আবুল বারকাত "ৰূপকল্প ২০২১" বাস্তবায়নে গণমুখী সমবায় আন্দোলন

হানুনা বেগম জাতীয় নারী উনুয়ন নীতি '৯৭ এবং সকল পর্যায়ে নারীর সম-অধিকার নিশ্চতকরণ

Amin Mohammad Sharfuzzaman, M.A. Rashid

Energy Cooperation is Key to Economic Development in SAARC Countries

Md Abdul Wadud, Tariq Saiful Islam, Qamarullah Bin Tariq Islam

Causal Relationship between Energy Consumption and GDP in Bangladesh

Sakib-Bin-Amin, Shaikh Shahnawaz Ferdaus

The Role of Education and its Impact on Socio-Economic Development in Bangladesh: An Analytical Exercise

Abul Kalam Azad

Transit-Corridor Controversy: Optimum Service charges, Gains, Risks and Alternative

Hasan Tareq Khan, Amitabh Chakraborty, Nirmal Chandra Bhakta

Prospect of Tourism Sector in Bangladesh: A Case

Muhammad Abdul Mannan Chowdhury

Military Spending and Economic Growth in the Countries of East Asia and the Pacific Region

Murshed Ahmed

Management of Urban Disaster with special Emphasis on Fresh Water Scarcity and Surface Water Pollution in Dhaka City

Muhammad Mahboob Ali, Nargis Akter

E-Business with Special Reference to On-line Banking of Bangladesh: An Analysis

Md. Ruhul Amin, Md. Ruhul Amin Talukder

Problems and Prospects of Wholesale Marketing of Fresh Produce in Bangladesh Selected Case Studies

Md. Zahir Uddin Arif, Mir Semon Haider

Mobile Commerce from the view of its Technical Prerequisites and few Potential Areas of Uses in Bangladeshi Businesses

Halima Begum

IMO: Human Resource Development in the Maritime Sector-Bangladesh Perspective

(See Back Page)

BANGLADESH **JOURNAL** OF POLITICAL

VOLUME 26 NUMBER 2 DECEMBER 2010

ECONOMY



Bangladesh Journal of Political Economy

VOLUME 26, NUMBER 2, DECEMBER 2010

Abul Barkat Editor

Bangladesh Economic Association

4/C, Eskaton Garden Road, Dhaka-1000 Phone: 9345996, Fax: 880-2-9345996 Websid: www.bdeconassoc.org E-mail: becoa@bangla.net

বাংলাদেশ জার্নাল অফ পলিটিক্যাল ইকনমি ম্চাবিংশ খন্ত, সংখ্যা ২, ডিসেম্বর ২০১০

সম্পাদক ড. আবুল বারকাত

সম্পাদনা উপদেষ্টা কমিটি

অধ্যাপক ড. অমর্ত্য সেন অধ্যাপক ড. মুহাম্মদ ইউনুস অধ্যাপক ড. নুরুল ইসলাম অধ্যাপক ড. মোশাররফ হোসেন অধ্যাপক রেহমান সোবহান অধ্যাপক ড. মোজাফফর আহমদ ড. কাজী খলীকুজ্জমান আহমদ

সম্পাদনা পরিষদ

অধ্যাপক ড. আবুল বারকাত
অধ্যাপক ড. আশরাফ উদ্দিন চৌধুরী
অধ্যাপক আইয়ুবুর রহমান ভূঁইয়া
অধ্যাপক হারানা বেগম
ড. জামালউদ্দিন আহমেদ
অধ্যাপক ড. মোঃ মোয়াজ্জেম হোসেন খান
এম. এ. সান্তার ভূঁইয়া
অধ্যাপক ড. মোঃ আলী আশরাফ
অধ্যাপক ড. তৌফিক আহমদ চৌধুরী

কার্যকরী সম্পাদক
সদস্য, সম্পাদনা পরিষদ

বাংলাদেশ অর্থনীতি সমিতি

8/সি, ইস্কাটন গার্ডেন রোড, ঢাকা-১০০০ টেলিফোন ঃ ৯৩৪৫৯৯৬, ফ্যাক্স : ৮৮০-২-৯৩৪৫৯৯৬ ওয়েব সাইড : www.bdeconassoc.org

ই-মেইল : becoa@bangla.net

Bangladesh Journal of Political Economy

VOLUME 26, NUMBER 2, DECEMBER 2010

Editor

Dr. Abul Barkat

Editorial Advisory Board

Professor Dr. Amartya Sen Professor Dr. Muhammad Yunus Professor Dr. Nurul Islam Professor Dr. Mosharaff Hossain Professor Rehman Sobhan Professor Dr. Muzaffer Ahmad Dr. Qazi Kholiquzzaman Ahmad

Editorial Board

Dr. Abul Barkat	Editor
Professor Dr. Ashraf Uddin Chowdhury	Member
Professor Ayubur Rahman Bhuiyan	Member
Professor Hannana Begum	Member
Dr. Jamaluddin Ahmed	Member
Professor Dr. M. Moazzem Hossain Khan	Member
M. A. Sattar Bhuiyan	Member
Professor Dr. Ali Ashraf	Member
Professor Dr. Toufic Ahmad Choudhury	Member

Bangladesh Economic Association

BEA Executive Committee 2010-2012

- Bangladesh Journal of Political Economy is published by the Bangladesh Economic Association.
- No responsibility for the views expressed by the authors of articles published in the Bangladesh Journal of Political Economy is assumed by the Editors or the Publisher.
- Bangladesh Economic Association gratefully acknowledges the financial assistance provided by the Government of the People's Republic of Bangladesh towards publication of this volume.
- The price of this volume is Tk. 200, US \$ 15 (foreign). Subscription may be sent to the Bangladesh Journal of Political Economy,

c/o, Bangladesh Economic Association, 4/C, Eskaton Garden Road, Dhaka-1000.

Telephone: 9345996.

Websid: www.bdeconassoc.org
E-mail: becoa@bangla.net
Members and students certified by
their concerned respective
institutions (college, university
departments) may obtain the Journal
at 50% discount.

at 50% discoult.

ISSN 2227-3182

Cover design by: Syed Asrarul Haque (Shopen)

Printed by: Agami Printing & Publishing Co. 27 Babupura, Nilkhet, Dhaka-1205, Phone: 8612819

President

Abul Barkat

Vice- Presidents

Ashraf Uddin Chowdhury Hannana Begum Jamaluddin Ahmed M. Moazzem Hossain Khan Syed Yusuf Hossain

General Secretary

Toufic Ahmad Choudhury

Treasurer

Masih Malik Chowdhury

Joint Secretary

A.Z. M. Saleh Selim Raihan

Assistant Secretary

Monju Ara Begum Shamima Akhter Badrul Munir Mahtab Ali Rashidi Md. Mozammel Haque

Members

Qazi Kholiquzzaman Ahmad M.A. Sattar Bhuyan Md. Zahirul Islam Sikder Md. Sadiqur Rahman Bhuiyan Md. Mostafizur Rahman Sarder Syeda Nazma Parvin Papri Md. Main Uddin Mohammad Mamoon Md. Ali Asraf Md. Liakat Hossain Moral Jadab Chandra Saha Mir Hasan Mohammad Zahid Md. Tofazzal Hossain Miah Khourshedul Alam Quadery

Editor's Note

This volume (Vol.26, No.2) of Bangladesh Journal of Political Economy (BJPE) contains select papers presented at the Bangladesh Economic Association (BEA) 17th Biennial Conference held in 2010 and papers presented at the Regional Conferences organized by BEA during 2010-12 period in Chittagong, Kushtia, Mymensingh, and Rajshahi). All the papers included in the volume were reviewed thoroughly by both internal and external reviewers.

Let me express my indebtedness to the authors, the reviewers, and the members of the Editorial Board of the Journal. Special thanks are due to Prof. Ayubur Rahman Bhuyan and Prof. Toufic Ahmad Choudhury, who, as members of the Editorial board of the Journal, shouldered much more responsibilities than usual for a member.

(Abul Barkat)

(andrings)

President, Bangladesh Economic Association Editor, Bangladesh Journal of Political Economy

বাংলাদেশ অর্থনীতি সমিতির ষান্মাসিক জার্নাল Bangladesh Journal of Political Economy প্রকাশনার নীতিমালা

- ১। অর্থনীতির বিভিন্ন শাখায় তাত্ত্বিক এবং প্রায়োগিক বিষয়ে প্রবন্ধ প্রণয়ন করার জন্য প্রবন্ধকারদেরকে অনুরোধ জানানো হবে। ইংরেজী এবং বাংলা উভয় ভাষায় রচিত প্রবন্ধ জার্নালের জন্য প্রহণ করা হবে।
- ২। Initial screening নির্বাহী সম্পাদকের এখতিয়ারভুক্ত থাকবে, তবে প্রয়োজনবোধে সম্পাদনা পরিষদের অন্য সদস্যদের সহায়তা তিনি নেবেন। নির্ধারিত format মোতাবেক সংশোধনের জন্য এই পর্যায়ে প্রাথমিক ভাবে short-listed প্রবন্ধসমূহ প্রবন্ধকারের কাছে প্রেরণ করা হবে।
- ৩। অভ্যন্তরীণ reviewer সাধারণতঃ সম্পাদনা পরিষদের সদস্যদের মধ্য থেকেই মনোনীত হবেন। বহিঃস্থ reviewer সম্পাদনা পরিষদের সিদ্ধান্তক্রমে প্রবন্ধের বিষয়ের ভিত্তিতে সম্পাদনা পরিষদের বাইরে থেকে মনোনীত হবেন, তবে তিনি দেশের অভ্যন্তরে বা বিদেশে অবস্থান করতে পারেন। সম্পাদনা উপদেষ্টা কমিটির সকল সদস্য reviewer হতে পারবেন। তৃতীয় reviewer প্রয়োজন হলে সম্পাদনা পরিষদের বাইরে থেকে মনোনীত করা হবে।
- 8। ক) সমিতির দ্বিবার্ষিক কনফারেঙ্গে উপস্থাপিত প্রবন্ধগুলো referral প্রক্রিয়ার মাধ্যমে জার্নালের জন্য বিবেচিত হবে।
 - খ) বিভিন্ন সময়ে সমিতি কর্তৃক আয়োজিত সেমিনারে পঠিত আমন্ত্রিত প্রবন্ধসমূহ জার্নালের সম্পাদনা পরিষদের অনুমোদনক্রমে জার্নালে প্রকাশ করা যেতে পারে।
- ৫। অর্থনীতি সমিতির সদস্য এবং সদস্য-বহির্ভূত যে কোন আগ্রহী প্রার্থী জার্নালের গ্রাহক হতে পারবেন। তবে সদস্যদের ক্ষেত্রে গ্রাহক ফি (subscription fee) পঞ্চাশ শতাংশ রেয়াত দেয়া হবে।
- ৬। জার্নালের footnoting এবং writing style এতদৃসঙ্গে সংযোজিত হলো (জার্নালের শেষাংশ)।
- ৭। দেশের অভ্যন্তরে অবস্থানকারী উপদেষ্টা কমিটির সদস্যদেরকে বছরে দু'বার সম্পাদনা পরিষদের সভায় আমন্ত্রণ জানানো হবে।
- ৮। ক) তিনটি কোটেশন সংগ্রহ করে সম্পাদনা পরিষদের সিদ্ধান্তক্রমে মুদ্রক প্রতিষ্ঠান নির্বাচন করা হবে।
 - খ) প্রথম proof প্রেস দেখবে, পরবর্তীতে floppy তে প্রবন্ধকার ফাইনাল proof দেখে দেবেন।

Bangladesh Journal of Political Economy VOLUME 26, NUMBER 2, DECEMBER 2010

Contents

1.	"রূপকল্প ২০২ ১" বাস্তবায়নে গণমুখী সমবায় আন্দোলন <i>আবুল বারকাত</i>	1
2.	জাতীয় নারী উন্নয়ন নীতি '৯৭ এবং সকল পর্যায়ে নারীর সম-অধিকার নিশ্চতকরণ হান্নানা বেগম	35
3.	Energy Cooperation is Key to Economic Development in SAARC Countries AMIN MOHAMMAD SHARFUZZAMAN M.A. RASHID SARKARR	45
4.	Causal Relationship between Energy Consumption and GDP in Bangladesh MD ABDUL WADUD TARIQ SAIFUL ISLAM QAMARULLAH BIN TARIQ ISLAM	59
5.	The Role of Education and its Impact on Socio-Economic Development in Bangladesh: An Analytical Exercise SAKIB-BIN-AMIN SHAIKH SHAHNAWAZ FERDAUS	67
6.	Transit-Corridor Controversy: Optimum Service charges, Gains, Risks and Alternative ABUL KALAM AZAD	85
7.	Prospect of Tourism Sector in Bangladesh: A Case Study NIRMAL CHANDRA BHAKTA HASAN TAREQ KHAN AMITABH CHAKRABORTY	93
8.	Military Spending and Economic Growth in the Countries of East Asia and the Pacific Region MUHAMMAD ABDUL MANNAN CHOWDHURY	133

9.	Management of Urban Disaster with special Emphasis on Fresh Water Scarcity and Surface Water Pollution in Dhaka City Murshed Ahmed	155
10.	E-Business with Special Reference to On-line Banking of Bangladesh: An Analysis MUHAMMAD MAHBOOB ALI NARGIS AKTER	173
11.	Problems and Prospects of Wholesale Marketing of Fresh Produce in Bangladesh Selected Case Studies MD. RUHUL AMIN MD. RUHUL AMIN TALUKDER	193
12.	Mobile Commerce from the view of its Technical Prerequisites and few Potential Areas of Uses in Bangladeshi Businesses MD. ZAHIR UDDIN ARIF MIR SEMON HAIDER	215
13.	IMO: Human Resource Development in the Maritime Sector- Bangladesh Perspective HALIMA BEGUM	231
14.	বাংলাদেশে প্রতিবন্ধীতা ও দারিদ্রের চক্র: যোগসূত্র, ব্যয়-বরাদ্দ ও করণীয় <i>আবুল বারকাত</i>	243
15.	The Role of Islamic Financial Institutions in Resource Mobilization and Poverty Alleviation in Bangladesh: An Empirical Study of Rural Development Scheme (RDS) of Islami Bank Bangladesh Ltd (IBBL) MUHAMMAD ABDUL MANNAN CHOWDHURY	255
16.	Promotion of Food Security, Food Safety and its Regulation MD. ISMAIL HOSSAIN	279
17.	Management of Primary Education in Bangladesh: Issues for Achieving the Impossible! M. KAMAL HOSSAIN ABU HENA MORSHED ZAMAN MD. NURUZAMAN MAHBUBA FARJANA	301

18.	Skilled and Unskilled Labour Migration under GATS Mode 4 Negotiations and Poverty Reduction in Bangladesh MD. MORSHED HOSSAIN	317
19.	Changes in Rural Credit Structure over the Years : An Empirical Study in Kushtia District of Bangladesh	335
	M. N. KHATUN	
	M. A. Bashar	
20.	Status of Peace at Secondary Education: A Comparative	349
	Study with reference to Bangladesh	
	M. Azizur Rahman	

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 01-34 Bangladesh Economic Association (ISSN 2227-3182)

"রূপকল্প ২০২১" বাস্তবায়নে গণমুখী সমবায় আন্দোলন

আবুল বারকাত ১

১. বঙ্গবন্ধুর উন্নয়ন দর্শনে "গণমুখী সমবায় আন্দোলন"–"রূপকল্প ২০২১" এর যোগসূত্র

জাতির পিতা বঙ্গবন্ধু শেখ মুজিবের জীবন দর্শন ছিল এ দেশের গণমানুষের সুখ-সমৃদ্ধি নিশ্চিত করার লক্ষ্যে এক গভীর মানবিক সংগ্রামী দর্শন (deeprooted humane philoshophy towards people's wellbeing)। বঙ্গবন্ধুর এ দর্শনের ভিত্তিমূল হলো একটি ঐতিহাসিক বিশ্বাস যে "কেবলমাত্র জনগণই ইতিহাস সৃষ্টি করে" (only people can make history)। অর্থাৎ বঙ্গবন্ধুর উন্নয়ন দর্শন হলো অর্থনৈতিক, সামাজিক, সাংস্কৃতিক, রাজনৈতিক মুক্তি-মধ্যস্থতাকারী উন্নয়ন দর্শন, যা বিনির্মাণে নিয়ামক ভূমিকায় থাকবে জনগণ যার ধারাবাহিকতায় একটি মুক্তি সংগ্রামের মধ্য দিয়ে জন্ম হলো "গণপ্রজাতন্ত্রী" বাংলাদেশ যেখানে সাংবিধানিকভাবেই "প্রজাতন্ত্রের সকল ক্ষমতার মালিক জনগণ" [বাংলাদেশ সংবিধান, অনুচ্ছেদ ৭(১)]।

বঙ্গবন্ধুর গভীর মানবিক সংগ্রামী এ দর্শনের প্রতিফলনই হল তার স্বপ্ন: "সোনার বাংলার স্বপ্ন", "দুঃখী মানুষের মুখে হাসি ফোটানোর স্বপ্ন", "শোষণ-বঞ্চনা-দুর্দশামুক্ত বাংলাদেশ-এর স্বপ্ন"। এ স্বপ্ন প্রতিফলিত হয়েছিলো বঙ্গবন্ধুর ডাকে মুক্তিযুদ্ধের চেতনায় যেখানে স্বপ্ন ছিলো স্বাধীন বাংলাদেশে জনগণের জন্য কমপক্ষে ২টি বিষয় নিশ্চিত করা:

- ১. মানুষে-মানুষে বৈষম্য দূর
- ২. অসাম্প্রদায়িক মানস কাঠামো বিনির্মাণ।

অর্থাৎ বঙ্গবন্ধুর উন্নয়ন দর্শন অনুযায়ী কথাছিলো স্বাধীন বাংলাদেশ হবে 'সুস্থ-সবল-জ্ঞান সমৃদ্ধ-ভেদহীন মানুষের দেশ"। কিন্তু, ১৯৭৫ সালে পরিবার-পরিজনসহ বঙ্গবন্ধুকে হত্যার মাধ্যমে বাঙালী জাতির এ স্বপ্ন হত্যা করা হলো।

[্]ব অধ্যাপক, অর্থনীতি বিভাগ, ঢাকা বিশ্ববিদ্যাল (ই-মেইল: <u>hdrc.bd@gmail.com</u>, <u>hdrc@bangla.net</u>)

[&]quot;বাংলাদেশে সমবায় আন্দোলন ও রূপকল্প ২০২১ বাস্তবায়ন" শীর্ষক একটি প্রবন্ধ প্রবন্ধকার কর্তৃক সমবায় অধিদপ্তর আয়োজিত ৩৮তম জাতীয় সমবায় দিবস ২০০৯ উদযাপন উপলক্ষে মূল প্রবন্ধ হিসেবে পঠিত হয়েছিলো (০৭ নভেম্বর ২০০৯ তারিখে)। উত্থাপিত প্রবন্ধটি উপরোল্লিখিত প্রবন্ধের পরিমার্জিত রূপ।

বঙ্গবন্ধুর উন্নয়ন দর্শনের অন্যতম প্রধান উপাদান ছিলো ঐ স্বপ্ন বিনির্মাণে সমবায়ের অন্তর্নিহিত শক্তি পুরোমাত্রায় ব্যবহার করা। আর সে কারণেই মালিকানার নীতি বিষয়ে সংবিধানের ১৩নং অনুচ্ছেদে বলা হুলো গুরুত্বক্রম অনুসারে রাষ্ট্রে মালিকানা ব্যবস্থা হবে প্রথমত রাষ্ট্রিয় মালিকানা, দ্বিতীয়ত সমবায়ী মালিকানা, তৃতীয়ত ব্যক্তিগত মালিকানা। বঙ্গবন্ধু স্বপ্ন দেখতেন দেশের প্রতিটি গ্রামে সমবায় সমিতি গঠন করা হবে। সমবায় নিয়ে বঙ্গবন্ধুর স্বপ্ন যে কত গভীরে প্রোথিত ছিল এবং কত সুদূরপ্রসারি চিন্তাসমৃদ্ধ তা লক্ষ্য করা যায় ১৯৭২ সালের ৩০ জুন বাংলাদেশ জাতীয় সমবায় ইউনিয়ন আয়োজিত সমবায় সম্মেলনে প্রদন্ত তার বক্তব্যের মধ্যে। গুরুত্বের কারণে বঙ্গবন্ধুর বক্তব্যটি হুবহু উদ্ধৃত করছি:

"আমার দেশের প্রতিটি মানুষ খাদ্য পাবে, আশ্রয় পাবে, শিক্ষা পাবে উন্নত জীবনের অধিকারী হবে– এই হচ্ছে আমার স্বপ্ন। এই পরিপ্রেক্ষিতে গণমুখী সমবায় আন্দোলনকে অত্যন্ত গুরত্বপূর্ণ ভূমিকা পালন করতে হবে। কেননা সমবায়ের পথ– সমাজতন্ত্রের পথ. গণতন্ত্রের পথ। সমবায়ের মাধ্যমে গরীব কৃষকরা যৌথভাবে উৎপাদন-যন্ত্রের মালিকানা লাভ করবে। অন্যদিকে অধিকতর উৎপাদন বৃদ্ধি ও সম্পদের সুসম বন্টন ব্যবস্থায় প্রতিটি ক্ষুদ্র চাষী গণতান্ত্রিক অংশ ও অধিকার পাবে। জোতদার ধনী চাষীর শোষণ থেকে তারা মুক্তি লাভ করবে সমবায়ের সংহত শক্তির দ্বারা। একইভাবে কষক শ্রমিক. তাঁতী, জেলে, ক্ষদ্র ব্যবসায়ীরা যদি একজোট হয়ে পুঁজি এবং অন্যান্য উপাদানের মাধ্যমে একত্র করতে পারেন তবে আর মধ্যবর্তী ধনিক ব্যবসায়ী-শিল্পপতি গোষ্ঠী তাদের শ্রমের ফসলকে লুট করে খেতে পারবে না। সমবায়ের মাধ্যমে গ্রাম-বাংলায় গড়ে উঠবে ক্ষুদ্র শিল্প যার মালিক হবে সাধারণ কৃষক, শ্রমিক এবং ভূমিহীন নির্যাতিত দুঃখী মানুষ। সমাজতন্ত্র স্থাপনের জন্য আমরা ইতিমধ্যেই সমস্ত বড় শিল্প, ব্যাংক, পাটকল, চিনিকল, সুতাকল ইত্যাদি জাতীয়করণ করেছি। জমির সর্বোচ্চ মালিকানার সীমা নির্ধারণ করে দিয়েছি। আজ সমবায় পদ্ধতিতে গ্রামে গ্রামে, থানায়, বন্দরে গড়ে তুলতে হবে মেহনতী মানুষের যৌথ মালিকানা। কৃষকরা তাঁদের উৎপাদিত ফসলের বিনিময়ে পাবে ন্যায্যমূল্য, শ্রমিকরা পাবে শ্রমের ফল- ভোগের ন্যায্য অধিকার।

কিন্তু এই লক্ষ্যে যদি আমাদের পৌঁছাতে হয় তবে অতীতের ঘূনে ধরা সমবায় ব্যবস্থাকে আমুল পরিবর্তন করে একটি সত্যিকারের গণমুখী আন্দোলন গড়ে তুলতে হবে। অতীতের সমবায় ছিল শোষকগোষ্ঠীর ক্রীডনক। তাই সেখানে ছিল কোটারী স্বার্থের ব্যাপক ভূমিকা। আমাদের এই স্বাধীন বাংলাদেশে ঐ ধরনের ভূঁয়া সমবায় কোন মতেই সহ্য করা হবে না । আমাদের সমবায় আন্দোলন হবে সাধারণ মানুষের যৌথ আন্দোলন– কৃষক, শ্রমিক, মেহনতী জনতার নিজস্ব প্রতিষ্ঠান। আপনারা জানেন সমবায় সংস্থাগুলিকে সত্যকারের গণতান্ত্রিক প্রতিষ্ঠান হিসাবে গড়ে তোলার জন্য আমি ঘোষণা করেছি যে সংস্থার পরিচালনা দায়িত্ব ন্যস্ত থাকবে জনগণের নির্বাচিত প্রতিনিধিদের উপর, কোন আমলা বা মনোনীত ব্যক্তির উপরে নয়। আমার সমবায়ী ভাইয়েরা এই বলিষ্ঠ পদক্ষেপকে অভিনন্দিত করেছেন। এই গণতন্ত্রীকরণের পরিপ্রেক্ষিতে আমি তাদের স্মরণ করিয়ে দিতে চাই তাদের দায়িত্ব। তাদের দেখতে হবে যে সমবায় সংস্থাগুলি যেন সত্যিকারের জনগণের প্রতিষ্ঠান হিসাবে গড়ে উঠে। জেলে সমিতি, তাঁতী সমিতি, গ্রামীণ কৃষক সমিতি যেন সত্যিকারের জেলে, তাঁতী, কৃষকের সংস্থা হয়, মধ্যবর্তী ব্যবসায়ী বা ধনী কৃষক যেন আবার এই সমিতিগুলিকে দখল করে অতীত দুর্নীতির পুনরাবৃত্তি না করে। যদি আবার সেই কোটারী স্বার্থ সমবায়ের পবিত্রতা নষ্ট করে, তবে নিশ্চিতভাবে জেনে রাখুন যে আমরা পুরাতন ব্যবস্থা বাতিল করে দেবো। আমার প্রিয় কৃষক মজুর জেলে তাঁতী ভাইদের সাহায্যে এমন একটি নৃতন ও সুসম ব্যবস্থা গড়ে তুলতে হবে যা শোষণ ও প্রতিক্রিয়াশীল কোটারী স্বার্থকে চিরদিনের জন্য নস্যাৎ করে দেবে।.....

জয় বাংলাদেশের সমবায় আন্দোলন । জয় বাংলা"।

বঙ্গবন্ধুর সমবায় আন্দোলন কেন্দ্রিক যে মানবিক উন্নয়ন দর্শনের কথা বললাম তারই ধারাবাহিকতায় যুক্তিযুক্তভাবেই বিনির্মিত হয়েছে বঙ্গবন্ধু কন্যা মাননীয় প্রধানমন্ত্রীর নির্বাচনী ইশতেহারে নির্দেশিত 'ভিশন ২০২১' বা 'রূপকল্প ২০২১' । 'রূপকল্প ২০২১' এর মূল কথা হলো স্বাধীনতার ৫০ বছর পূর্তির সময় অর্থাৎ ২০২১ সালের মধ্যে বাংলাদেশ হবে "অসাম্প্রদায়িক, প্রগতিশীল, উদার গণতান্ত্রিক কল্যাণ রাষ্ট্র"। আর এ কল্যাণ রাষ্ট্র বিনির্মাণে বঙ্গবন্ধু নির্দেশিত "গণমুখী সমবায় আন্দোলন" এর বিকল্প নেই।

২. সমবায়ের গুরুত্ব: বিশ্ব পরিস্থিতি

উন্নয়ন প্রচেষ্টায় সরকারী-বেসরকারী খাতের পাশাপাশি সমবায় পদ্ধতির ব্যবহার সারা বিশ্বেই স্বীকৃত, প্রতিষ্ঠিত এবং ক্ষেত্র বিশেষে অতি জনপ্রিয়। ইন্টারন্যাশনাল কো-অপারেটিভ এলায়েঙ্গ (ICA)-র তথ্য অনুযায়ী বর্তমানে বিশ্বের প্রায় ৮০ কোটি মানুষ সমবায়ের সদস্য। বিশ্বে সমবায়ের মাধ্যমে কর্মসংস্থানপ্রাপ্ত হয়েছে এমন মানুষের সংখ্যা এখন ১০ কোটি। ৩০০ কোটি মানুষ জীবিকা নির্বাহ করেছে সমবায়ের মাধ্যমে। সারা বিশ্বের ২৫% বীমা ব্যবসা নিয়ন্ত্রিত হয় সমবায়ের মাধ্যমে এবং বিশ্বের ৩৩% দুগ্ধজাত পণ্য সরবরাহ করে সমবায়। বিশ্বের ৩০০ টি বৃহৎ সমবায় প্রতিষ্ঠানের বর্তমান সম্পদের পরিমাণ ৩০,০০,০০০-৪০,০০,০০০ কোটি মার্কিন ডলার এবং বার্ষিক টার্নওভার (বিক্রয়) এর পরিমাণ ৯৬,৩০০ কোটি ডলার যা বিশ্বের নবম বৃহত্তম অর্থনীতি অর্থাৎ কানাডার অর্থনীতির সমান। অর্থনৈতিক উন্নয়নে প্রতিষ্ঠান হিসেবে সমবায় যে গুরুত্বপূর্ণ তা বিভিন্ন দেশের সমবায় কার্যক্রম বিশ্বেষণ করলে সহজেই অনুমান করা যায়। বিভিন্ন দেশের অর্থনীতিতে সমবায়ের গুরুত্ব নিয়ে কিছু তথ্য দেয়া যাক:

- নরওয়ের ৯৯% ডেইরী পণ্য সমবায়ের মাধ্যমে উৎপাদিত হয়। ভোগ্যপণ্য বাজারের ২৫%
 সমবায়ের দখলে এবং প্রতি ৩ জন নরওয়েবাসীর মধ্যে ১ জন সমবায়ী।
- নিউজিল্যান্ডের জাতীয় মোট উৎপাদনের ২২% আসে সমবায় খাত থেকে । ৯৫% ডেইরী সামগ্রী
 সমবায়ের মাধ্যমে উৎপাদিত হয় এবং ডেইরী পণ্য রপ্তানীর ৯৫% আসে সমবায় খাত থেকে ।
 এছাড়া ৭০% মাংস, ৫০% কৃষিজ সামগ্রী, ৭০% সার বিপণন, ৭৫% পাইকারী ঔষধ, ৬২%
 মুদী ব্যবসা সমবায়ের মাধ্যমে সম্পাদিত হয় ।
- সিংগাপুরের ভোগ্য পণ্য সমবায়গুলো মোট বাজারের ৫৫% নিয়ন্ত্রণ করে থাকে যাদের বাৎসরিক টার্নওভার ৭০ কোটি ডলার।
- ফ্রান্সে প্রতি ১০ জন কৃষকের ৯ জনই সমবায়ী। মোট আমানতের ৬০% সমবায় ব্যাংকে সংরক্ষিত
 এবং খুচরা ব্যবসায়ীদের ২৫% সমবায়ী।
- জাপানে ৯১% কৃষক সমবায় সমিতির সদস্য । কৃষি সমবায়ীদের উৎপাদিত পণ্যের মূল্য প্রায় ৯

কোটি ডলার।

- কোরিয়ার ৯০% কৃষক সমবায়ী এবং সমবায়ী কৃষকের সংখ্যা ২০ লাখের বেশী। তাদের উৎপাদিত পণ্যের বাজার মূল্য ১ কোটি ডলার। তাছাড়া মোট মৎস্য উৎপাদনের ৭১% সমবায়ী মৎস্যজীবীরা উৎপাদন করে থাকেন।
- ভিয়েতনামের মোট জিডিপি'র ৮.৬% আসে সমবায় খাত থেকে ।
- কুয়েতের খুচরা বাজারের ৮০% সমবায়ের মাধ্যমে সম্পাদিত হচ্ছে।

৩. বাংলাদেশে সমবায়ঃ সংক্ষেপিত ইতিহাস

এদেশের সমবায়ের ইতিহাস আসলে ৫০০ বছর হবে। তবে, আনুষ্ঠানিকভাবে প্রাতিষ্ঠানিক সমবায় গঠনের বয়স ১০০ বছরের বেশি। একটি পদ্ধতি এ সুদীর্ঘকাল টিকে থাকার মধ্য দিয়েই এর গ্রহণযোগ্যতা ও উপযুক্ততা প্রমাণ হয়। যদিও সরকারী ও ব্যক্তিখাতের তুলনায় সমবায় খাতের ব্যবহার আমাদের দেশে এখনো সীমিত এবং ক্ষেত্র বিশেষে অপরিকল্পিত, তথাপি এ দীর্ঘযাত্রায় সরকারের অগ্রাধিকারপ্রাপ্ত অনেক কর্মসূচী মাঠ পর্যায়ে সফলভাবে বাস্তবায়নের গৌরবোজ্জ্বল অভিজ্ঞতা রয়েছে সমবায় অধিদপ্তরের।

দারিদ্র পীড়িত, নিরক্ষর এবং অনভিজ্ঞ কৃষকদেরকে সমবায়ের মাধ্যমে সংগঠিত করে উন্নত বীজ, সার ও সেচ পদ্ধতি ব্যবহারে উদ্বুদ্ধকরণের মাধ্যমে কৃষি উৎপাদন বৃদ্ধির ক্ষেত্রে সমবায়ের অবদান অসামান্য । এ লক্ষ্যে দেশের প্রায় প্রতিটি গ্রামে কৃষকদেরকে সংগঠিত করে সমবায় সমিতি গড়ে তোলা হয় এবং সম্প্রসারণ কর্মীরা বাড়ী বাড়ী ঘুরে এবং প্রয়োজনে রাত্রি যাপন করে কৃষকদেরকে উদ্বুদ্ধ করেন । যার ধারাবাহিকতায় ১৯৮০'র দশকের মাঝামাঝি এদেশে প্রথম সবুজ বিপ্রব সূচিত হয় । ক্ষুদ্র ঋণ ব্যবস্থা প্রবর্তন ও আত্মকর্মসংস্থান সৃষ্টি, স্বাভাবিক উন্নয়ন সুবিধা বঞ্চিত সংখ্যালঘু অনগ্রসর ও পশ্চাদপদ জনগোষ্ঠীর জীবিকা উন্নয়নে সমবায়ের ভূমিকা অনস্বীকার্য । তাছাড়া মানব উন্নয়ন ও নেতৃত্ব সৃষ্টিতে সমবায়ের অবদান যথেষ্ট । দেশের সর্বস্তরে বিশেষ করে পল্লী এলাকায় সমবায়ের মতো আনুষ্ঠানিক প্রতিষ্ঠান গঠন ও পরিচালনায় অংশগ্রহণ সাধারণ মানুষের জন্য এক বিরাট ও মহৎ অভিজ্ঞতা । প্রশিক্ষণের মাধ্যমে আইন মোতাবেক ব্যবস্থাপনা পরিচালনা, নির্বাচন ও সভা অনুষ্ঠান, হিসাব রক্ষণ, অভিট মোকাবিলা সহ আর্থিক কর্মকা- পরিচালনার অনুশীলনের মধ্য দিয়ে সমবায়ের সদস্যদের যে নেতৃত্ব, দায়িত্বশীলতা ও চেতনার বিকাশ ঘটে তা ঐ সকল সদস্যদেরকে সমাজ ও রাষ্ট্রের অন্যান্য কর্তব্য ও অধিকার সম্পর্কে অন্যদের তুলনায় অনেক বেশী দায়িত্বশীল করে তুলে । আজকে দেশের অনেক নেতৃস্থানীয় মানুষের মধ্যেই এর প্রতিফলন লক্ষণীয় ।

8. বাংলাদেশে সমবায়: উন্নয়ন সম্ভাবনার নবদিগন্ত উম্মোচনে সক্ষম

উল্লিখিত ধারাবাহিকতার নিরিখে বলা যায় বর্তমান গণতান্ত্রিক সরকারের নির্বাচনী অঙ্গীকার ও রূপকল্প ২০২১ (ভিশন ২০২১) বাস্তবায়নে বিশেষ করে কৃষি উৎপাদন বৃদ্ধি, দ্রব্যমূল্যের স্থিতিশীলতা আনয়ন, প্রশিক্ষণ ও আর্থিক সেবা প্রদানের মাধ্যমে কর্মসংস্থান সৃষ্টি, অনগ্রসর ও পশ্চাদপদ জনগণের জীবনমান উন্নয়ন, নারী সহ মানব সম্পদের উন্নয়ন ও অর্থনীতির বিভিন্ন ক্ষেত্রে ডিজিটাল পদ্ধতির প্রবর্তনে সমবায়

পদ্ধতি (অধিদপ্তরসহ) গুরুত্বপূর্ণ ভূমিকা পালন করতে পারে।

নিত্য প্রয়োজনীয় ভোগ্যপণ্যের মূল্য: কেন বাড়ে? সমবায় কি করতে পারে?

নিত্য প্রয়োজনীয় ভোগ্যপণ্যের মূল্য বৃদ্ধি এমন এক অবস্থা যা অনেক অর্থনীতিতেই কম বেশী ঘটে থাকে। তবে ভোক্তার স্বার্থ বিবেচনায় বিচার করা হলে এর প্রভাব দেশ ভেদে এক নয়। যেক্ষেত্রে দ্রব্যমূল্য বৃদ্ধির সাথে সাথে ভোক্তাদের আয়ও বৃদ্ধি পায় এবং প্রকৃত ক্রয় ক্ষমতা অপরিবর্তিত থাকে অথবা বৃদ্ধি পায় সেক্ষেত্রে একটি নির্দিষ্ট মাত্রার মূল্যবৃদ্ধি তেমন কোন সমস্যা নাও হতে পারে। কিন্তু যেসব অর্থনীতিতে দ্রব্যমূল্য বৃদ্ধির সাথে সংখ্যাগরিষ্ঠ জনগণের জন্য সামঞ্জস্যপূর্ণ আয় বৃদ্ধির সুযোগ থাকে না সেক্ষেত্রে ভোক্তার ক্রয় ক্ষমতা হ্রাস পায়, ফলে ভোক্তার ব্যয় সীমিতকরণ ব্যতীত কোন উপায় থাকে না। আর ব্যয় সংকোচন মানেই ভোক্তার জীবন মানের অবনতি যা আদৌ কাম্য অবস্থা নয়।

বাংলাদেশে নিত্য প্রয়োজনীয় ভোগ্যপণ্যের মূল্য বৃদ্ধির উধর্বগতির যেসকল কারণ পাওয়া যায় তা সংক্ষেপে নিমুরূপ ঃ

- ১. সাপ্লাই চেইনে প্রতিবন্ধকতা: প্রায় সকলেই একমত যে বাংলাদেশে ভোগ্যপণ্যের সরবরাহ চেইনে বহু ধরনের প্রচুর প্রতিবন্ধকতা আছে যা উৎপাদক ও খুচরা বিক্রেতার পর্যায়ে দামের মধ্যে বিরাট পার্থক্যের কারণ। এ লাইনে আছে মধ্যস্বত্বভোগী এবং দালাল; আছে ক্ষেত্র বিশেষে চাঁদাবাজি; অনুত্রত অবকাঠামো ও অপ্রতুল পরিবহন সুবিধার জন্যও বৃদ্ধি পায় পরিবহন খরচ; পচনশীল পণ্যের বিক্রেতারা নম্ভ পণ্যের ক্ষতি পোষানোর জন্যও দাম বাড়িয়ে থাকে।
- ২. উৎপাদন হ্রাস, উৎপাদন ব্যয় বৃদ্ধি ও টাকার অবমূল্যায়ন: বেশকিছু অর্থনৈতিক কারণ যেমন যোগানের তুলনায় অতিরিক্ত চাহিদা (demand pull), উৎপাদন-ব্যয় বৃদ্ধি (cost push) এবং টাকার অবমূল্যায়ন দ্রব্যমূল্য বাড়িয়ে দেয়। আন্তর্জাতিক বাজারে সারের মূল্য বৃদ্ধিসহ পেট্টোলিয়াম ও পেট্টোলিয়াম জাত পণ্যসামগ্রী এবং খাদ্যদ্রব্যের মূল্যবৃদ্ধি উল্লেখযোগ্য। যেহেতু আমাদের খাদ্য আমদানী করতে হয় এবং দরিদ্র-নিম্নবিত্ত শ্রেণীর সাধারণ ভোক্তাদের ব্যয় তালিকায় খাদ্য ব্যয় প্রায় ৬০%, সেহেতু এর প্রভাব স্থানীয় বাজারে অনেক বেশী।
- অর্থনৈতিক প্রবৃদ্ধি/মানি ইনকাম বৃদ্ধি: কোন কোন অর্থনীতিবিদের মতে অর্থনৈতিক প্রবৃদ্ধি এবং
 মূল্যক্ষীতি পাশাপাশি চলে। ধরেই নেয়া হয় যে প্রবৃদ্ধি হলে দ্রব্যমূল্য বাড়বে।
- মূল্যবৃদ্ধির আশংকা: মূল্যবৃদ্ধির আশংকাও অনেক সময় মূল্যবৃদ্ধির কারণ ঘটায়। বিশেষ করে
 মিডিয়ার "বদৌলতে" এ ধরণের ঘটনা ঘটতে পারে।
- ৫. মুনাফাখোর ও অসাধু ব্যবসায়ীদের অপতৎপরতা: অনেক সময় পাইকারী ও খুচরা পর্যায়ে অসাধু ব্যবসায়ীরা অধিক মুনাফার প্রত্যাশায় মূল্য বৃদ্ধি ঘটিয়ে থাকে। মজুদদারী ও কার্টেল ব্যবস্থা এর সাথে যুক্ত হয়। সেইসাথে উত্তরাধিকার সূত্রে প্রাপ্ত সিভিকেটইজম তো আছেই।

আমার মতে, ক্রমবর্ধমান মূল্য পরিস্থিতি থেকে পরিত্রান পাওয়ার ক্ষেত্রে সমবায় শক্তিশালী ভূমিকা পালনে সক্ষম। মাননীয় প্রধানমন্ত্রীর বক্তব্য থেকে শুরু করে অর্থনীতিবিদ, সুশীল সমাজ, সাংবাদিক প্রায় সবাই জোর দিচ্ছেন উৎপাদন, বন্টন ও ভোক্তা পর্যায়ে সমবায় সমিতি গঠনের উপর। উৎপাদন বন্দন ব্যবস্থায় সমবায়ের গুরুত্ব মূলতঃ বর্তমান ব্যবস্থার সীমাবদ্ধতা (unfair practice) এবং সমবায়ের উৎকর্ষতা (fair trade)-র দিক থেকে দেখা সম্ভব। উৎপাদন পর্যায়ে সমবায় সমিতি গঠন উৎপাদন ব্যবস্থার প্রাতিষ্ঠানিকিকরণে সাহায্য করে। ফলে উৎপাদনকারীদেরকে লক্ষ্য করে সরকারী সেবা প্রদান (support service) ফলপ্রসূ ও সহজ হয় যা কম খরচে উৎপাদন ও সরবরাহ বৃদ্ধিতে সহায়ক হয়। অন্যদিকে সংগঠিত উৎপাদনকারীগণ পরিকল্পিতভাবে উৎপাদন ও বাজারজাতকরণের জন্য প্রয়োজনীয় সক্ষমতা অর্জন করতে পারে যা দালাল/মধ্যস্বত্বভোগীদের সংখ্যা কমিয়ে অতিরিক্ত মূল্যবৃদ্ধি রোধ করে এবং কৃষকদের ন্যায্যমূল্য প্রাপ্তিতেও সহায়তা করে। ফলে ভোক্তা এবং উৎপাদনকারী উভয়ের জন্যই win-win situation সৃষ্টি সম্ভব।

উল্লিখিত যুক্তির নিরিখে সমবায় পদ্ধতিতে উৎপাদন ও বাজারজাতকরণ কার্যক্রম চালু করা যেতে পারে । উল্লেখ্য. বাংলাদেশে একশত বৎসরের অধিক সময় ধরে সমবায় সমিতি সংগঠিত হয়ে আসছে এবং বর্তমানে দেশে বিভিন্ন স্তরে প্রায় দেড় লক্ষ সমবায় সমিতি রয়েছে, যার সাথে প্রায় ৪(চার) কোটি মানুষ জড়িত। যদিও বিদ্যমান সকল সমবায় সমিতিরই কার্যক্রম প্রত্যাশিত মানের নয়, তথাপি একটি ব্যবস্থা একশত বৎসর টিকে থাকার মধ্য দিয়েই তার উপযুক্ততা যথেষ্ট মাত্রায় প্রমাণিত হয়। তবে অতীতে বিশেষ করে ১৯৫০ থেকে ১৯৭০ দশকের মধ্যে খাদ্য ও কৃষিজাত পণ্য উৎপাদন ও প্রক্রিয়াজাতকরণ কার্যক্রমে সমবায়ের পরিকল্পনায় হলেও বর্তমানে একমাত্র দুগ্ধ ও দুগ্ধজাত পণ্যব্যতীত উৎপাদন ও বাজারজাতকরণ কার্যক্রমে সমবায়ের পরিকল্পিত ও সংগঠিত কার্যক্রম নেই বললেই চলে। দেশের মোট সমবায় সমিতির প্রায় অর্ধেক হ'ল কৃষি সমবায় সমিতি যেগুলো পাঁচ হাজার টাকা পর্যন্ত কৃষি ঋণ মওকুফের ঘোষণা কার্যকর না হওয়ার প্রেক্ষিতে ১৯৯০ এর দশক থেকে প্রায় অকার্যকর ও মৃতপ্রায়। শহর অঞ্চলে সমবায়ের কিছু বিস্তৃতি ঘটলেও এদের অধিকাংশই আর্থিক সেবা প্রদানে নিয়োজিত। এমনকি খোদ সমবায় অধিদপ্তরের অবস্থানও এ লক্ষ্য থেকে বহু বহু দূরে। প্রকৃত সত্য হল এই যে, সমবায় আইনের আলোকে বিধিবদ্ধ দায়িত্ব পালন করা ছাড়া অন্য কোনরূপ পেশাদারিত্ব অর্জনের সুযোগ এবং সংস্কৃতি সমবায় অধিদপ্তরে প্রায় অনুপস্থিত। এহেন প্রেক্ষাপটে সমবায়ের মাধ্যমে বাজারজাতকরণ কার্যক্রমে সফলতা অর্জন করতে হলে অন্যান্য ব্যবস্থার পাশাপাশি বেশ কিছু পদক্ষেপ গ্রহণ জরুরি যা বাস্তবায়নে সমবায় অধিদপ্তরের সাথে সরকারের সংশ্লিষ্ট মন্ত্রণালয়-দপ্তরসমূহের যোগসূত্র স্থাপন করা অপরিহার্য। সেসব পদক্ষেপের অন্যতম নিমুরূপ:

- ১. জনসংখ্যা, এলাকাভেদে খাদ্যাভাস এবং আপতকালীন অবস্থা মোকাবেলায় কি পরিমাণ খাদ্যশস্য, শাক-সবজিসহ নিত্যপ্রয়োজনীয় ভোগ্য পণ্যের চাহিদা হতে পারে তা নিরূপণ করা ;
- ভূমির উপযুক্ততা, উৎপাদনশীলতা, পর্যাপ্ততা ও উৎপাদনে তুলনামূলক সুবিধা বিবেচনায় চাহিত পণ্যের বাণিজ্যিক উৎপাদনের জন্য এলাকা নির্ধারণ করা। এ দায়িত্বসমূহ কৃষি সম্প্রসারণ অধিদপ্তর পালন করতে পারে;
- পরিকল্পনা মাফিক নির্ধারিত এলাকায় উৎপাদন নিশ্চিতকরণের লক্ষ্যে সমবায় সমিতি গঠন করে উৎপাদন ব্যবস্থার প্রাতিষ্ঠানিকীকরণ ও সংহতকরণ;
- ৪. গঠিত সমবায় সমিতির প্রাতিষ্ঠানিক সুবিধা কাজে লাগিয়ে এর মাধ্যমে প্রয়োজনীয় বীজ, সার, কীটনাশকসহ কৃষি ঋণ ও সেচ সুবিধা সরবরাহ করে কম খরচে অধিক উৎপাদনে সহায়তা করা। উল্লেখ্য যে, সংস্কারের নামে আজ কৃষি উৎপাদনের প্রায়্য সকল প্রাতিষ্ঠানিক ব্যবস্থা বিলুপ্ত প্রায়।

কাজেই এ সকল প্রতিষ্ঠান যেমন- বাংলাদেশ কৃষি উন্নয়ন কর্পোরেশন, বাংলাদেশ কৃষি উন্নয়ন ব্যাংক ইত্যাদির কার্যক্রম জোরদার করা প্রয়োজন;

- ৫. সমবায় পাইকারী বাজার প্রতিষ্ঠা করে এর সাথে উৎপাদনকারী সমবায় সমিতিগুলোর ব্যবসায়িক যোগসূত্র স্থাপন করা;
- ৬. পাইকারী বাজার থেকে পণ্য সামগ্রী বিশেষ ব্যবস্থায় (মিল্ক ভিটা এর অনুসরণে) ভোক্তা সমবায় সমিতিতে পৌঁছানো ও বিক্রির ব্যবস্থা করা । উল্লেখ্য যে, দ্রব্য মূল্য বেশী বৃদ্ধি পায় খুচরা বিক্রেতা পর্যায়ে । কাওরান বাজারে পাইকারী বিক্রেতা কর্তৃক ৮ টাকা দরে বিক্রিত সবজি কাওরান বাজারেই খুচরা বিক্রেতা কর্তৃক ২৫ থেকে ২৮ টাকা দরে বিক্রি করতে দেখা যায় । মূলতঃ পাইকারী বাজারে সঠিক ওজন না দেয়া, পচা-গলা পণ্যের মিশ্রণ, পরিবহনের অসুবিধা, অতিরিক্ত টোল আদায়, প্রয়োজনের তুলনায় অতিরিক্ত শ্রম ব্যয়, অসংগঠিত/অপ্রাতিষ্ঠানিক বাজার ব্যবস্থা এবং খুচরা পর্যায়ে বেশি মুনাফা আদায়ের মানসিকতার কারনেই এ ধরণের মূল্য বৃদ্ধি ঘটে থাকে । কাজেই পচনশীল পণ্য সামগ্রী পরিবহনের ক্ষেত্রে আধুনিক সুযোগ-সুবিধা সম্বলিত যানবাহন ব্যবহারসহ পাইকারী বাজার থেকে খুচরা বিক্রেতার পর্যায়ে আদর্শ ও দক্ষ অনুশীলন (fair practice) নিশ্চিতকরণের মধ্যেই সুপারিশকৃত প্রচেষ্টার সফলতা অনেকাংশ নির্ভর করে;
- ভাক্তা সমবায় সমিতির পাশাপাশি চুক্তিবদ্ধ সুপার মার্কেট এবং চেইন শপের মাধ্যমেও এসব পণ্য
 সামগ্রী বাজারজাত করা যেতে পারে যদি ঐ বাজারে ফেয়ার ট্রেড অনুশীলনের ব্যবস্থা থাকে;
- ৮. আমাদের নিত্যপ্রয়োজনীয় ভোগ্য পণ্যের বেশ বড় অংশ আমদানী নির্ভর। ব্যক্তি খাতের হাতেগোনা কয়েকজন অলিগোপলিষ্ট এর মাধ্যমে এ আমদানি কার্যক্রম সম্পন্ন হয়ে থাকে যাদের সততা ও নৈতিকতা নিয়ে নানা প্রশ্ন রয়েছে। এক্ষেত্রে সিন্তিকেট-ইজম তো আছেই। কাজেই সমবায়ের পাইপ লাইনে আমদানিকৃত পণ্য বাজারজাতকরণ করতে হলে টিসিবি'র মাধ্যমে আমদানি বাড়াতে হবে এবং ব্যক্তি খাতে আমদানিকৃত পণ্যও সমবায়ের মাধ্যমে যাতে বাজারজাত করা যায় সে ব্যবস্থা করতে হবে:
- ৯. সমবায়ের মাধ্যমে বাজারজাতকরণ কার্যক্রমে সমবায় অধিদপ্তর বড় ভূমিকা রাখতে পারে। এ দায়িত্ব দক্ষতার সাথে পালন করতে হলে সমবায় বিভাগের কর্মকর্তা/কর্মচারীদের সক্ষমতা বৃদ্ধির জন্য প্রশিক্ষণসহ প্রয়োজনীয় লজিষ্টিক সাপোর্ট বৃদ্ধি করা প্রয়োজন; এবং
- ১০. সর্বোপরি, সার্বিক বিষয়ে সরকারের নীতিনির্ধারণী মহলের সিদ্ধান্ত ও সমর্থন একান্ত প্রয়োজন যা জাতীয় সমবায় নীতিমালার চূড়ান্তকরণ ও বাস্তবায়নের মধ্য দিয়ে প্রকাশিত হতে পারে।

সমবায়: কৃষি উৎপাদন বাড়াতে সক্ষম

আসলে কৃষিকে কেন্দ্র করেই এদেশে সমবায়ের আনুষ্ঠানিক কার্যক্রম শুরু। দারিদ্র পীড়িত, নিরক্ষর এবং অনভিজ্ঞ কৃষকদেরকে সমবায়ের মাধ্যমে সংগঠিত করে উন্নত বীজ, সার ও সেচ পদ্ধতি ব্যবহারে উদ্বুদ্ধকরণের মাধ্যমে কৃষি উৎপাদন বৃদ্ধির ক্ষেত্রে সমবায়ের অবদান অসামান্য। এ লক্ষ্যে দেশের প্রায় প্রতিটি গ্রামে কৃষকদেরকে সংগঠিত করে সমবায় সমিতি গড়ে তোলা হয় এবং সম্প্রসারণ কর্মীরা বাড়ী বাড়ী ঘুরে এবং প্রয়োজনে রাত্রি যাপন করে কৃষকদেরকে উদ্বুদ্ধ করে। যার ধারাবাহিকতায় ১৯৮০'র

দশকের মাঝামাঝি এদেশে প্রথম সবুজ বিপ্লব সূচিত হয়। বর্তমানে বাংলাদেশে কৃষি সমবায় সমিতির সংখ্যা ৬৯,০০০। কিন্তু ১৯৯১ সালে সরকার ঘোষিত ৫,০০০ টাকা পর্যন্ত কৃষি ঋণ মওকুফের ঘোষণা সমবায়ীদের ক্ষেত্রে প্রযোজ্য না হওয়ার কারণে সৃষ্ট জটিলতা এবং বেসরকারীকরণ নীতির কারণে সরকারী সমর্থন হ্রাস, দ্রুততার সাথে সমিতি সংগঠনের ফলে বিআরডিবি সমিতি সমূহের সাংগঠনিক দূর্বলতা এবং মূল কর্মসূচী বাদ দিয়ে বিভিন্ন উন্নয়ন প্রকল্পের আওতায় অনানুষ্ঠানিক দল গঠনের মাধ্যমে ক্ষুদ্র ঋণ কার্যক্রমে বিআরডিবির অধিক মনোযোগী হওয়া– ইত্যাদি কারণে কৃষি সমবায় সমিতিগুলো এখন প্রায় নিষ্ক্রিয় ও মৃতপ্রায়। এ অবস্থা পাল্টাতে হবে।

জাতীয় পানি নীতিমালার বিধান মতে দেশে ভূ-উপরিস্থিত পানি সম্পদের টেকসই ব্যবহার নিশ্চিতকল্পে পানি ব্যবস্থাপনায় স্থানীয় উপকারভোগীদের অংশগ্রহণ বাধ্যতামূলক করা হয়েছে। ফলে এলজিইডি ও পানি উন্নয়ন বোর্ড কর্তৃক বিগত কয়েক বৎসর যাবৎ সৃষ্ট পানি উন্নয়ন সংশ্লিষ্ট অবকাঠামো নির্মাণ প্রকল্পের সুবিধাভোগীদের সমন্বয়ে গঠিত হচ্ছে পানি ব্যবস্থাপনা সমবায় সমিতি। বর্তমানে এদের সংখ্যা প্রায় ১,৭০০। কৃষি উৎপাদন বৃদ্ধি, মৎস্য চাষ ও ক্ষুদ্র ঋণ পরিচালনাকারী এ সকল সমিতি সংগঠনে আইনগত সমর্থন এবং নিবন্ধন পরবর্তী যাবতীয় বিধিবদ্ধ দায়িত্ব পালনসহ প্রশিক্ষণ ও আয়বর্ধকমূলক কার্যক্রম গ্রহণে সহায়তা প্রদান করছে সমবায় অধিদপ্তর।

মৎস্যজীবী সমবায় সমিতি ঃ সম্ভাবনা অনেক তবে বাস্তবরূপ নিচ্ছে না

দেশের পশ্চাদপদ ও অনগ্রসর জনগোষ্ঠীর জীবিকা উন্নয়ন প্রচেষ্টার অংশ হিসেবে সমবায় অধিদপ্তর জেলে সম্প্রদায়কে সংগঠিত করে মৎস্যজীবী সমবায় সমিতি গঠন করে থাকে। বর্তমানে এরূপ সমিতির সংখ্যা প্রায় ৩,৩৪০টি। ভূমি মন্ত্রণালয়ের সহযোগিতায় সরকারী উন্মুক্ত জলাশয় এ সকল সমিতির নামে ইজারা দেয়ার মাধ্যমে এদের জীবিকা উন্নয়নের চেষ্টা করা হয়। তাছাড়া সমবায় অধিদপ্তর কর্তৃক এদের জন্য বিভিন্ন সময়ে বিভিন্ন উন্নয়ন প্রকল্প গ্রহণ করা হয়েছে যার আওতায় কার্যকরী মূলধনসহ বিভিন্ন উপকরণ সরবরাহ করা হয়েছে। তবে বর্তমানে প্রয়োজনীয় মূলধনের অভাব, অমৎস্যজীবীদের (জলদস্যু) অনুপ্রবেশ, জলাভূমি হ্রাস এবং ক্ষেত্র বিশেষে স্থানীয় প্রশাসনের অসহযোগিতা ইত্যাদি কারণে অনেক ক্ষেত্রেই এ সকল সমিতির সদস্যগণ প্রত্যাশিত সুবিধা থেকে বঞ্চিত হচ্ছে এবং সমিতিগুলো অকার্যকর হয়ে পড়ছে।

দুগ্ধ উৎপাদনকারী সমবায় সমিতি : সফলতা অনেক, তবে আরো করার আছে

দুগ্ধ উৎপাদনে সফলতা অর্জনকারী বিশ্বের প্রায় সকল দেশের তথ্য পর্যালোচনায় দেখা যায় যে, ঐ সফলতার পেছনে রয়েছে সে দেশের সমবায়ের অবদান । বর্তমানে বিশ্বের সর্বোচ্চ দুগ্ধ উৎপাদনকারী দেশ ভারতের প্রায় ৮০% দুধ সে দেশের দুগ্ধ উৎপাদনকারী সমিতিগুলো উৎপাদন করে থাকে । বাংলাদেশে এ খাতে সমবায়ের অবদান প্রত্যাশিত মানের না হলেও সমীহযোগ্য বটে । অনভিজ্ঞ কৃষকদেরকে আধুনিক ব্যবস্থাপনায় গাভী পালন, গাভীর জাত উন্নয়ন এবং সংগৃহীত দুধ প্রক্রিয়াকরণের মাধ্যমে শহরাঞ্চলের ভোক্তাদের কাছে জনপ্রিয় করে তোলার জন্য দুগ্ধ উৎপাদনকারী সমবায় সমিতি ও মিল্ক ভিটার সৃষ্টি সমবায় অধিদপ্তরের একটি সাফল্য হিসেবে বিবেচনা করা যেতে পারে । বর্তমানে বাংলাদেশে প্রাথমিক দুগ্ধ উৎপাদনকারী সমবায় সমিতির সংখ্যা প্রায় ১,৭০০ এবং ফেডারেশনের সংখ্যা মাত্র একটি যা মিল্ক ভিটা নামে পরিচিত । মিল্ক ভিটার মাধ্যমে বাৎসরিক দুগ্ধ সংগ্রহের পরিমাণ প্রায়

৮.৫ কোটি লিটার এবং বাৎসরিক লেনদেন প্রায় ২,৪০০ কোটি টাকা। মোট সুবিধাভোগীর সংখ্যা প্রায় ১০(দশ) লক্ষ এবং মিল্ক ভিটায় কমরত কর্মকর্তা/কর্মচারীর সংখ্যা প্রায় এক হাজার। বর্তমানে বাজারজাতকরণকৃত মোট পাস্তরিত তরল দুধের প্রায় ৫০% মিল্ক ভিটা কর্তৃক সরবরাহকৃত।

আশ্রায়ণ ও আবাসন সমবায় সমিতি : ভাল উদ্যোগ; আরো বিস্তৃতি প্রয়োজন

বাংলাদেশের ভূমিহীন, গৃহহীন ও ছিন্নমূল পরিবারের জন্য বাসস্থান এবং প্রশিক্ষণ ও ঋণ সুবিধা, স্বাস্থ্যসেবা, বিশুদ্ধ খাবার পানি সরবরাহ, বিদ্যুৎ, যাতায়াত ব্যবস্থা, বৃক্ষরোপণ ইত্যাদির মাধ্যমে দারিদ্র বিমোচনের লক্ষ্যে মাননীয় প্রধানমন্ত্রীর কার্যালয় কর্তৃক গৃহীত একটি অনন্য প্রকল্প। এ প্রকল্পের আওতায় এ পর্যন্ত ৭৭০টি সমবায় সমিতি নিবন্ধন করে ৫৫,৫৫৬ টি পরিবারের ৯৭,০১৭ জন সদস্যকে পুনর্বাসিত করা হয়েছে এবং এদেরকে বিভিন্ন আয়বর্ধনমূলক কার্যক্রমে প্রশিক্ষণ প্রদান করে প্রায় ৩৮,৮৬,৩৮,০০০ টাকা ঋণ প্রদান করা হয়েছে। সমবায় অধিদপ্তর এ প্রকল্পের আওতায় সমবায় সমিতি সংগঠন, প্রশিক্ষণ, আইনগত সমর্থন এবং ঋণ প্রদান ও আদায়ের মত গুরুত্বপূর্ণ দায়িত্ব পালন করে আসছে। আশ্রয়হীন মানুষের ক্রমবর্ধমান সংখ্যার নিরিখে বলা উচিত যে, আশ্রায়ন ও আবাসন সমবায় সমিতি-র আরো দ্রুতগতিতে সম্প্রসারণ করা প্রয়োজন।

ক্ষুদ্র ঋণ প্রদানের মাধ্যমে আত্ম-কর্মসংস্থান সৃষ্টিকারী সমবায় সমিতি : গতি বাড়ানো দরকার

ক্ষুদ্র ঋণের আবিষ্কর্তা কিন্তু এ দেশের সরকারী উদ্যোগ। ক্ষুদ্র ঋণের আবিষ্কারক ও ব্যবহারকারী দেশ হিসেবে আমাদের খ্যাতি এখন বিশ্বজোড়া। এ ক্ষেত্রে বড় বড় এনজিওগুলোর পাশাপাশি বিভিন্ন উন্নয়ন প্রকল্পের আওতায় বিআরডিবি কর্তৃক সংগঠিত সমবায় সমিতিগুলোও কাজ করে যাচ্ছে। তাছাড়া স্ব-উদ্যোগী সমবায় সমিতিগুলোর কার্যক্রম এ ক্ষেত্রে অসামান্য প্রশংসার দাবী রাখে, কেননা এ সকল সমিতির তহবিল নিজস্ব সঞ্চয় থেকে সৃষ্ট এবং অর্জিত মুনাফা সদস্যগণই লভ্যাংশ আকারে পেয়ে থাকেন। নিজস্ব মূলধন হওয়ার কারণে এ সকল সমিতির কার্যক্রম স্থায়িত্বের দিক থেকে (sustainability point of view) এনজিওদের তুলনায় অনেক বেশী সম্ভাবনাময়।

সমবায়ের সম্ভাবনা নির্দেশক কয়েকটি তথ্য সারণি ১-এ দেখানো হল। কো-অপারেটিভ ক্রেডিট ইউনিয়ন লীগ অব বাংলাদেশের তথ্য অনুযায়ী দেখা যায় যে, ৪১০টি সমবায় সমিতি ১,৮০,৫৮৩ জন সদস্যকে সেবা প্রদান করছে যার আওতায় সৃষ্ট শেয়ারের পরিমাণ মোট ৬৭ কোটি ২৯ লক্ষ ৬০ হাজার

নির্দেশক ২০০৮ (৩০ জুন) সমবায় (মোট সংখ্যা) 8\$0 মোট সদস্য 5.00.660 মোট পরিসম্পদ (কোটি টাকা) ২৮২.২ মোট সঞ্চয় (কোটি টাকা) ১৬০.৫ মোট শেয়ার (কোটি টাকা) ৬৭.৩ মোট বিতরণকৃত ঋণ (কোটি টাকা) ১৯২.৮ মোট রিজার্ভ (কোটি টাকা) ৩৭.২

সারণি ১: বাংলাদেশে সমবায় সংক্রান্ত কিছু তথ্য

উৎস: Cooperative Credit Union League of Bangladesh Ltd (CCULB), 2008.

টাকা, সঞ্চয়ের পরিমাণ ১৬০ কোটি ৪৮ লক্ষ ৯৩ হাজার টাকা, সম্পদের পরিমাণ ২৮২ কোটি ১৮ লক্ষ ৬০ হাজার টাকা, বিতরণকৃত ঋণের পরিমাণ ১৯২ কোটি ৮৪ লক্ষ ১৫ হাজার টাকা এবং সংরক্ষিত তহবিলের পরিমাণ ৩৭ কোটি ২৪ লক্ষ ৭৬ হাজার টাকা। কোনরূপ সরকারী আর্থিক সহায়তা ব্যতীত সম্পূর্ণ নিজস্ব প্রচেষ্টায় পরিচালিত এ সকল সমবায় সমিতির কার্যক্রম নিঃসন্দেহে প্রশংসার দাবী রাখে।

বহুমুখী সমবায় সমিতি: নতুন প্রজন্মের স্ব-উদ্যোগী সমবায়

সরকারের বেসরকারীকরণ ও উদারীকরণ নীতি, আনুষ্ঠানিক ব্যাংকিং ও এনজিওদের ক্ষুদ্র ঋণ কর্মসূচীর আওতা বহির্ভূত মধ্যবর্তী শ্রেণী ও ক্রমবর্ধমান নগরায়ন-এর প্রেক্ষাপটে সৃষ্ট অর্থনৈতিক ও ব্যবসায়িক সুযোগ গ্রহণের জন্য স্থানীয় উদ্যোগে সংগঠিত নতুন প্রজন্মের বহুমূখী সমবায় সমিতির আবির্ভাব শুরু হয় মূলত: ১৯৯০ এর দশকে। এ ধরনের সমবায়ের সংখ্যা ক্রমবর্ধমান। বর্তমানে এদের সংখ্যা প্রায় ২০ হাজার। মার্কেটিং, ক্ষুদ্র ব্যবসা, পরিবহন ও হাউজিং সহ বিভিন্ন অর্থনৈতিক ও সেবামূলক কর্মকা- পরিচালনার মাধ্যমে উৎপাদন বৃদ্ধি, কর্মসংস্থান ও উদ্যোক্তা সৃষ্টি সহ বিভিন্ন প্রকার সেবা প্রদানের মাধ্যমে এ সকল সমিতি বর্তমানে দারিদ্যু বিমোচন ও প্রবৃদ্ধি অর্জনে অবদান রাখছে।

তবে এ শ্রেণীভূক্ত সমবায় সমিতির কার্যক্রম এখনো প্রত্যাশিত মানের নয়। সততা, পেশাগত দক্ষতা ও সঠিক নেতৃত্বের অভাব এবং সমবায় অধিদপ্তরের উপযুক্ত মনিটরিং এর অভাবে এ ধরনের বেশ কয়েকটি সমিতি ইতিমধ্যে অচলাবস্থায় আছে এবং আমানতকারীদের টাকা ফেরং প্রদানে চরম অনিশ্চয়তা দেখা দিয়েছে। কাজেই যথাযথ প্রাতিষ্ঠানিক ও আইনগত ব্যবস্থার মধ্যে যদি এ সকল সমিতির কার্যক্রম পরিচালনা নিশ্চিত না করা যায় তবে একসময় এগুলি চরম বিপর্যয় ডেকে আনতে পারে: নিঃস্ব হয়ে যেতে পারেন এ সব সমবায়ের সদস্যরা।

কতিপয় সম্পদশালী অকার্যকর সমিতি: কিছু ভাবনা-দুর্ভাবনা

১৯৫০ থেকে ১৯৭০ এর দশকে তৎকালিন সরকারসমূহের উন্নয়ন প্রচেষ্টার অংশীদার কতিপয় শ্রেণীর প্রাথমিক, কেন্দ্রীয় এবং জাতীয় সমবায় সমিতি যেমন ইউনিয়ন বহুমূখী সমবায় সমিতি, কেন্দ্রীয় বহুমূখী সমবায় সমিতি, কেন্দ্রীয় সমবায় ব্যাংক, কেন্দ্রীয় শিল্প ইউনিয়ন, জাতীয় শিল্প সংস্থা, জাতীয় শিল্প সমিতি, সমবায় জুট মিল ও কটন মিল এবং বাংলাদেশ সমবায় ব্যাংক ইত্যাদি সমিতিগুলো সময়োপযোগীতা হারিয়ে বর্তমানে অকার্যকর অবস্থায় আছে। সমবায় অধিদপ্তরের সাম্প্রতিক এক গবেষণায় দেখা যায় যে, বর্তমানে এরূপ সমিতির সংখ্যা প্রায় ৫,০০০। এর মধ্যে ৮১৬টি সমিতির মালিকানায় রয়েছে প্রায় ৪১,৭৯২.৯৭ শতাংশ জমি যার বর্তমান বাজারমূল্য প্রায় ১,৪০০ কোটি টাকা। এছাড়া প্রায় ২০০ কোটি টাকা মূল্যের দালানকোঠা, প্ল্যান্ট, মেশিনারীজ ও অন্যান্য সম্পদ রয়েছে। এ সকল সমিতির প্রকৃত কোন সুবিধাভোগী না থাকার কারনে একশ্রেণীর অসৎ, সুবিধাবাদী, মতলববাজ ঐ সকল সমিতির কর্মচারী ও কিছু অসৎ সমবায় কর্মকর্তাদের সহযোগিতায় এ সম্পদ ভোগ করছে এবং বিভিন্ন কৌশলে স্থায়ীভাবে জবরদখল নেয়ার অপচেষ্ট্রায় লিপ্ত রয়েছে।

সমবায়: সামাজিক উন্নয়ন তুরান্বিত করতে সক্ষম

বাংলাদেশে সমবায়ের অবদান শুধুমাত্র আর্থিক সুবিধা সৃষ্টির মাপকাঠিতে বিচার করা যথার্থ হবে না। কেননা সামাজিক পরিবর্তনে এর বিরাট অবদান রয়েছে। নিরক্ষর ও অনভিজ্ঞ কৃষকদেরকে আধুনিক প্রযুক্তির ব্যবহারে উদ্বুদ্ধ করা, দুগ্ধ খাতে আধুনিক ব্যবস্থাপনার প্রচলন, সঞ্চয় ও ঋণ ব্যবস্থাপনার অনুশীলন প্রভৃতি ক্ষেত্রে সমবায়ের অবদান অসামান্য।

তাছাড়া দেশের সর্বস্তরে বিশেষ করে পল্লী এলাকায় সমবায়ের মতো আনুষ্ঠানিক প্রতিষ্ঠান গঠন ও পরিচালনায় অংশগ্রহণ সাধারণ মানুষের জন্য মহৎ অভিজ্ঞতা বিস্তারের মাধ্যমে । প্রশিক্ষণের মাধ্যমে আইন মোতাবেক ব্যবস্থাপনা পরিচালনা, নির্বাচন ও সভা অনুষ্ঠান, হিসাব রক্ষণ, অডিট মোকাবিলা সহ আর্থিক কর্মকা- পরিচালনার অনুশীলনের মধ্য দিয়ে সমবায়ের সদস্যদের যে নেতৃত্ব, দায়িত্বশীলতা ও চেতনার বিকাশ ঘটে তা ঐ সকল সদস্যদেরকে সমাজ ও রাষ্ট্রের অন্যান্য কর্তব্য ও অধিকার সম্পর্কে অনেক বেশী দায়িত্বশীল করে তোলে। এ অধিকারবোধ ও দায়িত্ববোধ শিক্ষা, স্বাস্থ্যসহ অন্যান্য সামাজিক খাতের বিকাশে গুরুত্বপূর্ণ প্রভাবক হিসেবে কাজ করে।

৫. সমবায় অধিদপ্তর: চলমান কর্মকাণ্ড, সীমাবদ্ধতা ও গতি বৃদ্ধিতে করণীয়

দেশের ব্যাপক দুগ্ধ ঘাটতি ও বেকারত্ব দূরীকরণে বাংলাদেশ সমবায় অধিদপ্তর বাৎসরিক প্রায় ৩ কোটি ৬৫ লক্ষ লিটার দুগ্ধ উৎপাদনক্ষম একটি উন্নয়ন প্রকল্প প্রণয়ন করেছে যা এখন অনুমোদনের অপেক্ষায়। প্রায় ৭৫ কোটি টাকা ব্যয়ে ২০০৯-২০১৩ মেয়াদে প্রকল্পটি বাস্তবায়িত হবে। দেশের পিছিয়ে পড়া জনগোষ্ঠীর জীবনমান উন্নয়নের লক্ষ্যে গৃহীত হয়েছে দু'টি উন্নয়ন প্রকল্প। জেডিসিএফ এর অর্থায়নে ৮ কোটি টাকা প্রাক্তলিত ব্যয়ে ২০০৯-২০১১ মেয়াদে একটি প্রকল্প বাস্তবায়ন করা হবে। এর আওতায় ২৪০০ অতি দরিদ্র গারো পরিবারে জীবনমান উন্নয়নের পরিকল্পনা করা হয়েছে। আর সমবায়ী মৃৎশিল্পীদের জীবনমান উন্নয়ন ও উৎপাদনশীলতা বৃদ্ধির লক্ষ্যে কুমিল্লার বিজয়পুরে বাস্তবায়িত হচ্ছে "বাংলাদেশের সমবায় মৃৎশিল্পের উন্নয়ন" শীর্ষক প্রকল্প। এছাড়া, সমবায় অধিদপ্তরের কর্মকর্তা/কর্মচারীর পাশাপাশি সমবায়ীগণকেও কম্পিউটার বিষয়ক প্রশিক্ষণ প্রদান করা হচ্ছে যা বর্তমান সরকারের ডিজিটাল বাংলাদেশ গড়ার ক্ষেত্রে সহায়ক ভূমিকা রাখবে।

এদেশে সমবায়ের প্রশাসন, কার্যক্রম এবং উন্নয়নের জন্য সমবায় অধিদপ্তর মূল সরকারী প্রতিষ্ঠান হিসেবে দায়িত্ব পালন করে আসছে। বিকেন্দ্রীভূত প্রশাসনিক কাঠামোর মাধ্যমে সমবায় অধিদপ্তর দেশ জুড়ে পিছিয়ে পড়া বিভিন্ন জনগোষ্ঠীর সমন্বয়ে সমবায় সংগঠন গড়ে তুলে ঐতিহাসিকভাবে যে ভূমিকা রেখেছে তা সর্বমহলেই স্বীকৃত। পাশাপাশি প্রত্যাশিত ভূমিকা পালনে ব্যর্থতার দায়ভারও সমবায় অধিদপ্তরের রয়েছে।

সমবায় অধিদপ্তরের দায়িত্ব সমূহকে মূলত: তিন ভাগে ভাগ করা যেতে পারে। যথা ঃ বিধিবদ্ধ দায়িত্ব (regulatory), উন্নয়নমূলক দায়িত্ব (developmental), এবং সম্প্রসারণমূলক দায়িত্ব (promotional)। সমবায় অধিদপ্তরের এসব দায়িত্ব পালনে সাধারণতঃ যে সকল সীমাবদ্ধতা চিহ্নিত করা হয়ে থাকে তা নিম্নরূপ:

- প্রয়োজনীয় জনবলের ঘাটতি ।
- সমবায় কর্মকর্তাগণের পেশাগত ও দৃষ্টিভঙ্গিগত উৎকর্ষতা আনয়নের জন্য প্রশিক্ষণের অভাব ।
- অপ্রতুল logistic support।

- কর্মকর্তা/কর্মচারীগণের পদোর্নতির সীমিত সুযোগ।
- কর্মকর্তা/কর্মচারীগণের বদলী ও পোষ্টিং সংক্রান্ত নীতিমালার অনুশীলন না হওয়া ।
- কর্মমূল্যায়নের জন্য যথাযথ ব্যবস্থার অনুশীলন না হওয়া ।
- রাজনৈতিক চাপ মোকাবেলায় ও রাজনৈতিক অনুপ্রবেশ ঠেকাতে কর্মকর্তাদের অক্ষমতা ।
- সমবায় সমিতি নিবন্ধনের বিষয়ে যথায়থ সতর্কতা ও আন্তরিকতার অভাব ।
- অভিযোগ তদন্ত, বিবাদ নিষ্পত্তি ও সমিতি পরিদর্শনের ক্ষেত্রে যথার্থ সতর্কতা অবলম্বন না করা।
- সমবায় সমিতির অভিট পরিচালনার জন্য একটি স্বতন্ত্র অভিট ইউনিটের অনুপস্থিতি ।
- বিদ্যমান পরিস্থিতিতে অকার্যকর ও সম্ভাবনাহীন সমবায় সমিতিগুলোকে দ্রুততার সাথে নিষ্পত্তি করতে না পারা।
- সমবায়ীদের জন্য সময়োপযোগী পেশাভিত্তিক ও নৈতিক প্রশিক্ষণ প্রদানে উদ্যোগের অভাব ।
- সমবায় ঋণ কার্যক্রমে গতিশীলতা না থাকা এবং ঋণ কার্যক্রমে স্বচ্ছতা ও দক্ষতা আনয়নের জন্য
 বিতরণ ও আদায় পদ্ধতির সংস্কারে ব্যর্থতা ।

উল্লিখিত সীমাবদ্ধতাসমূহ দূরীকরণে এবং সেইসাথে সমবায় অধিদপ্তর শক্তিশালীকরণ ও সমবায় আন্দোলন সক্রিয় করতে বেশ কিছু পদক্ষেপ গ্রহণ জরুরি। করণীয়সমূহ হতে পারে নিমুর্নপ:

- সমবায়ের সপক্ষে প্রচারণা বৃদ্ধি: সমবায়ের গুরুত্ব, উপযোগীতা ও অবদান তুলে ধরে এর সপক্ষে
 ব্যাপক জনমত গড়ে তোলা । সে লক্ষ্যে সমবায় অধিদপ্তরের প্রচার ও প্রকাশনা শাখার কার্যক্রম
 জোরদারকরণের প্রয়োজনীয় ব্যবস্থা নেয়া প্রয়োজন ।
- সমিতির সংখ্যা হ্রাস ও যৌক্তিককরণ: বিদ্যমান ১ লক্ষ ৬২ হাজার সমিতির মধ্যে প্রায় ৯৩,০০০ সমিতি বাংলাদেশ পল্লী উন্নয়ন বোর্ড কর্তৃক সংগঠিত। বর্তমানে বিআরডিবি বিভিন্ন প্রকল্পের আওতায় অনানুষ্ঠানিক দল গঠনের মাধ্যমে কার্যক্রম পরিচালনা করায় এ সকল সমবায় সমিতিগুলোর কার্যক্রমে স্থবিরতা পরিলক্ষিত হচ্ছে। কিন্তু সমবায় অধিদপ্তরকে বিধিবদ্ধ দায়িত্বের অংশ হিসেবে প্রতিবংসর এ সকল সমিতির অডিট সম্পাদন করতে হয়। ফলে যথেষ্ট জনবল এবং আর্থিক সংশ্লিষ্টতাসহ বিনা কারণে ব্যর্থতার দায়ভার বহন করতে হয়। কাজেই বিআরডিবি সমর্থনপুষ্ট এ সকল সমিতির দায়ত্ব বিআরডিবি বরাবরে হস্তান্তর করা হলে এবং অন্যান্য অকার্যকর সমবায় সমিতি বাতিলের মাধ্যমে সমবায় সমিতির মোট সংখ্যা যদি ৪০ হাজারে নামিয়ে আনা যায় তবে অতি সহজেই এদের কার্যক্রমে স্বচ্ছতা, জবাবদিহিতা ও গতিশীলতা আনয়ন সম্ভব হবে। অবশ্য এর অর্থ এই নয় য়ে, ভবিষ্যতে সমবায় সমিতির সংখ্যা বৃদ্ধি করা যাবে না।
- কৃষি খাতে সমবায়ের কার্যক্রম জোরদারকরণ: বিদ্যমান বাস্তবতা ও তুলনামূলক সুবিধার বিবেচনায় সমবায় সংগঠনের সম্ভাবনাময় ক্ষেত্র হিসেবে কৃষিজাত পণ্য উৎপাদন ও Vertical Integration এর মাধ্যমে বাজারজাতকরণ কার্যক্রমে সমবায়ের ভূমিকা জোরদার করা প্রয়োজন । এ লক্ষ্যে বর্তমানে দেশের প্রধান প্রধান চাল, সবজি ও মাছমাংস উৎপাদনকারী এলাকায় উৎপাদনকারীকে সংগঠিত করে সমিতি গঠন এবং সমবায়ের ব্যবস্থাপনায় পরিবহনের মাধ্যমে বাজারজাতকারী সমবায় সমিতিতে পৌঁছানোর ব্যবস্থা নেয়া যেতে পারে । এছাড়াও ৫০০০/- টাকা পর্যন্ত কৃষি ঋণ মওকুফ সমবায়ী কৃষকদের ক্ষেত্রে কার্যকর করে এসকল সমিতিগুলোকে পূর্ণ

কার্যকর করার জরুরী পদক্ষেপ নিতে হবে ।

- দুগ্ধ খাতে সমবায় সমিতির কার্যক্রম সম্প্রসারণ: বাংলাদেশে সমবায়ের সবচেয়ে সম্ভাবনাময় ও
 সফল খাত হলো দুগ্ধ খাত। বিভিন্ন অনাকাঞ্জিত কারণে আর্থিক ও সেবাদানকারী প্রতিষ্ঠান
 হিসেবে এটি দিন দিন ঝুঁকিপূর্ণ হয়ে উঠেছে। ব্যবস্থাপনা ও প্রশাসনে দক্ষতা, স্বচ্ছতা,
 জবাবদিহিতা ও পেশাদারিত্ব আনয়ন এবং ট্রেড ইউনিয়ন কার্যক্রম যৌক্তিক করণের মাধ্যমে এ
 প্রতিষ্ঠানটিকে লাভজনক ও প্রত্যাশিত সেবা দানকারী প্রতিষ্ঠানে উন্নীতকরণের উদ্যোগ নিতে
 হবে। এ লক্ষ্যে জরুরী ভিত্তিতে এ প্রতিষ্ঠানের উপ-আইন ও নিয়োগ বিধি সংশোধন করা
 প্রয়োজন।
- নতুন প্রজন্মের ক্রেডিট ও বহুমূখী সমবায় সমিতিগুলোর জন্য উপযুক্ত আইনগত ও প্রাতিষ্ঠানিক ব্যবস্থা নিশ্চিতকরণ: সরকারের বেসরকারীকরণ কর্মসূচীর আওতায় বর্তমানে বিশেষ করে মেট্রোপলিটান শহরগুলোতে ক্রেডিট সমবায় সমিতির সংখ্যা দিন দিনই বাড়ছে । আইনের দূর্বলতা ও যথাযথ তদারকির অভাবে এ সকল সমবায় সমিতি কর্তৃক আমানতকারীদেরকে বিভ্রান্ত ও প্রতারণার ঘটনা ক্রমেই বাড়ছে । এ সকল সমবায় সমিতির জন্য আইনের সংশোধন, নিবন্ধনে সতর্কতা অবলম্বন ও যথাযথ নীতিমালা প্রণয়ন ও অনুসরণ করা প্রয়োজন ।
- সমবায়ের সাথে আরাে অধিক সংখ্যক নারীর সম্পৃক্তকরণ: বর্তমানে মােট সমবায় সমিতির মধ্যে
 মহিলা সমবায় সমিতির সংখ্যা মাত্র ১৫%এবং নারী সমবায়ীর সংখ্যা ১৮% । বাংলাদেশে
 মহিলাদের বর্তমান অবস্থান বিবেচনায় সরকারের উন্নয়ন অংগীকার ও বিভিন্ন আর্থিক ও সামাজিক
 উন্নয়ন কর্মকা-ে নারীদের অধিকতর সততা ও দক্ষতা বিবেচনা করে সমবায়ের উন্নয়নে অধিক
 হারে মহিলাদেরকে সম্পৃক্ত করা এখন সময়ের দাবী ।
- নতুন সমবায় সমিতি নিবন্ধনের বিষয়ে যথাযথ সতর্কতা অবলম্বন করা: নিবন্ধিত সমবায় সমিতির
 সংখ্যা ক্রমেই বাড়ছে। সে তুলনায় কার্যকর ও সফল সমিতির সংখ্যা বাড়ছে না। এতে প্রতীয়মান
 হয় য়ে, অনেক ক্ষেত্রে সমিতির সম্ভাব্যতা বিচার না করেই নিবন্ধন করা হচ্ছে। কাজেই এ বিষয়ে
 যথাযথ সতর্কতা অবলম্বন করা দরকার।
- অভিযোগ তদন্ত, বিবাদ নিষ্পত্তি ও সমিতি পরিদর্শনের ক্ষেত্রে যথার্থ সতর্কতা অবলম্বন করা:
 যথাযথ দক্ষতা ও বিজ্ঞতার সাথে এ সকল কাজ সম্পাদিত না হওয়ায় অনেক ক্ষেত্রে দীর্ঘসূত্রিতা
 এবং আইনগত জটিলতার সৃষ্টি হয়। ফলে সমিতি ব্যবস্থাপনায় দ্বন্দ্ব ও বিবাদ স্থায়ীরূপ লাভ করে।
 কাজেই তদন্ত, বিবাদ নিষ্পত্তি ইত্যাদি কাজে দক্ষ ও সৎ কর্মকর্তাদেরকে নিয়োজিত করতে হবে।
- অকার্যকর ও সম্ভাবনাহীন সমবায় সমিতিগুলোকে দ্রুততার সাথে অবসায়ন করা: বর্তমানে অসংখ্য সমবায় সমিতি অকার্যকর ও সম্ভাবনাহীন অবস্থায় বিরাজ করলেও এ সকল সমবায় সমিতির নিবন্ধন বাতিল বা অবসায়ন সমাপ্তকরণ বিষয়ে তেমন কোনো উদ্যোগ নেই। ফলে এগুলোর পেছনে প্রতি বৎসর প্রচুর জনবল, সময় ও অর্থের অপচয় হচ্ছে। কাজেই এগুলোকে দ্রুত গুটিয়ে ফেলার উদ্যোগ নিতে হবে।
- সম্পদশালী অকার্যকর সমবায় সমিতিগুলোকে জরুরী ভিত্তিতে অবসায়ন/বিকল্প ব্যবহার
 নিশ্চিতকরণ: বর্তমানে কিছু শ্রেণীর সমবায় সমিতি রয়েছে যাদের সুনির্দিষ্ট কোনো সুবিধাভোগী
 নেই । কিন্তু এগুলোর মালিকানায় রয়েছে হাজার হাজার কোটি টাকার সম্পদ যা ক্রমেই বেদখল
 হয়ে যাচ্ছে এবং কিছু সংখ্যক অসৎ ব্যক্তি বৎসরের পর বৎসর এগুলোর সুবিধা ভোগ করছে ।

অনতিবিলম্বে এসকল সমিতি অবসায়নে দেয়া এবং প্রাপ্ত সম্পদ সমবায় উন্নয়ন ট্রাষ্ট বা ফাউন্ডেশন গঠনের মাধ্যমে সমবায়ের উন্নয়নে ব্যবহার করা অতি জরুরী।

- সমবায় কৃষি ঋণ কার্যক্রম পুনঃ চালুকরণ: ঋণ কার্যক্রমে স্বচ্ছতা ও দক্ষতা আনয়নের জন্য বিশেষ
 করে সমবায়ের মাধ্যমে ক্ষুদ্র ঋণ ব্যবস্থাপনায় গতিশীলতা আনয়নের জন্য বিদ্যমান বিতরণ ও
 আদায় পদ্ধতির সংস্কার ও নীতিমালা প্রণয়ন জরুরি । তাছাড়া সমবায় খাতের অর্থায়নের জন্য
 একটি পৃথক আর্থিক প্রতিষ্ঠান স্থাপন-এর কথা ভাবা প্রয়োজন ।
- সমবায় সেয়্টরের ডাটাবেইজ প্রতিষ্ঠা, ই-গর্ভনেন্স চালুকরণ সহ মনিটরিং কার্যক্রম জোরদারকরণ।

সমবায় অধিদপ্তর কর্তৃক উপরোক্ত করণীয়সমূহ দায়িত্ববোধসহ দক্ষতার সাথে পালনের জন্য নিম্নলিখিত সুপারিশসমূহ বিবেচনা করা যেতে পারে :

- সমবায় বিভাগের কর্মকর্তাদের সক্ষমতা ও মালিকানা-চেতনা (sense of ownership) বৃদ্ধির জন্য নৈতিক ও পেশাগত প্রশিক্ষণের ব্যবস্থা করা ।
- কর্মকর্তাদের সচলতা (mobility) ও কর্মদক্ষতা (efficency) বাড়ানোর জন্য যানবাহন সহ
 অন্যান্য লজিষ্টিক সাপোর্ট বাড়ানোর ব্যবস্থা নেয়া। উল্লেখ্য যে, কাজের প্রকৃতি অনুযায়ী সমবায়
 বিভাগের কর্মকর্তাদের ব্যাপক ভ্রমনের আবশ্যকতা রয়েছে। কিন্তু মাঠ পর্যায়ের কর্মকর্তাদের জন্য
 প্রয়োজনীয় যানবাহনের ব্যবস্থা না থাকায় এ উদ্দেশ্য চরমভাবে ব্যাহত হচ্ছে।
- কর্মকর্তা/কর্মচারীগণের পদোন্নতির সুযোগ সৃষ্টি সহ বদলী ও পদায়নের জন্য যথাযথ নীতিমালা অনুসরণ করা।
- কর্মমূল্যায়নের জন্য যথাযথ ব্যবস্থার সঠিক অনুশীলন এবং দায়ী কর্মকর্তাদের বিরুদ্ধে আইনগত ব্যবস্থা গ্রহণ নিশ্চিতকরণ।
- সমবায় সমিতির অভিট পরিচালনার জন্য একটি স্বতন্ত্র অভিট ইউনিট স্থাপন।

সমবায় অধিদপ্তর শক্তিশালীকরণের মাধ্যমে দেশে সমবায় আন্দোলন জোরদার করার লক্ষ্যে সরকারী প্রতিশ্রুতি জরুরি। এ লক্ষ্যে সরকারের জন্য করণীয় বিষয়াদি হতে পারে নিমুরূপ:

জরুরী ভিত্তিতে জাতীয় সমবায় নীতিমালা ঘোষণা। যে ঘোষণায় সংবিধানের ১৩ অনুচ্ছেদ
অনুযায়ী সমবায়ী মালিকানাকে দেশের উন্নয়নে যথাযোগ্য গুরুত্ব দিতে হবে।

পদের শ্রেণী	মঞ্জুরীকৃত পদ সংখ্যা	শূণ্য পদ সংখ্যা	
২	•	8	
প্রথম শ্রেণী	কর্মরত পদ -১৭৪	কর্মরত পদ -৩৬	
	<u>রিজার্ভ পদ- ১৫</u>	<u>রিজার্ভ পদ- ১৩</u>	
	মোট= ১৮৯	মোট = ৪৯	
দ্বিতীয় শ্রেণী	৫ ৭১	৩৪৯	
তৃতীয় শ্রেণী	২,৯১৩	ዓ ৫৫	
চতুৰ্থ শ্ৰেণী	১,২৩২	৩ 88	
মোট	8,৯০৫	১,৪৯৭	

- সমবায় আইনের সংশোধন করে সমবায় বায়বকরণ ।
- সমবায় অধিদপ্তরের শূণ্যপদ পূরণে প্রয়োজনীয় ব্যবস্থা গ্রহণ ৷ উল্লেখ্য যে, বর্তমানে সমবায়
 অধিদপ্তরের মঞ্জুরীকৃত মোট পদ সংখ্যা ৪,৯০৫টির মধ্যে শূণ্য পদের সংখ্যা ১,৪৯৭টি যা শ্রেণী
 ভিত্তিক নিয়ে দেখানো হ'ল ।

সমবায় অধিদপ্তরের সার্বিক কার্যক্রমে গতিশীলতা আনয়নের লক্ষ্যে দ্রুত শূণ্য পদ সমূহ পূরণ করা প্রয়োজন। এ লক্ষ্যে পদোন্নতির মাধ্যমে পুরণযোগ্য পদ সমূহে পদোন্নতি প্রদানের জন্য বিদ্যমান নিয়োগবিধি সংশোধন করার কাজটি চূড়ান্ত পর্যায়ে রয়েছে। সংশোধিত নিয়োগ বিধি জারী হওয়ার সাথে সাথে পদোন্নতি প্রক্রিয়া শুরু করা প্রয়োজন। অপরদিকে সরাসরি নিয়োগযোগ্য ৩য় শ্রেণীভূক্ত ৫৯৫টি পদে নিয়োগের জন্য সমবায় মন্ত্রণালয়ের মাধ্যমে সংস্থাপন মন্ত্রণালয়ে ছাড়পত্র গ্রহণের বিষয়টি প্রক্রিয়াধীন রয়েছে। অবিলম্বে উক্ত ছাড়পত্র প্রয়োজন। ছাড়পত্র প্রাপ্তির সাথে সারকারের প্রচলিত নিয়োগ পদ্ধতি অনুসরণ পূর্বক নিয়োগ প্রক্রিয়া শুরু করা জরুরি।

- জেলা ও উপজেলা সমবায় কর্মকর্তার পদটি উন্নীতকরণসহ জনবল কাঠামো পুনর্বিন্যাস করা প্রয়োজন: সমবায় অধিদপ্তরের মূল কাজ অনুযায়ী সমবায় সমিতিগুলোকে অর্থবহ সমর্থন ও সহযোগিতা প্রদানের কাজটি মূলতঃ উপজেলা সমবায় কর্মকর্তা এবং জেলা সমবায় কর্মকর্তার মাধ্যমে সম্পাদন করা হয়ে থাকে। দেশে বর্তমানে প্রায় সকল পেশার মানুষের মধ্যে ক্রমবর্ধমান হারে সমবায় সমিতির সংখ্যা বদ্ধি পাচেছ। পাশাপাশি সরকারের অগ্রাধিকার প্রাপ্ত কর্মসূচী আশায়ন প্রকল্পের আওতায় সমবায় সমিতি গঠন পূর্বক ঋণ কার্যক্রম পরিচালনা এবং কৃষি উৎপাদন বৃদ্ধির জন্য সুষ্ঠু পানি ব্যবস্থাপনা গড়ে তোলার লক্ষ্যে এলজিইডি ও পানি উন্নয়ন বোর্ড এর মাধ্যমে বাস্তবায়িত প্রকল্পের আওতায় অনেক সমবায় সমিতি গড়ে উঠেছে। কিন্তু সমবায় সমিতি বৃদ্ধির সংখ্যা অনুপাতে মাঠ পর্যায়ে অর্থাৎ উপজেলা ও জেলা পর্যায়ে প্রয়োজনীয় সংখ্যক জনবল বাড়লেও প্রয়োজনীয় যানবাহনসহ 'লজিষ্টিক সার্পোট' দেয়া হচ্ছে না। এমতাবস্থায় সরকারের অগ্রাধিকার প্রাপ্ত কর্মসূচী/ প্রকল্পসমূহ সুষ্ঠূভাবে বাস্তবায়নের স্বার্থে উপজেলা সমবায় কার্যালয়ের বিদ্যমান জনবল কাঠামো (উপজেলা সমবায় কর্মকর্তা - ১ জন, সহকারী পরিদর্শক - ২ জন, অফিস সহকারী বনাম কম্পিউটার অপারেটর- ১জন, এম,এল,এস,এস- ১ জন মোট- ৫ জন) সংশোধন পূর্বক জনবল বৃদ্ধিসহ উপজেলা সমবায় কর্মকর্তার পদটি ২য় শ্রেণী হতে ১ম শ্রেণীতে এবং জেলা সমবায় কর্মকর্তার পদটি ১ম শ্রেণী (এন্ট্রি পদ-৯ম গ্রেড) হতে ন্যুনতম উপ-নিবন্ধক (৭ম গ্রেড) পদে উন্নীত করা প্রয়োজন। একইসাথে এ সকল কর্মকর্তার কাজের সুবিধার্থে উপজেলা পর্যায়ে মটর সাইকেল ও জেলা পর্যায়ে জীপ গাড়ী এবং কম্পিউটার সরবরাহ করা প্রয়োজন। সেই সাথে সমবায় কর্মকা-ে গতি সঞ্চারের লক্ষ্যে সদর কার্যালয়ে কর্মকর্তা/কর্মচারীদের জন্য প্রয়োজনীয় সংখ্যক জীপ গাড়ী/ষ্টাফ বাস সরবরাহ করা প্রয়োজন।
- বরিশাল ও সিলেট বিভাগে সমবায় অফিস স্থাপন: সমবায় অধিদপ্তরের কার্যক্রম সুষ্ঠুভাবে
 পরিচালনার জন্য নতুন সৃষ্ট বরিশাল ও সিলেট বিভাগে সমবায় অফিস স্থাপন করা প্রয়োজন ।
 সম্প্রতি সংস্থাপন মন্ত্রণালয় হতে উল্লেখিত ২টি বিভাগের সমবায় অফিস স্থাপনের জন্য
 প্রয়োজনীয় জনবল নিয়োগ/পদ সৃজনের সম্মতি জ্ঞাপন করা হয়েছে । যথা দ্রুত সম্ভব উল্লেখিত
 ২টি বিভাগীয় সমবায় অফিস স্থাপনের জন্য প্রশাসনিক অনুমোদনসহ প্রয়োজনীয় জনবল নিয়োগ
 করা প্রয়োজন ।

- ১. বিদ্যমান জনবল কাঠামোর পুনর্বিন্যাস ও যৌক্তিককরণ: ঢাকা শহরে সমবায় সমিতির সংখ্যা ও কার্যক্রম ব্যাপকভাবে বৃদ্ধি পাচ্ছে। কিন্তু লোকবল সংখ্যা অন্যান্য জেলার অনুরূপ। ফলে এসকল সমবায় সমিতির কার্যক্রম যথাযথভাবে তদারকি করা সম্ভব হচ্ছে না। বর্তমানে সমবায় খাতের অনিয়ম ও সংঘাতের অধিকাংশই ঢাকা কেন্দ্রীক। কাজেই ঢাকা জেলাকে কমপক্ষে ৩টি অঞ্চলে বিভক্ত করে ৩ জন কর্মকর্তার অধীনে ন্যস্ত করা অতীব জরুরী। একইভাবে বর্তমানে ঢাকা মেট্রোপলিটান অঞ্চলে মাত্র ৬টি থানা সমবায় অফিসারের পদ রয়েছে। ফলে লোকবলের অভাবে কোন থানাতেই সুষ্ঠুভাবে কার্যক্রম পরিচালিত হচ্ছে না। এমতাবস্থায় ৬টির স্থলে কমপক্ষে ১২টি থানা সমবায় অফিসারের এর পদ সৃজন একান্ত জরুরী। একইভাবে চট্টগ্রাম জেলাকে ২টি অঞ্চলে এবং চট্টগ্রাম মেট্রোপলিটান এলাকায় ২টির পরিবর্তে ৪টি সমবায় অফিসারের পদ সৃজন জরুরী।
- নয়মিত পদোয়তি প্রদান: বিসিএস ক্যাডারভূক্ত অন্যান্য ক্যাডার সার্ভিসের তুলনায় বিসিএস
 সমবায় ক্যাডার কর্মকর্তাদের পদোয়তির সুযোগ খুবই সীমিত। এ ক্যাডারের কর্মকর্তাগণ
 চাকুরীতে প্রবেশের প্রায় ১৪/১৫বছর এট্রি পদে চাকুরী করার পর পদোয়তির সুযোগ পান। অথচ
 ঐ একই সময়ে অন্যান্য ক্যাডার কর্মকর্তাগণ ২/৩টি পদোয়তি পেয়ে থাকেন। এ ক্যাডারের
 কর্মকর্তাদের কাজের উৎসাহ সৃষ্টির লক্ষ্যে উচ্চতর পদে পদোয়তির সুযোগ সৃষ্টিসহ বিভিয় সমবায়
 সমিতিতে ডেপুটেশনে বদলী ও রিজার্ভ পদের বিপরীতে পদোয়তি বিষয়টি বিবেচনা করা
 প্রয়োজন।
- অতিরক্তি নিবন্ধক পদের বেতন স্কেল উন্নীতকরণ: বিসিএস ক্যাডারভূক্ত অন্যান্য ক্যাডার সার্ভিসের ২য় স্তরের পদটি ৩য় গ্রেড অথবা তদুর্ধ গ্রেডভূক্ত । অথচ বিসিএস (সমবায়) ক্যাডারের ২য় স্তরের অতিরিক্ত নিবন্ধকের পদটি ৪র্থ গ্রেডভূক্ত । ফলে অন্যান্য ক্যাডার কর্মকর্তাদের তুলনায় এ ক্যাডারের কর্মকর্তারা প্রাপ্য সুযোগ সুবিধা হতে বঞ্চিত হচ্ছেন । কাজেই এ ক্যাডারের অতিরিক্ত নিবন্ধক পদের বেতন স্কেল ৪র্থ গ্রেড হতে ৩য় গ্রেডে উন্নীত করা যুক্তিসঙ্গত ।
- প্রশিক্ষণ প্রদান ঃ কর্মকর্তা/কর্মচারীদের দক্ষতা বৃদ্ধি ও সমবায়-বান্ধব দৃষ্টিভঙ্গি বিনির্মাণে প্রশিক্ষণের কোনো বিকল্প নেই। কিন্তু, এ অধিদপ্তরের কর্মকর্তা/কর্মচারীদের দেশে/বিদেশে প্রশিক্ষণ গ্রহণের সুযোগ খুবই নগণ্য। কর্মকর্তা/কর্মচারীদের প্রয়োজনীয় সংশ্রিষ্ট প্রশিক্ষণ গ্রহনের সুযোগ সৃষ্টি করা প্রয়োজন। এ ক্ষেত্রে বাংলাদেশ সমবায় একাডেমীকে জাতীয় প্রশিক্ষণ প্রতিষ্ঠান হিসেবে স্বীকৃতি প্রদানের মাধ্যমে অধিকতর গতিশীল ও কার্যকর করা যৌক্তিক।
- অধিদপ্তরের নিজস্ব অফিস ভবন নির্মাণ: সমবায় অধিদপ্তর অতি প্রাচীন হওয়া সত্বেও এ অধিদপ্তরের নিজস্ব কোন অফিস ভবন ছিল না। সম্প্রতি সমবায় অধিদপ্তরের জন্য নিজস্ব অফিস ভবন নির্মাণ কাজ শুরু হলেও প্রয়োজনীয় অর্থের অভাবে অনুমোদিত স্থাপত্য নকশা অনুযায়ী নির্মাণ কাজ সমাপ্ত করা সম্ভব হচ্ছে না। দাপ্তরিক কাজের সুষ্ঠু পরিবেশ সৃষ্টির লক্ষ্যে জেলা সমবায় কার্যালয় ভবনসহ ৬টি বিভাগীয় দপ্তরের জন্য নিজস্ব অফিস ভবন নির্মাণ প্রয়োজন এবং সমবায় ভবনের জন্য প্রয়োজনীয় অর্থ বরাদ্ব প্রয়োজন।

৬. "রূপকল্প ২০২১" বাস্তবায়নে সমবায় আন্দোলন: সম্ভাবনা অসীম!

