

BANGLADESH JOURNAL OF POLITICAL ECONOMY

Vol. XV, No. 1



Bangladesh Economic Association

**BANGLADESH
JOURNAL OF
POLITICAL
ECONOMY**

Vol. XV, No. 1, December 2001

Executive Editor
Muinul Islam

Editorial Advisory Board

Prof. Amartya Sen	Dr. Abdul Gafur
Prof. Nurul Islam	Dr. Mohiuddin Khan Alamgir
Prof. Rehman Sobhan	Dr. Mohiuddin Alamgir
Prof. Anisur Rahman	Prof. Wahiduddin Mahmud
Prof. Mosharraf Hossain	Prof. Mahbub Hossain
Prof. Muzaffer Ahmed	Prof. Selim Rashid
Prof. Azizur Rahman Khan	Dr. Siddiqur Rahman Osmani
Prof. Muhammad Yunus	Dr. M. Golam Quibria

Editorial Board

Prof. Muinul Islam	Executive Editor
Prof. Ayubur Rahman Bhuiyan	Member
Prof. Syed Abdul Hai	Member
Prof. Sanat Kumar Saha	Member
Dr. Quazi Shahabuddin	Member
Prof. Harendra Kanti Dey	Member
Mrs. Sitara Alamgir	Member

BANGLADESH ECONOMIC ASSOCIATION

BANGLADESH JOURNAL OF POLITICAL ECONOMY
Vol. XV, No. 1

The volume contains the papers presented to the Thirteenth Biennial
Conference of the Bangladesh Economic Association
held in Dhaka on August. 10-12, 2000

MUINUL ISLAM
Executive Editor

DECEMBER, 2001

BANGLADESH ECONOMIC ASSOCIATION

4/C, Eskaton Garden Road, Dhaka-1000
Phone : 9345996

বাংলাদেশ জার্নাল অফ পলিটিক্যাল ইকনমি

পঞ্চদশ খণ্ড, ১ম সংখ্যা

বাংলাদেশ অর্থনীতি সমিতির
আগষ্ট ১০-১২, ২০০০ তারিখের অনুষ্ঠিত
ত্রয়োদশ দ্বিবার্ষিক সম্মেলনে উপস্থাপিত প্রবন্ধাবলী

মইনুল ইসলাম
নির্বাহী সম্পাদক

সম্পাদনা উপদেষ্টা কমিটি

প্রফেসর অর্মত্যা সেন	ডঃ আবদুল গফুর
প্রফেসর নুরুল ইসলাম	ডঃ মহিউদ্দিন খান আলমগীর
প্রফেসর রেহমান সোবহান	ডঃ মহিউদ্দিন আলমগীর
প্রফেসর আনিসুর রহমান	প্রফেসর ওয়াহিদ উদ্দিন মাহমুদ
প্রফেসর মুশাররফ হোসেন	প্রফেসর মাহবুব হোসেন
প্রফেসর মুজাফফর আহমেদ	প্রফেসর সেলিম রশীদ
প্রফেসর আজিজুর রহমান খান	ডঃ সিদ্দিকুর রহমান ওসমানী
প্রফেসর মুহাম্মদ ইউনুস	ডঃ এম, গোলাম কিবরিয়া

সম্পাদনা পরিষদ

ডঃ মইনুল ইসলাম	নির্বাহী সম্পাদক
প্রফেসর আইয়ুবুর রহমান ভূঞা	সদস্য, সম্পাদনা পরিষদ
প্রফেসর সৈয়দ আবদুল হাই	"
প্রফেসর সনৎ কুমার সাহা	"
ডঃ কাজী শাহাবুদ্দীন	"
প্রফেসর হরেন্দ্র কান্তি দে	"
মিসেস সিতারা আলমগীর	"

ডিসেম্বর ২০০১

বাংলাদেশ অর্থনীতি সমিতি

৪/সি, ইস্টাটন গার্ডেন রোড, ঢাকা-১০০০
টেলিফোন : ৯৩৪৫৯৯৬

BEA Executive Committee 2000-2002

- 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 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. Members and students certified by their concerned departments may obtain the Journal at 30% discount.

President

Muinul Islam

Vice- Presidents

Sitara Alamgir
Hannana Begum
Md. Azizur Rahman
Sayed Abdul Hye
MA Sattar Bhuyan

General Secretary

Abul Barkat

Treasurer

Masih Malik Chowdhury

Joint Secretary

AKM Shameem

Assistant Secretary

Md. Mostafizur Rahman Sarder
Md. Sadiqur Rahman Bhuiyan
Anisatul Fatema Yousuf

Members

Wahiduddin Mahmud
Khondkar Ibrahim Khaled
Ayubur Rahman Bhuiyan
Shoeb Ahmed
Toufic Ahmad Choudhury
Fatema Zohora
Mr. Abdullah
Aktary Khanam
Md. Muzaffar Ahmed
Md. Main Uddin
Md. Ghulam Murtaza
A.Z.M. Saleh