সংকটের আর্বতে নিমজ্জমান অবস্থা থেকে দেশকে পুনরুদ্ধার করে আগামী ২০২০-২১ সালের মাহেন্দ্রক্ষণে একটি উন্নত সমৃদ্ধ বাংলাদেশ উপহার দেয়ার সুস্পষ্ট অঙ্গীকার নিয়ে ঘোষণা করা হয়েছে "রূপকল্প ২০২১"। সুনির্দিষ্ট ২২ টি লক্ষ্য অর্জনের মাধ্যমে আমরা যে বাংলাদেশের স্বপ্ন দেখছি তার অর্থনীতি হবে দ্রুত বিকাশশীল, থাকবে না দারিদ্রা, প্রতিষ্ঠিত হবে প্রকৃত অংশীদারিত্বমূলক সহিঞ্চ্ গণতান্ত্রিক ব্যবস্থা। প্রতিষ্ঠিত হবে সামাজিক ন্যায়বিচার, নারীরা ভোগ করবে সমান অধিকার, থাকবে আইনের শাসন, মানবাধিকার, সুশাসন ও দূষণমুক্ত পরিবেশ। এক্ষেত্রে সফলতা পরিমাপের নির্দেশক সমূহ হ'ল অন্যান্য বিষয়ের পাশাপাশি উচ্চতম ও সমতাভিত্তিক অর্থনৈতিক প্রবৃদ্ধি, দ্রুততার সাথে দারিদ্রহাস, অভ্যন্তরীন উৎপাদন বৃদ্ধি, দ্রুব্যমূল্যের স্থিতিশীলতা আনয়ন, মানব সম্পদের উন্নয়ন, নারীর কর্মসংস্থান ও ক্ষমতায়ন, গণতন্ত্রের অনুশীলন ইত্যাদি। এসবের সফল বাস্তবায়নে প্রয়োজন তুলনামূলক সুবিধার ভিত্তিতে আমাদের সম্পদের সর্বোত্তম ব্যবহার নিশ্চিতকল্পে সকল অর্থনৈতিক শক্তির সমিলিত প্রয়াস। এসব শক্তির অন্যতম হ'ল "গণমুখী সমবায় আন্দোলন"।

বঙ্গবন্ধু নির্দেশিত 'গণমুখী সমবায় আন্দোলন' বঙ্গবন্ধু কন্যা মাননীয় প্রধানমন্ত্রীর নির্বাচনী ইশতেহারে প্রতিশ্রুত "রূপকল্প ২০২১"-এর ২২টি সময়-নিদিষ্ট লক্ষ্যমাত্রা অর্জনে কতটুকু অবদান রাখতে পারে? বিষয়টি বুঝতে আমরা দেশের ২৬টি জেলার সমবায় সমিতির ৫৫ জন জ্ঞান-সমৃদ্ধ-অভিজ্ঞ সদস্যদের কাছ থেকে সংশ্রিষ্ট তথ্য-উপাত্ত ধ্যান-ধারণা সংগ্রহ করেছি। আমরা জিজ্ঞেস করেছিলাম যে, "রূপকল্প ২০২১"-এ প্রদেয় ২২টি সময়-নির্দিষ্ট লক্ষ্যমাত্রার প্রত্যেকটি (আলাদা-আলাদাভাবে) অর্জনে সমবায়-সমবায়ীদের ভূমিকা কি হতে পারে? অভিজ্ঞ-জ্ঞানসমৃদ্ধ সমবায়ীরা প্রায় ১,২০০ সুপারিশ দিয়েছেন, ধারণা-মতামত ব্যক্ত করেছেন। বিভিন্ন জেলা থেকে প্রাপ্ত সুপারিশসমূহের অনেকগুলোই প্রায় অনুরূপ;

সারণি ২: "রূপকল্প ২০২১" বাস্তবায়নে সমবায় এর ভূমিকা সম্পর্কে তৃণমূল-সমবায়ীদের সুপারিশ

লক্ষ্যমাত্রা ১ : ২০১০ সালের মধ্যে প্রাথমিক স্তরে নিট ভর্তির হার হবে ১০০ শতাংশ। সুপারিশ :

- ১. প্রতি গ্রামে সমবায় সমিতি গড়ে সমিতির সদস্যদের সম্ভান কিংবা পোষ্যদের প্রাথমিক শিক্ষা নিশ্চিত
- ২. প্রতিটি গ্রামে সমবায়ের মাধ্যমে স্কুল মনিটরিং করা ও অস্বচ্ছল পরিবারকে সরকারী সহায়তা দান করা।
- প্রতিটি গ্রামে সমবায় ভিত্তিক প্রাথমিক বিদ্যালয় প্রতিষ্ঠা করা ।
- 8. সমবায়ের মাধ্যমে শিশুদের প্রাথমিক স্কুলে যাওয়া নিশ্চিতকরণ এবং উপবৃত্তির হার বাড়াতে হবে।
- কে. সমবায়ের মাধ্যমে স্কুল বিহীন গ্রাম গুলোতে ফ্রি স্কুল প্রতিষ্ঠা করা এবং 'খাদ্যের বিনিময়ে শিক্ষা'
 প্রকল্প জারদার করা।
- ৬. যেহেতু আমাদের নিজস্ব স্কুল রয়েছে সেহেতু আমরা প্রাথমিক পর্যায়ে শিশুদের বেতন ফুল ফ্রি অথবা হাফ ফ্রি করতে পারি।
- ৭. সমবায়ীরা ছোট ছোট উঠান বৈঠক, অভিভাবক সমবেশ, ব্যক্তিগত পর্যায়ে আলোচনা সভা আয়োজন করতে পারে।

- ৮. সমবায় সমিতির প্রতিটি সদস্যের পরিবারকে তাদের পরিবারের সদস্যদেরকে শিক্ষিত করার জন্য বাধ্য করতে হবে।
- ৯. শিক্ষার প্রয়োজনীয়তা সম্পর্কে জনগণের মধ্যে ব্যাপকভাবে প্রচারণা চালাতে হবে। এজন্য প্রত্যেক সমবায় সমিতিকে ব্যাপক পরিকল্পনা গ্রহন করে সরকারকে সহায়তায় প্রচার চালিয়ে প্রয়োজনে গরীব মানুষের সম্ভানদের আর্থিক সহায়তা প্রদান করে প্রাথমিক শিক্ষার ব্যবস্থা করতে হবে।
- ১০. একিভুত ও যুক্তি নির্ভর উদ্দেশ্য নিয়ে সকল স্তরে সমবায়কে সম্পুক্ত করতে হবে।
- ১১. মহল্লা ভিত্তিক সমবায় সমিতি গঠন করে সমিতির মাধ্যমে স্কুল তৈরী করে ভর্তির হার ১০০% করা সম্ভব হবে: বয়স্ক শিক্ষার মাধ্যমে।
- ১২. প্রাথমিক সমিতির সদস্যদের মাধ্যমে তাদের সন্তানদের স্কুলে পাঠানোর ব্যাপারে উদ্যোগী ভূমিকা পালন করতে হবে। এক্ষেত্রে জেলা সমবায় অফিস থেকে প্রাথমিক শিক্ষার গুরুত্তের বিষয়টি সংশ্রিষ্ট জেলার সকল প্রাথমিক সমিতিকে লিখিত চিঠি প্রেরণের মাধ্যমে জানাতে হবে এবং সদস্যদের সন্তানদের স্কুলে পাঠানোর ব্যাপারে প্রণোদনা প্রদান করতে হবে।
- ১৩. গ্রামীণ অবকাঠামোর প্রতি স্তরে সমবায় কার্যক্রমের মাধ্যমে প্রতিটি পরিবারের সদস্যদেরকে সমবায়ী সদস্য করে ভর্তি করা হলে ২০১০ সালের মধ্যে নিট ভর্তির হার ১০০ শতাংশ করা সম্ভব।
- ১৪. ইউনিসেফ কর্তৃক প্রকাশিত বিশ্ব শিশু পরিস্থিতি রিপোর্ট/ ২০০৯ অনুযায়ী বাংলাদেশে প্রাথমিক শিক্ষা গ্রহণকারী শিশুর সংখ্যা ৮১% (২০০০-২০০৭) এই হার ১০০% এ উন্নীত করার জন্য-
- (ক) প্রতিটি গ্রামে গ্রামভিত্তিক সমবায় সমিতির এবং শহরের বস্তি এলাকায় এক বা একাধিক সমবায় সমিতি গঠন করে সমিতির সকল সমবায়ীদের সন্তান সন্ততিদের বাধ্যতামূলক বিদ্যালয়ে গমনের ব্যবস্থা করা যেতে পারে। যার সন্তান স্কুলে যাবেনা তাকে সমবায় সমিতির সদস্য পদ হতে বহিঙ্কার করার বিধান রাখা যেতে পারে।
- (খ) সমবায় সমিতির সদস্যদের উদুদ্ধকরণের মাধ্যমে সকল সদস্যের সম্ভানদের স্কুলে গমনের সুফল বিষয়ে ধারণা দেয়া যেতে পারে।
 - সকল সফল সমবায় সমিতিকে একটি করে প্রাথমিক বিদ্যালয় পরিচালনার দায়িত্ব দেয়া যেতে। পারে।
- ১৫. দেশের সর্বত্র সমবায় সমিতি প্রতিষ্ঠার মাধ্যমে দেশের সকল মানুষকে সমবায়ে সম্পৃক্ত করার মাধ্যমে এ লক্ষ্যমাত্রা অর্জন করা সম্ভব।
- ১৬. শিক্ষার গুরুত্ব সম্পর্কে সমবায়ীদের মধ্যে সচেতনতা অধিক হারে বৃদ্ধি করতে হবে।
- ১৭. সার্বিক গ্রাম সমবায় সমিতির মাধ্যমে গ্রাম ভিত্তিক তথ্য তৈরী করে প্রাথমিক স্তরে ভর্তির সংখ্যা নির্বাচন পূর্বক সাপ্তাহিক বৈঠকে বিষয়টি নিশ্চিত করা যাবে।
- ১৮. স্কুল সমবায় করতে হবে। অভিভাবকদের সচেতন করতে হবে। প্রত্যেক সমবায়ীর সন্তানকে স্কুলে যাওয়ার ব্যাপারে উদুদ্ধ করতে হবে।
- ১৯. সমবায়ীদের সচেতন করে স্কুল পরিচালনায় অংশগ্রহণের সুযোগ দিতে হবে।
- ২০. সমবায়ীদের অঙ্গীকার করতে হবে যে, নিজেদের ১০০% সন্তানকে স্কুলে পাঠাবে।
- ২১. প্রাথমিক স্তরে প্রথমে ৫ বছর বয়সী শিশুদের অপ্রাতিষ্ঠানিক শিক্ষা প্রদান করা যেতে পারে এবং পরবর্তীতে তাদের ৬ বছর বয়স হলে আনুষ্ঠানিক শিক্ষায়তনে ভর্তি নিশ্চিত করা সম্ভব হবে। এ ক্ষেত্রে সমবায় সংগঠনের শিক্ষিত যুবকদের সম্পুক্ত করতে হবে এবং তাদের মাধ্যমে বয়স্ক শিক্ষা

- চালু করা যেতে পারে। এজন্য বিভিন্ন সরকারী বেসরকারী প্রতিষ্ঠান যারা বয়স্ক শিক্ষা চালু করেছে তাদের সমবায়ের সাথে সম্পুক্ত করতে হবে।
- ২২. দেশে বিদ্যমান প্রায় ১ লক্ষ সমবায় সমিতির সাথে প্রায় ১ কোটি সমবায়ী সম্পৃক্ত। এদের মাধ্যমে জনগণের অংশগ্রহণ নিশ্চিত করতে হবে।

লক্ষ্যমাত্রা ২ : ২০১১ সালের মধ্যে দেশের সকল মানুষের জন্য নিরাপদ সুপেয় পানির ব্যবস্থা করা হবে।

সুপারিশঃ

- ১. সমবায় ব্যবস্থাপনার মাধ্যমে সমবায়ীদের মধ্যে নিরাপদ সুপেয় পানির ব্যবস্থা করা।
- ২. সমবায় এর ভিত্তিতে প্রতিটি পাড়া, মহল্লায় গভীর নলকৃপ স্থাপন এবং তদারকীর ভার প্রদান।
- গ্রামাঞ্চলসহ সারা দেশে সমবায় ভিত্তিক সুপেয় পানি সরবরাহের ব্যবস্থা করা।
- 8. এলাকায় সমবায় ভিত্তিক সমবায় সমিতি গঠন করে সমিতির মাধ্যমে পানির পাম্প বসিয়ে পানির ব্যবস্থা করা যায়।
- ৫. সমিতির সকল সদস্যকে এ ব্যাপারে সচেতন ও উদ্বুদ্ধ করা।
- ৬. এনজিও গুলো যারা বিদেশী সাহায্য পায় তাদেরকে বাধ্য করা।
- ৭. সমিতির প্রতিটি পরিবারকে বিশুদ্ধ পানির সম্পর্কে সচেতন করতে হবে।
- ৮. এলাকার নিরাপদ পানির জন্য সকলে মিলে চাপকল অথবা ডিপকল এর ব্যবস্থা করা যাতে পানির লাইন পয়ঃনিক্ষাসন থেকে আলাদা হয়।
- ৯. সরকারী সহায়তায় সমবায় সমিতি সমূহের মাধ্যমে শহর ও গ্রামে গভীর নলকূপ স্থাপন করতে হবে।
- ১০. ২০১১ সালের মধ্যে সকল মানুষের জন্য নিরাপদ সুপেয় পানির ব্যবস্থা করার লক্ষ্যে সদস্যদের মাঝে সমিতির সদস্যদের কম মূল্যে টিউবয়েল সরবরাহের ব্যবস্থা নিতে হবে। আর্সেনিক আক্রান্ত এলাকায় বিশেষ নলকৃপ স্থাপনের মাধ্যমে আর্সেনিক মুক্ত পানি সরবরাহের ব্যবস্থা নিতে হবে। পানি দুষণ প্রতিরোধে জনসচেনতা সৃষ্টি করতে হবে।
- ১১. প্রত্যেক সমবায় সমিতির মাধ্যমে স্বল্প মূল্যে নলকৃপ সরবরাহ করে অধিকহারে নলকৃপ স্থাপন করার ব্যবস্থা গ্রহণ করা যেতে পারে। তাছাড়া সমবায় সমিতির মাধ্যমে বিভিন্ন পানি শোধনের ঔষধ সরবরাহ করার ব্যবস্থা গ্রহণ করা যেতে পারে। সমবায় সমিতি এ ক্ষেত্রে স্বাস্থ্য বিভাগের সহায়ক শক্তি হিসেবে কাজ করতে পারে।
- ১২. সমবায়ীদের মধ্যে সুপেয় পানি ব্যবহারের জন্য ঋণ প্রদান করা ও সচেতনতা বৃদ্ধির ব্যবস্থা গ্রহন করা।
- ১৩. নিজস্ব উদ্যোগে সমবায়ীদের নলকৃপ স্থাপনের পরিকল্পনা করতে হবে।
- ১৪. সমবায়ীদের স্ব-উদ্যোগে গভীর অগভীর নলকূপ স্থাপনে যৌথ উদ্যোগের উদ্ভব করতে হবে।
- ১৫. সার্বিক গ্রাম সমবায় সমিতি গঠনের মাধ্যমে গ্রাম ভিত্তিক নিরাপদ সুপেয় পানির ব্যবস্থা করা যাবে।
- ১৬. সমবায়ীদেরকে সমবায় সমিতির মাধ্যমে সুপেয় পানি সংরক্ষণ ও বিতরণের দায়িত্ব এবং এজেন্ট নিয়োগ করা যেতে পারে।
- ১৭. এলাকাভিত্তিক আর্থিক সংশ্রিষ্টতাসহ সমবায় সমিতিগুলি স্বেচ্ছাশ্রম দিয়ে সহযোগিতা করবে।
- ১৮. সমবায় সমিতিগুলোতে গভীর/অগভীর/হস্তচালিত নলকৃপ স্থাপন করে ভূ-গর্ভস্থ পানি সরবরাহ এবং

- ভূ-উপরিভাগের পানি শোধনের লক্ষ্যে ক্ষুদ্র ক্ষুদ্র প্রকল্প গ্রহন ও বাস্তবায়নের মাধ্যমে সদস্যদের এবং পরিবারের সকলের জন্য সুপেয় পানির ব্যবস্থা নিশ্চিত করা।
- ১৯. পুকুর, পুয়া ইত্যাদি সংস্কার ও সংরক্ষণের মাধ্যমে সুপেয় পানির আধার সৃষ্টি করা যেতে পারে। এ সমস্ত কাজে সমবায় সংগঠনের সদস্যদের সম্পৃক্ত করা যেতে পারে। সাথে সাথে আর্সেনিক মুক্ত গভীর নলকৃপ স্থাপনে সদস্যদের কাজে লাগাতে হবে। এ ক্ষেত্রে আঞ্চলিক সমবায় শিক্ষায়তন সমূহে প্রশিক্ষণে সমবায়ীদের সম্পৃক্ত করা যেতে পারে এবং সমবায় বিভাগের দ্রাম্যমান প্রশিক্ষণ ইউনিটকে সক্রিয় করা যেতে পারে।

লক্ষ্যমাত্রা ৩ : ২০১২ সালের মধ্যে বাংলাদেশকে খাদ্যে স্বয়ংসম্পূর্ন করা হবে।

সুপারিশঃ

- ১. কৃষিতে সম্পৃক্ত সমবায়ীদের উদ্বুদ্ধ ও কারিগরী সহায়তা দান।
- ২. সমবায়ের ভিত্তিতে চাষাবাদ করা।
- ৩. এলাকা ভিত্তিক সমবায় সমিতি গঠন করে সমিতির মাধ্যমে রেশনের ব্যবস্থা করা।
- গ্রাম অঞ্চলে কৃষি সমবায় সমিতির সদস্যকে কৃষি উপকরণগুলো বিনা মূল্যে দেওয়া।
- ৫. সকল পতিত ও অনাবাদি জমি সমবায় ভিত্তিতে পরিকল্পিতভাবে চাষের আওতায় আনতে হবে।
- ৬. এলাকার সকলে মিলে ন্যায্য মূল্যে খাদ্য সরবরাহ করা, ক্ষুদ্র কৃষি ঋণের মাধ্যমে সাহায্য করা, দামের ক্ষেত্রে আইনগত ব্যবস্থা নেওয়া– সমবায়কে সম্পৃক্ত করা।
- কৃষি পণ্য উৎপাদনকারী কৃষকদের সমবায় আন্দোলনের সাথে সম্পৃক্ত করা।
- ৮. কৃষকদের জন্য সরকারী সহযোগিতায় নতুন নতুন পণ্য উৎপাদনের জন্য ট্রেনিং এর আয়োজন করা এবং তাতে সমবায়কে সম্পুক্ত করা।
- ৯. কৃষি উপকরণ যেমন বীজ, সার ইত্যাদি সমবায় সমিতির মাধ্যমে সরকারের ভতুর্কি দিয়ে স্বল্প মূল্যে এবং সেচ কাজের জন্য স্বল্প মূল্যে বিদ্যুৎ সরবরাহ করতে হবে।
- ১০. সমবায় সমিতি গঠন করে রেশনের মাধ্যমে।
- ১১. কৃষি সমবায় সমিতির সদস্যদের কম সুদে কৃষি ঋণ বিতরণের ব্যবস্থা করতে হবে।
- ১২. খাদ্যে স্বয়ংসম্পূর্ণতা অর্জনে সমবায় সমিতিসমূহ অতীতে অত্যন্ত গুরুত্বপূর্ণ ভূমিকা পালন করেছে। প্রামভিত্তিক সমবায় সমিতি গঠন করে প্রত্যেক গ্রামের খাদ্যশস্য উৎপাদনের দায়িত্ব সমবায় সমিতির উপর ন্যান্ত করা যেতে পারে। তাছাড়া সমস্ত প্রকার কৃষি উপকরণ যেমন সার, বীজ সেচ ও কীটনাশক বন্টনের দায়িত্ব সমবায় সমিতি সমূহের উপর ন্যান্ত করা যেতে পারে।
- ১৩. দেশের সমবায় সমিতির মাধ্যমে বা সদস্যদের সহজ শর্তে ঋণ দিয়ে কৃষজাত সামগ্রী (সার, কিটনাশক, ট্রাক্টর ইত্যাদি ক্রয়) ক্রয় করতে সহযোগিতা করে দেশকে খাদ্যে স্বয়ংসম্পূর্ণ করা যায়।
- ১৪. সমবায় ভিত্তিক কৃষি খামার গঠন করে সদস্যদের ভাল বীজ ও সার প্রদান করে স্বয়ংসম্পূর্ণ অর্জন করা সম্ভব।
- ১৫. সমবায়ীদের আধুনিক পদ্ধতিতে কৃষি উৎপাদন বৃদ্ধি করতে হবে।
- ১৬. কৃষি উৎপাদকদের সমবায় ঋণ প্রদানের মাধ্যমে তথ্য প্রযুক্তি ও উপকরণ দিয়ে সাহায্য করা।
- ১৭. সমবায় ভিত্তিক হাইব্রিড চাষাবাদ ও বীজ ব্যবহারে সঠিক প্রশিক্ষণ দিতে হবে।
- ১৮. প্রত্যেক গ্রামে সমবায় সমিতি গঠনের মাধ্যমে গ্রাম ভিত্তিক দায়িত্ব দেয়া যেতে পারে।

- ১৯. কৃষি-ভূমি-জলা সংস্কারে সমবায়ীদের অগ্রাধিকার দেয়া এবং সক্রিয়া সহযোগিতা করা।
- ২০. কৃষি খাতে সমবায় কর্তৃক বিনিয়োগ। যেমন প্রশিক্ষণ ঋণ ইত্যাদি।
- ২১. সরকারের কৃষি সম্প্রসারণ অধিদপ্তরের সহায়তায় উন্নত বীজ সরবরাহ ও প্রশিক্ষণের উদ্যোগ নিতে পারে।
- ২২. সংগঠিত কৃষি ও কৃষক সমবায় সমিতির মাধ্যমে উন্নত চাষাবাদ পদ্ধতিতে খাদ্য স্বয়ং স্পূর্ণতা অর্জন করা যায়।
- ২৩. আবাসন/হাউজিং বন্ধ করা এবং আবাদী জমি বৃদ্ধি করা- এ ক্ষেত্রে সমবায়কে সম্পুক্ত করা।
- ২৪. খাস জমি সমবায়ীদের মধ্যে বরাদ্দ করা।

লক্ষ্যমাত্রা 8 : ২০১৩ সালের মধ্যে প্রতিটি বাড়ীকে স্বাস্থ্যসম্মত স্যানিটেশন ব্যবস্থার আওতায় আনা হবে। সুপারিশ:

- ১. সমিতির সভ্যদের মধ্যে স্বাস্থ্য সম্মত স্যানিটেশন ব্যবস্থা নিশ্চিত করা।
- ২. সমবায় সমিতির মাধ্যমে সরকারী সহযোগিতায় প্রতিটি পরিবারকে এই প্রকল্পের আওতায় আনা।
- ৩. এলাকা ভিত্তিক সমবায় সমিতির মাধ্যমে স্বাস্থ্যসম্মত স্যানিটেশন ব্যবস্থা করা যায়।
- 8. স্থানীয় সরকারকে এ বিষয়ে বিশেষ দায়িত্ব প্রদান করে সমবায়কে সম্পুক্ত করা।
- ৫. এলাকার সকলে মিলে সবাইকে স্যানিটেশন সম্পর্কে সচেতন করা
- ৬. ঋণের মাধ্যমে বিনামূল্যে দরিদ্রদের জন্য স্যানিটেশন ব্যবস্থা করা এবং প্রক্রিয়ায় সমবায়কে সম্পৃক্ত করা।
- প্রমিতির মাধ্যমে সদস্যদের পরিবারকে বিনা সুদে সরকার থেকে ঋণ দিয়ে স্যানিটেশন টয়লেট
 ব্যবস্থা করা যেতে পারে।
- ৮. গ্রামে গ্রামে সার্বজনীন স্যানিটেশন সমবায় গড়ে তোলা।
- ৯. সমবায় সমিতিগুলোর মাধ্যমে স্যানিটেশন সামগ্রী উৎপাদন করা ও তা কম মূল্যে বিতরণের উদ্যোগ নেয়া।
- ১০. সমবায়ের মাধ্যমে এলাকায় উদ্বুদ্ধকরণ করে গণ সচেতনতা সৃষ্টি করে সাধারণ মানুষকে স্বাস্থ্য সম্মত স্যানিটেশন ব্যবহারের সুফল তুলে ধরে স্যানিটেশন বিষয়ে পরামর্শ দেয়া যেতে পারে। সমবায় বিভাগীয় কর্মকর্তাগণ বিভিন্ন সমবায় সমিতিতে গিয়ে এ বিষয়ে প্রশিক্ষণ প্রদান করে সাধারণ জনগণকে উদ্বুদ্ধ করতে পারে। সমবায় সমিতি সমূহ নিজস্ব উদ্যোগে সমিতির সকল সদস্যের বাড়িতে তাদের লভ্যাংশের অর্থ দিয়ে স্যানিটেশন সুবিধা নিশ্চিত করতে পারে। তাছাড়া সমিতিসমূহ সেনিটারী পায়খানা স্থাপনের দায়িত্ব পালনের মাধ্যমেও স্বাস্থ্য বিভাগের সহায়ক হিসাবে ভূমিকা রাখতে পারে।
- ১১. সমবায় সমিতির মাধ্যমে বা সদস্যদের ঋণ দিয়ে 'একটি বাড়ী' 'একটি পায়খানা' প্রকল্প বাস্তবায়ন করতে পারে।
- ১২. সমবায়ীদের ক্ষুদ্র ঋণদানের মাধ্যমে স্বাস্থ্যসম্মত স্যানিটেশনে আগ্রহী করা।
- ১৩. প্রতিটি গ্রামে সার্বিক গ্রাম সমবায় সমিতি গঠন পূর্বক গ্রাম তথ্য বই তৈরী করে বছর ভিত্তিক পরিকল্পনা গ্রহন করে স্বাস্থ্যসম্মত স্যানিটেশন ব্যবস্থা তৈরী করা সম্ভব।

- ১৪. সরকারী সহযোগিতায় সমবায় সমিতির সদস্যদের রিং স্লাব সরবরাহ করা এবং এই ব্যাপারে প্রশিক্ষণের ব্যবস্থা করা।
- ১৫. জনস্বাস্থ্য বিভাগের সহায়তায় সমবায় সমিতির মাধ্যমে স্যানিটেশনের গুরুত্ব ও প্রয়োজনীয়তা সম্পর্কে সদস্যদের / জনগণের সচেতনতা বৃদ্ধির লক্ষ্যে উদ্বুদ্ধকরণ সভা ও স্বল্প/ বিনামূল্যে স্যানিটেশন সরঞ্জমাদি সরবরাহ নিশ্চিত করা।
- ১৬. সমবায় সমিতি বিভিন্ন সরকারী বেসরকারী প্রতিষ্ঠানের মাধ্যমে যোগাযোগ রক্ষা করে স্বাস্থ্যসম্মত স্যানিটেশন ব্যবস্থা চালু করতে পারে। এক্ষেত্রে তারা ইউনিয়ন পরিষদ, এনজিও, পৌরসভা, থানা স্বাস্থ্য কর্মসূচী ইত্যাদি স্বাস্থ্য উন্নয়নমূলক প্রতিষ্ঠান থেকে স্বাস্থ্যসম্মত পায়খানা সংগ্রহ করতে পারে এবং স্যানিটেশনের উপর সচেতনতা মূলক প্রশিক্ষণ নিতে পারে। সদস্যরা পায়খানা তৈরীর প্রশিক্ষণ নিয়ে কমিউনিটি লেভেল পায়খানা তৈরী করে বিক্রয় করতে পারে। এ ক্ষেত্রে বেকারত্ব দূরীকরণের সাথে সাথে প্রতিটি বাড়ীতে স্বাস্থ্যসম্মত স্যানিটেশন ব্যবস্থা চালু হবে।

লক্ষ্যমাত্রা ৫: ২০১৩ সালে বার্ষিক অর্থনৈতিক প্রবৃদ্ধির হার হবে ৮ শতাংশ। ২০১৭ সালে এই হার ১০ শতাংশ উন্নীত করে অব্যাহত রাখা হবে।

সুপারিশ:

- সমিতির সভ্যদের আর্থ সামাজিক অবস্থার সার্বিক মান উন্নয়ন ঘটানো এবং স্ব স্ব ক্ষেত্রে পেশাগত
 দক্ষতার উন্নয়ন করা।
- ২. ক্ষুদ্র ঋণ কার্যক্রমের মাধ্যমে অর্থনৈতিক গতি সঞ্চালন তথা সমবায় ভিত্তিক আয়বর্ধক কর্মসূচী গ্রহন।
- ৩. সমবায় সমিতি গঠন করে হাঁস মুরগীর খামার, গবাদি পশুর খামার, টেইলারিং, কম্পিউটার প্রশিক্ষণ দিলে দেশের কর্মসংস্থান করা সম্ভব।
- 8. এলাকার সকলে মিলে ক্ষুদ্র ঋণের মাধ্যমে কর্মসংস্থানের ব্যবস্থার সাহায্য করা এবং প্রয়োজনে বিভিন্ন প্রশিক্ষণ প্রদান করা। কাজটি সমবায়ের মাধ্যমে করা।
- ৫. কাঁচামাল উৎপাদন পণ্য সমবায়ীদের মাধ্যমে যাতে ভোক্তার হাতে পৌছায় এ ধরণের উদ্যোগ হাতে
 নিলে রাজস্ব খাতে আয় বাড়বে।
- ৬. প্রাকৃতিক দুর্যোগ মোকাবেলায় সমবায়কে শক্তিশালী করা।
- ৭. সমবায় সমিতির মাধ্যমে নুতন নুতন কর্মসংস্থান সৃষ্টি করা।
- ৮. প্রত্যেক এলাকায় সমবায় সমিতি গড়ে তোলা এবং এর মাধ্যমে ক্ষুদ্র ও মাঝারী শিল্প স্থাপন করা।
- ৯. সমবায় সমিতির মাধ্যমে কর্মসংস্থান সৃষ্টি করা।
- ১০. সমবায় সমিতিসমূহকে খাদ্য উৎপাদনের দায়িত্ব প্রদান করে যদি খাদ্য উৎপাদনে স্বয়ংসম্পূর্ণতা অর্জন করা যায় তবে দেশে জাতীয় প্রবৃদ্ধির হার বৃদ্ধি করা সম্ভব।
- ১১. রাষ্ট্রীয় বিভিন্ন শিল্প প্রতিষ্ঠান যে গুলো বছরের পর বছর ধরে অলাভজনক সে সকল শিল্প প্রতিষ্ঠান সংশ্লিষ্ট প্রতিষ্ঠানের কর্মচারীদের সমবায় সমিতির মাধ্যমে হস্তান্তর করে উক্ত প্রতিষ্ঠানকে লাভজনক প্রতিষ্ঠানে পরিণত করা সম্ভব।
- ১২. সমবায় সমিতিসমূহ যদি নিজস্ব পুঁজি বিনিয়োগের মাধ্যমে সহজ শর্তে শিল্প কারখানা স্থাপনের সুযোগ দেয়া হয় তবে উক্ত খাত থেকে ও জাতীয় আয় বৃদ্ধি করা সম্ভব।

- ১৩. সকল সমবায়ীদের অর্থনৈতিক ও প্রযুক্তিগতভাবে সাহায্য সহযোগিতা করতে হবে।
- ১৪. অর্থনৈতিক অবকাঠামো উন্নয়ন গতিশীল করতে হবে এবং উৎপাদনশীল খাতে সমবায় ভিত্তিক বিনিয়োগ আকৃষ্ট করতে হবে।
- ১৫. সমবায়ের মাধ্যমে ক্ষুদ্র ক্ষুদ্র সঞ্চয় একত্র করে বিরাট মূলধন গঠন করা; এই মূলধন উৎপাদনমুখী বিভিন্ন কাজে ব্যবহার করে উৎপাদন বৃদ্ধি করা।
- ১৬. ব্যাপক হারে সমবায় সংগঠন গড়ে তোলা, ক্ষুদ্র কুটির শিল্পসহ ব্যাপক কর্মসংস্থান সৃষ্টির আন্দোলকে সমবায়ের অন্যতম কর্মসূচী হিসেবে গ্রহণ করা।
- ১৭. কৃষি শিল্প ও বাণিজ্যে সমবায়ের আদর্শ প্রতিষ্ঠা করা।
- ১৮. সমবায় সংগঠনের মূলধন, সম্পদ, জমি, জনবল ও প্রশিক্ষণ কৌশল ইত্যাদির সদ্ব্যবহার এবং তা কাজে লাগিয়ে সদস্য তথা স্থানীয় জনগণের অর্থনৈতিক উন্নয়নের পথ সুগম করা যেতে পারে। মাঠ পর্যায়ে সমবায় সমিতির মাধ্যমে সম্পদের সুসম বন্টন করা এবং সমবায় ভিত্তিক চাষাবাদ করা গেলে অর্থনৈতিক প্রবৃদ্ধি সম্ভব।

লক্ষ্যমাত্রা ৬ : ২০১৩ সালে বাংলাদেশে বিদ্যুতের সরবরাহ হবে ৭ হাজার মেগাওয়াট এবং ২০১৫ সালে ৮ হাজার মেগাওয়াট। ২০২১ সাল নাগাদ দেশের বিদ্যুৎ চাহিদা ২০ হাজার মেগাওয়াট ধরে নিয়ে বিদ্যুৎ উৎপাদন বৃদ্ধির যথাযথ পদক্ষেপ গ্রহণ করা হবে।

সুপারিশ:

- সমিতির সকল সদস্যদের এনার্জি সেভিং বাল্প ব্যবহার নিশ্চিত করা ও বিদ্যুতের অপচয় রোধ করা এবং সৌর বিদ্যুৎ শক্তির ব্যাপক সম্প্রসারণ ঘটানো।
- ২. সমবায় এর ভিত্তিতে অঞ্চল ভিত্তিক সরকারী পৃষ্ঠপোষকতায় ক্ষুদ্র ক্ষুদ্র বিদ্যুৎ কেন্দ্র স্থাপন ও তার ব্যবস্থাপনা দায়িত্ব উক্ত সমবায়কে প্রদান যার মাধ্যমে বিদ্যুতের সুষ্ঠু বিতরণ এবং বিল আদায় করে সরকারী কোষাগারে জমা প্রদান।
- ৩. সমবায় সমিতি গঠন করে গবাদি পশুর খামার করে পশু পালন করলে সেখান থেকে বর্জ্য দিয়ে বিদ্যুত উৎপাদন করা সম্ভব ।
- 8. সমিতিগুলো যৌথ বিনিয়োগ করে বিদ্যুত কেন্দ্র স্থাপন করতে পারে। এজন্য প্রত্যেক উপজেলায় অন্তত একটি করে সমবায় সমিতি গড়ে তুলে এর মাধ্যমে সরকারের সহযোগিতায় ছোট ছোট বিদ্যুৎ কেন্দ্র স্থাপন করে আভ্যন্তরীণ চাহিদা মিটিয়ে জাতীয় গ্রীডে যোগ করার উদ্দ্যোগ গ্রহণ করতে হবে।
- ৫. বৃহৎ সমবায় সমিতির মাধ্যমে পাওয়ার প্লান্ট স্থাপনের অনুমতি প্রদান করতে হবে।
- ৬. সমবায় সমিতিসমূহ সৌর বিদ্যুৎ ব্যবহারে গ্রামের মানুষকে উদ্বুদ্ধ করতে পারে। তাছাড়া বিদ্যুতের অপচয় রোধকল্পে সাধারণ সদস্যদের উদ্বুদ্ধকরণের মাধ্যমে বিদ্যুৎ বিভাগের সহায়ক হিসেবে ভূমিকা পালন করতে পারে।
- ৭. সমবায়ের মাধ্যমে জনগণকে সৌর বিদ্যুৎ ব্যবহারে উৎসাহিত করা এবং জনগণকে বিদ্যুৎ ব্যবহারে সাশ্রয়ী হতে সচেতন করা।
- ৮. গ্রাম ভিত্তিক সমবায়ের মাধ্যমে বায়োগ্যাস প্লান্ট তৈরী করে বিকল্প জ্বালানীর ব্যবস্থা অতি সহজেই করা যায়। এছাড়া শহরাঞ্চলে এলাকা ভিত্তিক বর্জ ব্যবস্থাপনা সমবায়ের মাধ্যমে বর্জ ব্যবহার করে

বিকল্প জ্বালানীর উৎস্য তৈরী করা সম্ভব।

৯. দেশের যে সমস্ত এলাকায় বিদ্যুৎ সংযোগ আছে সে সমস্ত এলাকার প্রতিটি সমবায় সমিতিতে "বিদ্যুৎ চুরি প্রতিরোধ" সেল গঠন পূর্বক আইনগত সংস্থাকে সংবাদ/তথ্য সরবরাহ করার মাধ্যমে বিদ্যুৎ চুরি রোধ করা যেতে পারে।

লক্ষ্যমাত্রা ৭ : ২০১৩ সালে পর্যায়ক্রমে স্লাতক স্তর পর্যন্ত অবৈতনিক শিক্ষার ব্যবস্থা করা হবে। সুপারিশ:

- ১. সমিতির মাধ্যমে সকল গ্রামের আওতাধীন স্নাতক স্তর পর্যন্ত শিক্ষার্থীদের আর্থিক সহায়তা দান।
- ২. মেধাবী এবং অস্বচ্ছল ছাত্রদের সমবায় এর মাধ্যমে সহায়তা করা।
- ৩. সমবায় সমিতি গঠন করলে সদস্যদের ছেলে মেয়েকে স্নাতক পর্যন্ত পড়া লেখার সুবিধা দেয়া।
- 8. সমবায়ের মাধ্যমে ছাত্র-ছাত্রীদের সুদবিহীন ঋণের ব্যবস্থা করা।
- ৫. সরকার সমিতিগুলোর মাধ্যমে শিক্ষা খাতের সহায়তা প্রদান করতে পারে।
- ৬. এই কার্যক্রম সরকার গ্রহণ করলে সমবায় সমিতির পক্ষ থেকে জনমত গড়া ও সরকারকে সর্বাত্মক সহযোগিতা করা।
- ৭. সমবায় সমিতির বাৎসরিক আয় হতে অবৈতনিক শিক্ষার ব্যবস্থা করা।
- ৮. সমবায়ী সদস্যদের সম্ভানদের স্লাতক পর্যস্ত অবৈতনিক শিক্ষার ব্যবস্থা।
- ৯. সমবায় সমিতির সদস্যদের মাধ্যমে স্লাতক পর্যন্ত কন্যা সন্তানদের শিক্ষা অবৈতনিক করা।
- ১০. দুঃস্থ সমবায়ীদের সন্তান-সন্ততিদের বিনা মূল্যে স্নাতক শিক্ষার উপকরণ সরবরাহ করা।
- ১১. সমবায়ের মাধ্যমে কলেজ প্রতিষ্ঠা করে এ কার্যক্রম পরিচালনা করা সম্ভব।
- ১২. শিক্ষা বিভাগের সহায়তায় সমবায়ের ভিত্তিতে স্নাতক পর্যায়ে শিক্ষার্থীদের উপস্থিতি নিশ্চিত করে অবৈতনিক শিক্ষা কার্যক্রম বাস্তবায়নে সহায়তা করা।

লক্ষ্যমাত্রা ৮ : ২০১৪ সালে নিরক্ষরতামুক্ত বাংলাদেশ গড়ে তোলা হবে। সুপারিশ :

- সমিতির সভ্যদের উদ্বন্ধকরণ ও অংশগ্রহন নিশ্চিতকরণ।
- ২. সমবায় সমিতির মাধ্যমে বয়স্ক শিক্ষা চালু এবং সরকারী পৃষ্ঠপোষকতা।
- ৪. এলাকা ভিত্তিক সমবায় সমিতি গঠন করে সন্তানদের শিক্ষার ব্যবস্থা করা।
- ৫. সমবায়ের মাধ্যমে নিরক্ষরতা দূরীকরণ অভিযান চালু করা।
- ৬. বয়স্ক শিক্ষা ও পথশিশুর শিক্ষা কার্যক্রমের মাধ্যমে দেশ থেকে নিরক্ষরতা দূর করা সম্ভব। যা কেবল সমবায় সমিতির সম্মিলিত প্রচেষ্টা দ্বারা সম্ভব।
- ৭. এলাকা ভিত্তিক সমবায় সমিতির মাধ্যমে স্কুল তৈরী করে।
- ৮. সমবায় সমিতির সদস্যদের নিরক্ষরতা মুক্ত হওয়ার জন্য বাধ্যতামূলক শিক্ষা চালু করতে হবে।
- ৯. নিরক্ষরমুক্ত বাংলাদেশ গড়ার ক্ষেত্রে সমবায় সমিতিসমূহ নিম্নলিখিতভাবে দায়িত্ব পালন করতে পারে:
- (ক) প্রত্যেক সমবায় সমিতির সকল সদস্যকে অন্তত অক্ষর জ্ঞান সম্পন্ন হতে হবে মর্মে বিধান থাকতে

হবে।

- (খ) সদস্যদের সম্ভানকে স্কুলে না পাঠালে সমবায় সমিতি থেকে তার সদস্য পদ বাতিল করা হবে মর্মে বিধান রাখা যেতে পারে।
- (গ) সমবায় সমিতির সদস্যদেরকে নিরক্ষরতার অভিশাপ বিষয়ে বিভিন্ন প্রশিক্ষণ সেমিনার সভা সমাবেশের মাধ্যমে ধারণা দিতে হবে ।
- ১০. সরকারের সাথে হাত মিলিয়ে আরো জোরদারভাবে এগিয়ে যাওয়া।
- ১১. গ্রাম সমবায়ের মাধ্যমে গ্রাম ভিত্তিক প্রকৃত নিরক্ষর লোকদের চিহ্নিত করা সহজতর। অতঃপর গ্রাম ভিত্তিক সমবায় সমিতির মাধ্যমে নৈশ স্কুল প্রতিষ্ঠার মাধ্যমে নিরক্ষর মুক্ত বাংলাদেশ গড়া সম্ভব।
- ১২. দুঃস্থ সমবায়ীদের সন্তান-সন্ততিদের বিনা মূল্যে শিক্ষার উপকরণ সরবরাহ করা।
- ১৩. সমবায় সমিতিগুলিতে বয়স্ক শিক্ষাকেন্দ্রসহ স্কুল পরিচালনা করা যেতে পারে

লক্ষ্যমাত্রা ৯ : ২০১৫ সালের মধ্যে সকল মানুষের জন্য আবাসনের ব্যবস্থা করা হবে। সুপারিশ:

- ১. সকল স্তরের মানুষের আবাসনের আওতা বৃদ্ধি করা ও আর্থিক অবস্থার উন্নয়নের মাধ্যমে কৃষি সেবা শিল্প খাতে লক্ষ্যমাত্রা অনুযায়ী সমবায়ীদের সম্পৃক্তকরণ ও পেশাগত দক্ষতা উন্নয়ন করা এবং কারিগরী সহায়তা দান।
- ২. সমবায় সমিতিকে সরকারী খাস জমি বরাদ্দ এবং বহুতল ভবন করার অনুমতি প্রদান এবং সরকারী খাণ যাহা ফেরতযোগ্য।
- ৩. সমবায় সমিতির মাধ্যমে জমি ক্রয় করে তার মধ্যে ফ্ল্যাট তৈরী করে সহজ শর্তে ঋণ দিয়ে সকলের আবাসন সমস্যা সমাধান করা যায়।
- 8. সমিতির সদস্যবৃন্দ সম্মিলিতভাবে গুচ্ছ গ্রামের মত নিজস্ব আবাসিক এলাকা গড়ে তুলতে পারেন।
- ৫. তৃণমূল মানুষের জন্য সমবায়ের মাধ্যমে আবাসনের ব্যবস্থা করা।
- ৬. মাননীয় প্রধানমন্ত্রীর অগ্রাধিকার ভিত্তিক প্রকল্প আশ্রয়ন আবাসনের সংখ্যা বাড়াতে হবে এবং সেখানে সমবায় সমিতি গঠন করতে হবে।
- প্রমবায় ভিত্তিক গৃহ ঋণ প্রদানের মাধ্যমে আবাসন প্রকল্প গঠন করে প্রত্যেকটি সদস্য সদস্যাদের আবাসন ব্যবস্থা করা যেতে পারে।
- ৮. সমবায় ভিত্তিক আবাসন প্রকল্প নিতে হবে। এক্ষেত্রে প্লটের চেয়ে ফ্ল্যাট ভিত্তিক আবাসন করতে হবে।
- ৯. বসবাস উপযুক্ত দেশের পতিত জমি সমবায়ের মাধ্যমে অধিগ্রহণপূর্বক সদস্যদের সমন্বিত শক্তির দারা আবাসন সমস্যা অনেকাংশে দূর করা যেতে পারে। আবাসনের ব্যবস্থা নিশ্চিত করতে জেলা/উপজেলা/ইউনিয়ন ভিত্তিক আবাসন সমবায় সমিতি গঠন কিংবা বিদ্যমান সমবায় সমিতি কার্যক্রমের সাথে আবাসন সমস্যা নিরসনে বিষযটি সংযুক্ত করা যেতে পারে। এক্ষেত্রে ভূমি অধিদপ্তরের সাথে একটি সমঝোতা স্মারকের মাধ্যমে সমিতি পর্যায়ে যোগাযোগ করে দেয়া যেতে পারে।

শক্ষ্যমাত্রা ১০: ২০১৫ সালে জাতীয় আয়ের বর্তমান হিস্যা কৃষিতে ২২, শিল্পে ২৮ ও সেবাতে ৫০ শতাংশের পরিবর্তে হবে যথাক্রমে ১৫, ৪০ এবং ৪৫ শতাংশ।

সুপারিশ:

- ১. সমবায় ভিত্তিক ক্ষুদ্র ও মাঝারী শিল্প স্থাপন এবং সরকারী পৃষ্ঠপোষকাতায় বাজারজাতকরণের ব্যবস্থা করা।
- ২. কৃষি-শিল্প-সেবা খাতে সম্পুক্ত সমিতির সভ্যগণকে এ বিষয়ে সক্রিয় অংশগ্রহণে উদ্বুদ্ধ করা।
- কৃষির উপর নির্ভর না করে সমিতির মাধ্যমে শিল্প প্রতিষ্ঠান তৈরী করলে জাতীয় আয়ের পরিমাণ বৃদ্ধি করা সম্ভব।
- 8. কৃষি, শিল্প ও সেবা মূলক কাজের দক্ষতা বৃদ্ধির জন্য সমবায়ের মাধ্যমে বিভিন্ন প্রশিক্ষণ ও ক্ষুদ্র ঋণ এর ব্যবস্থা করা।
- ৫. সমবায় সমিতির মাধ্যমে গার্মেন্টস, কুটির শিল্প, বস্ত্রশিল্প, মৃৎ শিল্প কারখানা তৈরী করে তোলা সম্লব।
- ৬. দিনদিন জনসংখ্যা বৃদ্ধির কারণে কৃষিজমি কমে যাচ্ছে, এ সমবায়ী শিল্পের দিকে বিনিয়োগ বৃদ্ধি করা যেতে পারে।
- ৭. সমবায় সমিতির মাধ্যমে সহজ শর্তে ঋণ দিয়ে শিল্প প্রতিষ্ঠান প্রতিষ্ঠার সুযোগ দিতে হবে। অধিক হারে শিল্প প্রতিষ্ঠান সৃষ্টি হলে কৃষির উপর চাপ কমে যাবে এবং শিল্প খাতে অবদান বৃদ্ধি পাবে। শিল্প খাতে ব্যক্তি মালিকানার সাথে সাথে সমবায় ভিত্তিক মালিকানাকে উৎসাহিত করতে হবে।
- ৮. সমবায় ভিত্তিক ক্ষুদ্র ঋণ কার্যক্রমের মাধ্যমে কৃষি এবং শিল্পে বিনিয়োগ জাতীয় আয়ের হিস্যা বাড়াতে হবে।
- ৯. সমবায় সমিতির মাধ্যমে সমবায় ভিত্তিক শিল্প কারখানা স্থাপন করা।
- ১০. কৃষি আধুনিকীকরণ ও যাবতীয় উপকরণ সমবায়ের মাধ্যমে বিতরণ, সরকার ও সমবায় সমিতির যৌথ অংশীদারিত্বে মাঝারী ও বৃহৎ শিল্প স্থাপন ও সম্প্রসারণ ও সমবায় প্রশিক্ষণের মাধ্যমে সেবা খাতের সম্প্রসারণ।

লক্ষ্যমাত্রা ১১ : ২০২১ সালে বেকারত্বের হার বর্তমান ৪০ থেকে ১৫ শতাংশে নেমে আসবে। সুপারিশঃ

- অধিক হারে সফল যুব সমিতি গড়ে তোলা এবং আত্মকর্মসংস্থানের বিষয়ে অনু-ক্ষুদ্র-মাঝারি ঋণ
 দান।
- ২. প্রতিটি গ্রামে ইউনিয়নে এবং উপজেলায় সমবায় সমিতি গড়ে তোলা এবং তাদের সরকারী পৃষ্ঠপোষকতা প্রদান।
- ৩. সমিতির মাধ্যমে হাসমুরগীর খামার, পশু খামার, শিল্প প্রতিষ্ঠান তৈরী করে বেকারত্ব দূর করা।
- সমবায়ের মাধ্যমে বিভিন্ন কারিগরি প্রশিক্ষণের ব্যবস্থা করা ও যুব সমাজকে কর্মসংস্থানে উদ্বুদ্ধ করা।
- ৫. যেসব যুবক ইতোমধ্যে যুব অধিদপ্তরের অধীনে প্রশিক্ষণ পেয়েছেন এবং বেকার তাদের নিয়ে

কর্মসংস্থান-সৃষ্টি সমবায় গঠন করা এবং সহজ শর্তে প্রয়োজনীয় ঋণ দেয়া।

- ৬. সমবায়ের মাধ্যমেই সম্ভব। যদি সরকার সর্বক্ষেত্রে অনুকূল পরিবেশ সৃষ্টি করে।
- ৭. বেকারত্ব দূরীকরণ সমবায় বিভাগ সবচেয়ে ভূমিকা রাখতে পারে ঃ
- ক) প্রত্যেক গ্রামে এবং মহল্লায় বেকার যুবকদের সমন্বয়ে একটি করে সমবায় সমিতি গঠন করতে হবে।
- খ) উক্ত বেকারদের কোন একটি বিশেষ ট্রেডে প্রশিক্ষণ প্রদান করে সহজ শর্তে কিছু ঋণ দিয়ে উক্ত ট্রেডের মাধ্যমে তাদের আত্মকর্মসংস্থানের সুযোগ করে দিতে হবে। এক্ষেত্রে মৎস্য চাষ, গরু-ছাগল, হাঁস মুরগী পালন, সবজি উৎপাদন, নিত্য প্রয়োজনীয় পণ্য বাজারজাতকরণ, সেলাই প্রকল্প, কম্পিউটার, তথ্য প্রযুক্তিসহ বিভিন্ন প্রকল্প গ্রহণ করা যেতে পারে।
- ৮. স্বল্প আয়ের মানুষদের সমবায়ী চেতনায় গড়ে তুলে সমবায় কার্যক্রমের মাধ্যমে উৎপাদনমুখী খাতে উৎসাহিত করে বেকারত্বের হার কমিয়ে আনা।
- ৯. বেকারত্ব দূর করতে সমবায়ী প্রতিষ্ঠানগুলোর জন্য মাস্টার প্ল্যান তৈরি করা।
- ১০. সমিতির মাধ্যমে শিল্প কারখানা স্থাপনের চিন্তা করতে হবে।
- ১১. সমবায় নিবন্ধন এর শর্ত হিসেবে প্রত্যেক সমবায়কে কর্মসংস্থান মূলক শিল্প ক্ষুদ্র কুটির শিল্প, হাঁস মুরগী-গরু ছাগল ইত্যাদি খামার সৃষ্টি করা।
- ১২. সমবায় সমিতির মাধ্যমে পুঁজি গঠন করে কৃষি, বাণিজ্য, শিল্প খাতে নিবিয়োগ করা।
- ১৩. বিভিন্ন সমবায় সংগঠনের বেকার যুবক ও যুব মহিলাদের বিভিন্ন উৎপাদনমুখী কর্মকান্ত যেমন সেলাই প্রশিক্ষণ, ইলেকট্রিক প্রশিক্ষণ, মৌমাছি চাষ, মোবাইল, টিভি, ফ্রিজ মেরামত ইত্যাদিতে সম্পুক্ত করে তাদের বেকারত্ব দূর করা যেতে পারে।
- ১৪. সমবায় সমিতিগুলোকে সুনির্দিষ্ট প্রকল্পের আওতায় ক্ষুদ্র ক্ষুদ্র শিল্প স্থাপন করে বেকারত্ব নিরসন করা যায়।

লক্ষ্যমাত্রা ১২: ২০২১ সালে কৃষি খাতে শ্রমশক্তি ৪৮ শতাংশ থেকে কমে দাঁড়াবে ৩০ শতাংশে। সুপারিশ:

- ১. সমিতির সভ্যদের কারিগরি শিক্ষায় সম্পুক্ত করার মাধ্যমে শিল্পে নব জাগরণ ঘটানো।
- ২. শিল্পের সাথে সম্পুক্ত সমিতির সভ্যদের কর্মসংস্থান ও কারিগরি শিক্ষা দান করা।
- সমিতির মাধ্যমে শিল্প কারখানা গড়ে উঠলে কৃষি উপর নির্ভর কমে আসবে।
- 8. সমবায়ের মাধ্যমে কৃষি খাতে নতুন নতুন প্রযুক্তি ব্যবহার করা।
- ৫. এই কর্মসূচী সফল করতে হলে বর্তমানে কৃষিতে ব্যবহৃত সনাতন পদ্ধতির উপকরণ এর ব্যবহার কমিয়ে সমবায় সমিতির মাধ্যমে কৃষদের সচেতন করে সরকারের সহযোগিতা এবং সমবায়ের মাধ্যমে আধুনিক উপকরণ ব্যবহার করতে হবে।
- ৬. সমবায়ের মাধ্যমে ব্যক্তি মালিকানার সাথে সাথে সমবায় ভিত্তিক মালিকানার মাধ্যমে নতুন নতুন শিল্প ও সেবা প্রতিষ্ঠান সৃষ্টি করে কৃষি খাত থেকে শ্রম শক্তি শিল্প বা সেবা খাতে স্থানান্তর করা সম্ভব।
- সমবায় ঋণের মাধ্যমে অথবা সমবায় থেকে প্রকল্প প্রণয়ন করে আধুনিক কৃষি যন্ত্রপাতি ব্যবহারের
 মাধ্যমে কৃষি শ্রম কমিয়ে লক্ষ্যমাত্রায় পৌছানো সম্ভব।
- ৮. সমবায়ীদেরকে ছোট-মাঝারী শিল্পে কারখানা স্থাপনে আর্থিক সহায়তা প্রদান করা।

৯. সমবায় ভিত্তিতে কৃষি খাতে আধুনিক প্রযুক্তির ব্যবহার নিশ্চিত করে। লক্ষ্যমাত্রা ১৩ : ২০১১ সালে শিল্পে শ্রমশক্তি ১৬ থেকে ২৫ শতাংশে এবং সেবা খাতে ৩৬ থেকে ৪৫ শতাংশে উন্নীত হবে।

সুপারিশ:

- ১. শিল্প ও সেবা খাতে সমবায়ীদের কারিগরী প্রশিক্ষণ দান ও প্রণোদনা দানের ব্যবস্থা করা।
- ২. সমবায়ের ভিত্তিক শিল্প প্রতিষ্ঠানে উৎপাদিত পণ্য বিদেশে শুদ্ধ মুক্ত রপ্তানির রপান্তির ব্যবস্থা করা– তাহলে সকলে উৎসাহী হবে। সমিতির সভ্যগণকে এ বিষয়ে উদ্বুদ্ধকরণ ও অংশগ্রহন করা।
- সমিতির মাধ্যমে শিল্প প্রতিষ্ঠান গড়ে উঠলে সেবা খাতে উন্নয়ন সম্ভব।
- 8. শিল্প খাতে মালিক-শ্রমিকগণকে সমবায় সম্পর্কে সচেতন করা; মালিক ও শ্রমিকদের মধ্যে সমবায় আন্দোলন জোরদার করা; সমবায়ের বিভিন্ন সভা সেমিনারে শিল্পমালিক ও শ্রমিকদের অংশগ্রহণের সুযোগ সৃষ্টি করা।
- ৫. এই কর্মসূচী সফল করার জন্য সমবায় সমিতির মাধ্যমে ক্ষুদ্র ও মাঝারী শিল্প এবং হাসপাতাল ক্লিনিক গড়ে তুলতে হবে।
- ৬. সমবায় খাতকে সার্বাধিক গুরুত্ব দিয়ে থানা পর্যায়ে কারিগরী প্রশিক্ষণ কেন্দ্র তৈরী করে বেকার যুব সমাজকে প্রশিক্ষিত করে গড়ে তুলতে হবে এবং তাদেরকে ঋণ সুবিধা দিয়ে ক্ষুদ্র ক্ষুদ্র শিল্প কারখানা গড়ার কাজে উৎসাহিত করতে হবে।
- প. সমবায়ের মাধ্যমে শিল্প ও সেবা খাতে শ্রমশক্তি বৃদ্ধি করার ব্যপারে জনগণকে সচেতন করে
 তোলা।
- ৮. সমবায় ভিত্তিক যৌথ শিল্পে বিনিয়োগ বাড়াতে হবে
- ৯. সমবায়ের মাধ্যমে জনগণকে জনশক্তিতে রূপান্তরিত করতে পারলে সেবা খাত উন্নত হবে।
- ১০. সমবায়ীরা সেবক হতে পারে এমন কাজে উদ্বুদ্ধ করা এবং প্রয়োজনীয় প্রশিক্ষণ।
- ১১. সমস্ত বন্ধ পাট কল সমবায় ভিত্তিতে চালুকরণ।

লক্ষ্যমাত্রা ১৪ : ২০২১ সাল নাগাদ বর্তমান দারিদ্রের হার ৪৫ থেকে ১৫ শতাংশ নামবে। সুপারিশ:

- ১. সমবায় সমিতির মাধ্যমে সমাজের দরিদ্র জনগোষ্ঠির আর্থ সামাজিক অবস্থার উন্নয়ন সম্ভব।
- সমবায় ভিত্তিতে যদি প্রতিটি গ্রামকে সমবায় এর মাধ্যমে স্বাবলম্বি করে তোলা যায়।
- ৩. দারিদ্র্য বিমোচনে সমবায় ভিত্তিক ব্যবস্থা গ্রহণ।
- 8. সমিতির মাধ্যমে কর্মসংস্থান সৃষ্টি করলে দারিদ্রোর হার ১৫ শতাংশ নামবে।
- ৫. দারিদ্রতা যে একটি অভিশাপ সে সম্পর্কে সমবায়ের মাধ্যমে জনগণকে সচেতন করতে হবে।
- সমবায়ের মাধ্যমে প্রশিক্ষণ শেষে ক্ষুদ্র ঋণের ব্যবস্থা করা। কার্যক্রম সমবায় দারা
 মনিটরিং করা।
- ৭. এই কর্মসূচী সফল করতে হলে দরিদ্র জনগোষ্ঠীকে সমবায় সমিতির মাধ্যমে সংগঠিত করে ক্ষুদ্র সঞ্চয়ের মাধ্যমে এবং সরকারের কাছ থেকে আর্থিক সহযোগিতা নিয়ে ক্ষুদ্র ঋণ প্রদানের মাধ্যমে হাঁস, মুরগী, গাভী পালন, ক্ষুদ্র ও কুটির শিল্প স্থাপন করার সুযোগ সৃষ্টি করতে হবে।

- ৮. সমবায়ীদের কারিগরী, শিল্প ও কৃষিতে যথাযথ প্রশিক্ষণের ব্যবস্থা করা।
- ৯. সমবায়ের মাধ্যমে ক্ষুদ্র ঋণ বিতরণ ও কুটির শিল্পের মাধ্যমে আত্মকর্মসংস্থান সৃষ্টি করা।
- ১০. একমাত্র সমবায়ই ক্ষুদ্র ঋণের সম্প্রসারণের মাধ্যমে দারিদ্রের হার কমাতে পারে।
- ১১. সমবায়ের সদস্যদেরকে উৎপাদনশীল খাতে ঋণ গ্রহণে উৎসাহিত করা।
- ১২. সমবায় ভিত্তিক ক্ষুদ্র ঋণ কার্যক্রম চালু করে প্রান্তিক দারিদ্রকে ঋণ কার্যক্রমে আওতায় আনতে হবে।
- ১৩. যে সকল কার্যালয়ে শূন্য পদ রয়েছে সে সকল শূন্য পদে দ্রুত নিয়োগ করা।
- ১৪. সমবায় সমিতির মাধ্যমে স্বল্প স্বল্প পুজি সংগ্রহের মাধ্যমে স্বাবলম্বী করে দারিদ্র্যের হার কমানো সম্ভব।
- ১৫. সমিতিগুলি এলাকাভিত্তিক চাহিদা মাফিক উদ্যোগ নিতে পারে।
- <u>১৬ সমবায় সমিতির মাধ্যমে ক্ষুদ্ ও কুটির শিল্প চালু করা ।</u>

লক্ষ্যমাত্রা ১৫: ২০২১ সালে তথ্য প্রযুক্তিতে 'ডিজিটাল বাংলাদেশ' হিসেবে বাংলাদেশ পরিচিতি লাভ করবে।

সুপারিশ:

- ১. সমবায় ভিত্তিতে প্রতিটি গ্রাম, মহল্লায় তথ্য প্রযুক্তি কেন্দ্র স্থাপন এবং প্রশিক্ষণ এর ব্যবস্থা করা।
- ২. সমিতির সভ্যদের এ বিষয়ে উদ্বন্ধকরণ ও প্রশিক্ষণ দান।
- সমবায় ভিত্তিক প্রতিটি সমবায়ী প্রতিষ্ঠানে প্রযুক্তির ব্যবহার বৃদ্ধি এবং সমবায়ী সদস্যদের কম্পিউটার প্রশিক্ষণের মাধ্যমে ডিজিটাল বাংলাদেশ গড়ে তোলা সম্ভব।
- 8. কৃষি অর্থনীতিতে অধিকতর গতিশীল করার লক্ষ্যে কৃষকদের মাঝে সমবায় সমিতির মাধ্যমে আধুনিক তথ্য প্রযুক্তি ব্যবহারের সুযোগ সৃষ্টি করতে হবে। এক্ষেত্রে বাংলাদেশ টিভিসহ বিভিন্ন প্রচার মাধ্যমকে গুরুত্বপূর্ণ ভূমিকা পালন করতে হবে।
- ৫. সমবায় অধিদপ্তরকে শক্তিশালীকরণ প্রকল্পের মাধ্যমে ইতোমধ্যেই সমবায় বিভাগ গ্রাম পর্যায়ে সমবায়ীদেরকে কম্পিউটারসহ উন্নত তথ্য প্রযুক্তির প্রশিক্ষণ প্রদান করেছে। অধিকাংশ সফল সমবায় সমিতিতেই কম্পিউটারের মাধ্যমে হিসাব সংরক্ষণের পরামর্শ দেয়া হয়েছে। সরকারের ন্যূনতম সহযোগিতা পেলে ২০২১ সাল নয় বরং আগামী পাঁচ বছরের মধ্যে তৃণমূল পর্যায় পর্যন্ত কম্পিউটার সহ তথ্য প্রযুক্তি সাধারণ মানুষের দোর গোড়ায় পৌঁছে দেয়া সম্ভব হবে। ডিজিটাল বাংলাদেশ গড়ায় অন্যান্য বিভাগের তুলনায় সমবায় বিভাগ অগ্রণী ভূমিকা পালন করতে পারবে বলে আমরা দৃঢ়ভাবে বিশ্বাস করি।
- ৬. আধুনিক তথ্য প্রযুক্তি ও অবকাঠামো উন্নয়নে সমবায় সমিতিতে প্রশিক্ষণ চালু কর।
- সমবায় সমিতির হিসাবসমূহ কম্পিউটার সফ্টওয়ারের মাধ্যমে সংরক্ষণ।
- ৮. সমবায় সমিতি ভিত্তিক প্রযুক্তিগত শিক্ষার সম্প্রসারণ ও জনসচেতনতা সৃষ্টি করা।
- ৯. সমবায়ী ও তাদের সন্তানদের তথ্য প্রযুক্তি বিষয়ে প্রশিক্ষণ দিয়ে ডিজিটাল বাংলাদেশ বাস্তবায়ন করা যায়।
- ১০. সমবায়ীদের তথ্য প্রযুক্তি ব্যবহারে উদ্বুদ্ধ করা।

১১. সমবায়ের মাধ্যমে আইটি সেক্টরকে শক্তিশালীকরণ। লক্ষ্যমাত্রা ১৬: ২০২১ সালের মধ্যে দেশের ৮৫ শতাংশ নাগরিকের মানসম্পন্ন পুষ্টি চাহিদা পূরণ নিশ্চিত

*ত*বে

সুপারিশঃ

- সমবায় এর মাধ্যমে প্রতিটি গ্রাম-মহল্লায় সচেতনতার সৃষ্টি এবং শাকসবজি, হাঁস মুরগী, ফলমূল এর গাছ রোপন।
- ২. সমিতির মাধ্যমে এলাকা ভিত্তিক ফলজ বৃক্ষ রোপন করে সেখানে ফল পুষ্টি চাহিদা পূরণ করা সম্ভব।
- ৩. সমবায় সমিতির সহযোগিতায়
- ক) দেশের সকল জনসাধারণকে মানসম্মত পুষ্টি চাহিদা সম্পর্কে সচেতন করা।
- খ) জাতীয় ও আন্তজার্তিক পুষ্টি দিবস, সভা, সেমিনার, উঠান বৈঠক এবং পুষ্টি মেলা আয়োজনের মাধ্যমে জনগণকে সচেতন করা।
- গ) সরকারী ও বেসরকারী সহযোগিতায় নারী ও শিশুদের পুষ্টিকর খাদ্য বিতরণ করা।
- ঘ) গর্ভবতী মায়েদের নিয়ে পুষ্টি সম্পর্কে আলোচনা সভার আয়োজন করা।
- ঙ) ফলজ বৃক্ষ রোপন অভিযান আন্দোলনে রূপ দেয়া।
- 8. সমবায় সমিতির মাধ্যমে পুষ্টিযুক্ত খাদ্য দ্রব্য কমমূল্যে উৎপাদন এর ব্যবস্থা নিতে হবে এবং অপুষ্টিতে আক্রান্ত মানুষের মধ্যে পৌছে দিতে হবে।
- ৫. নাগরিকদের পুষ্টি চাহিদা পূরণের লক্ষ্যে প্রাথমিকভাবে সমিতির সদস্যদের বিভিন্ন পুষ্টি সম্পন্ন খাবারের পরিচিতি জানাতে হবে। তাদের নিজের জমিতে পুষ্টি সম্পন্ন শাক-সবজী ফলমূল ও মৎস্য চাষের ব্যবস্থা নিতে হবে। যাতে তারা তাদের নিজেদের পুষ্টির চাহিদা নিজেরাই পুরণ করতে সক্ষম হন।
- ৬. যুব সমবায় সমিতির মাধ্যমে যুবকদের প্রশিক্ষণ প্রদান করে হাঁস মুরগী, গরু-ছাগল পালন, মৎস্য চাষ, সাক সবজি উৎপাদনসহ বিভিন্ন প্রকল্প গ্রহণ করে দেশের পুষ্টি চাহিদা অচিরেই পূরণ করা
- সমবায়ীদেরকে স্বল্প ঋণের মাধ্যমে আয় বৃদ্ধি করে মান সম্পন্ন পুষ্টি চাহিদা পূরণের জন্য সহায়ক ভূমিকা পালন করা।
- ৮. কৃষি উৎপাদন বৃদ্ধির মাধ্যমে খাদ্য স্বয়ং সম্পূর্ণতা অর্জনসহ সমবায়ীদেরকে খাদ্য পুষ্টিমান সম্পর্কে অবহিত করতে হবে।
- ৯. সমবায়ীদেরকে গবাদিপশু ও মৎস্য চাষে আর্থিক সহায়তা প্রদান করতে হবে।
- ১০. এলাকা ভিত্তিক সমবায় সমিতি গুলোকে দায়িত্ব দেয়া হলে চাহিদা পূরণ হবে।
- ১১. সমবায় ভিত্তিক সমন্বিত খামার ব্যবস্থাপনার মাধ্যমে।
- ১২. পারিবারিক পর্যায় সদস্যগণকে হাঁস-মুরগি, গবাদি পশু পালন, গাভীর কৃত্রিম প্রজননের মাধ্যমে অধিক দুগ্ধ উৎপদান, দুগ্ধজাত দ্রব্যের বাজারজাতকরণ, মৎস্যচাষ, সবজি চাষাবাদ, ফলফলাদির আবাদ বৃদ্ধি করতে হবে। সে-উদ্দেশ্যে বাস্তবায়ন করতে হলে সমবেতভাবে কাজ করতে হবে এবং সেক্ষেত্রে সমবায়ের কোন বিকল্প নেই।

১৩. সমবায় মহিলা সমিতির মাধ্যমে দেশের মহিলাদের কে পুষ্টি জ্ঞান দিয়ে পুষ্টিকর খাদ্য সরবরাহ নিশ্চিত করা যায়।

লক্ষ্যমাত্রা ১৭ : ২০২১ সালের মধ্যে দরিদ্র জনগোষ্ঠীর জন্য প্রতিদিন ন্যূনতম ২১২২ কিলোক্যালোরির উর্ধ্বে খাদ্য নিশ্চিত করা হবে।

সুপারিশ:

- ১. সমবায় ভিত্তিতে উৎপাদিত পণ্য সুষম হারে বন্টন করা সম্ভব।
- ২. সমিতির সভ্যদের সুষম খাবার সম্পর্কে জ্ঞান দান নিশ্চিতকরণ।
- ৩. সরকার সমিতির মাধ্যমে দারিদ্র্য বিমোচন কর্মসূচী বাস্তবায়ন করলে সঠিক দারিদ্র লোক উপকৃত হবে।
- 8. সমবায় ভিত্তিক জনগোষ্ঠীর কর্মসংস্থান এর নিশ্চয়তা এবং সচেতনতার মাধ্যমে দৈনিক সঠিক পরিমাণে খাদ্য গ্রহণ নিশ্চিত করা যেতে পারে।
- ৫. সমবায় সমিতির মাধ্যমে কৃষি পণ্য উৎপাদনে স্বয়ংসম্পূর্ণতা অর্জন, যুবকদের সমবায় সমিতির মাধ্যমে হাঁস-মুরগী, গরু-ছাগল পালন মৎস্য চাষ ইত্যাদির মাধ্যমে দেশের জনগণের প্রতিদিন ২১২২ কিলো ক্যালেরির উধ্বের্থ খাদ্যমান নিশ্চিত করা সম্ভব।
- ৬. সমবায় সমিতির মাধ্যমে কৃষি খামার স্থাপন।
- সমবায় ভিত্তিক উৎপাদনমুখী কৃষি ব্যবস্থা এবং প্রাকৃতিক দুয়োর্গ ব্যবস্থা করা।
- b. সমবায়ীদের সম্পৃক্ত করে পুষ্টি জাতীয় খাদ্যদ্রব্য উৎপাদনে উদ্বুদ্ধ করা।
- ৯. সমবায়ের মাধ্যমে ডেইরী খামার প্রতিষ্ঠা করা।
- ১০. সমবায় সমিতির মাধ্যমে ফলের বাগান, গরুর খামার প্রতিষ্ঠা করা।

লক্ষ্যমাত্রা ১৮ : ২০২১ সালের মধ্যে সকল প্রকার সংক্রামক ব্যধি সম্পূর্ণ নির্মূল করা হবে। সুপারিশ:

- ১. সমবায়ীদের প্রচলিত স্বাস্থ্য সেবা সম্পর্কে সচেতন করে তোলা।
- ২. সমবায় এর মাধ্যমে প্রতিটি গ্রামে মাসে একটি করে সচেতনতা বৃদ্ধির জন্য সভা করা এবং সকলকে প্রয়োজনীয় ম্যাসেজ পৌছে দেয়া।
- ৩. সমিতির সভ্যদের সংক্রামক ব্যাধি সম্পর্কে সচেতন করে তোলা।
- 8. সমিতির মাধ্যমে সদস্যদের রোগ জীবাণু সম্পর্কে জ্ঞান দিলে সংক্রামক ব্যাধি নির্মুল সম্ভব।
- ৫. স্বাস্থ্য সচেতনতা বৃদ্ধির মাধ্যমে পর্যায়ক্রমে কমিয়ে আনা সম্ভব হবে।
- ৬. ঔষধী গাছ বেশী লাগাতে হবে।
- সংক্রামক ব্যধি সম্পর্কে সমবায়ের মাধ্যমে জনসাধারণেকে সচেতন করা; সরকারী সহযোগিতার
 মাধ্যমে সংক্রামক ব্যধির ঔষধ ও প্রতিষেধক টিকার ব্যবস্থা ও সরবরাহ করা।
- ৮. সমবায় ভিত্তিক জনগণকে বিনামূল্যে বা স্বল্প মূল্যে টিকা ও ঔষধ প্রদানের মাধ্যমে এ প্রকল্প বাস্তবায়ন করা সম্ভব।
- ৯. সমবায় বিভাগ স্বাস্থ্য বিভাগের সহায়ক শক্তি হিসেবে ভূমিকা পালন করতে পারে। সমবায় সমিতির

- শিক্ষিত বেকার সদস্যকে প্রশিক্ষণ প্রদান করে তৃণমূল পর্যায়ে বিভিন্ন টিকা প্রদানের দায়িত্ব প্রদান করা যেতে পারে।
- ১০. সমবায় সমিতির মাধ্যমে প্রচারণা ও প্রতিকারের প্রকল্প গ্রহন করে।
- ১১. এলাকা ভিত্তিক সমিতিগুলো একত্রিত হয়ে পরিষ্কার পরিছন্ন পরিবেশ গড়ে তুললে।
- ১২. সমবায় সমিতির সদস্যদেরকে স্বাস্থ্য সেবার প্রশিক্ষণ দিয়ে সংক্রামক ব্যাধি নির্মূল করা যায়।

লক্ষ্যমাত্রা ১৯ : ২০২১ সালে গড় আয়ৃস্কাল ৭০ এর কোঠায় উন্নীত করা হবে। সুপারিশ:

- ১. সমবায়ের মাধ্যমে যদি অর্থনৈতিকভাবে স্বাবলম্বি করা যায় তবেই সম্ভব।
- ২. সমিতির সভ্যদের আর্থ সামাজিক অবস্থার উন্নয়ন ঘটানো।
- ৩. ভেজাল খাদ্য ও অতিরিক্ত সার, ঔষধ ব্যবহারের মাধ্যমে যে সকল পণ্য উৎপাদিত হচ্ছে এবং তা গ্রহণ করে অকাল মৃত্যু ঘটছে। সমবায়ের মাধ্যমে বিষয়টি সম্পর্কে জনসাধারণকে সচেতন করা।
- 8. ২০২১ সালে গড় আয়ৃস্কাল ৭০ এর কোঠায় উন্নীত করতে হলে সমবায় সমিতির মাধ্যমে মানুষকে স্বাস্থ্য সম্পর্কে সচেতন করতে হবে। যুব সমাজকে মাদক ব্যবহারের পরিণাম সম্পর্কে সচেতন করতে হবে। সমবায় সমিতির মাধ্যমে গ্রামে প্রায়ে বাস্থায় সেবা দিতে হবে।
- ৫. সমবায় ভিত্তিক স্বাস্থ্য সেবার মান উন্নয়ন এবং সঠিক খাদ্যাভাসের মাধ্যমে গড় আয়ৢ বৃদ্ধি করা যেতে
 পারে।
- ৬. সমবায়ের মাধ্যমে জনগণকে তাদের জীবন সম্পর্কে সচেতন করতে হবে।
- ৭. শারীরিক ও মানসিক স্বাস্থ্য সুনিশ্চিত, পরিমিত আহার বিহার, নিয়মিত ব্যায়াম, সুষম খাদ্য সম্পর্কে সচেতনতা ও এতদসংক্রান্ত শিশু কিশোরীদের, গর্ভবতী মায়েদের স্বাস্থ্য সংক্রান্ত তথ্যাদি দেশের বিভিন্ন স্থানে ছড়িয়ে থানা সমবায় সমিতির সদস্যদের মাধ্যমে সাধারণ জনগণের মাঝে প্রচার চালিয়ে স্বাস্থ্য সচেতনতার মনোভাব গড়ে তুলতে হবে। জনগণ ধর্মীয় অনুশাসন ও মাদক দ্রব্য এড়িয়ে চলতে পারলে আয়ুস্কাল বৃদ্ধি পাবে। এক্ষেত্রে সমবায়ের বিকল্প নেই।

লক্ষ্যমাত্রা ২০ : ২০২১ সালে শিশু মৃত্যুর হার বর্তমান হাজারে ৫৪ থেকে কমিয়ে ১৫ করা হবে। সুপারিশ :

- ১. মাতৃ ও শিশু স্বাস্থ্য সম্পর্কে সক্রিয় সচেতনতা ও স্বাস্থ্য খাতের চিকিৎসার প্রসারে সমবায়ীদের সম্পৃক্ত হতে হবে।
- প্রতিটি গ্রামে গর্ভবতী মায়েদের সচেতনা মূলক কর্মশালা ও মনিটরিং এর ব্যবস্থা করা

 সমবায়ের

 নেতৃত্বে।
- সমিতির সভ্যদের পরিবারের মাতাও শিশু পালন সম্পর্কে সচেতন করে গড়ে তোলা ।
- 8. সমবায় ভিত্তিক সচেতনতা বৃদ্ধি ও বাস্তবধর্মী পদপেক্ষ গ্রহন।
- ৫. সমিতি গঠন করে শিশুদের কে স্বাস্থ্য সম্পর্কে জ্ঞান দিলে শিশু মৃত্যুহার কমানো সম্ভব।
- ৬. শিশু ও মা-এর টিকাদান কর্মসূচিতে সমবায়কে অন্তর্ভুক্ত করতে হবে।
- ৭. সমবায় সমিতির মাধ্যমে প্রশিক্ষণের মাধ্যমে মাতৃ শিশুর মৃত্যুর হার কমান সম্ভব।

- ৮. সমিতির সদস্যদের মাধ্যমে শিশু মৃত্যু প্রসংগে সচেতনতা বৃদ্ধি করতে হবে যাতে করেই শিশু জন্মের সময় মৃত্যু হার কম হয়।
- ৯. উদ্বুদ্ধকরণ কর্মসূচীর মাধ্যমে সমবায় বিভাগ ও সমবায়ীগণ শিশু মৃত্যুর হার কমাতে স্বাস্থ্য বিভাগের সহায়ক শক্তি হিসাবে ভূমিকা রাখতে পারে।
- ১০. সমবায়ের মাধ্যমে শিশু সেবা সেল প্রতিষ্ঠা করা।
- ১১. সমবায় সদস্যাদের বা গর্ভজাত মায়েদের গর্ভজনিত বিভিন্ন সমস্যা সমন্ধে শিক্ষাদানের মাধ্যমে এবং গর্ভউত্তর শিশুদের চিকিৎসা ও সেবাযত্নের মাধ্যমে বিশেষভাবে শিক্ষাদান করে শিশু মুত্যুর হার কমানো যেতে পারে।
- ১২. সমবায়ের মাধ্যমে শিশু মৃত্যুর কারণ ও প্রতিকার মূলক গণ সেমিনার সিম্পোজিয়াম করা ও চিকিৎসা দেয়া।
- ১৩. সমবায়ের মাধ্যমে বাল্য বিবাহ রোধ, অশিক্ষা রোধ করে গণসচেতনতা বাড়িয়ে।
- ১৪. স্বাস্থ্য বিভাগ, পরিবার পরিকল্পনা বিভাগের সহায়তায় সমবায়ের মাধ্যমে জনসচেতনতা সৃষ্টির মাধ্যমে শিশু মৃত্যুর হার কমিয়ে ১৫-তে নেওয়া সম্ভব।
- <u>১৮ সমবায় সমিতিগুলোর সাথে সম্পৃক্ত সকলকে স্বাস্থ্য সেবা সম্পর্কে সচেতন করে শিশু মৃত্যুর হার</u> কমানো যায়।

লক্ষ্যমাত্রা ২১ : ২০২১ সালে মাতৃমৃত্যুর হার ৩.৮ থেকে কমে হবে ১.৫ শতাংশ। সুপারিশ:

- মাতৃ স্বাস্থ্য সম্পর্কে সকলকে সচেতন করা এবং সংশ্লিষ্ট সেবা কাজে অংশগ্রহণ।
- ২. সমবায়ের মাধ্যমে মনিটরিং করা।
- ৩. সমবায়ের মাধ্যমে মহিলাদের স্বাস্থ্য সম্পর্কে সচেতন করা।
- ক) মহিলাদের বিনামূল্যে প্রতিষেধক ঔষধ ও টিকার ব্যবস্থা করা।
- খ) মহিলাদের জন্য পরিবারে সুষম খাদ্যের ব্যবস্থা করা সে সম্পর্কে পরিবারের পুরুষদের উদ্বুদ্ধ করা।
- গ) সমাজ থেকে যাতে বাল্য বিবাহ, যৌতুক প্রথা বন্ধ করা যায় সেসম্পর্কে জনগণকে সচেতন করা।
- 8. সমবায় সমিতির মাধ্যমে স্বাস্থ্য শিক্ষার মাধ্যমে মৃত্যুর হার কমানো যাবে।
- ৫. সমবায় ভিত্তিক মায়ের সঠিক চিকিৎসা, সেবা, খাদ্য, নিরাপদ মাতৃত্ব এবং সচেতনতা নিশ্চিত করতে হবে।
- ৬. মাতৃ মৃত্যুর হার হ্রাস কল্পে সমিতির সদস্যদের বাল্য বিবাহের কুফল সম্পর্কে সমবায়ের মাধ্যমে ব্যাপক প্রচারণা চালাতে হবে।
- ৭. মাতৃ মৃত্যু রোধে সমবায় সমিতির শিক্ষিত সচেতন মহিলাদের ধাত্রী বিদ্যায় উয়ত প্রযুক্তিতে প্রশিক্ষিত করে তুলতে হবে। মেয়দের উপযুক্ত বয়সের আগে যাতে বিয়ে দেয়া না হয় এ বিষয়ে সমবায় সামাজিক আন্দোলন গড়ে তুলতে পারে। সমিতি কিশোরীদের স্বাস্থ্য সেবা নিশ্চিত করার লক্ষ্যে নিকটস্থ স্বাস্থ্য সেবা ক্লিনিকে গর্ভবর্তী মা/ কিশোরীদের ভ্যাকসিনেসানের জন্য যোগাযোগ করে দিতে পারে। এছাড়াও গর্ভবর্তী মায়ের সুষম খাবার নিশ্চিতকরণে সমবায় সংগঠন সমাজে প্রচার চালাতে পারে।

লক্ষ্যমাত্রা ২২ : ২০২১ সালে প্রজনন নিয়ন্ত্রণ ব্যবহারের হার ৮০ শতাংশে উন্নীত করা হবে। সুপারিশ:

- সমবায় এর মাধ্যমে সচেতনতা সৃষ্টি এবং ১টি মাত্র সন্তান থাকলে তার যাবতীয় পৃষ্ঠপাষকতা
 সরকার এর করা।
- ২. সমিতির সকল সভ্যদের প্রজনন স্বাস্থ্য সেবা প্রাপ্তি নিশ্চিতকরণ।
- ৩. মাঠ পর্যায়ে সমিতির মাধ্যমে জন্ম নিয়ন্ত্রণের ব্যাপারে প্রশিক্ষণ দিয়ে প্রজনন নিয়ন্ত্রণ করা সম্ভব।
- ৪. প্রজনন নিয়ন্ত্রণ ব্যবস্থার সচেতনতা বৃদ্ধির জন্য সমবায়ের মাধ্যমে বিভিন্ন কর্মশালার ব্যবস্থা করা।
- ৫. সমবায় সমিতির সদস্যদের জনসংখ্যা বৃদ্ধির কুফল সম্পর্কে ব্যাপকভাবে অবহিত করতে হবে।
- ৬. সরকারী প্রচেষ্টায় সমবায়ের মাধ্যমে জন্ম নিয়ন্ত্রণে উদ্বুদ্ধ করা। এ ক্ষেত্রে সমবায় বিভাগ স্বাস্থ্য বিভাগের সহায়ক শক্তি হিসেবে ভূমিকা পালন করতে পারে। সমবায় সমিতির শিক্ষিত বেকার সদস্যকে প্রশিক্ষণ প্রদান করে তৃণমূল পর্যায়ে বিভিন্ন জন্ম নিয়ন্ত্রণ উপকরণ সরবরাহ করার দায়িত্ব প্রদান করা যেতে পারে। উদ্বুদ্ধকরণ কর্মসূচীর মাধ্যমেও সমবায় বিভাগ এ বিষয়ে ভূমিকা রাখতে পারে।
- বাংলাদেশ সরকারের জন্মনিয়ন্ত্রণ কার্যক্রম আরো জোরদার করে এবং সমবায় ভিত্তিক আন্দোলকে সম্পৃক্তের মাধ্যমে এ প্রজনন নিয়ন্ত্রণ কার্যক্রম ব্যবস্থা জোরদারের মাধ্যমে লক্ষ্যমাত্রা অর্জনের সহায়ক হবে।
- ৮. সরকার ব্যবস্থাপনায় ও নির্দেশে সমবায় সমিতিভূক্ত মহিলাদের জন্ম নিয়ন্ত্রণ সম্পর্কে সচেতন করা।
- ৯. ব্যাপক প্রচারের ব্যবস্থা এবং সমবায় সমিতিকে দায়িত্ব প্রদান।
- ১০. সমবায় জনসংখ্যা নিয়ন্ত্রণে পরিকল্পিত ছোট পরিবার গঠন, সদস্যদের বিভিন্ন জন্মনিয়ন্ত্রণ পদ্ধতি

উপসংহার

দেশের সামগ্রিক উন্নয়নের লক্ষ্যে "রূপকল্প ২০২১" বাস্তবায়নে জাতির পিতা বঙ্গবন্ধু শেখ মুজিব নির্দেশিত (১৯৭২ সালে) "গণমুখী সমবায় আন্দোলন"এর বিকল্প নেই। এ আন্দোলন সফল করতে একদিকে যেমন দরকার প্রাতিষ্ঠানিক কাঠামোর উন্নয়নসহ বর্তমান সমবায় আন্দোলন জোরদার ও বহুমুখী সম্প্রসারণ তেমনি প্রয়োজন সমবায়-চেতনা-ভিত্তিক একটি দীর্ঘমোদি উন্নয়ন পরিকল্পনা প্রণয়ন করা। এক্ষেত্রে বাংলাদেশের সংবিধানে নির্দেশিত মালিকানার নীতি সংক্রান্ত 'সমবায়ী মালিকানা'-ও (সংবিধান অনুচ্ছেদ ১৩) বিষয়টি আমাদের "দেশের মাটি উত্থিত উন্নয়ন দর্শন" (home grown developoment philosophy) এর ভিত্তি হিসেবে বিরেচিত হতে হবে। সুতরাং বর্তমানে প্রণয়ন প্রক্রিয়াধীন জাতীয় উন্নয়ন নীতি-কৌশল ষষ্ঠ পঞ্চবার্ষিকী পরিকল্পনাসহ সকল আর্থ-সামাজিক উন্নয়ন পরিকল্পনা দলিলে 'গণমুখী সমবায় আন্দোলন' বিষয়টি যথাযোগ্য গুরুত্বসহ বিবেচনা করতে হবে। আমাদের সবারই মনে রাখা জরুরি, ১৫ কোটি মানুষের আমাদের দেশে কমপক্ষে ১ কোটি মানুষই দরিদ্র-বঞ্চিত-দুর্দশাগ্রস্ত। অতএব এ দেশের উন্নয়ন মানে মাথাপিছু আয় বৃদ্ধি নয়, উন্নয়ন মানে হতে হবে বৈষম্য হ্রাস। উন্নয়নকে দেখতে হবে আন্দোলন হিসেবে। যে আন্দোলনে অন্যতম কেন্দ্রিয় ভূমিকা পালন করতে পারে পরিকল্পত "গণমুখী সমবায় আন্দোলন"।

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 35-44 Bangladesh Economic Association (ISSN 2227-3182)

জাতীয় নারী উনুয়ন নীতি '৯৭ এবং সকল পর্যায়ে নারীর সম-অধিকার নিশ্চতকরণ

হানানা বেগম ১

সারসংক্ষেপ

বাংলাদেশের সংবিধানে নারী-পুরুষের সম-অধিকারের কথা আছে। অতএব জেভার সমতা অর্জনের লক্ষ্যে দেশের জন্য একটি নারীনীতির প্রয়োজনীয়তা বরাবর অনুভব করা হয়েছে। বিষয়টি তুরান্দিত হয়ে যখন বেইজিং কর্মপরিকল্পনা ১৯৯৫ বাস্তবায়নের জন্য নারীনীতির বিষয়টি অত্যন্ত গুরুত্বের সাথে বিবেচনা করা হয়। বাংলাদেশ সরকার ১৯৯৭-এর ৮ মার্চ নারীনীতি ১৯৯৭ ঘোষণা করে। যা নারীসংগঠনগুলোর সার্বিক আশা বা আন্দোলনের প্রতিফলন। কিন্তু পরবর্তীকালে ২০০৪ সালের সরকার এ নীতির অনেক ইতিবাচক শব্দার্থ নেতিবাচক করে এটি উপস্থাপন করে। যা সর্বসমক্ষে গুরুত্ব পায়নি। ২০০৮ সালের তত্বাবধায়ক সরকার নারীর সম-উত্তরাধিকারকে পাশ কাটিয়ে নারীনীতি ২০০৮ উপস্থাপন করে। কিন্তু মৌলবাদীদের বিশৃত্বালা জ্বোলাও পোড়াও আন্দোলনের মুখে এটি হিমাগারে চলে যায়। বাংলাদেশে আওয়ালীগ দেশে ২০০৮ সালের নির্বাচনী ইশতাহারে ১৯৯৭-এর নারীনীতি বাস্তবায়নের ঘোষণা দেয়। অতএব নারীসমাজের একান্ত আকাক্ষেয় সার্বিকভাবে সুশৃত্বাল নারীনীতি বাংলাদেশের অর্থনীতিতে একান্তই গুরুত্বহ। এ নারীনাতীর মর্মকথা ও বিশ্লেষণ সাধারণ জনগণের অত্যন্ত প্রয়োজনীয় জানার বিষয়। ঐ উদ্দেশ্যেই প্রবন্ধের উপস্থাপনা ও নীতির বিশ্লেষণ।

ভূমিকা

"বাংলাদেশের নারী যুগ যুগ ধরে শোষিত অবহেলিত হয়ে আসছে। পুরুষশাসিত সমাজ ব্যবস্থায় ধর্মীয় গোড়ামী, সামাজিক কুসংস্কার, কুপমভূপকতা, নিপীড়ন ও বৈষম্যের বেড়াজালে তাকে সর্বদা রাখা হয়েছে অবদমিত। তার মেধা ও শ্রমশক্তিকে শুধুমাত্র সাংসারিক কাজেই ব্যয় করা হয়েছে। সমাজ ও দেশ গঠন কাজে তাকে কখনও সম্পৃক্ত করা হয়নি।" একথাগুলো বাংলাদেশের জাতীয় নারী নীতি '৯৭ এর প্রারম্ভিক পটকথা।

১ অর্থনীতিবিদ, সহ-সভাপতি বাংলাদেশ অর্থনীতি সমিতি, শিক্ষাবিদ, নারীনেত্রী – প্রাক্তন অধ্যক্ষ ইডেন গার্লস কলেজ, ঢাকা।

আমাদের জানা আছে- বাংলাদেশের সংবিধানে নারী-পুরুষের সমঅধিকারের ঘোষণা রয়েছে। সংবিধানের ধারা সাতাশ, আটাশ এর এক,আটাশ এর দুই, আটাশ এর তিন, আটাশ এর চার, ঊনত্রিশ এর এক, ঊনত্রিশ এর দুই, পয়ষ্টি এর তিন এ ঘোষণাকে সমুন্নত করেছে।

প্রবন্ধের ভূমিকার অবতারণায় গত কয়েক দশকের বিশ্বনারী এবং বাংলাদেশের নারীবিশ্ব ও নীতি প্রণয়নের ইতিকথা পরখ করতে চাই –

রক্তক্ষয়ী মুক্তিযুদ্ধের মাধ্যমে স্বাধীনতা অর্জনের পর থেকে বাংলাদেশ নারী উন্নয়ন বিষয়ক প্রতিটি আন্তর্জাতিক সম্মেলনে সক্রিয় অবদান রেখেছে। সমৃদ্ধ হয়েছে। সমৃদ্ধ করেছে।

বিশ্বনারী উদ্যোগের ধারাবাহিকতায় নব্বই এর দশকে চতুর্থ বিশ্বনারী সম্মেলনের প্রস্তুতি পর্বে ১৯৯৪ সালে জাকার্তায় অনুষ্ঠিত দ্বিতীয় এশীয় ও প্রশান্ত মহাসাগরীয় নারী উন্নয়ন বিষয়ক মন্ত্রী পর্যায়ের সম্মেলনে জাকার্তা ঘোষণা ও কর্ম পরিকল্পনা গৃহীত হয়। এ ঘোষণায় বলা হয়, ক্ষমতা বন্টন ও সিদ্ধান্ত প্রহণের ক্ষেত্রে নারী-পুরুষের মাঝে তীব্র অসমতা বিদ্যমান। এ অসমতা ও সীমাবদ্ধতা নিরসনের উদ্দেশ্যে সরকারসমূহকে উদ্যোগ নিতে তাগিদ দেওয়া হয়।

কমনওয়েলথ ১৯৯৫ সালে জেন্ডার ও উন্নয়ন কর্ম-পরিকল্পনা প্রণয়ন করে।

সার্ক দেশসমূহও নারী-উন্নয়নের জন্য কর্ম পরিকল্পনা গ্রহণ করে।

১৯৯৫ সালের ৪-১৫ সেপ্টেম্বর বেইজিং চতুর্থ বিশ্বনারী সম্মেলনে বেইজিং ঘোষণা ও কর্ম পরিকল্পনা গৃহীত হয়। বেইজিং কর্ম পরিকল্পনায় নারী উন্নয়নে ১২টি বিশেষ গুরুত্বপূর্ণ ক্ষেত্র চিহ্নিত হয়। ক্ষেত্রগুলো হলো - 'নারীর ক্রমবর্ধমান দারিদ্র', 'শিক্ষা ও প্রশিক্ষণের অসম সুযোগ', 'সাস্ত্রাত্রসার অসম সুযোগ', 'নারী নির্যাতন', 'সশস্ত্র সংঘর্ষের শিকার নারী', 'অর্থনৈতিক সম্পদে নারীর সীমিত অধিকার', 'সিদ্ধান্ত গ্রহণ ও ক্ষমতার অংশগ্রহণে অসমতা', 'নারী উন্নয়নে অপর্যাপ্ত প্রাতিষ্ঠানিক অবকাঠামো', 'নারীর মানবাধিকার লজ্জন', 'গণমাধ্যমে নারীর নেতিবাচক প্রতিফলন এবং অপ্রতুল অংশগ্রহণ', 'পরিবেশ সংরক্ষণ ও প্রাকৃতিক সম্পদে নারীর সীমিত অধিকার' এবং 'মেয়ে শিশুর প্রতি বৈষম্য'। এসব অসমতা উত্তরণের লক্ষ্যে জাতীয় পরিকল্পনা প্রণয়নের জন্য বাংলাদেশ বেইজিং প্যাটফরম ফর একশনে নি:শর্ত স্বাক্ষর দান করে।

আমরা বিশ্বাস করি দেশের সার্বিক উন্নয়নের স্বার্থে প্রতিটি ক্ষেত্রে প্রাসঙ্গিক উন্নয়ন নীতির প্রয়োজনীয়তা রয়েছে। নীতিহীন পথ কখনও গতিময় হতে পারে না। কিন্তু নীতি প্রণয়নে, নীতি বাস্তবায়নে আমরা পিছিয়ে আছি। নীতির ক্ষেত্রে সিদ্ধান্তহীনতা আমাদের আর্থ সামাজিক উন্নয়নকে পশ্চাংমূখী করছে। দ্রুত অগ্রসরমান বিশ্বে আমরা সামনের কাতারে থাকব, এটি আমাদের লক্ষ্য হওয়া উচিত আর এক্ষেত্রে বাংলাদেশের অর্ধেক জনগণ নারীর জন্য তো বটেই প্রতিটি খাতে সুনির্দিষ্ট নীতিমালা উন্নয়নের জন্য অবশ্যম্ভাবী উপাদান।

বাংলাদেশে একটি জাতীয় নারী উন্নয়ন নীতির প্রয়োজনীয়তা উপলব্ধি করা হচ্ছিল বহুদিন থেকে। বেইজিং কর্ম-পরিকল্পনা এ উপলব্ধিকে ত্বরান্বিত করলো। প্রশ্ন হতে পারে বাংলাদেশ কি জাতীয় নারী উন্নয়ন নীতি ছাড়া জাতীয় পরিকল্পনা করতে পারে না? তাহলে এতদিন কিভাবে চলছিল? আমরা আপদকালীন অনিয়মে চলছিলাম। এতে উন্নয়ন ব্যাহত হয়েছিল, আমরা ক্রমান্বয়ে নিয়মমূখী হতে চাই। নিয়ম বলে—

যে কোন জনগোষ্ঠির জন্য জাতীয় উন্নয়ন পরিকল্পনা করতে হলে, দেখতে হয়— সংবিধান তাকে কতখানি অধিকার দিয়েছে। সংবিধানের অধিকার এবং ঐ গোষ্ঠির বাস্তব অবস্থার প্রেক্ষিতে প্রথমত ঐ ক্ষেত্রে জাতীয় লক্ষ্য স্থির করতে হয়। নির্ধারিত সুনির্দিষ্ট লক্ষ্য অর্জনের জন্যই তখন নীতিমালা গ্রন্থনার প্রয়োজন পড়ে। পরিশেষে এ নীতিমালা যথার্থ অনুসরণ করে কাজের কৌশল ও পরিকল্পনা প্রণয়ন করা হয়। বাংলাদেশের জাতীয় নারী উন্নয়ন নীতি পড়লে বুঝা যায়, এটি এ নিয়মেই করা হয়েছে।

বেইজিং ঘোষণার পরের বছর ১৯৯৬ সালের নির্বাচনে নির্বাচনা মেনিফেস্টোতে বাংলাদেশ আওয়ামী লীগ জাতীয় নারীনীতি প্রদানের জন্য দেশবাসীর কাছে ওয়াদাবদ্ধ হয়। তদনুসারে ১৯৯৭ সালের ৮ মার্চ তৎকালীন সরকার প্রধান প্রধানমন্ত্রী শেখ হাসিনা নারীনীতি '৯৭ ঘোষণা করেন। এ সময়ে গণপ্রজাতন্ত্রী বাংলাদেশ সরকারের মহিলা ও শিশু বিষয়ক মন্ত্রণালয়ের উদ্যোগে বেইজিং প্ল্যাটফরম ফর একশন-এর বাস্তবায়নের জন্য ২৬৪ পৃষ্ঠার নারী উন্নয়নে জাতীয় পরিকল্পনা প্রণয়ন করা হয়। মন্ত্রণালয়ের কর্মকর্তাদের উদ্যোগ, সমাজ সংগঠক ও এন জি ও-দের নিরলস পরিশ্রমে নারী নীতি ও পরিকল্পনা প্রণীত হয়েছিল। কিন্তু ঐ সরকারের সময়কালে ঘোষিত নীতি সংসদে উত্থাপিত হয়নি এবং প্রেক্ষিত আইনও প্রণীত হয়নি।

শংকার বাস্তবতা হলো ২০০১ সালে বি.এন.পি. জোট সরকার ক্ষমতায় থাকাকালে এ নীতির গুরুত্বপূর্ণ ইতিবাচক শব্দসমূহ পরিবর্তন করে নীতিকে নেতিবাচক করে তোলে। তবে এ নীতির প্রকাশ্য ঘোষণা দেখা যায় নি। বিষয়টি জানাজানির পর নারী সমাজের তীব্র আন্দোলন ও অসন্তোষের মুখে তত্ত্বাবধায়ক সরকার নারীর উত্তরাধিকার বিষয়কে কিছুটা পাশ কাটিয়ে নারী নীতি ২০০৮ ঘোষণা করে। নীতি ঘোষণার মুহূর্তেই ধর্মীয় রাজনৈতিক দলের জ্বালাও, পোড়াও, হুমকির মুখে এটি হিমাগারে চলে যায়। স্থবির হয় বাংলাদেশের বহু শ্রমে বহু অর্থের বিনিময়ে করা নারীর অধিকার বাস্তবায়ন কর্মপরিকল্পনা।

আমাদের সৌভাগ্য, ২০০৮ এর নির্বাচনে মহাজোট সরকারের বড় দল বাংলাদেশ আওয়ামী লীগ নারীনীতি বাস্তবায়নের কথা দেয়। পরবর্তীতে জুন ২০০৯ এর প্রদন্ত বাজেটে সরকার নারীনীতি বাস্তবায়নের সুদৃঢ় ঘোষণা প্রদান করে। বর্তমানে এ নীতি বাস্তবায়নের জন্য সরকারের উদ্যোগ লক্ষ্য করা যায়। সচেতন জণগণ মনে করে এটি সরকারের একটি ইতিবাচক উদ্যোগ। এখন এ নীতি সম্পর্কে জানা আমাদের নৈতিক নাগরিক দায়িত্ব।

প্রবন্ধের উদ্দেশ্য

প্রবন্ধের উদ্দেশ্য প্রধানতঃ জাতীয় নারী উন্নয়ন নীতির সংক্ষিপ্ত ধারণা প্রদান। দ্বিতীয়তঃ প্রস্তাবিত নীতিতে নারীর অর্থনৈতিক অধিকারের দিকটি অত্যন্ত গুরুত্বের সাথে বিবেচনা করা হয়েছে, এ বিষয়টি তুলে ধরা । আলোচনার সুবিধার্থে প্রবন্ধটি দু'অংশে বিভাজন না করে একই ধারাবাহিকতায় উপস্থাপন করা হলো।

২.১

ঘেষিত জাতীয় নারী উন্নয়ন নীতি '৯৭ এর অধ্যায় পাঁচটি। প্রথম অধ্যায় অনেকটা পটভূমিকার মত। অর্থাৎ কি পরিস্থিতিতে এটি প্রণীত হয়েছে তার ধারণা, দেশের সংবিধানে নারীর অধিকার ও বিশ্ব প্রেক্ষাপট। শুরুতে রয়েছে বেগম রোকেয়ার উক্তি – "তোমাদের কন্যাগুলিকে শিক্ষা দিয়া ছাড়িয়া দাও, তাহারা নিজেরাই নিজেদের অন্নের সংস্থান করুক।" স্বীকৃতি দেওয়া হয়েছে মুক্তিযুদ্ধে নারীর অবদান।

অবারিতভাবে ধারণা দেওয়া হয়েছে – বেসরকারি সাহায্য সংস্থাণ্ডলি দেশের প্রত্যন্ত অঞ্চলে নারীর আর্থ- সামাজিক উন্নয়নের বিভিন্ন কর্মসূচি অব্যাহত রেখেছে।

দেশে গণতন্ত্র প্রতিষ্ঠার সংগ্রামে রাজনৈতিক দলগুলোর, পাশাপাশি নারী সংগঠনগুলোও প্রত্যক্ষ ও পরোক্ষভাবে অংশগ্রহণ করে।ফলশ্রুতিতে নিজেদের রাজনৈতিক, অর্থনৈতিক ও সামাজিক অধিকার প্রতিষ্ঠায় তারা সচেতন হয়ে ওঠে। এতে করে দেশে নারী উন্নয়নে এক বিরাট সম্ভাবনা সৃষ্টি হয়েছে। বলা হয়েছে - এ সম্ভাবনাকে কাজে লাগাতে হবে।

উদ্বৃত হয়েছে –বাংলাদেশের সংবিধানে নারীর সম অধিকার সমৃদ্ধ ধারাসমূহ। রয়েছে বিশ্ব প্রেক্ষাপট ও বাংলাদেশের কথা। বলা হয়েছে ১৯৭৬ সালে বাংলাদেশ প্রথম বিশ্বনারী সম্মেলনে যোগ দিয়েছিল। এ সম্মেলনে ১৯৭৬-১৯৮৫ সালকে নারীদশক হিসেবে ঘোষণা করা হয়। ১৯৭৯ সালে জাতিসংঘ সাধারণ পরিষদে নারীর প্রতি সকল প্রকার বৈষম্য বিলোপ সনদ সিডও গৃহীত হয়। ৩ সেপ্টেম্বর ১৯৮১ থেকে এটি কার্যকর হয়। নারীর জন্য আন্তর্জাতিক বিল অব রাইটস বলে চিহ্নিত এ দলিল নারীর অধিকার সংরক্ষণের একটি স্বয়ংসম্পূর্ণ মানদন্ড বলে বিবেচিত। বাংলাদেশ ১৯৮৪ সালে ধারা ২, ১৩(ক), ১৬(ক) ও (চ)-এ সংরক্ষণ সহ এই সনদ অনুস্বাক্ষর করে।

দ্বিতীয় অধ্যায়- 'বাংলাদেশে নারীর অবস্থা'

বর্ণনায় বলা হয়েছে - ১৯৭২ সনে বাংলাদেশ সরকার নারী পুনর্বাসন বোর্ড প্রতিষ্ঠা করে । এই বোর্ডের উল্লেখযোগ্য কার্যক্রম ছিল – স্বাধীনতা যুদ্ধে নির্যাতিত নারীর সঠিক তথ্য আহরণের জন্য জরিপ কাজ পরিচালনা করা এবং তাদের পুনর্বাসনের ব্যবস্থা করা; যুদ্ধে নির্যাতিত নারীদের বিভিন্ন বৃত্তিমূলক প্রশিক্ষণ প্রদান করা ; বীরাঙ্গনা নারীসহ যেসব পরিবারের উপার্জনক্ষম পুরুষ মুক্তিযুদ্ধে নিহত হন সেই সমস্ত পরিবারের কর্মক্ষম নারীদের চাকুরি এবং প্রশিক্ষণ প্রদান করা । নারী পুনর্বাসন বোর্ডের দায়িত্ব ও কর্মপরিধি ক্রমশ: বৃদ্ধি পাওয়ায় ১৯৭৪ সনে এ বোর্ডকে বৃহত্তর কলেবরে পূনর্গঠিত করে সংসদের একটি এ্যান্ট এর মাধ্যমে নারী পুনর্বাসন ও কল্যাণ ফাউন্তেশনে রূপান্তরিত করা হয় ।

প্রথম পঞ্চবার্ষিক পরিকল্পনায় সমাজকল্যাণ মন্ত্রণালয় নারীদের জন্য বৃত্তিমূলক প্রশিক্ষণ কর্মসূচি চালু করে। দ্বিবার্ষিক পরিকল্পনায়ও (১৯৭৮-৮০) নারীর কর্মসংস্থান ও দক্ষতাবৃদ্ধির কর্মসূচি গ্রহণ করা হয়। ১৯৮৫-৯০-এ তৃতীয় পঞ্চবার্ষিকীর কর্মসূচি একই ধরণের ছিল। চতুর্থ পঞ্চবার্ষিকী পরিকল্পনায় (১৯৯০-৯৫) নারী উন্নয়নকে সামাজিক ও অর্থনৈতিক কর্মকান্ডের অংশ হিসেবে চিহ্নিত করে নারীকে উন্নয়নের মূল স্রোতধারায় সম্পুক্তকরণের লক্ষ্যে উদ্যোগ গৃহীত হয়।

বাংলাদেশে নারী ও মেয়ে শিশুর প্রতি নির্যাতন রোধকল্পে কতিপয় প্রচলিত আইনের সংশোধন ও নতুন আইন প্রণীত হয়েছে। এসব আইনের মধ্যে উল্লেখযোগ্য হল মুসলিম পারিবারিক আইন, যৌতুক নিরোধ আইন, বাল্যবিবাহ রোধ আইন, নারী ও শিশু নির্যাতন প্রতিরোধ (বিশেষ বিধান) আইন প্রভৃতি।

১৯৯৭-পূর্ব নারী নির্যাতন চিত্রটি এভাবে এসেছে – যদিও ইতোমধ্যে বেশ কিছু আইন প্রণীত হয়েছে। এসব আইনের মৌলিক সংস্কার প্রয়োজন। বিভিন্ন পদক্ষেপ সত্ত্বেও মেয়ে শিশুর অবস্থার বিশেষ পরিবর্তন ঘটেনি। মেয়ে শিশুর বাল্যবিবাহ, পাচার, নির্যাতন ও অপব্যবহার চলছে অব্যাহতভাবে। বৃহত্তর সামাজিক প্রেক্ষাপটে মেয়ে শিশুর সাংস্কৃতিক, মানসিক এবং বুদ্ধিবৃত্তিক বিকাশে উল্লেখযোগ্য পরিবেশ সৃষ্টি হয়নি। গ্রাম্য সালিশির মাধ্যমে ধর্মীয় অপব্যাখ্যা দিয়ে ১০১ দোররা, গর্ত করে পাথর মারা, পুড়িয়ে মারার ঘটনাও এদেশে ঘটেছে। নারী নির্যাতনের ক্ষেত্রে একটি উদ্বেগজনক বিষয় হলো রাষ্ট্রীয় তথা পুলিশের নির্যাতন। নিকট অতীতে পুলিশের হাতে বেশ কিছু নারী নির্যাতিত হয়েছে, এমনকি পুলিশ দ্বারা নারী ধর্ষিত ও নিহত হয়েছে। নারী নির্যাতনের মামলাগুলো তদন্তের জন্য যথেষ্ট ফরেনসিক সুবিধা এখনও গড়ে ওঠেনি। নারী ও মেয়ে শিশু নির্যাতন প্রতিরোধের লক্ষ্যে দেশের ১০টি জেলায় নারী ও শিশু নির্যাতন দমন আদালত স্থাপিত হয়েছে।

সরকারি চাকুরিতে নারীর জন্য আরোপিত নিষেধাজ্ঞা উঠিয়ে দিয়ে সকল ক্ষেত্রে অংশগ্রহণ অবারিত করে দশভাগ কোটা সংরক্ষণ করা হয়। এছাড়াও তৃতীয় চতুর্থ শ্রেণী পদে প্রবেশ পর্যায়ে শতকরা ১৫ ভাগ কোটা নির্দিষ্ট রয়েছে। প্রাথমিক শিক্ষকদের মধ্যে নতুন শিক্ষক নিয়োগের ক্ষেত্রে শতকরা ৬০ ভাগ নারী নিয়োগের কথা থাকলেও এখনও এটি শতকরা ২৫ এর উপরে নয়।

তৃতীয় অধ্যায়- 'জাতীয় নারী উন্নয়ন নীতির লক্ষ্য'

আমাদের জাতীয় লক্ষ্যকে সামনে রেখেই, জাতীয় নারী নীতির লক্ষ্য স্থির করা হয়েছে। আমাদের অন্যতম জাতীয় লক্ষ্য নারী পুরুষের সমতা আনয়ন। সে লক্ষ্যে নারীনীতির লক্ষ্যসমূহ হলো –

'জাতীয় জীবনের সকল ক্ষেত্রে নারী পুরুষের সমতা প্রতিষ্ঠা করা'; 'রাষ্ট্রীয়, সামাজিক ও পারিবারিক জীবনের সকল ক্ষেত্রে নারীর নিরাপন্তা নিশ্চিত করা'; 'নারীর রাজনৈতিক, সামাজিক, প্রশাসনিক ও অর্থনৈতিক ক্ষমতায়ন নিশ্চিত করা'; 'নারীর মানবাধিকার নিশ্চিত করা'; 'নারীকে শিক্ষিত ও দক্ষ মানবসম্পদ হিসেবে গড়ে তোলা'; 'নারী সমাজকে দারিদ্রের অভিশাপ থেকে মুক্ত করা'; 'নারী পুরুষের বিদ্যমান বৈষম্য নিরসন করা'; 'সামাজিক ও অর্থনৈতিক পরিমন্ডলে নারীর অবদানের যথাযথ স্বীকৃতি প্রদান করা'; 'নারী ও মেয়ে শিশুর প্রতি সকল প্রকার নির্যাতন দূর করা'; 'নারী ও মেয়ে শিশুর প্রতি বৈষম্য দূর করা'; 'রাজনীতি, প্রশাসন ও অন্যান্য কর্মক্ষেত্রে, আর্থসামাজিক কর্মকান্ড, শিক্ষা, সংস্কৃতি ও ক্রীড়া এবং পারিবারিক জীবনের সর্বত্র নারী-পুরুষের সমানাধিকার প্রতিষ্ঠা'; 'নারীর স্বাথর্ব অনুকুলে প্রযুক্তি উদ্ভাবন ও আমদানী করা এবং নারীর স্বার্থ বিরোধী প্রযুক্তির ব্যবহার নিষদ্ধ করা'; 'নারীর সুস্বাস্থ্য ও পুষ্টি নিশ্চিত করার জন্য উপযুক্ত ব্যবস্থা গ্রহণ নিশ্চিত করা'; 'নারীর জন্য উপযুক্ত আশ্রয় এবং গৃহায়ন ব্যবস্থায় নারীর অগ্রাধিকার নিশ্চিত করা'; 'প্রাকৃতিক দূর্যোগ ও সশস্ত্র সংঘর্ষে ক্ষতিগ্রস্ত নারীর পুনর্বাসনের ব্যবস্থা করা'; 'বিশেষ দুর্দশাগ্রস্ত নারীর চাহিদা পূরণের ব্যবস্থা করা'; 'বিধবা, অভিভাবকহীন, স্বামী পরিত্যাক্তা, অবিবাহিতা ও সন্তানহীন নারীর নিরাপত্তার ব্যবস্থা করা'; 'গণমাধ্যমে নারী ও মেয়েশিশুর ইতিবাচক ভাবমূর্তি তুলে ধরাসহ জেন্ডার প্রেজিত প্রতিফলিত করা'; 'মেধাবী ও প্রতিভাময়ী নারীর সূজনশীল ক্ষমতা বিকাশে সহায়তা দেয়া'; 'নারী উন্নয়নে প্রয়োজনীয় সহায়ক সেবা প্রদান করা'।

চতুর্থ অধ্যায়- জাতীয় নারী উন্নয়ন নীতি

এ অধ্যায় এক অর্থে জাতীয় নারী উন্নয়ন নীতির প্রাণ। আর এ নীতিসমূহ ঘোষণার জন্যই এত আয়োজন। আমাদের সার্বিক নীতিসমূহ এ অধ্যায়ে বর্ণিত হয়েছে। এখানে চৌদ্দটি মূলনীতি রয়েছে। এগুলোর প্রতিটির সাথে রয়েছে করণীয় সহনীতি সমূহ, প্রবন্ধের স্বল্প পরিসরে যা তুলে আনা সম্ভব নয়। এক্ষেত্রে সহজে বুঝার জন্য প্রতিটি নীতির সাথে একটি করে সহনীতি উপস্থাপন করা হলো।

নীতি - নারীর মানবাধিকার এবং মৌলিক স্বাধীনতার বাস্তবায়ন।

সহনীতি - নারীর প্রতি সকল প্রকার বৈষম্য বিলোপ সনদ সিডও বাস্তবায়নের জন্য প্রয়োজনীয় পদক্ষেপ গ্রহণ করা।

নীতি - মেয়েশিশুর প্রতি সকল প্রকার বৈষম্য বিলোপ সাধন এবং সে লক্ষ্যে প্রয়োজনীয় নতুন আইন প্রণয়ন করা।

সহনীতি - বাল্য বিবাহ, ধর্ষণ, নিপীড়ন, পাচার এবং পতিতাবৃত্তির বিরুদ্ধে আইনের কঠোর প্রয়োগ করা।

নীতি - নারীর প্রতি সকল প্রকার নির্যাতন দূর করা ।

সহনীতি - নারী নির্যাতন প্রতিরোধ সম্পর্কিত প্রচলিত আইন যুগোপযোগী করার লক্ষ্যে সংশোধন করা এবং নতুন আইন প্রণয়ন করা।

নীতি - সশস্ত্র সংঘর্ষে নারীর নিরাপত্তা বৃদ্ধি করা ।

সহনীতি - সশস্ত্র সংঘর্ষ ও জাতিগত যুদ্ধে নারীর অধিকতর নির্যাতিত ও ক্ষতিগ্রস্থ হওয়ার বিরুদ্ধে জাতীয় ও আন্তর্জাতিক পর্যায়ে সচেতনতা সৃষ্টি করা, সংঘর্ষ বন্ধ ও শান্তি প্রতিষ্ঠায় নারীর অংশগ্রহণ বৃদ্ধি করা।

নীতি - শিক্ষা ও প্রশিক্ষণ প্রদান।

সহনীতি - জেন্ডার সমতার প্রতি ইতিবাচক দৃষ্টিভঙ্গি আনয়ন করা।

নীতি - নারীর জন্য অধিকতর হারে ক্রীড়া ও সংস্কৃতির প্রচলন ।

সহনীতি - স্থানীয় পর্যায়ে নারীর জন্য পৃথক ক্রীড়া কমপ্লেক্স গড়ে তোলা।

নীতি - নারীর রাজনৈতিক ক্ষমতায়ন।

সহনীতি - জাতীয় সংসদে সংরক্ষিত আসনে প্রত্যক্ষ ভোটে নির্বাচন অনুষ্ঠানের জন্য উদ্যোগ গ্রহণ করা।

নীতি - নারীর প্রশাসনিক ক্ষমতায়ন।

সহনীতি - সরকারের নীতি নির্ধারণী পদসহ সিদ্ধান্ত গ্রহণের সকল স্তরে নারীর সম ও পূর্ণ অংশগ্রহণ নিশ্চিত করার লক্ষ্যে শতকরা ৩০ ভাগ পদে নারী নিয়োগের উদ্দেশ্যে সর্বাত্মক উদ্যোগ গ্রহণ করা।

নীতি - স্বাস্থ্য ও পুষ্টি ।

সহনীতি - পরিবার পরিকল্পনা ও সন্তান গ্রহণের সিদ্ধান্তের ক্ষেত্রে পুরুষ ও নারীর সমান অধিকার নিশ্চিত করা।

নীতি - গৃহায়ন ও আশ্রয়।

সহনীতি - পল্লী ও শহর এলাকায় গৃহায়ন পরিকল্পনা ও আশ্রয় ব্যবস্থা নারী-প্রেক্ষিত অর্ন্তভূক্ত করা।

নীতি - নারী ও পরিবেশ ।

সহনীতি - নদী ভাঙ্গন ও প্রাকৃতিক দুর্যোগে ক্ষতিগ্রস্থ নারী ও শিশুর পুনর্বাসন করা।

নীতি - নারী ও গণমাধ্যম ।

সহনীতি - বিষয় আলোকে আইন, প্রচারনীতি, নিয়ন্ত্রণবিধি ও আচরণ বিধি প্রণয়ন করা।

নীতি - জাতীয় অর্থনীতির সকল কর্মকান্ডে নারীর সক্রিয় ও সম অধিকার নিশ্চিতকরণ

জাতীয় অর্থনীতির সকল কর্মকান্ডে নারীর সক্রিয় ও সমঅধিকার নিশ্চিতকরনের নীতিটি অতীব গুরুত্বপূর্ণ বিধায় এটি সবিস্তারে বর্ণনা করা হলো।

অর্থনীতিতে নারীর সমঅধিকার নিশ্চিতকরণের লক্ষ্যে, যেসব-নীতিমালা অনুসরণের কথা বলা হয়েছে তা নিমুক্তপ-

অর্থনৈতিক প্রতিষ্ঠান সমূহের সিদ্ধান্ত গ্রহণ পর্যায়ে নারীর অংশগ্রহণ বৃদ্ধি করা এবং নারী পুরুষের মধ্যে বিরাজমান পার্থক্য দূর করা; মুদ্রানীতি; বাণিজ্যনীতি; করনীতি প্রভৃতি প্রণয়নে ও বাস্তবায়নে নারীর সম অধিকার নিশ্চিত করা; নারীর অনুকূলে সেফটি নেট গড়ে তোলা; সম্পদ, কর্ম সংস্থান, বাজার ও ব্যবসায়ে নারীকে সম অংশীদারীত্ব দেয়া; সুযোগ দেয়া; সমান মজুরি; কর্মস্থলে নিরাপত্তা; চাকুরি ক্ষেত্রে বৈষম্য দূর করা; নারীর অর্থনৈতিক অবদানকে দৃশ্যমান করার লক্ষ্যে পরিসংখ্যান ব্যুরোসহ সকল প্রতিষ্ঠানে কার্যকর ব্যবস্থা গ্রহণ করা; নারী যেখানে অধিক সংখ্যায় কর্মরত আছেন সেখানে যাতায়াত ব্যবস্থা, বাসস্থান, বিশ্রামাগার, পৃথক টয়লেট, শিশুদের দিবায়ত্ম কেন্দ্র স্থাপনসহ প্রয়োজনীয় বিশেষ ব্যবস্থা নেওয়া; শিক্ষা পাঠক্রমসহ অন্যান্য প্রকাশনা ও গণমাধ্যমে নারী অবমূল্যায়ন দূর করে ইতিবাচক ভাবমূর্তি গড়ে তোলা।

ঘোষিত এসব নীতিকে প্রতিফলিত করার জন্য কয়েকটি ক্ষেত্র চিহ্নিত করা হয়েছে। ক্ষেত্র সমূহ হলো নারীর দারিদ্র দূরীকরণ, নারীর অর্থনৈতিক ক্ষমতায়ন, নারীর কর্মসংস্থান, সহায়ক সেবা, নারী ও প্রযুক্তি ও নারীর খাদ্য নিরাপত্তা -

নারীর দারিদ্র দূরীকরণের জন্য যা যা করা হবে – দরিদ্র নারীকে সংগঠিত করে, প্রশিক্ষিত করে অর্থনৈতিক মূলধারায় সম্পৃক্ত করা। অন্ন, বস্ত্র, বাসস্থান, চিকিৎসাসহ সকল চাহিদা পূরণের লক্ষ্যে জাতীয় বাজেটে বরাদ্দ বৃদ্ধি করা, জাতিসংঘের সেচ্ছাসেবী সংগঠনগুলোকে নারীর দারিদ্র দূরীকরণের প্রয়োজনীয় ব্যবস্থা গ্রহণে সহায়তা দেওয়া। নারীর অর্থনৈতিক ক্ষমতায়ন সুদৃঢ় করার লক্ষ্যে নারীর স্বাস্থ্য, শিক্ষা, প্রশিক্ষণ, জীবনব্যাপী শিক্ষা, কারিগরী শিক্ষা, তথ্য, উপার্জনের সুযোগ, উত্তরাধিকার, অর্জিত সম্পত্তির উপর অধিকার, নিয়ন্ত্রণের অধিকার দেয়া, একই সাথে প্রয়োজনীয় আইনও প্রণয়ন করা।

নারীর কর্মসংস্থান নিশ্চিত করার জন্য কোটা বৃদ্ধি করা হবে এবং তা বাস্তবায়ন করা হবে, নিয়োগকারী প্রতিষ্ঠানকে কর্মসংস্থাননীতি অনুসরণে উদ্বুদ্ধ করা এবং নারী উদ্যোক্তা শ্রেণী গড়ে তোলার লক্ষ্যে বিশেষ প্রশিক্ষণ ও ঋণদান কর্মসূচি গ্রহণ করা হবে। তাছাড়া নারীর কর্মসংস্থানের জন্য আইনের সংস্কার করা হবে। নারীর অর্থনৈতিক কার্যক্রমে অংশগ্রহণ নিশ্চিত করার লক্ষ্যে নারীকে সহায়ক, সেবা দেওয়া হবে।

এজন্য শিশু যত্ন সুবিধা ব্যবস্থা নেওয়া হবে । নারীকে অর্থনৈতিক কাজে দক্ষ করতে হলে তার সংসারকে প্রযুক্তি নির্ভর করতে হবে । এক্ষেত্রে নতুন প্রযুক্তির উদ্ভাবন, আমদানী ও প্রয়োগের ক্ষেত্রে জেন্ডার প্রেক্ষিত প্রতিফলিত করা হবে । নারীর খাদ্য নিরাপত্তা নিশ্চিত করার প্রতি লক্ষ্য রেখে খাদ্য বিতরণ ব্যবস্থা শক্তিশালী করা হবে ।

সকল অর্থনৈতিক কর্মকান্ডে ও উন্নয়ন প্রক্রিয়ায় নারীর কার্যকর অংশগ্রহণের লক্ষ্যে সহায়ক সেবা যেমন- শিশুঘত্ন সুবিধা, কর্মস্থলে শিশু দিবাযত্ন পরিচর্যা কেন্দ্র, বৃদ্ধ, অক্ষম, প্রতিবন্ধী নারীদের জন্য গৃহায়ন, স্বাস্থ্য, বিনোদনের ব্যবস্থা প্রবর্তন, সম্প্রসারণ এবং উন্নত করা হবে। নতুন প্রযুক্তি উদ্ভাবন, আমদানী ও প্রয়োগের ক্ষেত্রে জেন্ডার প্রেক্ষিত প্রতিফলিত করা হবে। উদ্ভাবিত প্রযুক্তি প্রয়োগের ফলে নারীর স্বার্থ বিদ্নিত হলে গবেষণার মাধ্যমে ঐ প্রযুক্তিকে নারীর প্রতি ক্ষতিকারক উপাদানমুক্ত করার উদ্যোগ গ্রহণ করা হবে। প্রযুক্তি ক্ষেত্রে নারীর স্বার্থের অনুকূল লক্ষ্যসমূহ অর্জনের জন্য প্রয়োজনীয় আইন প্রণয়ন ও সংক্ষার করা হবে।

দু:স্থ নারীর চাহিদা ও প্রয়োজনের প্রতি লক্ষ্য রেখে সরকারী খাদ্য বিতরণ ব্যবস্থা শক্তিশালী করা হবে। খাদ্য নিরাপত্তা অর্জন প্রক্রিয়ায় পরিকল্পনা, তত্ত্বাবধান ও বিতরনে নারীর অংশগ্রহণ নিশ্চিত করা হবে।

পঞ্চম অধ্যায়– জাতীয় নারী উন্নয়ন নীতি বাস্তবায়ন কৌশল

যে কোন নীতির বাস্তবায়ন কৌশল হলো নীতির জীয়নকাঠি। মূলত: এ জীয়নকাঠির উপর নির্ভর করে নীতি কতখানি সফলতা লাভ করবে অথবা ব্যর্থ হবে। ঘোষিত নীতি বাস্তবায়নের জন্য কৌশল সমূহ নিমুব্ধপ –

নারীর উন্নয়ন ও ক্ষমতায়নের লক্ষ্যে জাতীয় পর্যায়ে মন্ত্রণালয়, মহিলা ও শিশু বিষয়ক মন্ত্রণালয়, মহিলা অধিদপ্তর, এবং জাতীয় মহিলা সংস্থাকে অবকাঠামোগত ও প্রশাসনিকভাবে শক্তিশালী করা হবে। ইতোমধ্যে প্রধানমন্ত্রীকে সভাপতি করে গঠিত ৪৪ সদস্যবিশিষ্ট জাতীয় মহিলা উন্নয়ন পরিষদের কর্ম পরিধি নিশ্চিত করা হয়েছে।

কর্ম পরিধিতে রয়েছে — আর্থ সামাজিক উন্নয়নমূলক কর্মকান্ডে মহিলাদের অংশগ্রহণ নিশ্চিত করার উদ্দেশ্যে বিভিন্ন মন্ত্রণালয়, বিভাগ ও সংস্থার উন্নয়নমূলক কার্যক্রম সংক্রান্ত নীতি প্রণয়ন ও কার্যক্রমের সমন্বয় সাধন, মহিলাদের আইনগত অধিকার, নারী উন্নয়ন ও নারী নির্যাতন প্রতিরোধ সংক্রান্ত বিষয়াবলী সম্বন্ধে নীতি প্রণয়ন। জাতীয় পর্যায়ে সংশ্রিষ্ট সংসদীয় কমিটির পরামর্শ প্রদান, মন্ত্রণালয়, বিভাগ, সংস্থাসমূহের ফোকাল পয়েন্টসমূহে জাতীয় নারী উন্নয়ন নীতির আলোকে কর্মসূচি গ্রহণ, প্রকল্প প্রণয়ন ও বাস্তবায়ন, মহিলা ও শিশু বিষয়ক মন্ত্রীকে সভাপতি এবং নারী উন্নয়নে চিহ্নিত ফোকাল পয়েন্ট মন্ত্রণালয় ও সরকারি-বেসরকারি নারী উন্নয়নমূলক সংস্থার প্রতিনিধিদের নিয়ে একটি নারী উন্নয়ন বাস্তবায়ন ও মন্ত্রণালয় কমিটি গঠন এবং থানা ও জেলা পর্যায়ে নারীর অগ্রগতি এবং ক্ষমতায়নের লক্ষ্যে জেলা পর্যায়ের প্রশাসন, জেলা পরিষদ, পৌরসভা, স্থানীয় সরকার, সংশ্রিষ্ট মন্ত্রণালয়ের দপ্তর ও এনজিওদের কার্যক্রমের সমন্বয় সাধন।

তৃণমূল পর্যায়ে গ্রাম ও ইউনিয়নের নারীকে স্বাবলম্বীদল হিসেবে সংগঠিত করা হবে। এদলসমূহকে শক্তিশালী করার লক্ষ্যে বিভিন্ন সরকারি সংস্থার আওতায় নিবন্ধিকৃত সংগঠন হিসেবে রূপ দেয়া হবে। সরকারী, বেসরকারি উৎস, ব্যাঙ্ক ও অন্যান্য আর্থিক সংস্থা থেকে প্রাপ্ত সম্পদ আহরণ করে এ সংগঠনগুলোর সাথে ইউনিয়ন পরিষদ, থানা-পরিষদ, জেলা পরিষদ, পৌরসভা ও সিটি কর্পোরেশনসমূহের নিবিড় সম্পর্ক স্থাপন ও সমস্বয় সাধন করা হবে।

প্রকৃত নারী উন্নয়ন একটি ব্যাপক কাজ। সরকারের একার পক্ষে এ কাজ করা অসম্ভব। তাই এ কাজে সরকারি -বেসরকারি উদ্যোগের সমন্বয় ঘটানোর প্রয়াস নেয়া হবে। যাতে করে সর্বস্তরের জনগণের অংশগ্রহণ নিশ্চিত করা সম্ভব হয়। এক্ষেত্রে সহায়ক ভূমিকা পালন করাই হবে সরকারের মূল দায়িত্ব।

অর্থনীতিতে নারীর সমঅধিকার নিশ্চিতকরণের কৌশল

অর্থনীতিতে নারীর সমঅধিকার নিশ্চিতকরণের কৌশল হচ্ছে নারী নীতির আর্থিক ব্যবস্থাপনা।

জাতীয় নারী উন্নয়ন নীতিতে নারীর সম অধিকার নিশ্চিত করার জন্য আর্থিক ব্যবস্থাপনায় নিম্নলিখিত কৌশল অবলম্বন করা হবে–

তৃণমূল পর্যায়ে ইউনিয়ন পরিষদ, থানা পরিষদ ও জেলা পরিষদে নারী উন্নয়নের লক্ষ্যে অর্থ বরাদ্দ করা হবে। জাতীয় পর্যায়ে মহিলা ও শিশু বিষয়ক মন্ত্রণালয়ের রাজস্ব ও উন্নয়ন বাজেট বরাদ্দ বৃদ্ধি করা হবে। নারী উন্নয়নে নিয়োজিত মন্ত্রণালয় এবং সংস্থা যেমন, স্বাস্থ্য, পরিবার কল্যাণ, স্থানীয় সরকার, পল্লী উন্নয়ন ও সমবায়, শ্রম ও জনশক্তি, কৃষি, শিল্পা, শিক্ষা, বিজ্ঞান ও প্রযুক্তি প্রভৃতি মন্ত্রণালয়ে নারী উন্নয়নের জন্য লক্ষ্যমাত্রা ও কর্মসূচি চিহ্নিত করে বাজেট বরাদ্দ বৃদ্ধি করা হবে।

পরিকল্পনা কমিশনের সকল খাতে বিশেষ করে শিক্ষা, শিল্প, গৃহায়ণ, পানিসম্পদ, স্বাস্থ্য ও পরিবার কল্যাণ, প্রশিক্ষণ, দক্ষতা বৃদ্ধি, কর্মসংস্থান, এবং অন্যান্য উপখাতে নারী ও পুরুষের জন্য পৃথক ভৌত ও আর্থিক সম্পদ চিহ্নিত করে অর্থ বরাদ্দ করা হবে। অর্থনৈতিক সম্পর্ক বিভাগ নারী উন্নয়নে আর্গুজাতিক উৎস থেকে নতুন ও অতিরিক্ত আর্থিক সহযোগিতা প্রাপ্তির প্রয়োজনীয় উদ্যোগ গ্রহণ করবে।

বাণিজ্যিক ব্যাংক, বাংলাদেশ ব্যাংক ও অন্যান্য আর্থিক প্রতিষ্ঠানসমূহ নারী উন্নয়নের লক্ষ্যে ক্ষুদ্র ও মাঝারি নারী উদ্যোক্তাদের আর্থিক সহায়তা প্রদান করবে।

শেষের কথা

স্বাভাবিকভাবে সংবিধানের পরেই নীতির স্থান। নীতি ছাড়া সরাসরি পরিকল্পনায় গেলে পরিকল্পনা সুষ্ঠু হয় না। কিন্তু নীতির প্রশ্নে আমরা বরাবরই বাদানুবাদে জড়িয়ে পড়ি। নীতি প্রণয়নের ইতিবাচক দিকটি অনৈতিক রাজনীতির শিকার হয়। এ অভিজ্ঞতা আমাদের শিক্ষানীতি, নারীনীতিসহ প্রতিটি নীতির। ১৯৯৭ সালে প্রথম নারী নীতি ঘোষণার পর ২০০৪ সালে ইতিবাচক শব্দ পরিবর্তন করে নীতিকে বিপদগামী করার প্রচেষ্টার পলায়নপর নীতি, আর তত্ত্বাবধায়ক সরকারের ২০০৮এ নীতি প্রদানের পর যুদ্ধ অপরাধীদের বিচারের দাবীকে ভিন্ন খাতে প্রবাহিত করার জন্য নারী নীতি নিয়ে বিধ্বংসী রাজনীতি মুক্তিযুদ্ধের পক্ষের শক্তিকে সাবধান হতে বলে।

নারী নীতির প্রসঙ্গ আসলে পারিবারিক সম্পত্তির অংশীদারিত্বের প্রশ্ন একক বিষয় হয়ে ওঠে। কিন্তু নারীনীতি শুধু সম্পত্তি বিভাজনের বিষয় নয়।

উপস্থাপনায় আমরা পেয়েছি, এখানে নারীর মানবাধিকার এবং মৌলিক স্বাধীনতার বাস্তবায়নে

মেয়েশিশুর প্রতি সকল প্রকার বৈষম্য বিলোপ সাধন এবং সে লক্ষ্যে প্রয়োজনীয় নতুন আইন প্রণয়ন, নারীর প্রতি সকল প্রকার নির্যাতন দূরীকরণ, সশস্ত্র সংঘর্ষ বন্ধের জন্য নারীর অংশগ্রহণ বৃদ্ধি, শিক্ষা ও প্রশিক্ষণ, ক্রীড়া ও সংস্কৃতি, জাতীয় অর্থনীতির সকল কর্মকান্ডে নারীর সক্রিয় ও সম অধিকার নিশ্চিতকরণ, রাজনৈতিক ক্ষমতায়ন, প্রশাসনিক ক্ষমতা, স্বাস্থ্য ও পুষ্টি, নারী ও গণমাধ্যমের কথা আছে। অতএব নীতির লক্ষ্য, মুক্তিযুদ্ধের বিনিময়ে অর্জিত বাংলাদেশ নামক রাষ্ট্রের সার্বিক উন্নয়ন।

বাংলাদেশ নারীকে অর্থনৈতিক সমঅধিকার দেবে কিনা, এটা এখন আর আলোচনার বিষয় হতে পারে না। নারী এখন অর্থনীতির চালিকা শক্তি। নারী সৈনিক, নারী পুলিশ এখন শান্তিরক্ষায় বিদেশী মিশনে যায়। দ্রুত অগ্রসরমান বিশ্বে বাংলাদেশের প্রত্যেকটি নাগরিককে আমাদের বিশ্ব-উপযোগী করে গড়ে তুলতে হবে। অতএব দেশের প্রতিটি ক্ষেত্রে, প্রতিটি সেক্টরে আমাদের নীতির প্রয়োজন। প্রয়োজন শিক্ষানীতি, ক্ষিনীতি, পানিনীতি, শতকরা পঞ্চাশজন নাগরিকের নারী নীতি।

আমাদের সংবিধানে নারী-পুরুষের সম অধিকারের কথা আছে। তবে সংবিধানে পারিবারিক আইনে ধর্মীয় অনুশাসনের কথাও রয়েছে। মুসলমান আইনে নারী পুত্র সন্তানের অর্ধেক সম্পত্তি পায়, হিন্দু সমাজে পৈতৃক সম্পত্তিতে নারীর আদৌ অংশীদারিত্বের অধিকার নেই। কিন্তু চলমান বিশ্বে নারীর দায়িত্বশীল অবস্থান ও অবদানের প্রেক্ষিতে অনেক দেশ যেমন নেপাল, ভারত, শ্রীলংকা এবং মুসলিম অধ্যুষিত দেশ মালদ্বীপে পুত্র-কন্যার সম-অধিকার দেওয়া হয়েছে।

১৯৯৫-এর বেইজিং কর্ম পরিকল্পনার আলোকে ও সিডও-এর আদলে করা নারী নীতি '৯৭ এবং নারী উন্নয়নে জাতীয় কর্ম পরিকল্পনা উভয়টি বাংলাদেশ সরকারের উর্ধ্বতন কর্মকর্তা, সামাজিক নারী সংগঠন সমূহ, এন.জিওদের দীর্ঘদিনের পরিশ্রমের ফসল। একযুগ আগে ঘোষিত নারীনীতির প্রেক্ষিত পরিবর্তন হতে পারে, পরিসংখ্যান পরিবর্তন হতে পারে। ইতোমধ্যে মহিলা মন্ত্রণালয়ের উদ্যোগে নারী সংগঠনগুলোর সাথে এ বিষয়ে মতবিনিময় হয়েছে। এখন আমাদের প্রয়োজন সরকারের দৃঢ়তা এবং জনসচেতনতা।

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 45-57 Bangladesh Economic Association (ISSN 2227-3182)

Energy Cooperation is Key to Economic Development in SAARC Countries

AMIN MOHAMMAD SHARFUZZAMAN¹ M.A. RASHID SARKAR

Abstract

Energy is one of the basic infrastructures of any country. It is nowadays the most important issue, which is being discussed all over the world as every country is searching for options to attain self-sufficiency. SAARC region basically is energy deficient and low resource based. Only cooperation among the countries can usher a new era in the energy scenario and provide the only hope in the quest for the energy sufficiency of region. It may be in the form of bilateral exchange or in the form of any other treaties formed by the SAARC countries. The socio-economic development will be a reality to the people of the region if energy cooperation among the countries can be ensured. Energy security in this region will have multifaceted social impacts and benefits. These benefits and impacts will produce synergy in economic growth, poverty alleviation, and human development in the region.

1. Introduction

Energy resources are the lifeblood of thriving economies. As one approaches the subject of energy resources for regional economic cooperation one runs into a host of basic questions aimed at understanding the changing nature, scope and dynamics of regional economic relations. Energy development, interpreted broadly to mean increased provision and use of energy services, is an integral part

_

Amin Mohammad Sharfuzzaman is an M.Sc. student Mechanical Engineering Department, BUET, and Professor M.A. Rashid Sarker is the Dean of the Faculty of Mechanical Engineering, BUET.

of enhanced economic development. Advanced industrialized societies use more energy per unit of economic output and far more energy per capita than poorer societies, especially those still in a preindustrial state. So energy sector development has now got an extra dimension in the modern world, especially in the developing countries of South Asia.

The South Asian Association for Regional Cooperation (SAARC) was officially founded in 1985 to promote the well-being of the populations of South Asia and improve their standard of living, to speed up economic growth, social progress and cultural development. Set up in 1985, SAARC has long passed its disturbing teen phase and now is more responsible than ever before. The attainment of the maturity of SAARC is reflected in the fact that it has expanded itself by admitting Afghanistan as the eighth member state and giving China, South Korea and Japan observer status. At the Islamabad summit of SAARC, January 2004, a major breakthrough came in the framework on the South Asian Free Trade Area (SAFTA) with promises to gradually turn it to a Customs Union, Common Market and Economic Union. In recognition of the role of energy in development, the Heads of State or Government at the 13th SAARC Summit held in Dhaka on November 13, 2005 agreed to the recommendation of the SAARC Energy Ministers to establish the SAARC Energy Centre (SEC) in Islamabad. The South Asia Regional Initiative for Energy (SARI/Energy) program had already been launched in 2000 to promote energy security through increased trade, investment and access to clean sources of power and fuel. Since then, SARI/Energy has reached out to more than 4000 participants in the region on clean energy trade, energy efficiency, rural energy supply, energy regulation, energy statistics, and private sector involvement. SARI/Energy-sponsored training, capacity building, and networking have contributed to the writing of energy sector restructuring laws throughout the region.

The paper is organized as follows: The present energy situation in South Asia is discussed in Section 2. Section 3 spells out the need for promoting energy cooperation and indicates the factors that prevented energy cooperation in the past. Section 4 highlights the existing level of cooperation in energy and provides a rationale for creating an energy ring in the South Asian region. Section 5 suggests what SAARC governments need to do to promote energy cooperation. Vision-2021 of Bangladesh Government on energy security is explained in Section 6, while the lone paragraph in section 7 concludes the paper.

2. Energy Detail in South Asia

South Asia is the most densely populated region with a population of 1.5 billion. The region's energy demand as a percentage of the world's energy demand increased from 2.4% in 1987 to 4% in 1998. The US Energy Information Administration (EIA) estimated a 50% growth in the primary energy demand in the period 1990-98. This figure, however, excludes the traditional forms of energy that account for more than half of the energy demand in the region. Despite this growth in energy demand, however, the South Asian region continues to average among the lowest levels of per capita energy consumption in the world, but among the highest levels of energy consumption per unit of GDP.

Discounting "non-commercial" sources of energy including animal waste, wood, and other biomass, South Asia's commercial energy mix in 2003 was 44% coal, 35% petroleum, 13% natural gas, 6% hydroelectricity, 1% nuclear and 0.3% "other." There are significant variations within the region. Bangladesh's energy mix, for example, is dominated by natural gas (85% in 2008) and there is 3% hydropower, 4% by furnace oil, 4% diesel and 4% by coal, while India relies heavily on coal (52% in 2003). Sri Lanka and the Maldives are overwhelmingly dependent on petroleum (84% and 100%, respectively); Pakistan is diversified among petroleum (38%), natural gas (41%), and hydroelectricity (14%).

The Himalayan countries of Bhutan and Nepal have the highest shares of hydroelectric power in their energy consumption mix at 82% and 37%, respectively, in 2003. South Asian nations are faced with rapidly rising energy demand coupled with increasingly insufficient energy supplies. Most of South Asia is already grappling with energy shortfalls, typically in the form of recurrent, costly, and widespread electricity outages.

Country	Total Installation in MW	Electricity access of % population
Afganistan	454	6
Bangladesh	5000	33
Bhutan	445	30
India	112058	56
Nepal	552	40
Pakistan	17953	56
Srilanka	1615	64

Table 1: Electricity production in South Asia

The demand for commercial energy in India, which by far makes up the dominant share of the South Asian energy demand, is projected to increase by 3.8%-4.3% a year through 2020. In India, there exists a clear seasonality in power generation, particularly in the generation of hydel power. The peak months for hydro power generation are August-September while the lean period is January to June. The thermal plants generation has been mostly designed to match and balance the trough months created by the hydel plants in winter and the pre-monsoon season.

In Nepal, the peak demand of the Integrated Power System is usually during Dec/Jan. This is the period when generation from the hydro power-plants is low. Power demand is maximum during the month of December and is minimum during the month of August. The supply capacity in turn is maximum during the wet months and minimum during the dry months of February/March. The seasonality in energy supply and demand indicates energy surplus. This is where the complementarity in cross border power trade emerges. It is during the period of hot summer months when the Indian system is starved of energy and capacity.

Some estimates indicate Nepal's hydroelectric power potential at 80 million kilowatts—2.6 percent of the world's capacity. Nepal is the major contributor of the Ganga Basin, the five major sub-basins inside. The annual discharge of outflowing rivers from Nepal to India is about 224 billion cubic meters. In a span of about 100 km, rivers lose a potential height of about 4,000 meters, thus providing a high linear density (33 MW/km).

However, the immense hydro potential in the South Asian region has not yet been fully utilized. Hydro power is the most clean source of energy. So maximum utilization of this very potential is a major challenge. Table 2 portrays the picture of the used hydro potential in South Asia.

Country	Potential(MW)	Installed Capacity(MW)	Potential Utilized (%)
Afghanistan	23000	304	1.32
Bangladesh	330	230	69.7
Bhutan	30000	1486	4.95
India	150000	36654	24.44
Nepal	42000	545	1.30
Pakistan	30000	6493	21.64
Sri lanka	2650	1332	50.26
Total	277980	47044	17

Table 2 : Hydro Potentials in South Asia

Bangladesh is said to have a good reserve of natural gas and there are more gas fields to be found. According to US geological survey Bangladesh has gas reserve of 10.6 Tcf. But it has severe electricity crisis during summer as it fails to cope with the demand. The gas is being drawn but it is not becoming adequate for the day to day demand. Now Bangladesh is concentrating on its renewable energy sources.

3. Why Energy Cooperation is Needed

Dynamic growth in the past had been driven by global, rather than regional integration. The intra-regional trade in South Asia was only about 2 percent of its GDP compared to more than 20 percent in East Asia in 2005. Per capita income in the region was still less than \$700 in 2005 and the region's growth has to encompass not merely the services sector (in which remarkable progress has been registered) but also the industrial and agricultural sectors.

The real picture is that only a very small percentage of the hydro potentials have been converted to reality. There will be more crisis for fuel in the immediate future.

Naturally and geographically this portion of South Asia was and is an energy deficient area. In this region there is lack of resources both for fossil fuel and gas. Had there been a single hypothetical country integrating all the areas of the eight SAARC countries, the power crisis might still prevail because the experts said that whatever power potential this region has in store is not sufficient for the entire region. No country is self-sufficient either. So helping each other by exporting power or selling it will not be the unique solution. There must be some sort of power import from relatively sufficient neighboring countries. And here comes the need for cooperation in the field of letting any kind of pipeline or grid through one country to another, other than bilateral import or export and technological support.

- Cross border power trade will lead to:
- Consolidate peace and economic stability.
- Enhance integrity rather than being a source of conflict.
- Free flow of goods, services, business, skilled labor and freer flow of capital.
- Alleviate poverty and electricity access to rural areas.
- Reduce supply cost and system loss.

- Confidence building and generating trust among the countries.
- Effective utilization of natural resources.
- Economy in operation and mutual support during contingencies.
- Bring about large scale transformation in the sectors contributing to economic growth.
- More foreign investment.
- Increase in reliability of power supply.

We can see the high usefulness of power trading in the South African Power Pool (SAPP), which brought South Africa, Lesotho, Mozambique, Namibia, Malawi, Zimbabwe and Zambia under the regional cooperation that has opened a new door in the socio-economic arena in that region.

Nowadays everybody is talking about the growing concern of polluting the nature by the power production systems. As we all know, burning fossil fuel causes lots of harmful effects on environment. Gas is a more clean fuel and hydropower is the most clean above all. So trading in energy now needs to get more attention because it is a sensitive matter. Here's a overview of how much CO₂ is produced in different countries (Table 3). But sacrifices might be made in this case, and solutions will need to be found. Exchanging power can usher a way to safeguard the environment.

Table 3: Energy consumption and Carbon Dioxide Emissions in South Asian Countries, 2003

Commercial Energy Consumption 1				Carbon				
Countries	Total (Qua- drillion Btu)	Petro- leum (%)	Natural Gas (%)	Coal (%)	Nuclear (%0	Hydro- electric (%)	Other 2 (%)	Dioxide Emissions (million metric tons of carbon)
Bangladesh	0.61	29	67	1	0	2	0	9.7
Bhutan	0.02	9	0	9	0	82	0	0.09
India	14.03	34	7	52	1	5	0.3	279.5
Maldives	0.01	100	0	0	0	0	0	0.2
Nepal	0.06	49	0	14	0	37	0	0.8
Pakistan	`1.91	38	41	6	1	14	0	28.5
Sri Lanka	0.2	84	0	0	0	15	0	3.2
Total	16.84	35	13	44	1	6	0.3	322

Sources: Energy Information Administration, International Energy Database, February 2006.

Here every country should realize and decide upon on its win-win chance over any kind of power trade among the countries. There is benefit for everybody, especially for the people living in this region. There are distinct advantages for South Asian countries to cooperate in the energy sector.

3.1 Factors Which inhibited Cooperation in the Past

The most important among the factors that inhibited regional energy trade in the past relate to political tensions, security issues and past economic policy choices. These factors include:

- Prolonged political tension between India and Pakistan over Kashmir, war like conditions in Afghanistan, internal armed conflicts in Sri Lanka and Nepal as well as the political turmoil in Bangladesh.
- Past pursuit of inward looking, import substitution based policy approach aimed at the elusive goal of national self-sufficiency. This approach regarded energy imports as diluting energy security.
- Lack of cross border transmission links and a lack of adequate transmission infrastructure even for transferring power within the large countries themselves, such as India, Pakistan and Bangladesh.
- Poor operational efficiency and lack of creditworthiness (arising from inadequate tariffs, high system losses and poor collections) of most power utilities in the region, which did not encourage trade among them, as payment risks were perceived as unmanageable.
- Pervasive state ownership of the utilities, their poor earnings and the lack of resources to invest for their own domestic needs, let alone the investments for export.

4. Existing Level of Cooperation

Presently there is no cross border pipeline or trade in natural gas. Cross border electricity interconnections and electricity trade are insignificant except for the following:

- Bhutan's export of 5664 GWh in FY 2007 to India from three hydropower projects with total generating capacity of 1,416 MW constructed with substantial grant assistance from India;
- Import of about 430 GWh (or about 28% of the total supply) by Afghanistan from Iran, Turkmenistan, Uzbekistan and Tajikistan;

- Nepal's import from India of 266 .23 GWh (or 9.6% of its total supply) and its export of 101 GWh (or 5% of its total sales) to India.
- Pakistan's import of about 25MW of power from Iran to the isolated grid of Baluchistan near Gwadar deep sea port.

4.1. Energy Cooperation and Creating an Energy Ring

After decades of insignificant volumes of cross-country electricity trade and absence of any trade in natural gas through pipelines among the countries of South Asia, political leaders and businessmen of the region have recently evinced a great deal of interest and enthusiasm in cross border electricity and gas trade, not only within South Asia but also with its neighbors in the west (Central Asia and Iran) and in the east (Myanmar).

So the concept of an "energy ring" has now come into picture and political leaders now realize that to establish a regional energy ring and build an international grid among the countries is necessary. The steady, reliable supply of energy at reasonable cost is one of the key determinants for industrial competitiveness.

A few months ago it would have been unthinkable for Bangladesh to strike any deal on either exporting gas to India or offering a transit pipeline for Burmese gas. Indian officials say with the proposed deal Bangladesh can get a hefty transit fee and eventually Dhaka may also decide to sell its gas. For its part, Dhaka is reportedly trying to extract additional concessions from its big neighbour — like a trade corridor to the landlocked Nepal and Bhutan.

AFG.

Srinagar

CHINA

Figure 1 : Shiliguri Corridor (Chicken Neck)

The so called "Chicken Neck" or the Shilliguri corridor can play an important role in this case which lies in the state of West Bengal. The city, Shilliguri, is the central node which connects Bhutan, Nepal, north-east India, mainland India and top of Bangladesh. Yes, cooperation through this line is highly a political issue but it definitely joins four countries. So grid transfer and joining by pipeline is possible, at least theoretically.

The two generally accepted power trading mechanisms are:

- i) Bilateral power trade and
- ii) Pool based approach

Cross border power trade on a bilateral basis already takes place widely between India and Bhutan and to a certain extent between India and Nepal. The West Seti power project in Western Nepal is a third type of power exchange which is likely to take place in the region. A unique feature of this arrangement is the involvement of a private agency for the first time as a power generating unit meant primarily for exports to India. This indicates a changing paradigm of power exchange.

The pool based approach also known as agent based integrated simulation can possibly provide support to develop a competitive long run market equilibrium in regional power trade. This approach involves working together of a set of agents (manufacturers), a monitoring, advisory and channelizing regional body in close harmony. These agents develop their own strategies to explore and exploit the capacity and meet other constraints of plant and market. They also evolve their own market clearing as well as settlement mechanisms.

Energy trade opportunities currently being discussed or pursued include:

- Hydropower import from Central Asia to Afghanistan and Pakistan.
 This prominent multilateral trade project is being currently discussed and formulated with the help of multilateral and bilateral development partners led by the World Bank. It relates to the export of 1000 MW of power from Tajikistan and Kyrgyz Republic to Pakistan and Afghanistan.
- Natural gas import by India and Pakistan from Iran (IPI Gas project).
 This project, which is in an advanced state of negotiation, is for importing annually (for 30 years) 33 bcm of gas by India and 21.7 bcm of gas by Pakistan from Iran in two phases. This pipeline can be extended to Bangladesh. Here the decisions are critical and need to be carefully thought about.

Myanmar Bangladesh India Gas Exchange

India have designed alternative gas pipelines from Myanmar off-shore fields to India—one passing through Bangladesh and the other bypassing that country. Depending on the outcome of discussions with Bangladesh one of these pipelines is expected to be selected.

• Hydropower exports from Bhutan.

Bhutan's unexploited hydropower potential exceeds 23,000 MW and there is a wide shelf of projects to choose from. Feasibility studies for several hydropower projects and many other studies are ongoing.

• Hydropower exports from Nepal.

Construction of two 220 kV links between India and Nepal would help increase the present modest level of power exchange between the two countries and would also enable many of the privately owned IPPs in Nepal to export their surplus power to other countries. Nepal's unexploited hydropower potential exceeds 43,000 MW and it has a large shelf of proposals for run-of-the river and storage projects of large and medium sizes, which have been studied over the last several decades.

5. What the SAARC Governments need to do to promote energy Cooperation

Now the government should find some necessary measure to have some kind of policy established to encourage the power trading. Some guidelines are given below:

- Subscribe to, and become members of the Energy Charter Treaty, as Pakistan has done, in order to place the cross border energy trade on a firmer multilateral footing in relation to investment protection, regulation of cross-border energy infrastructure and flows, provide additional comfort and confidence to all participants, and minimize the political risks to prospective investors.
- Create firm political commitment towards energy trade.
- Transnational energy lines (electricity, gas and oil) for long term should be set up.
- Give attention to adequate training to enhance individual country capability in power sector as well as launch educational program.
- Reduce political tensions within and across the countries, with special

attention to the integrity of transit countries (such as Afghanistan) and the viability and operational stability of their energy systems. Trade flourishes under peaceful conditions.

- Adopt a sustainable commercial approach to trade (rather than a political ad hoc approach) and use standard commercial contracts which allocate risks fairly. Let the private investors and market forces play a major role in actual buying and selling.
- Keep the price expectations realistic based on reliable market signals and ensure that both the buyer and the seller see advantage in the trade.
- To promote private sector investment and public private partnership in power production.
- Cooperation can be in the form of sharing the technology and experience such as India has a good reserve of coal and they have experience in mining, which they can share with Bangladesh, which is facing much difficulty in coal sector.
- Joint procurement strategy can be undertaken for efficient fuel handling and management.
- Adoption of renewable energy systems like bio-gas, solar and wind energy systems must be encouraged.

6. Vision 2021 of the Present Government of Bangladesh on Energy Security

Recently Bangladesh Government has launched a groundbreaking goal for energy sufficiency within the year 2021. This includes the following steps:

- A comprehensive long term policy on energy and electricity will be adopted. Economic usage of oil, gas, coal, hydro power, wind power and solar energy will be ensured. Import of electricity from neighboring countries, arranging 100/150 megawatt gas turbine projects on urgent basis will be done. Power production will be increased to 7000 megawatt by 2013. The Rooppur Nuclear Power Project will be implemented.
- Priority will be given to exploration and exploitation of oil and new gas fields. Arrangements will be made to supply gas in the north and western regions of the country.
- A Coal Policy will be formulated safeguarding national interest. Special
 initiatives will be taken to ensure economic use of the coal available so
 far and also to develop coal-based power plants.

Bangladesh Government is very keen to foster cooperation among all SAARC countries to ensure its energy security. The Cooperation and proper nourishing of friendly relations among countries in this region may serve as one of the sustainable tools to ensure the energy security of the SAARC Countries.

7. Concluding Remarks

Energy cooperation is now a demand of time and of the people living in this region, but strong political will of SAARC governments will be needed to forge cooperation in this regard. So peoples of this region along with the political leaders should think and design ways and means for promoting mutual understanding and cooperation, which will pave the pathway for future development of this region.

References

- 1. SAARC Energy Newsletter.
- 2. http://www.terina.org/energy.html.
- 3. Ibid.
- 4. www.ep-bd.com
- 5. www.eia.doe.gov/emeu/cabs/south_asia/background.html
- Annual report 2005-2006, Bangladesh Power Development Board.
- 7. "Energy Cooperation in South Asia" by Dr Mahendra P. Lama, Sikkim University.
- Shrestha, H.M., 1966, "Cadastre of Hydropower Resources", PhD Thesis, Moscow Power Institute, Moscow, USSR. Figures are rounded
- 9. "Regional cooperation to meet energy demand in South Asia" by Hilal A. Raza, Director,SEC
- 10. "Energy resources & renewable energy prospects in Bangladesh" by Dr.Abdur Rashid Sarkar-Jordanian Mechanical Engineering Conference, Amman, 1998.
- 11. "Energy Development Strategy for Bangladesh"-Dr. Nurul Islam, seminar on energy security of Bangladesh,2004
- 12. Bangladesh Economic Review 2006-07, Finance division, ministry of Finance, GoB.
- 13. Barkat, A, 2005, Regional Energy security for South Asia, Bangladesh Country Report.
- 14. SAARC Regional Energy Trade Study country report-Bangladesh by M. Jamaluddin, Feb 2008

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 59-66 Bangladesh Economic Association (ISSN 2227-3182)

Causal Relationship between Energy Consumption and GDP in Bangladesh

Md Abdul Wadud¹ Tariq Saiful Islam² Qamarullah Bin Tariq Islam³

Abstract

Causal relationship between energy consumption and GDP for Bangladesh is studied in this paper using a multivariate analysis consisting of GDP, energy, capital, and labour for the period 1976 - 2008. This is different from the bivariate analysis, which many researchers used before. It is found that GDP and energy are cointegrated and causality in the sense of Granger is unidirectional running from energy consumption to GDP growth.

Keywords: Granger causality; Energy use; GDP; Bangladesh

1. Introduction

The empirical evidence on the relationship between energy consumption and economic growth remains ambiguous. Although considerable work has been done on this topic using the concept of Granger causality, the findings still remain widely divergent. The objective of this paper is to add further empirical evidence using data of Bangladesh, a developing economy.

Studies in this area generally used the bivariate approach, which includes only the two variables whose causality is studied. A recent development has seen use of the multivariate approach that is expected to shed a more accurate light on the issue.

^{1.} Professor, Department of Economics, University of Rajshahi

^{2.} Professor, Department of Economics, University of Rajshahi

^{3.} Assistant Professor, Department of Economics, University of Rajshahi

The multivariate approach includes variables other than those, but related to the variables, whose causality is studied. For example, when causality between energy and GDP growth is studied, labour and capital are also included in the analysis.

Stern (1993, 2000) studied causality between energy and GDP using a multivariate Granger causality method for the USA. The variables he considered were energy, GDP, capital and labour. Masih and Masih (1997, 1998) and Asafu – Adjaye (2000) included price in their trivariate models. Oh and Lee (2004) studied causal relationship between energy consumption and GDP in Korea using the multivariate approach that included GDP, energy, capital, and labour. Our paper proceeds along the line adopted by Oh and Lee.

Lee and Chang (2008) studied the causal relationship between energy consumption and real GDP within a multivariate framework that included capital stock and labor input for 16 Asian countries during the 1971-2002 period. It is found that although economic growth and energy consumption lack short-run causality, there is long-run unidirectional causality running from energy consumption to economic growth. This means that reducing energy consumption does not adversely affect GDP in the short run but would in the long run. Thus, these countries should adopt a more vigorous energy policy.

Erbaykal (2008) investigated the relationship between energy consumption and economic growth using oil and electricity consumption for the 1970-2003 period in Turkey. He employed the Bounds test approach by Pesaran at al (2001) for cointegration relationship. Co-integration test results showed that in the short run both oil consumption and electricity consumption have positive and statistically significant effect on economic growth. However, in the long run oil consumption has positive effect on economic growth while electricity consumption has negative effect. But in long run the electricity and oil consumption coefficients are statistically insignificant. Therefore, he concluded that both electricity and oil have short run effect on economic growth.

Omotor (2008) investigated the causal relationship between energy consumption and economic growth in Nigeria. He disaggregated energy consumption into coal, electricity and oil consumption. He applied Hsiao's Granger causality version and found bidirectional causality, that is, that energy consumption led economic growth and vice versa.

There are some aspects of this study that requires a special mention. Earlier studies mostly involved developed economies, while our study is on a developing economy that has seen considerable and steady increase in the use of energy. It is

necessary to see in which way our results agree with, or differ from, those obtained for the developed countries.

There is one important aspect of cointegration and causality that is very pertinent to this study. This refers to the use of vector autoregressive (VAR) and vector error correction model (VECM). The VAR model essentially suggests a short run relationship between the variables as first differencing removes much of the long run relation. These shortcomings can be avoided if the VECM model is used. This is done in this paper.

2. Variable definitions and data sources

We use annual time series data of real GDP, energy, capital, and labour of Bangladesh for the period 1976 to 2008. These were obtained from various issues of the Statistical Yearbook of Bangladesh, which is a publication of the Bangladesh Bureau of Statistics.

It is seen in Figure 1 that all four variables remained static till 1981, after which energy began to grow at a faster rate. After 1988, except labour, which grew slowly, all three variables grew faster except for the years 1994-1997 when some downswings were observed. Of all the variables, energy showed the highest growth.

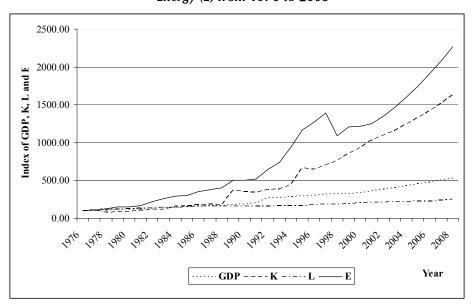


Figure 1 : Index of real GDP (GDP), Capital (K), Labour (L), and Energy (E) from 1976 to 2008

3. Empirical Study

Our empirical study contains unit root tests, cointegration tests, and Granger causality tests. These are detailed below.

Unit root tests

The augmented Dickey-Fuller test (ADF) is used to examine existence of unit roots and determine the order of integration of the variables. The tests are done both with and without a time trend. Akaike method is used to choose the optimal lag length, which is found to be 3 for all variables. It can be seen from Table 1 that presence of a unit root can not be rejected for levels and first differences for all variables at the 5% significance level. However, for second difference the problem of unit root vanishes for all variables. Hence we only report the statistic for the level and the second difference of the variables.

Table 1 : Augmented Dickey-Fuller Unit Root Test

		With a time trend		Without a time trend		
Variable	Lags	Test statistics	Critical values	Test statistics	Critical values	
GDP	1	93743	-3.5796	2.0412	-2.9706	
K	1	99814	-3.5796	2.7532	-2.9706	
L	1	-1.3105	-3.5796	1.3014	-2.9706	
E	1	.10004	-3.5796	1.8077	-2.9706	
$\Delta^2 GDP$	1	-5.3669	-3.5943	-5.4790	-2.9798	
$\Delta^2 K$	1	-6.7378	-3.5943	-6.8879	-2.9798	
$\Delta^2 L$	1	-3.7971	-3.5943	-3.6554	-2.9798	
$\Delta^2 E$	1	-4.9366	-3.5943	-5.0206	-2.9798	

Note: GDP, real GDP; K, capital; L, labour; E, energy; Δ^2 Second difference operator. Critical values (5%) are from MacKinnon (1991). First difference values are not reported as stationarity could not be achieved then.

Cointegration tests

The maximum likelihood estimation method of Johansen and Juselius (1990) is used to test for cointegration. Gonzalo (1994) provided Monte Carlo evidence that Johansen-Juselius method performed better than others according to different criteria.

We first consider a VAR model given by

$$Z_t = \delta + \Pi_1 Z_{t-1} + ... + \Pi_k Z_{t-k} + \varepsilon_t, \quad t = 1, 2, ..., T$$
 (1)

The corresponding VECM is written as:

$$\Delta Z_t = \delta + \Gamma_l \Delta Z_{t-l} + \dots + \Gamma_{k-l} \Delta Z_{t-k+l} + \Pi \Delta Z_{t-l} + \varepsilon_t$$
 (2)

where
$$Z = [GDP \ K \ L \ E], \Gamma_i = -l + \Pi_1 + ... + \Pi_i, i = 1,...,k-1, \Delta \Pi = l - \Pi_1 - ... - \Pi_k$$

 Δ denotes the first difference operator, δ is the intercept term and ϵ_t is white noise.

An examination of the Π matrix enables us to detect existence of cointegrating relations among the Z variables. The most interesting case is 0 less than rank (Π)= r < p. This implies that there are r cointegrating relations among the elements of Z, and there are p.r matrices α and β such that $\Pi = \alpha\beta$. Here α is a matrix of error correction parameter and β is interpreted as matrix of cointegrating vectors, with the property that $\beta'Z_t$ is stationary, even though Z itself is nonstationary.

Without a trend With a trend Variables Cointegration Test Critical **Test** Critical rank statistics values statistics values Maximum eigenvalue test GDP - K - L - E31.7900 r = 066.3587 28.2700 27.5046 22.0400 23.1805 $r \leq 1$ 17.2256 25.4200 15.8700 10.9302 19.2200 $r \leq 2$ 12.1831 $r \leq 3$ 1.9330 9.1600 6.2488 12.3900 Trace test GDP - K - L - E63.0000 r = 097.7005 53.4800 67.8641 $r \leq 1$ 34.8700 42.3400 31.3418 40.3595 $r \leq 2$ 14.1162 20.1800 17.1790 25.7700 $r \leq 3$ 1.9330 9.1600 6.2488 12.3900

Table 2: Cointegration Results

In Table 2, it can be seen from the maximum eigenvalue test with and without trend that estimated test statistics is greater than the critical value for r = 0. This means that the hypothesis of no cointegration is rejected. To find the number of cointegrating vectors we see that for $r \le I$, the estimated test statistics is less than the critical value, which means that there is only one cointegrating vector. Similar results are noticed for the trace test with and without a trend.

Granger Causality Tests

Recent development of the cointegration concept indicates that a VAR model specified in differences is valid only if the variables under study are not cointegrated. If they are cointegrated, a VECM should be estimated rather than a VAR as in a standard Granger causality test (Granger, 1988). Following Granger, we estimate a VECM for the Granger causality test because we found a cointegration relationship between energy and GDP. By the Granger Representation Theorem and by focusing on energy consumption and GDP, equation (2) can be rewritten a

$$\Delta^{2}GDP_{t} = \alpha_{I} + \beta_{I}ECT_{t-I} + \sum_{i=1}^{n} \gamma_{yi} \Delta^{2}E_{t-i} + \sum_{i=1}^{n} \delta_{yi} \Delta^{2}GDP_{t-i} + \sum_{i=1}^{n} \lambda_{yi} \Delta^{2}K_{t-i}$$

$$+ \sum_{i=1}^{n} \theta_{yi} \Delta^{2}L_{t-i} + \varepsilon_{yt}$$

$$\Delta^{2}E_{t} = \alpha_{2} + \beta_{2}ECT_{t-I} + \sum_{i=1}^{n} \gamma_{ei} \Delta^{2}E_{t-i} + \sum_{i=1}^{n} \delta_{ei} \Delta^{2}GDP_{t-i} + \sum_{i=1}^{n} \lambda_{ei} \Delta^{2}K_{t-i}$$

$$+ \sum_{i=1}^{n} \theta_{ei} \Delta^{2}L_{t-i} + \varepsilon_{et}$$

$$(4)$$

where GDP, K, L, and E are real GDP, capital, labor, and energy consumption, respectively. Both the capital and labor equations are omitted because they are not relevant. It is to be noted here that although the capital and labor equations are not included in our analysis, these two variables have their impact on the GDP and energy equations, which have been augmented and now include capital and labour. As we found the series to be cointegrated, there must be either unidirectional or bidirectional Granger causality. Table 3 shows results of Granger causality tests.

Table 3: Granger Causality Tests

Dependent	ECT	t-statistic	F-statistic
variable			
GDP	-90.8040*	-2.3517	5.5306
E	-66.9756	-1.6660	2.7755

Note: * Significant at the 1% level

Using an F-test, we find unidirectional long-run causality between energy consumption and GDP growth because we cannot reject the null hypothesis that the coefficient on the ECT is zero in the GDP equation. The coefficient on the

ECT in the GDP equation is significant at the 1% level. This implies that causality between them runs from energy consumption to GDP growth. But the coefficient on the ECT in the energy equation is not significant, which means that there is no causal relationship running from GDP growth to energy consumption.

4. Conclusions

In this paper we examined the causal relationship between energy and economic growth in Bangladesh for the period 1976–2008 using a multivariate causality analysis that included GDP, energy, capital, and labor. Our results show that there is unidirectional causality running from energy consumption to GDP. This appears to be consistent with the high growth of energy consumption compared to GDP growth in Bangladesh. It should be noted here that although energy consumption grew rapidly, energy demand has outstripped energy supply and Bangladesh is grappling with the issue of meeting this excess demand. Increasing energy supply will assure that energy consumption growth will continue to play its due role, otherwise the tempo generated by it may not be maintained.

References

- 1. Asafu-Adjaye, J. (2000). "The relationship between energy consumption, energy prices and economic growth: time series evidence from Asian developing countries". *Energy Economics*, 22, 615–625.
- Erbaykal Erman (2008). "Disaggregate Energy Consumption and Economic Growth: Evidence From Turkey", *International Research Journal of Finance and Economics*, 20, 172 – 179.
- 3. Gonzalo, J. (1994). "Five alternative methods of estimating long-run equilibrium relationships". *Journal of Econometrics* 60, 203–233.
- 4. Granger, C.W.J. (1988). "Some recent developments in a concept of causality". *Journal of Econometrics* 39, 199–211.
- Johansen, S. and K. Juselius (1990). "Maximum likelihood estimation and inference on cointegration with applications to the demand for money", Oxford Bulletin of Economics and Statistics. 52, 169–210.
- 6. Lee, C.C. and C.P. Chang (2008). "Energy consumption and economic growth in Asian economies: A more comprehensive analysis using panel data", *Resource and Energy Economics*, 30, (1) 50 65.
- 7. MacKinnon, J. (1991). "Critical values for cointegration tests". In: Engle, R.F., Granger, C.W.J. (Eds.), *Long-run Economic Relationships: Readings in Cointegration*. Oxford University Press, New York, pp. 267-276.
- Masih, A.M.M. and R. Masih (1997). "On the temporal causal relationship between energy consumption, real income, and prices: some new evidence from Asian-energy dependent NICs based on a multivariate cointegration vector error-correction approach", *Journal of Policy Model*, 19 (4), 417–440.
- Masih, A.M.M. and R. Masih (1998). "A multivariate cointegrated modelling approach in testing temporal causality between energy consumption, real income and prices with an application to two Asian LDCs". Applied Economics, 30 (10), 1287–1298.
- 10. Oh, W., and K. Lee (2004). "Causal relationship between energy consumption and GDP revisited: The Case of Korea 1970 –1999", *Energy Economics* 26, 51–59
- 11. Omotor (2008). "Causality between Energy Consumption and Economic Growth in Nigeria", *Pakistan Journal of Social Sciences*, 5 (8), 827-835.
- 12. Stern, D.I. (1993). "Energy and economic growth in the USA". *Energy Economics*, 15, 137–150.
- 13. Stern, D.I. (2000). "Multivariate cointegration analysis of the role of energy in the US macroeconomy", *Energy Economics* 22, 267–283.

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 67-83 Bangladesh Economic Association (ISSN 2227-3182)

The Role of Education and its Impact on Socio-Economic Development in Bangladesh: An Analytical Exercise

SAKIB-BIN-AMIN¹ SHAIKH SHAHNAWAZ FERDAUS²

Abstract

Education is considered to be the ultimate driving factor in the socio economic development of any country around the globe. Education is responsible for increasing labor efficiency, hence production. In addition, it influences social improvements, like higher living standards, lower fertility and birth rates and food security. In the recent past, Bangladesh has invested heavily in the education sector. However, despite the efforts of the government, Bangladesh has failed to foster the benefits from this sector because of some constraints. On the other hand, in an attempt to combat the constraints, several government and non-government initiatives have been undertaken. With an intention to discover the impact of education on the socio economic development of Bangladesh, this paper makes an attempt to delve into the educational structure of Bangladesh along with the challenges faced and actions needed in the education sector.

Keywords: Education, Productivity, Socio-Economic Development

Lecturer in Economics Department at North South University, Dhaka, Bangladesh. Email: sakibamin@yahoo.com

² BS student, Department of Economics, North South University, Dhaka, Bangladesh.

1. Introduction³

Education is considered a vital weapon to achieve socioeconomic development for any nation across the world. Being a driving factor, education can increase the efficiency of labor, which in turn, boosts the overall productivity of the country, aiding the country to take a further step towards attaining development. Recently, the world market has been characterized by changes in technology and production process for which it demands a malleable labor force. If any nation wants to adapt with such changes and process, it can be highly catalyzed by education. Education can also bring about social changes such as higher living standards, food security, lower birth rate, lower fertility rate and reduction in population. It is obvious that spending on education provides returns much like investing on fixed capital; therefore education can be considered analogous to investment.

Bangladesh is a relatively young democratic country, which got its independence in 1971. It is a developing country with a large supply of cheap unskilled labor. According to "Bangladesh Economy Profile 2010", Bangladesh has a labor force of 72.35 million, the majority of which (45 percent) are involved in the agriculture sector, 35 percent are involved in industry and 25 percent earn a living from the services sector. The unemployment rate is 5.1 percent and about 40 percent of the labor force is underemployed. The literacy rate of the country is 47.5 percent but the government is taking substantial initiatives to improve this figure through increased budgetary allocation to the education sector. Despite praiseworthy efforts made by the government in the education sector, however, Bangladesh is yet to be able to convert its growing population into human resource. Bangladesh, with due effort, can definitely achieve high economic growth by increasing the productivity of its huge unskilled labor force through education.

Although some researchers have made attempts to examine the role of education towards economic development of Bangladesh, in our knowledge, very few studies have so far focused on the socio economic context of education in the country. Having focused on the current educational condition in Bangladesh, this study makes an attempt to critically analyze the role that education can play in the country's socio-economic development.

The rest of the paper is organized as follows. Section 2 presents a review of the available literature. Section 3 discusses the relationship between education and socio economic development in general. The national education system in

All the information provided in this section has been compiled from BANBEIS and Bangladesh Economy profile 2010.

Bangladesh is discussed in Section 4. Major policy recommendations appear in Section 5. Some concluding observations are made in the sixth and final section.

2. Literature Review

On 2nd January 1999, while addressing a group of educationists in New Delhi, the Nobel Laureate Amartya Sen stated that "elementary education is a central component of any kind of economic development, and economic powers, such as Japan had high levels of education before they advanced towards industrial development" (Rahman, Kabir & Alam, 2005).

Card (2001) and Heckman (1974, 1996, 2003) said that years of schooling had an increasing effect on the earnings of the individuals and that there was a positive marginal benefit between the ages of 6 - 11 years, which was incidentally the appropriate age group for primary education.

In a recent report at the World Economic Forum in Davos, Switzerland, the Organization for Economic Co-operation and Development (OECD) used economic modeling to associate cognitive skills to economic growth. It found that a small enhancement in cognitive abilities could have considerable impacts on the future of a country's economy. The report argues that in order to make long term investment in economic health, countries are required to improve the quality of their education. The study also states that if all the 30 countries improve their average PISA scores by 25 points in the next 20 years, there would be a total gain of \$ 115 trillion in GDP over the lifetime of the generation born in 2010. In 1997, the Paris-based OECD initiated the Program for International Student Assessment (PISA). After every 3 years, PISA holds a competition for 15 year olds from countries around the world. Here, they are tested to find out the performance of their educational system on the basis of results achieved by the students.

Asadullah M. Niaz (2005) used an adaptation of the Mincer-Beckerian model (See Appendix) and found that the returns to education in Bangladesh were 7.1 percent. The model controlled for the effects of unearned income, gender and marital status and also delved into the differences created due to employment in private vs. public sectors. It also looked into the wage gap due to gender and rural vs. urban employment. In addition, the study included an experiment controlling for family background for a sub sample. It was found that the effect of maternal education was not quite noteworthy. However, spousal education in wage regression was highly significant. He also mentioned that in Bangladesh a large part of the labor force was employed in the informal sector, thus creating biased samples and leading to estimates which did not correctly reveal the average returns to education.

Hanushek and Wobmann (2007), on the contrary, questions the acceptability of the estimates derived from Mincerian models. In their study, they attempt to show that quality of education is a far more important factor of economic growth in comparison to the number of educational institutions. They imply that returns to quality may be larger in developing countries than the developed countries. The study analyzes the effect of attainment of cognitive skills (measured as standardized test scores) on earnings. The authors admit that the measurement of quality is a major obstacle and there are substantial errors which lead to downward biases in estimated coefficients.

Francesco Burchi (2006) states the instrumental role of education can be seen in two different ways; i) economic production and ii) social change. The author argues that education is a fundamental factor for achieving food security for rural populations in developing countries and that basic education improves the ability of individuals to live a respectable life and to evade hunger traps. The study examines theoretical as well as empirical causalities between education and food security. It also includes a cross section model that shows the impact of education on household food insecurity. The model expresses education by school attendance rate and food insecurity by a combination of adequate survival status, adequate nutrition status and food adequacy and female malnutrition. The study shows that there exists a high linear correlation between food insecurity and basic education which tends to decrease for advanced education and is statistically insignificant for higher education. Burchi (2006) further states that increasing children school attendance rate by 100% may reduce food insecurity by a whooping 19%, thus creating a better, nourished world for all to live in.

Islam and Nesa (2009) focus on the role of education on fertility reduction in Bangladesh. The authors suggest that fertility declines with women's education and that the relation also holds even after controlling the factors like place of residence, region and household wealth status. The paper also states that length of education is related to the start of one's reproductive life, child bearing and use of birth control and therefore women with better education show lower fertility. This is backed by a finding of the study which shows that the Total Fertility Rates (TFR) of urban dwelling, secondary educated, rich women were close to replacement level. In addition, it is observed that the level of fertility gradually declines with the increase in the level of education, which undoubtedly implies that there exists an inverse relation between women's education and fertility in Bangladesh.

3. The Relationship between Education and Socio-economic Growth

An educated population contributes more to economic growth. In this creative, competitive and innovative world, there is no substitute for education to enhance the economic scenario of a country. Specialized knowledge and technical skills lead to enhanced level of production and higher income. However, the effects of education are not limited to economic gains only. Education not only enables people to become better parents, voters and citizens but also creates better human beings. Education can also play an important role in changing the quality of human life, like reducing poverty, increasing social networks and understanding and abiding social rules.

Education, undoubtedly, enhances worker productivity and skills which ensures higher production in the economy. Skilled workers are more literate and numerate and capable of doing more complex tasks. They are easy to train and are more punctual and dependable. Moreover, highly educated individuals imply greater number of scientists, analysts, technicians and inventors who can increase the stock of human knowledge through development of new procedures and technologies. Different studies show that countries with higher levels of economic growth have labor forces with higher educational attainments. According to the report of "Investment in Education on Private and Public Returns" (2000), over the period of 1915 – 1999, in USA, the growth in education caused an estimated 10 percent growth in GDP.

Higher education is also responsible for higher income. The amount of education of an individual has an important impact on labor market experience. Education increases the productivity of an individual and hence earnings. Increased education means that an individual has higher capability to absorb new information and skills and can familiarize with new technologies rather easily. By having higher levels of education, a worker increases his/her human capital and is thus able to improve not only his/her own productivity but also of the other capitals s/he uses. Therefore, highly educated workers are paid an increased wage premium compared to the less educated workers.

In addition, level of education can influence the quality of employment. Jacob Mincer (1993) stated that educated workers have three advantages over their less educated competitors: i) Higher wages, ii) Greater employment stability, and iii) greater upward mobility in income.

Higher levels of education increases labor force participation and decreases probability of unemployment and job turnover. Higher educated workers have higher wage, hence they provide more working hours to obtain more income and thereby get primary preference. "Investment in Education: Private and Public Returns" (2000) further shows that possession of a college degree in 1993 in USA increased the chances of having a job by 23% over high school graduates. Today, men with lower level of education are less likely to hold on to a job than they were 20 years ago. Educated workers have also been found to have better health. Owing to their knowledge about diseases, higher earning and employer provided healthcare, they are able to dispose more on treatment and check ups. A second reason for better health is that these workers, drawing a large amount of money from their workstations, prefer preventative measures against diseases to falling ill and losing out on income.

The never ending demand of the world's massive population is creating stress on our mother Earth. Population growth has become the name of a formidable adversary for many countries. Education plays a major role in reducing fertility, and hence, population. Female education increases the age at first marriage, decreasing the number of years devoted to child bearing. Increase in education also decreases the dependence of parents on their children for support at old age. So the demand for children decreases. Educated parents want their children to be qualified as well. This aspiration leads them to arrange for higher education of the children. Therefore the cost of upbringing of a child increases and so demand for more children decreases. Highly educated women are usually paid employed and mostly have to work outside home. An educated woman takes into consideration the loss of income she will incur due to having more children and thus the demand of children decreases still. Additionally, having children narrows down the freedom of individuals to go for better job opportunities and since the opportunity cost of children is high, couples settle for fewer children. Besides, educated couples are more informed about contraceptives, which play a vital role in reducing fertility.

Milton Friedman (1964) says that a stable and democratic society is impossible without a minimum degree of literacy and knowledge on the part of the citizens and without widespread acceptance of some common set of values. Education can contribute to both. So, education creates a better society for people to live in.

4. The Education Scenario in Bangladesh

The development of a country depends on the nature and quality of implemented educational policies of that country. Bangladesh is a developing country with a throbbing population of an estimated 16 million (Source: UN data). One and the

most effective way of fostering this enormous resource of human capital into a weapon to achieve economic growth is to educate the mass population. Increasing educational attainments of an individual enhances the human capital, thus an educated labor force can be a driving factor for Bangladesh's economy. Therefore, an effective education system can help us to move up from current economic condition.

4.1 Current Education System in Bangladesh⁴

The education system in Bangladesh is categorized into four parts:

I. General education

Primary education

It is the preliminary level of education and comprises of 5 years of formal schooling (class/ grades I - V). At this level, education usually begins at 6+ years of age up to 11 years. This stage is mandatory, free and universal. Moreover, 40% of the enrolled students (lower income group) are granted stipend at a rate of Tk. 100(1.52 US\$) per month per student in order to ensure the enrollment of all school age children. Primary education is commonly conveyed at primary schools. There are around 82,218 primary schools of which 37,672 are run in public sector. The others are at private, NGO and community level. A total of 365,929 (41.8% Female) teaching staffs serve in these types of schools. Female graduates are encouraged to serve in primary level of education. A total of 16001605 students were enrolled in the primary schools in 2008, 50.51% of which were female students. The gross enrollment rate in primary schools is 97.6%.

Secondary Education

On completion of the primary education, students are admitted to the second level of education, the secondary education. It is comprised of 7 (3+2+2) years of formal schooling. The first 3 years (grades VI-VIII) are referred to as junior secondary; the following 2 years (grades IX - X) as secondary and the last 2 years (grades XI - XII) as higher secondary. There are around 18,756 secondary level schools for about 6,819,748 (53.69% female) students in Bangladesh, of which, 317 are run in the public sector and the others in the private sector. 209496 teachers, of whom, 22.33% are female, are serving in secondary level schools.

⁴ All data in this section have been compiled from an article by Fazle Kabir titled "Growth Strategies for Secondary Education: Interface between Government and Non-Government initiatives in Bangladesh" and BANBEIS.

However, the gross enrolment rate drops down to 39.67% for the secondary level. The drop out rate at this level in 2007 amounted to a staggering 62.45%, and 66.16% for males and females, respectively. For grade XI-XII, there are 1185 institutions, of which, only 11 are public and the rest are private. 21,032 teachers are devoted to instruct a total of 210,026 students.

In 2008, around 8,796,201 students reached the 5th grade. Surprisingly though, only 6,819,748 students were enrolled in secondary schools. Sadly, 22.5% of the students were lost from the stream of education.

Tertiary Education

This is the third stage of general education. It consists of 2-6 years of formal schooling. Having influenced by lack of employment with low levels of education and attracted by high rates of return (over 10% annually), about 3 out of 4 students passing the higher secondary certificate examination, continue on some form of higher education. The minimum requirement for admission to higher education is the Higher Secondary Certificate (HSC). HSC holders can enroll in 3-year degree pass courses. While for honors, they may enroll in 4-year bachelors' degree honors courses in degree level colleges or in the universities. After successful completion of a pass/honors bachelors' degree course, an individual can enroll in the master's degree course. Master degree courses are of one year for honors bachelor degree holders and 2 years for pass bachelor degree holders. For those aspiring to take up M.Phil and Ph.D courses in selected disciplines or areas of specialization, the duration is of 2 years for M.Phil and 3-4 years for Ph.Ds after the successful completion of master's degree. Higher education is being offered in the universities and post HSC level colleges and institutes of diversified studies in professional, technical, technological and other special types of education.

II. Madrasah education

This is the parallel system of formal religious education for Muslim students. It was introduced in 1780 with the establishment of Calcutta Madrasah. For Madrasah education, Ebtedayee, Dakhil, Alim, Fazil and Kamil are the equivalent to primary, secondary, higher secondary, bachelors' and masters' levels, respectively.

III. Technical – Vocational education

Students who do not prefer academic education might find technical-vocational programs to be more appropriate and useful for their future career. The government tries its best to ensure that the course prospectus is relevant to the students' interest and aspirations, while at the same time, it fulfils the requirements of the job market.

This form of education is relatively small in Bangladesh, receiving only 6.5% of the education sector budget. Only about 40,000 students in total are enrolled at both certificate and diploma levels. At the present, there are 24 polytechnic institutes in the public and 87 in the private sector, all of which provide diplomas in various departments of the technical and engineering sector. Good models for skills training are also provided by some NGOs.

IV. Non-Formal Education in Bangladesh

Non Formal Education (NFE) in Bangladesh is monitored and supervised by the Bureau of Non- formal Education (BNFE). NFE is an organized form of learning that usually takes place outside the formal educational institutions. It is an extremely important sector for Bangladesh simply due to the country's enormous population and high illiteracy rate. NFE provides a second chance for the dropout and un-enrolled children, adolescents and also illiterate adults to enter into the mainstream education. Generally, the sector consists of disadvantaged people. NFE provides basic education, life skill training, functional literacy and awareness building that helps the underprivileged in employment sectors and thus helps them improve their social and economic condition.

4.2 Government Initiatives in the Education Sector in Bangladesh

Even though the 70's and the 80's saw little progress in the growth of the primary education sector of Bangladesh, the education programs improved dramatically in the latter half of the 90's. The renewed dedication was mainly catalyzed by the 1990 World Conference on Education for All (WCEFA), where all participating nations were encouraged to expand their vision to meet goals in the education sector, particularly the goal of making primary education universal. The Government of Bangladesh made five year primary education program free in all government schools and also declared education for girls in rural areas free till 8th grade in the Compulsory Primary Education Act in 1993.

The Government-funded Food for Education Program was commenced in 1993 in order to compensate the opportunity cost of the poor parents because they would have to pay for sending their children to school. This program successfully increased enrolment and attendance in schools and reduced child labor. From the financial year 2002-2003, the Food for Education Programme was replaced by another program that produced cash support to school going children. In this program, parents received a stipend of Tk.100 for each child who was admitted to school.

The Government introduced the six-year Primary Education Development Program in 2003, supported by the Asian Development Bank (ADB) and 10 other

development partners. The objective of the program is to make sure that each child has access to minimum acceptable standard of primary education. The program attempts to increase access, attendance and completion of primary education, improve the standards of education by the introduction of Primary School Quality Level Standards and to take up an approach which is child centered. The project has undergone 81.38% financial and 81.63% physical progress. In July 2008, the second phase of the 5 year Primary Education Stipend Project was initiated. The project aims at increasing the enrolment rate, increasing the attendance, reducing the dropout rate, establishing equity in the financial assistance to children and enhancing the quality of primary education. Until November 2010, the project achieved 31.4% financial and 46% physical progress.

In 2004, the government launched a six-year project named Reaching Out-of-School Children. Annual allowances, ranging from Tk 800 for those students in Grades 1 to 3, to Tk. 970 for Grades 4 to 5, are paid to children. Some 11,000 learning centers have been established in partnership with NGOs which serve more than 300000 children. The project targets the neediest communities, which includes landless people, families of widowed women, day laborers, underprivileged marginal groups by occupation (e.g. fishermen, artisans, blacksmiths, and cobblers), socially deprived groups, ethnic minorities, children of floating populations (who live for less than one year in a particular place) etc.

The Government has created Non-Government Teachers Registration and Certification Authority (NTRCA) through an Act of the Parliament in February, 2005, to ensure the recruitment of well qualified and competent teachers at non-government secondary schools, colleges and madrasahs. The education institutions must recruit their teachers from the pool of registered teachers, meticulously tested by the NTRCA.

From January 2006, a new approach had been taken in the curriculum for grade 9-10. The new curriculum prepares students for the challenges of the 21st century by including seven compulsory subjects (Bangla, English, Mathematics, General Science, Social Science, Business Studies, and Religious Studies) and an optional subject from ICT, Agriculture or Home Economics.

By enacting the Retirement Benefit Act, 2002, the Government has met the demand for pension benefits of teachers and employees of non-government education institutions. As a result, quality teachers have been highly motivated to take up teaching in non-government institutions, improving the quality of education.

4.3 The role of NGOs in the Education Sector of Bangladesh

Non-government organizations or NGOs have played a major role in the education sector of Bangladesh by enhancing the socioeconomic transformation of the country. Since 1971, the active role of NGOs in the education sectors has slowly, but steadily, increased. Recently, there are well above 400 NGOs in collaboration with the donors providing basic education to the poor and unreached population of Bangladesh. Even though the number of NGOs involved in catering education is quite high, the type of Non-formal primary education (NFPE) is similar. Most NGOs provide 3-4 years of schooling for basic education. However, NGOs like Friends in Village Development (FIVDB) and Gonoshahajjo Sangstha (GSS) offer five years of primary education. Approximately 4-8 percent of the primary school aged children in the country receive non-formal primary education at NGO programs.

Government of Bangladesh has recognized the NGOs for their extensive involvement in the field of education and has even handed over certain non-functioning government schools to some of the leading national NGOs like BRAC. According to Sharafuddin (1998), some of the education programs undertaken by different NGOs are:

GSS Primary Education Program: This program has been initiated by the Gono Shahajjo Shangstha (GSS). Children unable to be admitted to formal primary schools are enrolled here. The children are taught up to grade 3, which is now being extended to grade 5. Classes are usually held in brick schoolhouses built by GSS.

BRAC Non-Formal Primary Education Program: This program has been developed by the Bangladesh Rural Advancement Committee (BRAC). This caters to children 8-10 years of age who were unable to be admitted to formal primary schools. Hence, the pupils are older children who never attended school. The program covers grades 1-3.

CMES Technology School: The Centre for Mass Education in Science (CMES) is a science and technology oriented NGO and has initiated this program. The students are offered general education. Then in grades 4-5, some science lessons are included in the syllabus which covers environment, popular science and technology. The aim is to make people aware of the importance of scientific education in real life.

Dhaka Ahsania Mission Alternative Primary School Programme: The target groups are children within the age group of 6-8. The 27 month course consists of

3 grades, each of which takes up 9 months. The school premises are provided by the local community.

UCEP School: The Under-privileged Children's Education Program (UECP) school is a specialized program intended for the working children between the age group of 6-14 years. The program is a mixture of general and technical education and has duration of 7 years.

Terre Des Hommes (TDH) Street Children Program: The target group of this program is children aged 8-10 years, working at railway stations, bus and launch terminals. These children are grouped under railway station sheds or bus or launch terminals with the help of local authorities, including the police. BRAC curriculum and materials are used.

NGO-run schools perform better than rural government schools. This is because NGOs focus on building schools in isolated corners of the country in an attempt to spread the light of education throughout. NGOs carry out community based education, often reaching out to the ethnic minorities. NGOs also offer incentives for students coming to school. Cultural and sporting events are held and, occasionally, food is also offered in order to boost attendance.

Observations of the Study

With a net enrolment rate of approximately 90%, Bangladesh is one of the few developing countries which is nearing the U.N Millennium Development Goals (MDG) of achieving 100% enrolment in primary schools by 2015. However, even after taking a number of significant initiatives and reaching remarkable successes in many of the implemented projects, there are yet many drawbacks that need to be addressed. At least 15% of the primary school age children are not enrolled in schools. This amount, combined with the 25% primary school dropout rate implies that around 40% of Bangladeshi children do not receive a complete primary education. However, some of the drawbacks are mentioned below.

Low spending on education: Government spending on education in Bangladesh is 2.3% of GDP, which is the lowest in South Asia and is also lower than the regional average of 3.5%. Even though primary government schools are free for all, the hidden costs of uniforms and supply may add up to a fairly large amount at the end of the year. Also, a large portion of money has to be spent in order to hire private tutors to assist the students in completing their assigned home tasks. The cost may make education too expensive for many poor families.

Quality differences: Difference in the quality of education is a big problem faced by Bangladesh. Most importantly, significant quality difference is visible between the government-run schools and the NGO-run schools.

Lack of access to education: Government schools are usually concentrated at urban centers. Majority of the people in Bangladesh dwell in rural areas. Due to the concentration of schools in urban areas and also due to the lack of schools in the outskirts, many children are deprived of their right to education. Since many schools are too far, parents are discouraged to send their children to school.

Gender inequity: Due to low achievement rates in primary level, the enrollment of girls in secondary level is remarkably low. Girls are more prone to getting dropped out of secondary school than boys and their achievement scores are considerably lower.

Gender discrimination: The act of considering women as inferior beings is deeply embedded in the context of Bangladesh. Many families deprive their daughters from going to schools simply because they think girls have no need for education. Child marriage is a common practice in Bangladesh and many young girls get married against their will, eradicating any chance of their education. Although gender parity has been somewhat attained in the context of enrollment in primary level, the attendance of female students remains low as many girls are kept back at home to do household works.

Urban poverty and child labor: Urban poverty has been ignored over the past years by the government and has also gone quite unnoticed by the NGOs. This is mainly because the rural population has always been much larger than the urban population and the lion share of the educationally deprived children have dwelled in the rural areas. Even though the enrollment rate in the cities is much higher, it is because the cities are the dwelling places of the rich and the middle class citizen. Enrollment of urban poor in schools is very low. One major reason is that 40% of the population live below the poverty line, unable to meet their basic needs. Therefore, they have no option other than to turn to their children for income. Due to this reliance of the family on their income, many child laborers naturally find the opportunity cost of losing a day's earning too expensive to attend a day of school.

Inadequate school facilities: Many schools face constraints in terms of basic necessities like textbooks, blackboards and working toilets. The pupil-tutor ratio is very high in Bangladesh, that of 63:1. Small, unclean, stuffy classrooms cannot accommodate all the students. This coupled with the low tutor-pupil ratio,

deprives students from proper attention of the teachers and acts as a contributing factor to higher rates of absenteeism. Almost half of the schools have no playgrounds, and proper mental growth of children is hindered.

Curriculum: The textbooks supplied in government schools often fail to grip the student's attention and interest. In most of the cases, the contents are considered irrelevant to their lives. Government schools also lack in extra curricular activities.

Teacher training and supervision: To teach at a government school in Bangladesh, teachers are required to attend a yearlong training at a Primary Teacher Institute (PTI). Yet, teachers seldom make use of the knowledge obtained from the course and there is almost no supervision and very few refresher training sessions.

5. Policy Recommendations

In order to create skilled labor force out of the huge population, education has no alternative. Quality education has to be ensured to enhance the human capital. Certain measures need to be taken in order to improve the education system of Bangladesh, which in recent times have managed to obtain the attention of the Government.

The share of education in the budget should be increased in order to attract quality tutors into the profession by offering handsome salary packages as well as other incentives. School buildings, class rooms and working toilets could be maintained and looked after properly. In addition, teachers might be trained continuously and kept up to date with modern teaching methods.

Provisions for mid-day meals can be made in order to attract the poorer students to attend school. Some NGOs are already providing mid-day meal and so they can be consulted for advice.

A unified education system should be introduced. That is, all schools should have common curriculum, facility and goals in order to ensure quality education. Thereby, if the school is in an isolated corner of Bangladesh or in the heart of Dhaka city does not matter; all students will learn exactly the same lessons.

A highly centralized system like that of the education system of Bangladesh, fails to respond to local needs effectively. The government may decentralize the system, making the district responsible for planning and management in order to provide better support and supervision to the education system.

It has been seen in the recent past that a change in Government brings about a change in the syllabus. This should be thoroughly discouraged. The education quality should be improved only on the basis of learning skills and not on the basis of political influence. It is also important that teachers are hired on the basis of their capability and not how well connected one is.

Female participation in all sectors of education should be encouraged. Better transports for female students, better environment at schools and drastic actions against eve teasing should be taken in order to provide a suitable atmosphere for female students to attend school.

More efforts should be made to reach out and provide non-formal education to the numerous underprivileged children who either get dropped out of education or who can never enter the education stream. Night schools may be created in cities to cater education to the urban poor children.

Advanced technical and vocational education should be provided for those students who are incapable of doing general education and the curriculum should be up to date to teach them what they will require in the professional life.

6. Conclusion

Education is a human right. It has been responsible for improving social and economic conditions of nations through developing human capital, increasing human productivity, increasing income and reducing unemployment as well as by reducing fertility rate, thus reducing population growth, increasing female awareness, reducing crime, poverty and improving the health of individuals. Bangladesh has an enormous resource waiting to be turned into a priceless asset - its population. Educating the population will boost Bangladesh's productivity manyfold and hence the nation will race forward towards achieving economic feats. The education system of Bangladesh has had dramatic improvements in the last few years. The net enrollment rate in primary level has exceeded 90% and is soon reaching the Millennium Development Goal of 100%. The female enrolment in education sectors has also risen sharply and the percentage of female teachers has been gradually increasing. However, the attainments are being held back by certain offsetting factors like lack of access to education, high pupil-tutor ratio, low salary packages of teachers etc. Although steady growth in GDP as well as growth in educational attainments of children may suggest a positive relation between education and growth of the country, further empirical research is needed on this topic in order to draw any policy conclusions.

References

- 1. Asadullah, M. Niaz (2005). 'Returns to Education in Bangladesh', QEH Working Paper Series 130. University of Oxford.
- Burchi, F. (2006). 'Identifying the Role of Education in Socio Economic Development', paper presented at International conference on Human and Economic Resources, Sunny and Izmir University.
- 3. Card, D. (2001). 'Estimating the Return to Schooling: Progress on Some Persistent Econometric Problems', *Econometrica*, 69(5); 1127-1160.
- 4. Friedman, M. (1962). *Capitalism and Freedom*. University of Chicago Press, Chicago.
- 5. Hanushek and Wobmann (2007). 'The Role of Education Quality in Economic Growth', The World Bank Policy Research Working Paper 4122.
- Heckman, J., A.L.Farrar and P.E. Todd (1996). 'Human Capital Pricing Equations
 with an Application to Estimating the Effect of Schooling Quality on
 Earnings', Review of Economics and Statistics 78: 562-610.
- Heckman, J., L.J.Lochner and P.E. Todd (2003). 'Fifty Years of Mincer Earnings 18 Regressions', National Bureau of Economic Research Working Paper No. 9732.
- 8. Heckman, J. and S.Polachek (1974) 'Empirical Evidence on the Functional Form of the Earnings-Schooling Relationship', *Journal of the American Statistical Association* 69, 350-354.
- Heckman J., L.J.Lochner and P.E.Todd (2005). "Earnings Functions, Rates of Return, and Treatment Effects: the Mincer Equation and Beyond", NBER Working Papers, No. 11544, National Bureau of Economic Research.
- 10. Islam, R and A. Mia (2007). 'The role of education for rural population transformation in Bangladesh', *Asia-Pacific Journal of Cooperative Education*, 8(1):1-21.
- 11. Islam, S. and M. K. Nesa (2009). 'Fertility transition in Bangladesh: The Role of Education', *Proc. Pakistan Acad. SCI*, 46(4):195-201.
- 12. Mincer, J. (1958). 'Investment in Human Capital and Personal Income Distribution', *Journal of Political Economy* 66:281-302.
- 13. Mincer, J. (1974). *Schooling, Experience and Earnings*. Columbia University Press: New York.
- 14. Mincer, J. (1993). Studies in Human Capital: Collected Essays in Honor of Jacob Mincer. Vol. 1. Cambridge: Edward Elgar.

- 15. Rahman, A, M. Kabir and AKMM Alam (2005). 'Public Expenditure in Primary Education in Bangladesh: An Analysis', Working Paper 1, Dhaka Shamunnay.
- 16. Saxton, J (2000). 'Investment in Education: Private and Public Returns,' Joint Economic Committee, United States Congress.
- 17. Sharafuddin, A M (1998). 'Innovations in Primary Education in Bangladesh' in B. Saraswati (eds) *The Cultural Dimension of Education*, Indira Gandhi National Centre for the Arts, New Delhi.

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 85-92 Bangladesh Economic Association (ISSN 2227-3182)

Transit-Corridor Controversy: Optimum Service charges, Gains, Risks and Alternative

ABUL KALAM AZAD¹

Abstract

Granting of corridor-services to India through Bangladesh (albeit, in the name of so-called transit) is being advocated on the ground that it will promote regional connectivity, economic cooperation and thereby regional economic development. But any formal agreement between Bangladesh and India allowing the latter a corridor through the former not only raises politically controversial issues like sovereignty and national security, it involves complex technical and economic matters of necessary investment, infrastructure development, determination of appropriate fees/service charges and so on. In addition, it has been shown that the result of connectivity/cooperation through such mode may turn out to be more isolation for Bangladesh from the seven-sisters states of northeastern India. In this paper, it has been argued that the best way to promote cooperation among the countries of the South-Asian region, particularly among Bangladesh, Bhutan, Nepal, India, is to promote trade among these countries. And such promotion of trade can be easily designed to take care of the Indian need to move her goods between the northeastern land-locked seven-sisters states and the western India through Bangladesh at cheaper costs and more quickly. Yes, Indian goods will move between northeastern seven sisters states of India and western India through Bangladesh. But this could be accomplished by profit-driven Bangladeshi businessmen by way of trade without creating so much fuss about transit, corridor, security, appropriate fees/service charges and so on.

¹ Professor, Department of Economics, University of Chittagong

The 1946 British Cabinet Mission plan for self-rule of India envisaged three autonomous regions— A, B, C— of which the C-region was proposed to be comprised of the present day Bangladesh along with West Bengal of present day India and the so called "seven sisters" of northeastern India. The reason I am making reference to this long past historical fact is that such a plan was proposed considering the geographic contiguity and economic integration of these regions. So it is clear that the present day Bangladesh and the northeastern Indian states have been economically interlinked since long time back. The partition of British India in 1947 left these "seven-sister" states only marginally linked with the mainland India through the chicken neck on the northern border of Bangladesh. This link is not only long and arduous but also nearly impassable hilly land.

Since the partition of India, the rulers and policy-makers in Delhi pursed economic policies and political agenda (propaganda) to ensure artificial delinking of the existing natural economic links between Bangladesh and the seven-sisters states of north India. Ironically, the policy-makers from this side of the border, under insistence of the then Pakistani rulers, were pursuing measures to complement and supplement the policies adopted by their counterparts in Delhi. So the de-linking of Bangladesh with the seven sisters of northeastern India was all but complete. Although the de-linking of seven-sister states from Bangladesh was successful, their links with the mainland India remained minimum as ever. To overcome this problem, India needed an easy passage to the seven sisters of northeast India through Bangladesh and this they have been demanding ever since from Bangladesh in the name of so-called transit.

Transit-Transshipment-Corridor

The word "transit", more appropriately, international transit means passage of goods/people from one country into another country through the territory of one or more other countries. This word is more common in the fields of international trade and international aviation. When the passage of goods/people takes place using transport of the concerned country which the goods/people pass through, it is known as transshipment .By contrast, India wants to move goods between mainland India and seven sisters states of northeast India through Bangladesh territory. This is not what is meant by the word transit in international trade and international aviation. This is not transit for the following reasons.

1. The goods will be moving from one location of India into another part of India (of course through Bangladesh) which is India's internal trade/commerce, not international trade. International transit is meant for facilitating international trade.

- 2. The routes through Bangladesh are not international routes in the sense that we do not allow any other country to use these routes.
- 3. More importantly, Bangladesh itself cannot use these routes to reach China on the eastern front and to Sri Lanka, Pakistan on the western front (which will definitely be a part of international trade/ transaction in the true sense of the term) through Indian territory for movement of merchandise.

So, what India wants from Bangladesh is not transit of goods through Bangladesh territory to a third country but a "corridor" to link up two of her all but disjointed parts. Through this "corridor", India wants to move goods between the mainland India and the northeastern seven- sister states. If and when implemented, Bangladesh in effect will be providing 'corridor' service to India for moving goods between two of India's almost disconnected parts. The immediate benefits to India from such 'corridor service' are easier, safer and quicker movement of goods between the western part of India and the seven sister states of northern India and consequent savings on transport costs and time. However allowing India 'corridor' service involves costs. So what is the optimum price that Bangladesh should charge India for this 'corridor service'?

The Optimum price for Corridor service

The determination of price or service charge for corridor service to be provided by Bangladesh to India will be a classic example of price determination under bilateral monopoly. Bangladesh is or will be the sole supplier of this service and India will be the only buyer. Under such circumstances, we can determine minimum and maximum limits of the price to be charged for such service.

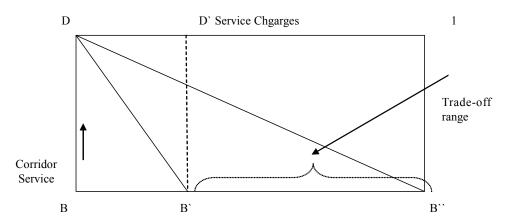
The Minimum price

Normally, when goods are imported in to a country, imposition of import duty is the normal practice but the Indian goods which will pass through Bangladesh will not be consumed/used in this country. So we cannot logically impose import duty on these goods. But it does not mean that the service charge/fee to be charged on Indian goods (passing through Bangladesh) will be just a nominal amount or should necessarily be less than our normal import duty on similar goods. For example, for facilitating industrialization, we may import machinery goods duty-free in this country, but we cannot allow such type of goods to pass through our territory without any charge/fee (because it involve costs). So, what should be the amount of this fee/charge? While the exact amount of such service charges will be determined by our policymakers/negotiators, after negotiation with their

counterparts from Indian side, we will try to fix upper and lower limits of such service charges.

The principal determinant of the lower limit of the service charge for corridor services given to Indian cargo will be the actual cost of transportation of per ton cargo from the entry to exit points of such cargo in Bangladesh territory. With the transport cost, we should add the traffic congestion costs which may be fixed on the basis of vehicle movement carrying Indian cargo as percentage of total vehicle movement through the concerned route. With the actual transport costs and a surcharge for the congestion cost, we should add a premium to cover the fixed

Figure
The Trade-off Range for Bangladesh & India for Corridor service



costs. The calculation of fixed cost is complex and there are various ways to calculate such costs. Nevertheless, the service charge for corridor service to Indian cargo should include a component to cover the fixed cost of infrastructures in providing the corridor service. Additionally, the administration costs of the service too should be included in the service charges.

The Upper limit

Determination of the upper limit for corridor service is rather straightforward. This limit should be not more than the actual financial costs of moving per ton of cargo (should be at least four times the actual transport costs of the same amount of cargo through Bangladesh) between mainland India and the seven sister states through the chicken-neck mentioned above plus a premium for savings on time. Simple economic theory tells us that if the charge/fee for corridor service is more than this upper limit, Indian businessmen on both eastern and western borders of

Bangladesh will not be interested in availing this corridor service from Bangladesh.

Determination of Actual Service charge/fee for Corridor service

According to the theory of pricing, the charge/fee for corridor service will be determined between these upper and lower limits. We may demonstrate this by using the familiar Edgeworth box diagram frequently used for analyzing the optimum solution in classic bilateral monopoly market cases.

In the above figure initially Bangladesh is in position B possessing only (right to sell) corridor services and India is at point I with the service fee. ID is the maximum amount of fee which may be paid in various rates by India. By contrast, Bangladesh has got a unique commodity (more appropriately service) which may be offered either in whole or nothing. So once any deal is struck, that is, once the corridor service is offered, Bangladesh instantly moves to point D and if there is no reciprocal payment of service charge (zero service charge) Bangladesh's position will be represented by the line BD and India's position will be represented by B"D line implying that India receives the service without having to pay any service charge (keeping all the money to herself). But if India agrees to pay B'B amount of service charges/fees which cover the minimum cost of providing the corridor service, Bangladesh's position will be represented by the B'D line showing Bangladesh's gain of BB' amount of service charges in return for BD corridor service. But if Bangladesh can succeed in exacting the highest amount of service charges that India should be ready to pay (from economic point of view), then Bangladesh's position will be represented by DB". The DB, DB' and DB" lines are some of the trade off lines for Bangladesh and their slopes denotes the gain for Bangladesh from respective service trade deals. Rationally, Bangladesh should not settle to the left of DB' line, because in that case the gains from the deal will not cover the minimum cost of providing the services. Similarly to the right of DB" line, there will be no deal, because in such case Indian businessmen will have no gains, hence no incentive, in using the Bangladesh corridor for transporting their goods. So B'B" is the tradeoff range where the deal should be struck. However within the B'B" range, the specific point of a deal will depend on the concerned parties' bargaining skill, tenacity, perception of direct and indirect cost-benefits and their respective desire to reach a deal.