BEA Executive Committee 1998-2000

President

Wahiduddin Mahmud

Vice-Presidents

M. Azizur Rahman

Mashiur Rahman

Momtaz Uddin Ahmed

Sayed Abdul Hye

Mustafa Kamal Mujeri

General Secretary

Sajjad Zohir

Treasurer

Salehuddin Ahmed

Joint Secretary

A.K.M. Shameen

Assistant Secretary

Altaf Hossain

Md. Sadiqur Rahman Bhuiyan

Md. Mostafizur Rahman Sarder

Members

Sitara Alamgir

Khondoker Bazlul Hoque

K.M. Jamshed Uz Zaman

Md. Lutfor Rahman Mallick

Hannana Begum

Ihsanul Aziz

Masih Malik Chowdhury

Abdus Sattar Mandal

Md. Korban Ali

Anisatul Fatema Yousuf

Md. Zahirul Islam Sikder

A.K.M. Delwar Hossain Malder

Bangladesh Journal of Political Economy
Vol. XV, No. 1
Conference Volume

Contents

1.	Bangladesh Since Independence: Development Performance, Constraints and Challenges <i>- Sadiq Ahmed</i>	1
2.	South Asia in the Twenty-First Century: Managing Growth in A Democratic Framework <i>- Moazzem Hossain, Iyanatul Islam & Reza Kibria</i>	31
3.	Aid and Resource Allocation <i>- M A Taslim</i>	43
4.	Money Supply Process in Bangladesh: An Empirical Analysis <i>- Imam Abu Sayed</i>	51
5.	Savings in Bangladesh—An Econometric Model <i>- Rahima Tasneem Rahman</i>	71
6.	Balance of Payment: Problems and Prospects for the Developing Countries <i>- Md. Julhas Uddin</i>	79
7.	Should Central Bank in Developing Countries be Independent of Government? <i>- M. A. Kashem</i>	93
8.	Water as a Scarce Resource: Policies on Water Pricing and Cost Recovery in Bangladesh <i>- Quazi Shahabuddin</i>	105
9.	Some Reflections on Multipurpose and Economic Use of Water Resources and Regional Co-operation with Particular Reference to the Ganges Basin <i>- Murshed Ahmed</i>	115

10.	Microfinance in Bangladesh: Sustained Progress or Emerging Problems? - <i>Rushidan Islam Rahman</i>	129
11.	Development Potentials of Micro-enterprises in Bangladesh: An Analysis of Issues and Constraints - <i>Momtaz Uddin Ahmed</i>	141
12.	বাংলাভাষায় অর্থনীতি শিক্ষা ও গবেষণার সমস্যা ও সম্ভাবনা - <i>বিনায়ক সেন</i>	175
13.	Growth Trend of Aged in Bangladesh and Related Issues - <i>M. Zainul Abedin</i>	183
14.	Cultural Values and Economic Development: Some Reflections on Bangladesh Experience - <i>Ashraf Uddin Chowdhury</i>	189

Editorial Note

The Bangladesh Journal of Political Economy was last published in 1997. I do not intend to start a blame game for this delay, but I urge upon all the members of the Bangladesh Economic Association to redouble their individual commitments towards the Association and its prestigious publication, the Bangladesh Journal of Political Economy.

In the second business meeting of the Executive Committee held on 28 August, 2001 after our election in August 2000, we have decided to transform the Journal into a full fledged referred journal to be published twice every year in June and December. The newly formed Editorial Board started the painful preparatory works in right earnest. The Editorial Board decided to publish the articles presented in the Biennial Conference of the Association held in August, 2000 in its first regular session designed as the Conference volume. But to our dismay, we found that only a handful of the articles were in a reasonably complete form suitable for a professional journal. Then, we wrote to the presenters to revise their articles according to a specific set of guidelines to be followed in the Journal, but many did not respond. Another group of presenters submitted only the synopses of their presentations. We requested them to submit the full articles. Again, we got only scant response. We have, therefore, included only fourteen articles in the present conference volume, which, according to the views of the Editorial Board, could be approved as articles with reasonable completeness and quality.

The next issue of the Journal will hopefully include the articles submitted to the Association or presented in seminars organized by the Association. Those are currently going through the review process of the internal and external reviewers selected by the Editorial Board. From now on, acceptance of the articles for publication will be strictly on the basis of referees, reports.

We have been repeatedly urging our members to submit new articles for the Journal. I am happy to note a slow but increasing response to our appeals in this regard. A particular writing style of the Journal has been approved by the Editorial Board and the Executive Committee. We urge upon all contributors to follow the guidelines provided.

I must admit that the long and arduous process of approval of articles in a respectable professional journal may be quite frustrating for the contributors. But, any compromising attitude will definitely frustrate the efforts to ensure the acceptable quality of the Journal itself. Our efforts, however painful at the present stage, will bear fruits in due course, we hope.

Therefore, I solicit your patience and perseverance. I earnestly thank my colleagues in the Editorial Board for their unstinted cooperation.

Sincerely,



(Dr. Muinul Islam)
Executive Editor,
Bangladesh Journal of
Political Economy
and
President,
Bangladesh Economic Association.

বাংলাদেশ অর্থনীতি সমিতির ষাণ্মাসিক 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 গ্রহণ 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 তাঁকে মনোনীত করা হবে।
- ৪। Reviewer দেরকে ৫০০.০০ টাকা হারে সম্মানী প্রদান করা হবে। এ হার পরিবর্তনযোগ্য।
- ৫। প্রবন্ধকারের প্রবন্ধ জার্নালে প্রকাশনার জন্য গৃহীত হলে তাঁকে ২০০০.০০ টাকা সম্মানী প্রদান করা হবে। এই হার পরিবর্তনযোগ্য। Note এর জন্য ১০০০.০০ টাকা সম্মানী দেয়া হবে।
- ৬। ক) সমিতির ২০০০ সালের দ্বিবার্ষিক কনফারেন্সে 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।
- ৭। 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।
- ৮। জার্নালের Footnoting এবং Writing Style এতদসঙ্গে সংযোজিত হলো (সংযুক্তি-২)
- ৯। ক) Reviewer হিসেবে সম্পাদনা উপদেষ্টা কমিটির সদস্যদেরকে Involve করা হবে।
খ) দেশের অভ্যন্তরে অবস্থানকারী কমিটির সদস্যদেরকে বছরে দু'বার সম্পাদনা পরিষদের সাথে মিলিত সভায় আমন্ত্রণ জানানো হবে।
- ১০। 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।

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 Executive Editor, The Bangladesh journal of political Economy, Bangladesh Economic Association office, 4/c Eskaton Garden Road, Dhaka-1000, Bangladesh.
3. An article should have an abstract within 150 words.
4. Manuscript typed in double space on one side of each page (preferably with softcopy) should be submitted to the Executive 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 her name and address on the manuscript. A separate page bearing her full name, mailing address and telephone number, if any, and mentioning the title of the paper should be sent to the Executive Editor.
7. If the article is accepted for publication elsewhere, it must be communicated immediately. Otherwise, the onus 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 article.
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 be 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 offprints.

Bangladesh Since Independence: Development Performance, Constraints and Challenges

Sadiq Ahmed*

1. Overview

In 1973 Henry Kissinger, former US Secretary of State, is reported to have commented that **Bangladesh was a basket case**, being possibly overwhelmed with the appalling state of the economy following the country's independence from Pakistan on December 16, 1971. Today, after 30 years of independence, the country can boast of some convincing progress with economic development. Per capita income has expanded by more than three-fold, human development has progressed impressively, and the incidence of income/consumption poverty has been reduced by a third. Yet, major challenges remain. At dollar 370, per capita income is low even by South Asia standards, some 50% of the population is still poor, and most indicators of human development are low even by standards of low income economies. *Against the backdrop of these challenges, major governance and financial constraints have emerged which threaten the sustainability of the past progress.* The development challenges for Bangladesh as it enters the new millennium are indeed daunting, but by no means insurmountable. As the nation has shown, rising from the ruins of a war-devastated economy in the 1970s, with concerted efforts constraints can be overcome and progress with development is very much possible.

The objective of this paper is to trace the development progress in Bangladesh over the past 30 years, look at the emerging constraints and challenges, and draw lessons for the way forward. The three decades constitute a rich experience and important lessons can be gained, both positive and negative. As well, an effort will be made to draw on the equally rich international experience, especially lessons from the neighboring South Asian countries. Hopefully, this review will make a modest contribution to the debate on policy options for Bangladesh.

* The author is the Chief Economist of the World Bank South Asia Region. Views expressed in this paper are the author's own and not of the World Bank. He is grateful to Fred Temple, Zaidi Sattar, Shekhar Shah, Rashid Faruquee, Farooq Akhter Choudhury, Zahid Khan and Shamsuddin Ahmed for their comments and advice on the first draft. All errors are the author's sole responsibility.

The paper is organized as follows. After the overview, the next section reviews development performance in Bangladesh since independence. Trends in relevant quantitative indicators of performance are presented and compared, wherever possible, with performance in South Asia and other developing economies. Policies that explain past developments are analyzed in section III. In section IV, we summarize the emerging development challenges for Bangladesh in the new millennium and discuss the implications for future policy and institutional reforms.

Section II: Development Progress over the Past Three Decade

Development is best defined as social transformation¹. For practical purposes, though, one needs some convenient reference points to measure development in order to pass judgements about progress made and also to make international comparisons. One common approach is to measure development progress in terms of performance with *poverty reduction*. It is well recognized that poverty is multidimensional². Again, a commonly used approach is to define poverty in terms of income or consumption and in terms of human development indicators. These indicators of poverty are well understood as they are quantifiable, and progress over time can be measured. Tables 1 (a and b), 2 and 3 below show Bangladesh's progress with poverty alleviation, human development and reduction in gender bias.

Bangladesh's progress with poverty reduction, human development and gender bias

Arguably, Bangladesh is the most vulnerable of the South Asian economies in view of her extremely high population density (the highest in the world excluding Singapore) and the high incidence of natural disasters. Poverty incidence data compiled by World Bank staff and national researchers show that there was a substantial deterioration in the poverty situation in the 1970s, followed by rapid progress during 1978-86 (Table 1 a). There was again a worsening of the poverty situation in the 1986-92 period (Tables 1a and 1b). More recently (1992-96), there has been an improvement in the poverty reduction effort (Tables 1a and 1b). Given the high concentration of the poor in the rural areas, the national poverty outcome is dominated by the poverty situation in the rural areas³.

¹ See Stiglitz 1998

² See World Bank 2000

³ Good discussions of the Bangladesh poverty estimates and issues are contained in Sen 2000 and World Bank 1999.

Table 1a: Bangladesh Poverty Incidence, 1973-1992⁴

Years	Head Count A ⁵			Head Count B ⁶		
	Rural	Urban	National	Rural	Urban	National
1974	60.3	52.0	59.4	71.3	63.2	70.4
1977	78.9	67.7	77.4	n.a.	n.a.	n.a.
1978	77.4	68.4	75.4	n.a.	n.a.	n.a.
1979	65.8	54.9	64.1	n.a.	n.a.	n.a.
1982	55.3	45.5	54.2	65.3	48.4	63.3
1984	46.3	37.1	45.1	53.8	40.9	52.1
1986	37.3	26.4	35.9	45.9	30.8	47.9
1989	43.4	37.4	41.2	49.7	35.9	47.9
1992	n.a.	n.a.	n.a.	52.9	33.6	50.4
1996	n.a.	n.a.	n.a.	51.1	26.3	46.4

Although the two time series poverty estimates are not comparable because of definition and other measurement differences, some broad conclusions can be made⁷. First, overall, Bangladesh has made an impressive reduction in poverty since independence. Both the rural poor and the urban poor have benefited from this effort. Second, *the reduction in poverty seems to have slowed down considerably since the mid-1980s, due to stagnation in progress with reduction of rural poverty*⁸ Urban

Table 1b: Bangladesh Progress With Poverty Reduction, 1984-96⁹

Years	Poor (headcount index)			Very Poor (headcount index)		
	Rural	Urban	National	Rural	Urban	National
1984	60	50	59	43	28	41
1986	53	43	52	36	20	34
1989	59	44	57	44	22	41
1992	61	45	59	46	23	43
1996	57	35	53	40	14	36

⁴ Source : Sobhan, et. al. 1996 and Sen 2000.