Implementation of Corridor through Bangladesh

The corridor services through Bangladesh has been envisaged to be executed using Railway, land routes and waterways. Land routes will connect western India

with northeastern seven-sister states through Benapole (Jessore) and Tamabil (Sylhet) points. Both points again will be connected with Chittagong port. Railway routes will run from Karimgonj, Agartala in northeastern India through Kulaura and Akhaura to all the way to western India through Jessore, Gaibandha points. Water route will connect western India through Bangladesh river-port Ashugonj (Brahminbaria) and from there, through a road connection of less than fifty kilometers, to all the way to Tripura of northeastern India.

Gains and Risk for Bangladesh from Corridor service

A recent CPD study has estimated that Bangladesh will be able to earn 3 billion US dollar over a period next 30 years from fees to be charged on movement of Indian cargo through Bangladesh territory. This comes to 100 million US dollar per year. On the other hand according to a report by South Asian Center for Policy Study, the implementation of corridor service through Bangladesh will require a staggering amount of investment of around 5 billion US dollars in infrastructure development over next five to seven years. One does not have to be an expert in cost-benefit analysis to conclude that such a staggering amount of investment is not at all worthwhile because it will not cover even the invested amount over a period of 30 years (the lifetime of capital/infrastructure created).

Apart from the security and political risks, such a deal involving so huge an investment will put Bangladesh to a dangerous financial risk. Let us assume that Bangladesh decides to make the investment over a period of 5 years. Once Bangladesh has made the investment, she will be stuck to the deal. But the other party, that is, India may not want to avail the service at some point of time. What can Bangladesh do other than sitting with crossed fingers and counting the costs of such a huge investment?

The Effect of Corridor deal

Granting of corridor-service to India through Bangladesh (albeit, in the name of so-called transit) is being advocated on the ground that it will promote regional connectivity, economic cooperation and thereby regional economic development. But the result of connectivity/cooperation through such mode may turn out to be more isolation for Bangladesh from the seven-sister states of northeastern India.

Although, India would prefer to keep all the options of using all the corridor-routes open, in all likelihood, Indian businessman will find it more convenient and cheaper to use the water route from Silghat (Calcuta) to Ashuganj (Bhrahminbaria) and from Ashuganj to only a short distance (less than fifty Kilometers by road) in Tripura.

This is going to be the most frequently used route for movement of most of the Indian cargo between western India and northeastern seven-sister states. Besides, this Ashugoni river port with a feeder service connecting the Calcutta sea port, will emerge as a sea-outlet for the land-locked seven sister states. Consequently, the dependence of these states on Chittagong port will be reduced to the minimum. The corridor service through Bangladesh, particularly through this water route, will economically isolate the seven-sister states from Bangladesh to the greatest possible extent. The goal which the Indian leadership pursed relentlessly since 1947 to isolate the northeastern seven-sisters states from the then East Pakistan and later Bangladesh and integrate the former with the western India more intensely will be successfully accomplished through this corridor, more specifically, water corridor through Bangladesh. Presently for every 1000 taka worth of imports from India, Bangladesh exports only 10 taka worth of goods to India. With the implementation of corridor service through Bangladesh, exports to India particularly to seven-sister states from Bangladesh are likely to decrease even further. Consequently tradedeficit of Bangladesh with India is going to deteriorate even further.

Regional Cooperation through Trade: An alternative

Successful globalization is not possible while neglecting regional cooperation and integration. So in this age of globalization, regional cooperation for mutual peace, progress and prosperity is an undeniable proposition. But while promoting regional cooperation, the real obstacles to such efforts must be addressed adroitly with skill and sensitivity. The best way to promote cooperation among the countries of the South-Asian region, particularly among Bangladesh, Bhutan, Nepal and India is to promote trade among these countries. And such promotion of trade can be easily designed to take care of the Indian need to move her goods between the northeastern land-locked seven-sister states and the western India through Bangladesh at cheaper costs and more quickly. I am not going to describe the relevant trade model here. Such a trade model has been expounded elaborately in the book by the present author entitled, Top Priorities: Tough Decisions, published by the University of Chittagong. Yes, Indian goods will move between northeastern seven sister states of India and western India through Bangladesh. But this could be accomplished by profit-driven Bangladeshi businessmen by way of trade without creating so much fuss about transit, corridor, security, appropriate fee/service charge and so on. Bangladeshi businessmen handle a traffic of goods worth about 4 billion U.S. dollars annually in the form of import from and export to India alone; and they can be reasonably expected to be quite capable of handling similar/larger amount of cargo in order to move them between the western mainland India and the land-locked seven-sisters states of northeast India through Bangladesh.

References

- 1. Abul K. Azad, *Top Priorities: Tough Decisions*, Chittagong University, 2009.
- 2. Centre for Policy Dialogue (CPD), Report (published in the Daily Star), 2010.
- 3. South Asian Center for Policy Study, Report (published in the Daily Star), 2010.
- 4. World Trade Organization (WTO), *Multilateral Trade Negotiations* (Final Act), 1995

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 93-132 Bangladesh Economic Association (ISSN 2227-3182)

Prospect of Tourism Sector in Bangladesh: A Case Study

NIRMAL CHANDRA BHAKTA¹ HASAN TAREQ KHAN² AMITABH CHAKRABORTY³

Abstract

In recent years tourism has become a major element in the balance of payments of many countries. In this situation Bangladesh is not a good position to attract the international tourists. Bangladesh accounts for only 4.5% of all international tourists visiting South Asian countries, and almost two-thirds of foreign tourist arrivals in Bangladesh are from India, Pakistan and other South Asian countries. The majority of visitors from the UK and USA are ethnic Bangladeshis, who used to come to visit relatives and friends. Almost 60% of foreign tourist arrivals are for business or official purposes, and the number of leisure tourist arrivals is insignificant. Among the reasons for this are the inadequate role of the National Tourist Organization (BPC) in developing the touristic image of Bangladesh, the absence of essential infrastructural systems and facilities needed by tourists, identify the target and potential markets, and unplanned development and construction projects. This study analyses the present condition of Bangladesh tourism potential, and puts forward some suggestions and recommendations for turning the country into a potential tourist destination.

1. Introduction

Bangladesh is a country of vast, largely unknown and unspoiled natural beauty and reserves, which are simply unique and fascinating. These natural phenomena

Authors are General Manager & Assistant Directors of Bangladesh Bank respectively.
 Opinions expressed in the paper are their own, and in no way reflect the official position of Bangladesh Bank.

are composed of hills and vales, forests, rivers, lakes, sea and Beaches, and the evergreen landscape embracing the country is situated in the northeastern side of the South Asia sub-continent. The topography is mainly flat alluvial plain, crisscrossed by the world's three mighty river systems, the Padma (Ganges), the Jamuna and the Meghna and their innumerable tributaries. The east and the northeast of the country joins India, and the southeastern part, adjoining Myanmar, is mainly hilly with dense forest. This area comprises Chittagong and the three Hilly Districts (as they are known) of Rangamati, Bandarban and Khagrachori, with an average elevation of 610 m. These folded ranges run parallel to each other in the north-south direction and the hill slopes are generally enveloped by dense virgin forest. In the south and southwest, alongside the coast of the Bay of Bengal, lies the Sundarbans, better known as a swampy tropical mangrove forest, the home of the Royal Bengal Tiger. These areas are all ideal for the expansion of ecotourism in the country. The climate of Bangladesh is subtropical with a hot and humid summer and cool and dry winter. Annual rainfall ranges from 160 to 400 cm. The best period to visit Bangladesh is November to March, when the temperature ranges between 13.3 and 26.5 Celsius.

2. Literature Review

A substantial number of works on tourism as a subject has been done throughout the world. But a relatively few works and literatures on the development of tourism worldwide have been found as yet. Similarly, enough literatures on the same area of tourism industry in Bangladesh are not available. However, a few articles and research reports addressing the marketing issues and dealing with the problems of the tourism industry in a skin-deep manner have been available to the researcher. As a consequence, literatures reviewed for this study include only a handful of papers and the few research reports.

3. The Research Gap

The literatures reviewed earlier section clearly indicates that there has been a considerable expansion of tourism activities worldwide. It is understood that a relatively little attention has been given by the professionals and researchers to the issues of tourism development. Therefore, the study on the development of tourism industry has been largely unexplored. As such, literatures on tourism development throughout the world are not enough.

Bangladesh tourism industry, being at its infant stage, is of no exception from this. No comprehensive literature covering the same area has yet been available to the present researchers. Researchers in Bangladesh also do not seem to have much

attention to the studies on the development of tourism industry. Therefore, no comprehensive and worthy paper, research monograph, or research report on this issue of tourism industry in Bangladesh has yet been available. The very few literatures available in Bangladesh have tired to suggest the ways and means in the present context of the country for the development of the industry. These existing literatures on Bangladesh tourism are also with inadequate justification and skin-deep analysis. Therefore, these offer little help in developing a framework for further studies by the researchers. As a result, Bangladesh tourism industry has to take necessary steps to search the way to attract a sizeable number of foreign tourists, motivate them to stay longer, obtain better performance of the industry, and thus ensure sustained growth and development of the industry.

4. Objectives of the Study

- a. To discuss about historical background of Cox's Bazar and other tourism spot Bangladesh and its nearer potential tourism products;
- b. To analyze the present position as well as performance of tourism industry of Bangladesh in general;
- c. To analyze the potatiantiality of various types of tourism in comparisons to county like Bangladesh;
- d. To evaluate development initiatives and investment opportunities for developing tourism infrastructure with international competitiveness;
- e. To identify various constraints and challenges of tourism industry in Bangladesh and finally to suggest some pragmatic and realistic policy measures for meaningful tourism development in Bangladesh

5. Methodology

Present study is a descriptive one drawing on empirical data and a wide range of literature from a variety of disciplines, based on extensive search from various sources. The desk research method has been followed to review the existing literature on the aforesaid area. Secondary materials, like Report of Bangladesh Parjaton Corporation; Tourism Statistics of Bangladesh, 2008; Asian Development Outlook; UNWTO, WTTC Report; the daily news papers; seminar papers; UNCTARD Report; online databases produced by both academicians, consulting firms and institutions were used to develop the theoretical frame work regarding economic prospects of Bangladesh Tourism Industry and its existing constraints and challenges. Besides, informal interview method was followed to discuss with the administrative officials of some service providing organization in various tourist spot.

6. Potential for tourism in Bangladesh

Bangladesh is located conveniently on the east-west air-corridor making it a gateway to the Far East. It is endowed with resources and the potential for a tourism industry. In the south-east the country has a 120 km long beach of soft silvery sand, perhaps the world's longest, in a Riviera-like setting with crescentshaped low hills overlooking the Bay of Bengal. The range of the hills clad in lush green thickets are treasured locations for eco-tourists and wildlife watchers. At the head of this terrain is Cox's Bazaar which is as romantic as its name is to the outside world. The Hill Districts to the north and north-east of Cox's Bazar nestle the Kaptai and Rangamati lakes, a 840 sq.km body of crystal clear water lying in sylvan shadows not far from where a dozen hill tribes follow their traditional lifestyles. The Tea District of Sylhet in the far north-east of the country has prospects of tourism, as does the Sundarbans, a large mangrove forest in the south which is home of the Royal Bengal tiger; remains of palaces of old principalities and archaeological sites of Buddhist monasteries, Shrines and holy places, mosques and temples, particularly in the northern part of the country, are among the tourist treasures of Bangladesh.

We may consider the tourism prospect of Bangladesh from four aspects

- Beach Tourism
- Eco-tourism
- Cultural tourism
- Religious tourism

6.1. Prospect of Beach Tourism

Bangladesh is the blessing of Bay-of-Bangle. The southern side of the country is fully surrounded by the blue sea with flat and sandy sea beach. Bangladesh is situated on the lap of Bay-of-Bengal with 712 kilometer costal line. Along its 712 km of coastline, Bangladesh boasts of a number of beautiful beaches. The tranquil environment with abundant greenery around is just perfect to relax and refresh the drained mind and body. Lie on the smooth sandy beaches and soak the warmth of the sun or simply take a quiet walk barefooted on these beaches. The calming effect will easily penetrate deep into your body. The vast stretches of sea water have a unique ability to carry away all our worries and heartaches along with its waves. We can also watch the sun rise and set far in the horizon and appreciate the beauty that is reflected as a reflection in the water.

Major Beach Tourism Destination in Bangladesh

- Cox's Baza Sea Beach (Largest sandy sea beach of the world)
- Kuakata Sea Beach
- Teknaf sea Beach

6.1.1 Coxes Bazar

Miles of golden sands, towering cliffs, surfing waves, rare conch shells, colorful pagodas, Buddhist temples and tribes, delightful sea-food—this is Cox's Bazar, the tourist capital of Bangladesh. Having the world's longest (120 kilometers.) beach sloping gently down to the blue waters of the Bay of Bengal, Cox's Bazar is one of the most attractive tourist sport in the country. There are also a few very old wooden Buddhist temples at Ramu, a few kilometers from Cox's Bazar, well worth visiting. Located at a distance of 152 km. south of Chittagong, the leading seaport of Bangladesh, Cox's Bazar is connected both by air and road from Dhaka and Chittagong. A drive to Teknaf, which is the southernmost tip of the mainland of Bangladesh, is a memorable journey. A day trip to either Moheshkhali or Sonadia, the deltaic islands nestled among the gentle waves of the Bay of Bengal, will also be really interesting. Other attractions for visitors are conch shell market, tribal handicraft, salt and prawn cultivation. Besides, the longest sea-beach, Cox's Bazar and its adjoin areas have a lot of things to see and places deserve visit by the tourists.

Major attraction

Himchari: It is about 32 km. South of Cox's Bazar along the beach, a nice place for picnic and shooting. The famous "Broken Hills" and waterfalls here are rare sights.

Inani: It is about 32 km. South of Cox's Bazar and just on the beach, with the sea to the west and a background of steep hills to the east. Inani casts a magic spell on those who step into that dreamland. It is only half an hour's drive from Cox's Bazar and an ideal place for Sea-bathing and picnic.

Maheskhali: An island off the coast of Cox's Bazar. It has an area of 268 square kilometers. Through the centre of the island and along the eastern coast line rises a range of low hills, 300 feet high; but the coast to the west and north is a lowlying treat, fringed by mangrove jungle. In the hills on the coast is built the shrine of Adinath, dedicated to siva. By its side on the same hill is Buddhist Pagoda.

Ramu: This is a typical Buddhist village, about 16 km. from Cox's Bazar, on the main road to Chittagong. There are monasteries, khyangs and pagodas containing

images of Buddha in gold, bronze and other metals inilaid with precious stones. One of the most interesting of these temples is on the bank of the Baghkhali river. It houses not only interesting relics and Burmes handicrafts but also a large bronze statue of Buddha measuring thirteen feet high and rests on a six feet high pedestal. The wood carving of this khyang is very delicate and refined. The village has a charm of its own. Weavers ply there trade in open workshops and craftsmen make handmade cigars in their pagoda like houses.

Sonadia Island: It is about seven kilometer of Cox's Bazar and about nine square kilometer in area. The western side of the island is sandy and different kinds of shells are found on the beach. Off the northern part of the island, there are beds of window pane oysters. During winter, fisherman set up temporary camps on the island and dry their catches of sea fish.

The Aggameda Khyang, Cox's Bazar: Equally elaborate in plan, elevation and decoration is the Aggameda Khyang near the entrance to the Cox's Bazar town which nestles at the foot of a hill under heavy cover of a stand of large trees. The main sanctuary-cum-monastery is carried on a series of round timber columns, which apart from accommodating the prayer chamber and an assembly hall, also is the repository of a large of small bronze Buddha images-mostly of Burmese origin— and some old manuscripts.

Beyond the main khyang to the south there is an elevated wooden pavilion and a smaller brick temple with a timber and corrugated metal root. Apart from bearing an inscription in Burmese over its entrance the temple contains some large stucco and bronze Buddha images.

6.1.2 Kuakata

Kuakata, locally known as Sagar Kannya (Daughter of the Sea) is a rare scenic beauty spot on the southernmost tip of Bangladesh. Kuakata in Latachapli union under Kalapara Police Station of Patuakhali district is about 30 km in length and 6 km in breadth. It is 70 km from Patuakhali district headquarters and 320 km from Dhaka. At Kuakata excellent combination of the picturesque natural beauty, sandy beach, blue sky, huge expanse of water of the Bay and evergreen forest in really eye-catching.

The name Kuakata have originated from Kua-Well dug on the sea shore by the early Rakhine settlers in quest of collecting drinking water, who landed on Kuakata coast after explied from Arakan by Moughals. Afterwards, it has become a tradition of digging Kua-Well in the neighbourhood of Rakhaine homestead for collection water for drinking purpose and general use.

Major Attractions

Kuakata is one of the rarest places which has the unique beauty of offering the full view of the rising and setting of crimson sun in the water of the Bay of Bengal in a calm environment. That perhaps makes Kuakata one of the world's unique beaches. The long and wide beach at Kuakata has a typical natural setting. This sandy beach has gentle slopes into the Bay of Bengal and bathing there is as pleasant as is walking or diving.

Kuakata is truly a virgin beach-a sanctuary for migratory winter birds, a series of coconut trees, sandy beach of blue Bay, a feast for the eye. Forest, boats plying in the Bay of Bengal with colourful sails, fishing, towering cliffs, surfing waves everything here touches every visitor's heart. The unique customs and costumes of the 'Rakhyne' tribal families and Buddhist Temple of about hundred years old indicate the ancient tradition and cultural heritage, which are objects of great pleasure Kuakata is the place of pilgrimage of the Hindus and Buddhist communities.

Innumerable devotees arrive here at the festival of 'Rush Purnima' and 'Maghi Purnima'. On these two days they take holy bath and traditional fairs are held here. All these additional offers to panoramic beauty make the beach more attractive to the visitors. One should visit Kuakata and discover the lovely grace of Bangladesh.

6.1.3 Teknaf

Southernmost tip of Bangladesh, Teknaf situated on the Naaf river and just at the end of the hilly regions of the district. Mayanmar is on the opposite bank of Naaf river. Wild animals and birds are available there but the most interesting thing is a journey on the river. Wide sandy beach in the backdrop of high hills with green forests is an enchanting scene never to be forgotten.

Major Attraction

One of the major attractions of Teknaf is a cruise by boat or sampan. The town and its surrounding areas provide visitors an opportunity to see the people and culture of the Arakan and Rakhain communities. Teknaf beach is an attractive tourist spot. Besides, there is another beautiful beach at Shahpari dwip at the farthest end of this upazila.

6.2. The prospect of eco-tourism

Bangladesh enjoys a unique position, being easily accessible from many popular destinations in South Asia. This is a real advantage, and particularly true of the

Chittagong Hill Tracts that provides a truly pristine and exciting destination for travelers. According to the Lonely Planet Bangladesh profile, three destinations worth visiting are the Govinda Shiva and Jagannath Temples at Puthia, Rajshahi, St. Martin's Island, and Rangamati and Kaptai Lake in the Chittagong Hill Tracts. The country is home to the Royal Bengal Tigers, leopards, Asiatic elephants, monkeys, langurs, gibbons (the only ape in the subcontinent), otters and mongooses. Reptiles include the sea tortoise, mud turtle, river tortoise, pythons, crocodiles, gharials and a variety of snakes. There are more than 600 species of birds, including the Paradise Flycatcher and the most spectacular kingfishers and fishing eagles (IUCN, 2000). The climate of Bangladesh is subtropical and tropical and there are six main seasons: Grishmo or summer, Barsha or Monsoon, Sharot or fall, Hemanto or fall, Sheit or winter and Bashonto or spring. The Bengal region has a multi-faceted folk heritage, enriched by its ancient animist, Buddhist, Hindu and Muslim roots. Weaving, pottery, and terracotta sculpture are some the earliest forms of artistic expression. The World Heritage Committee has included in the World Heritage List and the Sundarbans (which is in the list of World Heritage Sites).

Major Eco-Tourism Destination in Bangladesh

- The Sundarbans (Largest Mangrove Forest)
- Hill tracts Districts (Bandarban, Rangamati, Khagrachori)
- The Saint Martin's Island (Coral Island)
- Nijhum Deep (Sea queen Island)
- Srimongol Lawachera rain forest & Tangua Hoar

6.2.1 The Shundarbans

Sundarbans is the world biggest mangrove forest. In Bangladesh tourism, Sundarbans plays the most vital role. A large number of foreigners come to Bangladesh every year only to visit this unique mangrove forest. Besides, local tourists also go to visit Sundarbans every year. The area of great Sundarbans is approximately 6000 sq. km.

Major Attractions

Wildlife photography including photography of the famous Royal Bengal Tiger, wildlife viewing, boating inside the forest will call recordings, nature study, meeting fishermen, wood-cutters and honey-collectors, peace and tranquility in the wilderness, seeing the world's largest mangrove forest and the revering beauty. The Sundarbans are the largest littoral mangrove belt in the world,

stretching 80km (50mi) into the Bangladeshi hinterland from the coast. The forests aren't just mangrove swamps though; they include some of the last remaining stands of the mighty jungles, which once covered the Gangetic plain. The Gangetic River Dolphin (Platanista gangeticus) is common in the rivers. No less than 50 species of reptiles and eight species of amphibians are known to occur. The Sundarbans now support the only population of the Estuarine, or Salt-Water Crocodile (Crocodiles paresis) in Bangladesh, and that population is estimated at less than two hundred individuals. Here land and water meet in many novel fashions, Wildlife presents many a spectacle. No wonder, you may come across a Royal Bengal Tiger swimming across the streams or the crocodiles basking on the riverbanks. With the approach of the evening herds of deer make for the darking glades where boisterous monkeys shower Keora leaves from above for sumptuous meal for the former. For the botanist, the lover of nature, the poet and the painter this land provides a variety of wonder for which they all crave.It's beauty lies in its unique natural surrounding. Thousands of meandering streams, creeks, rivers and estuaries have enhanced its charm. Sundarbans meaning beautiful forest is the natural habitat of the world famous Royal Bengal Tiger, spotted deer, crocodiles, jungle fowl, wild boar, lizards, theses monkey and an innumerable variety of beautiful birds. Migratory flock of Siberian ducks flying over thousands of sail boats loaded with timber, golpatta (round-leaf), fuel wood, honey, shell and fish further add to the serene natural beauty of the Sundarbans. This is indeed a land for the sportsmen, the anglers and the photographers with its abundance of game, big and small, crocodile, wild boar, deer, pythons, wild-birds and above all the Royal Bengal Tiger, cunning, ruthless and yet majestic and graceful, For the less adventurously inclined, there are ducks and snipes. herons and coots, yellow-lags and sandpipers. It is also the land for the ordinary holiday makers who desire to rest or wander around at will to refresh their mind and feast their eyes with the rich treasure that nature has so fondly bestowed.

6.2.2 Hill Track

This is the most prospective tourism area of Bangladesh situated at the south east corner of the country. This tourist zone is a combination of hill, lake, forest, river, sea, fountain and many other temples. As Chittagong is the important commercial town of the country the communication and infrastructure facility is good enough up to Chittagong.

Main attraction

The Hills : The Hill Tract is divided into four valleys surrounded by the Feni, Karnaphuli, Sangu (Sankhu) and Matamuhuri rivers and their tributaries. The

ranges or hills of the Hill Tracts rise steeply thus looking far more impressive than what their height would imply and extend in long narrow ridges. The highest peaks on the northern side are Thangnang, Langliang and Khantiang while those on the southern side are Ramu, Taung, Keekradang, Tahjindong (4632 ft, highest in Bangladesh), Mowdok Mual, Rang Tlang and Mowdok Tlang.

The Forests: The valleys of the Hill Tracts are covered with thick-planted forests. The vegetation in semi-evergreen to tropical evergreen dominated by tall teak trees. The natural vegetation can be seen best in the Rain-khyong valleys of the Bandarban district. This district provides valuable wood which is used for various purposes, besides supplying wood and bamboo for the Karnaphuli Paper Mills and the Rayon Mills situated at Chandraghona. Here a tourist may be lucky to see how huge logs of wood are being carried to the plain by the tamed elephants.

Kaptai Lakes: Famous Kaptai Lake, the largest "man-made" lake, spreading over 680 sq. km. of crystal-clean water flanked by hills and evergreen forests lies in the Rangamati Hill District. The lake was formed when the Karnaphuli river dam (153 feet high, 1800 feet long crest) was built for the purpose of hydroelectric power project at Kaptai. The old Rangamati town was submerged under lake water and a new town had to be built later. The lake is full of fish and provides facilities for cruising, swimming and skiing. There are also facilities for angling and short trip by Sampan, local name for country boats.

Rangamati: If you don't visit Rangamati you will not discover a big portion of natural beauties of Bangladesh. From Chittagong a 77 km. road amidst green fields and winding hills will take you to Rangamati. It is also connected by waterway from Kaptai. Parjatan holiday complex is the best place to stay in Rangamati. There are other hotels in Rangamati where you can stay. Boating is the prime attraction in Rangamati. You can go to Kaptai and also by Karnaphuli River you can go deep in side the hill areas where on the way you will find lots of natural waterfalls. If you wish you can take shower in the waterfall or you can swim in the river. By boat you can visit the tribal villages, King Chakma's (tribal) Palace that is called Chakma Rajbari, Rajbonbihar pagoda, Tribal museum etc. You can also enjoy the tribal handmaid crafts if you go for shopping in the local market.

Bandarban: Lots of hills and hilly areas, waterfalls, River Sangu, Lakes and the tribal culture are the main attraction of Bandarban. You can go to Bandarban from Chittagong by road. Chimbuk hill is one of the major attractions of Bandarban. You can enjoy the journey to Chimbuk Hill by jig jag hilly roads. It's the third

highest mountain in Bangladesh of approx. 3000 ft height. Reach Chimbuk by jeep or microbus from Rangamati. A beautiful Rest house is there on the top of Chimbuk hill. If you are lucky then you can feel the clouds touching your whole body. If you take the prior permission from Roads and Highway Department you can spent a night in the rest house on the top of Chimbuk hill. If you stay there a night, you will remember your stay for your whole life with the calmness of nature hearing sometimes the wild animals squalling.

Khagrachari : Khagrachhari is the natural wild beauty of Bangladesh. Here you can visit the tribal lifestyle of Chakmas' in Khagrachari. You can also visit Alutila hill. Approximately 100 meters long a very dark Cave is the mysterious beauty of Alutila hill.

Matai Pukhiri Lake-It is a lake at 1500 feet above the ground at Nunchhari in Khagrachari. According to Tripura tale, water of this lake is never up or it turns dirty that is why it is called Lake of God.

Patenga sea beatch: This sea beatch is in the Chittagong district. The main attraction of this sea beach is sand and sun. The sea beach is well communicate with the Dhaka and Chittagong.

6.2.3 Nijhum deep

The Nijhum Deep, an island with forest and deep blue water of the Bay of Bengal in the south of Bangladesh attracts hundreds of tourists during the winter season and many are interested to visit the island.

Major attraction

Four decades ago, the island was under deep water. But, the alluvial island surfaced over the period and in 1972 the forest department began afforestation programmes in the island. Later, the government declared the Nijhum Deep as a 'national garden'. The Bay waves that irrigate the forest more than once a day helped grow quickly the planted Keowra, Geowra, Bain and Kakra and other valuable trees. Wild animals -the spotted deers, monkey, buffalo, snakes and 35 species of birds— made the island attractive for the tourists. In the winter, thousands of guest birds migrate to this island to add more to its beauty. In 1978, four pair of spotted deers were released in the forest and now the number of deer has increased to around 6000. The visitors can easily watch these attractive animal. The island has 20 kms long sandy and grassy beach that may attract thousands tourists annually if facilities and services are made available there.

Oysters of various nature and snails are can be easily seen in the island. The tourists in the island can enjoy sunrise and sunset from the island. To pay a visit in the Nijhum Deep is a bit adventurous and enjoyable. Tourists from Dhaka can avail the motor launches plying between Sadarghat and Hatia Tamorddi to reach the island. From Chittagong tourists can avail sea-truck to go Hatia. From Hatia the tourist can get transport to go Jahajmara Bazar and from there, they can go to Amtalighat or Katakhalighat by rickshaw. Boats are available there to reach the island.

6.2.4 Srimongol

Srimongal is famous for the largest tea gardens of the world covered by lush green carpet. One can have a look into the spectacular tea processing at Tea Research Institute. Bangladesh produces and exports a large quantity of high quality tea every year. Most of the tea estates are in Sremongol. It is called "The land of two leaves and a bud". It is also called camellia, green carpet or Tea Mountain. There are a lot of tea estates including the largest one in the world. The terraced tea garden, pineapple, rubber and lemon plantations from a beautiful landscape. It is known as the tea capital in Bangladesh. Just offer entering into the tea estates the nice smells and green beauty will lead you many kilometers away.

Lawacherra Rain Forest: Lawacherra Rain Forest is one of the important & well-reserved forests in Bangladesh. Here visitor may see gibbons swimming through the trees and birds like bee-eater owls parrot. It is a good habitant of Deer, leopard, wild chicken, squirrel, and python. The terrain is hilly and vegetation is fairly thick. Only one rare Chloroform tree of Asia is here and a prime attraction of tourist. Kasia & Manipuri is two important ethnic-tribe live here. Manipuri is famous for its rich culture especially for dancing & singing. They are also famous for their traditional weaving. You can buy their handicrafts exquisitely woven woolen. Shawls, Sharee, Napkin, bed-cover and some should a bags. It is known as colorful community. Kasia tribe is famous for their betel leaf cultivation. They make their villages high on hilltop in deep forest and so far from town. It is like " a Piece of paradise". Certainly it will please you. Pineapple cultivation in numerable rows of Pineapple cultivation covering largest area is very amazing and fascinating. Largest quantity of pineapple grown here of Bangladesh. It is also sweetest and best quality. Pineapple is really a greatest offer of summer but now it is cultivated all the year round. So, you can enjoy the juicy summer fruit in any time coming to its real field. Just after entering into pineapple plantation. It can be highlight for you in Sremongol.

Madhabkunda: Madhabkunda surrounded by lush tea estates and full of waters lilies is a unique one. Magurchara ruined gas & Oil reserved field, which was blasted while digging 3 years ago and was burning an 500-feet height for more than 3 months. A lot of burnt trees now carrying the symbols of digester. Ever where a lot of rubber & lemon plantation form a beautiful landscape. And you can have a visit to Madhobkundo water fall.

6.3. Prospect of Cultural & Historical tourism

Bangladesh is a country considerably rich in cultural and archaeological wealth, especially of the medieval period both during the Muslim and pre-Muslim rules, though most of it is still unexplored and unknown. In archaeological fieldwork and research this area was very much neglected for a long time for various reasons, not the least of which are its difficult geography and climate and remoteness from the main centers of the subcontinent.

Major areas of the cultural & historical Tourism

- Culture & Cultural activities
- Archaeological places

6.3.1 Culture and Cultural activities

The multi dimensional cultural heritage of Bangladesh encompasses within itself the cultural diversity of different social and religious groups of Bangladesh. Bangladesh has a composite culture, in which the influences of Hinduism, Jainism, Buddhism, Christianity and Islam have been assimilated. It is manifested in various forms, including music, dance and drama; arts and crafts; folklore and folktales; literature, philosophy, fairs and festivals as well as in a distinct cuisine and culinary tradition. The indigenous communities of Bangladesh have their own culture and tradition full of colorful diversity. The reverie landscape and the monsoon climate are intimately related to the cultural practices of this country. This site is an endeavour to focus on the country's noteworthy cultural features including the lifestyles and culture of the indigenous people.

Major attraction of cultural tourism

Baishakhi Mela: Baisakhi Mela is the mirror of our traditional culture. It is presumed that it was started about 600 years back. The number of Baisakhi Melas celebrated in different parts of Bangladesh is around 300-350.

Though Baisakhi Melas are organised in a planned way in almost all cities of the country, originally they were very much rural based. Traditional handicrafts, hand-made cakes, special kinds of food stuff, sweets, potteries, bangles, pitchers and cane products are the main exhibits.

The Baisakhi Mela is an ancient form of Bengali folk festival that continues to thrive in the modern age. It continues for three days, one week or even as long as one month.

Dubla Rash Mela: Dubla Rash Mela is not only a big fair for Bagerhat, it is undoubtedly one of the biggest fairs in the country. At the centre of the festival are twenty thousand temporary fishermen who are engaged in catching and drying fish on Dubla and nearby islands. In the Bangla month of Agrahayan every year, the fair continues for 5-7 days during full moon time.

Dubla island stands on the Bay of Bengal and is a part of the Sundarban Forest. The fair on the Dubla island was started in 1923 by Hari Bhajan, a disciple of Thakur Hari Chand. The life of Hari Bhajan was very extraordinary. During his stay in Sundarbans for twenty four years, he lived on the fruits of the forest. He had many disciples in nearby villages. One of his notable works was to start the Dubla Rash Mela during the Rash Purnima. To celebrate the occasion and keep alive the memory of Thakur Hari Chand, the devotees, especially the fishermen of the Sundarbans, organise this five-day fair.

This has become a grand occasion for many foreign tourists visiting the Sundarbans and people come from India as well. Around 40-50 thousand people join the celebrations every year. Handicrafts and precious wooden items are put on sale.

Tribal life: The inhabitants of the Hill Tracts are mostly tribal. Life of the tribal people is extremely fascinating. Majority of them are Buddhists and the rest are Hindus, Christians and Animists. Despite the bondage of religion, elements of primitiveness are strongly displayed in their rites, rituals and everyday life. The tribal families are matriarchal. The women are more hardworking than the males and they are the main productive force Boats that visit the villages leave from Rangamati. Bring your swimming gear because you can take a plunge anywhere. The tribal people are extremely self-reliant, they grow their own food, their girls weave their own clothes and generally speaking, they live a simple life. Each tribe has its own dialect, distinctive dress and rites and rituals. The common feature is their way of life, which still speaks of their main occupation. Some of them take pride in hunting with bows and arrows. Tribal women are very skilful in making

beautiful handicrafts. Tribal people are generally peace loving, honest and hospitable. They usually greet a tourist with a smile.

Manipuri Dance: An interesting feature of Sylhet region is the aboriginal tribes such as the Tipperas, the Monipuris, Khasis and Garos who still live in their primitive ways in the hills, practising their age-old rites, rituals, customs and traditions. During festivals such as, Rash Leela (Full-moon night in February) and Doljatra, the attractive young girls dressed in colorful robes, dance with the male members of their choice & love. The Monipuris perform their famous dance, based on allegorical love themes of the ancient mythology.

6.3.2 Archaeological places

The earlier history of Bangladesh reveals that Buddhism received royal patronage from some important ruling dynasties like the great Pala rulers, the Chandras and the Deva Kings. Under their royal patronage numerous well-organized, self-contained monasteries sprang up all over the country.

Major attraction of Archaeological places

Paharpur - Largest Buddhist center of learning: Paharpur is a small village 5 km. west of Jamalganj in the greater Rajshahi district where the remains of the most important and the largest known monastery south of the Himalayas has been excavated. This 7th century archaeological find covers approximately an area of 27acres of land. The entire establishment, occupying an uadrangular court, measuring more than 900 ft. externally on each side, has high enclosure- walls about 16 ft. in thickness and from 12 ft. to 15 ft. height. With laborate gateway complex on the north, there are 45 cells on the north and 44 in each of the ther three sides with a total number of 177 rooms. The architecture of the pyramidal ruciform temple is profoundly influenced by those of South-East Asia, especially Myanmar and Java. A small site-Museum built in 1956-57 houses the representative collection of objects recovered from the area. The excavated findings have also been preserved at heVarendra Research Museum at Rajshahi. The antiquities of the museum include terracotta plaques, images of different Gods and Goddesses, potteries, coins, manscriptions, ornamental bricks and other minor clay objects.

Mahasthangarh-The oldest archaeological site: The oldest archaeological site of Bangladesh is on the western bank of river Karatoa 18 m. north of Bogra town beside Bogra-Rangpur Road. The spectacular site is an imposing landmark in the area having a fortified, oblong enclosure measuring 5000 ft. by 4500ft.with an

average height of 15 ft. from the surrounding paddy fields. Beyond the fortified area, other ancient ruins fan out within a semicircle of about five miles radius. Several isolated mounds, the local names of which are Govinda Bhita Temple, Khodai Pathar Mound, Mankalir Kunda, Parasuramer Bedi, Jiyat Kunda etc. surround the fortified city

This 3rd century archaeological site is still held to be of great sanctity by the Hindus. Every year (mid-April) and once in every 12 years (December) thousands of Hindu devotees join the bathing ceremony on the bank of river Karatoa. A visit to the Mahasthangarh site museum will open up for you wide variety of antiquities, ranging from terracotta objects to gold ornaments and coins recovered from the site. For visiting Paharpur and Mahasthangarh, the visitors may enjoy the hospitality of Parjatan Motel at Bogra. Mahasthangarh and Paharpur are only 18 km. and 75 km.respectively from Bogra town.

Rajshahi is famous for pure silk. Silk processing industry of the Sericulture Board is just ten minutes walk from Parjatan Motel at Rajshahi. Besides the Sericulture Board, a visit to Varendra Research Museum at the heart of the City for archaeological finds, would be most rewarding.

Maimamati: An isolated low, dimpled range of hills, dotted -with more than 50 ancient Buddhist settlements of the 8th to 12th century A.D. known as Mainamati-Laimai range are extended through the centre of the district of Comilla.

Salban Vihara almost in the middle of the Mainarnati-Lalmai hill range consists of 115 cells, built around a spacious courtyard with cruciform temple in the centre facing its only gateway complex to the north resembling that of the Paharpur Monastery.

Kotila Mura is situated on a flattened hillock, about 5 km north of Salban Vihara inside the Comilla Cantonment is a picturesque Buddhist establishment. Here three stupas are found side by side representing the Buddhist "Trinity" or three jewels i.e. the Buddha, Dharma and Sangha.

Charpatra Mura is an isolated small oblong shrine situated about 2.5 km. northwest of kotila Mura stupas. The only approach to the shrine is from the East through a gateway which leads to a spacious hall.

Mainamati Museum has a rich and varied collection of copper plates, gold and silver coins and 86 bronze objects. Over 150 bronze statues have been recovered mostly from the monastic cells, bronze stupas, stone sculptures and hundreds of terracotta plaques each measuring on an average of 9" high and 8" to 12" wide.

Mairiamati is only 114 km. from Dhaka City and is just a day's trip by road on way to Chittagong.

Lalbagh Fort: The capital city Dhaka predominantly was a city of the Mughals. In hundred years of their vigorous rule successive Governors and princely Viceroys who ruled the province, adorned it with many noble monuments in the shape of magnificent places, mosques, tombs, fortifications and 'Katras' often surrounded with beautifully laid out gardens and pavilions. Among these, few have survived the ravages of time, aggressive tropical climate of the land and vandal hands of man. But the finest specimen of this period is the Aurangabad Fort, commonly known as Lalbagh Fort, which, indeed represents the unfulfilled dream of a Mughal Prince.

It occupies the south western part of the old city, overlooking the Buriganga on whose northern bank it stands as a silent sentinel of the old city. Rectangular in plan, it encloses an area of 1082' by 800' and in addition to its graceful lofty gateways on south-east and north-east corners and a subsidiary small unpretentious gateway on north, it also contians within its fortified perimeter a number of splendid monuments, surrounded by attractive garden. These are, a small 3-domed mosque, the mausoleum of Bibi Pari the reputed daughter of Nawab Shaista Khan and the Hammam and Audience Hall of the Governor. The main purpose of this fort, was to provide a defensive enclosure of the palacial edifices of the interior and as such was a type of palace-fortress rather than a seige fort.

Sonargaon: About 27 km. from Dhaka, Sonargaon is one of the oldest capitals of Bengal. It was the seat of Deva Dynasty until the 13th century. From then onward till the advent of the Mughals, Sonargaon was subsidiary capital of the Sultanate of Bengal. Among the ancient monuments still intact are the Tomb of Sultan Ghiasuddin (1399-1409 A. D), the shrines of Panjpirs and Shah Abdul Alia and a beautiful mosque in Goaldi villaae.

Shatt-Gumbujj Mosque: In mid-15th century, a Muslim colony was founded in the inhospitable mangrove forest of the Sundarbans near the sea coast in the Bagerhat district by an obscure saint-General, named Ulugh Khan Jahan. He was the earliest torch bearer of islam in the South who laid the nucleus of an affluent city during the reign of Sultan Nasiruddin Mahmud Shah (1442-59), then known as 'khalifatabad' (present Bagerhat).

Khan Jahan adorned his city with numberous mosques, tanks, roads and other public buildings, the spectacular ruins of which are focused around the most

imposing and largest multidomed mosques in Bangladesh, known as the Shait-Gumbuj Masjid (160' x 108'). The stately fabric of the monument, serene and imposing, stands on the eastern bank of an unusually vast sweet-water tank, clustered around by the heavy foliage of a low-laying countryside, characteristic of a sea-coast landscape.

The mosque roofed over with 77 squat domes, including 7 chauchala or four-sided Pitched Bengali domes in the middle row. The vast prayer hall, although provided with 11 arched doorways on east and 7 each on north and south for ventilation and light, presents a dark and sombre appearance inside. It is divided into 7 longitudinal aisles and 11 deep days by a forest of slender stone columns, from which springs rows of endless arches, supporting the domes. Six feet thick, slightly tapering walls and hollow and round, almost detached corner towers, resembling the bastions of fortress, each capped by small rounded cupolas, recall the Tughlaq architecture of Delhi. The general appearance of this noble monument with its stark simplicity but massive character reflects the strongth and simplicity of the builder.

Kantanagar Temple: The most ornate among the late medieval temples of Bangladesh is the Kantanagar temple near Dinajpur town, which was built in 1752 by Maharaja Pran Nath of Dinajpur. The temple, a 50' square three storyed edifice, rests on a slightly curved raised plinth of sandstone blocks, believed to have been quarried from the ruins of the ancient city of Bangarh near Gangharampur in West Bengal. It was originally a navaratna temple, crowned with four richly ornamental corner towers on two storeys and a central one over the third storey.

Unfortunately these ornate towers collapsed during an earthquake at the end of the 19th century. In spite of this, the monument rightly claims to bethe finest extant example of its type in brick and terracotta, built by bengali artisans. The central cells is surrounded on all sides by a covered varendah, each pierced by three entrances, which are separated by equally ornate dwarf brick pillars, Corresponding to the three delicately causped entrances of the balcony, the sanctum has also three richly decorated arched openings on each face. Every inch of the temple surface is beautifully embellished with exquisite terracotta plaques, representing flora fauna, geometric motifs, mythological scenes and an astonishing array of contemporary social scenes and favourite pastimes. Besides, there are many other monuments which incite tourist interest.

AhsanManzil: On the bank of river Buriganga in Dhaka the Pink majestic Ahsan Manzil has been renovated and turned into a museum recently. It is an epitome of

the nation's rich cultural heritage. It is the home of Nawab of Dhaka and a silent spectator to many events.

Today's renovated Ahsan Manzil a monument of immense historical beauty. It has 31 rooms with a huge dome atop which can be seen from miles around. It now has 23 galleries in 31 rooms displaying of traits, furniture and household articles and utensils used by the Nawab.

World War II Cemetery: In a well-preserved cemetery at a quiet and picturesque place within the city lie buried in eternal peace over 700 soldiers from British, Australia, Canada, New Zealand, India, Myanmar, East and West Africa, The Netherlands and Japan who laid down their lives on the Myanmar front during the World War II.

6.4. Religious tourism

Bangladesh is a multi religious country with huge number of religious structure. More over the 2nd largest assembly of Muslim held here in each year. More over the other historical religious structure found across the country. If we implement the tourism philosophy in this area like India it may be a high potential area to attract the tourist.

6.4.1 Tongi Estema

In each year more than 1 million religious Muslim assemble in tjis estema and this is second largest Muslim assemble in the word. The estema held on the bank of Turag river in Tongi under the district of Gazipur. So the place has special religious values to the all Muslim of the word.

6.4.2 Star Mosque

A very beautiful mosque of the city is situated at Mahuttuly on Abul Khairat Rd; just west of Armanitola Govt. High School. Architecturally faultless (Mughal style) is a five-dome mosque with hundreds of big and small twinkling stars as surface decorations. The stars have been created by setting pieces of chinaware on white cement. Seen from the front and from far it looks as if shining above the surface of the earth.

The inside of it is even more beautiful that the outside, lovely mosaic floor and excellent tiles with many floral patterns set on the walls, are all in complete harmony. The sitara Masjid was built originally with three domes in early 18th century by Mirza Ghulam Pir, a highly respectable Zamindar of Dhaka.

6.4.3 Baitul Mukarram Mosque

Baitul Mukarram Mosque is situated at Purana Paltan east of Bangladesh Secretariat and north of Dhaka Stadium. Largest Mosque in the city, three storied and built after the pattern of the Kaba Sharif. Very beautiful and costly decorations in the interior. Long lawn, garden and rows of fountains to the south and east. The mosque is on a very high platform. Lovely flight of stairs lead to it; from the south, east and north. On the east is a vast varanda which is also used for prayer and Eid congregation. Below in the ground floor is a shopping centre.

6.4.4 Chhota Sona Mosque:

One of the most graceful monument of the Sultanate period is the Chhota Sona Masjid or Small Golden Mosque at Gaur in Rajshahi Built by one Wali Muhammad during the reign of Sultan Alauddin Husain Shah (1493-1519). Originally it was roofed over with 15 gold-gilded domes including the 3 Chauchala domes in the middle row, from which it derives its curious name.

6.4.5 Mosque of Baba Adam

Of a slightly later date the elegant 6-domed mosque (43' x 36') of Baba Adam in Rampal near Dhaka was erected by one Malik Kafur during the reign of the last llyas Shahi Sultan, Jalauddin Fateh Shah in 1483 A.D. It displays the same characterstic features of the period such as the faceted octagonal turrets at 4 corners, the curved cornice, the facade and 3 mihrabs relieved richly with beautiful terracotta floral and hanging patterns.

6.4.6 The Shrine of Hazrat Shah Jalal

Among the several places of historical interest in Sylhet town is the shrine of Saint Hazrat Shah Jalal. Even today, more than six hundred years after his death, the shrine is visited by innumerable devotees of every caste and creed, who make the journey from far away places. Hazrat Shah Jalal is credited with the help extended to the Muslim army which conquered Sylhet in 1303 A.D.

6.4.7 Shrine of Sultan Bayazid Bostami

Situated on a hillock in Nasirabad, about 6 km. to the north-west of Chittagong town, this shrine attracts a large number of visitors and pilgrims. At its base is a large tank with several hundred tortoises. Tradition has it that these animals are the descendants of the evil spirits (genii) who were cast into this shape because they incurred the wrath of the great saint who visited the place about 1,100 years ago.

6.4.8 Shrine of Shah Amanat

The shrine of Shah Amanat is another place of religious attraction. Located in the heart of the town, the shrine is visited by hundreds of people everyday who pay homage to the memory of the saint who lived in the 19th century.

6.4.9 Tomb of Sultan Bayazid Bostami : Situated on a hillock at Nasirabad, about 6 km. to the north-west of Chittagong town, this shrine attracts a large number of visitors and pilgrims. At its base is a large tank with several hundred tortoises. Tradition has it that these animals are the descendants of the evil spirits (genii) who were cast into this shape because they incurred the wrath of the great saint who visited the place about 1100 years age.

6.4.10 The Shrine of Shah Amanat: It is another place of religious attraction, located in the heart of the town, the shrine is visited by hundreds of people everyday who pay homage to the memory of the saint.

7.0 Present status of our Tourism business

As per The Travel & Tourism Competitiveness Report 2009 Bangladesh is ranked 25th in the region and 129th overall, down two places since last year. As with India, Bangladesh is well assessed for its natural resources (ranked 40th) and cultural resources (65th), with many World Heritage sites, both natural and cultural in the country. Bangladesh also has a reasonable ground transport infrastructure (ranked 60th). However, some aspects of its tourism infrastructure remain highly underdeveloped (ranked 125th), with very few hotel rooms per capita by international comparison and low ATM penetration as well as rental car facilities. Further, despite government and industry efforts to promote the country abroad (Bangladesh is ranked 62 with regard to tourism fair attendance) but the exposure given to recent promotional campaigns, the assessment of marketing and branding to attract tourists remains below average (ranked 124th). Another area of concern is the policy environment, ranked 108th, with much time and cost for starting a business, bilateral Air Service Agreements that are not assessed as open, and visas required for most visitors. The Travel and Tourism Competitiveness index is given bellow in details-

The Travel & Tourism (T&T) Competitiveness Index in detail of Bangladesh

1st pillar: Policy rules and regulations	
1.01 Prevalence of foreign ownership93	□
1.02 Property rights114	□
1.03 Business impact of rules on FDI56	□

1.04 Visa requirements*	101	□
1.05 Openness of bilateral Air Service Agreements*		
1.06 Transparency of government policymaking		
1.07 Time required to start a business*		
1.08 Cost to start a business*		
2nd pillar: Environmental sustainability		
2.01 Stringency of environmental regulation	125	□
2.02 Enforcement of environmental regulation	111	□
2.03 Sustainability of T&T industry development	126	□
2.04 Carbon dioxide emissions*	16	□
2.05 Particulate matter concentration*	128	□
2.06 Threatened species*	106	□
2.07 Environmental treaty ratification*		
3rd pillar: Safety and security		
3.01 Business costs of terrorism		
3.02 Reliability of police services		
3.03 Business costs of crime and violence		
3.04 Road traffic accidents*	121	□
4th pillar: Health and hygiene		
4.01 Physician density*	106	П
4.02 Access to improved sanitation*		
4.03 Access to improved drinking water*		
4.04 Hospital beds*		
4.04 Hospital ocus	123	
5th pillar: Prioritization of Travel & Tourism		
5.01 Government prioritization of the T&T industry	124	□
5.02 T&T government expenditure*	95	□
5.03 Effectiveness of marketing and branding	124	□
5.04 T&T fair attendance*	62	□
6th pillar: Air transport infrastructure		
6.01 Quality of air transport infrastructure		
6.02 Available seat kilometers, domestic*	58	\square
6.03 Available seat kilometers, international*	61	□
6.04 Departures per 1,000 population*		
6.05 Airport density*		
6.06 Number of operating airlines*		
6.07 International air transport network	84	□
7th pillar: Ground transport infrastructure		
7.01 Quality of roads	93	
7.02 Quality of railroad infrastructure		

7.03 Quality of port infrastructure121	□
7.04 Quality of ground transport network100	
7.05 Road density*	′ □
INDICATOR RANK/133	
8th pillar: Tourism infrastructure	_
8.01 Hotel rooms*	
8.02 Presence of major car rental companies*	²□
8.03 ATMs accepting Visa cards*120)
9th pillar: ICT infrastructure	
9.01 Extent of business Internet use	2□
9.02 Internet users*	2□
9.03 Telephone lines*	·□
9.04 Broadband Internet subscribers*127	′
9.05 Mobile telephone subscribers*	ō□
10th pillar: Price competitiveness in the T&T industry	
10.01 Ticket taxes and airport charges*	, ,
10.02 Purchasing power parity*	
10.03 Extent and effect of taxation	
10.04 Fuel price levels*	
10.05 Hotel price index*	· ⊔
11th pillar: Human resources	
11.01 Primary education enrollment*93	·□
11.02 Secondary education enrollment*	□
11.03 Quality of the educational system107	′
11.04 Local availability of research and training services130	
11.05 Extent of staff training	
11.06 Hiring and firing practices29	
11.07 Ease of hiring foreign labor124	
11.08 HIV prevalence*	
11.09 Business impact of HIV/AIDS	
11.10 Life expectancy*	
12th pillar: Affinity for Travel & Tourism	
12.01 Tourism openness*	, ,
12.02 Attitude of population toward foreign visitors	, u
12.02 Attitude of population toward foreign visitors	
12.03 Extension of business trips recommended116	, ப
13th pillar: Natural resources	
13.01 Number of World Heritage natural sites*40	
13.02 Protected areas*	
13.03 Quality of the natural environment	
13.04 Total known species*	ŀ□

14th pillar: Cultural resources

· · · · · · · · · · · · · · · · · · ·	
14.01 Number of World Heritage cultural sites*65	□
14.02 Sports stadiums*	□
14.03 Number of international fairs and exhibitions*101	□
14.04 Creative industries exports*64	□

Source: The Travel & Tourism Competitiveness Report 2009 © 2009 World Economic Forum

If we analyze the T&T Index of Bangladesh we will observed that we have comparative advantage only in 10 areas among the 73 different tourism indicator. So we have a lot to develop this sector. In comparison to Bangladesh India have only 13 more advantage. But their overall ranking is 61. In various areas where Bangladesh is not enjoying the competitive advantage is recoverable, if we give minimum attention.

8.0 Comparative position of tourism with three counties (India, Malaysia & Thailand) in Asia

India is ranked 11th in the region and 62nd overall, in 2008, up three places since last year. As with China, India is well assessed for its natural resources (ranked 14th) and cultural resources (24th), with many World Heritage sites, both natural and cultural, rich fauna, and strong creative industries in the country. India also has quite a good air transport network (ranked 37th), particularly given the country's stage of development, and a reasonable ground transport infrastructure (ranked 49th). However, some aspects of its tourism infrastructure remain somewhat underdeveloped (ranked 73rd), with very few hotel rooms per capita by international comparison and low ATM penetration. Further, despite government and industry efforts to promote the country abroad (India is ranked 1st with regard to tourism fair attendance) and the exposure given to recent promotional campaigns, the assessment of marketing and branding to attract tourists remains average (ranked 53rd). Another area of concern is the policy environment, ranked 108th, with much time and cost for starting a business, bilateral Air Service Agreements that are not assessed as open, and visas required for most visitors.

Malaysia is ranked 7th regionally and 32nd overall, in 2008, with its rich natural resources (ranked 21st) and good ground transport infrastructure (ranked 28th). The country also benefits from excellent price competitiveness (ranked 4th), with low comparative hotel and fuel prices, low ticket taxes and airport charges, very competitive hotel prices, and a favorable tax regime. Malaysia's policy environment is assessed as highly conducive to the development of the sector (ranked 9th), and the country is prioritizing Travel & Tourism; it markets the country at many international tourism fairs (ranked 1st) and also has an excellent

evaluation for its destination-marketing campaigns (ranked 12th). With regard to weaknesses, health and hygiene indicators lag behind those of many other countries in the region, with, in particular, a low physician density (placing the country 94th).

Thailand is ranked just behind Malaysia in the region at 8th place and 39th overall, in 2008, up three places since last year. It is endowed with rich natural resources and a strong affinity for Travel & Tourism (ranked 24th and 22nd, respectively), with a very friendly attitude of the population toward tourists (ranked 13th). This is buttressed by the sector's strong prioritization by the government (ranked 12th) with, similar to Malaysia, excellent destination-marketing campaigns and good price competitiveness. However, some weaknesses remain: despite the prioritization of the sector by the government, some aspects of the regulatory environment —such as stringent foreign ownership restrictions, visa restrictions for many travelers, and the long time required for starting a business in the country—are not particularly conducive to developing the sector (ranked 62nd). In addition, given the importance of the natural environment for the country's tourism, environmental sustainability should be a greater priority (ranked 99th).

9.0 Constraints and Challenges of Tourism Sector of Bangladesh

From the findings of the present study, it is seen that tourism sector of Bangladesh has been

facing multisided problems. It mainly lacks proper planning, infrastructure facilities etc. However, according to the findings of this study and previous researches, the following are main barriers of tourism development of Bangladesh:

1. Inadequate Infrastructure Facilities: Existing infrastructure facilities is not modern and developed in Bangladesh. For this reason in spite of the presence of many tourism potentials, Bangladesh's share of income from tourism is very poor. With poor infrastructure, little marketing sense and direction, and a national carrier too busy serving the labor traffic, tourism potentials of Bangladesh is far remained unexploited. One of the key aspects of infrastructure is the availability of monetary funds during travel. Even until recently, the ATMs outside Dhaka aren't connected to the international network, and traveler's cheques are very difficult to cash. Due to counterfeiting, many stores accept only "beautiful" (crisp and clean) bills.

- 2. Lack of Modern and Adequate Recreation Facilities: Although Cox's Bazar Spot is treated as a tourism capital of Bangladesh, its recreation facilities yet to developed. Existing recreation facilities are not modern and sufficient according to the demand of the tourists especially for foreign tourists. For example, boating, wind surfing, horse racing and other modern playing instruments with local recreation facilities etc. are not available in the Cox's Bazar and other tourism spots of Bangladesh.
- 3. Negative Impact of Security and Safety: Social security and safety have great impact on tourism development in any region like Bangladesh. Security system is yet to develop in the main cities of all tourists spots of Cox's Bazar. The condition of security and safety are very disappointing in the roadsides for tourists coming especially from Chittagong to Cox's Bazar and other spots. Due to kidnapping and hijacking issues, foreign tourists are reluctant to stay longer period in Cox,s Bazar (Amin, 2006, Siddique, 2006). This issue leads to loss huge foreign currencies of the country. Moreover, due to lack of sufficient security foreign tourists seldom stay in the beach area after evening time to enjoy the rare natural beauty (during sunset) without any anxiety.
- 4. Country's Poor Image: Bangladesh, whose image abroad tends to revolve round its being one of the poorest countries in the world and prone to natural calamities like flood and cyclone, is not an obvious tourist destination. The tourism industry has also suffered significantly due to the bomb attacks in the year 2005. In addition to this, negative image of the country in the international tourism market has not helped change the view of the West for Bangladesh
- 5. Lack of trained Human Resources in different Parjatan Sector: Trained human resources play vital role to develop tourism in any region like Bangladesh. In this regard Bangladesh Parjatan Corporation has established National Hotel Tourism Training (NHTTI) in 1974. A two-year diploma course on Hotel-Management has been started in 2002. However, the above initiatives of BPC are not sufficient to meet needs of all tourist spots in the country. Besides, some recent research findings (Siddiqui 2006, Rahman 2007, and Parveen 2008) prove that still there are acute shortage of tourism experts in most hotels and motets of tourist areas in Bangladesh.
- 6. Visa Problems: Visa policy of government is one of the main reasons behind the foreign tourists' unwillingness to visit Bangladesh. If the government lifts visa restrictions for visitors from Europe, USA and other

- western countries, around 20 lakh foreign tourists will come to Bangladesh in a couple of years. Now it requires about 15 to 20 days for a Bangladeshi visa even for a European citizen (The Daily Star, May 29, 2008).
- 7. Lack of FDI in Tourism Industry: A good presence of FDI is seen in many sectors (like IT, Garments, Medicine, Communications etc.) of Bangladesh except tourism. Government should provide special facilities to both local & foreign investors to invest in this industry considering its economic growth and development. For instance, Sri Lanka encourages, 100 % FDI in the tourism sector development of their country. Government may give Tax holiday to more and more development of tourism industry and set up hotels and restaurants in the tourist areas all over the country. As a result foreign investors will be interested to invest in this industry.
- 8. Lack of Proper and Updated Information: Cox's Bazaar definitely needs to be advertised properly on the popular tourist related web sites. There should be coordination of information and services between these websites and popular hotels, restaurants, shops and travel services of Cox's Bazaar and other tourist spot s of Bangladesh. We need to take pragmatic steps to develop and update our websites to increase international tourist flow. For instance, Cambodia has its tourism websites in eight languages; Thailand, Malaysia, Indonesia in 12 languages, and we have ours only in one language, English.
- 9. Proposed investment offers to develop Cox's Bazar and nearest tourism sites
 - Ras Al Khaimah royal family is interested to invest US\$2 billion to develop Sonadia Island as ourist resort as well as Cox's Bazar airport to facilitate movement of tourists
 - China is also interested in building a sort of China Town near Cox's Bazar for tourist coming from unming to use the beach as the nearest beach for them, which is 6,500 kilometers away (The Bangladesh Monitor, July 1 2008).
 - Bangladesh and China agreed to open a road link between the two
 countries through Myanmar to ease transportation of goods for
 further expanding bilateral trade. The two countries have also
 decided to swap air flights by their national airlines to boost business
 and tourist exchanges. The road link will connect Bangladesh with

China's southwestern Yunnan province, which is the closest in proximity between the two countries (SDNP, 2004).

• UNESCO like invest for Sundarban to protect it as world Heritage.

Like the above many other tourism companies is interested to invest in Bangladesh tourism sector but all of them stepped back due to law and order situation, huge social constraints and negative image.

10. Review of existing government initiatives and investment opportunities for the tourism development

Bangladesh possesses tremendous tourism potential, which has yet to be exploited. The Industrial Policy of 1999 included tourism as an industry and identified it as thrust Sector. In the national tourism policy framed in 1992, tourism's contribution to poverty alleviation has also been recognized. But in the later draft policy 2003-2007, tourism was not included as a thrust sector. All the governments of Bangladesh-past and present-transmitted strong signals about their seriousness to put tourism development on right-track and to secure for the country some benefits of current worldwide tourism boom. But all the promises and assurances were contradicted by not providing adequate funds for the development of tourism infrastructure and promotion of Bangladesh to dispel its negative image (Siddique 2006). Following the independence of Bangladesh, tourism development plans were prepared with foreign assistance. The latest five-year development plan and other perspective plans on tourism development were prepared with assistance from the World Tourism Organization (WTO) and the United Nations Development Programme (UNDP).

South Asian Sub regional Economic Cooperation (SASEC) Domestic private sector investments in the development of this industry have been made in an uncoordinated manner, so they have not achieved any remarkable progress (Khan 2001).

As recommended in keynote paper, Mahbub Jamil, Special Assistant to Chief Adviser, incharge of the Ministry of Civil Aviation and Tourism announced that law concerning formation of National Tourism Authority (NTA) is in final stage and the authority is likely to come next month (July).

He also told that the proposed NTA would be powerful and independent. In drafting the concerned law, structures of national tourism organizations of Malaysia, Singapore, Thailand, Nepal and Sri Lanka have been studied. The proposed NTA would perform the job of regulator and facilitator.

- The business in tourism industry will be left for businessmen.
- The Special Assistant to Chief Adviser said the question of country branding would be taken up after the formation of NTA.
 Development of infrastructure would also be taken up according to short, medium and long-term plans.
- Policy of public private partnership (PPP) would be followed in developing tourism infrastructure.

He said that the government should take the lead in this building infrastructure and would leave the field jobs to the private sector. About the negative image of the country, Mahbub Jamil said, "We are greatly responsible for that." He mentioned practice of security screening at hotels in Dhaka and said that this makes the visitors apprehensive without any valid reason.

However, the success of the effort rests on the final outcome and the ability of the proposed NTO/NTA to translate the vision behind its creation into reality. The past experience in this regard is bitter. We can recall the fate of current NTO-the Bangladesh Parjatan Corporation (BPC). The vision and purpose behind creation of BPC as a corporation, was to free it from government control. But taking advantage of adequate legal protection, it was turned into an organization, worse than a government department. BPC enjoyed no freedom even to spend its own earnings, employ, promote or transfer its employees. Like government department it received no fund from revenue budget (The Bangladesh Monitor, July 1 2008). Besides, as a main and only government institution in tourism development, BPC's existing initiatives are not up to the mark to meet global competition. It fails to attract foreign tourists due to some limitations (The New Nation, December 6 2006). Resource constraint may be one of the main limitations of government intervention to develop tourism sector widely in Bangladesh.

11. Review of Private Investment Opportunities

Bangladesh is a developing country, and therefore, its economy does not permit huge investments in the development of infrastructure facilities especially in identified areas for tourism development. Inadequate funding by the government in the tourism sector is also a major impediment to tourism infrastructure development. The government is therefore taking appropriate measures to attach due priority to the tourism sector so that economic benefits can be realized as has been done in other countries (Khan 2001). The Board of Investment in Bangladesh is working diligently to attract local and foreign investments in the private sector. From an analysis of recent statistical data, it is evident that 77

percent of the total investment in the national economy is coming from the private sector, which is playing a very significant role in the growth of GDP in the economy of Bangladesh (Embassy of Bangladesh, Stockholm 2007). To encourage more and more private investments in this sector, it is very important to ensure congenial investment environment in the country and government support is vital in this regard. Considering the aforesaid issues, at present, government has taken necessary measures to encourage the private sector to play a positive role in the development and diversification of tourist facilities and to promote domestic and international tourism in the country. Government has liberalized the industrial and investment policies in recent years by reducing bureaucratic control over private investment and opening up many areas. Major incentives are shown below:

- 1. Tax Exemptions: Generally 5 to 7 years. However, for power generation exemption is allowed for 15 years.
- 2. Duty: No import duty for export oriented industry. For other industry it is @ 5% advalorem.
- 3. Tax Law:
 - i. Double taxation can be avoided in case of foreign investors on the basis of bilateral agreements.
 - ii. Exemption of income tax up to 3 years for the expatriate employees in industries specified in the relevant schedule of Income Tax ordinance.
- 4. Remittance: Facilities for full repatriation of invested capital profit and divided.
- 5. Exit: An investor can wind up on investment either through a decision of the AGM or EGM. Once a foreign investor completes the formalities to exit the country, he or she can repatriate the sales proceeds after securing proper authorization from the Central Bank.
- 6. Ownership: Foreign investor can set up ventures either wholly owned on in joint collaboration with local partner.

Source: BOI Report, 2008 site available at: http://www.boi.gov.bd/invest_incentive.php

Due to taking some measures to open investment climate in Bangladesh, recently, some domestic private organizations like the Concord Group and others have seen coming forward. To establish and develop tourism in Bangladesh, Concord Group has taken some projects like Fantasy Kingdom, Water Kingdom, and Heritage Park etc., especially in Dhaka and Chittagong. But no foreign investment is seen

in this prospective industry in Bangladesh like other sector till today. However, recently, foreign investors have shown keen interest to invest in tourism development of Bangladesh

12. Recommendations

After observing all the issues it is clear that Bangladesh is highly potentials for tourism industries but we can't capitalize the opportunity due to lack of capital, social values and proper planning. With a view to overcome this constraints we may consider the following issues-

Recommendation -1: Passport Protected Tourism Investment Zone(PPTIZ)

Considering our EPZ experience we may introduce Passport Protected Tourism Investment Zone(PPTIZ) to promote tourism investment in Bangladesh.

The details of probable PPTIZ planning given bellow.

Geographical Location

Under PPTIZ program the major potential tourist areas may be divided into three PPTIZ respectively.

- **PPTIZ-1:** We may bring 40 Km length at the side of sea beach and 4 Km wide to the side of mainland of Coxes Bazar under this zone. This Zone May be start from Him Chahari point to 40 Kim of its east. This may be segmented by a good number of tourist spot or plot. This tourist Zone will cover sea, sand, hill and tribal culture at a time what will attract those investors who presently searching a investment zone for beach tourism in terms of sand bath, sun bath, beach volleyball, show biz business etc.
- **PPTIZ-2:** Katka to Dublar char of Sunadarban may consider the PPTIZ-2 area. This zone will be a attractive to eco-tourism investors. The Shundarban forest and the Royal Bengal Tiger will be the main attraction to them. The prospective investment mode may be safari park, enjoyment and leaser resort etc.
- **PPTIZ-3:** The entire Suvolong lake and its surrounding may consider this zone area. The lake view and seasonal waterfalls, Tertiary hills covering the lake will become the major tourism attraction to them who seeks place for ecotourism in Thailand and India.

Investment Planning for PPTIZ

PPTIZ - 1 & 3 are open only for the foreign investors which will limited by 120 investors as if the tourist get enough space.

PPTIZ - 2 allow foreign and local joint venture investment in addition to the investment planning of PPTIZ-1 which will be limited by 30 investors only.

In addition to that Bangladeshis are allowed for shopping molls, transport business and restaurants in the PPTIZ.

The foreign investors will get all types of investment facilities as the other foreign investors receive.

The investors will build their own resort and other establishment to attract their customers. Bangladesh govt. will be responsible for International Airport, Sea port, road infrastructure and utility service as well as the shopping molls and Super markets.

The investors of these zones will get land for building resort, hotel, casino, night club, bar, open stage and other entertainment establishment on rental basis. Besides this they have to pay zone tax yearly on their net income which will be fixed by PPTIZ Authority. The Bangladeshi businessmen who will do business inside the PPTIZ area will have to follow the same rules.

Access to PPTIZ

PPTIZ is exclusively open for the foreigners. No Bangladeshi inhabitants will allow to enter here except the Bangladesh businessmen who have ownership shops or transport company inside PPTIZ, Bangladeshi workers who have legal work permit, Bangladesh Army, Costal Guard, Special Police for PPTIZ and Law enforcing agencies. Except the law and enforcement agency's actual need none of them who are entitled to enter in the zone have no access to stay in the hotels or resort and completely forbidden to enter in the casino. In this case we may follow the rules and regulation of Malaysia, Indonesia or Egypt.

Law and order of PPTIZ

In this case we may get experience from Malaysia. But as the Zone areas will be filled by the foreign tourist so the law and order must ensure their safety and security.

Communication with main land to PPTIZ

The tourist come in the PPTIZ will allow entering in the main land but they are not allow to spend night there. They are allowed to come in the mainland only for shopping the Bangladeshi goods from the nearby markets or take Bangladeshi food from the nearby restaurants though all these will be available in the PPTIZ.

Visa system for PPTIZ

All the tourist want to go PPTIZ will directly enter in the zone through port visa after giving the port visa fee. County visa also allowed in this case they need not to pay port visa fee. In case of enter the main land they have to get another port visa which will not exceed 6 hours of day time.

Infrastructural development of PPTIZ

With a view to reach the tourist in the any one of PPTIZ the road, rail or water transport will have to developed as the tourist will enable to reach to the PPTIZ area within a shortest time. If possible an international standard air port will have to establish adjacent to the PPTIZ area as the govt. has full control on the airport. For the internal movement, well planed and sufficient roads will have to construct in the PPTIZ areas. For uninterrupted energy supply the govt. hast to ensure electric supply in all point of the PPTIZs. To do so establish special power station is a must. For internal car riding the PPTIZ area will abounded with sufficient petrol pump.

Disaster Management of PPTIZ

To protect PPTIZ the PPTIZ Authority will have to have proper disaster management planning.

Potentiality of PPTIZ

As per our experience we observed that Patiaya (Thailand), Goa (India), Dubai (Arab Emirate) and Malaysia are the major tourist receiving zone. All these spot attract the leisure tourist of developed countries. The slope and sand of Cox's Bazar beach is unique. Only for social constraints we can't sell our sand and sun to the European or American tourist. After constructing the PPTIZ this constraint will be removing. On the other hand at the law and order situation of these areas will be improve because the areas will be bordered by law and enforcement agency. So these tourist zone will become very attractive in comparison to those and to capitalize the opportunity a good many tourist company must come forward. If so the other tourist spot of Bangladesh will also get attention of the foreign tourist which will be a blessing for us.

Financial viability of PPTIZ

At present the proposed tourist zone receive very negligible leisure tourist what is almost nil. If we introduce these zone and able to attract the leading tourism companies these zone will be packed with leisure tourist. If the average rent of per seq. meter land of these zone \$5 per annum. The PPTIZ-1 only earn \$700millon in a year. The two spot will not receive revenue rent less than \$400million each per annum. The total rent of these three PPTIZ will become equal to our export earnings within a short time. but to get ready these zone govt. will need nearly \$2billion(approx.) which will be returned within five years undoubtedly. More over we will receive a handsome PPTIZ zone tax in each year. Besides these tow major source of income port visa fee, transport revenue.

Recommendation 2: Promote religious tourism

As Tongi Estama is the 2nd largest assemble of Muslim Umma the Tongi Estema spot should be developed. The toal spot area should be designed under a single structural plan. In which the following establishment will be include-

- A big and spacious mosque on the Estama spot.
- Furnished rental buildings adjacent to the Estema area.
- Standerd and cheep restaurant.
- Medical centers.

Rationality of the recommendation

Religious assemble is also a major source of tourism. Saudi Arabia, India, Pakistan and many other countries receive substantial amount of foreign exchange from this sector. If we can develop Tongi Estema spot as the other religious assemble spot more Muslims will attract to join in the Estema not only in the time Estema but also in various time of the year. It will increase the tourism income of Bangladesh. We should remember that income from Hajj was the main income of KSA before their petroleum income.

Recommendation -3: Promote Cultural & heritage Tourism

As Bengali we have very rich culture and tradition i.e International Mother Language Day, Baishakhi Mela, Ras Utshab etc. Apart this tribal culture also lies with us. We also have a good number of heritage and historical place i.e. Maynamoti Bihar, Paharpur Bihar etc with grate tourism vanue. As the former Mugal state and British Colony we also have a good number of historical establishments which also can attract the tourist. If we consider all these things as tourism element we may get good result. To do so we have to take the following steps-

• Focus the programs of International Mother Language Day globally through electronic media and invite them to celebrate this day with us.

- Focus the programs of Baishaki Mela globally through electronic media and invite them to celebrate the Mela with us.
- Arrange Baishakhi Mela and programs in various tourist spot i.e.
 Potenga, Cox's Bazar, Kuakata, Dhaka and other areas where the foreigners will get tourism facility.
- Focus the tribal festible nationally and internationally.
- Develop the existing tourism companies product. Under this they will develop special & compound tourism package both for the foreigners and local people.
- Renovate the historical places, building and preserve the places for tourists.
- Develop the communication and residential facilities for the foreign tourists.
- Develop tourist guide profession.

Rationality of the proposal

In Malaysia each and every year a good number of tourist come to see the tribal life and there culture. In India the Mughal Establishment, Cultural life and Religious festible of Indian people is a great attraction to the foreigners. India receive more than one lack foreign tourist during the Durga Puja ceremony and to see the TAJMAHAL the number is more than trice. So, if we can promote the cultural areas of us as well as the historical places and heritage providing full tourism facility it will be possible for us to attract more tourist.

Recommendation-4: Ensure proper and timely development and modernization of tourism industry in Bangladesh

As per findings, the present study and policy guidelines of other recent researches, a number of suggestions, however, are made below that would help to ensure proper and timely development and modernization of tourism industry in Bangladesh.

Government may establish a have a high-powered independent tourism authority (National Tourism Board) to guide tourism development in the country. The authority must be the facilitator and promoter of tourism and perform all campaigning activities including infrastructure development. It can coordinate with the authority of hotel, motel and tourists for the organized development of tourism industry in Bangladesh. Under present organizational structure, BPC cannot function as regulatory and promotional body (The Bangladesh Monitor, July 1 2008),

For campaigning activities, government can employ trained manpower countrywide who continuously will work to include all scenic beauties, prospective tourism products, and update previous tourism sites including Cox's Bazar & Sundarbans.

Public and Private partnership may play vital role to develop and modernize Bangladesh tourism as per global competition. Government should address such issues as creating a conducive environment, providing investment incentives, introducing adequate and supporting legislation and building public sector capability for the formulation and prioritization of projects and negotiations.

Investment in convertible foreign currencies by foreign investors, and the option to establish public/private limited companies or sole proprietorship concerns, could be allowed.

To ensure better communications telex, fax and international dialing services, email and Internet connections through a satellite system need to be made available in the tourist destination especially in the Exclusive Tourist Zones (ETZs) in Cox's Bazar and other important spots.

Adequate communication services especially railroads, and street in all tourism spots must be ensured. Roads from Dhaka to Chittagong, Chittagong to Cox's Bazar, and its other nearer spots need drastic improvement. As Govt. has resource constraints so, it should allow Travel Agents Association of Bangladesh to import luxury coaches at reduced tax to carry tourists in the important spots.

As stated earlier, visa policy of government is one of the main reasons behind the foreign tourists' unwillingness to visit Bangladesh. No tourism development will bring any good, if visa is not relaxed, Government may introduce an online visa tracking system by bringing all the land ports and airports connecting through internal network and can monitor visitor's entry and exit date and time automatically (The Daily Star, May 29, 2008).

BPC needs to be turned into a self-governed and self-controlled body if the government wants to turn the tourism industry into a profitable venture (The New Nation June 15, 2008).

Government should ensure proper security and safety system in the country in general and 2 Bureau of South and Central Asian Affairs May 2007. tourism spots in particular. In this regard more strong involvement of joint forces)3 play vital role to control unwanted events (Hijacking or kidnapping tourists) occurring while coming from main city to tourism spots (Cox's Bazar and other spots). In

the remote areas and roads, involvement of 'tourist police'/ joint forces to ensure security and safety will lead to increase more foreign tourists in Cox's Bazar and other spots.

As the concept of economics has changed globally, we have to introduce public-private partnership in this industry. Moreover, as our govt. has resource constraints, only govt. initiatives are not adequate to develop tourism; rather public private partnership is a demand of the day to develop infrastructure and modern recreation facilities (like –boating, wind surfing, horse racing and other playing instruments as per international standard) as well as local cultural activities for the enjoyment of tourists.

To control unwanted situation as well as death hazards in the beach areas, it is very important to set up and develop weather forecasting (during sea bathing) system and like Yasir Life Guard, other institutions may set up for the rapid safety and security of the tourists.

References

- 1. The Travel & Tourism Competitiveness Report 2009 © 2009 World Economic Forum.
- 2. Asian Development Bank TA 6131STU Final Report, 2004
- 3. Akhter, Shelina (2001): "Tourism in Bangladesh: An Evaluation", Journal of Bangladesh Asiatic Society
- 4. Bangladesh, December 2001.
- 5. Amin Sakib-Din, "The role of tourism in Bangladesh economy" The New Nation, 6th Dec 2006,
- Akteruzzaman & Ishtiaque (2001) "Potenga Seashore, A Rising Horizon for Tourism: Problems and
- 7. Bangladesh High Commission, "Tourism in Bangladesh", London, UK, available at: http://www.bhclondon.org.uk/
- 8. Board of Investment (BOI) Report August 5 2008, available at www.boi.gov.bd/invest incentive.php
- 9. Brown, D.O. (1998a). "In Search of an Appropriate Form of Tourism for Africa: Lessons from the Past and
- 10. Suggestions for the Future". Tourism Management. Volume 19, Number 3, pp.237-245, cited in Christina Koutra, (s.d.).
- 11. Brohman, J. (1996) "New Directions in Tourism for Third World Development". Annals of Tourism Research, Volume 23, Number 1, pp.48-70.,
- 12. BPC- Bangladesh Parjotan Corporation's Report (Various Issues)
- 13. Dieke, P.U.K. (2003). "Tourism in Africa's Economic Development: Policy Implications". Management
- 14. Decision. Volume 41, Number 3, pp.287-295.
- 15. Hasan Faruque (2006), "But does it enrich Bangladesh?", The Daily Star, September 27, 2006.
- 16. Hasan, S.R. (2000), Problems and prospects of Bangladesh Tourism Industry", bureau of Business Research,
- 17. University of Dhaka 2000.
- 18. Hua Du, (2008), "Bangladesh Economy: Opportunities and Challenges", American Chamber of Commerce in Bangladesh, Asian Development Bank 17 June 2008, site available at: http://www.adb.org/ Documents/Speeches/2008/sp2008031.asp
- 19. EASCAP (ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC) TOURISM

- REVIEW, No. 21, United Nations, available at: http://www.unescap.org/ttdw/ Publications/TPTS_pubs/Toreview_No21_2172.pdf
- 21. Bureau of South and Central Asian Affairs, May 2007
- 22. Japan Herald, "Five million foreign tourists visited India in 2007" Wednesday May 7, 2008. available at: http://story.japanherald.com/inde/1
- 23. Khan Abdul Kalam (2001), "Opportunities And Challenges For Tourism Investment: Bangladesh, Manager
- 24. Bangladesh Parjatan Corporation National Tourism Organization Dhaka, EASCAP TOURISM REVIEW, No. 21, United Nations.
- 25. Embassy of Bangladesh, Stockholm (2007), "The Colors of Bangladesh", KALEIDOSCOPE -Newsletter of the Volume 1, Issue VI Nov Dec 2007.
- 26. Khan Mizan R. and Haque Mahfuzul (2007), BIMSTEC-Japan Cooperation in Tourism and Environment-
- 27. Bangladesh Perspective Discussion Paper #27, Center for Studies in International Relations and 3 Joint forces- Police RAB and Army
- 28. ECONOMIC PROSPECTS AND CONSTRAINTS OF COX'S BAZAR BANGLADESH 55 Development (CSIRD) Kolkata
- 29. Media Bangladesh, "Tourism shows Positive note on Port Entry Visa" April 6 2008, available at: www.mediabangladesh.net/news-political.php?
- 30. Rahman Dr. Mohammad Mahbubur (2007), "Bangladesh: A Host of Tourist Treasures", Arab News, Monday
 - 26 March 2007, Available at: http://www.arabnews.com
- 31. Rasooldeen Mohammed, "Land of Diverse Attractions", Arab News, 26 March 2004.
- 32. Siddiqi Raquib (2006), "Second SAARC Tourism Ministers meet ends with no Breakthrough", The New
- 33. Nation June 11, 2006.
- Sikder Zahed Husain and Hussain Md. Moazzam (1998) "Tourism Management and Development- A study of some selected Areas in Greater Chittagong", The Chittagong University Journal of Commerce Vol. 14, 1998, p. 171-183.
- 35. SDNP- Sustainable Development Networking Programme Bangladesh, Business & Finance News, august 02, 2004, available at http://www.sdnbd.org/sdi/news/general-news/August-2004/02-08-04/Business.htm
- 36. The Report of Tourism Statistics of Bangladesh- Issues: 2004-2005
- 37. The Bangladesh Monitor, July 1 2008 available at: http://www.bangladeshmonitor.net/tourism story.php?recordID=464
- 38. The Eastern Time, 13 August 2007, available at: www.sarawaktourism.com/content.cfm/

- 39. The New Nation, June 15, 2008 available at: http://nation.ittefaq.com/issues/2008/06/15/all0271.htm
- 40. The News Today February 18, 2008
- 41. The Daily Star, May 29, 2008, The Daily Star May 19 2006
- 42. The Daily Star, August 5 2008, available at: http://www.thedailystar.net/story.php? nid=39727
- 43. UNEP- United Nation Environment Preservation (2002), "Tourism Industry as a partner for
- 44. Sustainable development", A report prepared by: World Travel & Tourism Council (WTTC) United Kingdom, 2002, available at: http://www.gdrc.org/uem/eco-tour/WSSD-tourism.pdf
- 45. Weekly Economic Times, quoted in Media Bangladesh, April 6, 2008 available at: http://www.mediabangladesh.net/news_political.php?
- 46. World Travel and Tourism Council (WTTC), Hong Kong, 2004 available at:www.wttc.org
- 47. World Travel and Tourism Council (WTTC), 2003-2005

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 133-154 Bangladesh Economic Association (ISSN 2227-3182

Military Spending and Economic Growth in the Countries of East Asia and the Pacific Region

Muhammad Abdul Mannan Chowdhury¹

Abstract

This study examines the causal relationship between military spending and economic growth by using the more comprehensive panel data approach within the framework of the economic growth model, as well as by developing an additional case study of eight countries in East Asia and the Pacific Region. The result of the relationship between military spending and economic growth, as it can either be positive or negative depending upon a country's specific circumstances. Caution is warranted in relating military spending and economic growth, as priorities, goals and national security concerns of nations can vary considerably.

Keywords: Military Spending; Economic Growth; Panel-Data Approach; the Countries of East Asia and the Pacific Region.

1. Introduction

There is a long debate regarding the relationship between military spending and economic growth. The debate was first initiated by Benoit (1973, 1978) who found a positive relationship between the two. To test the validity of Benoit's findings a good number of empirical studies with the help of advanced econometric technique have been carried out subsequently. But to our utter surprise, the studies could not arrive at any consensus regarding the matter. The same remark is applicable to the case of economic growth also. Though there are considerable studies with regard to the determinants of economic growth, no

¹ Professor of Economics, University of Chittagong and Senior Fulbright Scholar.

conclusive results have been obtained about the number and nature of factors determining economic growth.

The number and nature of variables affecting economic growth vary across countries depending upon each country's unique socio-economic and geographic factors. As per the findings of Solow-Swan (1956) Neo-classical growth model, under steady-state equilibrium situation, the factors like the prevailing technology, the exogenous rates of saving, population growth, and technical progress affect the real level of GDP per capita. The model points out to the fact that countries with higher saving rates will have higher levels of income, and vice versa under given conditions. This conclusion was valid for the past four decades since 1956. This conclusion has, however, been challenged by the modern critics who opine that the Solow-Swan (1956) model can not explain the observed differences in per capita income among different countries under different sociopolitical structure. The critics are of the opinion that the endogenous growth model can explain the determinants of economic growth adequately since it assumes both constant and increasing returns to capital.

More research works have been undertaken in recent times to reconcile between the different implications of both the exogenous and endogenous growth models (Khan and Yim, 2000; Mehanna, 2001). The researchers at present attach utmost importance to the issue of convergence. That is, in order to reduce the incomegap between the rich and poor countries, the poor economy should grow at a higher rate per capita than a rich country. The recent studies put emphasis upon the fact that a macroeconomic policy framework conducive to growth is essential. The economists agree to the fact that the relationship between long-term growth and inflation is negative while the relationship between long-term growth and good fiscal performance as well as undistorted foreign exchange markets is positive (Fischer, 1993).

Actually, macroeconomic policies may affect growth in many different ways. Some policies are conducive to growth while others affect growth negatively. Of course, there may be some policies whose impact on growth may not be clearly spelt out. Military spending is one of such policies. There are many factors like economic base, population growth, unemployment rate, investment in physical and human capital, flows of foreign investment, industrial growth, inflation, development of financial institutions, the level of global economy etc., which affect economic growth. But of all the factors, military spending and foreign aid are now considered to be the most important determinants of economic growth particularly in the context of developing countries (Benoit, 1973, 1978; Ball,

1983; Joerding, 1986; Chowdhury, 1991; Looney, 1991; Madden and Haslehurst, 1995; Kolliar and Makrydakis, 1997).

However, we can not arrive at any definite conclusion regarding the relationship between defense expenditure and economic growth on the basis of available empirical findings and theoretical framework since they are not adequate to substantiate the conclusion. Of course, we may sum up some popular theoretical explanations about the relationship between defense expenditure and economic growth in the following:

- 1. Defense expenditure can exert positive influence upon economic growth of a country either through an increase in aggregate demand or through an increased security of a country. Four arguments are given in support of this relationship:
 - a) Military spending leads to an increase in economic growth in an economy through the Keynesian multiplier effect. The multiplier effect of military spending is likely to be stronger in developing countries.
 - b) Military spending encourages the adoption of technologies to produce civilian goods which is likely to create employment opportunities conducive to growth.
 - c) A major portion of the defense expenditure is meant for infrastructure build-up of a country like roads and highways, airport, information technologies etc. Therefore, military spending is expected to promote economic growth.
 - d) Defense expenditure may create a favorable climate for trade and investment for both the local and foreign investors by strengthening internal and external security of a country and as a result, economic growth is promoted.
- 2. There is on the other hand, negative or inverse relationship between economic growth and military spending. The following arguments are given in support of this relationship:
 - a) An increase in military spending is likely to crowd out more growthoriented public and private investment which may affect long-run economic growth adversely. The defense expenditure may crowd out R & D activities of the private sector which leads to technological innovations that spill over faster to civilian sector than those of the

- defense sector. It should be pointed out here that most of the innovations in the defense sector are not useful for the civilian sector as is evident from the empirical observations.
- b) Defense expenditure may lead to disequilibrium in the balance of payments if hard-earned foreign exchanges are used to purchase arms and defense hardware.
- c) Resources are diverted from the export sector to the defense sector due to military spending and as a result, the export sector which is regarded as engine of growth is adversely affected.
- d) Last but not the least, military spending affects growth adversely since it gives rise to bureaucratic inefficiency due to excessive wastage of resources and extra burdens upon the public imposed by taxes required to finance defense expenditure.

From the above discussion it is evident that military expenditure may have both positive and negative influences upon economic growth. The net effect, of course, will depend upon the relative strength of the two opposing forces.

Like military spending, foreign direct investment (FDI) is also regarded as an important determinant of economic growth by a group of economists. The country barriers to foreign investment since the 1980s have actually given way to countries actively seeking FDI in stead of discouraging it. There is a keen competition among the governments of the developing countries to invite more investment from foreign companies. FDI plays a vital role in the economic development of a country. It develops a country's production capacity in all sectors of the economy, facilitates the use and exploitation of local raw-materials, introduces modern techniques of management, helps to get easy access to new technology, increases the stock of human capital via on the job training, stimulates R & D activities, links a country with global economy and ensures competitiveness. As per the new theory of economic growth, FDI is likely to affect both the level and rate of output per capita. It is usually held that defense expenditure can exert significant influence upon FDI, a factor of vital importance for economic growth.

2. Objectives and Scope of the study

In this paper we have made an attempt to examine the relationship between military spending and economic growth in the context of multivariate economic framework in the eight countries (China, Indonesia, South Korea, Malaysia, Papua New Guinea, Philippines, Thailand and Vietnam) of East Asia and the Pacific region over the period from 1980 through 1999. The main focus of the paper is to determine if military spending has any impact on economic growth and FDI, to make a political economy analysis of the issue, and to analyze the policy implications of the findings of the study.

The paper contains nine sections. Section-1 gives a prelude to the study, Section-2 states the objectives and the scope of the study. Section-3 presents a brief review of the research works done on the issue while Section-4 describes the rationale for the study. Section-5 narrates the hypotheses, the conceptual framework of the model or the research methodology and the nature of data used in this study while Section-6 gives an analysis of empirical results. Section-7 narrates the political economy of military spending in the countries of East Asia and the Pacific region while Section-8 gives the conclusion and analyzes the policy implications of the findings of the study.

3. A Brief Review of the Research Works done on the topic

A good number of research works have been done on the issue of economic growth and military spending. A majority of them used cross-country or panel data approach to investigate the issue. Though most of these studies used the standard Neo-Classical growth models or its extended version, which includes human capital, more recent studies focus on endogenous growth models. The convergence hypothesis of the Neo-Classical growth model stated above has been totally discarded by Romer (1986) and Lucas (1988). They are of the opinion that the issue of convergence is a conditional one since it is influenced by factors like the rate of savings, the growth rate of population, the marginal productivity of labor, and so on. The lower the level of income, the greater the opportunity of catching up through higher rates of capital accumulation and diffusion of technology. The main conclusion of all the recent studies taken together may be summarized as follows:

A country's growth over a long period is basically determined by three factors such as (a) the efficient utilization of the existing stock of resources, (b) the accumulation of productive resources such as human capital, and c) technological progress. However, these factors can be broken down further into various determinants of economic growth (Dewan and Hussein, 2001).

Many research works have been undertaken on the relationship between military spending and economic growth, but none of them has been able to arrive at any definite conclusion regarding the exact nature and direction of relationship

between the two. Benoit (1973, 1978) was the first to carry on study on the issue of military spending and economic growth who found a positive relationship between the two. But this methodology was questioned by Ball (1983) and subsequently, many research works by researchers like Joerding (1986), Manage and Marlow (1986), Kinsella (1990), Looney (1991), Chowdhury (1991), Chen (1993), Hasan (1994), Kusi (1994), Dunne (1996), Kollias and Makrydakis (1997) have been carried out using rigorous econometric tools to test the validity of Benoit (1973, 1978)'s findings, and to overcome the analytical deficiency in his study. There have been studies using single equation analysis, simultaneous equation systems and large macroeconomic models, all developed from a variety of theoretical perspectives. Studies have been applied to different cross-sectional samples of countries, time series for individual countries, and pooled time series and cross-sectional data. None of the studies, however, could arrive at any consensus on the issue.

Recent studies used Granger (1969) causality test to examine if there is any effect of military spending on growth and vice versa. Joerding (1986) used two measures of military spending and growth for 57 less developed countries (LDCs) for the period from 1962 to 1977 and found no impact of military spending on growth. Kinsella (1990) studied the causal relationship between military spending and output. Chowdhury (1991) used a Granger-causality test to analyze the causal link between military spending and economic growth and found no consistent result across different countries. Looney (1991) found positive relation between military spending and growth for Pakistan and negative relation between the same for India. Chen (1993) found no significant relationship between military spending and economic growth for China.

However, Hasan (1994) found positive relation for China when he reworked Chen's data with VAR methods. Madden and Haslehurst (1995) found no causal link between the two. Kollias and Makrydakis (1997) also found no causal link between military spending and economic growth using Greek data. Hassan et al. (2002) studied the relationship between the two in the seven SAARC countries in the context of a multivariate economic growth framework using a panel data approach and found positive relationship. Hassan (2003) also examined the impact of military spending on growth using a panel data of 95 countries and 8 MENA (Middle East and North African) countries. The main objective of his study was to examine the important factors that contribute to FDI and economic growth in the 95 countries of the world as a group and to compare them with those of MENA countries. In this study Hassan (2003) found significant negative relationship between military spending and economic growth while he found

positive relationship between military spending and FDI. However, we cannot draw any clear-cut conclusion from this analysis. We must carefully assess various supply-side (spin-offs from technology or infra-structure) and demand side (resource diversion) factors before we make any generalizations.

A host of macroeconomic variables like globalization index, ICT (Information and Communication Technology), human capital, population growth, gross domestic investment, government expenditure, foreign direct investment (FDI), inflation rate, exchange rate, military expenditure, and per capita income, influence economic growth. Military spending (Hassan et al., 2002), population growth (Hassan, 2003), ICT, human capital (Barro, 1991; Benhabib and Spiegel, 1994; Becker et al., 1990; Sach and Warner, 1997; Barro, 1997), and globalization or the degree of openness to the global economy (Gallup et al., 1998) influence growth positively while inflation (Mankiw, Romer and Weil, 1992; Barro, 1997; Fisher and Modigliani, 1998), and government expenditure (Levine and Zervos, 1993; Barro, 1991; Hassan et al., 2002) negatively influence economic growth. The negative impact of inflation and government expenditure upon economic growth is not supported by the findings of Clark (1993) and Hassan et al. (2002) although the result obtained by Hassan et al. (2002) is not statistically significant. Economic growth is influenced positively by domestic and foreign investment, FDI, while the impact of per capita income upon economic growth is negative though not significant (Hassan et al., 2002).

The impact of FDI upon economic growth is not very clear. The impact of FDI upon economic growth is found to be positive by Schneider and Frey (1995), Tsai (1994), Lipsey (1999), and Hassan (2003) while Edward (1990) found negative relationship between FDI and economic growth. The quality of infrastructural development (Wheeler and Mody, 1992; Kumar, 1994; Loree and Guisinger, 1995) and openness to international trade (Edward, 1990; Gastanaga et al., 1998) affect FDI positively (Asiedu, 2002). Asiedu (2002) found the positive impact of infrastructure development on FDI significant in all countries save Africa. However, Hassan (2003) finds none of the economic factors significant in explaining FDI in MENA countries. In the SAARC countries Hassan et al. (2002) found positive relationship between FDI and globalization/information technology and negative relationship between FDI and each of the factors like human capital, population growth, exchange rate, per capita income and military expenditure.

4. Rationale for the Study

From the above review of research works done on the issue of military spending and economic growth it is quite evident that researchers have tried to ascertain the relation between military spending and economic growth through the estimation of single equation and simultaneous equation models and more recently, through the application of techniques that investigate causal links. The researchers have made both extensive cross-country analysis and detailed case studies of individual countries to ascertain the causal relation between the two; but none of former could arrive at any uniform conclusion regarding the issue. Our present study is expected to make additional contribution to the issue in the following ways:

- a) It provides a further case study of eight countries of East Asia and the Pacific Region.
- b) The present study goes beyond the standard "Granger Causality" econometric techniques used in previous econometric works, and uses a panel data approach within the framework of economic growth model.

In the light of the above stated facts we can say that our approach is more comprehensive than the earlier ones and here lies the justification for undertaking the present study.

5. Methodology of the study

5.1. Formulation of Hypotheses

In this paper the following hypotheses have been developed and tested based on the above review of research works done on the issue of economic growth, military spending, and FDI:

 H_1 : The impact of military expenditure (ME) on growth and FDI is ambiguous.

 H_2 : Globalization (GI) affects both economic growth and FDI positively.

 H_3 : ICT infrastructure (ICT) affects both growth and FDI positively.

 H_4 : The impact of human capital (HC) on growth and FDI is positive.

 H_5 : The impact of population growth (PG) on economic growth and FDI is ambiguous.

 H_6 : Gross domestic investment (GDI) affects economic growth and FDI positively.

 H_7 : The impact of government expenditure (GE) on economic growth is negative, but its impact on FDI is ambiguous.

 H_8 : FDI affects growth positively.

 H_9 : GDP growth affects FDI positively.

 H_{10} : The impact of inflation (IR) on economic growth and FDI is ambiguous.

 H_{II} : Exchange rate fluctuation (ER) affects growth and FDI negatively.

 H_{12} : Per capita income (PCI) affects both growth and FDI positively.

5.2. Sources and Nature of Data used in this Study

Data for this study are taken from World Development Indicators, International Financial Statistics, the World Telecommunication Development Report, and the UNESCO database. The analysis is based on data from a cross section of eight countries of East Asia and the Pacific Region over the period from 1980 through 1999. Data description and their nominal statistics are provided in Table 1.

5.3. Specification of the Model

The hypotheses presented above are represented by the following equations:

$$(GDP \ growth)_{ii} = \beta_0 + \beta_1(Y_0) + \beta_2(GI)_{ii} + \beta_3(ICT)_{ii} + \beta_4(HC)_{ii}$$

$$+ \beta_5(PG)_{ii} + \beta_6(GDI)_{ii} + \beta_7(GE)_{ii} + \beta_8(FDI)_{ii}$$

$$+ \beta_9(ER)_{ii} + \beta_{10}(IR)_{ii} + \beta_{11}(ME)_{ii} + E_{ii}$$
1)

$$(FDI)_{ii} = \beta_0 + \beta_1(Y_0) + \beta_2(GI)_{ii} + \beta_3(ICT)_{ii} + \beta_4(HC)_{ii}$$

$$+ \beta_5(PG)_{ii} + \beta_6(GDI)_{ii} + \beta_7(GE)_{ii} + \beta_8(GDP \ growth)_{ii}$$

$$+ \beta_0(ER)_{ii} + \beta_{10}(IR)_{ii} + \beta_{11}(ME)_{ii} + E_{ii}$$
2)

where,

 Y_0 = initial GDP per capita (denoted by GC);

GI = globalization index (an indicator of market openness);

ICT = information and communication technology infrastructure;

HC = human capital;

PG = population growth;

GDI = gross domestic investment;

GE = government expenditure;

FDI = net foreign direct investment inflows;

ER =exchange rate;

IR = inflation rate;

ME = military spending;

E = error term;

i = represents each sampled country;

t = represents each year.

5.4. Analytical Techniques

In order to estimate the model we have used the generalized least squares (GLS) regression analysis. To estimate the parameters of the two equations – one for GDP growth and the other for FDI, both the pooled cross-section regression and fixed effect panel regression have been used. To avoid possible cross-sectional heteroskedasticity and contemporaneous correlations we have used the generalized least square (GLS) regression analysis since this method uses cross-sectional weights of residuals to calculate the variance of the residuals. In this pool regression model, the intercept terms are restricted to be identical, i.e., there is no country-specific variations so that . We have also used the fixed effect panel regression in this study since this is an efficient technique when there are a large number of cross-sectional units with diverse qualitative variations.

In our study we have eight countries, some of which are less developed or less underdeveloped relative to others. In such situation, an unrestricted intercept term is more plausible. The fixed effects estimation allows to vary across section units so that we get different constants for different countries. In other words, and In this case also we have used the GLS method to estimate the parameters. All estimates are adjusted for white heteroskedasticity-consistent standard errors and covariance.

6. Analysis of Empirical Result

In the pooled cross-section regression of GDP growth we find the effects of human capital, gross domestic investment, government expenditure and inflation rate on economic growth statistically significant in the countries of East Asia and the Pacific region. Gross domestic investment, government expenditure, and inflation rate positively influence the GDP growth while human capital negatively affects the GDP growth. The effects of gross domestic investment, and inflation rate are found as expected while the impact of government expenditure is found positive and the impact of human capital on GDP growth is found negative contrary to our belief. The impact of ICT infrastructure, population growth and exchange rate on GDP growth is positive, and the impact of globalization index, FDI, military expenditure, and per capita income is negative, but none of them is statistically significant.

However, when country-specific variations are allowed in fixed-effect model, the human capital, gross domestic investment, government expenditure still remain significant with the same signs as in the pooled cross-section regression of GDP growth, but inflation rate becomes insignificant though with the same positive

sign. Globalization index, exchange rate, ICT infrastructure, still remains insignificant with same signs while population growth, FDI flows, military expenditure, and per capita income remain insignificant with different signs.

In the pooled cross-regression, the insignificant negative impact of military spending upon GDP growth contradicts with the findings of Hassan et al. (2002) in the SAARC countries. The globalization index, and per capita income are found to have negative impact upon GDP growth and exchange rate has positive impact upon GDP growth contrary to our expectation, but none of them are statistically significant. The human capital affects GDP growth negatively while government expenditure affects GDP growth positively contrary to our belief. However, their effects are statistically significant. The impacts of globalization index, ICT configuration, human capital, government expenditure, FDI flows, exchange rate, and military expenditure on economic growth as found in this study (i.e., in case of the countries of East Asia and the Pacific region) do not conform to the study by Hassan et al. (2002) in the SAARC countries. It should be pointed out here that the GDP growth rate in the countries of East Asia and the Pacific region is poorly explained with the above explanatory variables. Only four out of eleven explanatory variables are found significant in pooled regression.

Overall, when the country-specific variations are allowed, the fixed effect model cannot explain the variations better than the pooled cross-section model as reflected in the adjusted R^2 value, which is 70 percent in the former, a jump from 92 percent in the pooled cross-section model. However, the F-value is very high in the fixed-effect model.

When we regress foreign direct investment (FDI) against a set of explanatory variables, in pooled cross-section model we find the impacts of globalization index, GDP growth and per capita income negative on FDI flows contrary to our expectation and the impacts of ICT configuration, human capital, population growth, gross domestic investment, government expenditure, inflation rate, and military expenditure on FDI flows positive, and the impact of exchange rate on FDI negative as per our expectation; but the impacts of all the variables are statistically insignificant.

In the fixed-effect model, the negative effects of globalization index, GDP growth on FDI becomes positive, the positive effects of ICT configuration, human capital, population growth, inflation rate on FDI still remain positive, the positive effects of gross domestic investment, government expenditure, and military expenditure become negative, and the negative effects of exchange rate, and per capita income still remain negative; but the effects of all the explanatory variables

are not at all statistically significant. In the pooled cross-section model, the effects of all the explanatory variables except ICT configuration, exchange rate, and per capita income on FDI as found in this study do not conform to the same as found by Hassan et al., (2002) in case of SAARC countries.

Overall, the fixed-effect model explains the variations better than the pooled cross-section model as reflected in the adjusted R^2 value, which is 61 percent in the former, a jump from 37 percent in the pooled cross-section model. F-value is also higher in the fixed-effect model compared to the same in pooled cross-section model. However, it should be pointed out here that the findings of our present study relating to the impacts of all explanatory variables on economic growth and FDI as stated above are not fully consistent with the findings of other studies across countries of different regions such as Eastern Europe and Central Asia, (Hassan et al., 2003), SAARC countries (Hassan et al., 2002), and Sub-Saharan African region (Hassan et al., 2003).

7. Political Economy of the Military Expenditure in the countries of East Asia and the Pacific Region

Though we have not been able to show statistically the consistent relationship, positive or negative, between military spending and economic growth, we cannot deny the fact that some sort of connection exists between economic growth and military expenditure. If we look at the history we find both military power and economic power go hand in hand. In some cases, military power dominated over the economic power and in some other cases, economic power dominated over the military power. Therefore, it is difficult to generalize which precedes what: military power precedes economic power or economic power precedes military power. For instance, the United States, Japan and China have relied on economic prosperity to finance formidable military forces. On the other hand, the erstwhile Soviet Union (presently Russia), Iraq and North Korea have relied on their military to build economic power with little or limited resources.

The economic power of a country in broad terms refers to the capacity to influence other states through economic means. It is composed of a country's industrial base, natural resources, capital, technology, geographic position, health system and education. On the other hand, military power is the capacity to use force, or the threat of force to influence other states. The components of military power are number of divisions, armaments, organization, training, equipments, readiness, deployment and morale. In recent times, situation has changed. Now, economic power has come to dominate over military power. In fact, it is the economic power that enables a country to acquire or obtain military power.

Though it is possible to convert military power back into economic power peacefully, it is too expensive to do so. It is extremely risky to build economic power by the forceful use of military power. Because it can have counterproductive side effects in the form of economic sanctions, without corresponding levels of economic power military power also cannot sustain for long. The cases of the erstwhile Soviet Union and Iraq may be cited as examples. Therefore, economic power is a pre-condition that allows military power to be built up.