⁵ Based on distribution data ranked by per household expenditure.

⁶ Based on distribution data ranked by per capita expenditure.

⁷ Although the estimate of the level of poverty depends upon the specific definition and other measurement issues, the conclusions on poverty trends and progress are not very much affected. See Sen 2000.

⁸ This conclusion is still valid if one were to exclude the controversial poverty estimate for 1986 which shows a sharp reduction over 1984. Sen (2000) explains the nature of this controversy. As the results of Table 1b show, the important point is that between 1984 and 1996, the incidence of rural poverty seems to have stagnated around 60%.

⁹ Source: World Bank, 1991. These estimates in some sense are based on best practice methodology, being derived from the cost of basic needs method and careful attention is paid to deriving price deflators.

poverty reduction, however, has continued to make good progress, with the incidence declining to around 35% in 1996, as compared with rural poverty incidence of over 50%. Fourth, the fluctuations in the incidence of rural (and therefore national) poverty incidence suggests the vulnerability of the rural poor.

The picture regarding progress with human development (Table 2) shows that, since independence, Bangladesh made rapid strides from its low base levels in improving primary school coverage, reducing the population growth rate, improving access to safe water, reducing infant mortality, and raising life expectancy. The performance in the area of population management is truly remarkable, resulting in a rapid reduction in the rate of population growth from a high of 2.8% per annum in the 1970s to 1.6% per annum in the 1990s.

Table 2: Bangladesh Progress with Human Development 1975-97¹⁰

Years	Life expectancy (Years)	Infant mortality rate (per 1000)	Total fertility rate(%)	Access to safe water (% of population)	Adult literacy rate (%)	Primary school enrollment (%)	Secondary school enrollment (%)
1975-77	47	130	6.5	35	26	83	14
1985-88	51	118	5.5	46	33	59	17
1995-97	60	60	3.1	84	51	96	29

Also remarkable is the progress in reducing gender discrimination (Table 3). Apart from the rapid progress made in increasing enrollment of girls in primary schools, the increase in the ratio of female to male from a pretty low level to around the same level as in advanced western countries is an indication of the strength of the progress in reducing the anti-female bias in the country¹¹. This is particularly notable because of the overall difficult social environment for women in South Asia.

Table 3 : Bangladesh Progress With Reduction in Anti-Female Bias¹²

Indicators	1972	1980	1990	1997
Female-male ratio	0.93	0.94	1.06	1.06
Female literacy (% of male)	33	40	46	71
Female primary school enrollment (% of male)	50	62	85	87
Female secondary school enrollment (% of male)	30	38	50	54

¹⁰ Source: World Bank 1999-97; World Bank 2000a.

¹¹ See Dreze and Sen (1995) for a discussion of the importance of the female-male ratio as an indicator of gender bias.

¹² Source: World Bank 1999-97; World Bank 2000b; Human Development Report 1999.

Bangladesh Human Development in an International Perspective

How does Bangladesh's human development progress compare internationally? Table 4 shows the relative position of human development indicators in Bangladesh in the international context. Despite past progress, human development indicators in Bangladesh still lag substantially behind the levels achieved in Sri Lanka and the East Asian Economies. She has among the lowest life expectancy in the South Asia Region, falling even behind the average of the low income countries.

Table 4: Bangladesh's Social Indicators in the International Context-1996-97¹³

Region/ Country	Life expect- ancy	Popula- tion growth rate(%)	Primary school enrollme nt(%)	Second- ary school enrol- ment (%)	Ratio of female to male primary pupils (%)	Youth literacy rate (Male) (%)	Youth literacy rate (Female) (%)	Infant mortality rate (per1000 live births)	Under-5 mortality rate (per 1000)	Maternal mortality rate (per 10000)	Access to safe water (% of popu- lation)
Bangladesh	60	1.6	96	29	87	58	37	60	104	850	84
India	62	1.2	101	49	82	73	56	71	88	440	85
Nepal	57	2.0	113	42	67	73	38	83	117	1500	59
Pakistan	64	2.3	81	30	47	69	39	95	136	340	62
Sri Lanka	73	1.0	109	75	96	97	96	14	19	30	70
South Asia	62	1.4	96	44	80	75	52	77	100	480	81
Low Income	63	2.3	103	50	NA	77	59	82	118	—	69
Middle Income	—	0.9	105	70	99	96	94	34	43	—	79
East Asia	—	0.9	121	69	100	98	96	37	47	—	77
High Income	—	0.3	104	107	100	100	100	5	7	—	100

Overall, the health standards are poor, reflected not only in low life expectancy, but also in high infant, child and maternal mortality rates. Nutrition is a serious problem, with over 50% of the children suffering from malnutrition¹⁴ The adult literacy rate is still very low and secondary school enrollment is the lowest in the region. There are major concerns about the quality of basic services, including education¹⁵

Progress With the Enabling Environment

It is universally acknowledged that long-term economic growth is necessary for poverty reduction¹⁶. The intuition underlying this conclusion is easy to see. Income growth creates the basis for providing productive employment, supports increases

¹³ Source: World Bank 1999-97

¹⁴ See World Bank 1999a.

¹⁵ See World Bank 1999b.

¹⁶ For empirical evidence, see Dollar and Kraay 2000.

in real wages, and helps finance public programs for poverty reduction. However, it is also well recognized that the pattern of economic growth needs to be *pro-poor* in order to ensure that the poor are able to participate in the growth process. In the Bangladesh context, given the strong concentration of the poor in the rural areas and being a labor abundant country, the overall pace of economic growth, the performance of agriculture, and the overall labor intensity of production all matter for reducing income poverty.

Table 5 shows the progress with the *enabling environment for poverty reduction*. Some explanation of the choice of variables is in order¹⁷. The importance of saving and investment rates for supporting rapid growth is well recognized. However, the efficiency of investment is also important. A commonly used indicator is *total factor productivity (tfp)*. Lack of necessary data, particularly reliable estimates of the capital

Table 5: Bangladesh Progress With the Enabling Environment, 1973-98

Indicators	1973	1998 ¹⁸
Growth of GDP (% p.a)	-	4.7
Growth of Per Capita GDP (% p.a)	—	2.5
GNP Per Capita (\$)	110	350
Growth of agricultural GDP (% p.a)	—	2.3
Investment Rate (% of GDP)	12.9	22.2
National Saving Rate (% of GDP)	13.7	20.8
Domestic Saving Rate (% of GDP)	7.5	16.8
Exports (% of GDP)	5.0	13.8
Imports (% of GDP)	10.2	18.9
Inflation Rate (% p.a)	-	11.1

stock, prevents this. A proxy for efficiency is the *openness of the economy*, measured as the share of trade (exports and imports) to GDP. Admittedly, this measure is controversial. Yet, there is a considerable body of empirical evidence which suggests that openness to trade is good for economic growth¹⁹. A direct measure of labor intensity of production (capital/labor ratio) is similarly not possible due to inadequate data. A proxy for this is the share of exports in GDP. This is a useful proxy, given the

¹⁷ Admittedly, the selection of variables is rather limited. Other important elements of the enabling environment include governance related variables such as law and order, corruption, quality of the financial system. As argued later in the paper, these are major negative factors for poverty reduction in Bangladesh.

¹⁸ Growth rates are average per annum over 1973-98; levels are for the specific year shown.

¹⁹ Dollar and Kraay 2000.

strong weight of agriculture/agriculture based exports and labor intensive garments in the export basket. Finally, inflation is a direct determinant of poverty. There is substantial international evidence that high inflation hurts the poor more because of their weaker ability to protect against the decline in real income resulting from higher inflation²⁰.

The results of Table 5 show that Bangladesh made good overall progress in increasing per capita income based on an expansion in the rate of investment and supported by greater openness to international trade. Exports grew faster than GDP, fueled by a rapid expansion of labor-intensive garment exports. Importantly, an increasing share of this expansion in investment was financed by an increase in domestic and national saving rate. As against these positive developments, negative factors have been a much slower pace of expansion in agricultural value-added and an average inflation rate that has much exceeded the international inflation rate. Additionally, the expansion in per capita income lagged significantly behind the growth of per capita incomes in Sri Lanka (4% per annum) and the average of the East Asian economies (6% per annum). Not surprisingly, there has been much better progress with poverty reduction in these countries as compared with Bangladesh.

The aggregate results, however, hide some of the dynamics of the growth experience in Bangladesh. A disaggregated picture is important to understand why poverty reduction progress has slowed down since the mid-1980s. The pace and pattern of growth, corresponding to the various poverty progress periods is shown in Table 6. A number of important points emerge from this breakdown. First, the early years of independence (1972-77), which saw a considerable increase in the incidence of poverty, also witnessed slow overall per capita income growth and slow growth of agricultural incomes. In the second phase (1978-86), when a sharp reduction in the incidence of poverty in both rural and urban areas happened, overall per capita growth improved, notably, the pace of growth in agricultural value-added increased, and there was a rapid expansion in the exports of garments. In the third phase (1987-92), rural poverty increased despite an increase in the rate of overall per capita GDP. This happened partly due to a significant reduction in the pace of expansion of agricultural incomes. Urban poverty, however, continued to show a decline, benefiting from the continued good rate of expansion of urban incomes and the contribution of buoyant garment exports. Finally, in the fourth phase (1992-96), poverty declined in both rural and urban areas, supported by an increase in the rate of growth of overall per capita GDP, an increase in the rate of growth of agricultural GDP, and the continued strong contribution of garment exports.

²⁰ Dollar and Kraay 2000; Ahmed 1984; Datt and Ravallion 1996.

Table 6 : Bangladesh Growth Pattern

Growth Pattern	1973-77	1977-86	1986-92	1992-96
Growth of Per capita GDP	2.0	2.6	2.7	3.1
Growth of Agricultural value-added	2.3	2.7	1.8	2.4
Growth of Garment exports (\$)	—	210 ²¹	20	16

The breakdown of growth also shows a very important result. The impact of per capita income growth on poverty reduction has varied over time. Table 7 shows this result. The responsiveness of poverty to growth has been most buoyant in the 1977-84 period and least robust in the 1984-96 period²².

Table 7. Bangladesh Poverty Responsiveness to Growth²³

years	Per capita GDP growth rate (%p.a)	Reduction in poverty (% p.a)	Poverty responsiveness
1977-84	2.5	7.4	3.0
1974-92	1.7	1.9	1.1
1992-96	3.1	4.3	1.4
1984-96	2.4	1.0	0.4

Overall, the responsiveness of poverty reduction to growth has fallen sharply since the mid-1980s. What explains this? Part of the answer is the differential pattern of growth whereby the participation of the poor in the growth process has varied over time. In part also, *evidence suggests that there has been disturbing outcome of rising inequality in both urban and rural consumption in Bangladesh* (see Table 8). The incidence of inequality has been higher in urban areas than in rural areas.