In fact, there are both supply side and demand side factors that influence defense requirements and military spending. The demand side factors are: 1) confrontation with neighbors, such as a) territorial and sovereignty disputes, b) competition over natural resources, c) managing bordering ethnic people, d) dealing with refugees, e) instability of a neighbor, and f) nationalist and political posturing; 2) regional power relations, whether in co-operation or opposition; 3) a desire for prestige; 4) co-operative efforts with the UN, and other coalitions and countries, including peace-keeping operations, humanitarian assistance, and disaster relief; 5) obligations of treaty commitments; 6) negative, transnational issues (e.g., pollution, deforestation, oil spills); 7) protection of micro-economic factors such as watersheds, local sea-lane, exclusive economic zones, marine resources, fisheries; 8) maintaining domestic law and order; 9) the need to modernize forces due to competition and changing technologies.

The supply side factors are the conditions that improve resource availability. The supply side factors are : 1) economic growth and income, 2) a smoothly functioning military-industrial complex and industrial base, 3) the domestic availability of defense resources, such as manpower, natural resources, and industries, 4) objects purveyed by friends and allies, 5) assistance specified in treaties, and 6) intangible things like the perceived reliability of external assistance.

The sustainability of an economy is a function of the health of the economy and the degree of defense spending, With the Asian economic downturn of 1997, the defense spending dropped in the countries of East Asia and the Pacific region since their budgets were put on an austerity basis. For these countries the defense share is under 4 percent of GNP. According to the estimate of the International Institute for Security Studies, the country average of defense share for East Asia, Australia, New Zealand and the Pacific Islands was 3.7 percent of GDP and for the more contentious South Asia was 5.3 percent of GDP in 1999. Many Asian governments embarked on military modernization programs in the decade up to 1997 Asian financial crisis. During that period the defense expenditures of the

countries of the East Asia and the Pacific region in particular, and Asian countries in general modestly increased at a rate of about 2 percent annually. Asian countries with high long-term real growth in defense expenditure over the period from 1991 to 2000 were Singapore (8 percent per year), India (5 percent per year), and China (6 percent per year) (Stockholm International Peace Research Institute or SIPRI).

China's defense spending is by no means transparent. For many years, much of China's official budget was absorbed by high inflation rate. To estimate defense spending in China is difficult due to the inadequate accounting methods used by the People's Liberation Army (PLA). According to some estimates (International Institute for Strategic Studies or IISS estimate; U.S. Arms Control and Disarmament Agency or ACDA estimate), China is the biggest spender on defense in the region. China has to maintain its military strength so as to face external threats from neighboring countries like India, Taiwan etc. and to suppress rebellion in Tibet and the possibility of capitalist uprising at home, among others. China is criticized for promoting insurgencies and civil disorder by selling small arms to neighboring friendly countries like Pakistan and Burma.

In Vietnam, defense spending declined during the 1980s, but since 1990 it shows an annual 14.9 percent increase. Even during the regional prosperity of the mid-1990s, Vietnam had the tenth largest armed force in the world. Vietnam's defense share of GNP declined from 19.4 percent in 1985 to 3.1 percent in 1999 and is comparable to the average for Southeast Asian countries. Vietnam spends for defense mainly for security reasons and infra-structure build up.

Thailand's defense expenditure figure is underestimated since discrepancies exist between the budgeted and on-board numbers of soldiers. The budget does not include paramilitary functions or covert programs. It lays stress upon defense budget to suppress insurgencies and to face external threats from neighboring countries like Burma, Laos and Cambodia.

The Philippines has undertaken ambitious modernization program for armed forces which is off-budget. Figures intermingle humanitarian assistance, disaster relief, civic action and nation-building programs.

Indonesia embarked on an ambitious program to obtain submarines and frigates. However, typical of a procurement binge, it did not calculate the sustainability of the gear in terms of maintenance, facilities, and operations. Defense expenditure in Indonesia mainly aims at suppressing rebellion at home and resisting external threats, if any. Similar is the case with South Korea, Malaysia and Papua New Guinea.

From the above discussion, it is evident that in the countries of East Asia and the Pacific region, military expenditure is mainly done for security reasons, not for economic growth and the extent of military expenditure depends, in most part, upon the economic strength of a country concerned. Since military expenditure is an input measure, it cannot by itself promote economic growth because economic growth not only depends on the input of resources, but also on cost effectiveness – what we buy with our money. Cost effectiveness in turn depends on factors such as the various components of defense budget and the percentages they take, the pattern of recruitment, the technological level, and the methods of procurement (import or domestic production as well as infrastructure development). Military expenditure is most useful and meaningful when it is disaggregated into its various component parts. Unfortunately this is not the case in most of the countries of East Asia and the Pacific region. Therefore, it is difficult to generalize or ascertain the impact of military expenditure, positive or negative, upon economic growth on the basis of available data.

8. Summary, Conclusion and Policy Implications

Our results indicate that the sets of variables that affect GDP growth and FDI are not always the same. We find significant positive impacts of gross domestic investment, government expenditure, inflation rate, and significant negative impact of human capital on GDP growth, but we do not find their any significant impact, positive or negative, on FDI. Of course, the impacts of gross domestic investment, government expenditure, and inflation rate on FDI still remain positive though not significant while the impact of human capital on FDI becomes positive but insignificant.

Military spending is found to have insignificant negative influence upon GDP growth in pooled cross section regression and insignificant positive influence upon GDP growth in fixed effect model while it has insignificant positive influence upon FDI in cross-section regression and insignificant negative influence upon FDI in the fixed effect model.

Therefore, the impact of military spending upon both GDP growth and FDI is not consistent and therefore, inconclusive. However, though we are unable to ascertain the relationship between military spending and economic growth or between military spending and FDI, we cannot deny the fact that military spending has some sort of influence on economic growth and FDI. Military spending may bring overall stability in the country by providing security against all external threats and aggression and thus creates a congenial atmosphere both for economic growth and FDI. There is a popular belief that developing countries

gain more from defense spending vis-à-vis the developed countries, as benefits are more widespread across the economy in those countries.

Of course, the growth concepts are not usually kept in mind while money is spent for military purpose. This is more true in the Third World countries. The comparisons between military spending and GDP growth may be misleading sometimes. The proportion of national resources allocated to defense reflects the perceptions of national elite and decision making circle, which is largely guided by the security consideration of the country concerned. This is not expected to represent any comprehensive plan of sound investment where large-scale social and human welfare exist (Hassan et al., 2002). In most of the countries of East Asia and the Pacific region, resources are transferred to defense at the cost of their socio-economic development and growth. The question of national security should be intrinsically linked up with human resource development in these countries which could be fruitfully utilized for human resource development and GDP growth. No security plan would be sustainable one even if the size of military build up is very big unless there is an improvement in the condition of the general masses.

Therefore, for sustainable development and everlasting security, priority should be given upon the development of human resource and not upon military build up. In order to develop human resource, the associated measures like better access to education and training, better sanitation and health care facilities should be undertaken. Only military security is not enough to attain the long cherished goal of growth and development. So, it is imperative upon us to carefully assess various supply side (spin-offs from technology or infrastructure) and demand side (resource diversion) factors to analyze the impact of military spending on growth. There is no doubt that military spending has some positive impacts as trickling down effect in terms of employment and infrastructure development. But their magnitude would not be very large compared to the loss of benefits to be derived from the alternative use of resources spent for defense. Therefore, it is very essential to reassess national priorities in the backdrop of social development and opportunity cost for human resource development in particular and social wellbeing in general.

References

- 1. Asiedu, E. 2002, "On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa Different?" **World Development**, 30(1), pp. 107-119.
- Ball, N. 1983. "Defense and development: A critique of the Benoit study".
 Economic Development and Cultural Change 31 (3): 507-24.
- 3. Barro, R.J. 1997, Macroeconomics, M.I.T. Press, London.
- 4. Barro, Robert J. 1991. "Economic Growth in a Cross Section of Countries." *Quarterly Journal of Economics* 106, vol. 2 (May): 407-433.
- 5. Batchelor, Peter, and Sue Willett. 1998. **Disarmament and defense industrial adjustment in South Africa.** Oxford, UK: Oxford University Press.
- 6. Becker, G.S., K.M. Murphey and R. Tamure, 1990, "Human Capital, Fertility and Economic Growth," **Journal of Political Economy**, Vol. XCVIII: 12-37.
- 7. Benhabab, J. and M. Spiegel. 1994, "The Role of Human Capital in Economic Development: evidence for cross-country data," **Journal of Monetary Economics**, 34: 143-170.
- 8. Benoit, E. 1978. "Growth and defense in developing countries". **Economic Development and Cultural Change** 34:176-96.
- 9. Benoit, E. 1973. **Defense and economic growth in developing countries.** Boston: D. C. Heath.
- 10. Chen, C. H. 1993. "Causality between defence spending and economic growth: The case of mainland China". **Journal of Economic Studies 20** (1): 37-43.
- 11. Chowdhury, A. R. 1991. "A causal analysis of defense spending and economic growth". **Journal of Conflict Resolution** 35:80-97.
- 12. Clark, T.E. 1993, "Cross-Country Evidence on Long-run Growth and Inflation," Federal Bank of Kansas City, **Research Working Paper**, 90-105.
- 13. Dewan, E. and S. Hussein, 2001, "Determinants of Economic Growth," **Reserve Bank of Fiji Working Paper**, May 2001.
- Dunne, Paul and Eftyshia Nikolaidou. 2001. "Military Expenditure and Economic Growth: A Demand in Supply Model for Greece, 1960-96," **Defence and Peace Economics,** vol. 12(1), pp. 47-67.
- 15. Edward, S., 1990, "Capital Flows, Foreign Direct Investment, and Debt-Equity Swaps in Developing Countries," **NBER Working Paper** 3497.
- Fischer, S., 1993, "The Role of Macroeconomic Factors in Growth," Journal of Monetary Economics 32, MIT, Cambridge, USA.
- 17. Fischer, S. and F. Modigliani, 1978, "Toward an Understanding of the Real Effects and Costs of Inflation," **Weltwirts-Chaftliches Archive**, 114(4): 810-833

- 18. Gallup, J.L., J. Sachs, and A.D. Mellinger, 1998, "Geography and Economic Growth," paper prepared for the Annual Bank Conference on Development Economics, Washington D.C., April 20-21.
- 19. Gastanaga, V., J.B. Nugent and B. Pashamova, 1998, "Host Country Reforms and FDI Inflows: How much Difference Do They Make?" **World Development**, 26(7), 1299-1314.
- Granger, C.W.J., 1969, "Investigating Causal Relation by Econometric Models and Cross-Spectral Methods," Econometrica, 37, 424-38.
- 21. Hasan, S, 1994, "Causality Between Defense Spending and Economic Growth in China: A Re-examination," discussion paper in Economics, 94-1, University of Northumbria at New Castle.
- Hassan, M. Kabir, 2003, "FDI, Information Technology and Economic Growth in the MENA Countries," Paper presented at the 10th ERF Conference in Marakkesh, Morocco on December 16-18.
- 23. Hassan, M. Kabir, M. Waheeduzzaman and Aminur Rahman, 2002, "Defense Expenditure and Economic Growth in the SAARC Countries," Paper presented at the 2002 Annual Conference of Federation of Business Disciplines (FBD) in Houston, Texas, March 3-6.
- 24. Joerding, W. 1986. "Economic growth and defense spending: Granger causality".

 Journal of Development Economics 12:35-40.
- 25. Khan, Habibullah and Yap Wei Yim. "Defense Spending and Economic Growth: Evidence from Asean Using Cointegration and Causality Tests," Paper presented in the 7th Annual Meeting of the ASBBS, Las Vegas, February 17-21, 2000.
- Kinsella, D. 1990. "Defence spending and economic performance in the United States: A causal analysis". Defence Economics 1:295-309.
- Kollias, Christos and Stelios Makrydakis. 1997. "Defence Spending and Growth in Turkey 1954-1993: A Causal Analysis," **Defence and Peace Economics**, vol. 8(2), pp. 189-204.
- Kumar, N., 1994, "Determinants of Export Orientation of Foreign Direct Manufacturing Investment: An Ex-post Empirical Analysis," Journal of International Business Studies, 8(2): 29-42.
- Kusi, Newman K. 1994. "Economic Growth and Defense Spending in Developing Countries: A Causal Analysis," Journal of Conflict Resolution, vol. 38(1), pp. 152-159.
- Levine, R., and S. Zervos. 1993, "Looking at Facts: What We Know About Policy and Growth from Cross-Country Analysis," World Bank Policy Research Papers, WPS 1115.
- 31. Lipsey. R., 2000, "Inward FDI and Economic Growth in Developing Countries," **Transitional Corporations**, 9(1), pp. 66-95.

- 32. Looney, Robert E. 1991. "Defense expenditures and economic performance in South Asia: Tests of causality and interdependence". **Conflict Management and Peace Science** 11 (2): 37-67.
- Loree, D.W., and S. Guisiuger, 1995, "Policy and Non-Policy Determinants of U.S. Equity Foreign Direct Investment," Journal of Business Studies, 26(2), 281-297.
- Lucas, R., 1998, "On the Mechanics of Economic Development," The Journal of Monetary Economics, 22:3-42.
- 35. Madden, Gary G., and Paula I. Haslehurst. 1995. "Causal analysis of Australian economic growth and military expenditure: A note". **Defense and Peace Economics** 6:115-21.
- Manage, N., and M.L. Marlow, 1986, "The Causal Relation Between Government Revenue and Government Expenditure," Southern Economic Journal 52, pp. 617-29.
- Mankiw, N.G., D. Romer and D.N. Weil., 1992, "A Contribution to the Empirics of Economic Growth," Quarterly Journal of Economics, May.
- 38. Mehanna, Rock-Antoine, 2001. "Defense Spending and Economic Development in Lebanon: A Cointegration and Vector Autoregression Analysis" Working Paper, 2001, Wartburg College, US.
- 39. Romer, P. 1990, "Endogenous Technological Change," **Journal of Political Economy** 98, Part II, 71-102.
- 40. Sachs, J.D., and A.M. Warner, 1997, "Sources of Slow Growth in African Economies," **Journal of African Economies**, vol. 6: pp. 335-376.
- 41. Schneider, F, and B. Frey, 1985, "Economic and Political Determinants of Foreign Direct Investment," **World Development**, 13(2), pp. 161-175.
- 42. Solow, R., 1956, "A Contribution to the Theory of Economic Growth," **Quarterly Journal of Economics**, 70: 155-173.
- 43. Tsai, P.L., 1994, "Determinants of Foreign Direct Investment and its Impact on Economic Growth," **Journal of Economic Development**, 19, pp. 137-163.
- 44. Wheeler, D. and A. Mody, 1992, "International Investment Location Decision: The case of U.S. firms," **Journal of International Economics**, 33, pp. 57-76.

Table 1: Summary Statistics of Variables: Eastern Asian and Pacific Countries

	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
GG	3.95	5.70	12.80	-16.70	6.38	-1.62	5.40
IT	-1.00	-1.36	1.66	-1.67	0.78	1.92	6.15
GE	18.58	18.60	29.40	8.00	5.68	0.08	3.29
IV	30.43	28.00	43.00	14.00	8.23	0.06	1.74
IR	9.02	7.35	26.30	3.90	5.32	1.62	5.10
HC	61.18	60.00	102.00	14.00	23.82	-0.33	3.18
PG	1.89	1.85	2.70	1.10	0.49	-0.01	1.76
FI	7433.63	2325.00	44236.00	-2745.00	12957.36	2.15	5.96
GB	0.24	0.19	0.44	0.16	0.10	1.06	2.44
ER	2235.78	30.50	13916.00	1.00	4171.37	1.72	4.29

Table 2: Regression Estimates of Pooled Cross-Section and Panel Fixed Effect Models (GLS), East Asia and the Pacific (Dependent Variable: GDP Growth Rate)

Explanatory Variables	Pooled Cross-Section GLS (N = 8)	Fixed Effect GLS (N = 8)	
	GED (IV 0)	GES (IV 0)	
Globalization	-0.041	-0.054	
GI (Globalization Index)	(-1.539)	(-1.018)	
Infrastructure	0.958	1.026	
ICT (ICT Configuration)			
-	(1.453) -0.073**	(1.600) -0.331**	
HC (Human Capital)			
	(-2.281) 1.493	(-2.297)	
PG (Population Growth)		-3.497	
, -	(0.773)	(-0.922)	
N ational Investment	0.327**	0.345**	
GDI (Gross Domestic	(2.591)	(2.391)	
Investment)	0.934***	1.082**	
GE (Government	(4.936)	(2.246)	
Expenditure)	-1.04E-11	9.88E-12	
FDI (FDI Inflows)	(-0.294)	(0.156)	
Economic Factors			
IR (Inflation Rate)	0.185***	0.033	
ire (initiation reace)	(4.303)	(0.811)	
ER (Exchange Rate)	0.0003*	0.004	
Ere (Exchange reace)	(1.855)	(1.099)	
ME (Military	-0.146	0.895	
Expenditure)	(-0.223)	(0.854)	
Expenditure)	-1.93E-05	0.003	
GC (Per Capita Income)	(-0.115)	(1.303)	
Constant	10.451*		
	-12.451*	_	
	(-1.756)		
\mathbb{R}^2	0.94	0.83	
Adjusted R ²	0.92	0.70	
F-Value	38.74	233.65	

t-statistics in parentheses * p < .05 ** p < .01 *** p < .001

Table 3 : Regression Estimates of Pooled Cross-Section and Panel Fixed Effect Models (GLS), East Asia and Pacific

(Dependent Variable: Foreign Direct Investment)

Explanatory Variables	Pooled Cross- Section GLS (N = 8)	Fixed Effect GLS (N = 8)	
Globalization GI (Globalization Index)	-41840252 (-0.744)	70391231 (1.215)	
Infrastructure ICT (ICT Configuration)	1.86E+09 (1.111)	3.42E+09 (1.115)	
HC (Human Capital)	1.10E+08 (0.806)	2.40E+08 (0.851)	
PG (Population Growth)	8.78E+08 (0.662)	2.17E+09 (0.566)	
N ational Investment GDI (Gross Domestic Investment)	5.85E+08 (1.333) 6.10E+08	-3.72E+08 (-1.097) -1.86E+09	
GE (Government Expenditure)	(1.257) -75223495 (-0.417)	(-1.595) 1.34E+08 (0.594)	
GG (GDP Growth)	1.99E+08	52008479	
Economic Factors IR (Inflation Rate)	(0.412) -37773 (-0.062)	(0.095) -13868743 (-0.877)	
ER (Exchange Rate)	3.79E+08 (0.470)	-1.73E+09 (-1.037)	
ME (Military Expenditure)	-1861235 (-1.251)	-4801187 (1.457)	
GC (Per Capita Income)	-3.08E+10	, ,	
Constant	(-1.436)	-	
R ² Adjusted R ² F-Value	0.55 0.37 2.99	0.79 0.61 7.68	

t-statistics in parentheses * p < .05 ** p < .01 *** p < .01

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 155-172 Bangladesh Economic Association (ISSN 2227-3182)

Management of Urban Disaster with special Emphasis on Fresh Water Scarcity and Surface Water Pollution in Dhaka City

Murshed Ahmed¹

Abstract

Dhaka, the capital of Bangladesh, is a Mega City accommodating a huge number of people in a limited piece of land creating excessive demand for dwelling houses and industries, which result in the construction of high-rise buildings and growing slum areas simultaneously. These give rise to environmental hazards along with the paucity of fresh water for household and industrial use. Like many other cities in Asian developing countries, Dhaka is exposed to serious threats of versatile urban disasters viz. seismic, flood, cyclone, fire and the like. Now, environmental hazard in particular has become a community concern in Dhaka Metropolitan City. The environment within and around urban areas is worsening day by day due to unplanned and improper use of water and land. Ensuring safe and reliable water supply has been one of the major urban challenges. The main sources of surface water of Dhaka city are the river Buriganga and other peripheral rivers namely, Shitalyakha, Turag and Balu, which are extremely polluted by discharge of more than 1.3 million cubic meters of untreated effluents and 0.5 million cubic meters of sewage daily. Most of these waters are unusable for human and other living organisms. These polluted waters can no longer be considered suitable for chemical treatment. On the other hand, the

The author gratefully acknowledges the contribution of following institutions for providing valuable information that has proved extremely useful in producing this paper: Bangladesh Water Development Board (BWDB), Institute of Water Modelling (IWM), Centre for Environmental and Geographic Information Services (CEGIS) and South Asian Disaster Management Centre (SADMC) of International University of Business Agriculture and Technology (IUBAT), Dhaka, Bangladesh University of Engineering and Technology (BUET).

riverbanks and beds are encroached by illegal occupants. The scarcity of surface water, therefore, results in increasing pressure on ground water abstraction. Groundwater level of Dhaka city is receding alarmingly by 2 to 3 meter every year because of groundwater mining, which may result in land subsidence. In such a situation if water of surrounding rivers is not improved both in quality and quantity, the capital city will not remain environmentally fit for human habitation. The situation may improve through co-ordination and integration of different institutions engaged in urban development activities under the umbrella of an apex body for emergency mitigation of disaster. The present paper attempts to discuss some major aspects of human-induced urban disasters with special emphasis on fresh water scarcity and surface water pollution, highlighting measures for mitigating them through appropriate Environmental Management Plans (EMPs), including awareness building, active community participation, institutional development and strict enforcement of regulatory and legislative measures. Recommendations are prescribed for judicious use of land and water with proper planning and management of water resources using advanced technologies. Key words: Dhaka city, environmental hazards, humaninduced disaster, groundwater mining, land subsidence.

1. Introduction

Mankind is suffering from various kinds of disasters caused by flood, tropical cyclone, storm surge, tornado, river erosion, drought, earthquake, arsenic and environmental pollution. The environment within and around urban areas like Dhaka city are deteriorating day by day due to over-abstraction of ground water and pollution of surface water of the nearby rivers and unplanned use of land. Dhaka is already overcrowded by the dwelling houses, government offices and installations and infrastructures. The socio-economic conditions of people of the entire country depend greatly on Dhaka for various reasons. Dhaka is one of the mega cities of the world, which has already been rated as the environmentally most polluted one. City dwellers have been facing acute scarcity of safe drinking water for shortage of supply against demand. In the backdrop of rising demand for water in domestic, industrial and high-rise buildings and commercial centres, a new paradigm shift is required in the light of globalization. So, it will be a great challenge for the citizens to save the city from the threat of environmental degradation. This paper focuses on and responds to major urban disasters regarding water related issues. Rapid growth of population in a given area is the main reason for the multiple problems in our city. Groundwater level of Dhaka city is now alarmingly going down by 2 to 3 meters every year (IWM, 2006) resulting from mining and disaster threats of land subsidence, which has become alarming for the urban planners. Time may come when the city will fail to bear the burden of the increasing population with severe impact of environmental imbalance that will lead to a special type of disaster herein termed as humaninduced disaster. How this type of disasters can be managed with efficient and emergency response system is the main focus of the paper.

2. Theme of The Study

Access to fresh water resources is a global concern since the beginning of human civilization. As urban centres started growing and technology advanced, the issue got more importance in course of time. In this paper, water refers to surface fresh water from such places as rivers, lakes and wetlands as well as underground water sources. For the last few decades secured, safe, reliable and stable supply of water has been one of the leading economic and social challenges faced by the Asian developing countries as their population, economy, urban areas and mega cities have been growing fast. Water quality problems are becoming increasingly serious day by day. All surface water bodies within and around the urban industrial centres are now highly polluted. Surface and ground water is also becoming increasingly contaminated within and around growth centres of population and industrial areas. The major factors are human activities and interventions, which include encroachment on the river bank, flood plains and low lying areas, sewage and solid waste disposal, insufficient water supply and sanitation, industrial waste disposal, upstream diversions and abstractions (Ahmed, 2004). Waste assimilation capacity of the rivers is decreasing day by day and micro-organism is being destroyed due to increasing water quality deterioration. Now Dhaka has also a large slum population that will create problems for getting safe drinking water, inadequate sanitation and water shortages. The urban poor have become the worst sufferer of unplanned and irrational urbanization. The main objective of the study is to suggest a mechanism for mitigating fresh water scarcity and polluted surface water through good governance by coordinated and integrated efforts of different agencies and institutions, and by Participatory City Management (PCM) to significantly improve the city's social, economic, physical and biological environment.

3. Historical Background

Bangladesh is historically a riverine country with diverse ecological zones. A riverine environment shapes the life-style of its people living along river banks. From time immemorial nations, societies, cities as well as civilization have grown near rivers. The city of Dhaka was established by the Mughals on the bank of the river Buriganga in the early 17th century considering its immense potentiality of

growth and development. Since then this Buriganga river has been serving the people of Dhaka city with its entire resources with a flourishing river port. Undoubtedly Dhaka, the capital of Bangladesh, has an exciting history and a rich culture. Historically known as the city of mosques and Muslins, it attracted travellers from far and near. According to history, it was founded in 1608 AD as the seat of the imperial Mughal Viceroy of Bengal. It became a trade centre for the British, the French and the Dutch before coming under British rule in 1757. It was again named the capital of East Bengal in 1905 and became the capital of East Pakistan after the partition of the Indian subcontinent in 1947. As the capital of Bangladesh since 1971. Dhaka has now grown into a dynamic city offering opportunity for millions of migrants with an area of about 256 square kilometre (GOB, 2003), excluding peripheral towns and slum dwelling places. Dhaka's population is currently around 12 million and is projected to grow to 20 million in 2020, making it the world's third largest city (World Bank, 2007). Possessing a blend of old and new architecture, Dhaka is developing fast as a modern metropolitan city. Dhaka is surrounded by Buriganga, Turag and Sitalakhya rivers and inter-connected canals, which used to form a life-line for city residents in the past. During the last twenty years, a convergence of unregulated industrial units, rapid rural to urban migration, encroachment of the rivers and channels, disposal of untreated pollutants to the rivers, unplanned road network, and non-compliance of environmental regulations have all degraded surface water quality. Developers of lands and buildings have made many of the canals non-existent damaging the drainage system, and created water logging. The surface water of the rivers surrounding the Dhaka city is meagre and becomes polluted during the dry season. Most of the surface water is environmentally unfit for any use by human beings or any living organism. The city authorities have failed uptill now to prepare and implement any effective urban planning to keep the rivers free from water pollution and prevent the encroachment of the perennial water bodies and channels.

4. Need for The Study

A pollution-free environment is vital for a decent standard of living. The availability of fresh water and healthy environment is a fundamental right of the city dwellers. Unfortunately, with rapid urbanization and industrialization, urban governance and the provision of adequate safe water and housing have remained below the standard. Poverty has further aggravated the situation with increasing number of slums and squatters in metropolitan cities. Given the magnitude of the problems, the present study emphasizes the need for devising strategies for

accessing safe water towards socio economic enhancement. Emphasis has also been given on planned development of urban areas by strengthening environmental governance through involvement of all the stakeholders for achieving environmental sustainability.

5. Problems and Challenges

Massive and unprecedented urbanization in Dhaka has produced new types of water and wastewater related problems and challenges. The immediate challenges in terms of the management of demand for and supply of fresh water for the city for environment friendly conditions are as follows:

- Augmentation of fresh water supplies from outside Dhaka city from both surface and ground water sources to arrest the continuing fall of groundwater level and increase water supply is the prime need of the hour. Water treatment plants and well fields outside Dhaka will be required to solve this problem.
- All waste water needs to be treated before disposal in the nearby river. All
 residential houses, commercial places and industrial units within Dhaka
 need to be connected with sewerage disposal system.
- Proper land utilization planning, keeping provision for open area for recreation and water bodies, need to be provided.
- Proper land use planning and implementation of plan need to be controlled by participation of city dwellers and public organizations through a strong corporate body.
- The city area must be extended wherever possible.

The present and future challenges faced by the Dhaka city are multifaceted that need to be managed efficiently for reducing risks and vulnerability. These challenges are posing threat for optimisation and sustainable management of water resources and poverty reduction strategies. The dynamics of water for growth are extremely complex and highly dependent on driving forces like physical, technological, cultural, political, social and economic priorities.

6. Socio-Economic Impacts of Water Pollution

Dhaka suffers from water pollution, scarcity of pure drinking water, sewage management, water logging etc.. which pose a serious threat to public health, ecosystems and socio-economic life of the people. Pollution of the rivers and the change in the environment has seriously influenced the livelihood and living pattern of the city dwellers of Dhaka. Dhaka has not been able to keep pace with

the needs of the rapidly transforming social and economic demands of the growing population. Most migrants come from rural areas and their contribution to economic growth is significant, as they provide essential services to garments factory, housing, manufacturing, services etc. Dhaka has emerged as a mega city in the new millennium (World Bank, 2007). Dhaka, being a very large and dynamic city, has drawn substantial industrial investments, particularly in the ready made garments industry, which has created demand for workers and services. This migration, however, also adds tremendous strain on an already crowded city with limited inhabitable land and a low level of public services. The major socio-economic features of the city now are excessively high land prices, a large slum population, poor quality housing, traffic congestion, water shortage, poor sanitation and drainage, irregular electric supply, increasing air pollution, and poor governance. There is no urban planning to protect peripheral rivers and channels, which would accommodate the drainage water, and to assimilate waste discharges. Various studies and reports reveal that the extent of river pollution is now at an alarming level. Industry alone is responsible for discharge of more than 1.3 million cubic meters of effluents into the rivers everyday, compared to the daily discharge of 0.5 million cubic meter household waste water (Daily Star, 2008). As a result, natural resources and social life are severely endangered. Due to bad smell and unhygienic physical environment, people in large number are migrating from river side to other places. Inhabitants have become socially isolated from their relatives and friends. People are less interested to build relationship with the people living along river sides.

Three major types of diseases: skin diseases, diarrhoea and dysentery are spreading sporadically with industrial water pollution. Moreover, 20 types of illness due to industrial pollution have been increasing in the last ten years. Evidence of ground and surface water contamination has been found in areas near the polluted river Buriganga, particularly in Hazaribag area. High values of *E. coli* form have been observed in these areas (RPMC, 2008). Even people living in the vicinity of Buriganga are likely to be attacked by cancer for their contact with chemical wastes dumped into the water. The number of fish species has severely declined due to water pollution in the rivers. A recent study conducted by the Water Resources Department of Bangladesh University of Engineering and Technology (BUET) reveals that the oxygen level of the Buriganga and Turag is less than 1 mg/L. All species of local fish need 4-6 mg/L oxygen to survive. Many of the fishermen and boatmen dependent on the rivers for livelihood have shifted to other professions as the rivers have been polluted and dried up. Most of the the industrial effluents are dumped directly into the rivers Buriganga, Balu and

Sitalakhya. Pollution from tanneries in Hazaribagh is responsible for the increase in the health-related expenditure to 125 US dollar per capita of people living in the vicinity of the tanneries (GOB, 2005). These pollutants are causing serious damage to freshwater and healthy ecosystems as well. The unabated dumping of industrial wastes and sewage has polluted the waters to such a magnitude that it is no longer economically viable for chemical treatment. These kinds of pollution have a strong human health impact, particularly among the poor communities who are exposed to water-borne diseases.

7. Effects of Urbanization on Water Resources

Safe, affordable and stable water supply, proper sanitation facilities are vital requirements for human development and ecosystem survival. Without adequate quantity and quality of water, it will not be possible to ensure food, energy, health and environmental security (ADB, 2007). But as a result of rapid urbanisation and population boom, Dhaka city is facing serious environmental problems. Industrial expansion, rural to city migration, encroachment of the rivers/canals/water bodies, and lack of strict enforcement of environmental regulations with climatic change have significantly been contributing towards increased intensity of disasters. Consequently access to freshwater now has become a serious concern for city population and mankind as a whole. Unplanned urbanization and unregulated industrial expansion produce adverse impact on drainage situation, water quality, recharge of ground water, wetland ecology, and water retention.

Dhaka-Narayanganj-Demra (DND) project covering an area of 56.79 sqkm was ranked as one of the most successful projects of Bangladesh Water Development Board (BWDB), but it has now become a burning example where extreme environmental degradation has occurred due to unplanned urbanization and population increase, growth of illegal fish farms, and encroachment of canals/ borrowpits by the filling stations without proper drainage facilities. The continual growth of fish farms in the project area is responsible for water logging. These fish farms block free flow of water into the canals to maintain their ponds leading to water logging. Another problematic factor is the encroachment of the canals that are being filled up by the filling stations (CNG/petrol pump) in the project area. Highways borrow pits/canals, which were 100 feet wide, have been narrowed down at points to only 12 feet. Most of the canals in the DND area have been filled up due to industrial waste and garbage dumping causing severe water logging during the monsoon because the project area is beyond the jurisdiction of the municipal authority to dispose up the garbages. About 1.5 million people (2005) of the DND project area live with the risk as the authorities concerned

failed to take long term measures to improve the situation. Two national highways such as Dhaka-Chittagong road and Dhaka-Narayanganj link road have bifurcated the DND project into three parts without adequate drainage facilities which cause obstruction of natural flow of water. Unplanned road network also causes flood hazards, drainage congestion and disruption in urban utility services. So, to improve the existing drainage situation, re-excavation of drainage canal, rehabilitation of pump station and construction of road crossing bridge and culverts are needed to restore the normal livelihood for the dwellers in the project area adjacent to the Dhaka city with socio-economic and environmental upgradation (BWDB, 2008). Hence the urban planning should be based on comprehensive and integrated approach towards mitigation of such adverse impacts.

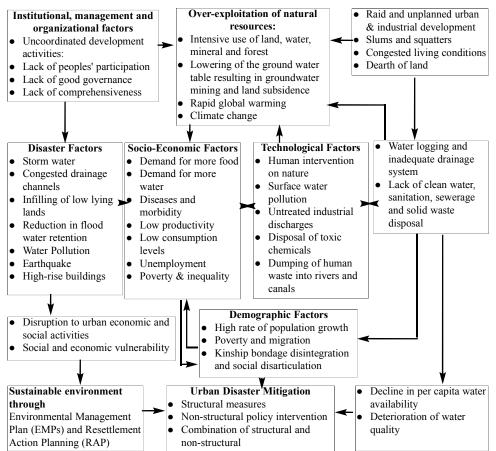
7.1 Water Quality

Surface water of Dhaka is in a very poor condition, especially in the dry season. Consequently, dilution of contaminants is drastically reduced in the dry season (World Bank, 2006). The water quality of the rivers has been seriously affected. Water and air pollution has already become a serious concern. The surface water in Dhaka is polluted severely through dumping of municipal solid wastes, indiscriminate discharge of untreated waste water and industrial effluents, oil and lubes spillage from the operation of river ports and ship wreckage. The serious surface water pollution is found in Buriganga river due to tannery wastes and industrial discharges and domestic sewage (Islam, et.al, 2003). It has been reported in recent surveys that around 60% of pollutants are generated from industrial sources and the rest 40% are mainly from domestic sources and to a lesser extent from untreated dispersal of lube and burnt oils from river transport/vessels. It is reported that more than 60,000 cubic meter/day of toxic waste from industries enters the Dhaka canal and river system. Both industrial effluent and domestic waste water are being disposed mostly untreated into the wetlands and natural streams in and around Dhaka city causing pollution of river water and affecting ground water quality. Every year ground water level is receding fast due to over extraction. River encroachment is narrowing the river width and reducing the water flow. Large scale sedimentation in river beds is causing reduction of normal depth of river (RPMC, 2008). Because of human activities like encroachment of rivers, floodplains and low lying areas, disposal of sewage and solid waste, industrial waste disposal and high rate of migration of the poor people in the slum areas of Dhaka city, the peripheral rivers are being polluted seriously. Apart from industrial sources, surface water in Dhaka is also extensively polluted by human faeces as sanitation is inadequate.

8. Environmental Concerns

Dhaka city is under threat due to rapid urbanization, population pressure and extensive resource use, conversion of wetlands and channels into housing settlements and other various human interventions. Interrelationships of different factors of disasters and their possible impacts are shown diagrammatically in figure-1. Human interference on nature has limited the biodiversity and aquatic habitats. Bio-diversity preservation is an urgent need of time to save the civilisation and face the challenges of the 21^{ts} century. Quality of water and soil has deteriorated due to unplanned land use, undesirable encroachment for settlements, indiscriminate disposal of hazardous industrial and sewage wastes. A serious problem in the urban areas is the mushroom growth of real estate business,

Figure 1: Dynamic and complex interrelationship between urbanization and environmental issues



which accelerates the filling of low lying areas, natural channels and ponds for construction of high-rise residential and commercial buildings.

The growth of high-rise buildings is causing reduction in the floodwater retention areas, thereby causing water logging and drainage problems in the city area. Illegal occupation and constructions in the surrounding rivers drastically reduced the drainage potentialities of the city which enhanced degraded environmental condition. Smooth navigation and fisheries are also adversely affected by such kind of encroachments (BWDB, 2007).

9. Role of Government in Combating Surface Water Pollution

The pollution of both surface and ground water around various industrial centres by untreated effluent discharge into water bodies is a critical water management issue (NWP,1999). The National Water Policy on industrial pollution states that the policy (1999) of government in this regard is:

- Zoning regulations will be established for location of new industries for fresh and safe water availability and effluent discharge possibilities
- Effluent disposal will be monitored by relevant government agencies to prevent water pollution
- Standards of effluent disposal into common watercourses will be set by Water Resources Planning Organization (WARPO) in consultation with Department of Environment (DoE)
- Industrial polluters will be under law to pay for the cleanup of water-body polluted by them

The departmental agencies and their functions in combating surface water pollution are shown in Table1.

Encroachment and pollution of the rivers surrounding Dhaka continue despite the existence of good number of government agencies involved in the management of the rivers and water bodies. It has worsened due to lack of co-ordination among different service agencies like DCC, Roads and Highways Department (RHD), RAJUK, BWDB, DWASA and DoE. There is a serious problem of overlapping of jurisdictions among many government agencies which leads to inaction. The roles of DCC, the planning authority RAJUK and the line ministries in urban management are not clear and co-ordination among them is very limited. All relevant government agencies need to come forward for a comprehensive management of environment in land and water in and around Dhaka city. The existing laws and regulations need to be updated, including restructuring and re-

Table 1 : Responsibilities of Government Institutions regarding water quality of Dhaka

Agency	Services					
Department of	Enforcement of environmental rules, administration of the					
Environment (DoE)	Open Space and Wetland Conservation Act, 2000 and					
	Urban Water Body Protection Law,2001.					
Dhaka City Corporation	Responsible for handling and disposal of solid waste;					
(DCC)	management of public green spaces; surface drainage					
	maintenance of some lakes, operation of health facilities.					
Rajdhani Unnayan	Detailed Area Plan (DAP) for a planned township					
Kartipakha (RAJUK)	ensuring environmental upgradation.					
Dhaka Water and	Responsible for ensuring supply of pure, safe, and					
Sewarage Authority	dependable water to city dwellers and regular disposal of					
(DWASA)	sewage.					
Bangladesh Water	Implementation and Maintenance of water resources					
Development Board	projects for flood control, drainage and environmental					
(BWDB)	improvement.					
Ministry of Land (MoL)	Control and administration of government owned land,					
	including land reclassification and settlement of land					
	reclaimed and accreted.					
Bangladesh Inland Water	Responsible for inland water transport and maintaining					
transport Authority	navigable waterways; dredging, shipping terminal					
(BIWTA)	maintenance					
Ministry of Industry	Overall policy direction for industrial development; a role					
	in development of industry in specified zones in					
	compliance with pollution control regulations in factory					
	design.					

organization of the different development agencies and their co-ordination for effective and balanced development of the mega-city in the present context of socio-political and structural realities. It is important to establish an apex body with administrative, financial and enforcement power for co-ordination of their activities effectively as well as for cost-effective mitigation measures to build support for better management. Environmental concerns are multi-sectoral issues for which institutional arrangements are critical to the success and failure of all initiatives.

9.1 Promoting Compliance

Industrial discharges into rivers, canals and ground water must be controlled if water quality is to be improved. This will require strict enforcement of environmental clearance condition and effluents standards. There has been no strict enforcement of environmental regulations to date. To reduce the pollution of

surface water bodies, both on-site and centralised treatment plants for industrial effluent are required. Each industrial unit should have an effluent treatment plant according to the Environment Conservation Act-1995. To reduce the pollution of ground water bodies, a reduction of pollutants leached to the aquifer can be achieved by on-site treatment in combination with improved conveyance of effluents to a centralised treatment facility. Strict control on new industrial setups around the city must be applied through more effective use of the Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA). It is encouraging that Government of Bangladesh (GOB) has already taken decision to remove the Hazaribagh tannery in the industrial complex at Savar with a provision of treatment plants of the effluents. Similar action should be taken for Dholai Khal outfall containing sewage wastes.

9.2 Priority Projects Under BWDB

Dhaka Integrated Flood Protection Project was implemented covering the most densely populated western part of about 136 sq. km. with a view to providing the city dwellers a living condition free from floods, drainage and environmental hazards (BWDB, 1992). Environment of city improved as polluted water does not stay within the city area and trees have been planted on the sides of the embankment. Living standard of the city dwellers has improved due to this project. Yet a vast area of about 124 sq.km. of Eastern part remains unprotected. However, the Dhaka Integrated Flood Control Embankment cum Eastern Bypass Road Multipurpose Project is now under the process of approval of GoB (BWDB, 2008) to protect the eastern part of Dhaka city from floods, drainage and environmental hazards. Realistic remedial measures are also being undertaken to augment the flow of Buriganga for ensuring proper management of water resources for environmental conservation (BWDB, 2006). Besides, some steps need to be undertaken for protecting the existing flood control works, preventing illegal use of land and illegal occupants, including construction of illegal structures, which create the problem of water logging by narrowing the drainage canals. Treatment of all industrial waste needs to be ensured to protect environmental degradation. It is also equally important to recover areas occupied by land grabbers in the absence of Rajuk Detailed Area Plan (DAP) for accumulating waste water for pumping and protecting the overall environment.

9.3 Further Actions to be Taken

Government should have a dynamic role to mark the areas of rivers and canals, which were illegally encroached upon, to bring back their original shapes and sizes. Following steps will need to be taken for that purpose.

- Land reclassification for industries, commercial and residential areas
- Strengthening water quality monitoring for participatory EMP/ETP
- Strict enforcement of the Environment Conservation Act-1995 & Rules for maintaining a habitable environment
- Establishment of standards of effluent disposal into common watercourses
- Providing fiscal and other financial incentives for retrofitting or for reduction of effluents from industries
- Devising effective water quality management technology
- Applying polluters pay principle to make the polluters land to rectify them

10. Participatory City Management (PCM)

The administrative structure of service delivery by government institutions in Dhaka city is complex. Services are delivered by different agencies with poor governance and lack of co-ordination. The main causes are the limited role and authority of the DCC in urban management. It has a limited role in city planning and management and is highly dependent on the central government. Urban planning still lies on top down planning approach without consultation of the local. The approach should be bottom up wherein the local will be involved and participate in urban planning and management. The Government alone can never solve the problems and disasters properly without people's participation with its limited resources and manpower. For this reason peoples' participation is essentially required. DoE has the responsibility of enforcing environmental regulations as these affect land and housing development. In the circumstances, without public awareness, and consciousness development and structured planning procedures, it is impossible to achieve better institutional framework. It is evident that government have failed to solve and mitigate the different problems faced by city dwellers. What is still lacking is structured planning, and development and management procedure with enhanced peoples' participation in city management. In the case of Dhaka city with a population of about 12 million, government alone cannot face the different types of urban disaster. For successful management and mitigation of water-related disaster, peoples' participation is essential. So, participatory approach of city management is given emphasis to effectively cope with complex issues of current trends of urbanization. Government alone is not enough to manage, mitigate and to conduct rescue operations during the onset of disaster. A strong apex body should be formed to promote cross-sectoral coordination and minimize jurisdictional conflicts. An important element of the strategic framework will be to monitor environmental pollution in compliance with public information, aimed at raising awareness of the causes and impacts of environmental degradation and at disseminating information about related intervention. Such initiatives are essential to build civil society and private sector support, both for the necessary investment and for strengthening enforcement of environmental regulations. The participatory approach of management has been proved to be pragmatic in different sectors e.g. water sector, community self help programs etc. The Participatory City Management (PCM) will work in other areas of city management including disaster. An organizational framework of the PCM may be conceived as follows (Chart 1).

PCM will bring opportunities for local people's participation to achieve compactness in townships to maximum level of economy, convenience and beauty. Both government and people should come forward for sustainable service delivery. By ensuring good governance PCM will determine the preparation and implementation of city master plan to a great extent. PCM is one in which people can work and perform their tasks easily, conveniently and economically. The purpose of PCM is to make the city functionally efficient for all the residents and users making the city environmentally healthy and sustainable.

Ministry of Local Government, Rural Development and Cooperatives (LGRD) Ministry of Land Ministry of Industry DCC **RAJUK BWDB** DoE DWASA Police Commissioner Lawyers of Technical Adviser NGOs Supreme Court from BUET/DU Peoples Environmentalist Representatives from Representatives i.e. MP and Civil Society Journalist sociations

Chart 1 : A suggested organizational framework for Integrated Environmental Management (IEM) in Dhaka city

11. Mitigation Measures of Urban Disasters

Urban disaster management in Dhaka is not only limited to technical aspects but it also encompasses social, economic, cultural and environmental needs. The mitigation measures will include integrated strategies for structural and non-structural interventions, institutional participation, infrastructural security, and enhanced community safety and resilience. In a nutshell, integrated disaster risk management, effective monitoring and evaluation, active community participation and networking are the key factors for successful mitigation of urban disaster. It recommends appropriate method of mitigation, preparedness and emergency response, proper education, information, effective forecasting and early warning.

Recommendations are made for implementation method of land use planning and legislation, housing and settlement, landscape design, urban conservation and the management of water resources up to the optimal level. More attention should be given while implementing projects for flood protection and road network. Any solution to be permanent and sustainable for mitigation of disaster calls for broad political and social consensus for the comprehensive plan. The present system as experienced cannot be the solution and it must be changed. What is needed is to think strategically for a properly planned city to promote PCM to enforce regulatory measures to protect environment and combat surface water pollution. There should be PCM to deal with public health, education, water supply and sanitation problems necessary for healthy growth and socio-economic development. Participatory approach of city management is essential for overall improvement of economic, social and environmental condition. It is urgently needed to establish an apex body which will co-ordinate the activities of DWASA, RAJUK, DCC, BWDB and other agencies to save Dhaka city from any disaster. Citizens should be sensitized and motivated through awareness building by DCC and through community participation. DCC should provide adequate service to urban people and formulate an appropriate slum development policy with the participation of slum dwellers.

The mitigation measures can be phased into three stages for prioritized implementation:

Immediate measures

- Strengthening the performance and promoting co-ordination of the government and non-government institutions.
- Restoring illegally occupied lands in canals and rivers of Dhaka city and to

- finalize the Detailed Area Plan by Rajuk.
- Building awareness amongst the citizens and ensuring participatory management.
- Ensuring sustainability of water supply and monitoring of water quality by DWASA.
- Compelling the polluters to install Effluent Treatment Plants (ETP) for all industries
- Shifting of Hazaribag Tannery and treatment of Dholai outfall containing sewage.
- Establishing sewage treatment plants.
- Water quality monitoring by applying polluters penalty system.

Mid-term Measures

- Opening silted up river and channels by dredging for improving the drainage water flow systems and navigations.
- Shifting of dockyards from Buriganga river banks to further downstream for making proper environmental management.
- Establishment of phase-wise Central Effluent Treatment Plants (CETP) in industrial areas.
- Increasing DWASA's sewage coverage from present 30% to 75% of the city
- Bringing industrialists under a broader commitment for overall pollution control.

Long term Measures

- Augmentation of the Buriganga flow by restoring silted up links with Jamuna by BWDB.
- Maintaining navigability of the Buriganga and improvement of water quality of the surrounding rivers.
- Ensuring full sewage coverage by DWASA.
- Bringing all industrial units under full CETP coverage within 2015.
- Using state-of-art technologies and a wide range of alternative materials.
- Decentralising Dhaka and spreading out the economic activities outside Dhaka.
- Motivating industrialists to introduce cleaner production technology to minimize pollution load at industries.
- Implementation of Dhaka Integrated Flood Control Embankment cum Eastern Bypass Road Multipurpose Project to protect the eastern part of the city from floods, to remove water logging and to upgrade overall

- environmental condition by BWDB.
- Develop a plan for protecting floods and proper drainage of the city area and implement it through PCM approach.
- Need-based research and development on monitoring and evaluation of water resources in Dhaka city.

12. Conclusion

Among the disasters that occurred, human-induced disasters are no less important than natural disasters. Pollution of both surface and ground water caused by human activities and interventions may create a havoc making the city uninhabitable. Hence, natural disasters and human-induced disasters should be concomitantly addressed. Water use efficiency and pollution control of both surface and ground water in the future should be taken within the framework of emerging technology, social goals, national and international rules and regulations, environmental concerns and socio-economic realities. Needless to say, surface water treatment would be cost effective if the pollution level of surface water can be reduced substantially through effective preventive measures in cognizance with acceptable water quality standards. Existing pollution of surface water should be treated and protected from further pollution by untreated domestic and industrial waste water. Many opine that the urban environment is going to face impending crises if the surrounding rivers and water bodies are not appropriately protected to make a pollution-free healthy environment. Improved performance and coordination among the Government and NGOs are crucial with greater involvement of participation of the commons. GoB alone will not be able to face all of these problems. As an approach to solve the problems, PCM may be considered a possible strategy by involving all the stakeholders of a city to address such a complex issue. In fine, management of water-related disaster in a populous mega city like Dhaka needs an intensive and comprehensive study. People of Dhaka city would discover a "new sun" shining overhead when such anthropocentric vision would ultimately be achieved. Indeed, it would be of utmost help to humanity in the long run.

References

- 1. ADB, 2007, Asian Water Development Outlook 2007, P.3
- 2. ADB, 2003, The Water Policy of the Asian Development Bank, June, P.17
- 3. Ahmed, Murshed, 2004, Development and Management Challenges of Integrated Planning for Sustainable Productivity of Water Resources, Bangladesh Journal of Political Economy (BJPE), Bangladesh Economic Association, Volume 21, No. 2, December, P.123
- 4. BWDB, 2006, Development Project Proposal for Augmentation of Buriganga flow by Restoring Silted up links with Jamuna, DPP, January, P. 52
- 5. BWDB, 1992, Development Project Proposal for Dhaka Integrated Flood Protection Project (BWDB Component: Flood Protection and Project Implementation Assistance), DPP, P.15
- 6. BWDB, 2008, Development Project Proposal for Dhaka Integrated Flood Control Embankment Cum Eastern Bypass Road Multipurpose Project, DPP, January, P. 17.
- 7. BWDB, 2008, Revised Development Project Proforma/Proposal (RDPP) for Drainage Improvement of Dhaka-Narayangonj-Demra (DND) Project (Revised), June, P.5.
- 8. Daily Star, 2008, The Daily Star, A national daily newspaper of Bangladesh. May 1.
- GoB, 2003, Bangladesh At a Glance, Published by Department of Films and Publications, 2003 edition, Ministry of Information, Govt. of the People's Republic of Bangladesh, P.127
- GoB, 2005, National Strategy for Accelerated Poverty Reduction, General Economics
 Division, Planning Commission, Government of the People's Republic of
 Bangladesh, October, P.178.
- 11. NWP, 2009, *National Water Policy*, Ministry of Water Resources, Government of the People's Republic of Bangladesh, P.12, Section 4.8
- 12. Islam, Sirajul and Sajahan Miah, 2003, *Banglapedia*, *National Encyclopaedia of Bangladesh (ed.)*, Volume 10, Asiatic Society of Bangladesh, March, P. 362
- 13. IWM, 2006, Resource Assessment and Monitoring of Water Supply Sources for Dhaka City DWASA 2006, Institute of Water Modelling, Volume I Main Report, July, P. 2-52
- 14. RPMC, 2008, Report on Mitigation of River Pollution of Buriganga and linked rivers

 Turag, Tongi Khal, Balu, Sitalakhya and Dhaleswari; River Pollution
 Mitigation Committee, May, P. 5.
- 15. The World Bank, 2007, *Dhaka: Improving Living Conditions for the Urban Poor, Bangladesh Development Series*, Paper No. 17, June, P. xiii, 33
- 16. The World Bank, 2006, Bangladesh Country Environmental Analysis, Bangladesh Development Series, Paper No. 12, September, P. 28
- 17. Winters, Alan O., and Terrie L. Walmsley (2002), "Relaxing the Restrictions on the Temporary Movement of Natural Persons." Mimeo. Brighton: University of Sussex.

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 173-191 Bangladesh Economic Association (ISSN 2227-3182)

E-Business with Special Reference to On-line Banking of Bangladesh: An Analysis

MUHAMMAD MAHBOOB ALI¹ NARGIS AKTER²

Abstract

Due to recent remarkable development in Information and Communication Technology (ICT), a global revolution in e-business has set in, but Bangladesh lags far behind other countries to avail of the opportunities of e-business. However, Bangladesh Bank has recently started on-line banking. The article analyzes the data that were collected from local Bangladeshi banks and suggests that in order to survive in the integrated global financial market, the country must be well prepared. Proper utilization of Information and Communication Technology (ICT) is essential, which can be achieved by creating low cost community information and communication centers (CICCs), initially in the rural areas and later, upgrading them into community networks. This may be helpful towards attaining digital Bangladesh by the next decade. E-business should be encouraged as it becomes a vital medium of transaction to improve total quality management of organizations, especially bank management, through ensuring proper online banking system as observed in this paper.

Keywords: E-business, On-line banking, ICT, Globalization.

Professor, School of Business and Economics, Atish Dipankar University of Science and Technology, Dhaka, Bangladesh.

Assistant Professor and Head, Dept. of Computer Science and Engineering, Institute of Science and Technology (IST), Dhaka, Bangladesh.

1. Introduction

Recent developments in Information and Communication Technology (ICT) have set in a global revolution in e-business especially in the banking sector. Banks of Bangladesh, too, are keen to introduce e-business as the challenges set by the global trend in business arena cannot be met under the traditional banking system. The present Government has already declared that Bangladesh will become digital by 2021.

Internet has opened a new horizon of e-business, creating immense opportunities for marketing products as well as banking internationally. Government as well as international organizations generally recognize that underdeveloped banking causes some costly obstacles to the country's economic progress. Investors are frequently scared to invest because of its sluggish banking system. Hence the task of making the banking system of Bangladesh of international standard deserves the highest priority.

On-line banking system is a way of conducting, managing, and executing banking transactions, utilizing information and communication technology (ICT) and electronic communication networks such as the Internet, intranet and extranet. The environment of electronic banking requires authentication procedures for electronic payment system, network environment, computer hardware and software, electronic hardware, legal bindings, etc. The security and authentication of modern banking are very much dependent on cryptography and its applications. E-business can be expedited by the on-line banking processes.

Ramakrishnan (2001) argues that Internet banking primarily increases information security risk and many banks have not sufficiently focused on its effect on other banking-specific risks. Risk management disciplines have not evolved at the same speed, and many institutions, especially the smaller ones, have not been able to incorporate Internet banking risk controls within their existing risk management structures. Very little research work on e-business has been done and little on-line banking expansion has taken place in Bangladesh, but banks in Bangladesh, especially private banks, are willing to offer this service.

E-business brings a new channel of distribution process, which leads to a change in the regulatory issues, and cross border trade through emerging new marketing distribution channels. This reduces transaction time, results in boundary less trade, and accuracy. In developed nations, e-business creates an opportunity to directly sell the product to the customer without using any intermediaries. This process occurs mainly in the four markets: business to business (B2B), business

to consumer (B2C), business to government (B2G), and consumer to consumer (C2C).

Bangladesh can benefit from an effective utilisation of Information and Communication Technology, just like any other country. Social and economic disparity and lack of Internet accessibility are pulling the country backward. E-business process creates an opportunity for doing business through the real time sharing business. Organizations can take help to transact through e-business solutions from around the world where on-line facility is available. Business process of the globe is gradually becoming complex, but e-business especially in the banking sector can help get away from these complexities.

Literature Review

According to Federal Financial Institutions Examination Council (2001), USA, the existing authentication methodologies involve three basic "factors": identification of users (e.g., password, personnel identification number (PIN), etc.); user processes (e.g., ATM Card, Smart Card etc.); and users' physical identities (e.g., biometric characteristics, such as finger print, retinal pattern etc). In fact the study of electronic security measures in banking has become an important topic of research now. Rahman (2001-2002) observes that issues relating to electronic fund transfer require security, availability, authenticity, non-repudiability and audibility.

Singh (2002) warns that merely deciding to adopt a new business model does not guarantee success. Implementing a new business model in an established organization many cause considerable disruption. Technical adjustments, such as integration, debugging, software integration and effective web sites are necessary, but managerial and organizational adjustments requiring planning, allocation of resources and responsibilities, coordination between different groups and departments, negotiations and human resource initiatives as well as adaptation to the e-culture are also essential.

Ali (2003) argues that Bangladeshi companies and organizations have several problems to start full swing e-business. These include limited resources, backwardness in technology, managerial inefficiency, socio-infrastructural problem such as corruption, default culture, poor law and order situation, rampant corruption, strike etc.

Huda, Momen and Ahmed (2004) observes that the banking sector in Bangladesh is clearly recognizing the importance of information technology for their continued success. Hoq, Kamal and Chowdhury (2005) argues that a key reason why e-commerce, especially the business-to-business segment, is growing so quickly in the developed countries is its significant impact on the reduction of costs associated with inventories, sales execution, procurement, intangibles like banking, and distribution. If these cost reductions become pervasive, e-commerce has the potential to usher in large productivity gains. Achieving these gains is therefore contingent on a number of factors, including access to e-commerce systems and the needed skills. However, what is unique about e-commerce and its efficiency gains is that it promises a premium on openness. To reap the potential cost savings fully, firms must be willing to open up their internal systems to suppliers and customers. This raises policy issues concerning security and potential anti competitive effects as firms integrate their operations more closely.

Souter (2005) argues for developing tele-centres, which have the following characteristics: Tele-centres may be: Private entrepreneurial ventures (including cyber cafés); Promoted by civil society organisations; Sponsored by government; Sponsored by development agencies. Some very large 'multi-purpose community Tele-centres' have been promoted by the ITU and other international donors. These offer a very wide range of services, including: Computer training, Distance education, and Tele-medicine. Tele-centres tend to be used by the more skilled members in the society. Sponsored tele-centres have often proved difficult to sustain after the end of donor funding. Entrepreneurial cyber cafés have proved much more sustainable in many countries.

Uddin and Islam (2005) observes that the multifarious projections of ICT in human life plead a winning case for institutional integration of ICT related components in rural support programs taken by Governments and NGOs. Chaffey (2006) dealt with strategy and applications of E-Business and E-Commerce in a logical but robust manner. Pires and Stanton (2007) comments that policy wise government must recognize that the ability of countries to engage in e-commerce is tied both directly and indirectly to their attractiveness for FDI.

Ahmed and Islam(2008) observes that in adopting e-banking services, banks in developing countries are faced with strategic options between the choice of delivery channels and the level of sophistication of services provided by these delivery channels. Shamsuddoha (2008) argues that in Bangladesh the banking industry is now mature to a great extent than in earlier periods. It has developed a superb image in various activities, including electronic banking. Now modern

banking services have been launched by some multinationals and new local private commercial banks. Electronic banking is now one of the most demanded and latest technologies in the banking sector.

Ahshan (2009) argues that on-line transaction would boost the gross domestic product (GDP) growth and thus help Bangladesh achieve the Millennium Development Goals (MDGs). In the era of globalisation, the Internet makes the world smaller, and e-commerce facilitates marketing and shopping from home. E-commerce facilitates business with customers over the internet. In e-commerce, customers can buy goods and services over the internet.

Nyangosi, Arora, and Singh (2009) argue that banking through electronic channels has gained increasing popularity in recent years. This system, popularly known as 'e-banking', provides alternatives for faster delivery of banking services to a wide range of customers. The overall result indicates that customers in India and Kenya have developed positive attitudes and they attach much importance to the emergence of e-banking.

Shah and Clarke (2009) focused on human, operational, managerial, and strategic organizational issues in e-banking and argued that e-banking management could help expedite doing business through using the electronic medium. Rahman (2010), the present Governor of Bangladesh Bank, notes that Bangladesh Bank has achieved a historic milestone in the trade and business arena, departing from conventional banking with the introduction of e-commerce recently, a giant stride towards digital Bangladesh.

Objectives of the Study

The study has been undertaken with the following objectives:

- To examine the infrastructure situation of the country, which is necessary to promote e-business and on-line banking in Bangladesh (addressed in Section 2);
- ii) To observe the present status of e-business and on-line banking in Bangladesh (addressed in Section 3);
- iii) To make some recommendations so that e-business can bring fruitful results in the country (vide Section 4).

Methodology of the Study

The study is based on secondary sources and also field survey. A number of published articles, books, and websites have been reviewed, all are which or listed

in the References at the end of the article. The related information regarding the present status of on-line banking has been gathered through field visit to the head offices of forty-nine banks and their IT and MIS Departments. Data has been collected through visits to Bangladesh Bank as well. Moreover, opinion has been gathered from 500 randomly selected bank customers who make on-line banking transactions. These customers are mostly from Dhaka and Chittagong cities.

Hypothesis of the Study

Null Hypothesis (H₀): E-Business especially with the help of on-line banking can manage the economy of Bangladesh in a better way through offering more customer satisfaction.

Alternative Hypothesis (H_A): E-Business especially with the help of on-line banking can not manage the economy of Bangladesh in a better way as customer satisfaction decreases.

2. Present Status of ICT Infrastructure in Bangladesh

Globalization means a situation of free interstate flow of investment, commodities, and technology. Globalization influences the socio economic and political condition of all countries. There are both opportunities and threats from globalization for a country in an integrated world. Bangladesh policy makers must be careful to minimize the dangers created by globalization.

Bangladeshi companies and organizations have several problems to start full swing e-business. These include limited resources, backwardness in technology, managerial inefficiency, socio-infrastructural problem such as corruption, default culture, weak law and order conditions, rampant corruption, strike etc. Network is a mode of communications with computers. Electronic Payment Systems for e-business call for broad geographic presence and acceptance by a large number of merchants or programs. Participants in an electronic payment system may include users, financial institutions, business personnel, industrialist, merchants, third party processors etc. One can classify the networks of computers as local area network, metropolitan area network, and worldwide area network. Multiple computers connected through telephone lines, cable systems, and wireless technologies are also required.

WiMAX stands for worldwide interoperability for microwave access, which offers wireless transmission of data via different transmission modes, from point-to-multipoint links to portable and fully mobile internet access. During the trial

launching of operation of the country's first-ever wireless broadband technology WIMAX, the Finance Minister urged upon entrepreneurs of the telecommunications sector to reach the digital communications system to the doorsteps of the rural people. He hoped that the WiMax technology would be available at every divisional headquarter within a year (Source: http://www.bangladeshinfo.com/ gadgets/news_inner.php?nid=2343, July 22, 2009)

Telephone density is awfully low in Bangladesh, in fact far less in comparison with other developed nations of the world as well as neighboring countries. In one estimate for 2008 in Bangladesh, there were 36.4 million Mobile Phones, 1.2 million Fixed Lines (PSTN) and some 37.6 million telecom users with a teledensity of 26.8 percent (Kabir 2008). Outside Dhaka, a few computer network infrastructures have been developed so far. Apart from some educational institutes outside Dhaka, however, most of the LAN setups are Dhaka centric. Bangladesh has been connected to the worldwide Internet Super High Way since 2006 through an under sea submarine cable. But this single submarine cable frequently faces disruption resulting in slow bandwidth.

Most people in Bangladesh live in villages where amenities for ICT are almost nonexistent. A huge digital divide exists between the city of Dhaka and the rest of the country. Private-public partnership is a crucial issue for information and communication technology (ICT) development and application. Private enterprise and capital can lead the ICT revolution in Bangladesh, but that would require the government to provide an enabling environment. The supportive role of the forward-looking government of Malaysia can be a good example for Bangladesh to emulate in this regard. The infrastructure deficiency of Bangladesh is now a major obstacle to the expansion of e-business in the country. Rapid growth in ICT is, therefore, not possible without massive investments in ICT infrastructure and human resource development through quality education. Still now the call charge of cell phone is very high in Bangladesh.

Under the private initiative, Internet was started in 1996 by ISN in Bangladesh. They are the first ISP operator in this country. Still now all the Internet service providers have the server abroad, for which they are facing competitive disadvantage, as cost remains high.

Security problem is still high in this country. Lack of digital accessible personnel is a real problem for the country. Moreover, some software developers of the country are not well conversant with the market demand for which they cannot supply faultless application software.

Policy makers of the country are not well aware about the benefits of e-business. As such they do not put much importance to a proper and systematic development of the process of e-business. In this connection it may be stated that Bangladesh Bank has recently implemented automated clearinghouse through utilizing MICR procedure. But in developed nations MICR procedure was replaced long ago by more sophisticated procedures such as cheque truncation process.

Total number of Banks in Bangladesh are now forty nine (vide Bangladesh Bank, Scheduled Bank Statistics). On the basis of utilization of electronic devices, Bangladesh's Banks can be subdivided into three groups: (i) Foreign Commercial Banks and some of the second and third generation Private Commercial Banks: Fully Online banking; (ii) First generation private banks and some of the second generation private banks: Medium range Online banking system; and (iii) Nationalized Commercial Banks, Specialized Banks and a few foreign Bank branches of this subcontinent: Low grade online banking system.

At present, banks in Bangladesh use very limited electronic banking services. It is expected that banks can count on more profit and offer better service to its customers by introducing on-line banking facilities. The foreign commercial banks operating in Bangladesh like Standard Chartered Bank, Citi Corp. N.A. and the HSBC are pioneers to introduce the electronic banking facilities. They provide ATM, Debit Card, Credit Card, Home Banking, Internet Banking, Phone Banking, On-line banking etc. services.

Among the local banks, private banks are ahead of the public banks. Prime Bank, Dhaka Bank, BRAC bank, Dutch-Bangla Bank, Eastern Bank, and Mercantile Bank have already adopted electronic banking facilities. Apart from these banks, Mutual Trust Bank also introduced ATM service. Among the four Nationalized Commercial Banks (NCBs), Janata bank has some access to the electronic banking facilities. Bangladesh Bank, the central bank of Bangladesh, is also trying to formulate a wide structure of electronic banking facilities. All of the private banks are offering limited on-line banking services. Most of these banks only offer services by providing ATM card. They do not offer wide range of internet banking facilities, which are the main advantages of e-banking. Depositing money in any branch and withdrawing money from ATM machine is now treated as the best e-banking facility in Bangladesh, where electronic money transfer has begun only in a limited way. Sonali and Agrani banks are providing on-line banking services in a limited scale. So, too is the Rupali Bank Limited. BASIC bank, which is 100 percent publicly owned but serves as a private sector bank, has also adopted new technologies in its banking operations.

3. Present Status of e-Business and On-line Banking in Bangladesh

A broad spectrum of internet banking services, a subset of electronic finance, is available in Bangladesh with different degrees of penetration. The credit card is available from VISA, MasterCard and VANIK. Some foreign banks provide electronic fund transfer (EFT) services, but it is still at an early stage and used on a very limited scale. Microchips embedded Smart Card is also becoming popular in the country, particularly for utility bill payment. Automated teller machine (ATM) is expanding rapidly in major cities. A group of domestic and foreign banks operate shared ATM network, which drastically increases access to this type of electronic banking service. The network will gradually be extended to other parts of the country.

Last couple of years witnessed a dramatic improvement in the awareness of the banking sector regarding the comprehensive application of ICT. Local software companies have begun competing with one another to supply complete banking software with like features. However, many forms of electronic banking service are still not possible to offer in Bangladesh at this moment due to the absence of appropriate technology infrastructure and legal infrastructure. Those products would be very useful for export-oriented industry to reduce lead-time in export and keep comparative advantage in the international market.

For sending foreign remittance a legendary decision was taken earlier. Now four nationalized banks and 15 private banks are working collaboratively with mobile phone service operators. Remittance can now be sent via Bangladesh banking channels through account transfer (normally it takes 3 working days) or in the form of instant cash transfer (takes 24 hours). Foreign residents can send their money and PIN (personnel identification number) through mobile phone. As a result, money transfer has become very easy, quick and hassle free. In terms of e-banking facilities this is regarded a legendary step in Bangladesh economy.

The dream to eradicate digital divide has not come into reality till now, but the process has started, although very slowly. Bogra, Kushtia, Barisal and Modhupur village of Tangil were brought under Internet banking on 2nd May of 2000. This will gradually give following services: e-marketing, e-shopping mall, e-marriage scheme, e-mail, e-tender, e-voting/polling, search engine, chat, e-commerce, e-stamp, e-Cash, e-music, e-entertainment, e-treatment, e-Advocacy etc. e-governance can help achieve good governance in the country.

Progress of linkage with fiber optics is going on. Its successful implementation will be helpful. Government will need to take proper initiatives to spread the

computerization process for that purpose. The parliament members of the country must also be aware of the benefits of Information and Communication Technology (ICT); otherwise it can not be successful and will not bring any dramatic change in the economy.

The Entrepreneurship Development Fund (EDF) of Bangladesh Bank regards IT as a thrust sector. But entrepreneurs are not getting real support from the banks to utilize the fund. The project profile evaluation procedure for IT industry is not correctly done. Only a few companies can avail of the fund. IT-related companies are trying to develop some e-business but no remarkable change has yet occurred. Most of the reputed companies do not have the basic idea on the execution process of e-business. If a proper procedure of e-business can be developed in the agribusiness sector, especially in the rural areas, through utilizing e-technology, it will be beneficial for the producers of agricultural commodities.

Acute shortage of human resources to do on-line banking business is one of the main reasons for e-business to lag behind. This problem must be resolved if Bangladesh is to move ahead and remain competitive in the digital global economy. It should be realized that for Bangladesh, a country of 150 million people, there is no other option for us than to join the current global trend. According to a news report published in The New Nation on 28th August 2009, the government has formulated a policy on the national information and communication technology as part of its announced plan for digitization of the nation. The policy has earmarked activities in three phases of short, medium and long-term plans to be implemented within 2021. The government aims at doubling the gross national product (GNP) during this time to achieve the goal. The policy details suggest a number of activities, including spreading the use of keyboard by functionaries at different levels, encouraging the use of standard code by software sellers, developing a national web-portal and popularizing the use of e-citizen service, paying service charge through mobile phones or ticketing etc. Land registration, passport renewal, digitization of police case diary and case position in the court, spreading the use of broadband internet throughout the country, and such other essential services may also be brought under the scheme. The new policy will be the common property of all departments and organs of the state targeted to develop a digitized nation within the stipulated time.

Most of the existing banking system in our country is manual (paper based); that's the reason why it is awkward, slow and error-prone. It fails to meet the customers' demand and, at the same time, causes significant losses both for the banking authority and traders. Electronic banking, on the other hand, does not have any

such problems. Instead, it opens up such opportunities as increased foreign trade and foreign investment. At present, the weekly bank holidays in Bangladesh are Friday and Saturday, whereas in most parts of the world it is Saturday and Sunday. So Bangladesh has only 4 banking days for foreign exchange transactions. With e-business facilities still in preliminary stage, it is debatable if this limited time period for banks' transactions would bring any good to Bangladesh. Government should consider this case carefully.

According to a report entitled "Bangladesh is developing electronic payment infrastructure" (May 20, 2008), the Securities and Exchange Commission (SEC) of Bangladesh asked the IT Consultants Limited (ITC), a manager of Q-cash brand of ATM and different cards, to raise their paid-up capital from the current Tk. 370 million to Tk. 500 million if the company desired to raise capital from the secondary market through initial public offerings. This measure is believed to extend the sphere of the company's influence. The company began as a private limited business in 2001. But now it is the local leader in electronic payment systems which are developing in the country with increased speed. ITC possesses necessary tools to process transactions for banks and retailers. It has the largest independent network of more than 100 ATMs in the country. There is also a wide network of point-of-sales (POS) centers operated by the company. (Source: http://www.ecommerce-journal.com/news/bangladesh_is_developing_electronic payment infrastructure 0?drgn=1).

According to a report published in The Financial Express (3 November, 2009), Bangladesh Bank gave a ground breaking directive to commercial banks through a circular issued on 2 November, 2009, saying that from now on their clients would be allowed to pay their power, water, gas and phone bills from bank accounts and transfer funds within a bank or to other banks. The central bank said that on-line payments will be treated like any other cash transaction although it reminded the banks that these money transfers would be regulated by the country's strict Anti-Money Laundering Act. According to Bangladesh Bank, the country had about 400,000 credit card holders at the end of June last year. Payments and transactions by credit cards were about Tk. 11 billion in June 2008 — one of the lowest in the world. Yet, however, some experts, including software specialists, have urged caution, saying that the banks will still need massive IT backbone to ensure that on-line transaction is not misused.

Meanwhile, Bangladesh Bank started the Bangladesh Automated Clearing House (BACH) on trial basis from 8 November, 2009. It is gathered from Bangladesh Bank that BACH completed its SIT (System Integration Testing) phase, in

January 2010, and in the first phase, only Dhaka was brought under this umbrella, which means that all bank branches in Dhaka region are now part of BACH. Bangladesh Bank (BB) in its Dhaka office is using 7 inch * 3.50 inch MICR encoded cheques in BACH. Cheque truncation is done; some banks truncating cheques fully (meaning at branch level) while some others partially (meaning at a central point). BB also provides bureau service, if needed by any bank. Clearing is for inter-bank transaction and is settled by BB after t+1 days.

3.1. Customers' Response

The researchers conducted a survey of 500 bank clients that receive on-line banking services to obtain their opinion on the system. Their responses are presented in Table 1.

Table 1: Customers' opinion on On-line Banking

Comment	Dhaka (In percentage)	Chittagong (In percentage)
On line Banking is good	79%	65%
6 6	, , , ,	
On line banking provides good Customer service	72%	61%
Just in time services in Banking can be provided	56%	48%
Bank Personnel behave properly	52%	56%
Technologically improved but quality of banking service		
worsen off	51%	44%
Better E-business environment	67%	61%

(Source: Compiled on the basis of Customers' response)

As can be seen in Table 1, customers' opinion on the performance of on-line banking is mixed, though most of the customers believe it provides good customer service. This supports the null hypothesis of the paper. But the problem is that about half of the customers consider e-banking as technologically improved but the quality of banking services worsens off. In respect of other queries in the opinion survey, the response of most of the customers is positive, which indicates that the null hypothesis is correct.

3.2 Problems of e-Banking

E-business is yet to make any notable progress in Bangladesh. Mass awareness is not feasible. The country faces problem of developing human-ware. Without preparing human capital of international standard, the country will not be able to compete in the global market, and successful e-business will not be feasible. In

the absence of quality human capital, software development will falter and market access to foreign countries will be limited. Moreover, as regards production of hardware, especially computer and its accessories, the entrepreneurs are not taking any sort of strategic planning. The country should adopt the latest technology but due to the lack of vision the users are adopting old technology. The introduction of MICR for Bangladesh Bank automation procedure is an example in point.

The shortage of technology-based human resources and poor telecommunication infrastructure needs to be overcome to break the low equilibrium trap. Bridging the digital divide would provide technology-based human resources, which will contribute to gross domestic product (GDP), national savings and investment. Problems identified in on-line banking system in Bangladesh are numerous. Some of them are as follows:

- 1. Inefficiency and lack of adequate knowledge of the bank management about on-line banking
- 2. Lack of proper strategic plan to gain and retain market share of the indigenous banks
- 3. Lack of international standard communication channel
- 4. High cost of establishing on-line banking system
- 5. Inadequate back and front office management
- 6. Lack of integrated plan among banks and the Central Bank authority
- 7. Inefficient Clearing House Facilities
- 8. Inadequate software
- 9. Legal barriers and inappropriate policy framework

Customers intending to take e-banking services are not always able to bear the cost of additional equipments like computer, Internet etc. Using Internet facility is still very costly and people have little knowledge to operate computers. A few cyber café are available but people do not feel safe to use these facilities for e-banking purposes. As a result total numbers of customers are limited. In these circumstances investment for establishing e-banking facilities may not be profitable.

On-line banking involves some financial risks as well. The major risks include operational risks (e.g., security risks, system design, implementation and maintenance risks); customer misuse of products and services risks; legal risks (e.g. without proper legal support, money laundering may be encouraged); strategic risks; reputation risks (e.g. in case the bank fails to provide secure and

trouble free e-banking services, this will cause reputation risk); credit risks; market risks; and liquidity risks. Therefore, identification of relevant risks, and formulation and implementation of proper risk mitigation policies and strategies are important for the scheduled banks while performing on-line banking.

3.3. Electronic Business and on-line Banking from the Managerial Perspective

Managers at various levels of organizations especially in a least developed country like Bangladesh will have to play vital roles to successfully implement ebusiness. They are the key forces to initiate dedicated strategy to change from the traditional business processes to the technology driven business processes. This will not only involve huge costs in the transition period of the organizations but also require adaptability of the human being to the new processes. Due to changing global environment, to achieve success in the global as well as domestic business, organizations are often forced to change their strategy and adopt e-business.

Managing external as well as internal pressure should be coordinated by the Management so that e-business can supersede traditional business processes of organizations. Flexible innovative changes are required for the organizations to succeed in the transformation process. Strong motivations by the management towards all levels of personnel of the organization are required. Managers' function to implement e-business is a difficult task for which their mindset should be very strong and they should consider not only global considerations but as well domestic conditions.

E-business can add value through knowledge management as it helps to render new services to the customers. Successful e-business depends on the sharing of strategic knowledge for which dissemination of the information and free flow of knowledge around the globe is required. If the organizations of the country still depend on traditional business model, they will be obsolete in a short period of time. On-line banking can provide twenty-four hour banking facilities. Through electronic data interchange, customers are able to transfer money from one branch to another. Letter of credits can be sent through SWIFT. Actually on-line banking provides faster, reliable services. Encryption and decryption can be used to send money from one place to another. As such, on-line bank management handles customers in a far better way.

But in Bangladesh the key people of the business, or in the other words the decision makers, are generally aged and experienced in their old line of business

and hence are unenthusiastic about new technology. It is difficult for people who do not have much technical knowledge to understand the necessity of technology in this continually changing business world, partly because they do not know what is possible beyond their own experience of using computers. So the pace of computerization in various offices and sectors is low.

Another problem in initiating e-business in this country is that the management is reluctant to accept something new. Management prefers to maintain the current business model and that is why they are reluctant to introduce any thing new. To avail of the advantage of e-business, firms have to invest in software and infrastructure development. But the firms are not interested to invest because they consider the expenses as cost, not investment.

Bangladesh is a developing country where people are not much aware of technology. The owners are uncertain about the benefits of e-technology, which requires huge investment. This is a great drawback to initiate e-business. However, the present government is very keen to develop digital Bangladesh by the next eleven years.

4. Concluding Remarks and Recommendations

The customers' survey conducted for purpose of the present study indicates that e-business can provide better customer services. Creation of knowledge-based person can improve the economic condition of the country. As such, the development of human ware should be given due importance. E-business can play an important role in poverty reduction only when it can effectively spread business both in rural and urban areas, create job opportunity, remove middlemen in the business process, and increase both income and savings.

Rahman (2010) rightly pointed out that a holistic approach needs to be taken by all stakeholders to reach the IST facilities to the doorstep of the common people. Actually e-technology can be utilized with other computer peripherals to enhance communication, skill and understanding and provide a sound basis for implementing e-business. It can be helpful to accelerate the learning process, including the acceleration of the development and application of knowledge and technology.

Business sector should be encouraged to make their own investment in the application of ICT in production, trade and services. Procurement and utilization of funds from national sources, both public and private, should be pursued. International development and donor agencies should be approached for funds to

set up necessary infrastructure and develop human resources, conforming to the objectives of ICT policy.

Bangladesh is in the group of the world's most underdeveloped economies and one of the obviously vital reasons for this is its poor banking system. Government as well as different international organizations generally recognize that underdeveloped banking causes some costly obstacles on the way of the country's economic progress. Investors are frequently scared to invest because of its sluggish banking system. Hence the task of making the banking system of Bangladesh of international standard deserves the highest priority.

The global financial system is getting stronger day by day and it is being strengthened by e-business. Around the globe, consumer market has greater potentialities, and therefore, producers must be active lest they lose their share in the global market. Tele-centers must be developed in the country. The rate of call charge of cell phone should be lowered. The hidden cost in cell phone should be removed. However, on-line banking is not free from risk. Not only security risk, but cost of transactions may rise as well.

Recommendations

To implement e-business successfully in Bangladesh following recommendations are made:

- Digital Bangladesh by 2021 should be established to develop the economy. Successful team building in a coherent manner for developing human ware, hardware, software and web ware are required to increase ebusiness in a systematic way.
- Greater emphasis should be given on security system and to prevent fraud so that on-line banking or any other electronic fund transfer can be properly handled. Career path should be properly designed for the experts in this sector. Otherwise manpower will be de-motivated and they won't work with job satisfaction.
- In Bangladesh, the on-line banking system is still in a preliminary stage. Government should create a congenial environment for this sector.
- The Clearing House operation in Bangladesh should be fully automated.
 Banks should have adequate research and technological background in that regard.
- Initiatives to develop integrated e-banking software should be taken.

- Banks can charge normal profit to enlarge the market size on the on-line banking products. They should have their own strategic plans to implement on-line banking.
- Creating awareness and consciousness among the clients of the banks are also required.
- The country needs innovative polices for strengthening of public institutions and development of e-business with the help of ICT facilities and the related information network to create the environment for ICT development.
- ICT application and development of software are very much dependent on the quality of the workforce, and supportive infrastructure and environment. This can be achieved by creating low cost community information and communication centers (CICCs), initially in the rural areas, and later, upgrading them into community networks.
- E-business can help improve total quality management. This can also ensure quality assurance of banking through the on-line banking system.
- Provision for adequate training and technological support to develop the manpower through partnership between government and non-government organizations is required.
- Public private partnership (PPP) for e-business should be encouraged.
- Business sector as a whole should be focused on using E-business. It should be accompanied with e-governance system. It should move towards other areas like e-tender, e-trafficking, e-ticket, e-learning etc.
- More high-speed fiber optical data communication infrastructures should be established for speedy data communication both internally and externally.

References

- Ahmed, Feroz and Md.Tarikul Islam (2008): "E-Banking: Performance, Problems and Potentials in Bangladesh", *Business Review*, Vol. 06, No.1&2, January to December.
- 2. Ahsan, AFM Mainul (2009): "E-commerce in Bangladesh", *The Financial Express*, Bangladesh, January 12.
- 3. Ali, Muhammad Mahboob (2003): "E-Business in the age of Globalization: Bangladesh perspective", *The Bangladesh Observer*, September, 13.
- 4. Buffam, William J (2000):*E-business and is solutions :An Architectural approach to Business Problems and Opportunities*, Addison-Wesely, USA.
- 5. Chaffey , Dave (2006). *E-Business and E-Commerce Management*, Prentice Hall: Financial Times Press, UK , 3rd edition.
- 6. Federal Financial Institutions Examination Council (2001): *Authentication in Electronic banking Environment*, Washington, D.C., USA.
- 7. Gulati, V.P. (2002):"Web Based Information System for Indian Banking Industry", *South Asian Journal of Management*, Vol.9, No.2., Vo.6, No.1 & 2. http://www.eweek.com/article2/0.1895.1818538.00.asp
- 8. Kabir, Md. Anwarul (2008): Designing ICT Roadmap: A holistic approach, *The New Nation*, 23rd July.
- 9. Nyangosi, Richard, J.S. Arora, and Sumanjeet Singh (2009). "The evolution of e-banking: a study of Indian and Kenyan technology awareness", *International Journal of Electronic Finance*. Vol.3, Issue: 2
- Pires , Guilherme, and John Stanton (2007): "Macro Issues in Electronic Commerce and Foreign Direct Investment", Global Business & Economics Anthology, Volume II, December.
- 11. Rahman, Atiur (2010): "Digital Bangladesh Bank", *The Daily Star*, January, 13.
- 12. Rahman, M. Lutfar (2001-2002): "E-Commerce and Concern for E-commerce in Bangladesh", Journal of The Institute of Bankers Bangladesh, Vol. 48.
- 13. Ramakrishnan, Ganesh (2001): "Risk Management for Internet Banking", *Information Systems Control Journal*, Volume 6.
- 14. Singh, M. (2002): "Evolving E-Business Models: A Process of Technology", *E-Business in Australia: Concepts and Cases* edited by D. Waddell, Pearson Education Australia.
- 15. Shah, Mamood and Steve Clarke (2009): *E-Banking Management: Issues, Solutions, and Strategies*, Information Science Publishing, UK.
- 16. Shamsuddoha, Mohammad (2008). "Electronic Banking in Bangladesh", *Journal of Business Solutions*, Vol. 1, No. 2, December.

- 17. Stephen, Denning (2000): Springboard: How Storytelling Ignites Action in Knowledge-Era Organizations, Butterworth Heinemann, Boston, London.
- 18. Souter, David (2005): "Entrepreneurial and tele-centre approaches", ITU Workshop on "Universal Access and Universal Services Policies".
- 19. The Financial Express (Bangladesh), 03 November, 2009.
- 20. The New Nation, 28th August, 2009
- 21. Uddin, Md. Kamal and ABM Shahidul Islam (2005): "Contribution of Information and Communication Technology to the Development of Rural Bangladesh", *Dhaka University Journal of Business Students*, Vo.. XXVI, No.2.
- Wilson, Ernest J. (2003): "Globalization, Information Technology and Conflict in the Second and Third Worlds-A critical", http://www.rbf.org.pdf.wilson_ info-Tech.pdf.

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 193-214 Bangladesh Economic Association (ISSN 2227-3182)

Problems and Prospects of Wholesale Marketing of Fresh Produce in Bangladesh Selected Case Studies*

MD. RUHUL AMIN¹ MD. RUHUL AMIN TALUKDER²

Abstract

The paper identifies the problems relating to trade, marketing margins, and maintenance of quality and safety standards in fresh agriculture produce in wholesale urban markets. It also examines the prospects of wholesale markets in performing the economic function of buying, selling and value-addition. Four wholesale markets for the supply of vegetables, fruits and fish were surveyed.

The study confirms that the supply of produce from the northwest Bangladesh to Dhaka usually involves middle men between producers and final consumers and entails three successive stages of delivery from farm to local primary market, from primary market to urban whole sale market, and from wholesale market to

Director General (on LPR), Food Planning and Monitoring Unit (FPMU), Ministry of Food and Disaster Management, Government of the People's Republic of Bangladesh and served the Government in the area of policy research and analysis since 1980.

Research Director (in-charge) (Food Security, Consumption and Nutrition Analysis), Food Planning and Monitoring Unit (FPMU), Ministry of Food and Disaster Management, Government of the People's Republic of Bangladesh.

^{*} The authors acknowledge the support made by the FPMU professional staff in data collection. They also admire the inputs provided by Dr. Lalita Bhattacharjee, Dr. H.K.M Yusuf and Dr. Rezaul Karim Talukder right from the preparation of the questionnaire to finalization of the paper. The authors are grateful to the AFMA secretariat who invited the DG, FPMU, the principal author of the paper, to attend the workshop and present this paper in the technical plenary.

the retail market. Alongside, an organized retailing sector (supermarkets) is emerging that is gaining popularity among the rich and upper-middle income consumers in Dhaka and other big cities. Inadequacies in handling, transportation and storage facilities for fresh produce are noted to be the prime cause of quantity loss and degradation of quality resulting in poor shelf life. Significant informal transactions influence the prices across the market chain.

Collaborative efforts and arrangements among government, private sector, traders and NGOs need strengthened in order to put in place a wholesale marketing system of fresh produce along with strategic policy implementation for improving the marketing environment across the food chain.

Key Words: Wholesale market, marketing environment, interventions, infrastructure management

Introduction

With the progress in urbanization, an increasing share of national food consumption takes place at a location other than where it is produced. The marketing system must provide necessary services as producers sell in markets distant from where consumers purchase their food. The urbanization process also influences the composition of the diet. The diet of an urban resident tends to consist of a higher share of processed foods, in part because some foods do not have good keeping quality. Some foods spoil soon after harvest, unless processed. Fresh produce must move to the market soon after production, either directly to the consumer or to the processor. The composition of the national diet also changes as the development process proceeds (HIES, 2005). Consumers tend to seek a wider variety of foods, induced by rising incomes and the demand for convenience in preparation (FAO, 1996; BBS, HIES, 2005). Subject to constraints such as household needs, agro-climatic factors, the available means of production, and the comparative advantage, producers move towards the production of goods that promise highest economic returns. Over time, provided that transportation is reliable and efficient, the flow of food products moving between communities increases, and provides the basis for a further development of the marketing, processing and distribution systems (FAO, 1996).

The flow of food products, namely fresh produce like vegetables, fruits and fishes, increases with the pace of urbanization. For example, the population of Dhaka city has been increasing at a rate of 0.4 to 0.6 million per year (about 4.33% between 1995 to 2005). The growing demand for high-value agricultural commodities—including fruits, vegetables and spices, fish, and livestock products—provides enormous opportunities for producers and suppliers in Bangladesh (World Bank

and IFC³, 2008). The additional demand for these commodities, according to World Bank, is estimated at about US\$8 billion (in 2005 prices). Because high-value agricultural production is typically more labor-intensive than traditional cultivation, this increasing demand also provides an opportunity to raise rural incomes and improve livelihoods.

Although much progress has been made in enhancing food supplies to cities, urban growth will continue to present enormous problems for the marketing of food. On the one hand, incomes of certain segments of the urban population are rising rapidly, leading to increasing demand for more expensive foods such as fish, horticulture produce and livestock products, as well as for products that provide a varied diet and are processed to offer greater convenience. On the other hand, given that majority of urban dwellers in developing countries remain highly disadvantaged, guaranteeing the efficient distribution of low-cost but nutritious food is a challenge. This necessitates an increasingly capable wholesale distribution system along with improvement of rural-urban linkages through continuing investment in marketing infrastructure at all stages of the supply chain.

Developing markets requires a detailed knowledge of the marketing system and realistic forecasts. If marketing chains function inadequately, investment in production becomes both more costly and risky. Poor storage of fresh produce leads not only to food loss but also to wastage of the resources and jeopardizes expensive investments in production facilities. Market modernization, beyond improving basic transport also includes marketing information systems, commodity exchanges, and price-risk management and calls for continuous monitoring, analysis and research of market information. Several studies in Bangladesh have conducted market structure and value chain analysis for fresh produce and have identified the evolution of the market structure and bottlenecks of the whole chain, but little attention has been given on individual market segments, especially the urban wholesale markets. This is critical for transmitting enabling new market opportunities for farmers and guiding their production to meet changing consumer preferences for quantity, quality, variety, and food safety.

This paper is an attempt to identify the constraints of urban wholesale markets of fresh produce, especially for bulk trading of vegetables, fruits and fishes, in urban

High-Value Agriculture in Bangladesh: An Assessment of Agro-business Opportunities and Constraints by World Bank and IFC (2008) South Asia Enterprise Development Facility (SEDF).

areas. It also analyzes the prospects of wholesale markets by evaluating perceptions of major stakeholders-traders, retailers and key informants.

In the next sections, efforts are made to elaborate the objectives and methodologies, followed by results and discussion on the findings with regard to problems and prospects of wholesale marketing, and provide some strategic recommendations.

Objectives and Methodology

This paper focuses on the wholesale markets for agriculture fresh produce in urban areas in terms of identifying their problems relating to infrastructure (for handling and transportation, storage and packaging), trade, marketing margins and maintenance of quality and safety standards. It also examines the prospects of wholesale markets in performing the economic function of buying, selling and value-addition. The three agricultural commodities considered are vegetables, fruits and fishes. Case studies were conducted in four wholesale market places. The locations were *Kawranbazar*, approximately 5 kilometers from the city, which is the receiving point of fresh vegetables, fruits and fishes from the districts by road, *Swarighat* (for fish) and its adjacent *Shambazar* (for vegetables) and *Badamtali ghat* (for fruits), where products are received from the southern and riverine districts by water transport.

Analysis was carried out using primary and secondary data. The primary data collection was carried out using a set of pretested questionnaires for the wholesalers. Thirty wholesale traders (*aaratders*, *who owns shops/warehouses*) were interviewed. Of these, 9 were fish wholesalers (*4 from Kawran bazaar and 5 from Swarighat*), 10 were wholesalers of fruits⁴, and 11 were wholesalers of vegetables⁵, all randomly chosen from the traders in the market. The questionnaire included information on household and socio-economic condition, trade and establishments, facilities available in the shops/markets, personal hygiene, institutional hygiene and sanitation, prevailing problems, risks and their probable solutions, awareness about laws and regulations, involvement in associations/groups, potential barriers and prospects of wholesale trade, etc. In addition, eight Focus Group Discussions (FGDs) with retailers were organized⁶.

^{4 (5} from Kawranbazar and 5 from Badamtoli)

⁵ (6 from kawranbazar and 5 from Shambazar)

^{6 (1} for fish, 2 for fruits and 6 for vegetables)

Discussions were also held with 16 Key Informants⁷ who were associated with monitoring, research and management and governance of market infrastructure for ensuring safety and quality of food stuffs. These discussions helped to fill information gaps and validate opinions obtained from the traders⁸. A desk review was also conducted to gather information on agriculture and food policies of the country and findings of available studies about market structure and marketing margins across the chain for agriculture produce.

Results, Discussions and Policy Implications

Production of vegetables, fruits and fish in Bangladesh

According to Bangladesh Bureau of Statistics (BBS) reports (1993-2006), the vegetable growing area of Bangladesh increased from 0.196 million hectares in 1993/94 to 0.302 million hectares in 2005/2006. At the same time, the production of vegetables increased from 0.129 million metric tons to 2.05 million metric tons. On the basis of the seasonal production, vegetables can be categorized into winter vegetables and summer vegetables. The winter vegetables are cabbage, broccoli, tomato, brinjal, beans, different types of bottle gourd, radish, carrots, cauliflower, ladies fingers etc., and summer vegetables include sweet gourd, bitter gourd, ribbed gourd, sponge gourd, wax gourd, snake gourd etc. There are more than 90 varieties of vegetables that are grown in this country, among which 50% of different varieties are produced for commercial purpose.

Fruit crops mainly grown in the country are mango, pineapple, papaya, jack fruit, coconut, betel nut, carambola, berfruit, blackberry, guava, litchi, cashew nut and wood apple, covering an area of about 202,024 hectares, nearly 80% of which are in home gardens. Several regions specialize in certain crops, such as banana in Jessore, mango in Rajshahi, pineapple in Chittagong and Sylhet, and betel nut and coconut in the delta regions.

Most of the fruits produced in the country are consumed at domestic level. About 30% of them are generally marketed, especially pineapple from Chittagong area (29% of total production), mango from Rajshahi area (about 15%), and banana from Barisal area (about 15%). For a population of 150 million, the consumption of fruits per head per year is staggeringly low, only 13.6 Kg/head/year (BBS, 2005). This is about one quarter of the fruit consumption in Europe and one-ninth

leaders of wholesale traders association, laborers, consumers, local political elites and central and local government officials

Questionnaires administered on wholesalers, retailers (FGDs), and Key Informants may be obtained from the authors, if the interested reader will so desire.

of that in Australia, Hong Kong and Taiwan. This explains why a large number of fruits, particularly in the winter season, are imported to Bangladesh every year.

In general, production of fruits is an attractive alternative for farmers, as gross margins may go up to 10-12 times compared to paddy. But the risk involved is much too high for many fruits, because of price volatility and market gluts during peak season. Like vegetable crops, retail and wholesale price of fruit crops also fluctuates substantially from year to year and also from month to month, depending on the supply situation. The reasons of this price volatility are also similar to those of vegetables.

Bangladesh being a lowland country has rich water resources in and around the country. The total fish production in 2007-2008 was about 2.4 million MT of which nearly 80% were from inland fisheries and 20% from marine sources. Major portion (97%) of the total harvested fish is marketed internally for domestic consumption. About 50% of the inland fish production is consumed in fresh form due to strong consumer preference (Chowdhury, 2004).

Marketing chain of fresh produce in Bangladesh

Several studies have resorted to analyze market structure, value chain analysis, and identified market impediments in Bangladesh. However, this study focuses on only one specific segment of the market chain of fresh produce, especially vegetables, fruits, and fish wholesale markets in Dhaka, the capital city. Studies by World Bank, FAO and others reveal a generalized picture of the market structure of fruits and vegetables as follows: Farmer > Collector > Local Assembly Market >Primary wholesale markets> Secondary wholesale markets> Tertiary Wholesale Market > Retailers (ranging from shops to street hawkers) > Customers (see figure-1). A new dimension has been increasingly visible in the scene, that is, the modern retailing (supermarkets, hypermarkets, convenience stores) driving innovation in the wholesale sector. Thus farm produce from the northwest to consumers in Dhaka usually involves at least three different sets of agents between primary producers and final consumers. They are: collectors, traders, and retailers. It also involves three successive stages, viz., from farm to the local primary market, from the primary market to the urban wholesale market, and from the wholesale market to the retail market. Though not all three agents ensure supply, nor are all these stages always strictly followed, that is how fresh produce goes from farmers to consumers. The extent and usefulness of the wholesale sector in marketing, quality management, and profit sharing for the vegetable sector varies across the region, but the key issues are: modernization

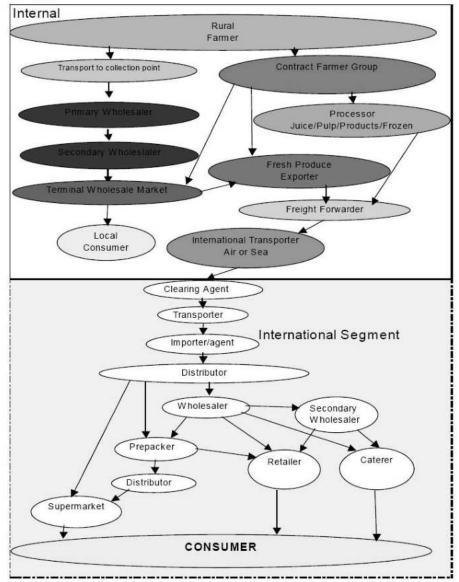
and streamlining of the wholesale sector and improvement of market infrastructure, transport systems, and utilities.

In Bangladesh, vegetables are generally sold by farmers immediately after harvest because of their need for cash and lack of storage facilities. An FAO survey (1996) reveals that about 82% of farmers in all the regions sell horticultural crops immediately after harvest. They use head load and rickshaw vans to carry the produce to markets. Traders, wholesalers and buyers mainly use rickshaw vans and trucks. About 66% of the farmers sell their produce in weekly markets and 22%, in the daily markets. Farmers usually get price information from other farmers, traders, radio, television and newspapers. Marketing channels and involvement of intermediaries vary among regions. The FAO survey indicates that about 19% of retailers, 41% of traders and 21% of consumers buy vegetables directly from farmers. The two major marketing channels are producer-traderretailer-consumer and producer-trader-wholesaler/ commercial agent-small holder/retailer-consumer. The commission of intermediaries varies by region and from crop to crop. The margin between the trader's price and the retailer's price could be as high as 150% during peak season and 200% during off season⁹. Retail and wholesale prices of vegetables fluctuate substantially from year to year and also from month to month, depending on the supply situation. Seasonality, underdeveloped marketing and transportation system, poor infrastructure, and insufficient storage facilities intensify price volatility.

The marketing system of fruits is similar to that of vegetables. The FAO survey indicates that about 36% of retailers, 27% of traders and 22% of consumers buy fruits directly from the farmers who usually sell their crops mostly in the weekly markets and partly in the roadside and daily markets.

An IFPRI study (quoted in Chowdhury, S. 2009) suggests a wide price spread between the prices that farmers received and the prices that consumers paid in Dhaka. Between farmer's price and wholesale price, the spread is about 42% to 46%; between farm and traditional retail price it is about 162% to 176%; and between farm and supermarket it is about 181% to 198%. The highest price spread occurs between wholesale and retail. Chowhury, S. (2009), however, observed that the price spread found by IFPRI study was too high.

For brinjal alone, as revealed from the study by Murshed et al (2009), however, the gross marketing margin of traders (*farias* and *beparis*) is 24.5%, whereas for the *aratder*/wholesalers and the retailers it is 25.83% and 35.58%, respectively.



Source: ITC (2008), A strategy for developing the Horticulture sector of Banglades, August

The fish marketing system in Bangladesh is traditional, complex, and less competitive but plays a vital role in connecting the fish producers, and consumers. Fish marketing is almost entirely managed, financed and controlled by a group of powerful intermediaries who play a big role in fish marketing channel. The dominant marketing channel (product route to ultimate consumers) of freshwater fish for domestic consumption includes farmer>bepary>aratdar>paiker>

retailer>consumer (Figure-2 shows a typical structure of Hilsha fish marketing in Bangladesh). This simple channel covers primary and secondary market levels up to Upazila. Beparies handle a large volume of fish and sell their purchases to Aratdars and to Paikers/retailers. Beparies do not generally hold any trade licence, unlike Aratdars. They can be local or non-local traders. Some Beparies get advance business loans from the Aratdars during lean periods on the condition that they will sell their purchases through Aratdars. From the higher secondary markets, fish flow down again to the town and peripheral village primary markets (final consuming markets) through paikers/retailers (FAO, 2009). The communication between the traders in different markets is generally good and takes place by telephone, and nowadays cellular phones are mostly used. This keeps wholesale prices in line throughout the country. The least informed party is the fisherman, because of his physical isolation from the markets. Other factors which weaken the fisherman's bargaining position are his dependence on credit and illiteracy.

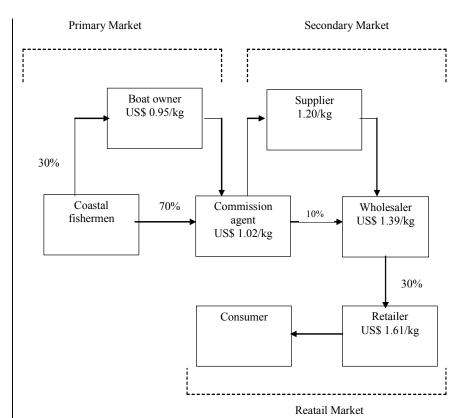


Figure 2: Hilsa marketing systems and its value chain (Nesar, A., Aquaculture News, January 2007)

A new pattern that has recently emerged is that pond fish farmers directly approach Aratdars at the higher secondary market. Fish farmers get 8-10% of the total sale proceeds from the lot of each catch. The farmers bear the transportation costs to the Aratdars in the markets and arrange bidding for open sales of fish to Paikers/retailers. In lieu of providing space for fish landing, icing for some fish and selling, Aratdars get commission at different rates of the sale proceeds. For example, the commission for Hilsa fish is 3%, for carps 4%, rohu, catla mrigal 6.20% in Mymensingh and Kishoregoni markets. The limited number of wholesalers, their joint actions in bidding and close understanding through their associations negate the principles of competitive market structure. Inadequate competition at the Aratdar level means that the Beparies pay relatively higher commission but the burden is born ultimately by the fish farmers/fishermen, who get lower prices. Open auctioning of fish lots by the wholesalers to Paikers/retailers makes the market structure competitive at retailer level in the final consuming markets. Therefore the market structure situation is not the same for all market levels. Exploitation prevails from the farm-gate to the higher secondary market level. This is also confirmed in the present study.

Dhaka wholesale markets-location, ownership and management

The Swarighat fish wholesale market is by the side of the Buriganga (the river on which Dhaka stands). It has 71 wholesalers/aratders trading there. It has a landing station on the river bank owned and managed by Bangladesh Inland Water Transport Authority, a state owned organization responsible for facilitating and regulating waterways and inland river ports. The aaratders mostly take commission from the sale managed through auctions. The market is privately owned and managed since its inception long back. It has four approach roads linked to it. All are narrow and busy except the Buriganga ring dam, which is about 60 feet wide having waterways adjacent to it.

The *Badamtoli ghat* fruits market is also owned and managed by private entrepreneurs, the traders associations of respective markets. It consists of a large number of independent markets having different fruit wholesale shops housed in them. The markets are in one row facing the Buriganga dam as approach road. However, the markets have other roads in between linked to them. Both imported (such as apples, orange, grapes etc) and locally produced fruits (such as banana, pineapples, mango, guava, etc) are sold here in bulk. The *shambazar*, a vegetable wholesale market, is very old. This is also privately owned and managed, except that the waste disposal is done by City Corporation. It is also adjacent to the city's main inland port (locally called 'sadar ghat').