²¹ This high growth rate reflects an increase from a very low base of only \$ 3.0 million in June 1981.

²² As noted earlier (footnote 8), there is some debate about the reliability of the 1986 poverty estimates which show a marked improvement in poverty reduction between 1984 and 1986. So, if one were to use 1986 as the base point for measuring poverty since then, the outcome is one of negative progress with poverty reduction in the rural areas!

²³ Due to non-comparability of the various poverty series, the estimates of responsiveness are computed as follows. For 1977-84, series A in Table 1a is used; for 1974-92, series B is used; finally, for 1992-96 and 1984-96, poverty data in Table 1b is used.

Table 8. Distribution of Consumption in Bangladesh²⁴

Years	National Gini Coefficient	Rural Gini Coefficient	Urban Gini Coefficient
1984	0.26	0.24	0.29
1986	0.26	0.24	0.30
1989	0.28	0.27	0.31
1992	0.27	0.25	0.31
1996	0.31	0.26	0.36

Section III: Policy Framework for Poverty Reduction

Overview

Except for the early years of independence, Bangladesh has relied pretty heavily on economic growth and human development as the main instruments for poverty reduction. Since 1975, this focus on growth and human development has remained dominant in spite of the many changes in government. Correspondingly, the experiment with a controlled economy, comprising of state ownership and management of production and price controls, was short-lived and was basically reversed after the fall of the first government in 1975. Over the years since then, deregulation, liberalization and focus on private enterprise have proceeded in different forms, pace, and pattern.

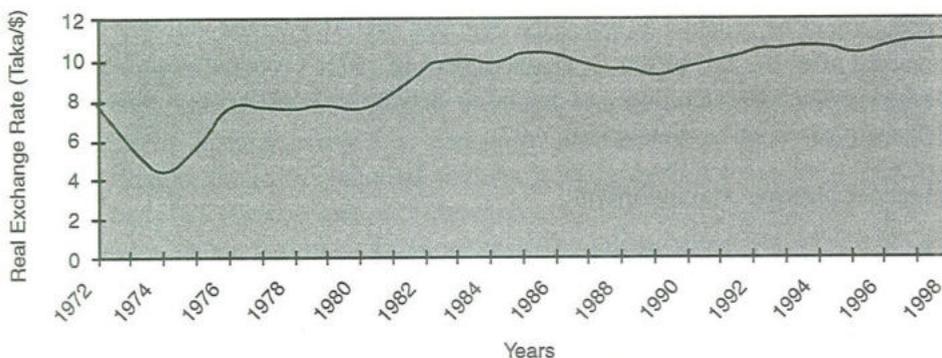
Macroeconomic Management

This was a problem area in the early years of independence, but to a large extent became an area of strength since the late 1970s. However, there were some worrisome signs of strain on the macroeconomic balances in the late 1990s. Overall, after the difficult first few years of independence, macroeconomic management has generally been prudent allowing Bangladesh to reduce the pace of inflation, preserve the competitiveness of the real exchange rate, maintain positive real interest rates but without driving them too high, maintain low debt servicing ratio, and keep the fiscal cost of debt to a manageable level. The main problem areas though have been the very low tax effort and the poor quality of public spending, both having adverse implications for poverty reduction.

²⁴ See Wodon 1999.

Over the longer-term, *the management of the exchange rate has been a positive aspect of Bangladesh economic management.* The long-term trend in real exchange rate is shown in graph 1. A rapid pace of inflation in the 1972-75 period caused a sharp appreciation in the real exchange rate. This was reversed by 1980, and then was accompanied by a noticeable depreciation of the real exchange rate over the 1980-85 period aimed at securing the competitiveness of the real exchange rate. Since then to 1999, the real exchange rate showed a gentle upward drift indicating a slight depreciating pattern. Overall, by avoiding significant periods of real exchange rate appreciation despite double digit inflation in the 1980s, Bangladesh has been able to preserve the competitiveness of the export sector. This has been an important factor underlying the good performance of the export sector, contributing positively to poverty reduction. At the same time, by allowing a significant expansion in exports, this has substantially increased the debt servicing capacity of the economy enabling the maintenance of a low debt servicing ratio.

Graph 1: Bangladesh Real Exchange Rate Trend



In the 1970s, the management of monetary policy was a problem area. Rapid *monetary expansion, much in excess of the growth of real GDP, along with structural problems associated with a war-ravaged economy fueled a rapid pace of inflation in the early to late 1970s which hurt the poor considerably.* Since late 1970s, the management of monetary policy improved considerably over the years and the pace of monetary expansion became more disciplined. Along with the sharp improvement in food supply, good monetary management contributed to a substantial slowdown in the pace of inflation to single digits in the 1990s (see Table 9).

Table 9: Money, Growth and Inflation

Indicators/Years	1972-80	1980-90	1990-98
Rate of growth of GDP	4.6	4.8	4.7
Rate of monetary growth (M1)	15.8	12.5	12.1
Rate of inflation (CPI)	19.3	10.4	5.1

The management of fiscal policy has been more problematic (Table 10). This is perhaps the Achilles Heel of Bangladesh's macroeconomic management. Problems are reflected in large fiscal deficits, a low tax to GDP ratio, and poor quality of spending. When Bangladesh became independent in 1972, separating from Pakistan, it inherited a very difficult fiscal situation but also a number of advantages. These advantages related to low debt obligations and low military spending. By and large, while Bangladesh has benefited from these initial conditions, she has failed to fully capitalize on them. So, on the positive side, Bangladesh has restrained her defence spending and maintained a good balance between military and social spending. The relative priority given to social spending has served Bangladesh well and contributed to the notable progress made in human development over the past years. Yet, the level of public spending on health and education (3.1% of GDP) is low by international standards and given the country's needs. While there has been some growth, rising from a very low level of 2% of GDP in 1972, the increase in public spending on health and education to levels necessary to address the remaining substantial gap in human development noted earlier has been prevented by the very low level of tax effort (only 7.2% of GDP - the lowest in the region). Tax compliance is a serious problem in Bangladesh estimated at only 6%, the lowest in the region. Large fiscal deficits in the 1990s were also a worrisome development. While the interest cost of debt is still small, this is only because of the past dominance of concessional foreign assistance, the continued availability of which is by no means assured. The growing debt to GDP ratio, rising from 6% in 1973 to 47% in 1998, is an indication of the creeping effects of large external borrowings to finance the fiscal deficits.

Table 10: Indicators of Fiscal Management in Bangladesh

Indicators	1972	1980	1990	1999
Defence spending(% of GDP)	0.5	0.9	1.5	1.4
Social spending (% of GDP)	1.9	1.8	2.4	3.1
Fiscal Deficit (% of GDP)	0.8	1.6	5.8	4.8
Interest Cost (% of GDP)	0.2	0.5	1.0	1.3
Tax revenue (% of GDP)	4.3	5.7	5.7	7.2

In addition to the inadequacy of the level of public spending on human development, there are some serious concerns about the quality of public spending. These relate to the efficiency of public spending as well as to the equity of such spending. A number of World Bank studies suggest that the efficiency of public spending can be considerably improved in health, education, irrigation and water supply²⁵. Similarly, there is evidence that the equity of public spending can be substantially improved. These are discussed a bit more below in the section on human development.

Structural Policies

Following the early years of experimentation with a socialist pattern of economic management, Bangladesh embarked upon a more market-based economy. The incentive policies became the key determinant of economic growth. The pace and pattern of liberalization and deregulation varied considerably in scope and significance by sectors and over time. Progress with deregulation and liberalization has been most advanced in the area of trade policy, following the big push in the early 1990s. Deregulation in the industrial sector has been of mixed effectiveness because of the inability to address many of the deep-rooted governance problems of this sector. Liberalization in agriculture, focused mostly on the input markets, has yielded good results for rice production. Deregulation in the area of infrastructure and the reform of the financial sector are much less advanced.

Trade Policy: By and large this has been an area of strength. Bangladesh has made steady progress in the 1990s in reducing trade barriers, both tariff and non-tariff. Thus, the maximum tariff rate has been sharply cut back from a high of about 500% in 1989 to 38% now. The unweighted average tariff rate has climbed down from 94 % in 1989 to 25% in 1996. The number of banned items has been significantly cut back. Nominal and effective rates of protection have been reduced noticeably²⁶. In addition, special bonded warehouses and export processing zones have provided a big boost to the exports of the garments industry. As a result of these trade reforms and good exchange rate management, the anti-export bias has been substantially reduced and the efficiency of domestic production has increased²⁷. Overall, progress with trade policy reforms has been an important factor in supporting the expansion of exports and economic growth in Bangladesh. However, there is still an unfinished agenda, and proceeding with the next phase of trade reforms, including reduction

²⁵ See World Bank 1997, World Bank 1999.

²⁶ See World Bank 1996.

²⁷ For empirical evidence, see Sattar 1997 and World Bank 1999d.

in the dispersion of tariffs and elimination of most other remaining trade bans, will be important for securing a further increase in the efficiency of domestic production and the rate of economic growth.

Industrial Policy: After the massive nationalization of the industrial sector in 1972, there was a slow process of denationalization and private enterprise promotion during the 1980s and 1990s. Progress with industrial deregulation gained momentum since the 1980s. However, the overall response of the manufacturing sector to this deregulation effort has been weak²⁸. The main exception has been the garments sub-sector which benefited most from this policy of deregulation and trade liberalization, contributing handsomely to poverty reduction through higher incomes and employment for the poor.

The reason for the weak supply response from the non-garments enterprises is the deep-seated governance problems of the large-scale manufacturing sector which require deeper reforms in addition to deregulation, problems in the financial sector, weak infrastructure, and law and order problems.

The policy of nationalization of the early 1970s left a very difficult legacy of labor militancy, over-employment, corruption, and management inefficiency, all contributing to heavy financial losses and a severe overhang of debt in the industrial sector, from which the country is yet to recover. There is still a significant involvement of the public sector in the management of industrial enterprises, many of which are in the red and do not have a ready market for privatization due to the overhang of indebtedness and labor problems. For example, the consolidated losses of state-owned manufacturing enterprises stood at taka 7 billion in 1999, increasing from around taka 6 billion in 1998²⁹. These enterprises continue to be a drag on the efficiency and growth of the industrial sector. As well, the depth of the manufacturing sector remains low owing in a large part to inadequate foreign investment. Indeed, Bangladesh is amongst the lowest recipient of foreign direct investment in South Asia, except Nepal. Among the negative factors for low foreign investment and shallowness of the industrial sector are corruption, poor infrastructure, poor law and order situation, and political instability³⁰.

Agricultural Policy: Bangladesh started with a pretty heavy dose of controls over both the product and input markets for agriculture. Deregulation in agriculture started

²⁸ See Bakht and Rahman 1998 for a detailed analysis of the industrial sector constraints and performance.

²⁹ The deficits of the consolidated state-owned non-financial enterprises stood at taka 8 billion in 1999. Total SOE debt stood at taka 470 billion or around 27% of GDP as of June 1997.