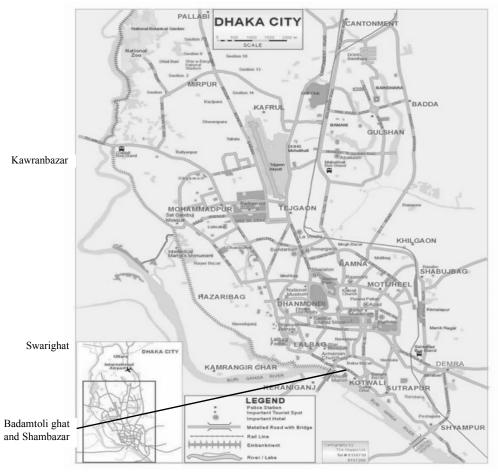


Figure-3: Dhaka city map

The *kawranbazar*, approximately 5 km from the city center, is another market place where all three wholesale markets are available – the fish, the fruits and the vegetables. It is the largest fresh produce wholesale market in Dhaka city, increasingly flourished in the business district of Kawranbazar. While the markets are owned by City Corporation, they are managed by traders association. The approach roads are relatively broader here among the four places depicted in this paper. In all the four markets, the approach roads are very near to the shops as the average distance of the shops from the road/water way is 0.16 km (varying from 0 to 1 km), the modal value being .091 km, that is, about 100 yards (see the map of Dhaka city in figure-1 for the market locations). The wholesalers and retailers are mostly in favour of the existing locations, while the key informants (except the association leaders) are skeptical of the locations saying that the wholesale markets in Dhaka city must be relocated near the different entrances of the city.

However, all insisted upon broadening of the approach roads and more supporting role of city corporation or the government in modernizing and regulating the markets.

The wholesale traders belong to lower middle class and middle class people

The fresh produce wholesale traders are mostly males having average age of 43 years. However, 18 of 30 traders were of age 40 and above. They do not belong to the educated section of the society as their average year of schooling is only 7 (and 7 out of 30 traders have graduated to SSC and HSC). The average size of household is 5.91, slightly above the national average. Out of 30 respondents, 19 live in *pucca*¹⁰ house, the rest in *semi-pucca* and *kacha* house while 3 stay in the shop/arat. They mostly live in two-roomed residences at an average distance of 5.48 km from the market place (the range being 0 to 50 km as three of them stay in the *arat*/shops). The respondents are mostly dependent on this trade (23 of them have income from only fresh produce trade), others do trade plus other economic activities. All these depict the fact that they mostly belong to the middle class or lower middle class of the society.

Personal and institutional hygiene scenario depict poor environment and sanitation

The traders are supported by management and accounts staff and labourers who assist in handling and on/off-loading of fresh produces. So the personal hygiene, the environment of the shops and establishments and the market places themselves are instrumental to maintaining safe food. It was revealed that 19 out of 39 respondents depend on WASA supply for drinking water, while the rest on tube wells and other sources. They mostly drink boiled water, but the staff and labourers do drink WASA supply water mostly. Although the support staff and labourers use sanitary latrines in houses as well as in market places, they seldom use soap to wash their hands after defecation. Only three of the respondents said they use soap for washing hands after defecation, others use only water. They also do not wear globes for handling fresh produces. Moreover, the latrines in the markets are not adequately cleaned. The drainage facilities are inadequate as are the waste disposal arrangements run by the city corporation. The fish markets are filled with filth and bad odour makes it difficult to breath in. The cleaning of the shops are not particularly possible as the floors are muddy, uneven and temporary.

Pucca means brick built, semi-pucca means houses with brick wall but with tin roofs, kacha stands for houses having muddy floors and having walls made of bamboo/tin-wooden structures.

The nature and volume of fresh produce wholesale trade

The size of the shops varies from 25 square feet to 1200 square feet depending on the size of the business, the average median and mode being 216 square feet, 1135 square feet, and 100 square feet, respectively. Twenty-eight out of 30 shops have no other space to store the fresh produce they trade in. Sometimes, they store (fish) in tanks and cold boxes in the office spaces if supply arrives late in the day. Only 2 traders said they had storage of approximately 0.5 tons. The average size of staffing is 4, with 2 office staffs and 2 laborers. However, in most cases, the wholesalers (except for fish wholesalers) do operate the business themselves without taking support of any staff. It is to be mentioned that laborers are mostly part timer, the average number being 6 (0 to 60 in number).

Of the traders, 3 out of 30 have own shops, and the others use rented shops. The mode of rent payment as per contract is of four types – (i) the monthly average rent is taka 9595 (3000-6000 taka for 15 respondents, 6000-9000 for 2 respondents, and above 9000 taka for 5 respondents); (ii) the second mode is temporary, taka 200 per day on sit-in basis (for 2 respondents); (iii) the third mode is a fixed rent plus 1/8 of the commission obtained from wholesale trading especially in the case of fish (1 respondent); (iv) the fourth mode is 6.1 % of sale (1 respondent).

About the rolling capital requirement, the traders need to offer 'dadon'11' to ensure steady supply of fish, fruits and vegetables to their aarats/shops. This is a sort of forward buying on their part and forward selling on the part of local suppliers, farmers and fishermen. The average amount of rolling capital need is 1.2 million taka (highly skewed range of taka 20 thousand to 8.0 million, 50 % having capital of 0.3 million taka while the remaining 50% need over 0.3 million taka). The volume of transaction varies with the type of produce they trade in. The daily purchase per fish wholesaler is over 4 tons on average, where as for fruits it is 4.5 tons, and for vegetables it is 1.07 ton. The daily sale is 4.3 tons for fish, 4.3 tons for fruits and 1.0 ton for vegetables. And the average stored quantity is: fish 0.0 ton, fruits 0.22 ton, and vegetables 0.06 ton. The quantity of produce that gets partially damaged is 3.8% for fish, 3% for fruits, and 8.5% for vegetables, whereas the quantity that gets rotten are zero percent for fish, 8% (average 2.4%) for fruits, and up to 20 % (average 10%) for vegetables.

The tax payment by wholesalers is rare as majority of them do not own any shop; however, they need to collect trade licence from the City Corporation (face lot of

Informal credit to local wholesalers and collectors who in turn offer the same to the farmers, fishermen and collectors to ensure steady supply to their ends.

hassle) for doing the business. There are also unidentified costs in the business starting from transportation to sitting with shops. However, majority of the traders did not fully disclose these costs, ostensibly out of fear; but these are identified as extortion in each stage of the business (apart from cleaning of premises, posting night guards and others).

The marketing margin for fish is 5-33% (average is 17.4%) (including the *aaratder* commission of 2-4%), for fruit it is 6-40% (average is 24.3%), and for vegetables it is 10-55% (average is 30%) depending on the variety and location of purchase. The average net income per month by fish wholesaler is 39800 taka (taka 10000 to over taka 75000) depending on the volume of business, price prevailing, and the margin of profit. The net income per month by fruit wholesaler is on average 36977 taka (7200 to 81000), and for vegetables wholesaler it is on average over 33000 taka (9000 to 58000). Some traders have other income sources as well but they felt shy of telling about those incomes.

Sources of supply and transportation

The transports used for bringing fresh produce supply to Dhaka city are mainly trucks for road ways and launches and trawlers for the river ways. The sources of fish are Teknaf in the south-east and Potuakhli in the south-west of the country for sea fish; Chandpur, Barisal and Bhola for Hilsha fish; and Faridpur, Rangamati, Khulna, greater Mymensingh for other inland sweet water fish. Sources of fruits

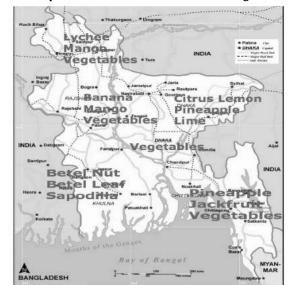


Figure 4: Main production areas for fruit and Vegetables

Source: ITC (2008)

are Modhupur of Tangail district for Pineapples, Rajshahi, Dinajpur, Gazipur and Jessore for Mango and Jackfruits, Perojpur, Gazipur and Kaliganj for other domestically produced fruits, whereas import is the main source for apples, oranges and grapes. The sources of vegetables are Natore, Munshiganj, Faridpur, Brahmanbaria, Comilla, Kushtia, Jessore, Chuadanga, Narshingdi, Dhaka and Bogra districts (see Figure-4).

The average time for arrival of fish supply to Dhaka wholesale markets is 11.75 hours (5 to 24 hrs), for fruits it is 12 hrs (1 to 24 hrs), and for vegetables it is 8.24 hours (1.15 to 24 hrs). This implies that adequate measures are needed to preserve the quality of fresh produce on their way to Dhaka wholesale markets – food fit transport and packaging, cool chain where needed, and safe handling practices.

Facilities available in the Dhaka wholesale markets

Modern marketing facilities are largely absent in the wholesale market places of Dhaka city. Six respondents said that they had no facility for water for washing, whereas others used water stored in drums or river water. Majority of the traders spoke of the need for washing the premises after market hours but that was not done regularly due to lack of arrangements for water, manpower or even infrastructure. However, some of the traders said they did not need washing as the produces were washed and retailed by the retailers. They do not get any support from the government organization in terms of information, advice regarding market extension, and inspection of quality and quantity. The adequacy level of transport availability is sufficient according to majority respondents, and the handling system is mostly manual calling for adopting safe handling practices at both ends – at load and discharge. Majority use normal storage without any provision of temperature and moisture control while 9 traders have no storage facility at all. Grading is done by eye estimation depending on the size and quality of the produce (rotten, partially rotten, and good). Majority have no suitable packing facility; others either do not require packing or use boxes, bamboo baskets etc depending on the type of fresh produce. On the availability of labor for handling, majority have no problem, but at times labor supply becomes inadequate. The traders need access to adequate credit, either formal or informal, but most of them favor lesser formalities in having credit. Places when the laborers can take rest are highly inadequate. The markets have no fire fighting facility and there is serious shortage of power supply as well. The traders want adequate security while transporting goods. They want the market infrastructure to be built pucca. They want access to associations and easy access to markets with developed grading, storage and credit facilities and asked for government interventions to address these issues and constraints.

Perception of traders about quality, laws and supply

Majority of wholesale traders and retailers are not aware about food quality and safety laws and standards and practices applicable to their business. They could not specify laws they need to adhere to, except that a few cited provisions on trade license and security and other requirements imposed by the traders associations. The majority of traders expressed satisfaction, about the quality of the produce, only four being skeptical about quality. Fourteen respondents said they were satisfied with the quantum of supply while others were not as they faced variability of supply.

Perceptions about groups, market information and role of stakeholders

Fifteen of the traders are members of associations while others are either non-members or abstain from saying anything. The associations are market as well as product specific. However, there are apex associations of traders like Metropolitan Chamber of Commerce and Industry, Dhaka Chamber of Commerce, and the Federation of Bangladesh Chambers of Commerce and Industry. The traders take the view that the associations can try more to promote the business by providing information, creating modern infrastructure and management. This is the view of the key informants as well. The traders say that at present they get market information from local parties (suppliers of produce, may be primary wholesalers and farmers) through mobile phones. The majority of traders find no problem with the location. They reported that only narrow roads and irregular approach of vehicle control by the traffic police cause problems.

Perceptions about risks and suggested solutions

Mr. Xian Zhu, World Bank Country Director in Bangladesh, observed that "high-value agricultural products tend to be highly perishable, and there are many risks associated with marketing these commodities. Appropriate policies and investments in key infrastructure are needed to make it viable for farmers to switch to these commodities and increase production." The statement holds good for Dhaka wholesale markets as well. The problems and risks that are faced by Dhaka wholesale markets vary from traders to traders, for types of produce, and over time as well. The major risks and problems if ranked according to severity would follow this descending order: financial risks, risk of quality deterioration, and security risk. The financial risks, as inherent to every business, involve non-realization of dadon offered to local suppliers/wholesalers/collectors resulting in shortage of capital and unsteady supply of produce, non-realization of money

under credit sale, price variability resulting in negative profit (in case of fruits and vegetables) or loss of commission (in case of fish wholesalers). The risk is further aggravated by road accident, theft and extortion prevailing in different stages of transportation and handling and finally with the asymmetry in market information – prices, supply and demand. The risk of quality deterioration is influenced by inadequate storage and cool chain facility, inadequate safe handling system, inadequate personal and institutional hygiene, water unavailability, inadequacy of food fit transportation and packaging system,. This risk is likely to translate into financial risk as well. The security risks arise from inadequacy of law and order situation, robbery, theft, fewer security personnel than required in the market places, traffic jam and restricted movements of trucks to Dhaka city etc. All this results in increased transaction cost for the business and affects profit margin. The focus group discussions with retailers and interview with key informants also confirmed the risks described above.

The solutions suggested are to gear up roles of the government, the local authority and traders associations, and private sector initiatives. The measures suggested are as follows:

Risks/problems	Suggested solutions
Uncertainty of supply	Measures to boost/sustain production – support to farmers, preserve water bodies for continued fish production and ensure safe reproduction, reduce transportation bottlenecks, investment in road infrastructure, ensure credit to the farmers/fishermen, symmetric market information
Uncertainty of prices	Strengthen market information, streamline supply
Non-realization of dadon	Institutional credit, enforcement of private contracts (this would increase the transaction cost though)
Quality deterioration	Improved infrastructure for storage, transportation and handling, <i>pucca</i> shops and market establishments, raising awareness about personal and market environment, ensure sanitation and waste disposal, water supply, efficient traffic control, electricity supply etc
Security risks	Improve law and order situation, ensure justice, provision of security guard, efficient traffic control

Perceptions about future barriers and prospects of fresh produce wholesale business

The present risks and problems, if not addressed with adequate focus and sincerity, might cause future barriers to the fresh produce business. The majority

of wholesalers are skeptical of the prospects of the fresh produce wholesale business because of prevailing uncertainties. However, the traders, the retailers and the key informants envisaged good prospect if supply is ensured, market information is made transparent, easy entry and exit of market players are ensured, export chains are established and infrastructural and quality impediments are eliminated. The public-private partnership, the active professional association and improvement of market places management might bring sustained prospect in the trade. This will bring benefit to all: the consumers, the traders, the retailers, and the farmers.

While private sector investment necessarily leads the development of high-value agriculture and agribusiness, the role of the government remains essential in fostering an enabling business environment and investment climate. It does so by providing critical public goods and services and stable and undistorted economic incentives. This is particularly consistent with the 2008 World Development Report 'Agriculture for Development', which points to agricultural growth as having especially pronounced potential to raise people out of poverty relative to growth in other sectors. In fact, throughout the developing world, the GDP growth that is attributable to agriculture can benefit the income of the poor two to four times more that GDP growth that is attributable to other sectors according to that publication. High-value fresh produce from agriculture, together with new markets and technological innovations, are new opportunities to producers and traders alike.

Need of renewed focus of policies and strategies

The perishability of high value fresh produce like fish, fruits and vegetables requires careful handling, special facilities (packing houses, cold storage, and refrigerated transport), and rapid delivery to consumers to maintain quality and reduce physical and nutritional losses. Like many developing countries, Bangladesh's marketing chains of those products are long and suffer from poor access to roads and electricity. Also, inadequate infrastructure and services in physical markets add to the transaction costs and cause quality deterioration and high spoilage losses. Market infrastructure and facilities in urban market, as revealed from this study, are very much limited and congested, increasing the difficulty of trading such perishable goods.

In addition to the price and supply uncertainty, new and emerging challenges are peeping in – like (i) a new business environment where agri-food business is having an increasing concentration of suppliers, intermediaries, and sophisticated retailers like supermarkets and is likely to stimulate new methods of

differentiation and spur a more intense drive for new supply sources and greater efficiencies in costs and logistics; (ii) a new regulatory environment is emerging as more and more food is traded globally under globalized trading regime, and government is determined to manage the safe food supplies by imposing new barriers to entry in the form standards in production, packaging, marketing, export and even in domestic consumption. The wholesale markets need to cope with the new challenges (otherwise, there is likely ugly fate waiting for them). The present study reveals these signals from the wholesale traders. This could result in disarraying problems for both farmers and consumers. This calls for renewed focus of policies and strategies. Although Bangladesh National Food Policy 2006, the National Agriculture Policy, and the PRSP put emphasis on promoting production and marketing of high value agriculture produces, little steps are being taken to make all market players aware. Especially the urban wholesalers seem to be falling behind (along with farmers) in terms of understanding the risks of losing market access.

The renewed focus of policies should pursue the extent and usefulness of the wholesale sector in marketing, quality management, and profit sharing across the chain and in raising competitiveness among the players. Pragmatic programmes need to be chalked out to address the key issues like modernization and streamlining of the wholesale sector and improvement of market infrastructure, transport systems, and utilities, solve the location issues, issues of increasing transaction cost and financial risk of the traders, access to credit, formal contracts and so forth.

It appears that private sector at the level of leading Chambers and Product Associations is also not adequately tuned up; firstly, because they consider it the responsibility of the government and secondly, possibly, they neither have adequate resources, nor do they seriously feel the punch yet. Only one private sector Foundation (Hortex Foundation) and one NGO (Bangladesh Rural Advancement Committee-BRAC) are apparently working in this area all throughout the chain.

The new strategic policy regime should, therefore, pursue a broad-based capacity building, the means of which could be *awareness and recognition* at the level of users, implementers and policy-makers, *physical infrastructure*, *human resources/training* and *institutional build-up*. This huge task of capacity building ahead cannot be taken care of by the Government of Bangladesh (GOB) alone. The policy should seek public-private partnership, donor-GOB partnership etc for the implementation of such policy agenda. Fortunately, an initiation of change has

occurred with the establishment of Horticulture Export Development Foundation as a non-profit horticulture development and promotional agency in the private sector. With the support of BRAC, this foundation is working for up-scaling of farmers, but nothing is being done so far to support the wholesale marketing segment in the urban area. The capacity building must adopt a total approach: include all stakeholders, all institutional framework and processes.

The policies need to address the bottlenecks at the operational level, viz., lack of infrastructural facility; lack of access to information; lack of coordination and monitoring system; limited technology choice; vulnerability to market access barriers; diseconomies of scale of operation etc. Associations of wholesale traders have the potential to both facilitate the work of their members and to achieve greater efficiency in the marketing chain. They can increase the possibility that the vital role the traders play in food marketing and distribution is recognised and can assist in improving the infrastructural and regulatory framework under which trading takes place. By working together as associations of traders, they can also contribute to the reduction of marketing transaction costs, reduction of risk, improvement of liaison with market managers, and provide important welfare services.

Conclusion

The wholesale markets provide most small farmers with effective and profitable outlets. They are important for maintaining a sustained flow of fresh produce to the retail markets, thus offering benefits to the low income consumers as well. While the private sector will continue to take the lead in developing high-value agriculture and related agro-business, the role of government remains essential in fostering an enabling business environment for market-led growth through stable and undistorted economic incentives and in providing critical public goods and services where private sector is less interested in. Closer collaboration between the public sector, nongovernmental organizations, and the private sector would be extremely beneficial in addressing the combinations of opportunities, risks, and challenges embedded in the wholesale marketing environment in Bangladesh.

Bibliography

- 1. AFMA (2008), "Consumer Trends for Tropical Fruits in Importing Countries", *AFMA News letter*, Volume 58, no.3, July-September.
- 2. AFMA (2004), Report on the FAO/AFMA/FAMA Regional Workshop on the Growth of Supermarkets as Retailers of Fresh Produce, Kuala Lumpur, Malaysia, 4 7 October.
- Ahmed, N. & M.M. Rahman (2005), "A Study on Fish Marketing Systems in Gazipur, Bangladesh", *Pakistan Journal of Biological Sciences;* Issue: 2; pp: 287-292; Vol. 8;2005, http://eprints.kfupm.edu.sa/90145/1/90145_1.pdf (accessed on 15 September 2009).
- 4. BBS (2005), *Household Income and Expenditure Survey*, 2005, Ministry of Planning, Govt. of Bangladesh, Dhaka.
- 5. Chowdhury, S. (2009), "Fresh produce: Farmer to consumer", *The Daily Star, September 13*.
- 6. Chowdhury, M.H. (2004), Fish market and marketing issues in Bangladesh, International Institute of Fisheries Economics & Trade, Corvallis, Oregon, (USA).
- 7. FAO (1996), Food for consumers: marketing, processing and distribution, Technical background document, © FAO, 1996.
- 8. FAO (2005), Associations of market traders- Their roles and potential for further development, Agricultural Management, Marketing and Finance Service (AGSF), Agricultural Support Systems Division, Rome, 2005
- 9. FAO, (2009), Fish Marketing Practices, http://www.fao.org/DOCREP/004/ Y2876E/y2876e09.htm (accessed on 15 September 2009)
- 10. Government of Bangladesh (2006), *National Agricultural Policy 1999*, Ministry of Agriculture, Bangladesh Secretariat, Dhaka.
- 11. Government of Bangladesh (2006), *National Food Policy 2006*, Ministry of Food and Disaster Management, Bangladesh Secretariat, Dhaka.
- 12. Hortex (2008), Hortex Newsletter, Volume 8 Number 4, October December 2008
- 13. ITC (2008), "A strategy for developing the Horticulture sector of Bangladesh" *August*.
- 14. Murshid, K.A.S et al (2009), "Re-Emergence of Food Insecurity in Bangladesh-Instability in Food Production and Prices, Nature of Food Markets, Impact and Policy", NFPCSP sponsored research, Dhaka, May.

- 15. Rahman, M.M. et al. (2006), "Identifying Profitable Urban Markets for Vegetables from Rural Areas: A study in the Northern Part of Bangladesh", *Journal of International Farm Management Vol.3*. No.4 December.
- World Bank and IFC (2008), High-Value Agriculture in Bangladesh: An Assessment of Agro-business Opportunities and Constraints, IFC-South Asia Enterprise Development Facility (SEDF), Bangladesh Development Series 21, February. http://siteresources.worldbank.org/BANGLADESHEXTN/Resources/public ations/384630-1222304825031/BDAgricultureReport21.pdf (accessed on 10 September 2009).
- 17. World Bank, (2008), "Bringing agriculture to the market", *World Development Report*, 2008; http://siteresources.worldbank.org/INTWDR2008/Resources/2795087-1192112387976/WDR08_09_ch05.pdf (accessed on 10 September 2009).

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 215-230 Bangladesh Economic Association (ISSN 2227-3182)

Mobile Commerce from the view of its Technical Prerequisites and Few Potential Areas of Uses in Bangladeshi Businesses

MD. ZAHIR UDDIN ARIF¹ MIR SEMON HAIDER

Abstract

Electronic commerce continues to enjoy phenomenal growth, but so far most E-Commerce development demands wired infrastructure, such as a browser on a PC connected to the Internet using phone lines or a Local Area Network (LAN). The limited use and accessibility of internet and compatible devices in Bangladesh did not support E-Commerce up to its potential. The authors envision many new e-commerce applications that will benefit from emerging wireless and mobile networks. The authors term these applications "Wireless E-Commerce" or "Mobile Commerce" or "M-Commerce".

Wireless and mobile networks have experienced exponential growth in terms of capabilities of mobile devices, middleware development, standards, and network implementation, and user acceptance in Bangladesh. Countries with a lack of regular telecom infrastructure are likely to adopt wireless and mobile communications to serve both urban and rural areas. The Wireless Application Protocol (WAP) plays an important role in bridging the gap between the Internet and the mobile world.

In this article, the authors examine how new M-commerce applications can be designed and supported by wireless and mobile networks and mobile middleware in the Bangladesh. How a business will adopt these applications will depend on how fast these applications can be developed, acceptance of

Md. Zahir Uddin Arif is an Assistant Professor, Marketing Department, Jagannath University, Dhaka, and Mir Semon Haider is a Senior Lecturer in Marketing, School of Business, North South University, Dhaka,

new technologies by users and businesses based on "easy to use" and uniform interfaces, and building of trust/security concern necessary to conduct M-Commerce transactions while on the move. The study advocates widespread deployment of wireless and mobile E-Commerce all over the world, including Bangladesh.

KEY WORDS: Mobile commerce, m-commerce services, privacy, security, trust, wireless technologies, WAP, network middle-wire

1. Background and Motivation

Advancements in e-commerce have resulted in significant progress towards strategies, requirements, and development of e-commerce applications. However, nearly all e-commerce applications envisioned and developed so far assume fixed or stationary users with wired infrastructure. The authors of the present papers envision many new e-commerce applications that will be possible and significantly benefit from available and emerging wireless and mobile networks or service providers in Bangladesh. To allow designers, developers, and researchers to strategize and create mobile commerce applications, the authors propose four attempts to identify several important classes of applications such as mobile financial applications, mobile inventory management, proactive service management, product location and search, and wireless re-engineering.

2. Methodology

No systematic study has been done so far in this new important sector of Bangladesh. The present paper is a modest attempt to fill this gap. The paper is prepared on the basis of secondary information, reviewing and analyzing the existing international literature published in relevant books, magazines, reports, and relevant websites.

3. Mobile-Commerce Defined

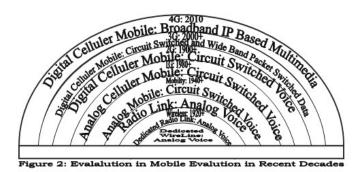
Mobile commerce – the conduct of business transactions over the internet enabled wireless devices – is gradually becoming a dominant force in business and society. The push for advancing technology and the pull of public demand for low-cost, high-speed, communications and ubiquitous access to information anytime anywhere have truly revolutionized the telecommunications industry over the past two decades. Nevertheless, the wireless web market is still in the womb in Bangladesh, and Mobile Commerce (M-Commerce) is expected to evolve significantly in future; this study looks forward to locate some potentials.

Mobile Electronics Commerce (M-Commerce) is defined as any type of

transaction of an economic value having at least one mobile terminal at one end and thus using the mobile communication network. E-Commerce transactions performed by a mobile customer via a fixed terminal (e.g. from a cyber cafe) or via a portable computer that is connected to the internet via a modem and wired network are not included in his definition. The same applies for personal SMS communication sent by one person to another.

M-Commerce is the product of interaction among business transactions, Internet applications, and mobile communications. It is a highly evolved version of t-commerce (commerce via telephony) of the 1980s and E-Commerce (commerce via the Internet) of the 1990s.

Figure 1 shows the revolutionary changes in the cellular mobile communication facilities in almost every decade. The first generation (1G) system, introduced in the early 1980s, provided analog voice-only communications, and the second generation (2G) system, introduced in the early 1990s provided digital voice applications and circuit switched low speed data services (Mehrotra, 1994). The introduction of the third generation (3G) systems resumed in the 21st century, with the focus shifting to packet instead of just void data (www.umts-forum.org). The fourth generation (4G) system was foreseen to provide broadband IP-based multimedia services around the year 2010 (www.docomo.com and Tachikawa, 2003).



3.1 Mobile Advertising

Mobile advertising is also a very important class of m-commerce applications. Using demographic information collected by wireless service providers and information on the current location of mobile users, much targeted advertising can be done. The advertising message can be personalized based on information

provided by consulting the user at an earlier stage or by the history of the user's purchasing habits. Advertisements sent to a user can also be location sensitive and can inform a user about various on-going specials (shops, malls, and restaurants) in surrounding areas. The type of advertising can be performed using short messaging service (SMS) or by using short passing message to mobile users. The message can be sent to all users located in a certain area (the geographic region can be identified by advertisers or even by users in advance). A user specific message can be sent independent of the user's current location.

Also, depending on interests and the personality type of individual mobile users, a network provider may consider using a "push" or "pull" method of mobile advertising based on a per-user basis or a class of users.

Wireless networks may consider such advertising lower priority traffic if network load crosses a certain threshold. Since these services need the current location information of a user, a third party may be needed to provide location service. However this may require a sharing of revenues between the network service provider and location service provider.

3.2 Mobile Inventory Management

This class of applications involves location tracking of goods, services, and possibly even people. The tracking of goods may help service providers in determining the time of delivery to customer service and obtaining a competitive edge over other businesses. One very interesting application is "rolling inventory", which may involve multiple trucks and just-in-time delivery of goods

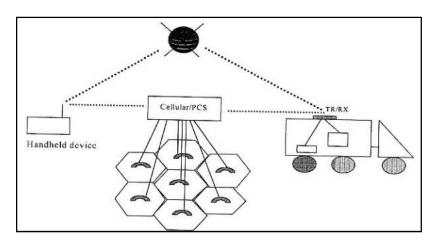
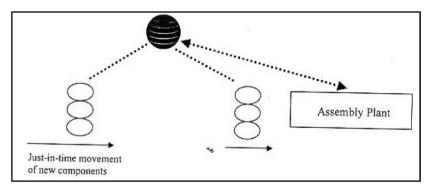


Figure 2: Authors' idea in Locating and Tracking of Goods with M-Commerce.

can be performed. The rolling inventory and delivery application can reduce the amount of inventory space and cost for both vendors and stores and may also reduce the time between when an order and when placed on the goods are delivered (Figure 2). Rolling inventory is a B2B m-commerce application while location tracking can be considered a B2C application. Using expensive embedded radio/microwave devices (chips), a wireless network can track goods and services. Since satellite signals may not work well inside a truck, a separate wireless LAN can be provided on-board for intra-truck communication and tracking.

Figure 3 : Authors' idea in Location Tracking and just-in-time movement of components using M-Commerce



Another example of MIM is just-in-time delivery/movement of components in an assembly plant based on the rate of consumption of existing components (Figure 3). A variety of new components can be moved at a certain speed after receiving a wireless signal from the components reaching the assembly line or from a device on the assembly line itself. This will allow just-in-time delivery leading to a reduced inventory and assembling cost. If the new components are delayed for some reason, then signals can be sent to the assembly line for possible adjustment of the assembly speed to match the arrival time of new components. Such an application would reduce the inventory cost while increasing productivity by matching the speed of new component arrival to the rate of assembly.

3.3 Mobile Entertainment and Other Services

With an increasingly mobile society, more and more people are on the move. While mobile, people may prefer to be involved in some business or entertainment activities. Many of these services can be offered to people through mobile devices and wireless meteors. These include mobile auction/reverse

auction, video-on demand service, and other entertainment-oriented services. The technologies needed include mobile devices with capabilities to match desired applications, suitable mobile middleware, and wireless networks with high bandwidth (such as emerging LEO satellites or third generation wireless networks).

4. Wireless User Infrastructure and Middleware Issues

To make the applications described previously a reality, several functional components are necessary. One important area includes mobile devices with sufficient power in terms of memory, display and communication functionalities. The hand-held device is really the entry point for most mobile commerce systems. The capabilities or limitation of these devices will impact the type and frequency of which mobile commerce applications will be used.

The devices available today (Oliphant, 1999) can be characterized as either communication-centric or computing-centric. However, in near future such differences may cease to exist as these devices converge to a single intelligent mobile device. Many hand-held devices now support a variety of network interfaces and access ranges, from short range Bluetooth, to wireless LAN to wireless WAN access. Location support, video streaming, barcode readers and other features are also being implemented in many of the devices.

Although it is possible to do some simple mobile commerce transactions using a simple hand-held device, many sophisticated mobile commerce applications require other capabilities. For example-

- Dynamic, adaptable and smart user interface with multi-lingual support,
- Ability to accept user input in many forms, including voice,
- Ability to display rich and usable contents,
- Location awareness and ability to track users, products and devices,
- Multi network interfaces for increased and reliable wireless access,
- Basic security features to handle malicious code, support for authenticating user, servers, and applications,
- Ability to work with and adapt to mobile commerce applications with diverse requirements (such as the types of transaction both push and pull, transaction rates, duration, and multicast),
- Possible support for context awareness,
- Ability to discover and download upgraded applications and software proactively,

 An operating system that can manage resources to support many of these functions.

Some of these features are already available in hand-held devices. For example, iMode devices using I-appli can use software applications downloaded from sites by employing an automatic transmission mode. These devices are also capable of receiving area specific (location-dependent) information and currently support a bi-lingual (Japanese and English) interface (www.nttdocomo.com).

5. Primary Problems of Introducing WAP in Bangladesh

WAP success depends on rapidly expanding the installed base of WAP terminals. Operators are in a strong position to do this, but they must put pressure on the handset vendors to provide WAP terminals on time and at the right price. An upgrade strategy is required with a carefully constructed marketing message, as further upgrades will be required for 2G+. The key determinants for WAP service and m-commerce in Thailand are summarized in Figure 4.

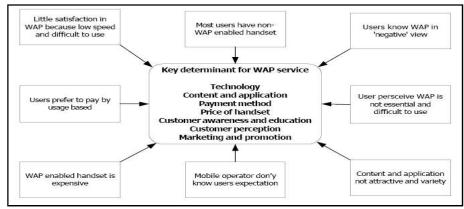


Figure 4: Possible Key Determinants for WAP service (The authors' finding).

Information and telecommunication services on mobile terminals. It was developed by the WAP forum, an industry association founded by Nokia, Ericsson, Motorola and Unwired Planet in June 1997 with the goal to open internet for wireless mobile access by creating a 2G+ network technology. Today, WAP forum comprises over 200 members from all segments of wireless industry value chain, including Hewlett Packard, Microsoft, IBM etc. aiming to ensure product interoperability and growth of wireless market.

Internet standard such as HTML, HTTP, TLS, TCP are inefficient over mobile networks as they require large amounts of mainly text-based data to be

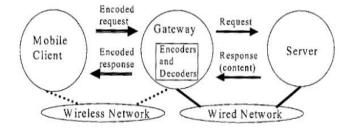
transferred. Standard HTML content can not be effectively displayed on the small-sized screens of packet sized mobile wireless terminals or pagers. WAP optimizes these standards for low band-with, high latency and unstable connection.

The WAP specifications define a lightweight protocol to minimize band-with requirements and to guarantee that a variety of wireless networks can deliver WAP service. The lightweight protocol stack is designed to minimize the required brand with and minimize the number of wireless network types that can deliver WAP content. Multiple networks can be targeted, which include GSM900, 1800, 1900 MHz, DECT, TDMA, PCS, FLEX and CDMA. All network technologies and bearers will also be supported, including SMS, USSD, CSD, CPDD and GPRS.

The interface between the operator's network and the internet is realized by the WAP gateway, which includes HTML to WML fitters. The HTTPS interface to an on-line web server as well as interface to the WAP from the mobile devices/terminal are sent as a URR through the operator's network to the WAP gateway (Figure 5). Responses are sent from the web server to the WAP Gateway in HTML, which are then translated in WMC and sent back to the mobile terminal over WST/WST.

WAP (Wireless Application Protocols) appears to be the key to future IP-based m-commerce applications. WAP, an industry-initiated world standard, has emerged as a common communications technology and uniform interface standard for presenting and delivering wireless services on wireless devices (Varshney and Vetter, 2002). WAP specifications include a micro-browser, access functions, and layered communication specifications for sessions, transport, and security. The WAP gateway is used to translate the WAP protocols (protocols that have been optimized for low bandwidth, low power consumption, limited screen size, and low storage) into the traditional Internet protocols (TCP/IP). These specifications

Figure 5: The Role of WAP Gateway for Bangladesh according to the author



enable bearer-independent and interoperable applications. In short, future trends clearly indicate that the device manufacturers as well as service and infrastructure providers will keep adopting the WAP standard (www.openmobilealliance.org).

In this process WAP established the mobile terminal as a trusted, personalized delivery channel for many kinds of services – new financial services, travel services, information services, news alerts, relating services, entertainment services and so on. The penetration of the market by WAP is quite hard for Bangladeshi context but not at all an impossible task. Moreover, it will generate possibilities and create challenges and competition and network operators for service providers in providing new services for the clients.

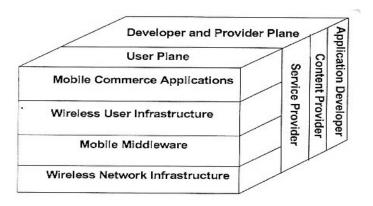
6. Possible Mobile Commerce Framework

To help future developers and M-Commerce service providers to strategize and effectively implement M-Commerce applications, a framework is shown in Figure 6.

The framework tries to define multiple functional layers, simplifying the design and possible future development in the current mobile service infrastructure, so that different parties (service providers, vendors, sellers, suppliers, developers, and designers etc.) can focus on individual layers. This framework has *four levels*:

- Mobile Commerce Application,
- User/client infrastructure,
- Mobile middleware, and
- Network infrastructure.

Figure 6: From the viewpoint of the authors, A Possible Framework for M-Commerce



The framework shows that M-Commerce applications should take into consideration the general capabilities of user infrastructure (Mobile/Wireless Devices), and not the individual devices. With its ability to hide details of understanding wireless and mobile networks from applications while at the same time providing a uniform and easy to use interface, mobile networks middleware distinctively is an extremely important component in developing new mobile commerce applications. The network infrastructure also plays an important part in M-Commerce, as the user-perceived service quality depends on available resources and capabilities of wireless and mobile networks.

The framework also shows a developer and service provider plane to indicate the different needs and roles of application developers, content providers and service providers. Each of these could build its products and services using the functionalities provided by others.

A content provider can offer its service using applications from multiple application developers. They can also aggregate content from other content providers and can supply the aggregate content to a network operator or service provider.

Service providers can also play the role of content aggregators, but are unlikely to act as either an application or content provider due to their focus on the networking and service aspects of M-Commerce. A service provider can also be a clearing house for content and application providers in advertising and distributing their products to its targeted customers/clients.

Wireless carriers can play a very active and important role in M-Commerce application and services due to the fact that a mobile user is going through their network to perform all commercial transactions. In addition, a mobile user is likely to perform one common bill (bundled services) for voice, data and M-Commerce services. However, there are many technical and non-technical hurdles (i.e. pricing for mobile commerce transaction) that need to be solved. Before carriers can become major players in this emerging business field. The key advantage of M-Commerce is its ability to support a wide variety of attractive and innovative applications, and that will be the "killer" characteristic of M-Commerce. It is worth highlighting that the highly-personalized, context-aware, location-sensitive, time-critical applications, conducted in a very secure environment are the most promising M-Commerce applications. There are indications that the next generation of wireless communications services based on 4G systems will not be limited to human (as it has been before) but rather to

anything that very small wireless chips can be attached to (i.e., machine-to-machine communications).

Table-1 Highlights the M-Commerce service categories encompassing sets of attractive applications.

M-Commerce services with compelling contents are provided by tight business and strategic partnership arrangements and by involving a large number of companies, each influencing other parties in the value chain. While no two value chains are the same, a company can assume multiple roles in the value chain for m-commerce, or a single role for a multiplicity of services, such as M-Commerce, E-Commerce and, iTV. Table-2 identifies the main categories of players in the m-commerce value chain.

Table 1: M-Commerce Value Chain

Players	Roles	
Telecom Infrastructure Providers	provide the communications networks.	
Infrastructure Equipment Vendors	manufacture the mobile base stations and switching systems.	
Mobile Network Operators	provide wireless access to mobile users.	
Mobile Device Manufacturers	manufacture wireless devices (e.g., phones, pagers, PDAs).	
Mobile ISPs	provide mobile users with anytime, anywhere access to the Internet.	
Mobile Content Providers	develop new content to deliver information and services.	
Mobile Portal Providers	provide mobile users with access to all Internet needs.	
Content Aggregators	focus on value creation by assembling content from multiple sources.	
Mobile Location Brokers	supply info about user's position to everyone across the value chain.	
Software Vendors	supply operating systems, databases, and micro-browsers.	
Third-Party Billing Providers	make it possible for users to make payments.	
Server Wallet Providers	store both payment information and other valuable personal data.	
Security Providers	ensure secure payments through digital signatures and biometrics.	
Push/Pull Advertisers	furnish users with messages to influence them.	
Voice Portals	provides users with audio interfaces	
Mobile Technology	provide technologies to introduce new applications.	
Online Retailers	sell product and services to mobile users over the Internet.	
Financial Organizations	allow all users to pay using debits/credit cards.	
Wireless Applications Providers	develop, maintain, and/or host applications.	

Figure 7 presents a generic payment model for mobile commerce (www. openmobilealliance.org). This model provides an abstract view of what information is passed between various parties to conclude a transaction and does

not depict any particular ordering of the information flow. In the selection phase, the customer indicates what goods and services are desired, and he/she negotiates the price of the goods and services and the terms of conditions. The transaction details highlight the description of goods or services, the customer's name, and

Service Categories Applications Types Portal Services: SMS, E-mail/voice-mail/video-mail, interactive voice, instant messaging, soft fax, Web browsing, synching with PC, video-conferencing, file transfers, MMS Interactive games, downloading music (MP3 files) and comics (jokes/cartoons/horoscope), Entertainment Services: uploading photos, streaming music/video on-demand, gambling Financial Services: Banking, stock trading, paying fees, bills, tolls, and e-cash E-Tailing Services: Shopping, booking, ticketing, advertising (user-specific/time-dependant/location-sensitive) Directory Services: Finding the nearest "X" (on-the-move yellow pages) and shortest route (driving directions) Information Services: News (e.g., sports, business, weather, traffic), crisis alert Distribution Services: Fleet tracking/dispatching of goods/people, broadcasting/multicasting, audio/video streaming Monitoring Services: Metering, trouble shooting, inventory control & management, tracing & tracking moveable /wearable objects, telemetry services, tracking assets, tracking stolen/lost cars/pets Social Services: Medical query/consultation, distance learning Security Services: Security and surveillance of people, locations, and things Emergency Services: 911 & enhanced 911, taxi, roadside Micropayment Services: Wireless access to vending machines, parking meters, gas pumps Access Services: Wireless access to doors and toll booths

Table 2: M-Commerce Services and Applications

other required details. The customer then responds with transaction credentials (which may contain the payment credentials), the transaction details, and some authentication of the customer. Upon authentication, the payment is approved, the funds are transferred, and the goods will be delivered, or services will be provided.

In mobile payment, although confidentiality (making sure that information is not visible to eavesdroppers), integrity (finding out the content has not been tampered with), and non-repudiation (proving that the transaction has taken place) are primary concerns, authentication (ensuring that communicating parties are certain of each other's identity) is of paramount importance. As a result, public key

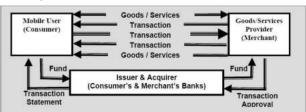


Figure 7: M-Commerce transaction model

cryptography, which is slower but more powerful than symmetric key cryptography, will be used for authentication and the exchange of symmetric session keys. In order to prevent a false (cracker's) public key as a legitimate public key, a certificate authority issues a public key certificate that would contain the name, the public key, and the expiration date. In view of the fact that the emerging wireless devices will have more throughputs, processing power, and memory, more complex encryption techniques—such as longer keys and/or more sophisticated multi-level algorithms—will be employed to enhance mobile payment security (Sklar, 2001).

7. Privacy, Security and Trust in M-Commerce

Even though wireless communications have numerous merits, privacy is not one of them. M-Commerce possesses, in addition to all privacy issues related to E-Commerce, another major privacy threat: the sharing of knowledge about a user's location with others. There are basically three solutions to this positioning problem: i) the network-based solution, where the calculations are carried out by the cellular network and the positioning information may then be passed to the user; ii) the device-based solution, where the wireless device computes its own position; and iii) a hybrid solution. The pitfall associated with the network-based positioning is that the information about the user's whereabouts can be collected but not necessarily passed to the user. Instead, the information may be exploited by other entities, all without the user's knowledge, let alone his/her consent. Also, there are some privacy implications about the requirement that wireless devices need to be embedded with a location tracking technology to provide locationbased services, such as targeted advertising and finding the nearest "X." For instance, if location records were kept over time, an in-depth profile could be compiled for other, perhaps unwarranted, purposes.

8. Conclusion

The potentials of M-Commerce are enormous for all over the world, including Bangladesh. Mobile terminals seem to be the ideal channel for offering personalized and location-based services as well as for *one-to-one* marketing. Other very popular applications are mobile advertising, mobile financial services (stock exchange, bank payments, and insurance services), mobile entertainment, e-mails based on SMS and alert services, to mention a few.

Regarding the m-terminals, PDAs and smart phones, including a WAP micro-browser for wireless Internet access, are becoming very popular. We will soon

have a wide range of mobile terminals from simple voice terminals to multipurpose terminals incorporating MP-3 player or video player that can handle in parallel voice, data and video services, depending on customer demand.

The mobile network operators have a competitive advantage in the M-Commerce market due to the fact that they possess information about customers, they have an established billing relationship with them, and they can easily locate the subscriber's geographical location. Thus, location-based services such as advertising, shopping, reservations and information provisioning can be easily offered. Also, they can be strategically positioned between content/service providers and subscribers and have an upgraded role in the M-Commerce value chain by acting as mobile portals or information brokerage. They can also play the role of Internet service provider and even acquire a bank or a banking license and play the role of a Trusted Third Party. It is very likely that operators will keep only mobile voice services and set up subsidiary companies for mobile portal services in order to comply with existing legislation and also because of the different business models required for serving respective demands. In this paper we have investigated some of the roles that the mobile network operator can play and discussed associated issues. A more extensive discussion on the associated business, legal and technical issues as well as on transactional aspects may be found in (Tsalgatidou and Veijalainen, 2000).

At the moment there is still only a small number of applications and contents available. The WAP phones are not widely available and the call set-up time is too long. But, there is a lot of work going on by many industries, network operators and software providers. It is expected that, as GPRS10, which started in 2002, will become more widespread, m-commerce will begin to take off on a larger scale (Durlacher Research Ltd.: Mobile Commerce Report, 2000). However, in order for m-commerce to flourish, related business and legal issues should also be resolved.

Future research should focus on studies involving implemented technology. Because our study is based on hypothetical services, the findings do not necessarily reflect users' behaviors in a real setting. Longitudinal studies could be conducted to assess if the use level is consistent or is just due to initial excitement. Finally, research focusing on implementing technology to ensure privacy, should consider looking into what level of privacy is actually needed and desired by users.

References

- 1. Durlacher Research Ltd.: Mobile Commerce Report (2000), February. www.durlacher.com.
- 2. Mehrotra, A. (1994), Cellular Radio: Analog and Digita Systems, Artech House.
- 3. Oliphant, M. (1999), "The mobile phone meets the Internet", IEEE Spectrum, August.
- 4. Sklar, B. (2001), Digital Communication, Prentice-Hall.
- 5. Tachikawa, K. (2003), "A perspective on the evolution of mobile communications," *IEEE Communications Magazine*, October, pp. 66-73.
- 6. Tsalgatidou, A. and J. Veijalainen (2000), "Requirements Analysis for Billing Transactions in MCommerce," *Internal Report*, University of Jyvskyl. UPS. http://www.ups.com
- 7. Varshney, U. and R. Vetter (2002), "Mobile commerce: framework, applications and networking support," *Kluwer Mobile Networks and Applications*, pp. 185-198.
- 8. Wireless Application Protocol (WAP). http://www.wapforum.org

www.docomo.com

www.openmobilealliance.org

www.umts-forum.org

Your Wap. www.yourwap.com

Appendix: List of Selected Acronyms

CDMA = Code Division Multiple Access FCC = Federal Communications Commission

GPS = Global Positioning System

GSM = Global Systems for Mobile communications

ISDN = Integrated Services Digital Network

ISP = Internet Service Provider

ITU = International telecommunications Union

MIMO = Multiple Input Multiple Output MMS = Multimedia Messaging Services

OFDM = Orthogonal Frequency Division Multiplexing

PIPEDA = Personal Information Protection & Electronics Document Act

PSTN = Packet-Switched Telephone Network RFID = Radio Frequency Identification

SDR = Software Define Radio SMS = Short Messaging Services

UWB = Ultra Wide-Band

WAP = Wireless Application Protocols
WBAN = Wireless Body Area Network
WEP = Wired Equivalent Privacy
WLAN = Wireless Local Area Network
WPAN = Wireless Personal Area Network
WMAN = Wireless Metropolitan Network
WRC = World Radio Conference

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 231-241 Bangladesh Economic Association (ISSN 2227-3182)

IMO: Human Resource Development in the Maritime Sector- Bangladesh Perspective

HALIMA BEGUM¹

Abstract

Bangladesh is a population rich maritime country. The maritime dependency factor is increasing at a high rate with the increase of international trade where about 92% international trade is transported by sea. Bangladesh has emerged as a shipbuilding nation vis-a vis kept the top rank as a ship demolition country. Though the economy is heavily dependent on the maritime sector which is flourished by the private initiative where skilled manpower is one of the key factors for thriving but has remained neglected and unexplored. In this paper the author has tried to figure out the dimensions of maritime sector in general and the education & training facilities in particular.

(This paper was presented at Chittagong Port Authority Training Institute, on 16th October 2008 in observation of IMO Day. The extract of that presentation is reproduced as an article here.

The views expressed in this paper are the views of the author & should not in any way be related to any office or her official capacity.)

1. Human Resource Management

The very concept Human Resource Management (HRM) concerns with people immersion in management. People are the heart of the organization. Effective organizations are not built on investment or technology and its returns but on the

Senior Training Officer, Chittagong Port Authority. This paper was presented at Chittagong Port Authority Training Institute, on 16th October 2008 in observation of IMO Day. The extract of that presentation is reproduced as an article here. The views expressed in this paper are the author's own and do not in any way represent the views of her employers.

quality of their employees, their commitment to achieve the goals and the investment made to attract, train, develop and ultimately retain superior HR.

2. Maritime Sector & Human Resource Development

Maritime Sector deals with ocean related matters. It includes marine sectors like shipping, ship building, dry docking, ship demolition, marine equipment recycling, dredging, offshore drilling, mining, inland shipping, yachting, fishing, ocean pollution and environment, including naval activities.

Maritime sector is globalized, capital-intensive, technology based, very specialized, and highly competitive and the environment is beset with difficulties. To survive in the fierce competitive world maritime organizations have to depend on 4Ms, i.e., **Machine, Material, Money, and Man** where human factor plays the key role. So skilled manpower is the greatest asset in the maritime sector. HRM holds the topmost priority and here comes the question of Human Resource Development (HRD). HRD function starts with training towards skill upgradation and competencies development leading to attitudinal changes of employees, management development for acquiring higher knowledge with a view to enhancing manager's conceptual abilities, career development, and a continual effort to match long term individual and organizational needs.

3. Tools of IMO for HRD

International Maritime Organization (IMO) is concerned with safe, secure and efficient shipping on clean oceans. It is also committed to provide technical cooperation. With this end in view, a number of conventions have been adopted and enforced.

The International Convention on Standards of Training, Certification and Watch Keeping for Seafarers 1978, revised in 1995 (Known as STCW'95), has introduced the internationally accepted minimum standards for the training and the Certification of Masters, Officers and ratings. It has also established watch-keeping standards. International Safety Management (ISM) code is again an effective instrument for achieving the goal of IMO. The objective of these Codes is to ensure safety at Sea, Prevention of human injury or loss of life, and avoidance of damage to the environment and to property.

With the enforcement of the International Ship and Port Facility Security (ISPS) Code during 2004, IMO for the first time has extended its jurisdiction up to port, and training has been made mandatory not only for seafarers but also for the port facility providers.

At its 20th session in 1997 the IMO Assembly adopted a resolution on the human element vision, principles and goals for the organization. The resolution acknowledged the need for increased focus on human-related activities in the safe operation of ship and the need to achieve and maintain high standards of safety and environmental protection for the purpose of significantly reducing maritime casualties.

The IMO also arranges training and seminars to build awareness and disseminate knowledge on technical matters. Besides, to provide technical co-operation to the developing countries and to increase the number of highly qualified specialist maritime personnel in countries across the world, IMO established World Maritime University (WMU) at Sweden in 1983. WMU offers M.Sc. and Ph.D. on six subjects – Port Management, Shipping Management, Maritime Education and Training, Maritime Law and Policy, Maritime Safety and Environmental Administration, and Maritime Environment and Ocean Management.

4. Bangladesh Economy and Maritime Sector

Statistics reveal that the economy of Bangladesh is heavily dependent on the maritime sector. The economy is import based and 92% of its international trade is transported through seaports. The Maritime Dependency Factor (MDF) is about 35%. About 40% of annual revenue of the government comes in the form of export-import tax and VAT. Agriculture, industry, infrastructure and construction sectors are all greatly dependent on the maritime sector. For the import of essential food items like edible oil, lentils, wheat and rice, maritime transportation is extremely important. About 100% of exports and 80% of import materials of garment sector, which contributes about 76% of the export earnings, are transported through the seaports. The entire quantity of POL, Cement Clinker and Edible oil, and a large percentage of essential fertilizer and agricultural seeds are imported through this sector. Most EPZs and industries are established near the seaport and that is why the Dhaka-Chittagong and Dhaka-Mongla corridor generate 40% of the GDP.

Maritime sector is also a good source of earning foreign currency. Ports, Shipping Companies, Dry Dock, Ship Building Industries, Officers and crews working in foreign vessels, Marine consultants and surveyors, Freight Forwarders, Shipping Agents etc. fetch an average 1 billion dollar per annum. About 15 lakh white and blue color workers are directly involved with this sector.

Sub- sector wise contribution

4.1. Shipping

It is accepted on all hands that waterways are the cheapest, most economical, and environment friendly mode among the three modes. That's why 90% of world trade is transported by sea. Shipping is considered a very profitable business. The shipping situation of Bangladesh from international trade transportation and manning perspective are highlighted here.

4.1.1 Trade transportation

There are 28 national flag vessels operated by BSC and six private shipping companies, which carry about 5% of our international trade. So the country has to spend a huge amount of hard currency as freight cost. In the absence of adequate fleet, national Flag Protection Rules cannot be applied. National shipping can provide cost effective transportation of international trade, which could make export prices competitive. So there is much scope for the private sector to venture more in shipping

4.1.2 Manning

Seafaring is considered one of the most risky professions of all. Modern ships are highly specialized and sophisticated. To operate such ships well trained and skilled seafarers with latest technological knowledge and experience are required. At present 2686 Bangladeshi Officers and 3739 Ratings work in local and foreign ships. Seafarers working in foreign vessels earn about \$0.1 billion per year. During 2007-08 Bangladesh received about \$8 billion as remittance wherein remittances of seafarers and other marine professionals working abroad were also included.

Besides seafarers, a good number of marine engineers, technicians, and welders including skilled laborers, work in foreign shipyards (Singapore, Middle East, Korea, Poland). Bangladeshi mariners work abroad as consultants, surveyors, charter engineers and academicians with great reputation.

4.2. Inland waterways

The contribution of water transport to GDP is about 2%. There are 1000 landing points scattered around the country, including 21 inland river ports. The World Bank report on Revival of Inland Water Transport-Options and strategies 2007 on Bangladesh reveals that from 1975 to 2005 the share of IWT in passenger

transportation decreased from 16% to 8% and freight transportation decreased from 37% to 16%. About 80% of POL and 60% of Dry bulk cargo are transported through waterways to uplands from the Chittagong port.

Though containerization started in Bangladesh in 1976, container transportation facilities are yet to be developed in the IWT sector. It is clear that the IWT sector is lagging far behind its potential. The reason perhaps is poor Government policy, as the priority that the IWT deserves was not accorded in the national planning as well as in the development budget allocation.

4.3. Ship Breaking Industries

Bangladesh is ranked second among ship breaking countries. The ship breaking industry provides scrap steel for the raw material of steel and re-rolling mills, which saves foreign currency. Recently for the first time one private Steel Mill (GSP) has exported billet to Sri Lanka. This industry has also helped to meet the growing demand of furniture and household fittings of all types. Released equipment like boilers, generator and various kinds of structured steel materials collected from ship breaking helped the growth of many medium and small industries. About 4,00,000 skilled and unskilled labor are directly and indirectly involved in this industry.

Bangladesh started with ship breaking but the skills gradually developed through ship breaking have led to the development of ship building industry in the country.

4.4. Ship Building Industry

Ship building industry and dockyards save foreign currency in one hand, as no inland vessels are required to be imported. On the other hand it now earns foreign currency by exporting sea-going vessels. Once reputed for ship demolition, Bangladesh has recently emerged as a shipbuilding nation too.

Three shipyards have received orders for construction of 60 vessels worth \$700 million upto 2012. This industry has diversified our export market. There is a great demand in the world market in building new ships less than 20,000DWT as the traditional shipbuilding nations are now not interested to build such small vessels which is not cost effective to them.

There are 9056 inland vessels, 75 coastal vessels, and 6245 fishing vessels registered with the Department of Shipping and almost all these vessels are home built. Docking facilities to sea-going vessels are also provided by the Chittagong

Dry Dock Ltd. This sub-sector has much scope for further expansion and development, because it not only earns foreign currency but also saves it. But in road and railway transportation, virtually all transport vehicles are imported from abroad.

If proper attention is given by the Government to this sector, it will be in a position to earn more foreign exchange than what the RMG sector is earning now.

4.5. Port Industries

Chittagong and Mongla Ports handle 92% of the country's international trade. Last year about 30 milliom M/T export –import cargoes were transported through these two ports. Due to heavy dependence on maritime trade the seaports are considered the lifeline of Bangladesh economy. The total revenue income of the seaports is about \$130 million (2007-08). But the indirect and induced benefits of the ports are huge. About 40 organizations and about 65 thousand white and blue color officials are related with the port operation system. About 67% of the ports' revenue is collected in foreign currency.

4.6. Marine Fisheries

The Bay of Bengal is a good source of sea fish. About 0.48 million-mt fish are collected from the sea. About 128 Industrial Trawlers, about 21,000 Mechanized and Motorized Fishing Boats and 0.3 million manpower are directly involved with off shore and deep sea fishing. The share of fishery to the GDP is about 4%. During 2005-06 total export earning on account of fish and fish products was about \$428 million wherein Sea fish accounts for 80% i.e., \$340 million.

4.7 Tourism Industry

Tourism is one of the flourishing sectors in the ocean economy. Cox's bazzar, the longest beach, attracts huge local and foreign tourists every year. Besides, there are Patenga Beach, Fouzderhat Beach, Parki Beach and Kuakata Beach, which attract increasing number of tourists. The coral island – Saint Martin Island, is showing another promising tourist spot during winter. With the launching of 3 local built passenger vessels cruising at off- shore islands is gaining popularity.

4.8. Others

Offshore drilling, consultancy, maritime education and training and marine environment are the other prospective sub sectors, which are yet to venture.

5. Fellowships (Foreign Training)

Every year, governments of Singapore, South Korea, Holland and Belgium, and such organizations as JAICA, NORAD and SIDA provide fellowships to the professionals working in the maritime field of Bangladesh. But majority of the scholarships do not go to the actual professionals of the maritime sectors.

Case Study - 1

World Maritime University was established in 1983 by IMO with a view to providing technical support to developing countries and to disseminate knowledge on implementation of IMO conventions and technological developments in the maritime sector. A visionary mariner, Capt M. Shafi, Ex DG of Department of Shipping proposed to establish this kind of institute in a meeting at IMO and Bangladesh is one of the permanent members of the governing body of WMU. Every year World Maritime University provides scholarship for M.Sc. on 6 subjects. Upto 2008 about 95 Bangladeshi officials received this scholarship. The irony is that, only 9 port officials received this scholarship on Port Management since its inception. Only 20% of the scholarships go to the actual professionals while the rest are availed by the Civil Servants and others. The knowledge and expertise acquired by the civil servants do not benefit the maritime sector due to transferable nature of their job. So professionalism stumbles at every step.

6. Training & educational facilities (Public Sector)

There are two institutions under the Ministry of Shipping for creating officers and rating.

6.1 Marine Academy Bangladesh

Chittagong Marine Academy, a branch of World Maritime University, Sweden was established during 1962. Pre-sea and post-sea trainings are offered. Since its inception, 2354 Merchant Officers passed out. Intake capacity has recently been increased from 100 to 170 cadets. Chittagong Port is the biggest donor, which donates about 75 thousand taka every year.

6.2 National Maritime Training Institute

For ratings Seamen's Training Center was initially established in 1952. It was renamed as National Maritime Training Institute in 2007. The NMI provides training as per International Convention on Standard of Training Certification and Watch-keeping for seafarers (STCW-1978/95).

6.3 Chittagong Port Authority Training Institute

Chittagong Port Authority Training Institute (CPATI) was established in 1980 with a view to imparting on-the-job training to port officials and port users. Foundation courses, tailor made courses, refreshers courses on port operation related matters are conducted here. During 2004 in implementation of ISPS code this institute conducted 30 sessions to train 600 officials in two months. CPATI also provides internship facilities to different universities and industrial attachments to various vocational and technical institutes.

6.4. Bangladesh Institute of Marine Technology (BIMT)

BIMT was established in 1958 under the Bureau of Manpower, Employment and Training, which is an attached department under the ministry of Expatriate Welfare & Overseas Employment. BIMT offers Diploma in Marine Engineering, Diploma in Ship Building Engineering, including various trade courses.

6.5 Marine Fisheries Academy

Marine Fisheries Academy was established in 1973 to meet the professional needs of industrial fishers and seafarers. This is the only institute in the country, which produces Navigators, Marine engineers and processing Technologists in fishing sector. Up to 2008 about 1142 cadets passed out. The intake capacity is about 100 cadets per year. About 40% of mariners that passed from Marine Fisheries Academy are now working abroad who earn about \$10.00 million pa.

7. Training & educational facilities (Private Sector)

Following training institutions are run by the private sector, which offers not only pre-sea and post-sea training to seafarers but also other maritime related trade trainings:

- Bangladesh Institute of Marine Technology (BIMT)
- Bangladesh Maritime Training Institute (BMTI)
- Marine Institute of Science & Technology (MIST)
- International Institute of Marine Technology (IIMT)
- Western Marine Institute (WMI)
- Maritime Agency Services (MAS) (yet to be approved)

8. Demand of Seafarers

There is a great demand of Marine Officers in the world market. Shipbuilding is growing @1% per year. It was revealed that almost all Officers of developed

countries would retire in 2010. And new generations of developed world are not interested to work at sea. Australian Maritime Safety Authority had made a projection that there would be a shortage of 46000 Marine Officers in 2010. Bangladesh can very well avail the opportunity of capturing the market. This can be achieved by enhancing training capabilities of institutions like Marine Academy in Chittagong and establishing similar institutions elsewhere in the country with participation of both public and private sector.

9. Neglected Sector

There are 29 Public and 57 Private Universities, which offer courses on liberal arts, science and commerce. But there is no Maritime University. In fact, no other University than BUET and Chittagong University teaches any Maritime related subjects. Our neighbor Myanmar has also established a Maritime University to produce Maritime professionals.

Bangladesh is rich in young manpower. Close to 8 lakh students pass SSC every year but there is hardly any mentionable scope within the country for these young students to receive training in the highly prospective marine profession compared to the scope for education in liberal arts, commerce and science subjects.

Case Study 2

In the Middle East an unskilled labour working in the construction field on average earns \$200 per month (excluding food & lodging) whereas a skilled worker at shipyard earns \$600 (including food & lodging) on average per month. On the other hand, a simple graduate at home earns on average \$50 per month (excluding food, and lodging etc.).

The difference between the earning of a skilled and unskilled and non-technical person is huge. A technical person like welder has great demand in shipbuilding and dry docking industry. The minimum requirement to be a technical person in the maritime sector is HSC in Science and hands—on training in the respective trade. Here training has a great role. Therefore, the establishment of more maritime training organizations can not only produce skilled manpower to cater to the international demand but also create jobs for more people at home.

The total capacity of all the maritime institutes in the country is about 2500. The training budget of the mentioned organizations (public and private) is about 10 crore taka, whereas the national education budget is about 21000 crore taka. Just imagine the %.

This shows how much the maritime education and training has been neglected in Bangladesh although the maritime related profession was once one of the most important earning sectors for the people of some of the coastal districts like Chittagong, Noakhali, Barisal and Khulna.

This appears to be so because there is little concern or understanding of the officials in the Education, Science and Technology and Shipping Ministries about the prospect and need for developing marine-related professionals in Bangladesh.

10. Critical Issues

10.1 Shortage of Qualified Trainers

Like any other government organization, the existing maritime training institutes, too, face serious shortage of logistic support in terms of money, materials and manpower. Especially, these institutions suffer **shortage of qualified trainers due to highly unattractive compensation package** under existing government policy. Without adequate expansion of physical and training facilities the intake of Cadets at Marine Academy has recently been increased. So the required facilities are to be provided.

10.2 Brain drain

A good number of Marine professionals are working abroad due to inadequate development of institutional facilities within the country.

10.3 Transport Policy

There is no comprehensive Transport Policy. In the absence of Multimodal transport policy the country is not reaping the benefit of containerization.

11. Recommendations

11.1 National Maritime Policy

It is astonishing that till date there is no national policy guideline for the Maritime Sector in general and Maritime Training in particular. As a result, this sector is running like a ship without a rudder. So a maritime policy should be formulated and implemented in a professional manner by the real professionals.

11.2 Involvement of private sector in capacity building

Global demand for manpower in the maritime sector is increasing. The capacity of the Marine Academy can be expanded on self-supporting basis by offering 50% of the intake cadets to be admitted purely on merit and the remaining 50% on merit—cum-cost supporting basis. This will gradually encourage the private sector also to invest in the expansion and development of Maritime Training Facilities.

11.3 Encourage women in shore-based job

Marine sector is an unconventional field for woman employment. Half of our population is women and more and more women are involved in economic activities in almost every sector. I believe there is ample scope for our women folk to work in the shore-based maritime job.

11.4 Strengthen Department Of Shipping

The Department of Shipping should be strengthened with sufficient number of qualified marine professionals and for that purpose the compensation package should be made attractive for attracting highly qualified professionals.

11.5. Reorganize the Shipping Ministry

For a proper all-round development of the maritime sector in Bangladesh, the Ministry of Shipping should be reorganized with the involvement of true professionals at the highest levels for framing proper policies, guidelines, investment planning, and formulation and implementation of projects.

Bangladesh Journal of **Political** Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 243-253 Bangladesh Economic Association (ISSN 2227-3182)

বাংলাদেশে প্রতিবন্ধীতা ও দারিদ্রের চক্র: যোগসূত্র, ব্যয়-বরাদ্দ ও করণীয়

আবুল বারকাত ১

প্রবন্ধের লক্ষ্য, উদ্দেশ্য ও সিদ্ধান্ত

বাংলাদেশে প্রতিবন্ধী মানুষ কারা? প্রতিবন্ধীতার সাথে দারিদ্রের কোন যোগসূত্র আছে কি না? দরিদ্র মানুষের মধ্যে অদরিদ্রের তুলনায় প্রতিবন্ধীতার আনুপাতিক হার বেশি কিনা? হলে কেনো? দারিদ্রের কারণে মানুষের প্রতিবন্ধী হবার সম্ভাবনা মাত্রা কতটুকু? দারিদ্রের কারণে প্রতিবন্ধীতা নাকি প্রতিবন্ধীতার কারণে দারিদ্র নাকি উভয়ই? দারিদ্র কি প্রতিবন্ধীতা বাড়ায়? প্রতিবন্ধী মানুষ কি মানুষ হিসেবে অন্যদের তুলনায় সমমর্যাদা-সমসুযোগ পান? প্রতিবন্ধী মানুষের জীবন মান উন্নয়নে রাষ্ট্রের পক্ষে সরকার কতটুক করছে? এসব প্রশ্নের সদুত্তর অনুসন্ধানে তেমন কোনো গভীর বিশ্লেষণাত্মক-গবেষণাধর্মী কাজ এদেশে এখনও খুব একটা চোখে পড়ে না। আজকের প্রবন্ধটি এসব প্রশ্ন উত্থাপন এবং প্রশ্নের বস্তুনিষ্ঠ উত্তর অনুসন্ধানের লক্ষ্যে রচনার প্রয়াস। আমার অনুসন্ধানের ভিত্তিতে আমি কয়েকটি সিদ্ধান্তে উপনীত হয়েছি:

সিদ্ধান্ত 🕽 : প্রতিবন্ধীতা আর্থ-সামাজিক শ্রেণী নিরপেক্ষ বিষয় নয়। অ-দরিদ্রের তুলনায় দরিদ্র মানুষের মধ্যে প্রতিবন্ধীতার হার বেশি।

সিদ্ধান্ত ২ : প্রতিবন্ধীতা বঞ্চনার এক চক্র (deprivation cycle) সৃষ্টি করে । বঞ্চনার এ চক্রে দরিদ্র-প্রতিবন্ধী মানুষ দরিদ্রতর হয়।

সিদ্ধান্ত ৩: প্রতিবন্ধী মানুষের জীবন মান উন্নয়নে সরকারি ব্যয়-বরাদ্দ এতই স্বল্প যা প্রতিবন্ধীদের প্রতি আমাদের "অত্যুক্ত অসম্মান মাত্রা" (high degree of non-respect) নির্দেশ করে ।

দ্রষ্টব্য: "বাংলাদেশে প্রতিবন্ধীতা ও দারিদ্রের চক্র: যোগসূত্র ও ব্যয়-বরাদ্দ" শীর্ষক একটি প্রবন্ধ প্রবন্ধকার কর্তৃক ৬ আগস্ট ২০০৮ সালে জাতীয় প্রতিবন্ধী উন্নয়ন আয়োজিত প্রতিবন্ধী ব্যক্তিবর্ণের জাতিসংঘ সনদ (UNCRPD) বাস্তবায়ন সংক্রান্ত জাতীয় কর্মশালায় উপস্থাপিত হয়েছিলো। বর্তমানে প্রবন্ধটি উল্লিখিত প্রবন্ধের পরিমার্জিত রূপ।

অধ্যাপক, অর্থনীতি বিভাগ, ঢাকা বিশ্ববিদ্যালয় (ই-মেইল: hdrc@bangla.net)

সিদ্ধান্ত 8: প্রতিবন্ধী মানুষের প্রতি সরকারের পক্ষে সংবিধানে বিধৃত দায়-দায়িত্ব পালন সম্ভব। এ লক্ষ্যে সংশ্লিষ্ট ব্যয়-বরান্দ বৃদ্ধিসহ অনেক কিছুই করা সম্ভব।

সিদ্ধান্ত ৫: রাষ্ট্র যদি প্রতিবন্ধী মানুষের প্রতি তার দায়-দায়িত্ব পালনে যথেষ্ট ভূমিকা পালনে ব্যর্থ হয় তাহলে প্রতিবন্ধীতা বাড়বে এবং যুক্তিযুক্ত কারণেই তা দারিদ্র বাড়াবে।

বাংলাদেশে প্রতিবন্ধী মানুষের সংখ্যা ও প্রক্ষেপণ

তথ্যটি অবিশ্বাস্য মনে হতে পারে যে ১৫ কোটি মানুষের বাংলাদেশে ১.৫ কোটি মানুষই (অর্থাৎ জনসংখ্যার ১০%) প্রতিবন্ধী মানুষ। আরো অবিশ্বাস্য বলে মনে হতে পারে যে, ১.৫ কোটি প্রতিবন্ধী মানুষের প্রত্যেকে যদি ভিন্ন ভিন্ন খানায় বাস করেন (বাস্তব অবস্থা একটু ভিন্ন হতে পারে) সেক্ষেত্রে এ দেশের প্রতি দু'টি খানার একটিতে প্রতিবন্ধী মানুষ আছেন (কারণ দেশে মোট খানার সংখ্যা আনুমানিক

প্রতিবন্ধীতার ধরণ	মোট (লাখ)	মোট প্রতিবন্ধীর শতাংশ
শারীরিক প্রতিবন্ধী	ዓ৮.৮	<i>@2.@2</i>
দৃষ্টি প্ৰতিবন্ধী	২২.৬	১ ৫.০৭
বাক-শ্রবণ প্রতিবন্ধী	২২.৩	\$8.৮৭
বুদ্ধি প্ৰতিবন্ধী	১৬.৩	३०.४९
বহুমুখী <i>প্ৰ</i> তিবন্ধী	٥.٥	৬.৬৭
মোট	\$60.0	> 00

সারণি ১: বাংলাদেশে ১.৫ কোটি প্রতিবন্ধী মানুষের প্রতিবন্ধীতার ধরণ কাঠামো, ২০০৮

৩ কোটি)। দেড় কোটি এ প্রতিবন্ধী মানুষ মোটামুটি পাঁচ ধরনের প্রতিবন্ধীতার শিকার: ৫২.৫ শতাংশ (৭৮.৮ লাখ) শারীরিক প্রতিবন্ধী, ১৫.১ শতাংশ (২২.৬ লাখ) দৃষ্টি প্রতিবন্ধী, ১৪.৯ শতাংশ (২২.৩ লাখ) বাক-শ্রবণ প্রতিবন্ধী, ১০.৯ শতাংশ (১৬.৩ লাখ) বুদ্ধি প্রতিবন্ধী, এবং ৬.৭ শতাংশ (১০ লাখ) বহুমুখী প্রতিবন্ধী (সারণি ১ দেখুন)। অর্থাৎ দেশের ১.৫ কোটি প্রতিবন্ধীর সর্ববৃহৎ অংশ বিভিন্ন ধরনের শারীরিক প্রতিবন্ধী মানুষ (মোট প্রতিবন্ধীর ৫২.৫%)।

প্রতিবন্ধীতার যে হার এখন আছে তা যদি বজায় থাকে—হ্রাস না পায়—সেক্ষেত্রে মুক্তিযুদ্ধের ৫০-তম বর্ষপূর্তির সময় অর্থাৎ ২০২১ সালে আমার হিসেবে আজকের ১.৫ কোটি প্রতিবন্ধী মানুষের সংখ্যা গিয়ে দাঁড়াবে আনুমানিক ৫.২ কোটিতে (সারণি ২ দেখুন)। অর্থাৎ অন্যান্য অবস্থা অপরিবর্তিত থাকলে আগামী ১১ বছরে মোট প্রতিবন্ধী মানুষের সংখ্যা বর্তমানের তুলনায় প্রায় তিনগুণ বৃদ্ধি পাবে। নৈতিক, মানবিক, ন্যায়বোধ ও সৌন্দর্যবোধ— কোনো দিক থেকেই এ অবস্থা কাম্য অবস্থা হতে পারে না। এ অবস্থা কাম্য অবস্থা হতে পারে না এ কারণেও যে 'নিয়ন্ত্রণযোগ্য' (controllable) ও 'নিয়ন্ত্রণ—অযোগ্য' (uncontrollable) প্রতিবন্ধীতার প্রতিযোগিতায় বিজ্ঞান—প্রযুক্তির অসীম সম্ভাবনার এ যুগে 'নিয়ন্ত্রণযোগ্য' বা 'নিয়ন্ত্রণ—সম্ভব' প্রতিবন্ধী-নিরোধ ব্যবস্থা অনেক বেশি কার্যকর। কোনো কার্যকর পদক্ষেপ না নিলে আগামী ১২ বছরে প্রতিবন্ধী মানুষের সম্ভাব্য সংখ্যা যে আজকের তুলনায় সাড়ে তিনগুণ বৃদ্ধি পেতে পারে তা প্রতিবন্ধী মানুষের প্রতি সাংবিধানিক বাধ্যবাধতার কারণেও কাম্য নয়। কারণ বাংলাদেশের সংবিধান রাষ্ট্র পরিচালনার মূলনীতির ১৫ (ঘ) অনুচ্ছেদে রাষ্ট্রের অন্যতম মৌলিক দায়িত্ব হিসেবেই স্পষ্ট বলছে—

"সামাজিক নিরাপত্তার অধিকার, অর্থাৎ বেকারত্ব, ব্যাধি বা পঙ্গুতৃজনিত কিংবা বৈধব্য, মাতাপিতৃহীনতা বা বার্ধক্যজনিত কিংবা অনুরূপ অন্যান্য পরিস্থিতিজনিত আওন্তাতীত কারণে অভাবগুন্ততার ক্ষেত্রে সরকারি সাহায্য-লাভের অধিকার"।

সারণি ২: বাংলাদেশে প্রতিবন্ধী মানুষের বর্তমান ও প্রক্ষেপণকৃত সংখ্যা : ২০০৮-২০২১

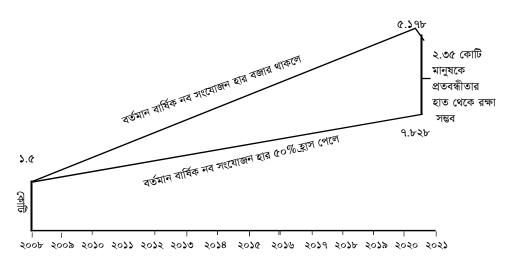
সাল	মোট প্রতিবন্ধীর সংখ্যা:	মোট প্রতিবন্ধীর সংখ্যাঃ
	বর্তমান হার বজায় থাকলে (কোটি)	বর্তমান হার বছরে ৫০% কমলে (কোটি)
২০০৮	\$.600	\$.600
২০০৯	<i>\$.</i> \%	১. ৫৭৫
२०১०	3.536	১.৬৫৩
२०১১	১.৯৯৬	১.৭৩৬
२०১२	২.১৯৬	১.৮২৩
২০১৩	₹.8\$€	8۵۵.۵
२० ऽ8	২.৬৫৭	২. ০১০
२०১৫	২.৯২৩	۷.১১٥
২০১৬	৩.২১৫	২.২১৬
২০১৭	৩.৫৩৬	২.৩২৬
२०১৮	৩.৮৯০	২.৪৪৩
২০১৯	8.২৭৯	<i>২.৫৬৫</i>
২০২০	8.909	২.৬৯৩
২০২১	৫. ১৭৮	২.৮২৮

হিসেবের পদ্ধতিতাত্ত্বিক বিয়য়: প্রতিবন্ধীর বছর-ওয়ারি হিসেবের ক্ষেত্রে ধরে নেয়া হয়েছে যে ২০০৮ সালের জনসংখ্যা ১৫ কোটি, যার মধ্যে ১০ শতাংশ বিভিন্ন ধরণের প্রতিবন্ধী। প্রক্ষেপণকৃত অন্যান্য সালের ক্ষেত্রে জনসংখ্যা প্রক্ষেপণের মাঝারি থেকে উচ্চ হারের মধ্যবর্তী মানসমূহ গৃহিত হয়েছে এবং "বর্তমান হার বজায় থাকলে" বলতে মোট জনসংখ্যার ১০ শতাংশের সাথে 'নিয়ন্ত্রণযোগ্য' ফ্যাক্টর অথচ নিয়ন্ত্রণ করা হচ্ছে না সে হারও যোগ করা হয়েছে।

রাষ্ট্র সংবিধানে বর্ণিত এ দায়িত্ব পালনে অনেক ক্ষেত্রেই ব্যর্থ হয়েছে। তবে যেসব ক্ষেত্রে ব্যর্থতার রেকর্ড সবচে' বেশি তার অন্যতম হলো প্রতিবন্ধী মানুষকে মানুষ হিসেবে গণ্য না করার ক্ষেত্রে, প্রতিবন্ধী মানুষকে তার নাগরিক ও ন্যায্য অধিকার নিশ্চিত না করার ক্ষেত্রে (বিষয়টি পরে বিশ্লেষণ করা হয়েছে)।

আমার প্রশ্ন প্রয়োজনীয় ব্যবস্থা নিলে মুক্তিযুদ্ধের ৫০তম পূর্তির বছরে অর্থাৎ ২০২১ সাল নাগাদ ১.৫ কোটি প্রতিবন্ধী মানুষের এ দেশে নব-সংযোজিত প্রতিবন্ধী মানুষের সংখ্যা কতদূর হ্রাস সম্ভব? আমার হিসেবে প্রতিবন্ধীতা 'নিয়ন্ত্রণযোগ্য' অথবা 'নিয়ন্ত্রণ সম্ভব' (controllable factors) কার্যকর ব্যবস্থাদি পূর্ণ অঙ্গিকারসহ বাস্তবায়ন করলে বর্তমান বার্ষিক নব-সংযোজন হার ৫০ ভাগ কমানো সম্ভব। 'নিয়ন্ত্রণ-

সম্ভব' এ সবের মধ্যে যা আছে সে সবের অন্যতম হলো মাতৃত্বকালীন সেবা (অথাৎ প্রসবপূর্ব, প্রসবকালীন ও প্রসবোত্তর) প্রদান নিশ্চিত ও উন্নত করা, দুর্ঘটনা (সড়ক,নৌ, সহিংসতা-উদ্ভূত) হাস করার কার্যকর পদক্ষেপ গ্রহণ করা, দুর্ঘটনা-উত্তর স্বাস্থ্য সেবা যথা চিকিৎসা বিলম্ব হ্রাস এবং উন্নত চিকিৎসা সেবা নিশ্চিত করা, বিভিন্ন ধরনের অনিচ্ছাকৃত ইনজুরী হ্রাসে পদক্ষেপ নেয়া, বিভিন্ন ধরনের প্রতিবন্ধী-সহায়ক অসুখ-বিসুখ দূর করার ব্যবস্থা নেয়া, দরিদ্র মা ও শিশুর দারিদ্র দূরীকরণে যথেষ্ট মাত্রায় কার্যকরী ব্যবস্থা নেয়া, আর জন্মসূত্রের প্রতিবন্ধী অবস্থার চিকিৎসাসহ জীবন মান উন্নয়নের সকল ব্যবস্থা উন্নততর করা ইত্যাদি। আর এসব ব্যবস্থা যথাযথভাবে গ্রহণ করতে পারলে আমার হিসেবে ২০২১ সালে মোট প্রতিবন্ধী মানুষের সম্ভাব্য সংখ্যা ৫ কোটি ২০ লাখ থেকে কমে ২ কোটি ৮০ লাখে দাঁড়াতে পারে। অর্থাৎ প্রতিবন্ধীতা হাসের 'নিয়ন্ত্রণ-সম্ভব' পদক্ষেপ গ্রহণ করলে আমরা আগামী ২০২১ সাল নাগাদ প্রায় ২ কোটি ৪০ লাখ মানুষকে প্রতিবন্ধী হওয়া থেকে রক্ষা করতে পারি (ছক ১ দেখুন)। এমতাস্থায় আমাদের জাতীয়ভাবেই সচেতন সিদ্ধান্ত নিতে হবে যে ২০২১ সালে আমরা এদেশে মোট ৫ কোটি ২০ লাখ প্রতিবন্ধী মানুষ চাই? আজই এ সিদ্ধান্ত নেয়া জরুরি। কারণ বিলম্ব অধিকতর বিপর্যয়ের কারণ হবে। সিদ্ধান্তটি ধণাত্মক হতেই হবে এ কারণে



ছক ১: ২০০৮-২০২১ এর মধ্যে প্রতিবন্ধী মানুষের সংখ্যা কত কমানো সম্ভব (কোটি)

যে প্রতিবন্ধীতাকরণ প্রক্রিয়ায় সহায়তা করা এক মহা ক্রিমিনাল অফেন্স; সিদ্ধান্তটি ধণাত্মক হতেই হবে এ কারণেও যে প্রতিবন্ধীতা থেকে রক্ষাকৃত ঐ ২ কোটি ৪০ লাখ মানুষ তাদের জীবদ্দশায় দেশের অর্থনীতি-সমাজ-রাষ্ট্রে যথাযোগ্য অবদান রাখতে সক্ষম হবেন (যা প্রতিবন্ধী মানুষের জন্য সমভাবে প্রযোজ্য নয়)।

প্রতিবন্ধী মানুষের আর্থ-সামাজিক শ্রেণী বিন্যাস: দরিদ্র মানুষ আনুপাতিক অধিক প্রতিবন্ধী

প্রতিবন্ধী মানুষের আর্থ-সামাজিক শ্রেণীবিন্যাসকরণ নিয়ে তর্ক হতে পারে। এ প্রসংগে নীতিগত প্রশ্নও উত্থাপিত হতে পারে এ বলে যে প্রতিবন্ধী তো প্রতিবন্ধীই – তার আবার আর্থ-সামাজিক শ্রেণী বিন্যাসকরণ কেনো? এ প্রসংগে বিতর্কে না গিয়ে আমার ধারণাটা হলো এ রকম যে মানুষের জন্য যত

রকমের বঞ্চনা-দুর্দশা (deprivation-distress) প্রযোজ্য হতে পারে প্রতিবন্ধী মানুষের জন্য তার সবটাই পূর্ণ মাত্রায় প্রযোজ্য। তবে প্রতিবন্ধী মানুষের বঞ্চনা হতে পারে প্রধানত ত্রিমাত্রিক একবার প্রতিবন্ধী হিসেবে, একবার দরিদ্র-বিত্তহীন-নিম্নবিত্ত-প্রান্তিক ঘরের প্রতিবন্ধী মানুষ হিসেবে, আর একবার দরিদ্র ঘরের প্রতিবন্ধী নারী হিসেবে। আর এ কারণেই আমার ধারণা এ দেশে প্রতিবন্ধী মানুষের আর্থ-সামাজিক শ্রেণীবিন্যাস যা কেউ এ পর্যন্ত সম্ভবত করেন নি তা খতিয়ে দেখা প্রয়োজন।

এ দেশের মানুষের সার্বিক আর্থ-সামাজিক শ্রেণী-বিন্যাস এবং তার সাথে প্রতিবন্ধীদের উপর পরিচালিত ছোট-খাটো নমুনা জরিপের ভিত্তিতে আমার হিসেবে এদেশে দেড় কোটি প্রতিবন্ধী মানুষের মধ্যে বিত্তের মানদ-ে একপ্রান্তে আছেন প্রায় ৯৯ লাখ প্রতিবন্ধী যারা দরিদ্র-বিত্তহীন পরিবারের মানুষ আর অন্যপ্রান্তে আছেন ৪ লাখ প্রতিবন্ধী যারা আছেন ধনী পরিবারে (সারণি ৩ দেখুন)। আর আর্থ-সামাজিক শ্রেণী বিন্যাসের ঐ দুই প্রান্তের মাঝখানে আছেন ৪৭ লাখ প্রতিবন্ধী মানুষ যারা আছেন মধ্যবিত্ত পরিবারে। আবার বিত্তের মাপকাঠিতে এই মধ্যবিত্ত ৪৭ লাখ প্রতিবন্ধীর ২৫ লাখ হবেন নিম্ম-মধ্যবিত্ত, প্রায় ১৫ লাখ মধ্য-মধ্যবিত্ত এবং বাদবাকী ৪ লাখ হবেন উচ্চ-মধ্যবিত্ত পরিবার-আগত। দেশে দ্রব্যমূল্যের (নিত্য প্রয়োজনীয় খাদ্যসহ খাদ্য-বহির্ভূত, যেমন চিকিৎসা-শিক্ষা ইত্যাদি) যে উর্ধ্বগতি এবং পাশাপাশি কর্মসংস্থানহীনতার যে উচ্চমাত্রা তা থেকে নিশ্চিত বলা যায় যে প্রবণতাটিই এমন যে নিম্ম-মধ্যবিত্তরা আসলে দরিদ্র-বিত্তহীন-নিম্মবিত্তের কাতারে যোগ দিচ্ছেন। আর সেটা ঠিক হলে ১.৫ কোটি প্রতিবন্ধীর ৯৯ লাখ নয়, ১ কোটি ২৫ লাখই (অর্থাৎ ৮৩%) হবেন দরিদ্র-বিত্তহীন-নিম্মবিত্ত পরিবার-আগত এ ১ কোটি ২৫ লাখ প্রতিবন্ধী মানুষের ৮০ ভাগই থাকেন গ্রামে আর বাদবাকী ২০ ভাগ থাকেন শহরে (অবশ্য মোট প্রতিবন্ধী হিসেবে গ্রাম-শহর অনুপাতটি

সারণি ৩: বাংলাদেশে ১.৫ কোটি প্রতিবন্ধী মানুষের আর্থ-সামাজিক শ্রেণী বিন্যাস, ২০০৮ সাল (লাখ প্রতিবন্ধী)

দরিদ			মধ্যবিত্ত শ্রেণী				সর্বমোট
গ্রাম/শহর	দরিদ (বিত্তহীন)	নিম	মধ্য	উচ্চ	মোট	ধনী	প্রধোট
গ্রাম	৮০.৯	3 b.2	৯.২	೨.8	೨ 0.৮	২.৩	?? 8
শহর	\$6.0	٩.২	8.9	৩.৬	১ ৬.২	\$.6	৩৬
মোট	৯৮.৯	২৫.৪	১৪.৬	9.0	89.0	8.\$	১ ৫০

উৎস: প্রবন্ধকার কর্তৃক হিসেবকৃত। এ হিসেবের দুর্বলতম দিক হলো দেশের মোট জনসংখ্যার আর্থ-সামাজিক শ্রেণী বিন্যাসই প্রতিবন্ধীর শ্রেণী বিন্যাসকরণে ব্যবহৃত হয়েছে। আমার বিশ্বাস প্রকৃত অবস্থা এমন হতে পারে যে প্রতিবন্ধীদের আনুপাতিক হার অন্যদের তুলনায় দরিদ্র-বিত্তহীন-নিম্নবিত্ত পরিবারে বেশি।

৭৬%-২৪%)। অর্থাৎ একদিকে যেমন অধিকাংশ প্রতিবন্ধী (৭৬%) বাস করেন গ্রামে আবার অন্যদিকে দরিদ্র-বিত্তহীন-নিম্নবিত্ত প্রতিবন্ধীদের তুলনামূলক আরো বেশি অংশ (৮০%) বাস করেন গ্রামে। এ বিশ্রেষণ থেকে অগ্রাধিকার বিবেচনা-সংশ্রিষ্ট দু'টি স্পষ্ট দিকনির্দেশনা দেয়া যেতে পারে:-

- প্রতিবন্ধী মানুষের উন্নয়্যনে গ্রামের প্রতিবন্ধীদের উপর অধিকতর জোর দিতে হবে,
- ২. প্রতিবন্ধী মানুষের উন্নয়নে দরিদ্র-বিত্তহীন-নিম্নবিত্ত পরিবারের উপর জোর দিতে হবে।

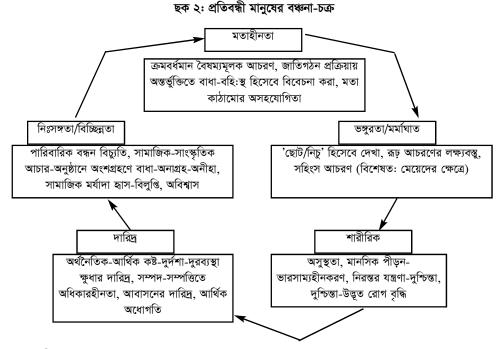
প্রতিবন্ধীতার সাথে দারিদ্রের যোগসূত্র নির্ণয়ে আরো কয়েকটি বিষয় স্পষ্ট করা প্রয়োজন।

প্রথমত: আমরা দেখছি যে প্রতিবন্ধীতা আর্থ-সামাজিক শ্রেণী নিরপেক্ষ বিষয় নয়। অর্থাৎ ধনীদের (অথবা অদরিদ্রদের) তুলনায় দরিদ্ররা বেশি হারে প্রতিবন্ধীতার শিকার হন। অর্থাৎ দারিদ্র নিজেই প্রতিবন্ধীতা সৃষ্টির অন্যতম কারণ হিসেবে কাজ করছে। এ দারিদ্র হতে পারে আয়ের দারিদ্র, ক্ষুধার দারিদ্র, কর্মসংস্থানের দারিদ্র, আবাসনের দারিদ্র, স্বাস্থ্য-চিকিৎসার অভাব উদ্ভূত দারিদ্র, বঞ্চনার বিভিন্ন রূপ উদ্ভূত দারিদ্র, জ্ঞানত্থ্যের প্রতি অভিগম্যতাহীনতা-উদ্ভূত দারিদ্র, এমন কি মানসিক-মানসিকতার দারিদ্র।

দিতীয়ত: দারিদ্র যেমন প্রতিবন্ধীতা সৃষ্টির অনুঘটক-প্রভাবক তেমনি প্রতিবন্ধীতা দরিদ্র খানার দারিদ্র বাড়ায়। অর্থাৎ যে দরিদ্র খানায় প্রতিবন্ধী মানুষ আছেন সে মানুষটি দরিদ্র খানাটিকে উত্তরোত্তর দরিদ্রতর করার কারণ হয়ে দাঁড়ায়। কারণ খানাটি এমনিতেই দরিদ্র, আর প্রতিবন্ধী মানুষটির জীবন চাহিদা মিটাতে ঐ খানার একদিকে যেমন অতিরিক্ত আর্থিক ব্যয়ব্রাদ্দ করতে হয় তেমনি অন্যদিকে খানার অন্যদেরও প্রতিবন্ধী মানুষটির প্রতি তুলনামূলক অধিক যত্রবান হতে হয় (যে জন্য সময় ব্যয় করতে হয়)। শুধু তাই নয়, একজন প্রতিবন্ধী মানুষ যে খানায় বাস করেন ঐ খানার জীবন-পরিচালন পদ্ধতি অন্যান্য খানার মত নয়ভিন্ন ধরণের। এটা স্বাভাবিক। এমনও হওয়া অস্বাভাবিক নয় যে প্রতিবন্ধী মানুষ আছেন এমন দরিদ্র খানায় প্রতিবন্ধী মানুষটির প্রতি যত্মবান হবার কারণে খাদ্য-পরিভোগ কাঠামোসহ শিক্ষা-চিকিৎসা ব্যয়-কাঠামোতে এমন ধরণের বৈষম্যমূলক পরিবর্তন ঘটে যায় যখন ধীরে ধীরে ঐ খানার কেউ কেউ আবার নতুন প্রতিবন্ধী হয়ে যায়। আমার মতে এ সম্ভাবনা সবচে' বেশি যাদের ক্ষেত্রে প্রযোজ্য হতে পারে তাদের মধ্যে আছেন নারী, শিশু ও বয়োবৃদ্ধ-প্রবীণ মানুষ।

তৃতীয়ত: রাষ্ট্র যদি প্রতিবন্ধী মানুষের দায়িত্ব নিতে ব্যর্থ হয় তখন নিশ্চিতভাবেই এ সম্ভাবনা অনেক যখন নিম্ন-মধ্যবিত্ত এবং মধ্য-মধ্যবিত্ত খানায় প্রতিবন্ধী মানুষের অবস্থান ঐ খানাটিকে উত্তরোত্তর আর্থিকভাবে দুর্বল করে। এ সম্ভাবনা অনেক গুণ বৃদ্ধি পায় যখন একদিকে নিত্য প্রয়োজনীয় ভোগ্যপণ্যের মূল্যসহ চিকিৎসা-শিক্ষা-বাসস্থান ব্যয় বাড়ে আর অন্যদিকে ঐসব খানার প্রকৃত আয় বাড়ে না (যেটাই এখনকার বাংলাদেশের চলমান বাস্তবতা)। তাহলে একথা সত্য যে দরিদ্ররাই যে আনুপাতিক হারে বেশি প্রতিবন্ধী শুধু তাই নয় প্রতিবন্ধীতা অদরিদ্রদেরও দরিদ্র করে। অর্থাৎ রাষ্ট্র যদি প্রতিবন্ধীতা দূরীকরণে কার্যকর ব্যবস্থা না নেয় এবং প্রতিবন্ধী মানুষের দায়িত্ব গ্রহণ না করে (যা সংবিধান অনুযায়ী করার কথা) সেক্ষেত্রে প্রতিবন্ধীতা দারিদ্র বাড়াতে বাধ্য।

চতুর্থত: প্রতিবন্ধীতা ধনী-নির্ধন নির্বিশেষে প্রতিবন্ধী মানুষের জন্য এক ধরণের নিরন্তর বঞ্চনার-চক্র (deprivation cycle) সৃষ্টি করে। যে চক্রে দরিদ্র ঘরের প্রতিবন্ধীরা অন্যদের তুলনায় অধিকতর বঞ্চনার শিকার হলেও বঞ্চনা-চক্রের বেশ কিছু নির্দেশক আছে যেখানে ধনী-নির্ধন নির্বিশেষে সমান বঞ্চিত হন। বঞ্চনার এ-চক্রটি আসলে পাঁচ ধরণের বৃহৎ-বর্গের বঞ্চনার এক জটিল মিথস্ক্রিয়া (ছক-২), যার মধ্যে আছে প্রতিবন্ধীতার কারণে ক্ষমতাহীনতা (powerlessness), ভঙ্গুরতা (vulnerability), শারীরিক দুর্বলতা (physical weakness), দারিদ্র (poverty), এবং নিঃসঙ্গতা/বিচ্ছিন্নতা (isolation/alienation)।



প্রতিবন্ধী মানুষের জন্য সরকারি উন্নয়ন বাজেট বরাদ্দ: "সম্মান মাত্রার" নিকৃষ্ট উদাহরণ

সাংবিধানিক বাধ্যবাধকতা থাকলেও প্রতিবন্ধী মানুষকে সরকার মানুষ হিসেবে বিবেচনা করে কি না— এ নিয়ে আমার যথেষ্ট সন্দেহ আছে। সরকার প্রতিবন্ধীদের নিয়ে আসলে কি ভাবেন অথবা প্রতিবন্ধী মানুষের প্রতি সরকারের সম্মান/অসম্মান মাত্রা (extent of respect or disrespect) কত—তা নিরূপণ করা জরুরি। এলক্ষ্যে বাংলাদেশ সরকারের ২০০৭-০৮ অর্থবছরের উন্নয়ন বাজেটে বিভিন্ন খাত-ওয়ারী প্রতিবন্ধী মানুষের লক্ষ্যে প্রত্যক্ষ ও পরোক্ষ প্রকৃত (সংশোধিত) বরাদ্দ হিসেবের চেষ্টা করা হয়েছে। সারণি ৪-এ প্রদেয় ২০০৭-০৮ অর্থ বছরের উন্নয়ন বাজেট বিশ্লেষণে আমার হিসেব নিমুরূপ:

- ১. মোট ১৮টি খাতের ১০৩২টি উন্নয়ন প্রকল্পের মধ্যে মাত্র ৫টি প্রকল্প প্রত্যক্ষ ও পরোক্ষভাবে প্রতিবন্ধীদের লক্ষ্যে গ্রহণ করা হয়েছে। প্রতিবন্ধীদের লক্ষ্যে গৃহীত ৫টি প্রকল্পের ২টি সুনির্দিষ্ট (অর্থাৎ প্রত্যক্ষভাবে প্রতিবন্ধী সহায়ক) আর ৩টি সুনির্দিষ্ট নয় (অর্থাৎ পরোক্ষভাবে প্রতিবন্ধী সহায়ক)। অর্থাৎ বার্ষিক উন্নয়ন কর্মসূচির আওতাধীন প্রকল্পসমূহের মাত্র ০.৪৮ শতাংশ প্রকল্প প্রতিবন্ধী-সহায়ক!
- ২. মোট ২২,৫০০ কোটি টাকা উন্নয়ন বাজেট বরাদ্দের মাত্র ১৬ কোটি ৮৪ লাখ টাকা বরাদ্দ হয়েছে প্রতিবন্ধীদের জন্য। অর্থাৎ মোট উন্নয়ন বাজেট বরাদ্দের মাত্র ০.১ শতাংশ বরাদ্দ হয়েছে প্রতিবন্ধীদের জন্য (প্রত্যক্ষ ও পরোক্ষ বরাদ্দসহ)!
- দেশের মোট জনসংখ্যার ১০ ভাগ প্রতিবন্ধী মানুষ- এ বিবেচনা থেকে সমানুপাতিক বরাদ হলেও তো ২২,৫০০ কোটি টাকার বার্ষিক উন্নয়ন বাজেটে প্রতিবন্ধীদের জন্য বরাদ্দ হবার কথা ২,২৫০ কোটি টাকা অথচ বরাদ্দ হয়েছে ১৬ কোটি ৮৪ লাখ টাকা।

সারণি ৪: বাংলাদেশে ২০০৭-০৮ সনের উন্নয়ন বাজেটে (সংশোধিত) প্রতিবন্ধিতা বিষয়ে খাতওয়ারী বরাদ্দ (প্রত্যক্ষ ও পরোক্ষ)

শ্ৰীত	থাত ভিত্তিক ব্রাদ	S. 1			প্রতি	প্ৰতিবন্ধিতা খাতে বৱাদ্ধ (লাখ টাকায়)	নাখ টাকায়)		মেটি বরাদ	त्यां वारकतिय	त्यां वात्रबक्त
শ্বভ	श्रकन्न ज्ञास्त्रा	মেটি টাকা (কোটি)	মোট বাজেটের %	थक ह्या ऋचा	সুনিৰ্দন্ত প্ৰকল্প	বরাক	সুনির্দিষ্ট নয় এরকম প্রকল্প	বরাদ (পরোক্ত)	(সুনিদিষ্ট ও অ-সনিদিষ্ট)	সুনির্দিষ্ট বরাদ্ধকাত আগশ	ব্রাশক্ত অংশ
क्ष	296	2086.38	48.9	0		0		0		. v	
পশ্ৰী উন্নয়শ ও প্ৰতিষ্ঠান	S	52.850	28.33	0		0		0			
शानि अध्यान	3	PPP.499	DE O	0		0		0			
Talks	3	400.00x	5.59	0		0		0			
বিদাৎ	00	200.6467	70.00	0		0		0			
জৈ, গ্যাস গুপ্ৰাকৃতিক	4	803.02	40.0	0		0		0			
Elwaic											
পরিবহন	490	2005.55	22.08	0		0		0			
যোগাযোগ	%	802.60	65%	0		0		0			
ভৌত পরিকল্পনা,	Z	2892.52	6.00	0		0		0			
পরিকল্পনা, পানি সব্রবরাহ											
ও গৃহায়ন কিছা ও ধর্ম	ž	00	ò								
高間 のお配の	200	00 5K	90.00	Ċ		,		į			
न्यास्य शहि क्वाजाश्या ए	7	2000	20.07	,		5		0			
महिवाद कम्माम	2	2002	90.00	0		0		0			
शंदामश्ट्यांश	d.	50.50	65.0	0		0		0			
भगासम्बद्धान्, ग्रह्मा	28	280.0	3	^	১. বাংলাদেশ প্রতিবদ্ধী	1488	्र विकार विकास	M80			
বিষয়ক ও যুব উন্নয়ন					ইনপ্তিটিউট স্থাপন, মিরপুর,	(202+40C)	শিহনের জন্য এটি বিভাগে	(400+380)			
					চাকা	一步.88 (河町)	কারণির প্রশাসকা কেন্দ্র	8.H			
					২. বাংলাদেশ জাতীয় অন্ধৰকাণে সমিতি		২.প্রতিবন্ধী ও দুছ যুব কিশারদের পশিক্ষা নক্ত	(त्रमिह)			
					হাসপাতাল সম্প্রসারণ,		পুনর্বাসন কেন্দ্র, আরাম্বাগ				
					क्रुविमा		এতিমখানা, ফরিনপুর ৩. চালু ২০টি সরকারী শিশু পরিনার শাসনিস্কী সমজ				
জন প্ৰশাসন	Ş	300.30	8.09			0		0			
বিজ্ঞান, তথ্য ও	8	289.08	3			0		0			
যোগাযোগ প্রযুক্তি											
শ্রম ও কর্মসংস্থান	æ	\$4.80	98.0			0		0			
	3	208be.2	PO.CE		^	0	9	0			
উন্নয়ন সহায়তা	22	\$028.b8	P.30		^	b.88	9	48	No 148		
包	300	22000	200		N	7.88	9	8.9	84.5%	80.0	50

যুক্তির কারণে ধরে নিচ্ছি যে প্রতিবন্ধী মানুষের জন্য আমি যে হিসেব করেছি সেক্ষেত্রে অন্যান্য বিভিন্ন খাতে সংশ্রিষ্ট-সহায়ক বরাদ্দ আমার হিসেবে বাদ পড়েছে। ধরলাম আমার হিসেব প্রকৃত বরাদ্দের ৫০ শতাংশ। সেক্ষেত্রে বরাদ্দ দাঁড়াতে পারে ৩৬ কোটি ৭০ লাখ টাকা। ধরলাম এটাই সত্য বরাদ্দ। কিন্তু জনসংখ্যার আনুপাতিক হারে বরাদ্দের পরিমাণ তো হবার কথা ২,২৫০ কোটি টাকা। তাহলে যা হবার কথা তার তুলনায় বরাদ্দ মাত্র ১.৫ শতাংশ। আর এ থেকে যদি বলি যে উন্নয়ন বাজেট বরাদ্দের নিরিখে প্রতিবন্ধীদের প্রতি সরকারের "অসম্মান মাত্রা" (degree of disrespect) ৯৮.৫ শতাংশ (১০০-১.৫)— তাহলে কি অন্যায় বলা হবে?

এদেশে প্রতিবন্ধী মানুষের জন্য সরকারি উন্নয়ন বাজেটে বরাদ্দ কত হওয়া উচিত?

এদেশে প্রতিবন্ধী মানুষকে সাংবিধানিক নির্দেশের প্রতি পূর্ণ সম্মান রেখে পরিপূর্ণ মানুষ হিসেবে বিবেচনায় আনতে হলে তাদের জন্য সরকারি উন্নয়ন বাজেট বরাদ্দ কত দেয়া উচিত? এ প্রশ্নের সহজ উত্তর আছে বলে আমার জানা নেই। হিসেবিট জিটিল তবে ইচ্ছে থাকলে হিসেব কষা সম্ভব। এ হিসেবের অন্তর্ভুক্ত হতে হবে প্রতিবন্ধীতার ধরণ অনুযায়ী সহায়ক উপকরণ ব্যয়, প্রতিবন্ধীতার ধরণ অনুযায়ী সংশ্লিষ্ট চিকিৎসা-স্বাস্থ্য ব্যয়, প্রতিবন্ধীতার ধরণ অনুযায়ী কর্মসংস্থান সৃষ্টি সহায়ক ব্যয়, প্রতিবন্ধীতা রোধ সংক্রান্ত (অর্থাৎ এখন থেকে ২০২১ সাল পর্যন্ত ২ কোটি ২৫ লাখ মানুষকে প্রতিবন্ধী হওয়া থেকে রক্ষা সংশ্লিষ্ট) ব্যয়, এবং অবশ্যই ১ কোটি ২৫ লাখ প্রতিবন্ধী যারা দরিদ্র-বিত্তহীন-নিম্নবিত্ত পরিবার থেকে আগত তাদের জন্য খাদ্য অনুদান সংশ্লিষ্ট ব্যয় (শেষোক্ত ব্যয়টি দুর্ভিক্ষের বাজারে করতেই হবে)।

এদেশে প্রতিবন্ধীতার ধরণ অনুযায়ী প্রতিবন্ধী মানুষের জন্য সহায়ক উপকরণ বাবদ সরকারি উন্নয়ন বাজেটে বরাদ্দ কমপক্ষে কত টাকা হওয়া উচিত? এ হিসেবটি কষার চেষ্টা করা হয়েছে (দেখুন সারণি ৫)। সহায়ক উপকরণ হিসেবে শারীরিক প্রতিবন্ধীদের জন্য ধরণভেদে প্রয়োজন হুইল চেয়ার. ক্রাচ, কৃত্রিম পা; দৃষ্টি প্রতিবন্ধীদের জন্য প্রয়োজন সাদা ছড়ি ও চশমা; এবং বাক-শ্রবণ প্রতিবন্ধীদের জন্য প্রয়োজন শ্রবণযন্ত্র । বিভিন্ন তথ্য-উৎস এবং সংশ্লিষ্ট জ্ঞানবান ব্যক্তিদের সাথে আলাপ-আলোচনার ভিত্তিতে এসব সহায়ক-উপকরণের বর্তমান মোট চাহিদা নিরূপণের চেষ্টা করেছি (অর্থাৎ একই সাথে জানার চেষ্টা করেছি ১.৫ কোটি প্রতিবন্ধীর কতজনের ইতোমধ্যে প্রয়োজনীয় কোনো সহায়ক উপকরণ আছে)। আমার হিসেবে ১.৫ কোটি প্রতিবন্ধীর মধ্যে ৪১ লাখ প্রতিবন্ধীর সহায়ক-উপকরণ প্রয়োজন. যার মধ্যে আছে ১০ লাখ ১৩ হাজার হুইল চেয়ার, ৯ লাখ ৯০ হাজার ক্রাচ, ৬ লাখ ৬০ হাজার কৃত্রিম পা, ৩ লাখ ৭৪ হাজার সাদা ছড়ি, ৪ লাখ ৮৬ হাজার চশমা, এবং ৫ লাখ ৮৭ হাজার শ্রবণযন্ত্র । **বর্তমান** বাজার মূল্যে ৪১ লাখ প্রতিবন্ধীর উল্লিখিত সহায়ক উপকরণ চাহিদা মেটাতে প্রয়োজন মোট ২.৯৬৩ **কোটি টাকা** (সারণি ৫ দেখুন) । অথচ প্রতিবন্ধীদের জন্য চলতি বছরের (২০০৭-০৮ অর্থবছর) উন্নয়ন বাজেটে মোট বরাদ্দ ছিল মাত্র ১৬ কোটি ৮৪ লাখ টাকা। অন্যভাবে বলা যায় যে শুধুমাত্র সহায়ক-উপকরণ চাহিদার নিরিখে সরকারের উন্নয়ন বাজেট বরাদ্দ প্রতিবন্ধীদের চাহিদার মাত্র ০.৫৭ শতাংশ পূরণ করে। অর্থাৎ শুধুমাত্র সহায়ক-উপকরণ চাহিদা মেটানোর ক্ষেত্রেই প্রতিবন্ধীদের প্রতি সরকারের "অশ্রদ্ধা মাত্রা" প্রায় ১০০ ভাগ (সঠিক হিসেব হলো ১০০-০.৫৭=৯৯.৪৩ ভাগ)!

তাহলে প্রশ্ন প্রতিবন্ধী-বান্ধব সরকারি উন্নয়ন ব্যয় কত হওয়া উচিত? কত হওয়া সম্ভব? হিসেবটি আগেই বলেছি জটিল– পদ্ধতিতাত্মিক দিক থেকে এবং একই সাথে সংশ্রিষ্ট তথ্যের অপ্রতুলতার

সারণি ৫: বাংলাদেশে প্রতিবন্ধীতার ধরণ অনুযায়ী প্রতিবন্ধী মানুষের জন্য সহায়ক উপকরণ বাবদ সরকারি উন্নয়ন বাজেট বরাদ্দ কমপক্ষে কত হওয়া উচিত

সহায়ক উপকরণ: প্রতিবন্ধীতার ধরণ অনুযায়ী	মোট চাহিদা (প্রযোজন) (লাখ)	একক মূল্য (টাকায়)	মোট চাহিদা (প্রয়োজন) (কোটি টাকা)
হুইল চেয়ার (শারীরিক প্রতিবন্ধীর জন্য)	٥٤.٥٧	¢,000	৫০৬.৫
ক্রাচ (শারীরিক প্রতিবন্ধীর জন্য)	৯.৯০	٥,000	৯৯.০
কৃত্রিম পা (শারীরিক প্রতিবন্ধীর জন্য)	৬.৬০	8,000	২৬৪.০
সাদা ছড়ি (দৃষ্টি প্রতিবন্ধীর জন্য)	৩. ৭৪	(00)	\$ 69.0
চশমা (দৃষ্টি প্রতিবন্ধীর জন্য)	8.৮৬	9 00	\$86.5
শ্রবণ যন্ত্র (বাক-শ্রবণ প্রতিবন্ধীর জন্য)	<i>৫.</i> ৮৭	૭ ,૦૦૦	o. <i>Ł</i> ⊌₽ ૮
মোট	83.3		২৯৬৩.৩

কারণে। আমার হিসেবে এদেশে ১.৫ কোটি প্রতিবন্ধীকে পরিপূর্ণ মানুষ হিসেবে বিবেচনা করলে বার্ষিক ব্যয় বরাদ্দ হওয়া উচিত আনুমানিক ১৩,৭৪৩ কোটি টাকা। এ হিসেবের অন্তর্ভুক্ত সহায়ক উপকরণ বাবদ ২,৯৬৩ কোটি টাকা, চিকিৎসা-স্বাস্থ্য ব্যয় ১,৩৬৮ কোটি টাকা, কর্মসংস্থান সংশ্লিষ্ট ব্যয় ২,৫০০ কোটি টাকা, খাদ্য অনুদান (দরিদ্র-বিত্তহীন-নিম্নবিত্তের জন্য) ৪,৫৬২ কোটি টাকা এবং প্রতিবন্ধীতা রোধ সহায়ক ব্যয় ২,৩৫০ কোটি টাকা। এ দেশের সরকারি উন্নয়ন বাজেট সম্পর্কে সম্যক জানেন এমন প্রায় সবাই হয়তো বা বলবেন– এ এক অসম্ভব হিসেব অথবা অবাস্তব প্রস্তাবনা। কারণ

সারণি ৬: বাংলাদেশের ১.৫ কোট প্রতিবন্ধীর জন্য বার্ষিক ব্যয়-বরাদ্দ কত হওয়া উচিত

প্রধান ব্যয় খাত	আনুমানিক প্রয়োজনীয় বরাদ্দ
	(কোটি টাকায়)
১. সহায়ক উপকরণ	২,৯৬৩
২. চিকিৎসা-স্বাস্থ্য	১,७५ ৮
৩. কর্মসংস্থান (সংশ্লিষ্ট শিক্ষা ও প্রশিক্ষণসহ)	२,৫००
 খাদ্য (দরিদ্র-বিত্তহীন-নিম্নবিতের জন্য অনুদান) 	8,৫৬২
৫. প্রতিবন্ধীতা রোধ–সংশ্লিষ্ট	<i>ঽ,૭</i> ૯૦
মোট	\% ,98\%

প্রতিবন্ধীদের জন্য আমার হিসেবকৃত ব্যয়-বরাদ্দের পরিমাণ বর্তমান মোট উন্নয়ন বাজেটের ৬১ শতাংশ।

আমার প্রস্তাব, যেহেতু আমরা এক মহান মুক্তিযুদ্ধের মাধ্যমে অর্জিত বাংলাদেশকে বৈষম্যহীন-শোষণমুক্ত ও অসাম্প্রদায়িক চেতনাসমৃদ্ধ একটি বাংলাদেশ বিনির্মাণের স্বপ্ন দেখি, যেহেতু ২০২১ সাল নাগাদ বাংলাদেশ হবে অসাম্প্রদায়িক, প্রগতিশীল, উদার গণতান্ত্রিক কল্যাণ রাষ্ট্র এবং যেহেতু আমাদের সংবিধান প্রতিবন্ধী-বান্ধব সেহেতু প্রতিবন্ধীদের জন্য আমার হিসেবে অন্ততঃ ১০ শতাংশ অর্থাৎ বছরে ১,৩৭৪ কোটি টাকার ব্যয় বরাদ্ধ ব্যবস্থা করা হোক। সেই সাথে প্রতিবন্ধী-সহায়ক যত ধরনের বাস্তবমুখী কর্মসূচি নেয়া সম্ভব তা রাষ্ট্রীয়ভাবে গ্রহণ করা হোক— যেমন এ দেশের ২ কোটি বিঘা খাস জমি-জলা বিতরণে প্রতিবন্ধীদের অগ্রাধিকার দেয়া হোক, দেশের প্রতিটি শিক্ষা প্রতিষ্ঠানে পর্যায়ক্রমে প্রতিবন্ধী-বান্ধব পরিবেশ (সংশ্লিষ্ট শিক্ষক নিয়োগসহ) সৃষ্টি করা হোক ইত্যাদি। এসবই সম্ভব যদি নেতৃত্ব প্রতিবন্ধী-বান্ধব হয়!

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 255-278 Bangladesh Economic Association (ISSN 2227-3182)

The Role of Islamic Financial Institutions in Resource Mobilization and Poverty Alleviation in Bangladesh: An Empirical Study of Rural Development Scheme (RDS) of Islami Bank Bangladesh Ltd (IBBL)

Muhammad Abdul Mannan Chowdhury¹

Abstract

A major portion of rural people in Bangladesh live below the poverty line. Provision of credit to the needy and the hardcore is considered the sine qua non for the poor to involve in income and employment generating activities and thus break away from poverty. But the poor and the landless in Bangladesh do not have access to the formal credit market due to lack of tangible collateral for loan. The Grameen Model introduced in 1976 was the first mechanism to deliver credit to the poor without any collateral. Being inspired by the pioneering success of the Grameen Model in the field of micro finance, many micro finance organizations (MFOs) or micro finance institutions (MFIs) and non-government organizations (NGOs) have come forward to alleviate the sufferings of the poor and elevate their status in the rural society with their respective programs for providing micro finance.

However, one of the serious limitations of all these MFOs and NGOs from Islamic point of view is that they are interest-based, charge a very high rate of interest, and have very little or no focus on human development. Instead of bringing the hardcore poverty group out of the vicious cycle of poverty, the interest-based micro finance rather aggravates the situation further, perpetuating their indebtedness and poverty. It is also held that most of these MFOs are not able to operate at breakeven level without subsidies from outside sources and hence are not able to attain sustainability. As a way of escape from this interest-based system of micro financing and to carry on

¹ Professor, Department of Economics, University of Chittagong

financial operations with no dependence on subsidies from outside sources, a handful of Islamic NGOs have recently come forward to provide interest-free loan based on profit and loss sharing (PLS) in line with Shari'ah principles. Of these Islamic programs, the micro financing program known as Rural Development Scheme (RDS) undertaken by Islami Bank Bangladesh Ltd.(IBBL) to mobilize resources in order to ameliorate poverty is the largest one.

It is held that the Islamic MFOs are better performers than the secular MFOs and NGOs in the field of resource mobilization and poverty alleviation as well as loan repayment. The Islamic programs are also held to be economically more viable and sustainable both in respect of borrowers and lending operations compared to secular NGOs and MFOs since they are not dependent upon subsidy from outside sources, emphasize on moral and ethical values as well as qualitative development of human beings, and operate on profit and loss sharing (PLS) abandoning interest in any of their lending operations and banking transactions.

There are very few studies undertaken so far to establish the superiority or otherwise of micro finance of Islamic banks and other Islamic MFOs over the traditional interest based ones. The present paper, based on an empirical study of the RDS of IBBL, attempts a comparison of the performance of the RDS with that of some well-known MFOs, and NGOs including Grameen Bank, so as to derive lessons for necessary rectification and modifications as well as determining the future course of action in micro financial activities of the Islamic financial institutions aimed at local resource mobilization and poverty alleviation both in Bangladesh and other similarly-placed countries of the world.

1. Introductions

As a way of escape from the interest-based system of micro financing and to carry on financial operations with no dependence on subsidies from outside sources, a handful of Islamic NGOs have come forward very recently to provide interest-free loan based on profit and loss sharing (PLS) to both men and women of hardcore poverty group with necessary modifications in the Grameen Model in line with Shari'ah principles. Of these Islamic programs, the micro-financing program known as Rural Development Scheme (RDS) undertaken by Islami Bank Bangladesh Ltd. (IBBL) to mobilize resources in order to ameliorate poverty is the largest one.

The IBBL was founded to establish equity and justice in the economy. With this end in view, the IBBL in 1995 launched a special program known as "Rural Development Scheme" (RDS) in order to mobilize local resources for alleviation of poverty through the generation of income and employment opportunities and

to cater to the investment needs of poor micro entrepreneurs, particularly in the rural areas. The program started its operations in 1996. RDS is funded from IBBL's general investment fund with no subsidy from external or foreign sources. As of June 2004, RDS provided micro finance services in 3700 villages from 83 branches of IBBL. A total of Taka 3523.11 lacs were disbursed so far at 12 percent rate of return to 120087 clients (organized in 29941 groups and 6073 centers) with a recovery rate of 99 percent.

The RDS has chalked out a package program to ensure socio-economic development of the rural poor, marginal farmers and the landless laborers by making them self-reliant so that they are able to meet their basic needs and can contribute to the rural upliftment. The objectives of RDS are to eliminate rural poverty through community development approach. The target group of RDS is the rural poor, defined as landless or households having a per capita farm size of 0.5 acre of cultivable land or a gross annual income of not more than Taka 15000 (equivalent to US \$ 250) per household. The investment programs, among others, include provision of loan for investment in crop production, fish cultivation, irrigation, agricultural and irrigational equipments, non-farm activities, rickshaw van and rural transport, hand-driven tube wells for drinking water, materials for housing etc. Other than providing finance for micro enterprises to generate income, RDS also focuses on health, sanitation and education of its beneficiaries. The dominant mode of financing used by RDS is Bai-Muajjal (deferred pricesale). The scheme (i.e., RDS) retains the group-based format of the Grameen Model, but rejects interest on any of its operations.

All operations of the RDS are on PLS (Profit and loss sharing) basis in line with Shariah principles. Small amounts (roughly from Taka 3000 to Taka 25000) are given to individuals and repaid back in small weekly installments. Like Grameen Bank (GB), no physical collateral is required for obtaining funds. Instead, social collateral is introduced by forming groups and centers like GB. The clients save Taka 5 per week as personal savings and have to give Taka 1 per week for the center fund. It should be mentioned here that 2 percent of the 12 percent rate of return charged goes to a risk fund that is used to repay installments of beneficiaries facing unusual problems and in case of emergencies.

Side by side with income generating and employment creating activities, RDS also aims to motivate people, to seek help from Allah (SWT) in all circumstances, to advise for good work and to refrain from evil deeds, to refrain from anti-social activities and to abide by the rule of law, to cultivate vegetables in the fallow land or the vacant compound of dwelling houses, to plant trees in the planting season,

to remove illiteracy and to establish night school for adult education, to arrange education for children, to help one another in times of danger and misfortune, to take care of own health and health of the community people, to drink water from tube well, to abstain from giving and receiving dowry, to maintain law and order, to work hard, to practise five times prayer as well as shariah laws in every day life (Hakkullah and Hakkul Ebad), to keep promises to tell the truth and to keep the deposit (Amanah) of somebody under safe custody, and so on.

RDS deals with the family via the women. The Islamic approach of targeting the family and using Islamic modes of financing eliminates to a large extent asymmetric information problems that arise in conventional micro finance programs. This approach seeks to mitigate the adverse selection and moral hazard problems resulting from the fact that the intended use and user are different from the actual use and user of funds.

As Islamic modes of financing involve a real transaction, the moral hazard problem arising from the use of funds for purposes other than those intended is also expected to be eliminated.

1.1 Objectives of The Study

It is held that the Islamic Micro Finance Organizations (MFOs) are better performers than the secular MFOs and the NGOs in the field of resource mobilization and poverty alleviation as well as loan repayment. The Islamic programs are also held to be economically more viable and sustainable both in respect of borrowers and lending operations compared to secular MFOs and NGOs since they are not dependent upon external fund, emphasize on moral and ethical values as well as qualitative development of human beings, and operate on profit and loss sharing (PLS) basis abandoning interest in any of their lending operations and banking transactions.

Based on the above assertions with regard to the Islamic mocro finance some relevant questions are likey to be asked the answers to which need intensive study into the operation and performance of the Islamic MFOs. The questions are:

- a) Are the Islamic MFOs institutionally more viable than the secular MFOs?
- b) Are the Islamic MFOs financially more viable than secular MFOs because they are not dependent on external fund or subsidies from outside sources?
- c) Are the borrowers from Islamic MFOs more viable than borrowers from secular MFOs in terms of group deposit, behavior of the group members, loan repayment, mobilization of savings etc.? If so, why?

- d) What are the kinds of resources mobilized by Islamic MFOs and for what purposes and with what result? To what extent do they differ from those of secular MFOs?
- e) What is the role of Islamic MFOs with regard to ideological promotion, human development and social welfare activities?

So far known, no intensive study has yet been undertaken to answer the above questions regarding the role of Islamic financial institutions in resource mobilization and poverty alleviation. The present paper is an attempt to find answers to the above questions based on an empirical study of the RDS of IBBL carried out by the author in June, 2004 and compares the findings of the study with the findings of a few other selected empirical studies undertaken so far with regard to the performance of selected well known MFOs and NGOs including Grameen Bank (GB) in Bangladesh.

1.2 Methodology and Scope of The Study

Eighteen villages in 18 districts covered by 18 branches of IBBL (i.e., one village under one branch) operating RDS have been taken for the study on the basis of purposive sampling. The recipients of investment assistance (i.e., the borrower) have been chosen as the unit of study and fifty respondents from each of 18 selected village have been taken as sample size for the study on the basis of random sampling. The primary data have been collected on the basis of a set questionnaire through formal interview of the respondents. Secondary data have been collected from published sources like books, journals, research reports etc. and also from relevant documents/records of IBBL dealing with RDS.

Primary data collected cover a wide range of information relating to different aspects of the investment program under RDS, viz., information on the nature of the activities financed, amount of loan disbursed and recovered, socio-economic costs and benefits of loans received, the nature of generation of income and employment, productivity, literacy, raising of Islamic consciousness in terms of 'Hakkul Ebad' activities, and human development.

The study covers a period of eight years from 1996 to 2004. Both qualitative and quantitative techniques of analysis have been used for the study. Arithmetic mean, ratios, percentages and other relevant statistical techniques have been used.

The paper is organized as follows. Section –1 gives an introduction, including the objectives, methodology and scope of the study. Subsequent sections, beginning with Section 2, discuss the major empirical findings of the study. Section –2

discusses the findings with special emphasis upon sustainability and viability of the RDS both at the institutional and program levels. Section—3 explains branch level viability relating to financial cost-benefit of RDS while Section—4 discusses branch level viability with special reference to outreach and sustainability. Section—5 explains borrower's viability with special emphasis upon mobilization of saving, poverty alleviation and income generation as well as ideological promotion of the borrowers. Section—6 highlights the complementary poverty reduction program of the RDS, while Section—7 makes a comparison between Islamic MFIs and Secular MFIs based on the basis of findings of the present study. Section—8 presents the conclusions and prescribes some policies for further development of RDS and its replication elsewhere.

2. Major Findings of The Study

Sustainability of the RDS

The sustainability of the program is defined as the ability of the program to continuously carry out activities and services in the pursuit of its objectives (Khandker, Khalily and Khan, 1996). The sustainability of the program has been examined in terms of (a) institutional viability, (b) financial and economic viability, and (c) borrower's viability. Each of these is discussed at some length in the following, based on empirical findings.

a) Institutional viability

The institutional viability has been examined in terms of leadership, decentralization, monitoring, evaluation, management style, staff training, incentives and performance, administrative structure and organizational growth or credit delivery, targeting credit, social development program (Hakkul Ebad), coverage and expansion of activities.

(i) Leadership, Decentralization, Monitoring and Evaluation

The leadership in the case of RDS of IBBL is rather institutional rather than personal. Unlike Grameen Bank (GB) or BRAC there is no influence of personal leadership on the operation and performance of the RDS. The leadership is delegated to the bank branches of IBBL in the areas covered by the RDS. The manager and project officer of the relevant bank branches together with the field staff (FS) are empowered to plan, organize and implement the RDS investment program in the areas with little or no supervision from the head office

of IBBL. The devolution of many decision making roles to the branch offices and the flexibility in branch operation allow the head office to focus on broader issues of policy and development. Unlike GB there is no participation of the loanees (the recipient of investment assistance) in the management process of the RDS. The decision making function of the branch offices with respect to the implementation of the investment project relies on field level information which are collected by the FS and analysed and disseminated by branch manager together with project officer. The branch manager and project officer in collaboration with the FS in relevant areas does thus the monitoring and evaluation of the RDS. Monitoring and evaluation are crucial to the RDS's operations and expansion, providing continuous feedback from different operational and financial reports. The head office of IBBL monitors loan disbursement made by the branch offices, repayment, saving and default records as well as the flow of funds from information reported by the branch offices and based on the daily statement prepared by branch managers. These reports enable the head office to keep track of each branch's performance and compare it with the aggregate data prepared by the head office of IBBL. This comprehensive reporting forms the basis of the built-in-learning process characterising the decision-making and policies of IBBL relating to the RDS and helps to identify problems in branch or area performance that can be addressed by the head office.

(ii) Management Style, Staff Training, Incentives and Performance:

Besides decentralized administration, professional management is an important component of institutional viability. The management style of the RDS has evolved from its effort to provide a whole range of programs to the rural poor. It is observed that the management structure has a built-in-adaptability that has been refined through field level experiences. It should be mentioned here that a combination of learning, innovation and flexibility is the hallmark of style evident at all levels. (Fuglesung and Chandler,1998). The management system is based on an innovative approach to training characterized by a structured learning process which is continuously modified by trial and error. The branch manager, project officer and the FS are well oriented to plan, organize and implement the RDS programs without extensive supervision from the head office.

The FS of the RDS faces the challenging task of mobilizing the rural poor and helping to make them creditworthy and productive. They are located in remote rural areas where the amenities of modern life are seldom available. The same is applicable to the project officer and other staff including the branch manager of the branches located in the project area. Although employees may be influenced by factors like pay structure, they also require different types of real incentives in order to be more productive. With this end in view, sometimes the **FS** are rewarded for better performance. Needless to say, the decision to choose an area to be covered by the RDS is based on concern for the poor and the nature of risk involved due to agro-climatic and locational characteristics. It should be mentioned here that it is really difficult to start a financially viable project in an area which is largely flood-prone and where seasonality is more pronounced and infrastructure, including the road, is very poor. But the RDS has been started in such risky areas to alleviate poverty in the true sense of the term. This is quite in contrast to the investment projects of the commercial banks and other development finance institutions.

b) Financial And Economic Viability: The viability of the RDS depends on its revenue and cost structure. The concepts of financial and economic viability are used to examine the implications of operating efficiency on viability. The RDS is financially viable if revenue is equal to cost. The RDS is economically viable if profits are greater than economic subsidy, if any. In this study, financial or economic viability refers to the program level viability which is evaluated using two parameters: (1) profitability and (2) employee and capital productivity.

Loan recovery enhances profitabilities by turning over loanable funds and minimizing default, thus improving the viability of the RDS. Cost minimization, in addition to other parameters, depends on the composition and sources of funds. Given the availability of fund from own sources, the RDS does not have to depend on interest-based credit from outside sources. An evaluation of the cost structure and the operational performance also requires the analysis of both capital and employment efficiency which may be regarded as the crude proxies for the operational efficiency of the RDS. The financial margin (defined as service charge as a percentage of investment assistance) gives an overall measure of the cost of funds and revenue

in relation to total assets or investment assistance. The subsidy dependence is not calculated in this study since all the funds for investment assistance under RDS come from the internal source of IBBL (i.e., deposit, paid-up capital and investment).

Based on the above brief introduction to the concepts relating to program level viability, we will now analyze program level viability of the RDS in terms of loan recovery profile, assets and financial structure, revenue and cost structure, financial margin and program level viability in the following section:

- i) Loan Recovery Profile: The loan recovery performance of the RDS is an important supply side issue. Defined as the amount of loan recovered as a percentage of the loan due, the recovery rate of the RDS has been 99 percent every year since 1995. The minimum time allowed for repayment is 12 months while maximum time allowed for repayment is 36 months depending upon the nature of the investment project.
- ii) **Assets and Financial Structure:** The average asset holdings of the bank branches under study increased from Taka 45 lacs in 1995 to Taka 80.5 lacs in the year 2004. The average earning asset in terms of loan, deposit investment etc. increased from Taka 43.17 lacs to 76.70 lacs in the year 2004. The average fixed asset of the bank branches under study increased from Taka 7.94 lacs in 1995 to Taka 20.17 lacs in the year 2004. The higher amount of capital increases the capacity of the bank branches under the RDS to absorb any losses and to operate with more stability.
- iii) Revenue and cost Structure: The revenue or income side of RDS includes income from investment at 6 percent rate of return, income from supervision fund at 4 percent and amount of risk fund at 2 percent while the cost of RDS includes salary of field supervisors, other operational costs (i.e., depreciation of motor cycles, fuel cost etc.), salary of project officer and cost of funds (opportunity). When all items of income and expenditure are taken into account to calculate profit of RDS, it appears that RDS operates at a loss. However, the result does not reflect the true picture of the situation because of the following reasons:
- a) The rate of return charged by RDS (i.e., 12 percent) is lower than most MFIs that have rates of return / interest rate in the range of 16-

- 55 percent (Morduch, 1999). By charging a lower rate of return than the market rate, RDS is essentially subsidizing the micro entrepreneurs. As a result, the income from investment is relatively lower than that of MFIs (Ahmed, 2002).
- b) A major part of the expenditure is the salary of the project officer. The project officer, however, devotes only a part of the time for RDS activities, as he is an officer of the bank overlooking the activities of RDS. Payment of full salaries to the project officer is an overestimation of the expenditure for RDS (Ahmed, 2002).
- c) The opportunity cost of using the funds for micro financing is close to ziro since the Islamic bank (IBBL) has a large amount of liquid assets due to the lack of Islamic money market instruments and since the amount needed for micro finance is miniscule compared to total assets of IBBL (Ahmed, 2002.).

When all the above qualifications are taken into account, then RDS is found to operate at positive levels of profit (i.e., at a profit of Taka 2389 million to Taka 3066 million) (Ahmed, 2002).

There is another point to consider on the income side of the RDS. The income figure calculated by us is based on a rate of return of 12 percent. To cover all the expenditures, however, the breakeven rate of return is estimated at 13.2 percent. The rate of return charged by RDS is much lower than that charged by other MFIs. If the income is calculated at the lowest rate of return of 16 percent charged by other Islamic MFIs, then the profit with this rate of return will be significantly positive (Ahmed, 2002).

- iv) **Financial Margin and Program Profitability:** the profitability of the RDS is of critical importance to the operators or the policy makers of the project. It is found that the RDS is able to cover all its costs as a percentage of assets within its financial margin. The financial aim of the RDS is to gradually reduce its overhead cost to accommodate more members and more lending per member.
- v) **Employee and capital productivity:** The efficiency of RDS may be analyzed in terms of employee and capital productivity. The productivity of capital and employee can be measured in terms of membership, borrowers, loan disbursement, loan outstanding, savings and deposit mobilization. The average number of increase in male

members per bank branches increased from 50 in 1995 to 302 in 2004 while the average number of female members per bank branches increased from 150 in 1995 to 850 in 2004.

A similar pattern also holds for borrowers per bank branches. The borrowers per bank branches increased from 130 in 1995 to 550 in 2004. The total amount of loan distributed by the bank branches under study increased from Taka 43.17 lacs in 1995 to 1.50 crore in the year 2004. So, both the membership and lending criterion show a rising trend in case of RDS.

(vi) Analysis of Branch level Viability: As is evident from the field level study, all the branches of IBBL dealing with the RDS have a similar number of staff, members, and amount of assets, loan disbursement and saving mobilized. It is found that loan recovery rate is higher and member dropout rate is very negligible for all the bank branches dealing with the RDS under study.

The financial viability of a financial institution at branch level may be measured under two criteria: (a) Criteria relating to financial cost-benefit of a project; and (b) Criteria relating to assessment of self-sustainability and outreach to target clients. We shall discuss both types of the criteria in some detail in Sections 3 and 4 that follow.

3. Branch Level Viability of RDS based on criteria relating to Financial Cost-Benefit of a Project

- i) Earning Asset to Total Asset: The earning asset to total asset investment ratios shows how well bank management puts bank assets to work. The estimated result shows that over the years under consideration (i.e., from 1995 to 2004) the ratios have been highly consistent (i.e., 0.96 on average) which implies that the branch banks dealing with RDS are quite successful to put their assets to work of investment.
- ii) **Return on Earning Asset:** This is a profitability criterion. The 'return' here means income from investment assistance. The return on earning asset (ROEA) has been consistent over the years since 1995, which indicates that earning assets of the bank have been put more effectively.
- iii) **Profit Margin to Average Earning Asset:** Profit, which is one of the key determinants of bank profitability, has been found positive for the RDS and consistent over the years under study. Therefore, we can

- conclude that the branches dealing with RDS have been able to maintain lower spread between profit and the cost of operation of RDS.
- iv) **Equity Capital to Total Asset:** This ratio is a measure of the extent of equity ownership in the bank. This ownership provides the cushion against the risk of using debt and leverage. For branches working for RDS, the ratio was 0.10 on average, which is satisfactory.
- v) **Deposit-Equity Capital:** It refers to the average deposit to average equity ratio. More capital requires a greater degree of safety while more deposits give a higher return to stockholders since more money is available for investment purposes. This ratio (1.50 on average) has not been very high over the years under study. This indicates higher margin of safety of the deposits.
- vi) **Investment Assistance (Loan) to Deposit:** This is a type of asset to liability ratio. Investment assistance (loan) makes up a large portion of the bank assets and its principal obligations are the deposits that can be withdrawn on request within limit. This is a type of debt coverage ratio and it measures the position of the bank with regard to taking risks. The impact of the loans to deposit ratio (6.50 on average) is found satisfactory. The average loans have been always higher than the average deposit, which also measures the ability of the bank in taking risks.
- vii) **Loan Loss Coverage Ratios:** This ratio helps determine the asset quality and level of protection of investment assistance plus 10% provision for risk of losses, if any, by net charge off (i.e., difference between bad debt and recoveries). In the case of RDS, not a single case of bad debt has been found.

From the above analysis we can say that all the financial ratios relating to the branch level viability of the RDS are consistent and hence it may be said that the bank branches under the RDS manage their finance well.

The assessment criteria to assess branch level viability of RDS focus on income expansion and poverty reduction. They are also helpful in explaining the cost-effective alternatives such as increased investment in rural infrastructure or in human development to reach the goals. Because of socio-political reasons the Government intervenes extensively in financial markets, especially in rural financial markets of less developed countries both directly and indirectly. The

indirect interventions are made to improve the policy environment by addressing incentive problems and regulating intermediaries etc, while direct interventions refer to the steps to increase or supplant credit provided by private lenders. These interventions generally have had a limited outreach and resulted in huge costs, with insignificant impact on the borrowers at household level. As a result, it has become increasingly important to measure self-sustainability or viability based on subsidy dependence index. Fortunately, this is not the case with the RDS. So, an attempt is made here to measure the outreach and sustainability of the bank branches under the RDS with the help of assessment criteria comprising of several indicators other than the subsidy dependence index.

4. Outreach and Sustainability of Bank Branches under RDS

Outreach is measured by a hybrid index comprising several indicators. The main indicators of outreach are (1) market penetration, (2) relative income level, and (3) quality of services offered.

Market penetration is measured by (a) the number and annual growth rate of saving and loan accounts, (b) the value and annual growth rate of loan portfolio and deposits, and (c) the number of branches and staff.

Relative income level is measured by (a) the value of average loan and range of loan securities, (b) percentage of rural clients, and (c) percentage of male and female clients.

The quality of service is measured by (a) transaction costs, (b) flexibility and suitability of services, and (d) distribution network.

The **IMF**'s Executive Board has broadly agreed that the following objectives should provide guideline for strengthening the financial system:

- a) to ensure transparency and the role of market forces;
- b) to eliminate distortions created by official safety nets;
- c) to control risk through regulatory and supervisory measure;
- d) to strengthen the broader structural framework;
- e) to poster national and international supervisory co-ordination;

A bank or financial system will be unsound if it is characterized by the following factors:

1) If a weak governance of banks leaves the system vulnerable to microeconomic shocks.

- 2) If financial deregulation, competition and innovation outstrip the capacity of bank to manage risk prudently.
- 3) If financial deregulation takes place before adequate prudential regulation and supervision are in place.
- 4) If weak and incompetent financial institutions are allowed to continue operations, thus weakening the entire system.
- 5) If capital account liberalization occurs before the soundness of the domestic financial system by macroeconomic policy is ensured.
- 6) If declining business profits together with excessive corporate indebtedness lead to a decline in asset quality.

Although the above mentioned criteria are applicable for purely commercial banks operating in any country, the unsoundness and insolvency of banking systems have some kind of universality for all types of financial institutions. Moreover, some elements such as managing risks, creating official safety nets etc. are more important for those financial institutions, which are vulnerable in managing risks. Since the RDS is not dependent on external finance and since the recovery rate is too high, the question of risk and insecurity of realization of investment assistance is minimum in the case of the RDS, which is based on a sound footing. This fact may be further established if we examine the indicators of outreach index mentioned above in case of the RDS as described below:

(a) Market Penetration

(1) Number and Annual Growth Rate of Saving and Loan Accounts:

In case of the RDS of IBBL, investment assistance is given to each member via the group he/she belongs to. Those people receive the investment assistance who maintain saving account with the relevant bank branches of IBBL. Since the bank branch also conducts normal banking services such as receiving deposits at the stipulated rate of profit, the total number of member's accounts and loan (investment assistance) accounts differ. The loanees (recipients of investment assistance) maintain different types of account, namely, individual voluntary provision of saving for an amount of Tk.5, a forced group or center fund, a risk fund, and a personal saving account fund. From the data we have found that the growth of membership has been increasing gradually over the nine year period under study. In the same way the overall growth of saving in individual and group account has also been increasing year by year. This has been possible

because like GB the field supervisors of the RDS travel long distance daily to serve their clients from door to door.

(2) Value and Annual Growth Rate of Portfolio: The main type of investment assistance given by the RDS is Bai Muazzal. Side by side with investment assistance from the own fund of IBBL, the RDS has also been assisting the recipients of investment assistance by providing finance from group fund to different categories of social sectors of activities such as social and household need, health and medical expenses, loan repayment, maintenance and repairing, processing, new supplementary investment, trading, farming, joint activities, promotion of Hakkul Ebad_activities etc.

The RDS has contributed a lot to the social development and the promotion of 'Hakkul Ebad'. Due to the RDS assistance, 85.45% of the respondents found an increase in their employment, 19.07% found an increase in their crop production, 74.09% found an increase in the educational level of their children, 94.07% found an increase in their income, 97.36% became self-reliant, 99.34% found an increase in their self-confidence, 99.01% experienced an increase in their Islamic knowledge, 96.38% has become accustomed in honest (halal) earning, and 96.68% became inspired in social welfare (Hakkul Ebad) activities.

From the above discussion, we may conclude the following about the performance of the RDS operated by IBBL:

- It has been able to maintain a broad based loan (investment) portfolio like GB so that any unavoidable and unforeseen circumstances of any sector can be covered by other sectors.
- 2) It has been funding almost every sector of rural household economy in such a way that all members of the target group can participate in its activities.
- 3) It has not only been considering activities that are purely economic, but also some social activities without which no real development would be possible.
- (4) The poor people are getting proper direction for the development of the social system.
- (5) By and large, the RDS has developed a broad-based investment portfolio with a view to diversifying risks in volatile sociopolitical situations.

Number of Bank Branches, Staff and Village Covered: The cost **(3)** and effectiveness of rural credit are dependent on some specific points, of which the number of branches, staff and villages covered are considered as important elements. The growth of the RDS in terms of the number of branches, employees and villages covered have always been increasing. Initially the RDS was started with 48 field supervisors in 198 villages with 3600 people through 21 branches. Now it has become an organization of people with more than 1,49,705 members that covered 3700 villages and employing about 638 field supervisors through 83 branches. It is remarkable that there has been a rapid expansion of membership, but the increase of bank branches has not been proportionate to the increase in membership. This indicates that the RDS has been trying to achieve economies of scale to reduce costs to administer credits/ investment assistance.

(b) Relative Income Level

The second important criterion to measure the outreach to clients is to find out the relative income level by evaluating the value of average investment assistance and the range of the amount of investment assistance, percentage of rural clients, and percentage of female clients to total clients. It should be mentioned here that because of relatively small size of investment assistance and hence very small fraction to be repaid weekly, the repayment rate has been very high over the years. Hence the risks of bad and doubtful debts in such cases are negligible. It should be pointed out here that almost 74 percent of the RDS members are female and this fact has been contributing to:

- 1) Empowerment of females who are not given due attention by the development process of the country;
- 2) Provision of social security to the female members of the society;
- 3) Involvement of females in the household decision-making;
- Provision of expenditure by females to improve consumption standard of the household;
- 5) Provision of expenditure by females to help improve child health; and
- 6) Provision of expenditure by females for Hakkul Ebad activities;

However, females do not always control the amount of investment assistance. The same is sometimes distributed to other members of the family of the females, and the household head controls the expenditure to some extent.

(C) Quality of service

In order to measure quality of service, the third indicator of outreach, indicators like profit, number of field supervisors, number of villages covered, number of members, number of branches, total amount of investment assistance given, total income, total costs, salary cost as % of total cost, client per field supervisor, profit/loss per bank branch, average number of village per employee etc. have been used. The RDS has been earning profit from investment assistance at a consistent rate since 1995. Profit per employee has been satisfactorily increasing, which indicates that the bank is trying to achieve economies of scale. The coverage of recipients of investment assistance per employee also indicates the same fact.

The quality of service provided by bank branches dealing with RDS is found better than other MFOs. The reasons for better quality of service are the following:

- a) The RDS can attract better employees since a better benefit package is offered to them. The field supervisors not only get better pay, they also get other benefits associated with working in an established financial institution.
- b) All employees in the RDS are trained at the Islamic Bank Training Academy at no extra cost to them. The high quality in-house training provided by professionals in the Training Academy improves the skills of the workers increasing their productivity.
- c) The field level workers can perform their banking services more efficiently due to better logistic support. For instance, whereas field workers of most MFIs use bicycles to go to the weekly meetings and visit beneficiaries, those of RDS use motorcycles.
- d) RDS employs sufficient workers to keep an ideal employee-beneficiary ratio. This helps them to monitor clients and supervise the funds more efficiently.
- e) Since RDS is not dependent on external sources for funds, it can formulate its program in a manner that is suitable to the beneficiaries. For certain activities, an installment repayment schedule that corresponds to the income stream of the funded activity can be arranged. This practice does not burden the beneficiaries when there is no income generated from the investment (Ahmed, 2002).

5. Borrowers' Viability with Special Reference to Resource Mobilization and Poverty Alleviation

The RDS has enabled the poorest of the poor to get interest-free loan without collateral and saved them from exploitation by both the formal and informal money lenders who charge interest at a high rate. This has enabled the investment seekers to utilize their creativity to be self-employed. The most vulnerable and deprived men and women have come under the umbrella of the RDS to form a club of the poor, so to speak. It has united the poor (both man and woman) and created an environment in such a way that the poor can create their own security, for their existence and livelihood. The contribution of the RDS to promote indicators of socio-economic development is found satisfactory. The growth of membership, amount of loan in kind (investment assistance), saving etc. show that the RDS has successfully elevated the poor and mobilized their savings in the best possible productive way.

The average saving fund, average risk fund and average personal saving of the loanees per bank branch under study during 1995 were Tk. 6.95 lacs, Tk. 1.96 lacs and Tk. 15.10 lacs, respectively, which increased to Tk. 20.50 lacs, Tk. 10.15 lacs and Tk. 15.10 lacs, respectively, during the year 2004. A major proportion of the loanees (54%) took investment assistance for business purposes. This fact implies that the investment assistance in most cases was utilized for production purposes, which definitely helped asset formation of the loanees.

From the findings of the study it is evident that the investment assistance under the RDS contributed enormously to the upliftment of the socio-economic condition of the poor borrowers. We also find that 85.45 percent of the borrowers were benefited from increase in employment, 99.34 percent of the borrowers got self-confidence for their work, 99.01 percent were oriented in Islamic knowledge, 98.68 percent were inspired for social welfare activities, 96.38 percent were inspired for halal or honest earning, 97.36 percent became self-reliant, 94.07 percent experienced increase in their income, and 74.09 percent of the borrowers were able to raise the level of education of their children due to the availability of investment assistance under the RDS. It is also observed that 76.31 percent of the loanees were able to repay their loan (investment assistance) out of project income (i.e., income generated from within the investment activities for which investment assistance was sought). Most of the investors got surplus dividend from the investment project financed by the RDS. The provision of investment assistance by RDS generated different economic activities like fish cultivations, handicraft, handloom, betel leaf cultivation, cultivation of vegetables, cane products and

rearing of poultry and livestock. From the above brief description it can be safely concluded that borrower's viability increased significantly due to the provision of investment assistance under the RDS.

6. Complementary Poverty Reduction Program

RDS has been successful in integrating other support programs along with the micro finance scheme. Due to poverty, the poor people are usually induced to divert funds to consumption and purchase of other assets. RDS uses funds from Islami Bank Foundation for a complementary program for asset building. The clients can obtain interest-free loans (qard-e-hassana) from this fund to buy assets (like tube wells) and housing. This not only builds the asset base of the beneficiaries, but also affects the repayment rate positively as the funds are not diverted for non-productive purposes. Besides, as default and arrears disqualify beneficiaries to avail of interest-free loans, this facility acts as an incentive for them to repay the installments on time (Ahmed, 2002).

7. Comparison between Islamic MFIS and Secular MFIS based on Empirical Study of RDS of IBBL

- Islamic MFIs have been managing micro-investment / micro-credit programs with no dependence on external assistance while secular MFIs are implementing the same mainly with the financial assistance of external donors.
- 2. Both Islamic and secular MFIs are following almost the similar selection criteria to select their program beneficiaries. Both the groups of MFIs select poor people mainly on the basis of land ownership criteria, I.e., the families having maximum of 0.5 acres of land.
- 3. The secular MFIs include mostly women in their program while Islamic MFIs are including both men and women in their program.
- 4. Both the secular and Islamic MFIs copied the micro credit mechanism developed by the Grameen Bank (GB) with little or no modifications.
- 5. Secular MFIs charge interest rate at the rate of 20 to 30 percent on the credit (in cash) provided to the members. However, Islamic MFIs do not provide any cash loan. Their loan is called investment assistance. They apply the concept of 'Bai Muazzal' (sale on credit) and provide commodity adding certain percentage of mark-up on the cost of the commodity. The mark-up is 12%. IBBL divides the income from RDS as follows: profit to the bank is 6%, supervision fund is 4% and risk

fund is 2% and all these make a total of 12%. The equivalent rate of interest in conventional method of interest computation is 24%. Moreover, one distinguishing feature of RDS-IBBL is that it rebates one-fourth of such income, i.e., 6%, to the borrowers if his/ her repayment is regular. That makes the rate charged by RDS-IBBL 10.5%, one of the lowest in the micro credit sector. The minimum amount of saving is Taka 5.00 and members are free to save any amount since every member has to open a saving account in the bank. There is no legal restriction for RDS regarding mobilization of savings since it is a program of a bank.

- 6. The other terms and conditions of loan, apart from interest rate, are almost similar for both Islamic MFIs and Secular MFIs.
- 7. Both the groups of MFIs finance almost similar type of activities like poultry and livestock rearing, petty trade, agricultural inputs, rural vehicles, housing material, handlooms etc. However, unlike many MFIs, RDS-IBBL provides credit for both farm and non-farm activities for purchase of tube well and for building houses.
- 8. The institutional mechanism of credit delivery of Islamic MFIs is similar to that of the GB and other MFIs. The important difference is that the Islamic modes of investment have been proven to be equally applicable in reaching the poor. The duration and ceiling of loan are slightly different from typical micro credit and sometimes overlap the micro enterprise program of some MFIs.
- 9. To become a member of program of secular MFIs, a client is required to pay a fee of Taka 20.00. He is also required to buy a book of account. But in the case of RDS, a client or an investment seeker is not required to do so.
- 10. In case of secular MFIs like GB, a loanee is required to repay the 1st installment of the loan money just one week after the disbursement of the loan money whereas a recipient of investment assistance under RDS is allowed to repay the same two weeks after disbursement.
- 11. Since investment assistance under RDS is on PLS basis, the loss (if any and if it is genuine) incurred by the investment seeker may be borne by the RDS (i.e., IBBL). But there is no such provision in the case of other secular MFIs.
- 12. The RDS plays a vital role in promoting Islamic values and culture. In every weekly meeting of the center (Kendra), the field supervisors

teach the members about ethics and morality, values, norms, ideals and basic principles of Islam and their application in practice for overall human and material development. This teaching helps members to build their character and make a proper choice of their career. The pious villagers are very much attracted by this teaching of the field investigators. But there is no such religious and moral teaching in the case of other MFIs.

8. Conclusion and Policy Implication

The study presents an overview of the RDS, its style of lending or giving investment assistance, the process of distribution and collection of investment assistance without collateral and the present position of the RDS in sustainability and outreach. From the findings of the study stated in the previous sections, the following conclusions may be made:

- a) The RDS has enabled the poorest of the poor to get interest-free loan in kind without collateral and saved them from exploitation by both the formal and informal moneylenders who charge interest at a high rate. This has enabled the investment seekers to utilize their creativity to be self-employed. The most vulnerable and deprived men and women have come under the umbrella of the RDS to form a club of the poor, so to speak. It has united the poor (both men and women) and created an environment in such a way that the poor can create their own security for their existence and livelihood. The contribution of the RDS to promote indicators of socio-economic development is found satisfactory. The growth of membership, amounts of loan in kind, savings etc. show that the RDS has successfully elevated the poor.
- b) Although group-based lending is not a new one, the RDS has been successful in breaking all the previous records of loan recovery by both GOs and NGOs. The RDS has been found relatively less bureaucratic in all cases of its operation.
- c) The loans (investment assistance) provided to poor (both men and women) help to empower them since investment assistance given in kind can not be transferred to other members of the relatives and the families. But this is not always found in the case of other **NGO**s.
- d) Like the GB, the RDS has developed a broad-based loan portfolio with a view to diversifying risks. But most of its investment portfolio is related to agricultural and household sectors of Bangladesh.

- e) The RDS is not dependent on subsidized funds or foreign donations or loans like other **NGO**s including **GB**. As a result, it can run more smoothly and without fear of uncertainty relating to availability of funds.
- f) All the empirical findings relating to qualitative and quantitative indicators of sustainability and outreach prove that the RDS program is highly sustainable and effective. It is desirable from both practical and ethical points of view. It will maximize welfare both in the world here and the world hereafter since it serves the cause of both the mundane world and the cause of Allah. So, it is the best system so far as poverty alleviation is concerned.
- g) Since RDS does not depend on external sources, its operations can adopt to cater some special needs of the beneficiaries. RDS also operates a complementary support program along with micro financing to target the hardcore poverty group.
- h) RDS facilitates wealth creation of the poor through involvement in micro financing. Islamic banks are in a position to play the social role in the best possible way. The social aspect of Islamic banks can be best realized by financing the poor micro entrepreneur. Islamic banks can operate micro finance program at no extra-cost and improve economic conditions of the poor since they are predisposed to provide micro finance in a "win-win" situation. Empirical evidence of RDS of IBBL supports this assertion. However, RDS faces some transitional problems, which however, may be overcome if some effective steps are taken in time. The probable problems are highlighted and their tentative solutions are suggested below:
 - 1) The RDS has been providing investment assistance to the rural poor, especially women. These women have limited skill in entrepreneurship, marketing and distribution processes. The poor people living in urban areas have more skill in marketing and distributing the products but they are not eligible for investment assistance. The excessive biases cannot solve the real problem. Therefore, a satisfactory combination of male and female members as well as urban and rural poor may be more appropriate than the present one.
 - 2) The present target base is determined on the basis of land holding of less than half an acre. If the RDS increases this limit of half acre to one acre, it may increase the target base, which will enable more

people to join the RDS, and in the process, its overhead costs will also fall.

- 3) Relying primarily on the credit demand of poorly educated entrepreneurs may be too costly for the RDS if the investment seekers of the RDS find it difficult to switch over to more growth-oriented activities. The RDS should find out the field of investment in technology sectors in stead of agriculture. The diversification of portfolio in technology and raising the income of the poor may help the RDS to generate revenues and at the same time become more sustainable.
- 4) Heavy pressure on field supervisor to collect and distribute investment assistance may make them reluctant in overseeing utilization of the investment assistance. The number of field supervisor should be increased and necessary measures for rewarding honest and active field and branch level workers including the FS should be undertaken on a priority basis. The job of most of the field supervisors is temporary. They want to be regularized as permanent employees with higher salary and allowances. It is alleged that most of them are not regarded as a bank employee. The regularization of FS as permanent employee will give them incentive to work more sincerely and effectively.
- 5) The recipients of investment assistance often complain that the amount of investment assistance in general and the allocation for sanitary latrine are not adequate.
- 6) Till now, only one mode of investment (Bai-Muazzal) is practised. IBBL should taka initiatives to practice other modes of investment as well.
- 7) The RDS should be integrated with the IBBL mainstream banking, as a regular program and a separate department of the bank should be established with regular staff to deal with the RDS on a permanent basis.
- 8) The program should be replicated by other Islamic banks of the country and by Islamic banks in other countries of similar nature for resource mobilization and poverty alleviation. The secular MFOs, too, should derive lessons from the experience of RDS of IBBL to improve their performance.

References

- Ahmed, Habib (2002), "Frontiers of Islamic Banking: A synthesis of Social Role and Micro finance", Islamic Research and Training Institute, IDB, Jeddah, KSA.
- 2. Ahmed, Habib (2002), "Financing Micro-enterprise: An Analytical Study of Islamic Micro finance Institutions", *Islamic Economic Studies*, 9(2).
- 3. Fuglesang, Andreas and Dale Chandler (1998), "Participation as Process Process as Growth: What we can Learn from Grameen Bank", Grameen Trust, Dhaka, Bangladesh.
- 4. Khandker, S. R., B. Khalily, and Z.H. Khan (1995), *Grameen Bank: Performance and Sustainability*, The World Bank, Washington, D.C.
- 5. Morduch, Jonathan (1999), "The Micro finance Promise", *Journal of Economic Literature*, vol. 17.

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 279-300 Bangladesh Economic Association (ISSN 2227-3182)

Promotion of Food Security, Food Safety and its Regulation

MD. ISMAIL HOSSAIN¹

Abstract

Bangladesh has made substantial progress in enhancing food security by increasing food production. The country has a comprehensive agricultural policy and has undertaken various action programmes to further enhance food security. Government has also undertaken different safety net programmes, including special programmes for dought-prone and mongaprone areas. Despite this progress, however, the food production system still faces great challenges due to population increase, climate change, soil degradation etc. This paper puts emphasis on local efforts to face these challenges but at the same time suggests that better food security can be attained by regional cooperation, sharing of mutual knowledge and experience, and a joint approach towards weather and flood forecasting and disaster management. The paper notes that food safety is now increasingly becoming a matter of great concern, for which new food safety of regulating need to be undertaken. The paper has put forth a number of recommendations for further improving food security, formulating an effective safety policy and food laws of international standard, quickly enacting a Consumer Protection Act, and for constant monitoring of food safety practices.

1. Introduction

Bangladesh is predominantly an agricultural country. It plays a significant role in the overall economic development of the country. The Bangladesh Government has identified agriculture and rural development as the topmost priority sectors for

^{1.} Member-Dinector (ag. Econ), Bangladesh Agricultural Research Council (BARC), Dhaka.

rapid poverty alleviation. With about 21.11 percent of GDP contributed by agriculture (crops 11.72%, fisheries 4.73%, livestock 2.90%, and forestry 1.76%) and another 36 percent by the rural non-farm sector, the rural economy as a whole contributes more than 60 percent of the total GDP. Agriculture generates two-thirds of total employment, contributes 7.34 percent of total export earnings and provides food security to the increasing population. Bangladesh made a significant progress in cereal production in the last two decades. Cereal production has increased from 11.00 million tons in 1971 to almost 30.00 million tons in 2007. Ninety-eight percent of food comes from agriculture (MOF, 2008).

Food security describes a situation in which people do not live in hunger or fear of starvation. It is an access to food by all people at all times for a healthy life. The access is possible either through production in own land or purchase from the market. The latter depends on the purchasing power, which is determined by the jobs and income of the people.

Ensuring food security for all is one of the major challenges that Bangladesh faces today. Despite significant achievements in food grain production and food availability, food security at national, household and individual levels remains a matter of major concern for the Government. Ensuring food security for all requires a major effort at enhancing access to food through sustainable development of agriculture and subsequent utilization of food by the poor and distressed households.

2. Food Security Situation in Bangladesh

Bangladesh has made substantial progress in increasing food grain production over the last two decades. The country has made good progress in increasing rice production through technological progress, facilitated by private sector investment in small scale irrigation. Crop sub-sector contributed more than 11.72 percent to the GDP in 2006-07. Crop production in Bangladesh is being transformed from subsistence farming to commercial farming. Most agricultural production is still concentrated on a limited number of crops, with rice accounting for about 79 percent of total cultivated area. Other major crops include wheat (5%), jute (3.2%), pulses (3.4%), sugarcane (1.2%), and oilseed (3%). High value crops include vegetables, fruits, spices and potatoes.

The upsurge in cereal production has enabled the country not only to minimize the food requirement gap but also attain a modest surplus of cereals in recent years, although year to year fluctuation in production necessitates occasional food imports. A significant increase has occurred in maize production, from 1.17 lakh

metric tons in 2003-04 to 13.46 lakh metric tons in 2007-08. Besides, production of vegetables rose by almost 25 percent a year since the mid-seventies but the production of oilseeds and pulses has sharply declined since 2004-05, which is shown in Table 1.

Government programme to increase production of non-rice crops, especially highvalue crops (vegetables and fruits) will be further intensified and diversified in accordance with the market growth. The production of sugarcane and cotton has

Crops 2002-03 2003-04 2004-05 2005-06 2006-07 2007-08 Rice (lakh mt) 251.87 261.90 251.57 265.30 273.19 289.31 15.07 Wheat (lakh mt) 12.53 9.76 7.35 7.37 8.44 Maize (lakh mt) 1.17 2.41 3.56 5.22 9.02 13.46 Potato (lakh mt) 33.86 39.08 48.56 41.61 51.67 66.48 Pulses (lakh mt) 3.49 2.79 2.05 3.33 3.16 2.71 Oil seeds (lakh mt) 3.68 4.06 11.80 5.95 6.25 6.42 49.52 65.31 57.32 Vegetable (lakh mt) 56.22 69.67 86.85 Spices (lakh mt) 10.00 11.82 4.25 6.09 14.05 13.68 **Total** 362.91 385.62 403.72 397.36 433.93 486.69

Table 1: Production of different food crops during 2002-03 to 2007-08

Source: Bangladesh Bureau of Statistics, 2008; Bangladesh Economic Review, 2008

increased to 3.59 million metric tons and 77.50 bales, respectively. Potato production has increased from 9.03 lakh ton in 1981 to 66.48 lakh tons in 2007-08. The country is nearly self-sufficient in potato production (MOF, 2007).

Fish production increased from 1.17 million tons in 1994-95 to 2.44 million tons in 2006-07. Fish sub-sector contributed 4.07 percent to GDP and 4.9 percent to the export earnings. Fish provides about 58 percent of the total animal protein intake of the country. Meat, milk and egg production has also increased from 1.78 million tons, 0.75 million tons and 4094 million no. in 2000-01 to 2.28 million tons, 1.04 million tons and 5369 million no. in 2006-07, respectively (MOF, 2007).

Food aid from the development partners plays a vital role to meet the food requirements of the country. During the FY 2005-06, 194 thousand metric tons of food grains (rice and wheat) was received from abroad as food aid.

2.1 Conditions of Food Security

Food Security needs to be achieved at four levels, that is, i) National, ii) Regional, iii) Household and iv) Intra-household levels. The challenge for Bangladesh is to

increase production to feed the increased number of population. It follows the following conditions:

•Ensuring adequate domestic supply • Price stabilization • Ensured accessibility of the poor to feed • Development of adequate buffer stock • Efficient food distribution mechanism through infrastructure development and • Getting adequate nutrition from food intake

2.2 Access to Food

Access to pure food is a necessary corollary of right to life. Every human being has a right to get pure food for his consumption. Every state should provide a comprehensive law for the safety and purity of food. Pure and unadulterated food should be made available to every person, irrespective of his caste, creed, religion, race and nationality.

Poor people's access to food has improved over the years due to increased availability of food, rise in average household income, growth in rural infrastructure, diversification of non-farm income sources and expansion of social safety net programmes of the Government. However, a vast majority of the poor, particularly the vulnerable groups such as urban slum dwellers, small and marginal farmers and rural landless wage labourers still have limited access to food due to rising prices of food commodities, lack of purchasing power, lack of necessary assets, and inadequacy of food safety net programmes in some pockets.

2.2.1 Social Safety Net Programme

To bring the poor people under social safety net, the current important programmes in the country are: Food for Works (FFW), Test Relief (TR), Vulnerable Group Development (VGD), Vulnerable Group Feeding (VGF), Old age and widow allowances, Maternity allowances for the poor, Char livelihood projects etc. These programmes provide food security as well as employment opportunity to the poor. In addition, sufficient self-employment in the country is being created through micro credit programmes at government and non-government levels, training from youth development training centers etc. In the FY2008-09 budget, a 100-day employment generation programme was undertaken for the rural extreme poor, especially for the capable unemployed people in specific areas of the country where people remain unemployed during March-April and September-November. For the purpose, government approved a budget of Tk 2000 crore (Tk 20,000 million).

2.3 Nutrition Status

Although Bangladesh has achieved a remarkable progress in domestic food grain production since its independence in 1971, there is still prevalence of endemic poverty and widespread malnutrition. Per capita availability of energy has increased from 2069 calorie in 1992 to 2489 calorie in 2003-04. About two-fifths of the country's 148 million people are calorie poor, consuming less than 2122 kcal per capita per day, while one-fifth of the population are hard-core poor who consume less than 1805 Kcal per capita per day (BBS, 2008).

The current intake per capita of animal protein is less than 2 gm per day against the recommended 28 gm per day. Similarly, domestic milk production accounts for only 14 percent of the minimum requirement. Milk availability per capita is approximately 30 ml per day against the recommendation of 250 ml. The demand for food of animal origin and protein will increase at a higher rate because of their high income elasticity.

The Government adopted the National Food and Nutrition Policy in 1997 as a follow-up to the International Conference on Nutrition (ICN-1992) for improving nutritional development policies and programmes, improving food security down to the household level, and protecting consumers through improved food quality and food safety.

2.4 Action Taken by the Government

2.4.1 Major Policies and Strategies

Bangladesh Government has taken different policies, which emphasized intensification of cereal production, diversification of high value crops, processing of agricultural products, and raising the production of fishery and livestock products. Poverty Reduction Strategy Paper (PRSP) has placed special emphasis on technological advancement, including new technology (biotechnology, hybrid seeds, genetic engineering), by increasing investment in agricultural research and strengthening the capacity of National Agricultural Research System (NARS) and through fortifying agricultural research-extension linkages.

National Food Policy (NFP), 2006 has declared its overriding goal of ensuring a dependable sustained food security system for all people of the country at all times. The Ministry of Fisheries and Livestock has prepared National Fisheries Strategy to give specific direction to the specific fish areas.

2.4.2 Fish Act And Ordinance

There Are Acts, Laws and Rules for Conservation of Safety and Quality Exportable Fish and Fisheries Product. These Are: The Tank Improvement Act, 1939; The Bangladesh (The Then East Pakistan) Protection and Conservation of Fish Act, 1950; The Marine Fisheries Ordnance, 1983; The Fish Feed Fish Products (Inspection and Quality Control) Ordinance, 1983; The Private Fisheries Protection Act, 1989; and National Fisheries Policy, 1998.

2.4.3 National Agriculture Technology Project (NATP)

GOB approved the National Agricultural Technology Project, which started to be implemented from the 2007-08 financial year. The overall objective of this project is to support GoB's strategy to improve national agricultural productivity and farm income with a particular focus on small and marginal farmers. The objectives will be achieved by increasing the efficiency and effectiveness of agricultural research and extension systems and by strengthening farmers' market linkage. Technology transfer is also an important part of the project.

2.4.4 Krishi Gobeshana Foundation (KGF)

Bangladesh government has formed a Krishi (Agriculture) Endowment Trust through Krishi Gobeshana Foundation with a seed money of Tk 350 crore (3500 million) for research work in agriculture sector. Government is giving subsidy for fertilizer, diesel and electricity to farmers for farming activities. For FY 2008-09, government approved Tk 4285 crore (42,850 billion) for that purpose.

2.4.5 Action Plan on Major Crops

Twelve action plans on major crops have been taken, among which initiative has been taken to implement rice and pulses action plan in the 1st phase (2007/08 - 2009/10). Under the programme, quality seeds of modern varieties of rice and pulses will be produced and transferred at farm level. Improved technology will be demonstrated at farm level, and farmers will be trained on modern technology. An additional 51.01 lakh mt of rice and 0.80 lakh mt of pulses will be produced with improved technology.

2.4.6 Fertilizer Use

Optimum fertilizer dose and schedule for crops and cropping systems have been worked out to ensure the use of balanced plant nutrients at farm level. A fertilizer recommendation guide has been updated and prepared. Water requirement of crops has been determined and irrigation schedule for crops and cropping systems

in different AEZ have been developed. Buried pipe and fita pipe (polythene pipe) water delivery system have been introduced at Barind and Tangail areas to reduce the cost of irrigation and to enhance the water productivity.

2.4.7 **AEZ Map**

A map of the country delineating 30 AEZ based on physiography of soil, period of crop growth, and long term agro-climatic data has been prepared. Soil and land resource utilization guide for 459 upazillas have been prepared and is in use for location specification fertilizer application.

2.4.8 IPM and ICM

Integrated pest management (IPM) and integrated crop management (ICM) programmes are being implemented by DAE at farm level through IPM club to reduce cost of inputs, lessen environmental pollution, and avoid problems of pesticide residue.

2.4.9 Dissemination of Hybrid Rice Seeds

Actions have been taken to introduce hybrid rice variety at farm level during boro season (winter rice) through the active participation of NGOs and private sector seed enterprises. Private sectors are encouraged by MoA to produce hybrid rice seed locally. Technical supports and training have been provided to the private sector by MoA, SCA (Seed Certification Agency), BARC (Bangladesh Agricultural Research Council) and BRRI (Bangladesh Rice Research Institute). About 4000 mt of hybrid seeds is being produced locally through private sectors.

2.4.10 Leaf Colour Chart, Guti Urea and Drum Seeder

Steps have been taken to introduce leaf colour chart, gutti urea and drum seeder for cultivation of rice to optimize the use of fertilizer and timely establishment of rice crop. Programme has been taken to increase the truthfully labeled seeds (tls) of rice from 77,664 mt in 2005-06 to 1,79,185 mt in 2010-11 by BADC, DAE and private sectors. Specific actions have been taken for the poor to gain access to the fisheries resources and enable them to benefit from advice, access, resource distribution and credit.

2.4.11 Bio-technology

Crop improvement through biotechnology has been initiated recently. The research institutes initiated the research and development of GM crops through their planned research programme. Bt4 gene transferred in egg plants and trials are conducted (14 Bt4 varieties) under confined field conditions. Identification of

appropriate antagonistic fungus (*Trichoderma viridii*) for inhibiting the soil fungus is also a good example of biotechnological development in research and extension. The NARS institutions developed biotechnological laboratory for conducting demand-led biotechnological researches. Bio-safety measures have also been taken up for biotechnology research and development activities in Bangladesh.

2.4.12 Plant Genetic Resources

The genes in existing plants, domesticated and wild, improved varieties and land races, indigenous and exotic, are the plant genetic resources (PGR) from which breeders extract the traits essential for new varieties. A national Plant Genetic Resources Centre (PGRC) has been established under BARI, Gazipur to extend the collection of PGR to include endangered species and non-commercial species used locally for traditional cures, foods and other purposes.

2.4.13 Agribusiness Development

Agribusiness development through group marketing and consumer cooperatives approach have been significantly improved in rural areas fostering the improvement of livelihoods of the rural households, especially the poor and the extreme poor. The poor and the extreme poor are involved in business services (retailer, vegetable collector, mobile vendors etc.) for improving their livelihoods due to the promotion of high value crops and introduction of group marketing in rural areas. The development of wholesale markets (27 markets have been constructed) under different projects like NCDP (North-West Crop Diversification Project) is also fostering the agribusiness opportunities in the rural areas involving the rural poor women.

2.4.14 Support in SIDR Area

In the recent flood and SIDR affected areas, the government has undertaken extensive programmes for increased production through inputs and credit distribution. The participation of Government delegates, scientists, NGOs, extension workers and farmers was tremendous during the period. This resulted in bumper production of boro rice (winter rice), potato, maize and wheat in those areas.

2.4.15 Special Programmes

For employment generation and livelihood changes, government has taken special programmes in hilly areas, drought-prone areas, Barind tract, char land, monga-prone areas, haor-baor and coastal belt with appropriate technological support.

2.4.16 Credit Support

For the increase in production of non-rice crops like pulses and oilseeds, government has given credit facilities at the interest rate of 2 percent. The commercial banks have played an important role in this regard.

2.4.17 Safe Fish Supply in the Market

Formalin is used for preservation and marketing of some fish species. But formalin is harmful for human health. Government has given emphasis to the supply of hygienic and safe fish in the domestic market of the country. Government has also extended various supports to the growers and exporters. For this reason, the use and sale of formalin preserved fish has come down greatly in the markets.

3. Opportunities for Increasing Food Production

3.1 Input Use Efficiency for Productivity Enhancement

In order to reduce the cost of production, an efficient use of input management is important at farm level. In order to improve the input productivity, application of urea super granule (gutti urea), alternate practices of irrigation to enhance water productivity, use of good quality seed, and integrated pest management practices have been introduced.

3.2 Yield Gap Reduction

A large gap (26-60%) exists in crop yield between research station and farmers' field. Crop production in the country may be increased if the yield gap is minimized by addressing farmers' socio-economic constraints related to HYV cultivation, improving farmers' knowledge base, input support and price support of the products.

3.3 Replacement of Traditional Varieties by Modern Varieties (HYV & hybrid)

Modern rice varieties (47) developed by BRRI occupy 70% of rice area and wheat varieties (24) developed by BARI occupy 100 percent of the area sown with wheat. Hybrid varieties of mango (BARI mango-4), maize (4 hybrids) and rice (1 hybrid) have been developed by BARI (Bangladesh Agricultural Research Institute) and BRRI. These are being cultivated by the farmers. Private sector is producing maize hybrid seeds in collaboration with BARI. These varieties (HYVs) need to be expanded in coastal and other potential areas of the country. Location specific variety and production technology are being expanded. In the

case of livestock, artificial insemination programme for dairy breed/herd has been developed.

3.4 Expansion of Irrigation Coverage

Area under the minor irrigation increased from nearly 1.6 million hectares in 1980 to about 5.0 million hectares in 2006, an annual rate of increase over 4 percent. The total irrigated area is about fifty percent of the total cultivated area. Water use efficiency is being increased for increasing the irrigation coverage of existing irrigation facilities.

3.5 Crop Diversification

Programmes are being implemented for crop diversification, availing of the existing opportunities and potentials. There is also the potential for cultivation of pulses, oilseeds, potato, onion, garlic and vegetables as intercrops with sugarcane. Different fodder crops are also included in the diversification programme.

3.6 Breaking the Yield Stagnancy of Modern Varieties by Hybrid and Super Rice

The yield of modern varieties (MVs), especially of rice, has now reached almost a stagnant level. New technologies like hybrid rice production as well as the development and adoption of super cultivars, specially of rice and wheat, need to be emphasized, which may break the stagnancy by increasing crop yield by up to 15 percent or higher over that of the existing MVs.

3.7 Adoption of Integrated Crop Production Technologies

Location specific AEZ-based production management technology packages for different crops are available. Extension personnel are now utilizing these technologies for wide scale adoption at farm level.

3.8 Quality Seed Production and Timely Supply of Seeds

Bangladesh Agricultural Development Corporation (BADC), a public sector organization, is mostly producing rice, wheat, potato, pulses, oilseeds and a small quantity of vegetable seeds. The national seed policy introduced in 1993 made provision for private sector involvement in seed production and marketing. This eased the way to fill in the gaps between the seed demand and supply. Since then the supply of quality seeds has been increasing steadily. BADC has taken up a programme to increase the production and supply of quality seeds from 13 percent to 20 percent (both public and private sector).

3.9 Integrated Nutrient Management

Farmers need to be trained and motivated to apply balanced fertilizer doses in appropriate time as per requirement of the soil and crop. Integrated nutrient management and promotion of organic manure are needed for better soil health and increased nutrient use efficiency, which will result in higher yield.

3.10 Farm Mechanization

Due to the gradual decrease of the availability of draft animal power, the use of power tiller is increasing day by day for land preparation, threshing, irrigation, transportation etc. The use of various farm powers for agro-processing and other farming activities need to be increased.

3.11 Green Manuring

Importance has been given on the use of organic manures to increase soil health as well as for getting chemical-free produce. For the purpose, programmes have been taken through DAE and NGOs for farmers' training for the preparation of compost, green manure etc. It will also reduce the dependence on chemical fertilizers.

3.12 Hill Agriculture Development

About 30,000 hectares of land are available in hill districts. Large areas of these districts have been denuded of trees due to unlawful tree cutting. As a result, topside soil has eroded, which decreases the land productivity. This issue needs to be addressed with full attention.

3.13 Bio-technology Research and Development

Biotechnology research and development on rice and other crops has already been started in BARI, BRRI, BSRI and other NARS Institutes on a limited scale. Besides, a National Institute of Bio-technology (NIB) has been established for conducting bio-technology research. Region specific crops developed through bio-technology (GMO crops) can meet the challenges of the agro-ecologically disadvantaged areas. These will expand the production base as well as livelihood opportunities for the poor.

3.14 Introduction of Improved Cropping Patterns

The crop production of Bangladesh is manly rice based. Cropping systems research has resulted in the development of a sustainable multiple cropping system, i.e., rice-rice, rice-wheat-mumgbean and rice-potato-mumgbean capable of producing 10-12 tons to a ha a year under irrigated condition. Rice-based

cropping systems should be improved through incorporation of pulses, oilseeds and vegetables.

3.15 Insect Pest Management

Training is to be arranged for improving the knowledge base of the farmers about different diseases and insects of different crops. Integrated Pest Management (IPM) system and Integrated Crop Management (ICM) system are implemented for controlling different pests through minimum use of pesticides.

3.16 Technology Transfer

Extension activities and farmers' training have been strengthened and made operative for expansion of crop varieties and technology packages.

3.17 Infrastructure Development

The increased network of rural roads and highways linked with peri-urban and rural growth centres facilitates movements of agricultural inputs and produces. Various trades, services, production and consumption are very much related with the improvement of infrastructure. Lots of roads and electricity communication have been developed in the country by the government.

3.18 Research and Technological Innovation

There has been a lot of government technological progress as evidenced by the release of 47 HYV rice varieties by BRRI, 27 varieties of wheat, 30 varieties of potato, 35 varieties of oilseeds, 32 varieties of pulses, 36 varieties of fruits and 44 varieties of vegetables, 12 varieties of spices and another 114 varieties for other crops developed by BARI and Bangladesh Institute of Nuclear Agriculture (BINA). Bangladesh Jute Research Institute (BJRI) so far released 40 varieties of jute. Besides variety development, other technological developments in respect of cropping systems, water management, fertilizer management, pest and disease control measures, agricultural mechanization and post-harvest processing were achieved. Bangladesh Livestock Research Institute (BLRI) has developed 53 technologies for animal disease control and increasing livestock production.

3.19 Emerging Commercial Agriculture

Fresh vegetables and fruits are being regularly exported to Middle-East countries and to a some extent to European markets, which earn 32.92 and 6.67 million US\$ per year, respectively. Recently potato export to Singapore and Malaysia has earned US\$ 4.42 million. Aromatic rice is also exported to Australia, Canada,

Hong Kong, Italy, Japan, UK and Middle-East countries. According to EPB sources, an amount of US\$ 7.03 million is earned every year through exporting aromatic fine grain rice.

4. Issues and Challenges

Food production of a country is often threatened and affected by a number of factors, which may cause considerable instability in agricultural production. Any inattention or negligence in addressing these factors will gradually intensify the problem and may ultimately turn the food secure country into a highly food deficit country. Factors responsible for de-stabilizing the agriculture production system and emerging issues are discussed below:

4.1 Climate Change and Agriculture

Climate change affects agriculture performance by altering the availability of water, land, biodiversity and terrestrial ecosystem services and heightens uncertainties throughout the food chain, from yields to trade dynamics. Most damaging effects of erratic behaviour of present climate and extreme events in the country are flood, drought, cold weather and heat stress that are found to adversely affect crop productivity in almost every year. About 1.32 million hectare of crop land is highly flood-prone and about 5.05 million ha is moderately flood-prone. Besides crops, perennial trees and livestock are damaged by flood every year. Drought of different intensities in kharif, rabi (winter) and pre-kharif seasons cause damage to 2.32 million ha of T. aman (Kharif-II) and 1.20 million ha of rabi crop (winter crops) annually. Yield of wheat and pulses falls significantly in the country mainly due to climate change. In the livestock sector, the poultry industry has been found to become more and more prone to HPAI infection during winter season. In FY 2008-09, Bangladesh government formed an initial budget of Tk 300 crore (3000 million) to address the problem related to climate change.

4.2 Soil Degradation

Widespread deforestation activities, cutting of hills, filling of lakes, decline of soil nutrients and organic matter, invasion of salinity and water-logging, heavy erosion of soils and riverbanks, all help accelerate soil degradation. Estimates of areas affected by nutrient depletion and other forms of degradation are about 5.6 million ha in Bangladesh. About 0.83 million ha of land is affected by salinity at various degrees.

4.3 Lack of infrastructure and power supply

It increases food production and management problems, transport and transaction costs of agricultural inputs and food commodities. It reduces the power supply to the remote sites of DTWs, STWs, LLPs, etc. installed for irrigation of cropped land.

4.4 Bird flue of poultry (Avian Influenza)

This is a serious disease for poultry industry all over the world. The Asia-Pacific region has been or is confronted with the outbreak of Highly Pathogenic Avian Influenza (HPAI). However, following the outbreaks of pathogenic avian influenza in several South-East Asian countries since late 2003 and Bangladesh in March 2007, it poses a serious threat to the poultry industry in the region and has raised a serious global public health concern. Comprehensive and well-coordinated national preparedness and response is needed in mitigating the effect of HPAI/H5NI epidemic in birds and to minimize the risk of human pandemic influenza.

4.5 Global warming and sea-level rise

The forecasts of inundation of vast low lying coastal areas of Bangladesh resulting from global warming and sea-level rise are major threats to our existence. Such problem may make Bangladesh's existing food security uncertain through destabilization of its coastal agriculture and reduction of base assets.

4.6 High population growth and land scarcity

These are also the important limiting factors to the establishment of a viable food security system in the developing countries like Bangladesh. To sustain food security for the ever increasing population of Bangladesh like other land-scarce South Asian countries would need to increase food production many folds by the year 2020.

4.7 Pest infestation

Pest infestations are widespread in South Asian agricultural countries. They cause considerable damage to and account for about 25 percent loss of food grains in fields and storages. Frequent pest-attacks reduce production growth rate and cause fluctuations in food production trends.

4.8 Upstream withdrawal of water

Upstream withdrawal of water from the rivers originating in the Himalayan regions and flowing through India and Bangladesh into the Bay of Bengal, is

causing gradual desertification, salinity invasion and wiping out of the vast mangrove forest of Sundarbans and promoting natural imbalance in Bangladesh. Such ecological disturbances will contribute to instability of agricultural production and hence food insecurity.

5. Regional Cooperation for Food Security

Food security requires collective approaches and resources at regional and international level. Most of the developing countries are individually deficient in resources and necessary infrastructure. It would be extremely difficult for them to act individually to make a breakthrough in their own agricultural production with own resources and prepare a strong base for viable food security system.

The valuable networks like SAARC can be effectively utilized for supplementing facilities for attaining food security. The problems and concerns of agriculture are very similar in nature in many countries. These can only be solved through regional cooperation, integration of resources, sharing of knowledge and experience, exchange of new technology including quality seeds, exchange of germplasm, scientific materials, use of ICT in agriculture, education and human resources development, developing new varieties, hybrids and breeds, natural resource management techniques, biotechnology, weather and flood forecasting and disaster management, common data standard for GIS, etc. The decision on SAARC Food Bank should be in operation during emergency and shortage period of food requirement of the country.

South Asian countries will be the most adversely affected region by climate change and global warming. Most of the region will experience drought, heavy rains, floods and salinity in changing environment. To face the problems induced by climate change, a common fund may be created and adopted for common work plan for the management of agriculture among the developing countries. A dynamic water policy strategy should be adopted for sustainable and equitable use of natural water resource, specially sharing of river water.

6. Food Safety and Quality Food Supply

Food safety, an important public health issue, has been a concern of all governments and public authorities. This has assumed further importance as foods are now obtained from diverse sources. Food safety is interlinked with food security and is inferred that all people at all times need and deserve to get safe and nutritious food to maintain a healthy and active life.

Food safety is also an important global issue with international trade and public health implications. Food quality assurance is needed not simply for export, but also for supplying safe food to the domestic consumers.

Bangladesh is a signatory to the Sanitary and Phytosanitary (SPS) measures and the Technical Barriers to Trade (TBD) Agreements under the World Trade Organization (WTO), and also a member of the Codex Alimentarius Commission - bodies to ensure the supply of safe food. Priority may be given to assessment and prevention of risks involved in the distribution of safe food along the entire channel from production to consumption.

It is important to maintain certain standards so that consumers are satisfied with what they consume in terms of their quality, standard and hygiene. Food safety situation in Bangladesh is very much precarious. Bangladesh is yet to develop a unified food safety policy, a unified food safety administrative system and a unified food safety law.

6.1 Policy Linkages

Food Safety in all stages of the food chain, that is, from farm to table has been focused with due importance in all the relevant policies of GOB. The policies are-

• Bangladesh Environment Policy • Bangladesh Food and Nutrition Policy 1997 and NPAN 1997 • Bangladesh Food Policy 1988 • Comprehensive Food Security Policy 2001; • New National Food Policy 2001(draft) • National Agriculture policy and • Bangladesh Health Policy.

6.2 Efforts by NGOs

A wide range of activities on food safety awareness are being undertaken by a series of NGOs as follows-

- Consumers Association of Bangladesh (CAB)
- Bangladesh Paribesh Andolon (BAPA)
- DOSHER Bangladesh, etc.

6.3 SAARC Initiatives

SAARC member states have recently identified food safety as a topic of priority concern to ensure that both consumers and smallholder farmers in SAARC countries duly benefit from food trade and also to prevent farmers from marginalization due to food safety concerns in the process of globalization.

SAARC Food Security Reserve Board (SFSRB), at its 9th Meeting held in Islamabad in December 2002, urged the member states to consider harmonizing food laws, regulations, standards, quality control system, and control mechanism to facilitate maintenance of food safety for enhancing food trade.

6.4 Training and Human Resource Development

Training and human resource development should be targeted for i) food inspectors, ii) food scientists and analysts, iii) policy makers, iv) microbiologists, v) public health physicians, vi) food technologists, vii) serial librarians and documentation officials, viii) food law experts etc.

6.5 Conformity Assessment Infrastructure

Adequate testing facilities including microbiological and safety parameters analysis should be developed from farm to production. Cleaning, grading, testing, standardization, packing, storage, labeling and marketing based on well documented principles of good practice, HACCP, and scientific storage should be encouraged at farmers' level so as to promote direct integration of food processing units with producers.

6.6 Food Safety Database

Adequate data should be generated for pesticide residues, toxic metals in different food crops for use in risk assessment work, for ensuring consumer's protection and for harmonization of standards with that of safety standards under Codex.

Surveillance programme should be undertaken to collect more precise information about the incidence of food borne illness, especially illness caused by chemical and microbiological poisoning.

6.7 Awareness Building

Education, awareness and training through manuals, material, and practical demonstration as a priority to regulatory measures should be given to farmers, food processors, government regulators, policy makers, vendors and other persons involved in the system for compliance.

Adequate knowledge and guidance should be available to farmers for strict application of good agricultural and marketing practices for their food crops, and programmes to educate consumers about food safety should be launched.

6.8 Research and Study

Food Safety Policy research should be launched in the fields of production, processing, marketing and consumption. A study of collective impact of unsafe food intake should be carried out for which a technical assistance might be sought.

7. Bangladesh Food Safety Laws and Regulations

There are several laws in Bangladesh for maintaining health and safety standards. One should have a minimum knowledge of these laws so that the related official legal documents for health and safety in the past, present and future, can be better understood. The laws are listed below:

- The Bangladesh Pure Food Ordinance, 1959
- The Bangladesh Pure Food Rules, 1967
- The Food Grain Supply (Prevention of Prejudicial activity) Ordinance, 1956 (Ord. xxvi of 1979)
- The Iodine Deficiency Disorders (IDD) Prevention Act, 1989
- The Essential Commodity Act, 1990
- Fish and Fish product (Inspection and Quality Control) Rules, 1997

In addition, a number of other Laws and Regulations exist in the country to ensure safe and quality food, viz.:

- The Animal Slaughter (Restriction) and Meat Control (Amendment) Ordinance, 1983 (it is under revision)
- The Pesticide Ordinance, 1971 & the Pesticides Rules, 1985
- Destructive Insects and Pests Rules (Plant Quarantine), 1966, amended up to 1989
- Agricultural Products Market Act, 1950 (revised in 1985)
- Fish Protection and Conservation Act, 1950 (amended in 1995)
- Marine Fisheries Ordinance 1983 and Rules, 1983
- Fish & Fish Products (Inspection & Quality Control) Rules' 1997
- The Food or Special Courts Act 1956
- The Pesticides Ordinance-1971 & The Pesticides Rules-1985
- Procurement Specifications, Ministry of Food, Rice Mill Control Order etc.

7.1 The Bagladesh Standards and Testing Institution Ordinance, 1985

This ordinance relates to the establishment of an institution for standardisation, testing, metrology, quality control, grading and marking of goods. Within the framework of this ordinance, the government has established the Bangladesh Standards and Testing Institution (BSTI). One import task of this organisation is to certify the quality of commodities, materials, whether for local consumption or for export and import. The Ordinance was amended as The Bangladesh Standards and Testing Institution (Amendment) Act, 2003.

7.2 Quality Assurance

Food quality assurance is needed not simply for export, but also for supplying safe food to the domestic consumers. To this end, a country should have a National Food Safety and Control system.

The government should promote Good Agricultural Practice (GAP) in production and in supply chain management and also Good Manufacturing Practice (GMP) in food process against contamination, growth of pathogens or fungi. Sanitary and Phytosanitary (SPS) measures should be ensured during production, processing and marketing. Quarantine services should also be strengthened to meet the needs of both domestic and export market.

7.3 Setting Food Standards

It is necessary to promulgate standards of food related to their physical, chemical and other characteristics, including recommended steps in production practices to avoid contamination of food.

7.4 Coordination Among GOB Organizations and GO-NGO Activities

- Domestic harmonization of activities, procedures, method of testing etc. among the GOB agencies are very much required in the first place.
- A national commitment and the collaboration of all ministries concerned with health, agriculture, finance, commerce, food, industry, municipality and concerned NGOs are to be ensured.

7.5 Law Enforcement

• The laws in place should be implemented with full force and hurdles in implementing the existing laws against adulteration should be eliminated.

8. Conclusions and Recommendations

8.1 Conclusions

- Bangladesh has made substantial progress in enhancing food security by increasing production of rice, wheat, maize, potato and vegetables, improving infrastructure, making food delivery to the poor more efficient and liberalizing agricultural inputs.
- Bangladesh government has also given importance to increase production of non-rice crops, especially high-value crops in accordance with the market growth. Fish, meat, milk and egg production has also increased significantly over the last ten years.
- The government has comprehensive agricultural policy with region specific technology intervention and different national action programmes. Poverty Reduction Strategy Paper (PRSP) has placed special emphasis on technological advancement, including new technology (biotechnology, hybrid seeds, genetic engineering), by increasing investment in agricultural research and strengthening capacity of National Agricultural Research System (NARS) and fortifying agricultural research-extension linkages.
- Inspite of the progress, the food grain production system is facing great challenges due to increasing population, climate change, soil degradation and decreasing agricultural land, bird flue of poultry (Avian Influenza), pest infestation and depleting natural resource base.
- The Government has taken different social safety net programmes and has also taken special programmes for hilly area, drought-prone area, Barind tract, char land, monga-prone area, haor-baor and coastal belt with appropriate technological support.
- Food security can be attained only through regional cooperation, integration
 of resources, sharing of knowledge and experience, exchange of germplasm
 and new technology and scientific materials, education and human
 resources development, providing strategic infrastructure and technical
 support, GIS, biotechnology, weather and flood forecasting and disaster
 management, post-harvest technology, agro-processing, ICT etc.
- Food safety is an important global issue with international trade and public health implications. It is needed not simply for export, but also for supplying safe food to the domestic consumers. Food safety has been a concern of the present government with necessary policies and measures.
- The government has undertaken new food safety regulations by proper amendments of the existing ones and through encouraging the private sector initiatives.

8.2 Recommendations

- For increased production, farmers should have easy access to quality seeds, fertilizers and credit support with improved cultural practices in their fields.
- Biotechnology, plant protection measures, crop diversification as well as agricultural diversification with improved technology to the farmers are very important for sustainable agriculture development.
- The government should ensure development of trade-supportive and market-friendly regulatory environment to improve market structure and encourage increased production.
- A comprehensive and unified food safety policy should be formulated, a
 unified administrative system should be established, and a unified food
 safety law should be enacted.
- Food ordinances, food regulations and other relevant Acts should be updated from time to time in view of the changing requirements arising out of scientific and technical developments.
- There should be harmonization among the provisions of laws, rules, regulations and standards.
- For quality assurance, the government should promote Good Agricultural Practice (GAP) in production and in supply chain management. Sanitary and Phytosanitary (SPS) measures should also be ensured during production, processing and marketing.
- Food laws and regulations should accommodate international standards by adopting the guidelines and practices of CAC, HACCP, SPS and TBT.
- A national food control agency should be established.
- Consumer Protection Act, Feed Act etc. should be enacted as early as possible.
- Food production should be monitored along its every step. Food safety practices should be inspected from the farm to the dining table. Management of food safety practices should be undertaken from the beginning of the supply chain i.e. the producer to the end of the supply chain i.e. the consumer.

References

- Asaduzzaman, M. 2003. "Food Safety, Standards and Implications for Bangladesh Trade". Paper presented at the Agri-Invest 2003, Bangladesh, December 3-5, 2003.
- Asaduzzaman, M. 2007. "Food for All: A Right based Approach in Bangladesh Perspective." Keynote paper presented at the seminar on World Food Day at the BARC, Ministry of Agriculture, GoB, 16 October 2007.
- 3. BBS. 2008. Statistical Yearbook of Bangladesh. Government of Bangladesh: Various documents.
- 4. GoB. 2006. *National Food Policy 2006*, Ministry of Food and Disaster Management, Dhaka.
- Islam, S.M.Fakhrul. 2007. "Food safety measures of Bangladesh: policy framework, regulatory system and constraints". Symposium on Bio-Secure Agriculture in Bangladesh: Current Status and Policy Issues. BIDS-FAO, Dhaka, 24 June 2007.
- Mandal, M.A.S. 2000. "Food security and nutrition mapping in Bangladesh: lessons learned and tasks ahead". A paper presented at the National Workshop on Food Security and Vulnerability Information and Mapping System (FIVIMS). Bangladesh Institute of Research and Training on Applied Nutrition, Dhaka.
- MOA. 2004. Report of the National Task Force on Food Safety Bangladesh for FAO-WHO Regional Conference on Food Safety for Asia and the Pacific Seremban, Malaysia, 24-27 May 2004.
- 8. MOF. 2004. Report of the Working groups for Harmonization of food safety laws, regulations, control system, control mechanism and standards for facilitating food trade among the SAARC countries.
- 9. MOF. 2008. *Bangladesh Economic Review*. Ministry of Finance, Government of Bangladesh.
- Rahman, M.M. and S.I.Khan. 2005. "Food Security in Bangladesh: Food Availability". Food Security in Bangladesh. Paper presented in the National Workshop, GoB and WFP, Bangladesh, 19-20 October 2005.
- Rouf, Abdur. 2004. "Enhancing Certification System for Better Marketing," Country paper prepared for APO Seminar to be held in Tokyo, Japan, January 2004
- 12. WFP. 2004. *The Food Security Atlas of Bangladesh*. World Food Programme, Dhaka. World Bank. 2006. *Social Safety Nets in Bangladesh: An Assessment*. Bangladesh Development Series Paper No. 9. January 2006.

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 301-316 Bangladesh Economic Association (ISSN 2227-3182)

Management of Primary Education In Bangladesh: Issues for Achieving The Impossible!

M. Kamal Hossain¹ Abu Hena Morshed Zaman² Md. Nuruzaman³ Mahbuba Farjana⁴

Abstract

Planning education is Bangladesh is mainly administered by the Ministry of Primary and Mass Education (MOPME). The Ministry has 5 different offices to supervise primary education; these are Directorate of Primary Education (DPE), Compulsory Planning Education Implementation Monitoring Unit (CPEMU), Bureau of Non-formal Education (BNFE), and National Account for primary Education (NAPE). The present hierarchical structure of primary education in Bangladesh indicates that policy decision and implementation process consumes enormous time, which delays the outcome. In order to manage these mammoth institutions every year government allocates nearly 15 percent of the national budget to the education sector of which the share of primary and mass education is nearly 60 percent. At present a donor-aided project named Second Primary Education Development program (PEDP-II) is running under MOPME to ensure quality of primary education in Bangladesh. But with the above initiatives and incentives Bangladesh primary education faces many problems and challenges to achieve "Education for All" commitment by 2015. To overcome these challenges special emphasis would be given to the recruitment, training and management of teachers, creating physical facilities, improvement of curriculum, monitoring and supervision and coordination. A

¹ Director, Bangladesh Public Service Commission Secretariat.

² Additional Deputy Commissioner, Deputy Commissioner's Office, Dhaka.

Monitoring Specialist, LGI Capacity Building Project, National Institute of Local Government (NILG) Dhaka.

⁴ Deputy Director, Bangladesh Public Service Commission Secretariat, Dhaka.

comprehensive strategy may speed up the journey towards quality primary Education for All by 2015. Government can explore the potential instruments that fit into the integrated strategy and need to aptly navigate in achieving this goal.

1. Introduction

Primary education is one of the major sectors which can play a significant role in overcoming national development barriers. In developing countries in particular, long-term economic growth, political and social emancipation will be fostered by an appropriately tailored primary education management system (Andaleeb, 1998). But in many of these countries primary education is still a far cry. UNESCO report indicates that some 75 million children, 55% of them are girls, were not in school in 2006 (UNESCO EFA Report 2009). Access to universal primary education for these out of reach children is a major challenge of the 21st century. According to United Nations (UN) Millennium Development Goals (MDG), all children (girls and boys) around the globe should be able to complete primary education by 2015.

Nowadays quality education agenda has become an international issue and draws the attention of all levels of stakeholders in order to find out the tools and techniques for the effective implementation of quality education systems (Ahmed, 2008). In a study on the quality of children's education, Mirza and Hameed (1996) argue that a realistic planning for the achievement of the cherished goal of providing equal opportunity to every child at primary level

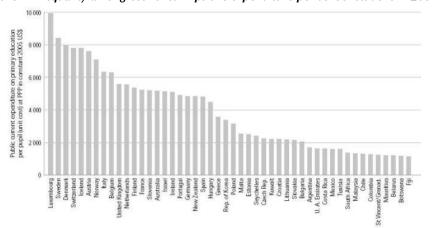


Figure 1: Inequality among countries in public expenditure per school student in 2006.

Source: UNESCO EFA Report 2009

needs to be based upon establishing cost-effective good quality primary schools for all children. In the 1990s, large-scale educational reforms were undertaken in many developed countries aimed at changing the teaching profession (Fullan, 2000) towards improved management system. Building a quality primary education system in a country also implies that government should focus on all stakeholders such as primary school management, its teachers, and the ultimate beneficiaries (Andaleeb, 1998).

Significant gaps exist between developed and developing countries in primary education management system. In developed countries, governments spend a huge amount of money to boost primary education compared to developing countries. A UNESCO survey reveals that in 2006 spending per student in primary education varied between US\$39 in the Congo and US\$9,953 in Luxembourg, (Figure 1). Therefore, it is necessary to consider the contextual management issues to bridge the gap and initiate public policy reform agenda There are many examples in the literature about the contextual management issues that need to be addressed in order to accelerate primary education in developing countries. In Pakistan, for example, low quality of education at primary level is closely related to school, head teacher, teacher, parent, and community (Saeed, 2003). In a study on shortcomings of management issues, Usman (2008) finds that ineffective communication and collaboration, poor instructional supervision and cultural insensitivity are major factors of poor performance of primary education in Nigeria. He also suggests that students may feel encouraged to attend school after adoption of the free lunch feeding policy. In many developing countries such as in Bangladesh, the education system is bifurcated, with a highly centralized and formalized government system coexisting with a range of less formal arrangements (Chaudhury, Hammer, Kremer, Muralidharan, and Rogers, 2006). The study also indicates that this centralization of education may contribute to weak accountability. It may lead to large disparities between the personnel in their responsibilities and supervision load (Andaleeb, 1998).

In developing countries it has been observed that many teaching staff hold low qualifications and limited opportunities to participate in in-service trainings (Oplatka, 2007). Also salaries and promotion are largely determined by educational qualifications and seniority, with less scope for performance-based pay (Chaudhury et al., 2006). Therefore, absenteeism, late arrival in school, escapism, shifting responsibilities to female members etc. are regular features of primary education management staff in many developing countries. In a cross-country survey, Chaudhury et al., (2006) observed that absenteeism is a major problem in developing countries, for instance in Bangladesh (Table 1). Their

study reveals that pay does have some impact on absenteeism but the role of the quality of infrastructure at the school can change the habit in a positive direction.

Table 1: Absence rate in primary schools by Country (modified from Chaudhury et al., 2006)

Country	Absence rate (%) in primary schools
Bangladesh	16
Ecuador	14
India	25
Indonesia	19
Uganda	27
Unweighted average	19

In developing countries discrimination towards female teachers in primary school is common. For example, in Turkey and Pakistan male teachers are preferred by authorities to hold educational leadership positions (Sales, 1999; Celikten, 2005). However, in many developing countries greater numbers of women are gaining administrative positions in schools (Oplatka, 2006).

Bangladesh as a developing country runs one of the biggest primary education management programmes in the world. Formal primary education in Bangladesh has a long past which started during the British colonial regime in 1854 and individual literacy activities were initiated in 1918 (Ministry of Primary and Mass

Table 2: Number of primary schools by type, teachers and enrolment in Bangladesh in 2007

Type of School	Number	er No. of Teachers		% of	Number of Pupils		% of
	of Schools	Total	Female	Female Teachers	Total	Girls	Girls Students
Govt. Primary Schools	37672	182374	91521	50.2%	9377814	4829793	51.5%
Regd. NGPS	20107	79085	25482	32.2%	3538708	1791500	50.6%
Non-regd. NGPS	973	3914	2532	64.7%	164535	81041	49.3%
Experimental Schools	54	210	82	39.0%	10097	4974	49.3%
Community Schools	3186	10060	7403	73.6%	436072	223258	51.2%
Kindergarten	2253	20874	11520	55.2%	254982	108520	42.6%
NGO Schools	229	1106	732	66.2%	32721	16515	50.5%
Ebtedaee Madrasahs*	6726	28227	2987	10.6%	947744	455761	48.1%
Primary Sections of High Madrasahs*	8920	35707	3734	10.5%	1099463	512867	46.6%
Primary Sections of High Schools*	1314	2937	1397	47.6%	450771	253325	56.2%
Total:	81434	364494	147390	40.4%	16312907	8277554	50.7%

Source: BANBEIS in School Survey Report 2007

Education, 2009). Bangladesh is one of the signatories among 155 countries who agreed at the World Conference on *Education for All* in Jomtien, Thailand (5-9 March 1990) to universalize primary education and massively reduce illiteracy before the end of the decade (UNESCO, 1990). Also the World Education Forum adopted the Dakar Framework (26-28 April 2000, Dakar) to promote *Education for All* by 2015 and to meet the collective commitments in following up the Thailand declaration. Owing to these initiatives Bangladesh has considerably achieved many successes in the area of primary education management. For example, Bangladesh is one of the few developing countries in the world to have met the UNESCO and MDG target of achieving gender parity in primary schools by 2005 which is ahead of schedule (UNESCO EFA Report, 2009). There are 81,434 primary schools of different types covering 16,312,907 students, among them around 50% are girls signifying gender parity in Bangladesh (School Survey Report 2007).

Table 3: Gross Primary Level Enrolment (%) from 1996 to 2002 in Bangladesh

Year	Gross Enrolment Rate (%)			
	Boys	Girls		
1996	97%	93%		
1997	97%	94%		
1998	98%	94%		
1999	98%	95%		
2000	97%	97%		
2001	97%	98%		
2002	97%	98%		

Source: Directorate of Primary Education, 2009

In Bangladesh the Gross Enrolment Rate (GER) in primary school is encouraging (Table 3). Over time, the enrolment rate of both boys and girls in primary education has considerably increased. Government also indentifies primary education as key to poverty reduction in their draft National Strategy for Accelerated Poverty Reduction (NSAPR) for 2009-2011 (ADB, 2008).

The Constitution also assures education for all citizens of Bangladesh. Thus, Article 17 of the constitution states, the State shall adopt effective measures for the purpose of:

a. establishing a uniform, mass-oriented and universal system of education and extending free and compulsory education to all children to such stage as may be determined by law.

At present it is anticipated that almost 2 to 3 million children are not covered by primary education despite government initiatives, such as stipends, free books, school feeding etc. (ADB, 2008). However, while Bangladesh has considerable accomplishment in primary education, it has still many management issues to be addressed towards achieving comparable global standards.

The aim of this article is to examine the present management practices of primary education in Bangladesh and identify the limitations of these practices. The article also explores perceived areas where Bangladesh may improve management practices. In order to address these objectives, this article mainly examines publicly available sources in order to explore current management practices of primary education in Bangladesh. We shall first briefly review the present management practices of primary education in the country. Then based on this assessment, barriers and challenges of primary education have been identified and presented. This paper argues that in order to overcome the management problems of primary education in Bangladesh a policy reform initiative is necessary; otherwise the essence of *Education for All* by 2015 will be thwarted. Finally, conclusions have been drawn based on the findings.

2. Management of Primary Education in Bangladesh

It is mandatory for every citizen in Bangladesh to send their children to the primary school. It may be noted that Compulsory Primary Education Act, 1990 affirms Unless there is a valid ground, the guardian of each child living in an area where primary education has been made compulsory, shall for the purpose of giving primary education, have his/her child admitted to the nearest primary education institution located in that area. But there are still many areas in Bangladesh where it is diffind tto reach children and prevent dropouts from primary schools. As mentioned earlier (Table 2), more than 81,000 primary schools of different types exist to accommodate children. Also in many areas of Bangladesh Non-governmental Organizations (NGOs) provide primary education (Chowdhury, Nath, & Choudhury, 2001). They usually offer: free and compulsory primary education for all children, free education for girls up to grade eight and free books for all children at the primary level, and stipend programmes. But there is no single education guideline for the country. Table 2 indicates that many institutions such as government, semi-government, and non-government institutions are responsible for primary education in Bangladesh. These include Ebtedaee madrasahs, experimental schools, and community schools. Also kindergartens are teaching students in the English medium but following different types of home-made syllabuses. At present, at the primary level, student-teacher

ratio is about 49:1 which is very high and the literacy rate (7⁺ years) is around 63 per cent (Ministry of Primary and Mass Education, 2009).

Primary education in Bangladesh is mainly administered by the Ministry of Primary and Mass Education (MOPME). The Ministry has 4 different offices to supervise primary education and these are Directorate of Primary Education

DPE CPEIMU NAPE

DD Office (6)

DPEO (64)

PTI (54)

UEO (495)

URC (481)

AUEO (2092)

SCHOOL (78,000)

Figure 2: Management Structure of Primary Education in Bangladesh in 2009

(Source: Directorate of Primary Education, 2009)

(DPE), Compulsory Primary Education Implementation Monitoring Unit (CPEIMU), Bureau of Non-formal Education (BNFE), and National Academy for Primary Education (NAPE). But among all DPE is largely responsible for policy planning and implementation of primary education in Bangladesh. Figure 2 illustrates present the primary education management structure in Bangladesh.

MOPME: Ministry of Primary and Mass Education

DPE: Directorate of Primary Education

CPEIMU: Compulsory Primary Education Implementation Monitoring Unit

NAPE: National Academy for Primary Education

DD Office: Office of the Deputy Director **DPEO**: District Primary Education Office

UEO: Upazila Education Office

AUEO: Assistant Upazila Education Officer

URC: Upazila Resource Centre

The present hierarchical structure of primary education in Bangladesh indicates that policy decision and implementation process consumes enormous time, which delays the outcome. It may be noted that a grass-roots level management staff needs to take at least five steps to make a contact with the Ministry. In addition to these tiers inside the DPE there are Directors, Deputy Directors, and Assistant Directors working under a Director-General, most of whom are deputed from outside the organization. In practice a top-down approach prevails in the primary education management process in Bangladesh. The centralized system of primary education signifies that there is little or no scope for variation and innovation in the management practices to adapt to local conditions (Siddiqui, 2000).

In order to manage these mammoth institutions every year government allocates nearly 15 percent of the national budget to the education sector of which the share of primary and mass education is nearly 60 per cent (Ministry of Primary and Mass Education, 2009). In fact, the State takes all responsibilities with regard to primary education such as recruiting primary school teachers, distributing free books, and stipends to enrolled students etc. Also primary school teachers have inservice training facilities, award incentives, and teacher welfare trust to improve their professionalism. At present a donor-aided project named Second Primary Education Development Program (PEDP-II) is running under MOPME to ensure quality of primary education in Bangladesh. But even with the above initiatives and incentives Bangladesh primary education faces many problems and challenges to achieve *Education for All* commitment by 2015.

3. Problems and Challenges of Primary Education in Bangladesh

In Bangladesh primary education is heterogeneous with regard to schools, curricula, teacher-students ratio, etc. (Table 2). Also teachers have different types of educational qualification and training in different sorts of schools. As a result, performance and quality of teaching significantly differs from school to school. Major management issues responsible for the existing quality of primary education in Bangladesh are discussed below:

3.1 Number of Teachers

The number of government primary schools is 37,672 (Table 2). Therefore, a law teacher-student ratio exists in Bangladesh, which is approximately 1:49. But in other developing countries, the teacher-student ratio is comparatively high. For example, in India the current average ratio is 1:42 (Premji, 2008), and in Malaysia it is 1:19 (Education Encyclopaedia, 2008). In developed countries the scenario is

different such as in the United Kingdom, the teacher-student ratio is around 1:21.6 (MacLeod, 2008), and in the US it is 1:16 (The Centre for Education Reform, 2007). In a study Premji (2008) suggests that a low teacher-student ratio has a negative impact on the quality of primary education. A low teacher-student ratio also impedes supervision and monitoring of primary education. Therefore, it is necessary to speed up the teachers' recruitment process to bridge the gap.

3.2 Physical Facilities

In Bangladesh most primary schools suffer from lack of adequate classroom facilities. In practice many schools have only 3-4 classrooms without adequate sitting arrangements. In some cases teachers do not have their own rooms. Also many schools run two shifts i.e. morning and afternoon shifts to accommodate students. As a result the contact hours for the student-teacher are limited. Moreover, primary school repair and maintenance is often controlled by government in power i.e. political interference by Members of Parliament (MPs) is a regular culture in Bangladesh. Due to lack of class room it is also observed that teachers take classes under the open sky.

In construction and maintenance of primary schools the MOPME has deployed another government ins titution named the Local Government Engineering Department (LGED), because the Ministry does not have itsown workforce. As a result, the MOPME has no administrative control over the LGED to ensure the quality and timely completion of the assigned works.

In many primary schools, other physical facilities for example playing ground, washrooms, electricity, text books, teaching aids, are limited. There is also a budget constraint to support regular expenditure at school.

3.3 Management of Teachers

Every year government recruits nearly 5,000 primary school teachers, which is inadequate in number to raise the present teacher-student ratio. The recruitment process is very extensive and administered partly by DPE and partly by the district administration. As oral test is taken locally, sometimes political interference and favouritism hinder the recruitment process. As a result, poorly qualified candidates are often selected as primary school teachers.

Poor salary structure is a major management problem in primary education. In general the salary of a primary school teacher is less than that of a lower grade clerk of government offices in Bangladesh. The primary school teacher has little social recognition. As a result well qualified people are not encouraged to become

primary school teachers. It is also observed that the people who initially join as primary school teacher are always on the look-out to change their jobs and obviously they are least committed to the students. In some cases, they are engaged in private tuition to earn extra money.

The present primary school teacher recruitment system is locality based. In Bangladesh vacant posts of primary school teachers are filled only from the permanent residents of that particular locality and, therefore, not fully on merit basis. Accordingly, in some areas less qualified candidates are selected whereas in other areas qualified candidates do not get a chance because of extreme competition. In private schools particularly in rural areas teachers are selected by the school management committee (SMC) and by and large they recruit less qualified teachers due to political and local influence.

The primary school teachers working in their own locality are habitually engaged in family affairs, local politics, and liaison with political leaders and MPs. Due to their strong political foothold, sometimes it becomes difficult for the supervisory authority to take any disciplinary action against them for dereliction of their duties.

Primary school teachers are also required to manage various local and national tasks, for instance, local bodies' elections, national elections, disaster management, voter list preparation, etc. Present compensation package and reward system are not sufficient to compensate the volume of work the teachers are required to perform. This has a negative impact on teaching students. So, absenteeism, late arrival, early departure, etc. are the common characteristics of primary school teachers in Bangladesh.

3.4 Teachers Training

To be a primary school teacher in Bangladesh there is no pre-requisite to have a degree or diploma in education. Government takes the responsibility and gives in-service training in primary training institutes (PTI) for the duration of ten months. But the trainee has to spend his or her own money, which is to some extent demoralizing training not only in pedagogy but also in subject matter because of poor recruitment. The only incentive is that after completion of the PTI training the salary is increased. A good financial package may encourage teachers to take up training seriously. It may be mentioned that government decided to start a certificate-in-education training from July 2009 and Upazila resource centres would be strengthened in order to improve in-service training (ADB, 2008).

3.5 Curriculum Development

The National Curriculum and Textbook Board (NCTB) is responsible for the development of primary education curriculum. Interestingly, NCTB is administered by the Ministry of Education, and MOPME does not have any significant role in it. The DPE does not have a voice in preparing a universal primary education curriculum for Bangladesh. In regard to curriculum development, printing, and distribution, there is virtually no coordination among MOPME, NCTB and DPE. Hence sometimes students do not get their new books at the beginning of their academic session. Also poor quality of text books demonstrates the unenthusiastic attitude of the liable agency.

3.6 Monitoring and Supervision

Primary education performance is mostly monitored by the Upazila Education Officer (UEO). It consists of simply filling of a few pre-designed forms on a routine basis. Hardly any attention is given to quality management practices of primary education in Bangladesh. Also there are schools in remote and mountainous hilly areas in Bangladesh, which are difficult to access due to limited communication. Therefore, access and quality issues need to be reviewed to consider learning needs of underprivileged groups (ADB, 2008). An effective monitoring and supervision system can improve the performance of primary education in Bangladesh.

3.7 Co-ordination

A strong bureaucratic environment around the primary education system often hinders the implementation of best practices. There is no significant interactive communication at present between policy planners and implementers of primary education. In fact the bureaucracy does not want to decentralize the primary education because it gives them the power to indulge in nepotism and corruption with regard to resources and personnel devoted to primary education (Siddiqui, 2000). It is necessary to incorporate new ideas, technologies, and opportunities to enhance the quality of primary education. There is a need for effective primary education coordination between different types of institutions and programmes within an integrated framework (ADB, 2008). In every step from physical facilities to human resource development, effective coordination can assist the efforts to achieve *Education for All* by 2015.

4. Recommendations for improving primary education management in Bangladesh

From the above discussions of primary education practices of Bangladesh it appears that as a developing country it has achievements in a few sectors for example student enrolment, gender parity, etc. However, it also has many challenges towards quality primary *Education for All* by 2015. Desired number of primary school teachers should be recruited through a quick, merit-based, and transparent system. Furthermore, the compensation package needs to be reconsidered in keeping with market needs. These initiatives will encourage better people to choose primary school as their preferred career.

An integrated curriculum is necessary to teach students at the primary level. An effective syllabus can assist a student to learn with creativity. In the primary school, the learning process should be updated with latest information, for instance real life activities, projects, computer literacy, second language, etc. Inservice training of resource persons should be designed in a useful way so that they can utilize their efficiency and experience when they come back to teaching. A formal introduction of teaching method of 'special need students', such as the physically impaired, mentally impaired etc. can help a large number of children to enrol in schools. Also a national policy direction is necessary in regard to teaching method, syllabus, and student-teacher ratio in different types of public and private schools in Bangladesh.

Measures should be taken to reduce the bureaucratic environment in the DPE. In particular, consultation and participation of primary school teachers should be encouraged in policy planning and decision-making process in Bangladesh. Therefore, decentralization of primary education management should be a foremost strategy in the way of universal primary education in Bangladesh.

Physical facilities at primary school need careful attention of government. Work place facilities, student enrichment facilities, flexible teaching hours and health and safety issues need to be appropriately taken care of.

Geographically disadvantaged areas in Bangladesh should be treated as a prioritized sector of primary education or else the education divide between urban and rural areas cannot be minimized. Present monitoring and supervision procedure should be customised and an introduction of paper-less environment may assist in developing quality education strategy in Bangladesh.

Lack of coordination among different stakeholders of primary education management is one of the major bottlenecks in achieving *Education for All* in

Bangladesh. Since more than one provider is involved, some form of coordination is necessary to manage primary education smoothly. Therefore, a comprehensive policy framework for primary education can help overcome the existing gaps.

5. Conclusions

Bangladesh runs one of the largest primary education programmes in the world. In recent times it has achieved a few significant improvements in gender parity and gross enrolment in the primary education. Government incorporates primary education in their main policy agenda (NSAPR) as an instrument of poverty reduction in the country. Primary education is free and government also provides stipends and free books, and operates school feeding programmes to encourage children to enrol in school.

Both public and private sectors offer a heterogeneous set of primary education in Bangladesh. At least 10 different types of schools are involved in teaching with different curricula. There is no particular programme for geographically disadvantaged locations and also no appropriate teaching method for students with special needs. There are also gaps in teacher recruitment, physical facilities, and in-service training. The quality of education needs to be enhanced for preventing drop-out from the schools.

Political interference sometimes hinders the effective management of primary education. A strong leadership role in primary education can help overcome the barriers. This is yet to be seen in Bangladesh. The lack of effective monitoring, compensation package and incentives often discourage teachers to attend schools regularly and to be effective in the school. Cooperation and coordination is inevitable among all stakeholders of primary education management in Bangladesh. A well-orchestrated mobilisation and campaign approach is necessary in favour of decentralization of primary education (Siddiqui, 2000).

Now more than ever before, Bangladesh is overcoming the gaps in primary education management. Government should consider the extent to which strengthening primary education can be a suitable approach to eradicate the illiteracy in Bangladesh. A comprehensive strategy may speed up the journey towards quality primary *Education for All* by 2015. Government can explore the potential instruments that fit into the integrated strategy and need to aptly navigate in achieving this goal.

References

- ADB (2008), People's Republic of Bangladesh: Preparing the Primary Education Sector Development Program, Technical Assistance Report, Project Number: 42122, November 2008, Asian Development Bank, Dhaka, available at http://www.adb.org/Documents/TARs/BAN/42122-BAN-TAR.pdf viewed on 27 January 2009.
- 2. Ahmed, N. (2008), "Emerging Systems of Educational Quality Assessment in Developing Countries", *Quality Assurance in Education*, Guest Editorial, Volume 16, Issue 2.
- 3. Andaleeb, S.S. (1998), "Delivering primary education in Bangladesh Enabling the field personnel", *International Journal of Public Sector Management*, Vol. 11 No. 5, pp. 379-396.
- 4. Celikten, M. (2005), "A perspective on women principals in Turkey", *International Journal of Leadership in Education*, Vol. 8 No. 3, pp. 207-21.
- Chaudhury, N. etl (2006), "Missing in Action: Teacher and Health Worker Absence in Developing Countries", *Journal of Economic Perspective*, Volume 20, No. 1, pp. 91–116.
- Chowdhury, A. M. R., S. R. Nath, & R. K. Choudhury, (2001), Equity Gains in Bangladesh, Research Monograph-20, BRAC Research and Evaluation Division, Dhaka, Bangladesh, http://www.bracresearch.org/monographs/equity-gains-in-ped.pdf viewed on 05/06/2008.
- 7. Constitution of Bangladesh, Article 17, available at http://www.parliament.gov.bd/ viewed on 27 December 2008.
- Dakar Declaration (2000), Dakar Framework for Action, Education for All:
 Meeting our Collective Commitments, available at
 http://unesdoc.unesco.org/images/0012/001211/121147E.pdf viewed on 17
 January 2009.
- Directorate of Primary Education 2009, Management of Primary Education, available at http://www.dpe.gov.bd/management_dpe.php viewed on January 26, 2009.
- Education Encyclopaedia (2008), Malaysia History & Background, Constitutional & Legal Foundations, Educational System—overview, Preprimary & Primary Education, Secondary Education, available at http://education.stateuniversity.com/pages/932/Malaysia.html viewed on 19 January 2009.
- 11. Fullan, M. (2000), "The return of large-scale reform", *Journal of Educational Change*, Vol. 1 No. 1.

- MacLeod, D. (2008), "Pupil-teacher ratios in schools improving, figures show",
 The Daily Guardian April 29 2008, available at http://www.guardian.co.uk/education/2008/apr/29/schools.uk1 viewed on 27 January 2009.
- 13. Ministry of Primary and Mass Education (2009), About the Ministry, available at http://www.mopme.gov.bd/Ministry_frm.htm accessed on 12 January 2009.
- Mirza, M.S. & A. Hameed (1996), Assessing learning achievement at primary level, Learning Achievement in Primary Schools of Pakistan: A Quest for Quality Education, UNESCO, Paris, in collaboration with the Ministry of Education, Curriculum Wing, Islamabad.
- 15. Niaz, A. (2008), "Emerging systems of educational quality assessment in developing countries", *Quality Assurance in Education*, Volume 16, Issue 2.
- 16. Oplatka, I. (2006), "Women in educational administration within developing Countries Towards a new international research agenda", *Journal of Educational Administration*, Vol. 44, No. 6, pp. 604-624.
- Oplatka, I. (2007), "The context and profile of teachers in developing countries in the last decade A revealing discussion for further investigation", *International Journal of Educational Management*, Vol. 21, No. 6, pp. 476-490.
- 18. Premji, A. (2008), "The importance of school education in budget 2008", available at http://business.mapsofindia.com/india-budget/2008/premji-on-school-education.html viewed on 27 January 2009.
- 19. Saeed, M. (2003), Report of the Research and Policy Dialogue on Achieving Quality in Education, Agha Khan University Karachi, in collaboration with Department for International Development (DFID), London.
- Sales, V. (1999), "Women teachers and professional development: gender issues in the training programs of the Aga Khan Education service, northern areas, Pakistan", *International Journal of Educational Development*, Vol. 19, pp. 409-22.
- School Survey Report 2007, Published in 2008, Directorate of Primary Education, Ministry of, Primary and Mass Education, Government of the Peoples' Republic of Bangladesh, available at http://www.mopme.gov.bd/pro2-SchoolSurveyReport2007.pdf viewed on 12 January 2009.
- 22. Siddiqui, K. (2000), Local Governance in Bangladesh: Leading Issues and Major Challenges, University Press Limited, Dhaka.
- 23. The Centre for Education Reform 2007, K-12 Facts, available at http://www.edreform.com/index.cfm?fuseAction=section&pSectionID=15 https://www.edreform.com/index.cfm?fuseAction=section&pSectionID=15 <a href="https://www.edreform.com/index.cfm?fuseAction=section&pSectio

- 24. The Primary Education (Compulsory) Act 1990, Act 27 of 1990, available at http://www.minlaw.gov.bd/indexin.htm viewed on 28 December 2008.
- UNESCO (1990), "World Declaration on Education for All", available at http://www.unesco.org/education/efa/ed_for_all/background/jomtien_declaration.shtml accessed on 12 January 2009.
- UNESCO (2008), Overcoming inequality: why governance matters, EFA Global Monitoring Report 2009, Oxford University Press, available at http://unesdoc.unesco.org/images/0017/001776/177683E.pdf, viewed on 18 January 2009.
- Usman, L.M. (2008), "Assessing the universal basic education primary and Koranic schools' synergy for Almajiri street boys in Nigeria", *International Journal of Educational Management*, Vol. 22 No. 1, pp. 62-73.

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 317-333 Bangladesh Economic Association (ISSN 2227-3182)

Skilled and Unskilled Labour Migration under GATS Mode 4 Negotiations and Poverty Reduction in Bangladesh

MD. MORSHED HOSSAIN¹

Abstract

The General Agreement on Trade in Services (GATS) came into force with the founding of the World Trade Organization (WTO) in 1995 as a result of the Uruguay Round negotiations. GATS provides for the 'movement of natural persons' among countries under its Mode-4, which is particularly significant for developing countries that have abundant supplies of semiskilled and unskilled lavour, which they can export to labour-short developed countries. Bangladesh is one of the participants in the global labour market as supplier of labour. Temporary Movement of Natural Persons (TMNP), i.e., mode 4 can provide it with the opportunity to send its people abroad to work and send remittances. Global liberalization in the services sector, especially allowing temporary movement of natural persons, can have a vital role in the alleviation poverty in the developing countries in general and in the LDCs in particular. When skilled personnel of a developing country work in a developed one, their incomes increase significantly. This contributes to raising the national income of the labour exporting country, although its poverty implication is not very clear. Since skilled workers were initially non-poor, it does not entail direct contribution to poverty alleviation

Liberalizing the movement of low skilled or unskilled workers from the developing countries to the developed ones is a far more secure route to general income growth and poverty alleviation in the developing countries. Because developed countries are poorly endowed with low and medium skilled people, the income increase for these people is likely to be very large, and by moving to developed countries for work they also reduce the oversupply of labour at home.

^{1.} Head of the Department of Economics, Begum Rokeya University, Rangpur.

1. Introduction

International labour migration is one of the most significant features of the recent globalization process. Nearly 200 million people or 3 percent of the world population live outside their countries of birth and world wide remittance flows are estimated to have exceeded \$ 318 billion in 2007, of which developing countries received \$ 240 billion (World Bank 2008a).

The General Agreement on Trade in Services (GATS) is a new trade agreement which came into force with the founding of the World Trade Organization (WTO) in 1995 as a result of the Uruguay Round negotiations. Now a days the negotiation under WTO framework is important for developing countries. Temporary Movement of Natural Persons (TMNP), i.e., mode 4 can provide it with the opportunity to send its people abroad to deliver services. The topic of skilled and unskilled labour migration is an important area for discussion in WTO.

Bangladesh is a big supplier of labour in the global labour market. Naturally, therefore, the remittance of workers' income has a significant role in this country.

This paper explores the scope of skilled and unskilled labor migration from developing countries like Bangladesh under GATS Mode 4 and suggests how Bangladesh will have to negotiate in the ongoing GATS negotiations in order to be able to increase the skilled and unskilled labour migration under Mode-4.

The paper contains four sections. After the introductory section, a review of the available literature has been done in the second section. The third section explains the concept of GATS Mode 4, and its implications for Bangladesh. The barriers to the movement of natural persons under Mode 4 are discussed in section 4. The findings of the paper are presented in section 5, while section 6 contains the conclusions and recommendations of the paper.

2. Literature Review

This section reviews literature concerned with skilled and unskilled labour migration under GATS Mode 4 and poverty reduction in the context of different economies.

Winters and Walmsley (2002) argued that global liberalization in the service sector, especially allowing temporary movement of natural persons, can have a vital role in the alleviation poverty in the developing countries in general and in the LDCs in particular. It has been argued that liberalizing the movement of natural persons; i. e., by introducing a temporary visa system in rich countries

permitting movement of labour up to 3 percent of the total labour force, would increase world incomes by nearly US \$ 160 billion

Major developed countries are facing changing demographic and economic trends that project an important need for increased low skilled worker participation over the next 50 years. According to a study conducted by McDonald and Kippen (2001), demographic and economic trends from 2000 to 2050 are projected to reduce labour supply in many of the major developed countries such as the United States, Australia and Germany. Reduction in labour supply is a major factor contributing to the shortage of workers in low (and high) skilled workers in these countries (South Centre, 2005).

Mc Culloch et. Al (2001) has explained impact of skilled and unskilled labor on poverty in the following:

"When skilled personnel leave a developing country for a developed one, typically their incomes are increased significantly. This contributes to raising the national income of the developing country, buts its poverty implication is not so clear. Since skilled workers were initially non-poor, it does not entail direct contribution to poverty alleviation. But if the higher incomes of these skilled workers lead to greater remittances in the developing country, there could be a positive effect. Furthermore, working abroad many facilitate individuals to acquire greater skills and these benefits would be doubled if they eventually returned home. On the contrary, liberalizing the movement of low- and medium- skilled workers from the developing countries to the developed one is a far more secure route to general income growth and poverty alleviation in the developing countries. As because, developed countries are poorly endowed with lowand medium skilled people, the income increase for these people is likely to be proportionately larger and by moving, they also reduce the over- supply of labour at home. Moreover, far more workers would potentially be affected at the less skilled than at the highly skilled end of the spectrum (Mc Culloch et. al 2001, cited in Razzaque and Raihan 2008: 183)".

One of the strongest arguments for Mode IV particularly of less skilled workers to developed countries is the forecast that in many developed countries there will be labour shortage within the next ten to twenty years. These are caused by ageing populations, early retirement policies, and young people entering the workforce at a later stage, low birth rates, and an increase in living standards leaving the local population less interested in low skilled work. Studies have shown that in most developed countries, zero immigration would mean that countries would face a

substantial fall in their labour force (MacDonald and Kippen, 2001. P. 17). The success of growth- oriented policies in developed countries will depend on a fast growing labour force of skilled workers. Without migration from labour surplus countries, developed countries will not be able to keep up with growth (Mistry, 2008).

In some developed countries, labour supply is projected to stagnate or fall in the next 10 years if present demographic trends continue. For example, Australia and Canada are likely to experience rising levels of labour force only until 2015, after which levels will become constant. For the Netherlands and Sweden on the other hand, labour supply is projected to fall after 2015. Additionally, current conditions in Germany are likely to lead to a fall in labour supply in the near term before 2015. So, the need for low skilled labour pool cannot be met entirely by domestic workers in developed countries. In short, the growth- oriented policies of developed countries will depend on a fast growing labour force that will require low skilled workers, whether provided domestically or from abroad (South Centre, 2005). Given the substantial need for low skilled workers in developed countries, LDCs may provide a good source of temporary workers. These countries as a whole are projected to have over 230 billion unemployed workers in 2010.

It is quite clear that developed countries' GATS commitments and initial offers do not include low skill occupations. Instead, many developed countries have more or less inscribed the same types of categories of high skilled workers with similar levels of liberalization commitments. However, if LDCs are urged to participate in current market access negotiations, they should do so only if benefits can be received through mode 4 commitments in low skill occupations (South Centre, 2005:8).

Razzaque, Raihan and Khatoon (2007) conclude that low-skilled and semi-skilled workers dominate the labour endowment in Bangladesh. It can be argued that liberalization in the services sector, especially allowing temporary movement of natural persons, can have a vital role in the alleviation of poverty. It has been argued that liberalizing the movement of natural persons, i.e., by introducing a temporary visa system in rich countries permitting movement of labour up to 3 percent of the total labour force, would increases world income by nearly \$160 billion (Winters and Walmsley 2002).

Razzaque and Raihan (2008) mentioned that more than 6 million Bangladeshis are working abroad. Low skilled workers are dominating the labour endowment in Bangladesh. The export of services from this country is dominated by Mode 4

exports (i.e. movement of natural persons). Bangladesh's large labour endowment, including low-skilled and semi-skilled categories, places the country's comparative advantage in exporting labour based services under the mode 4 of GATS.

Hossain (2006) concludes that for less Developed Countries (LDCs) like Bangladesh the greatest benefit of temporary labour migration is the direct impact that it can have on poverty alleviation.

Temporary Movement of natural Persons (TMNP) from Bangladesh can reduce the pressure on the acute unemployment problem of the country. Moreover, TMNP plays a vital role in poverty alleviation, in attaining a sound balance of payments (BOP) position (Ahmed and Yusuf, 2006).

Raihan and Mahmood, (2004) cited in their study that the TMNP has direct poverty alleviation impact. They also cited a study by IOM (2003) that shows that the higher the skill and education level of the overseas workers and employees, the lower their ties with the host country and incidence of sending remittances back home. About 94 percent of the Bangladeshi overseas workers are outside professional categories; they have strong ties with home and tend to send a significant portion of their remittance back to Bangladesh.

IOM (2008a: 65) concludes, that the General Agreement on Trade in Services (GATS) is seen as the most promising approach towards a broad multilateral framework to govern the mobility of skilled persons. The Mode 4 elements of the GATS can reduce the risks of a loss of scarce skilled human resources because it offers a managed approach to the temporary movement of service workers. Developing countries with the highest initial barriers to trade in services stand to gain the most from the liberalization of this type of movement. Developing countries like Brunei, China, the Philippines and Thailand and aware of this and made more commitments under Mode 4 delivery of services by "natural persons abroad" than under other Modes. Future progress requires the adoption by all parties of clear definitions and transparent regulations.

Walmsley and Parson (2005) provides further evidence of the potential gains to be made by both labour exporting and importing regions from negotiations under GATS Mode 4. They examine the impact on welfare, Real GDP and wages of Australia and New Zealand increasing their quotas on skilled and unskilled labour from the pacific island economies by 1% of the labour force. The results show that Australia and New Zealand would gain considerably from increasing these quotas through GATS Mode 4. Although most of the negotiations have focused on the

mobility of skilled labour, this paper provides further evidence that the gains from North- South agreements under Mode 4 are greatest when applied to unskilled labour. This result is consistent with other findings, such as Walmsley and winter (2005).

Mode 4 is unique from the other modes of delivery because it is the only one that directly regulates people. Of the four modes of supply Mode 4 is by far the most significant for developing countries. Most developing countries have significant labour surpluses and the temporary movement of natural persons provides a clear export opportunity for most developing countries, and is therefore of significant interest to Bangladeshi policy makers and negotiators. In theory, mode 4 embodies today's international trade regime insofar as it highlights the interdependence between countries, regardless of the level of economic development. In practice, it remains one of the least liberalized areas of GATS, particularly for medium and less skilled workers (Mistry, 2008).

Assessing the current level commitments, it is clear to see that there is poor coverage of sectors where Mode 4 is important; there are few sector specific entries in mode 4. There are ten restrictions on geographical or sectoral mobility and only seventeen percent of schedule (horizontal) cover low-skilled persons; the current commitments focus towards highly skilled labour and often tied with mode 3, which is of particular interest to most developed countries (Raihan, A., 2005).

The LDC group strengthened their demands on movement of natural persons (Mode 4), suggesting that Members should open their markets to "all categories of natural persons from LDCs, particularly unskilled and semi-skilled persons" without applying a so-called economic needs test. The LDC group argued that mode 4 of unskilled and semi-skilled persons was the most significant means for LDCs to market their services globally as well as to reduce poverty (Raihan, A., 2005).

Walmsley and Winters (2003) conduct such an analysis in order to see who might benefit from increasing the temporary movement of natural persons and by how much. A computable model, based on the GTAP Model is developed to examine the effects of an increase in TMNP between developing and developed countries on wages and remittances. They conclude "We estimate that by increasing developed economies' quotas on inward movements of both skilled and unskilled labour by just 3% of their labour forces, world welfare would rise by US\$ 156 billion - about 0.6% of world income. This figure is half as large as the gains expected from the liberalization of all remaining goods trade restrictions (US \$104 billion).

Walmsley and Winters (2003) also conclude that, in general, developing countries gain most from the increase in quotas, with higher gains from the increase in quotas on unskilled labour than on skilled labour. Developed economies generally experience falling wages, but their returns to capital and overall welfare increase in most cases. The relaxation of restrictions on unskilled labour is also found to be the more important component of TMNP for the developed economies. This is because it has widespread positive effects on production and hence on real GDP, whereas the benefits from skilled labour movements is felt primarily in specific service sectors.

Looking at the same issue from a trade perspective, experts assert that the current structure of the movement of natural persons under GATS does not provide adequate access to international labour markets with very limited commitments under Mode 4. In fact, it discriminates against the poor and exacerbates inequalities. Some experts even claim a definitional misinterpretation of Article 28 of the General Agreement on Trade in Services (GATS), which defines MNP or Mode 4 as "supply of the services (includes the production, distribution, marketing, sales, and delivery of a service) by a service supplier of one member, through the presence of natural persons of a member in the territory of any other member". This is distinct from a juridical person (commercial presence or mode 3) moving to another territory on a temporary basis. Nevertheless, more MNP in regional and bilateral trade accords is still linked with commercial presence or Mode 3. Experts also recommend that both trade and migration policy makers need to come to an agreement on resolving contradictions between the interlinked issues of trade and migration policies ((Bhadra Chandra, 2007: 17).

Raihan and Mahmood (2004) shows that Bangladesh would gain substantially through increased export of service providers through TMNP. The potential benefit from the increase of number of skilled service providers is lowest, which may be explained by the low ratio of skilled workers in total composition of migrant workers. An increase of 2 lakhs skilled workers would bring USD 381 million. The potential benefit from exporting unskilled workers is more than that of exporting skilled workers. An increase in the number of unskilled workers by 2 lakhs would bring additional USD 3.5 billion. The benefit from export of professionals by increased number is even higher. The potential benefit from exporting of 2 lakhs professionals would be USD 11.57 billion.

Raihan, S. and Razzaque (2007), conclude that there is no denying the fact that Bangladesh has important stakes in the negotiation on global liberalization of the service sectors. It is understood that there are significant scopes for Bangladesh

for taking a firm position in the WTO negotiations in the case of services, especially with respect to Mode 4. Bangladesh has large endowment of low skilled and semi- skilled labour, and the remittances incomes from the low and semi- skilled labours have significant shares in its national income. It is suggested that on the whole Bangladesh's policy stance should focus on negotiations relating to the 'non- reciprocal' Mode 4 liberalization, separation of temporary from permanent movements of natural persons, and to go for plurilateral negotiations with the developing countries to place the request for multiple entry GATS visa. Further, there should be requests for provisions to bring uniformity in the definition of service personnel and to increase coverage. To foster the negotiation under mode 4 market access Bangladesh should prepare for submitting proposals highlighting the sectors of their interest for consideration of the negotiators focusing on issues like inclusion of the less skilled under contractual service suppliers under a new sub- category, addressing definitional and classification issues, non- uniform enforcement issues to develop a revised model schedule to incorporate lower skill categories of service providers. Bangladesh along with other LDCs may seek special provisions under LDC modalities, in terms of 'non reciprocal treatment'. According to GATS document (article XIX), the developing countries are allowed appropriate flexibility in an individual country basis for negotiation. This implies Bangladesh should consider the country specific interests of the developing countries to take a proper policy stance.

3. GATS Mode 4 and its Implications for Bangladesh

3.1 Origin of GATS

The General Agreement on Tariffs and Trade (GATT) was established on a provisional basis after the Second World War. Since the inception in 1947, the focus of multilateral trading system under GATT was largely on trade in goods. From 1947 through the Tokyo Round (1973-79) of GATT, services were not covered in successive rounds of trade negotiations. Seuies were included in the multilateral trade negotiations by the Uruguay Round (1986-94), but a new round of multilateral services negotiations began only in 2000, as foreseen in Article XIX of the General Agreement on Trade in Services (GATS). With the launch of the Doha Development Agenda (DDA) in November 2001, services became part of a broader negotiating round (IOM, 2008a: 6).

3.2. Concept of GATS Mode 4

Trade in services differs from the trade in goods. The GATS identifies four modes of supplying services.

Mode 1 (Cross-Border supply): Cross border supply covers services that flow from the territory of one Member to the territory of another (e.g., services provided through internet, electronic banking, telecommunication, satellite television, telemedicine etc.)

Mode 2 (Consumption abroad): Consumption abroad refers to situations where a consumer travels from his territory to another Member's territory to obtain a service (e.g. patients, tourism).

Mode 3 (Commercial Presence): Commercial presence implies that a service supplier of one Member establishes a territorial presence in another Member's territory to provide a service (e.g. hotel chains, bank). In most cases, foreign investment (FDI) is involved in mode 3. It includes, among others, corporations, joint ventures, partnerships, representative offices and branches.

Mode 4 (Movement of Natural Persons): Movement of natural persons consists of persons of one Member entering the territory of another Member to supply services (such as doctors, accountants etc). The term "Natural Persons" is an Orwellian euphemism used in the GATS to describe working class people that are considered to be nothing more than commodities. However, this connotation has been proven to be wrong as natural persons may include all categories of professionals, with low to high skills. It has become essential to change the connotation of the "natural persons" to remove the stigma of lower skilled people (Raihan, A., 2005: 38).

Mode 4 is defined in Article I.2 (d) of the GATS as "the supply of service **** by a service supplier of one member, through presence of natural persons of a member in the territory of another member". A "natural" Person is a human being as opposed to merely legal entity, such as business. Mode 4 is an important component of the negotiations on services and has been identified by a number of World Trade Organization (WTO) Members, particularly developing countries, as one of the areas where they seek improved market opening commitments (IOM 2008a: 6).

Mode 4 is the smallest mode of delivery in terms of the amount of trade flows and volume of commitments. Recent estimates, based on limited empirical information, suggest that commercial presence (Mode 3) accounts for more than half of world trade in services and cross- border trade (mode 1) accounts for about

a fourth, while consumption abroad (Mode 2) contributes less than one- sixth of world trade in services. Temporary movement of natural persons (Mode 4) was found to be nearly insignificant, accounting for just over 1 percent of world services trade (Collantes Verona, 2003). So, the current commitments under Mode 4 are less significant for developing countries because their comparative advantage lies in low to medium skilled workers (Ostrovsky, Aaron, A., 2003).

Winters (2003) identifies within GATS Mode 4, three types of (North- South) flows, the movements of the skilled from developed to development countries, the flow of skilled workers from developing to developed nations, and the flow of the unskilled from developing to developed countries.

3.3 GATS Mode 4 and Bangladesh

The GATS regime is important for the developing, least developed, countries. These countries are suffering from severe constraints in economic development due to poor infrastructure, and institutional and human capacities to cope with the challenge emanating from the liberalization of trade in services (Raihan, A. 2005). Trade in Services has become a significant component for Bangladesh and without necessary precautions and adequate readiness Bangladesh will be lucrative targets for strong market players.

The contribution of services sector in Bangladesh economy has increased over time, currently accounting for about 50% of the total GDP of the country (Bangladesh Economic Review 2008). More than 40 percent of the labour force is employed by the services sector, which is more than the employment created in the manufacturing sector (Labour Force Survey 2005-06). Remittances from abroad have become a significant part of the country's national income.

GATS Mode 4 or Temporary movement of natural persons is especially important for Bangladesh. A remittance inflow from Bangladeshis working abroad has contributed significantly to the macroeconomic stability. Bangladesh can reduce the pressure on the acute unemployment problem of the country. Moreover, TMNP plays a vital role in poverty alleviation. All these show that Bangladesh has significant scope of gaining benefits from GATS especially in terms of exporting services through Mode 4. Thus the supply of workers and professionals of various skill levels to the global market is of considerable export interest to Bangladesh (Ahmed and Yusuf, 2006).

The liberalizing process begins at the negotiations stage and is based on an offerrequest process. Bangladeshi negotiators need to submit an initial request in order for them to be able to participate in the negotiations process, and therefore they have to express their area of export interest. It is also important that Bangladeshi negotiators do not submit any offers without a full assessment of the requests that have been made to them.

3.4 Offer and Request by Bangladesh

- During the conclusion of the Uruguay Round, Bangladesh committed to liberalize basic telecommunications and tourism sector. Specifically, the offer was limited to only voice telecommunications through government operator's circuit and five star hotels.
- Bangladesh has not made any request so far. Bangladesh prepared a
 request list to submit it to some developed countries in the Mode 4
 across the sector. However, it was not submitted due to lack of
 preparedness to sit for bilateral negotiations.

Bangladesh Statement on behalf of the Least Developed Countries at the informal review session of the General Assembly on Chapter III of the Monterrey Consensus "International Trade as an Engine for Development", New York, 19 may 2008 addressed the movement of labour under Mode 4 of GATS. But little progress has been achieved thus far. A successful conclusion of the Doha Round will need a concrete outcome in the services negotiations. Special priority needs to be accorded to modes and sectors of export interest of the LDCs. Bangladesh therefore called upon the developed countries to liberalize their markets for service providers of the LDCs under Mode 4 of GATS.

Bhattacharya, et al (2005) concludes that negotiations on trade in services have not yet seen any significant progress. Only on the regulatory issues negotiations have made some progress. The regulatory issues are expected to make progress in market access for mode 4, but only for the skilled categories service providers. The issues of ENT, mutual recognition, transparency in information related to TMNP are being discussed now. GATS visa issue might be the most tangible outcome of the Doha Round. Classification issue is back on the negotiation table.

A few member countries submitted requests on mode 4 using ISCO-88 categories. A new group titled" friends of mode 4" has emerged; however, the focus of the activities of the group is only with the current classification of the services. The core members of the group are Brazil, Columbia, India and Philippines. There is another group of 32 member countries. This is lead by Canada. Most of the developed countries still have strong reservations on market opening under mode

4; they do not think that any progress is possible in the Doha round on mode 4. Developing countries have pushed the regulatory issues and have made some progress in this area. They are not showing any tangible interest in mode-4 related less killed labour movements.

Assessing the current level commitments, it is clear to see that there is poor coverage of sectors where Mode IV is important; there are few sector specific entries in Mode IV. There are ten restrictions on geographical or sectoral mobility and only seventeen percent of schedule (horizontal) cover low-killed persons; the current commitments focus towards highly skilled labour and are often tied with Mode III, which is particularly of interest to most developed countries (Raihan, 2005).

4. Barrier of GATS Mode 4

- Barriers for Temporary Movement of Natural Persons are
- Wage- parity requirement discourages import of cheap labour
- Strict visa procedure
- Economic Needs Tests (ENT)
- Non- recognition of professional qualifications
- Imposition of discriminatory standards of burdensome licensing requirements
- Payment of social security without corresponding benefits like medical and pension insurance schemes
- Requirements of registration with or membership of professional organizations.

Bangladesh signed the WTO Agreement in 1994 without much consultation with stakeholders and with little understanding about the implications of the agreement. Gradually, the government started to mobilize professionals to deal with the negotiations. A WTO cell has been formed with a Director General as the chief of the Cell. The Bangladesh Foreign Trade Institute was established with public-private partnership to provide research support to the negotiating body of the government and provide training to government officials on WTO issues (Raihan, A., 2005).

Despite these efforts, the capacity to manage the whole negotiation machinery is still very low. The total number of people dealing with the negotiations in Bangladesh and in Geneva is limited. It is impossible to deal with the whole

negotiations process with such limited capacity. The negotiating body is missing economists and lawyers which are essential for successful negotiation. It is to be mentioned that for progressing negotiations on TMNP the involvement of lawyers is essential as much of the debate for inclusion of all categories will concentrate on interpretation of LDC modalities.

Immigration regulations and barriers related to visa and work permit procedures are one of the major restrictions of services trade liberalization, especially under mode 4 of services trade. In most of the cases, no distinction has been made between temporary and permanent movements of workers and the process involves complicated, non- transparent and costly steps through labour market regulations. Even, sometimes temporary workers have to undergo a two- permit entry procedure: one for visa and the other for work permit. The restrictions and regulations get more demanding for the developing and least developed countries due to their existing administrative barriers. Moreover, services trade barriers for developing country suppliers are more binding than for developed country suppliers in each other's market.

In terms of migration regulations, they are biased towards high skilled workers and it is relatively easier to obtain visa for intra company transferees and those associated with establishment of commercial presence. In general, movement of low skilled workers is the most restricted one. There are barriers in terms of Economic Needs Test, which restricts the market driven process of service providers, makes the process unpredictable and non-transparent, and therefore creates arbitrary barriers to Mode 4.

The evaluation process of quality and skills of workers in the developing countries and LDCs is considerably under stress. Domestic constraints like lack of uniformity in training and standards within the country apart, the upgraded recognition requirements for workers of developing and least developed countries are a daunting barrier to labour movement under Mode 4 from these countries. To assess qualification and skills, some countries apply Mutual Recognition Agreements (MRA), which is mostly used for certified and licensed professionals who already have internationally established standards. There are different testing procedures like USMLE for medical professionals and CGFNS for nursing in the developed countries like USA prior to providing license for job to foreigners.

All these problems act act as barriers to Bangladesh's services export. In addition to service categorization and classification problems, commitments of developed countries under Mode 4 are the least in WTO services negotiations, and after the incident of nine- eleven, 2001, there is not much scope for any significant liberalization in this regard.

5. Findings

- 1. From 1976 to 2008, half of the total migrants (50.01%) from Bangladesh were unskilled. The percentage of skilled migrants was 49.99.
- 2. Mode 4 is the smallest mode of delivery in terms of the amount of trade in services and the number of commitments.
- 3. During the conclusion of the Uruguay Round, Bangladesh committed to liberalize basic telecommunications and tourism sector. Specifically, the offer was limited to only voice telecommunications through government operator's circuit and five star hotels.
- 4. Bangladesh has not made any request so far. Bangladesh prepared a request list to submit it to some developed countries in Mode 4, but it was not submitted due to lack of preparedness to sit for bilateral negotiations
- 5. Global liberalization in the services sector, especially allowing temporary movement of natural persons, can play a vital role in the alleviation poverty in the developing countries in general and in the LDCs in particular.
- 6. When skilled personnel leave a developing country for a developed one, typically their income increases significantly. This contributes to raising the national income of the developing country, though its impact on poverty implication is not very clear. Since skilled workers were initially non-poor, it does not entail direct contribution to poverty alleviation. But if the higher incomes of these skilled workers lead to greater remittances to the home country, there could be a positive effect. Furthermore, working abroad many facilitate individuals to acquire greater skills and these benefits would be doubled if they eventually returned home.
- 7. The Movement of less skilled workers to developed countries under Mode 4 is likely to increase in future as many developed countries will be facing labour shortage within the next ten to twenty years.

6. Conclusions and Recommendations

From the analysis of potential demand for workforce in developed markets as well as Bangladesh's supply capacity, Bangladesh should be following these negotiating points (Raihan, A., 2005):

- There should be a reference to Article 3 of the Annex on Movement of Natural Persons Supplying Services under the Agreement which specifies, "In accordance with part III and part IV of the agreement, Members may negotiate specific commitments applying to the movement of all categories of natural persons supplying services under the agreement." The text in LDC modalities reinforces the text of Annex, specific to the LDCs.
- In the negotiations Bangladesh should highlight the poverty alleviation linkage of TMNP and relate it with paragraph 2 of "Special Modalities" The importance of trade in services for LDCs should be seen in light of the major role services can play for achieving social and development objectives and as means of addressing poverty, upgrading welfare, improving access to basic services, and ensuring sustainable development. This linkage could serve as leverage for Bangladesh in the services negotiations (Raihan, 2005: 38).
- The benefit from the framework of special Modalities largely depends on how effectively Bangladesh plays a pro-active role in the GATS negotiations. It has been made clear that LDCs should prepare requests considering their own interests. Furthermore, to include a classification of service providers based on ISCO-88, Bangladesh should make specific proposals.
- When formulating policy on mode 4, there needs to be a clear idea of the national interests. The mission in Geneva is alleged to have been far removed from the domestic situation; it is therefore, up to the central government to know what the national interest is. Temporary labour mobility is a complex issue and covers several ministries and agencies. Hence, even though there is a lead ministry to deal with all matters relating to WTO negotiations, there should be the created a central body to establish effective communication and structural links between the departments.
- Bangladesh should concentrate on negotiating for gaining market access
 of its unskilled labour in the developed countries for poverty alleviation.
 Side by side, understanding the skills requirement for the global
 marketplace is an essential task for the government so that it can design
 and promote appropriate policies and plans for manpower development.

References

- 1. Ahmed and Yusuf (2006), "GATS: What is in it for LDC's and Bangladesh?" *The Cost and Management*, Vol. 34, No. 2.
- Bhadra, C. (2008), "International Labour migration of Nepalese Women: The Impact of Their Remittances on Poverty Reduction". Asia-Pacific Research and Training Network on Trade Working Paper Series No. 44.
- Bhattacharya, D., and Others (2005), "Road to Hong Kong Ministerial of the WTO:
 Anticipating the "First approximations" from Bangladesh Perspective",
 Paper 49, centre for Policy Dialogue, Dhaka.
- Collantes Verona A. (2003), "Movement of Natural Persons (Mode 4): Importing Country members Commitments", Paper presented at regional consultation on Movement of natural Persons and Human Development, New Delhi, July 21-22, 2003, UNCTAD.
- CPD (2008), "Training manual on WTO and Bangladesh Trade Policy", Centre for Policy Dialogue, p. 23-24.
- Hossain M. Wahid, (2006), "Conditional Migration as a Skilled Labour: Challenges and Prospects of Bangladesh Under GATS Mode 4", NDC Journal, National Defence College, Bangladesh, Vol. 5, No. 1, June.
- 7. IOM (2003), "World Migration 2003- Managing Migration: Challenges and Responses for People on the Move Geneva," IOM.
- 8. IOM (2008a), "World Migration 2008- managing Labour Mobility in the Evolving Global Economy", IOM.
- 9. Mc Culloch, N., L. A. Winters, and X.Cirera (2001), "Trade Liberalization and Poverty: A Handbook", Centre for Economic Policy Research. London.
- McDonald, P. and R. Kippen (2001)," Labour Supply Prospects in 16 Developed Countries, 2000-2050. Population and Development Review (27(1): 1-32, March.
- Mistry, R., (2008)," Labour Mobility from Bangladesh: Opportunities through the General Agreement on Trade in Services", Refugee and Migratory Movement Research Unit (RMMRU).
- 12. Ostrovsky, Aaron, (2003) "Liberalization of Temporary Movement of Natural Persons and the Gulf between Unskilled and Skilled Service Suppliers: Suggestion for Further Liberalization of GATS Mode 4".

- 13. Raihan, A. and M. Mahmood (2004), "Trade Negotiations on Temporary Movement of Natural Persons: A Strategy Paper for Bangladesh", Paper 36, Centre for Policy Dialogue.
- 14. Raihan, A. (2005),"Liberalizing Trade in Services: Negotiating Strategy for Bangladesh, Paper 47, Centre for Policy Dialogue, Dhaka, 2005.
- 15. Raihan, S and Abdur Razzaque (2007), "WTO and Regional Trade Negotiation Outcomes: Potential Implications on Bangladesh", *Policy Brief*, A Unnayan Shamannay Publication, Issue 2, 2007.
- 16. Razzaque, Abdur and Selim Raihan (2008), "WTO Negotiations on Trade in Services: The Bangladesh Perspective", cited in WTO and Regional Trade Negotiation Outcomes: Quantative Assessment of Potential Implication on Bangladesh. Phathak Shamabesh, Dhaka.
- 17. South Centre analytical Note (2005), "GATS Mode 4 Negotiations and Low Skilled Workers". South Centre.
- Walmsley, Terrie, L. and Amer Ahmed and Chris Parsons, (2005),"The Impact of Liberalizing Labour Mobility in the Pacific Region", GTAP Working Paper No. 31, Global Trade Analysis Project.
- Winters, L. Alan (2003),"The Economic Implications of Liberalizing Mode 4
 Trade", Chapter 4 in Mattoo A and Carzaniga A (eds), Moving People to Deliver Service. Oxford University Press. 59-92.
- World Bank (2008a), "Migration and Remittances Fact book 2008", by Dilip Ratha and Zhimei Xu, World Bank, Washington, D.C.

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 335-348 Bangladesh Economic Association (ISSN 2227-3182)

Changes in Rural Credit Structure over The Years : An Empirical Study in Kushtia District of Bangladesh

M. N. KHATUN¹
M. A. BASHAR²

Abstract

The study was designed to investigate into the existing rural credit market structure and expected changes which might occur therein over the years. Eighty randomly selected farmers belonging to five different villages under Mirpur Upazila of Kushtia district were interviewed through administering a well prepared structured questionnaire. Respondents were grouped into small, medium and large farm size and analysis was done accordingly. Data used covered the period of January to December, 2008. The study reveals that the structure of rural credit market has undergone a radical change over the years. Large and medium farmers had more access to public and private banks than small farmers because of their ability to offer required collaterals against loan. Member-based institutions (GB and other NGOs), however, have taken care of these people in the study area. As a result, the respondents need not be so dependent at present on money lenders and other noninstitutional sources of credit. Most of the credit demand of the respondents has been satisfied by the credit institutions available close to the study villages. A lion's share of loaned money obtained has been productively utilized by the sampled respondents implying the borrower's positive attitude towards productive utilization of credit. Overall loan recovery position observed during the study period was found to be quite satisfactory. Self consciousness and hope of getting future loan were reported by most of the borrowers as major factors of timely loan repayment. Farm size, education

Former M.S. student, Department of Agricultural Finance, BAU, Mymensingh-2202

Professor, Department of Agricultural Finance, BAU, Mymensingh-2202

and income of the borrowers were the significant contributing factors towards loan repayment behaviour of the respondents in the study villages.

Key Words: Credit Structure; loan receipt, utilization and repayment.

1. Introduction

Bangladesh having been predominantly an agrarian economy, agriculture has to play the vital role in its economic growth and stability through contributing a major share to gross domestic product (GDP), employment generation as well as export earnings. Bangladesh has entered the arena of modernized agriculture since 1960 and as such needs high capital investment in accumulation of HYV seeds, required machineries and equipment for land tillage, irrigation water, fertilizer, insecticides, etc., and development of agro-based industries in rural and sub-urban areas. But the fact is that the people engaged in agriculture can not adequately afford to have all these inputs and machineries out of their own savings because of financial hardship and extreme poverty situation. Under the circumstances, the farmers in general and marginal, small and tenant farmers in particular, need adequate financial assistance in the form of low-cost credit from different sources (Mian, 2001). Historical evidences reveal that rural people had to depend on informal credit market, mostly money lenders and mahajans, for agricultural production (DU 1956, Bashar 1969, Islam 1998). This financial market structure, however, has undergone significant transformation over the years with gradual expansion of bank branching network at upazila as well as other important production points. During the 1970s, the emergence of Grameen bank and hundreds of other national, international and local NGOs working specially in remote villages has ushered a gateway for the rural mass to approach the formal sources of credit (Bashar and Alam 1985, Hossain 1986, Alam 2003). Reverse comments are also there that despite the continuous expansion of the institutional network, informal sources of credit still play a dominant role in distributing farm credit specially in remotest areas in the country (Alam et al 1984). Therefore, an attempt has been made in the present study to find out the factual information in this regard. Results of the study will hopefully help planners and policy makers to formulate more pragmatic decisions consistent with overall agricultural development of the country. The overall objective of the study is to see the structural changes occurred over the years in the rural credit market. The specific objectives of the study are as follows:

a. To assess the socio-economic characteristics of the respondents in the study area.

- b. To identify the existing sources of credit in the study area.
- c. To estimate the amount of credit received by the farmers from the available sources in the study area.
- d. To examine the credit utilization and repayment behaviour of the farmers in the area.
- e. To draw some rationale conclusions on the basis of the findings of the study.

The methodology adopted in the study is presented in section II. The results of the study with elaborate discussions thereon appear in section III, and the implications of the results are described in the concluding section.

2. Methodology

To achieve the set objectives, 80 farmers covering 5 villages under Mirpur Upazilla of Kushtia district were randomly selected from whom the required data were sought during intensive field visits. Data were collected through personally interviewing the sampled farmers with a prepared questionnaire during the period, March to April, 2009. Data used for the study covered the period January-December, 2008. After completion of data collection, sampled farmers of different farm sizes were grouped into small (less than 2.50 acres), medium (2.50 to 5.00 acres), and large (above 5.00 acres) farmers and subsequent analysis has been done accordingly. Out of the 80 sample farmers, 45 were small farmers, 25 were medium, and 10 were large.

A statistical analysis has been done to achieve the desired results. The specified regression model (Gujarati, 2003) was used to examine the contributing factors of loan repayment by the borrowers. The general form of the equation is follows:

$$Y = aX_1^{b1} X_2^{b2} X_3^{b3} X_4^{b4} X_5^{b5} X_6^{b6} e^{U}$$

The equation is alternatively expressed in log-linear form as:

$$\ln Y = \ln a + b_1 \ln X_1 + b_2 \ln X_2 + b_3 \ln X_3 + b_4 \ln X_4 + b_5 \ln X_5 + b_6 \ln X_6 + U_1$$

Where,

a = constant term

In = natural logarithm

Y = amount of loan repaid by the respondent (Tk.)

 X_1 = farm size of respondent (acres)

 X_2 = age of the respondent (years)

 X_3 = education of the respondent (years of schooling)

```
X_4 = income of the respondent (Tk.)

X_5 = expenditure of the respondent (Tk.)

X_6 = savings of the respondent (Tk.)

b_1 ----- b_6 = co-efficients of respective variables

U_i = error term.
```

3. Results and Discussion

Socio-economic Characteristics of the Respondents

Socio-economic characteristics of people are supposed to influence the credit need, its availability, loan use and repayment behaviour of the borrowers in less developed countries. Attempt has, therefore, been made in the present study to assess some of the important as well as relevant socio-economic characteristics of the respondents.

It appears from Table 1 that the overall family size of the farmers was 4.60, which is slightly less than the national average (4.90) (BBS 2006). The estimates according to small, medium and large farms were 4.37, 4.56 and 5.70, respectively, indicating a positive relationship between farm size and family size during the study. More family members within the active age group (15 to 57 years) and the higher dependency ratio indicate that there was unemployment problem in the study villages. Most of the respondents (84 percent) were found to have attended formal educational institutions and a majority of the large farmers had education above SSC level, which indicate the awareness of the respondents about the importance of education. Occupational distribution of the sampled farmers shows that most of them were engaged in agriculture (about 39 percent) and agriculture cum business (35 percent) during the study period. It is also evident from Table 1 that agriculture is the prime occupation of the respondents irrespective of farm size although some of them might have other subsidiary occupations. Land use distribution based on tenurial status was also considered in the study and presented in the same Table. Overall land holding under legal and de-facto status was estimated, respectively, at 2.19 and 1.36 acres comprising all farmers together. The Table further shows that medium and large farmers had relatively less effective land use because of their involvement other than in farming during the period under study. Small farmers, however, were found to have tried to increase their land acreage through various tenurial arrangements as evident from the Table. Land distribution relative to farmers belonging to different farm size groups considered in the study was relatively skewed (Gini coefficient = 0.51). A clear-cut positive relationship between farm size and average value of

Table 1 : Socio-economic characteristics of the respondents

Particulars		Farm Size	Category	
	Small	Medium	Large	All
Sample farmers (No.)	45	25	10	80
Family size (No.)	4.37	4.56	5.70	4.60
Average earning member (No.)	1.31	1.40	1.80	1.40
Dependency ratio (No.)	3.36	3.29	3.17	3.28
Education level (Percent)				
Illiterate	22.22	12.0	-	16.25
Primary	55.56	20.0	-	37.50
SSC	13.33	36.0	40.0	23.75
Above SSC	8.89	32.0	60.0	22.50
Occupation (Percent)				
Agriculture	37.78	48.00	20.00	38.75
Agriculture cum service	4.44	12.00	30.00	10.00
Agriculture cum business	33.33	32.00	50.00	35.00
Agriculture cum others	24.44	8.00	-	16.25
Size of land holding (Acre)				
Cultivated own land	0.57	1.52	2.92	1.16
Land rented in	0.17	-		0.10
Land rented out	-	0.40	0.46	0.18
Land mortgaged in	0.11	0.13	-	0.10
Land mortgaged out	-	0.57	3.03	0.56
Total cultivated land	0.85	1.65	2.92	1.36
Homestead	0.09	0.16	0.29	0.14
Others (pond, fallow, orchard etc.)	0.03	0.30	0.35	0.15
Total owned land (legal status)	0.69	2.95	7.05	2.19
Control over available land	17.72	42.05	40.23	100
(Percent)	(56.25)	(31.25)	(12.50)	(100)
Value of assets (Tk. in '000)	75	153	237	119
Annual income (Tk. in '000)				
Farm income	25	52	71	39
Non-farm income	33	47	87	44
Total income	58	99	158	83
Annual expenditure (Tk. in				
'000)	18	36	45	27
Farm expenditure	37	51	90	48
Non-farm and family expenditure	55	87	135	75
Total expenditure				
Annual savings (Tk. in '000)	3	12	23	8

Note: Figures in parentheses indicate percentage of total farms surveyed

Source: Field Survey, 2009

assets possessed by the respondents was found during the study. Income-expenditure analysis reveals that both were positively related to farm size categories. Average income of a large farmer was found to be 1.6 times and 2.7 times higher than those of medium and small farmers, respectively. It is also evident from the Table that the respondents, irrespective of farm size groups, had positive savings at the end of the year, which is definitely an encouraging phenomenon. Average saving was also related positively with farm size.

Sources of Credit

Both institutional and non-institutional sources of credit were found to have distributed credit among the farmers in the study area. Institutional sources of credit present in the study area were public banks (PBs), private commercial banks (PCBs) and member based institutions (GB and other NGOs), while well-to-do rural people, money lender and friends and relatives were important among non-institutional sources during the study period. No loan was given by the BRDB and co-operatives during the same period. The present credit structure in the study area is shown in Figure 1.

Amount of Credit Obtained from Different Sources

It appears from Table 2 that loans received from non-institutional sources by all categories of farms during the study period was quite insignificant (11.13 percent) relative to institutional ones (88.87 percent). This is indicative of the success of the government efforts to popularize the formal credit among the rural mass of the country.

Table 2 shows that the small farmers received on an average 84.54 percent of total credit from the institutional sources, of which a member-based institution "Pipasha" (local NGO) supplied the highest proportion (16.53 percent), followed by the Grameen Bank (15.16), Agrani Bank (15.16 percent) and ASA (11.83 percent) in the study villages. The small farmers, in fact, had more access to member-based credit institutions which gave collateral free loans, popularly known as micro credit, to the farmers for income generating activities (IGAs). The Table, on the other hand, reveals that the public and private commercial banks have supplied more money to medium and large farmers than small ones possibly because of the formers' ability to offer security against loan. Money lenders, friends and relatives and well-to-do rural people were more or less important to the small farmers while not so to medium and large ones for obvious reasons. Loan receipt was found positively related to farm size in the study villages.

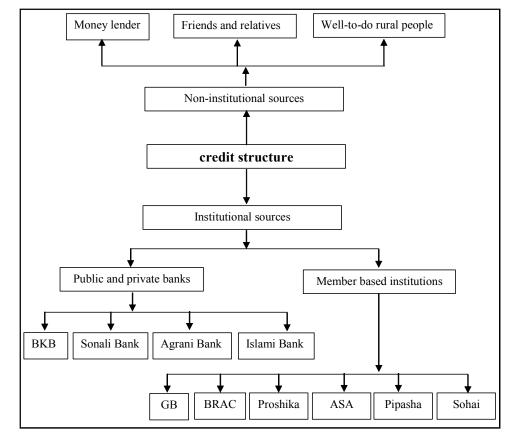


Figure 1: Credit structure in the study area

The above discussion reveals that institutional loan becomes more and more available among the farmers due to the gradual expansion of institutional branch network all over the country along with relatively easy terms and conditions of loan. Institutional sources of credit, however, have still more affinity with the wealthy people even though they may have no direct connection with actual farm production. This is because of the concerns of institutional sources for adequate security and safety of credit extended by them.

Utilization of Credit by the Respondents

Success or failure of any credit program depends mostly on the extent of loan use and, accordingly, on the loan repayment behaviour of the borrower, which might have important long term bearing on the liquidity as well as the viability of the concerned lending institutions. Keeping this concept in mind, attempt has been made in the present study to explicitly examine the pattern of loan use by the

Table 2 : Average amount of loan contracted from different sources

Taka)	
t in	
Amount	
_	

					Institu	Institutional sources	urces	80				N	Non-institutional sources	onal sourc	es	
	Pu	ublic and p	and private banks	nks		Me	mber ba	Member based institutions	rtions							v:
Farm Size	вкв	Sonali Bank	Авгапі Вапк	Islami Bank	Статееп Вапк	вкус	влінгот	VSV	Pipasha	isdo2	Sub	Money lender	Friends and relatives	Well-to-do rura People	Sub total	Total
Small	1556		2222		2222	233	622	1733	2422	1378	12388	844	311	11111	2266	14654
1	(10.62)		(15.16)		(15.16)	(1.59)	(4.24)	(11.83)	(16.53)	(6.40)	(84.54)	(5.76)	(2.12)	(7.58)	(15.46)	(100)
Medium	7560	8400	10400	4800	720	3200	1920	2120	800		39920	720		4000	4720	44640
	(16.94)	(18.82)	(23.30)	(10.75)	(1.61)	(7.17)	(4.30)	(4.75)	(1.79)	,	(89.43)	(1.61)	ε	(8.96)	(10.57)	(100)
Large	10000	10000	92000	15000							100000		10000		10000	110000
	(60.6)	(60.6)	(59.09)	(13.64)	ï					,	(90.91)		(60.6)		(6.06)	(100)
All	4488	3875	12625	3375	1475	1131	646	1638	1612	775	31943	002	1425	1875	4000	35943
	(12.49)	(10.78)	(35.12)	(6.39)	(4.10)	(3.15)	(5.64)	(4.56)	(4.48)	(2.16)	(88.87)	(1.95)	(3.96)	(5.22)	(11.13)	(100)

Note: Figures in parentheses indicate percentages **Source:** Field Survey, 2009

farmer borrowers. The information and data gathered from respondents in this regard are presented in Table 3. The broad purposes for which the borrowers in the study villages used loan money are (a) Capital expenditure on farming, (b) Current expenditure on farming, (c) Non-farm business expenditure, and (d) Family expenditure. Table 3 shows the break-up of the utilization of credit for

Table 3 : Percent utilization of credit according to farm size

		Percen	t of loan use	
Head of expenditure	Small	Medium	Large	All
Purchase of livestock	8.27	5.73	3.45	5.44
Purchase of land/mortgage in land	7.35	3.28	7.60	5.87
Purchase of agricultural equipment				
(tubewell, power pump, power tiller,	-	7.26	9.25	6.36
etc.)				
Pond leased in/digging	4.73	9.05	5.83	3.82
Total capital expenditure on	20.35	25.32	26.13	24.49
Farming	20.33		20.13	24.49
Purchase of seed/seedling	3.32	2.15	3.10	2.78
Purchase of fertilizer	8.53	7.21	4.06	6.30
Purchase of insecticide	2.21	1.07	1.30	1.42
Charge for human labor	5.76	3.56	3.27	4.00
Irrigation charge incurred	2.35	0.78	0.35	0.98
Charge for power tiller	2.07	0.64	0.17	0.78
Seed, feed and medicine charge for	1.18	0.65	1.25	0.97
live animals	1.10	0.03	1.23	0.97
Total current expenditure on	25.42	16.06	13.50	17.23
Farming	23.42	10.00	13.30	17.23
Petty business/SMEs	11.63	9.74	5.26	8.46
Grocery shop	6.92	5.87	7.41	6.70
Tailoring	4.75	-	-	1.09
Purchase of van/autovan	8.78	-	-	2.01
Rice mill/saw mill	-	13.86	17.54	12.09
Chatal business	-	16.09	20.04	13.91
Total non-farm business expenditure	32.08	45.56	50.25	44.26
Purchase of food	7.78	3.29	-	3.06
Purchase of clothes	4.23	0.25	-	1.07
Expenditure on education	1.27	2.60	2.33	2.19
Medical treatment	3.12	1.64	1.82	2.05
Social ceremonies	4.13	2.75	1.92	2.75
Construction/ repairing house and	1.62	2.53	4.05	2.90
household durables	1.02	2.33	4.03	2.90
Total family expenditure	22.15	13.06	10.12	14.02
Grand total	100	100	100	100

Source: Field Survey, 2009

these four purposes by the three size categories of farms. It is evident from Table 3 that, overall, a lion's share of the loan money has been used for productive purposes (almost 86 percent) while only 14 percent of the same was used for different items of family expenditure during the study period. Analysis of loan use by farm size category shows that the large farmers have used relatively more of the loan money on non-farm business activities (50.25 percent) and capital expenditure on farming (26.13 percent) while the small and medium ones put more or less equal importance on capital and current expenditure on farming and non-farm business expenditure during the same period. Small farmers, however, used relatively more on family expenditure (more than 22 percent) than medium (13 percent) and large ones (only 10 percent) during the year under investigation.

The pattern of loan use reveals a growing tendency on the part of the farmers towards productive use of credit over the years particularly since the later part of the 1980s. This shift of emphasis toward productive use of loans can perhaps be attributed to the gradual modernization in agricultural operation as well as rural small entrepreneurship development in the country.

Repayment of Credit by the Respondents

Loan repayment is one of the important aspects of credit analysis because of the fact that timely loan repayment by borrowers encourages the lending institutions to extend further loans to the farmers when required, which by and large helps economic development of the country. Attempt was, therefore, taken in the study to see the extent of loan repayment made by the borrowers. Table 4 shows the repayment behavior of the respondents. It can be seen in Table 4 that in the case of institutional sources, the loan recovery rate was 95.51%, 96.99%, and 100% for the small, medium and large farmers, respectively, while in the case of non-institutional sources, the recovery rate was 100% for all size catagories of farms. Overall loan recovery percentage was thus quite satisfactory during the study period. Self consciousness and the hope of getting loan gain in future was reported by most of the borrowers as the major motivation behind timely loan repayment. Fear of surcharge, proper supervision by the field level staffs, and pressure of the leader and other members of the group were the other factors that induced timely loan repayment.

Efforts were also made to identify the contribution of individual explanatory variables influencing loan repayment made by the borrowers under study using a regression model. Results of the regression analysis are presented in Table 5.

Table 4: Repayment of credit by the respondents

										Amount in Tk.
		Institu	Institutional Sources	arces			Non-insti	Non-institutional sources	ources	
Farm size	Average Principal	Averag	Average amount repaid	cpaid	Loan Recovery	Average Principal	Average	Average amount repaid	spaid	Loan Recovery
	received	Principal Interest	Interest	Total	Rate (%)	received	Principal Interest Total	Interest	Total	Rate (%)
Small	12388	11832	1584	13416	95.51	2266	2266	613	2879	100
Medium	39920	38720	5356	44076	66'96	4720	4720	1248	8969	100
Large	100000	100000	14150	114150	100	10000	10000		10000	100
All	31943	31256	4334	35590	97.85	4000	4000	735	4735	100

Source: Field Survey, 2009

[Note: Interest rate charged by BKB – 8% to 14%, Sonali Bank – 14%, Agrani Bank – 14%, Islami Bank – 15%, Grameen Bank – 15%, BRAC – 15%, Proshika – 15%, ASA – 12.5%, Pipasha – 12.5%, Sohai – 12.5%, Money lenders – 33% to 80%, Well-to-do rural people – 20% to 24%]

Explanatory variable	Coefficient	Standard error	t-value
Constant	6.583	4.185	1.575
X ₁ , farm size	0.384**	0.156	2.470
X_2 , age	-0.529	0.418	-1.265
X ₃ , education	0.220*	0.127	1.729
X ₄ , income	0.669*	0.382	1.750
X ₅ , expenditure	-0.258	0.333	-0.776
X ₆ , savings	0.050	0.042	1.171
R^2	0.58	-	-
Adjusted R ²	0.55	-	-
F-value	17.184***	-	-

Table 5: Estimated values of coefficients and related statistics of regression analysis

Farm size, education and income of the borrowers were the significant variables influencing the loan repayment behaviour of the respondents.

The co-efficient of multiple determinations, R², was 0.58 indicating that about 58 percent of the total variation in loan repayment by the farmers could be explained by the variables taken into account in the study.

The F- value of the equation is highly significant implying that the variables considered were important for explaining the variation in the amount of loan repaid by the farmers.

Conclusions

- Based on the findings of the study, following conclusions may be drawn:
- The structure of rural credit has undergone a radical change over the years.
- Large and medium farmers were the major beneficiaries of public and private banks' credit while the credit needs of the smaller ones have been taken care of by GB and the available NGOs.
- Land ownership on legal status still plays a dominant role in receiving loan from public and private banks signifying least access of marginal, small and landless farmers to those institutions.
- Availability of institutional sources of credit in the study area seems to be adequate causing a gradual decline in the importance absence of noninstitutional ones, particularly of money lenders and mohajans.

^{*} significant at 10 percent level

^{**} significant at 5 percent level

^{***} significant at 1 percent level

- Sources of credit available in the study villages more or less could satisfy the credit requirement of the farmers.
- Borrowed money is used mostly for productive purposes by the respondents in the study villages.
- Loan use for family expenses at present receives least priority from the borrowers.
- Timely loan repayment by the farmers in the study area seems to be quite satisfactory.
- Similar studies in other areas of the country are suggested to test the findings of the present study.

References

- 1. Alam, M.F., M.A. Bashar and M.A. Hassan (1984): "Factors Affecting Tenancy and Agricultural Credit in a Selected Garo Community of Jamalpur District in Bangladesh". *Financing Agriculture*, January-March, 1984, p.42.
- Alam, M.S. (2003): "An Analysis of the Present Agricultural Credit Structure in Some Selected Areas of Mymensingh District". Unpublished Master's thesis submitted to the Department of Agricultural Finance, Bangladesh Agricultural University, Mymensingh.
- 3. Bashar, M.A. (1969): "An Analysis of the Present Agricultural Credit Structure in Some Selected Areas of Mymensingh District". Unpublished Master's thesis submitted to the Department of Agricultural Finance, Bangladesh Agricultural University, Mymensingh
- 4. Bashar, M.A. and M.F. Alam (1985): "Structural Changes of Rural Credit over Time in Two Villages of Bangladesh". *The Bangladesh Journal of Agricultural Economics*, Vol. 8, No. 2.
- 5. BBS (2006): *Statistical Year Book of Bangladesh*, Statistics Division, Ministry of Planning, Government of the People's Republic of Bangladesh, Dhaka.
- 6. Dhaka University Socio-Economic Survey Board (1956): Report on the Survey of Rural Credit and Unemployment in East Pakistan, 1956, March, 1958.
- 7. Gujarati, D.N. (2003): *Basic Econometrics*, Fourth Edition, Singapore: Mc Graw-Hill, Inc.
- 8. Hossain, I. (1986): "An Analysis of Factors Affecting Availability and Repayment of Agricultural Credit: A case study". Unpublished Master's thesis submitted to the Department of Agricultural Finance, Bangladesh Agricultural University, Mymensingh.
- Islam, M.A. (1998): "An Economic Analysis of Land Tenurial Arrangements on Rice Production in a Selected Area of Tangail District". Unpublished Master's thesis submitted to the Faculty of Agricultural Economics and Rural Sociology, Bangladesh Agricultural University, Mymensingh.
- 10. Mian, M.S. (2001): *Economics and Agricultural Development Bangladesh Perspective*, Universal Publications, Banglabazar, Dhaka 1100, pp. 53-59.
- 11. Todaro, M.P. and S.C. Smith (2005): *Economic Development*, 8th edition, Published by Pearson Education (Singapore) Pre. Ltd., India, pp.235.

Bangladesh Journal of Political Economy

© 2010 Bangladesh Journal of Political Economy Vol. 26, No. 2, December 2010, pp. 349-364 Bangladesh Economic Association (ISSN 2227-3182)

Status of Peace at Secondary Education: A Comparative Study with reference to Bangladesh

M. AZIZUR RAHMAN¹

Abstract

Peace is the ultimate aspiration of mankind all over the world, despite all ethnic and cultural differences. After the First World War the League of Nations was established in 1920. It had failed to prevent the World War II. After the Second World War the UNO was established in 1945. All this was to prevent war among nations. War starts from individual and spreads world wide. The losses of war know no bound. Every body wants a war-free peaceful world. All great leaders of the past talked about peace and thought seriously about its permanent establishment. Still today it is going on. Though every body wants, peace is the most scarce commodity everywhere. The world is running after peace. But it is far from reach. Education is the best means to build peace in human minds. Every country of the world is using peace education and education for peace to build it in individual, family, society, nature, country and world minds. The paper reviews peace education in four selected countries and some peace literature and makes some recommendations for peace in Bangladesh as well as in the world.

Introduction

Peace is the first demand of all living creatures. In human life every thing is wanted to ensure peace. Food, cloth, shelter, health and education are the

_

Director (R &D), NAEM

fundamental rights required for peaceful human life. Individual, family, society, nature, country and world peace generate total peace. Peace at one sphere is related to another sphere. Peace is the ultimate aspiration of mankind all over the world, despite all ethnic and cultural differences. In establishing the foundation of a genuine culture of peace, UNESCO could not find a richer source of inspiration than the work initiated by Alfred Nobel nearly a century ago. The Nobel Peace Prizes serve to signpost possible paths to peace and foster awareness of the rights of future generations. The world had faced two World Wars. Besides, it had experiences of a good number of wars since the Second World War. At present many wars are going on. Terrorism is expanding rapidly. The World is gradually becoming unpleasant. Alfred Nobel placed great emphasis on the quest for fraternity among nations. It is today more apparent than ever that fraternity in its most inclusive sense of solidarity is a pre-requisite for a peaceful world. Almost all countries of the world are approaching peace and international understanding through education. Peace, development and democracy constitute a continuum. Many people advocate justice and sharing in cycle. Justice establishes mental stability and sharing is the key concept if we wish to reduce the present gap between the haves and the have nots which is the biggest threat to human security at the present day world.

The present paper is in the quest for peace education in some selected countries and to make a comparison with Bangladesh.

The word peace is used here in two dimensions. "Peace-building means the empowerment of all through lifelong education; it means providing access to knowledge and its applications; it means consolidating democracy through respect for the Universal Principles affirmed in UNESCO's constitution. Peace-Keeping implies that conflict has already taken place, that the sacrifice and suffering of the innocent have occurred, and the same applies to humanitarian assistance (Federico Mayor, former DG, UNESCO). The goal must be to foresee in order and to forestall. The world is developing fast mechanically and commercially. With this advancement, life is becoming mechanized and materialized. As a result peace is gradually becoming rare and rare. Every country is giving priority on peace education at secondary level. Some countries have introduced peace and conflicts management education at University level. In Bangladesh the University of Dhaka has opened the department of peace and conflicts studies.

Definition

The word peace has a broad spectrum of meanings, which cover all aspects of life. Without peace, life loses its meaning, beauty and dignity. Peace is all pervasive and therefore too big to define. Our predicament is the ignorance of the significance of peace. This ignorance makes man conflicting with everything that comes across, be it ethnicity, politics, society, language, culture or religion. He becomes more divisive rather than being united. Division leads to conflict and leads to mutual destruction. Peace provides the atmosphere, space as well as nourishment essential to grow towards human perfection and development.

Peace may be viewed as arising from three sources, namely from inner well being, social well-being and harmony with the nature. Taken separately, each one is fragmentary. If total peace becomes the guiding principle and the aim of development, socio-eco-cultural and political stability must be established in the country.

Inner peace includes harmony and peace with oneself, good health, absence of inner conflict, sense of joy, freedom, content, friendly for self and for other, etc. Social peace means peace between man and man, woman and woman, man and woman, conflict resolution and reconciliation, love, friendship, cooperation tolerance of differences, democracy and respect for human dignity and cultural diversities and so on.

Peace with nature implies harmony with natural environment and loves for all creatures. Here the slogan is: The Earth belongs to all creatures (BPDM report, 1990). Because the existence of all creature is essential for ecological balance.

Total peace arises from the fulfillment of peace in its three perspectives. It generates individual, family, social and state peace. Peace is an equilibrium brought by saturation. Peace in one sphere is complementary to other spheres.

Assumptions

The expansion of education and enhancement of peace are positively correlated. It is assumed that when peace keeping and building contents will be included in educational curriculum to make learners a good human and citizen of the country concerned and of the world, a peaceful situation and cultural harmony will develop. Many developed countries are trying to become successful in this regards. But many less developed countries are not so much active. Bangladesh is always facing very unstable socio-eco-political and cultural conditions. A study conducted by Centre for Policy Dialogue (CPD), Dhaka indicated that 10.6 per

cent of GDP is lost by dissension in family. This high rate of conflicts is an alarming information for us. Bangladesh education system contains some peace items for developing good citizenship of the students. The literacy rate is rising rapidly in the country. So it may be expected that the socio-eco-political and cultural stability will rise with the increase of literacy rate. But the actual situation does not satisfy the expectations. The article will make an enquiry into the causes why socio-eco-political and cultural stability is not enhancing with the rise of literacy rate. Here the question arises: Whether the peace contents of educational syllabus at secondary and higher secondary level are inadequate or whether learners read the contents to pass examination but not to retain in memory and apply in practical life.

Statement of the Problem

The history of mankind states that human civilization throughout the World has been developing rapidly with the passage of time. We always claim that human beings have become more civilized today than they were in old days. With the advancement of education, science and technology, the amenities of live have increased to a great extent. It has expanded worldly pleasures and luxuries. But eternal peace, family ties and social commitment have not incrased. Every body as seller wants to maximize profit and as a buyer wants to maximize utility. Nobody wants to maximize social benefit and to minimize social cost. As a result there arise conflicts between buyer and seller and between men and society. This generates conflicts, violence, terrorism and war. So it causes absence of real peace. The world is becoming commercial at a rapid rate. So material benefit is rising by defecting human and social benefit. So peace keeping and peace building become a problem in society. The world is gradually becoming incompetent for lives.

Rationale of the study

All citizens of the world are becoming more concerned about the peace of the world. This may be so because their expectation concerning a future world has often been coupled to their expectations of war and nuclear threat (Elder, 1965; Law 1973). Not only the adults but also the children are afraid of war and nuclear bombs. It is mostly agreed upon that children view the future in a very pessimistic way and expect nuclear war (Goodman, Mack Beardslee & Snow, 1983). High rate of social crimes, terrorism and other violent conflicts at micro and macro level has added new motion to it. So with the growth of displeasures of the world, the campaigns for peace are accelerating. Peace building and peace keeping campaigns use many devices like Nobel Peace Prize, Education for Peace,

Postage Stamps, Poster, Leaflet, Conferences, Seminars and soon. The United Nations had decided to celebrate the year 1986 as the year of peace. The Agenda Item No. 12 of the thirty-eighth session of the General Assembly of the United Nations suggested a wide variety of activities aimed at awakening and mobilizing the states and their peoples in the pursuit of universal peace. Among other things, it suggested organization of conferences, symposia and seminars to focus attention, and encourage reflection on the basic prerequisites of peace in the contemporary world (Sharma 1990). Almost all countries of the world considered education as the strong media of peace building and peace keeping. As wars build in human minds so it is peace that should be cultivated there to remove wars. UNESCO has been encouraging peace education to enhance international understanding and create respects for cultural diversities. Bangladesh is trying to be a developed country. It has lot of human and natural potentialities. It needs a strategy for sustainable development. Establishment of social peace is most essential for sustainable development. This paper may be helpful to show the way of peace.

Objective: There should be a positive correlation between educational expansion rate and social stability. Individual, family, society, country and world peace with natural balance generates total peace, which brings social stability. The main goal of education from supply side and also from demand side is to achieve total peace. With this in mind the paper has an objective to review the present status of peace education in Bangladesh and make a comparison with a few other countries. It will analyse the extent of peace contents and also its impact. On the basis of finding it makes some recommendations for future action in achieving total peace.

Methodology: The paper is prepared on the basis of secondary data and review of literature. This anther has studied different books, journals, peace documents of UNESCO and papers presented in different national and international seminars and conferences on peace. He has also consulted different research reports. Three countries like Japan, New Zealand and Sri Lanka are selected as case studies on Peace education. Japan is taken because they were badly afffected in the second World War. New Zealand is chosen because it is a newly developed country and have many social problems due to industrilization. Sri Lanka is selected because it has achieved cent per cent literacy rate among the developing countries.

Review of Literature

In his will of November 27, 1885, Alfred Nobel stated that the Peace Prize should be awarded 'to the person who shall have done the most or the best worked for

fraternity between nations, for the abolition or reduction of standing armies and the holding and promotion of peace congresses.' This was in a way Alfred Nobel's definition of peace.

UNESCO declares 'that ignorance of each other's ways and lives has been a common cause, throughout the history of mankind, of that suspicion and mistrust between the peoples of the world through which their differences have all too often broken into war'.

Ellen Wilkinson, Former Minister of Education, United Kingdom in his opening speech to the conference of UNESCO, London, 1945 emphasised to replace nationalist teaching by a conception of humanity that trains children to a sense of mankind as well as of national citizenship. That means working for international understanding.

Jaime Torres Bodet (Mexico), the former Director-General of UNESCO (1948-1952), stated: "Knowledge and understanding of the principles of the Universal Declaration of Human Rights and their practical application must begin during childhood. Efforts to make known the rights and duties they imply will never be fully effective unless schools in all countries make teaching about the Declaration a regular part of the curriculum.

Maria Montessori, a distinguished Italian Educationist, addressing the first UNESCO International Conference 1978 of Ministers responsible for Physical Education and Sports, in Paris stated the failure of present education system very nicely. He stated that Education in its present form encourages the child's sense of isolation and his pursuit of his own interests. "Children are taught not to help one another, not to prompt those who do not know something, to think of nothing but their own advancement, to aim solely at winning prizes in competition with their companions. And these pathetic egotists, mentally wearied as experimental psychology reveals them to be, then go out into the world, where they live side by side like grains of sand in the desert - every one cut off from his neighbour, and all sterile. If a gale arises, this human dust, with no spiritual essence to give it life, will be swept away in a death-dealing whirlwind,' and this death-dealing whirlwind was just appearing on the horizon." He stated: If one day UNESCO resolved to involve children in the reconstruction of the world and building peace, if it chose to call on them, to discuss with them and recognize the value of all the revelations they have for us, it would find them of immense help in infusing new life into the society, which must be founded on the cooperation of all.

Lionel Elvin (United Kingdom) (Director of the Department of Education, UNESCO, from 1950 to 1956) expressed the following views: If UNESCO were

only an office in Paris, its task would be impossible. It is more than that: it is an association of some sixty-five countries which have pledged themselves to do all they can, not only internationally but within their own boundaries, to advance the common aim of educating for peace. The international side comes in because we shall obviously do this faster and better and with more mutual trust if we do it together.

Jawaharlal Nehru (Prime Minister of India from 1947 to 1964) addressed on the occasion of his visit to UNESCO in September 1962. He said: It is then the minds and the hearts of men that have to be approached for mutual understanding, knowledge and appreciation of each other and through the proper kind of education. But we have seen that education by itself does not necessarily lead to a conversion of minds towards peaceful purposes. Something more is necessary, new standards, new values and perhaps a kind of spiritual background and feeling of commonness of mankind.

James P. Grant (United States) (Education Director of UNICEF from 1980 to 1995) stated: Education for peace must be global, for as the world is turing into a single community, everyone must come to understand that they are affected by what happens elsewhere and that their lives, too, have an impact. Solidarity is a survival strategy in the global village.

Attiya Inayatullah (Pakistan) (President of the Executive Board of UNESCO from 1993 to 1995) made statement in International Conference on Education, Geneva, 1994: We refer to a respect for cultural pluralism in which cultural tolerance is not based only on a passive acceptance of the right of other cultural groups, including minorities, but implies, further, an active and empathetic knowledge of those cultures resulting in mutual respect and understanding.

Colin N. Power (Australia) (former Assistant Director-Generul for Education, UNESCO) commented in the Final Report of the European Conference on Curriculum Development: Civic Education in Central and Eastern Europe, Vienna, October 1995: In providing curricula and textbooks, teaching methods and the actual functioning of educational institutions to strengthen citizenship, particularly in societies in transition, UNESCO's aim is to assist in effecting the transition, in people's lives and in their minds, from form democracy to democratic practice, one of the essential dimensions of the culture of peace.

Federico Mayor (Spain) (former Director-General of UNESCO) opined in his Speech given at the Norwegian Nobel Institute, Oslo, November 1995: The core problem is violence. Rather than imposing by force, we must learn to accept dialogue, to convince rather than conquer. Violence must be rejected. The crucial

transition at the present time is from the logic of force to the force of reason - that is to say, from the culture of war to the culture of peace.

Theodore Roosevelt (1858 - 1919), President of the United States, Nobel Peace Prize Laureate 1906 stated: We must ever bear in mind that the great end in view is righteousness, justice as between man and man, nation and nation, the chance to lead our lives on a somewhat higher level, with a broader spirit of brotherly goodwill one for another. Peace is generally good in itself, but it is never the highest good unless it comes as the handmaid of righteousness; and it becomes a very evil thing if it serves merely as a mask for cowardice and sloth, or as an instrument to further the ends of despotism or anarchy.

Ralph J. Bunche (United States 1904 - 1971), Nobel Peace Prize Laureate 1950 opined: It is truer today than when Alfred Nobel realized it a half-century ago, that peace cannot be achieved in a vacuum. Peace must be paced by human progress. Peace is no mere matter of men fighting or not fighting. Peace, to have meaning for many who have known only suffering in both peace and war, must be translated into bread or rice, shelter, health, and education, as well as freedom and human dignity - a steadily better life. If peace is to be secure, long-suffering and long-starved, forgotten peoples of the world, the underprivileged and the undernourished, must begin to realize without delay the promise of a new day and a new life.

Lester Bowles Pearson (Canada 1897 - 1972), President of the United Nations General Assembly 1952 and Nobel Peace Prize Laureate 1957, said: Peace must be more than the rejection of universal suicide; it must aim at general social and economic progress, international agreement, compromise and tolerance. Our Problem then, so easy to state, so hard to solve, is how to bring about a creative peace and a security which will have a strong foundation.

Martin Luther King (United States 1929 - 1968), Black Baptist minister; campaigner for civil rights and Nobel Peace Prize Laureate 1964, stated: We will not build a peaceful world by following a negative path. It is not enough to say 'We must not wage war.' It is necessary to love peace and sacrifice for it.

So we must fix our vision not merely on the negative expulsion of war, but upon the positive affirmation of peace. We must see that peace represents a sweeter music, a cosmic melody that is far superior to the discords of war.

Mumtaz Soysal (1977), Leader of the Amnesty International, made statement in Nobel Lecture: Peace is not to be measured by the absence of conventional war, but constructed upon foundations of justice.

Oscar Arias Sanchez, President of Costa Rica and Nobel Peace Prize Laureate 1978, said: Peace is a never-ending process, the work of many decisions by many people in many countries. It is an attitude, a way of life, a way of solving problems and resolving conflicts. It cannot be forced on the smallest nation or enforced by the largest. It cannot ignore our differences or overlook our common interests. It requires us to work and live together.

Javier Perez de Cuellar, Former Secretary-General, UNO and Nobel Peace Prize Laureate 1988, stated: Peace - the word evokes the simplest and most cherished dream of humanity. Peace is, and has always been, the ultimate human aspiration. And yet our history overwhelmingly shows that while we speak incessantly of peace, our actions tell a very different story.

Tenzin Gyatso, the XIVth **Dalai Lama of Tibet,** Religious and political leader of the Tibetan People and Nobel Peace Prize Laureate 1989, made this statement: Peace can only last where human rights are respected, where the people are fed, and where individuals and nations are free. True peace with oneself and with the world around us can only be achieved through the development of mental peace. The other phenomena mentioned above are similarly inter-related. Thus, for example, we see that a clean environment, wealth or democracy mean little in the face of war, especially nuclear war, and that material development is not sufficient to ensure human happiness.

Mikhail S. Gorbachev, Former President of the Soviet Union and Nobel Peace Prize Laureate 1990, said: Preparing for my address I found in an old Russian encyclopedia a definition of 'peace' as a 'commune' - the traditional cell of Russian peasant life. I saw in that definition the people's profound understanding of peace as harmony, concord, mutual help, and co-operation.

Frederik Willem de Klerk, President of the Republic of South Affica and Nobel Peace Prize Laureate 1993, opined: Peace is a frame of mind. It is a frame of mind in which countries, communities, parties and individuals seek to resolve their differences through agreements, through negotiation and compromise, instead of threats, compulsion and violence.

From the above discussion we have the idea that peace is the urgent demand of all but very little progress has been made so far to achieve it. All great leaders of the world seriously think about peace. But their thinking remains merely in dream not in action. So not thinking but serious action is most essential today.

The status of peace education in selected countries

Japan: Education for peace is different from education on peace. Education on peace simply gives knowledge and information, which do not include the prescription on what to do for peace. Education for peace is the education to grow people who create peaceful world. In Japan education is provided for both of the purpose (Hideo Fujita, 1996).

In Japan the organisations to promote adult peace education are as varied as follows:

- i. Local Educational Authorities: There are many community cultural centers (Kominkan) in cities, towns, villages in Japan. They have their own peace study programs. Some public libraries and museums make peace book concerns and occasionally hold special exhibitions for peace.
- **ii.** Local Government: There are many peace, anti-nuclear weapon local governments (Hikaku Jichitai) in Japan. They arrange lectures and exhibitions for peace especially in summer.
- **iii. Voluntary Organisation and Groups :** There are many national and prefectural organisations and community groups for peace in Japan. They develop peace activities domestically as well as internationally. They carry out peace education to strengthen the activities.
- iv. A number of Japanese Universities today, specially Hosei University (Tokyo) and Ryukyu University (Okinawa), have developed extension activities for peace for a long period.
- v. Mass Media: There are outstanding programs for peace on the air specially in August because of the Hiroshima, Nagasaki and Memorial Day for the end of the War. Even the programs on Japanese assault experience under 15year war are frequently televised.

Contents of Adult Education for Peace

Education of Suffered Experiences in 15-year War: The studies of suffered experiences under 15-year war like Hiroshima, Nagasaki, Okinawa battle bombings in many cities have become main subjects of discussions. The contents include the magnitude of the atomic bombs exploded, people instantly died from it, and mental suffering of survivors of atomic bombs. Most of the Japanese feel guilty of the war, and the peace educators insisted to compensate for the sin by trying never to allow it to happen again.

Education of Assault Experiences: Japanese education includes themes of assault experiences in Taiwan, Korean and China before the 15-year war. Recently many meetings organised by the Japanese Association of Veterans against War have realistically informed the students of the facts on what the Japanese militarism had actually done in detail. These meetings give strong impression to students.

Besides, Japanse education puts emphasis on the following contents: International politics, Disarmament education, Japan - US security Treaty and US Army in Japan, policy of the UN and peace-keeping operations.

Method of Adult Education for people includes Testimony Activities of war experiences, exhibitions for peace, movie meetings, lectures, study through survey, drama playing, singing, reciting, peace tour etc.

New Zealand

New Zealand is experiencing some disturbing social trends, such as an increase in the level of voilent crime, an increasing number of suicides committed by young people, a high percentage of teen age pregnancies and high level of alcohol and drug abuse. These changes have heightened awareness of the importance of peace education, for the individual, for the community and for the nation at large (Report of Ministerial Committee of Inquiry into Violence, 1987). This report made a strong recommendation for the implementation of peace studies at all levels and for providing resources to make peace education a reality in schools.

One of the most exciting peace education initiatives currently operating in a number of New Zealand (NZ) schools is "The Cool Schools peer Mediation Programme" which has been developed by the NZ Foundation for Peace Studies, in conjunction with Students and Teachers Educating for Peace (STEP) and the Peace Van (James Collinge, 1996). Cool Schools is a peer mediation training for use in NZ primary schools (ages 5-12) and involves teaching students. The techniques required to act as third party mediators when two or more of their peers are caught in a conflict and need help to find a resolution. The programme involves six 45-minute sessions over one day. The topics of the sessions are:

(i) Active listening; (ii) Affirmations and "I" statements (how to communicate feelings to others); (iii) Recognizing types of responses to conflict; (iv) The Role of the Mediation; (v) The Mediation Process and (vi) Handling difficult situations.

Pasco (1992, P.15) concluded that it has the potential to entrust a new generation with problem solving skills, which may empower them to resolve their own conflicts in a constructive way, rather than resorting to formal processes which are generally seen to disempower individuals.

Sri Lanka

Sri Lanka has a long tradition of learning going back to the period of the introduction of Bhuddhism to the country. It enabled the universalization of basic education by the end of the 20th century. Buddhism is saturated with the concept of peace, goodwill to all, justice, non-violence and the peaceful settlement of disputes. In education they have contents related to peace issues. Their syllabus, teachers' guides and textbooks have given much attention towards peace and international understanding.

The Peace Education Unit of the Ministry of Education also conducts programs to promote peace and understanding among children of different ethnic communities in the country. Peace camps are conducted with the participation of children from north and the south. The polls of the two cities is an example of a peace program conducted to promote inter-communal understanding. The cultural festivals of different ethnic groups are organised to create an understanding and appreciation of the cultural values of the other communities. Thus Sri Lanka has evolved very unique system of peace education. In Sri Lanka the people sing a peace evoking Buddhist stanza in all their important social events as follows:

May the clouds give rain in proper time and crops yield harvest May the whole world be happy and hale And the rulers be righteous!

This stanza views peace as the total product of balanced ecological cycles, as rain in proper time, abundance of foods from good harvests, happy and contended society and right governance. (Aluthgama S. Balasooruya, 2009)

Bangladesh

In Bangladesh peace education is the crying need of time. The education campuses, specially Colleges and Universities, are very unstable. These frequently become battle fields due to factions, violances, conflicts and terrorism. Once upon a time the student politics was a very glorious force for political movement and social justice. In all national movements, including the independence war of 1971, the role of students and their leaders was remarkable. They played very vital role in all crises of the nation. They have turbulent

potentialities by dint of which many impossible can be possible for the nation if properly guided. But now-a-days student politics is involved in commercial activities like extortion, tender, and admission-trade. Instead of having books they have taken hockey sticks, bamboos, bombs and fire arms in their hand. The students are not lonely responsible for this. It is a demonstration of social erosion and moral depreciation of the nation. Actually the teachers, guardians, education administrator and the society are responsible for moral degradation of students. The students are violent because education failed to cultivate peace and love in their minds. It failed to teach them to help others, to live together and to respect democracy. It successfully tought them to earn money blindly and to hold power by stopping others with arms.

The students, when they become matured and are about to come out from campus on completion of academic education, can see in job market that there is no room for them. The few job opportunities that are available are sold at high price beyond their guardian's affordable capacity. They become frustrated. Even after doing very brilliant result they have no job gurantee. Thus they find no away of fair life. They do not want to come out from campus and try to live on black money by becoming members of the black market. Moreover the teaching learning system in the country from primary to university is full of negativities. There is no scope of appreciation, inspiration, motivation and incentives. Every moment students have to face negative treatments of the teachers, system and the society. As a result they grow up with the negative attitude and aptitude.

The CPD made a statement that about 10.6% of GDP is spent for dissension in family. If we add loss of properties and lives due to hartal, blockade, violence and unrest, which become unavoidable due to the presence of undemoractic rules, national cost will be very high. Besides, expanding social conflict, terrorism and socio-eco-political instability speak in favour of it. The development processes in public and private sectors are mostly unsustainable in nature. Due to lack of sustainability in development programs very serious problems like disafforestation, pollution, desertification, deriverization and inside water shortage of the earth have been expanding. As a result poverty, malnutrition, fatal diseases (like cancer, diabetes, hypertension, asthma and heart-failure) have been expanding rapidly. Ecological imbalance is becoming serious. Peace education can take care of all problems of life as it teaches justice towards individual, family, society, country and nature.

If we can inculcate peace through education it will be possible to establish a peaceful society. Now it is needed to see what is peace education? Peace

education teaches people to be friend to individual, family, society, nature, country and world.

Education is a powerful means of changing human psyche and mind set up. If we want peace it is obligatory that we have to educate people how to live peacefully and how to live together with cultural diversities.

Bangladesh became independent in 1971 with the bloodshed of thirty lac martyrs under the leadership of the father of the nation Bangabandhu Sheikh Mujibur Rahman with the dream "Sonar Bangla" (golden Bengal). The golden Bengal means peace, love, development, justice and equity for all. It is a situation where every body will have the smile with full contentment in mind. We may call it total peace in a word. But this dream is yet to be materialized. We are very far from Sonar Bangla.

Peace contents in Bangladesh Education

In Bangladesh the syllabus of secondary and higher education contains some peace items. Professor Hedayet Hossin of IER, Dhaka University conducted a study on practical cases on EIU (education for International understanding) in Bangladesh. He mentioned that a student can acquire some knowledge in secondary stage about Human Rights but that is not sufficient. In totality curriculum of Bangladesh education contains some issues related to peace. But these are not sufficient. At present students are reading these contains to pass in examination. But they do not perceive them, because the contents are theoretical but not practical.

In Bangladesh religious education as in Ebeteday Madrasahs covers a large part of education. This sector needs much attention for modernization and inclusion of peace culture, respects for others and tolerance. This sector needs education how to live together with different cultures. Islam is a religion of peace and the great Prophet Hazrat Mohammad (Sm) is the mercy of Allah for all creatures (Makhlukat). This great ideal of Islam sometimes is misexplained. As a result sometimes terrorism, conflicts and violence are wongly associated with Islam. But in reality there is no room for them in Islam. There are other religions in Bangladesh like Hinduism, Christianity and Buddhism which, too, are saturated with the concept of peace.

Mahatma Gandhi in developing his extensive teaching on peace and Ahimsa relied heavily on Hindu teachings for peace in society and between rulers.

As for Christianity, Christ has been known throughout centuries as the prince of peace and teachings regarding non-violence run through the entirety of the Christian scriptures.

Buddhism is saturated with the concept of peace and goodwill to all.

The major religion of the country Islam has extensive teaching of peace and harmony between nations. The Islamic jurists worked out the first treaties on the modern international law nearly 800 years before books on the subject appeared in the West. So Bangldesh has very rich peaceful religious culture. We have to reap this potentiality through peace education at all level.

Findings

The world is overloaded by conflicts, violence, terrorism and war. At every moment the world is bathing by human blood. So peace is the most demanded agenda of the moment. In the words of Geir Lundestad, Secretary of the Norwegian Nobel Committee, "depending on one's definition of peace, there are probably more than one hundred peace prizes in the world today."

In the will of Alfred Nobel it is stated that the inputs like fraternity between nations, abolition or reduction of standing armies and the holding and promotion of peace congresses enhance peace.

From the very beginning, the promotion of peace has been one of UNESCO's fundamental aims. It declares that ignorance of each other's ways and lives has been a common cause, throughout the history of mankind, of that suspicion and mistrust between the peoples of the world through which their differences have all too often broken into war.

Lack of true respects towards democracy creates conflicts, violence and terrorism. In the present world social justice is increasingly becoming biased and purchasable commodity. Almost in every sphere of the society, justice is substituted for injustice. This injustice of the society generates agitation in human mind.

In Bangladesh curriculum, peace education contents are not sufficient at all. Moreover, the existing contents are theoretical, not practical at all. Students read these contents to pass in the examination, not for perceiving in heart. These peace contents are limited at primary, secondary and higher secondary level.

If we make comparison of four countries mentioned earlier it becomes vivid that peace education in Bangladesh is not good enough. The madrasah education,

specially Ebteday Madrasah, needs special attention. The countries like Japan, New Zealand and Sri Lanka are in a better position. Bangladesh can share their experiences. The above mentioned countries have peace education programmes for all students at university level. In Bangladesh there is a department of peace and conflicts studies in the University of Dhaka. But there is no peace education for students of other departments at university level.

Teaching learning system in Bangladesh is full of negativities. Students have to face negative treatments of the system throughout their lives. So they grow up with negative attitude.

With the expansion of education in the world, conflicts, violence, terrorism and war are increasing. Due to unsustainable development programs natural peace is very much challenging. In Bangladesh due to lack of effective peace education almost all campuses of college and university become battlefields frequently. Only material development is not sufficient to ensure peace, humanly development is required.

Recommendations: What is mostly needed in the present world for individual, family, society and country is peace and peace. The world today is over burdened by conflicts, violence, terrorism and wars. So peace education should be included in curriculum with emphasis in all countries of the world. In Bangladesh it needs the highest priority. Here at all levels from pre-primary to university, peace education should be included in theory and practice. Education should have the major goal to create peaceful and peace loving human resources.

It has to set target to be conflict-free society through expanding peace education. All training curriculum must include peace contents. Resources must be made available for peace education. Issues like conflicts, violence, terrorism and drug abuse must be addressed in peace education.

The negativities of the teaching learning process should be removed. Appreciation, inspiration, motivation and incentives should be the major guiding principle of teaching learning process.

As war builds in human minds so peace should be built there to make a peaceful world.

A social movement is needed through GOs, NGOs, and social and religious institutions for total peace. Establishment of justice and good governance at all micro and macro levels is essential as primary input for peace movement.

Conclusion

Bangladesh has to go long way for its socio-eco-political-religious and cultural peace. The country needs total peace. Inner peace, social peace and peace with nature will be able to generate total peace for the nation. Under purview of three aspects of peace we have to develop our human resources perfectly fully. If we can do it, every human being will be productive force with peaceful and loveful behavior and be able to overcome all problems.

With love we will be able to remove all the evils from the earth. We have to bring peace through understanding love for all and the joy of sharing.

In Bangladesh for peace education more items on human right, equitable distribution, poverty alleviation programs, social services, gender equity, universal love, cultural diversities, natural balance, plantation, social justice and welfare state and responsibilities for disadvantaged people should be included. Both practical and theoretical teaching of peace should be incorporated at all stages.

Reference

- 1. A Teaching Learning Guide for Education for Peace, Human Rights and Democracy, Paris, UNESCO, 1994
- 2. Aluthgama S. Balasooruya: Guest Lecture, *Introduction to Education and Sustainable Development*, APCEIU Conference, September 2008.
- 3. Bangladesh Peace and Development Mission (BPDM), Annual Report, 1990.
- 4. Banglapedia, 2003, Asiatic Society of Bangladesh, Dhaka
- 5. Beardslee, W & Mack, J (1982. *The impact on children and adolescents of nuclear development*, Washington.
- 6. Boulding, E. "Learning Peace", R. Vayrynen (ed.). *The Quest for Peace*, London, Sage Publication, 1987.
- 7. Collinge, J. "Peace Education in New Zealand", in Bjerst (edt.), *Peace Education* : *Global Perspectives*, Stockholm, Almqvist and Wiksell International, 1993
- 8. Elder, J.H. (1965). "A summary of research on reactions of children to nuclear war". *American Journal of Orthopsychiatry*.
- 9. Fujita, H(Ed.), An Introduction to Peace Study, Tokyo, Kokudo-Sha,1988.
- 10. Fujita. H. *The Present and the Future of Adult Education in Peace*. Kagaku To Shiso, 1982
- 11. *Global Perceptions on Peace Eduaction*, D. Bhaskara Ra, Discovery Publishing House New Delhi, 1996.
- 12. Goodman, L.A, Mack, J.E, W.R, & Snow, R.M.(1983) "The threat of nuclear war and the nuclear arms race: Adolescent experience and perceptions." *Political psychology*.
- 13. Journal of the First session of the General Conference of UNESCO, 1946
- 14. K.N. Sharma, Peace, Technology and Dev., Rawat Publications Jaipur 1990
- 15. *Peace! by the Nobel Peace Prize Laureates, An anthology*, Edited by Marek Thee, UNESCO, PARIS, 1995
- Practical Cases on EIU Related Themes (unpublished), Prof. Hedayet Hossain, IER, DU, 1908
- 17. Reifel, S. (1948) *Children living with the nuclear threat*, Young Children.
- 18. Report of Fourth session of the General Conference of UNESCO, Florence, 1950
- 19. Report of Opening speech to the UNESCO Conference, London, November 1945
- 20. Some suggestions on the Teaching of Geography, Paris, UNESCO, 1950.
- 21. Speech given by Federico Mayer, former Director-General of UNESCO at the Norwegian Nobel Institute, Oslo, November 1995.
- 22. The UNESCO Courier, December 1949 and 1964.
- 23. The UNESCO Courier, December, 1951.
- 24. The UNESCO Courier, May 1953.

Footnoting and writing style of the Bangladesh Journal of Political Economy

- 1. The Bangladesh Journal of Political Economy will be published in June and December each year.
- 2. Manuscripts of research articles, research notes and reviews written in English or Bangla should be sent in triplicate to the Editor, The Bangladesh Journal of Political Economy, Bangladesh Economic Association, 4/c Eskaton Garden Road, Dhaka-1000, Bangladesh.
- 3. An article should have an abstract within 150 words.
- Manuscript typed in double space on one side of each page (preferably with softcopy) should be submitted to the Editor.
- 5. All articles should be organized generally into the following sections: a) Introduction: stating the background and problem; b) Objectives and hypotheses; c) Methodological issues involved; d) Findings; e) Policy implications; f) Limitations, if any; and g) Conclusion (s).
- 6. The author should not mention his/her name and address on the manuscript. A separate page bearing his/her full name, mailing address and telephone number, if any, and mentioning the title of the paper should be sent to the Editor.
- 7. If the article is accepted for publication elsewhere, it must be communicated immediately. Otherwise, the onus for any problem that may are will lie on the author.
- 8. The title of the article should be short. Brief subheadings may be used at suitable points throughout the text. The Editorial Board reserves the right to alter the title of the article.
- 9. Tables, graphs and maps may be used in the article. Title and source(s) of such tables should be mentioned.
- 10. If the Editorial Board is of the opinion that an article provisionally accepted for publication needs to be shortened or particular expressions deleted or rephrased, such proposed changes will be sent to the author of the article for clearance prior to its publication. The author may be requested to recast any article in response to the review thereof by any reviewer.
- 11. The numbering of notes should be consecutive and placed at the end of the artile.
- 12. Reference in the text should be by author's last name and year of publication (e.g. Siddique, 1992, P. 9. In the list of references, the corresponding entry in the case of article should be in the following manner:

Siddique. H.G.A., "Export Potentials of Ready-Made Garments Industry-A Case Study of Bangladesh". The Dhaka University Studies. III, 1982, Pp. 66-67.

In the case of books, the following order should be observed: Author, title, place of publication, publisher, date of publication, page number. As for example: *Hye, Hasnat Abdul, Integrated Approach to Rural Development,* Dhaka: University Press Limited, 1984, Pp.3-4.

- 13. Reference mentioned in the text should be arranged in alphabetical order and provided at the end of the article.
- 14. The Bangladesh Economic Association shall not be responsible for the views expressed in the article, notes, etc. The responsibility of statements, whether of fact or opinion, shall lie entirely with the author. The author shall also be fully responsible for the accuracy of the data used in his/her manuscript.
- 15. Articles, not accepted for publication, are not returned to the authors.
- 16. Each author will receive two complimentary copies of The Bangladesh Journal of political Economy and 25 off-prints.

আকুল কারজাত বাংলাদেশে প্রতিবন্ধীতা ও দারিদ্রের চক্র: যোগসূত্র, ব্যয়-বর্জন ও করণীয়

Muhammad Abdul Mannan Chowdhury
The Role of Islamic Financial Institutions in
Resource Mobilization and Poverty Alleviation in
Bangladesh: An Empirical Study of Rural
Development Scheme (RDS) of Islami Bank
Bangladesh Ltd (IBBL)

Md. Ismail Hossain

Promotion of Food Security, Food Safety and its Regulation

M. Kamal Hossain, Abu Hena Morshed Zaman, Md. Nuruzaman, Mahbuba Farjana Management of Primary Education in Bangladesh: Issues for Achieving the Impossible!

Md. Morshed Hossain
Skilled and Unskilled Labour Migration under GATS
Mode 4 Negotiations and Poverty Reduction in
Bangladesh

M. N. Khatun, M. A. Basha Changes in Rural Credit Structure over the Years: An Empirical Study in Kushtia District of Bangladesh

M. Azizur Rahman Status of Peace at Secondary Education: A Comparative Study with reference to Bangladesh



Bangladesh Economic Association Bangladesh Economic Association
4/C, Eskaton Garden Road
4/C, Eskaton Garden Road
1/C, Eskaton Garden Road
1/El: 934 5996, Pax: 880-2-934 5996
Websid: www.bdeconassoc.org
E-mail: bea.dhaka@gmail.com