³⁰ See World Bank 2000a.

in early 1980s³¹. This involved liberalization of the fertilizer and irrigation equipment markets, and the reform of the public marketing of foodgrains. While much of the reform focused on agricultural inputs, on the output side the main noteworthy reform has been the abolishment of most forms of food rationing and abolishing the monopoly in the import and export of foodgrain. The overall effect of this deregulation effort was positive, contributing to expansion in agricultural productivity and value-added³². Much of the positive impact happened in rice production - the dominant agriculture activity. Deregulation enabled rapid adoption of the high-yielding varieties (HYV) of rice, causing paddy production to increase at a faster pace than population, and Bangladesh achieved rice self-sufficiency by the early 1990s.

Yet, the agriculture sector lacks dynamism. The performance of the agriculture sector is heavily dependent upon the contribution of rice, which seems to have become constrained by slowdown of demand due to low income elasticity of demand and the slowdown of the population growth rate. Given the importance of agriculture for poverty reduction, it has been a subject of considerable analysis, debate and discussion. The upshot of the main results of this intensive research is³³.

- Despite progress, agriculture continues to suffer from many controls over output pricing, marketing, and input supply; removal of these controls will benefit farm production and value-added.
- Deregulation has focused mostly on input markets; on the demand side low expansion of the pace of domestic demand and inadequate export orientation continue to limit the incentives for production.
- Diversification of agricultural production away from the heavy reliance on rice is important to raise agricultural value-added; this in turn will require policies to boost domestic demand along with policy support for pushing agricultural exports.
- The prospects for non-rice agricultural exports is also limited by the relatively low productivity. So, policies for promoting technological progress in non-rice agriculture are very important.
- Inadequate agricultural infrastructure is another constraint on farm production and productivity.
- Overall water management and flood control policies are deficient, suffering from serious management problems, including O&M.

³¹ See Abdullah and Shahabuddin 1997 and Ahmed 1998.

³² Abdullah and Shahabuddin 1997; Ahmed 1997.

³³ A good summary of these issues is contained in Abdullah and Shahabuddin 1997; Mahmud 1998; and Faruquee 1998.

- Land markets function inefficiently due to inadequate land administration policies, including the inadequacy of the legal process for land tenure arrangements and land sales³⁴.
- Finally, the inadequacy of the farm credit market remains a major constraint on farm production.

Infrastructure Policy: Progress with infrastructure policy reforms has been weak. Much of the infrastructure provision (power, telecommunications, railways, ports, road network) and maintenance is in the public sector. Except for bus services where an active private sector operates, incentives for attracting private investment in infrastructure are inadequate and a proper regulatory framework for private provision of infrastructure is lacking. Consequently, there are serious deficiencies in the quality and quantity of infrastructure services, thereby increasing the cost of doing business in Bangladesh. Most serious problems are in the **power sector**. Difficulties in the power sector include huge losses, supply constraints, and low reliability of service. Indeed, there are serious problems of corruption in the power sector. Thus, power losses, that are estimated in the range of 35-50% of output, are to a large part a reflection of power theft and poor collection of power bills³⁵. Power sector's financial losses were estimated at taka 5.6 billion in 1999. Recently, faced with acute power shortage, Bangladesh is seeking to attract foreign private investment in power generation. The problem though is that the agenda for required sector reforms is much less advanced. **Ports** in both Chittagong and Chalna are plagued with inefficiencies and labor problems, resulting in high shipping costs. For example, the cost of moving a container through Chittagong comes to \$600 as compared with \$150-300 in neighboring country ports³⁶. **Railways** suffer from serious financial losses and poor service. Inland waterways are inadequately regulated, causing serious safety hazards. **Telecommunications** network is inadequate, inefficient and expensive³⁷. Progress in expanding the **road network** has been more encouraging, including a rapid expansion in **private bus operators**. Yet, road traffic is seriously congested and suffers from unduly high incidence of accidents and poor maintenance. Overall, the infrastructure picture is pretty bleak and a significant constraint to a more rapid expansion of economic growth.

Financial Sector policy: This is another major area of concern. Banking sector is dominated by public banks with seriously infected portfolios. Even in the private

³⁴ See World Bank 2000b.

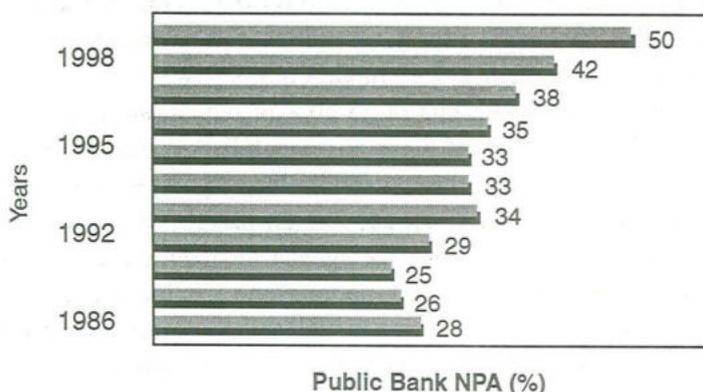
³⁵ Official estimates for power losses are 35%. However, more detailed scrutiny suggests that these losses may be as large as 50%.

³⁶ See World Bank 1998

³⁷ See World Bank 1998

banks, the portfolio infection is pretty high. The main problem in the banking sector is poor governance. Largely as a result of corruption, an estimated 50% of the loans of the public banks and some 30% of the loans of the private banks are non-performing³⁸. Although the problem of non-performing loans of public sector banks has probably existed for a fairly long time, available data suggests that the problem has become particularly acute in the 1990s (see graph 2). As of December 1999, total non-performing loans of the public sector banks stood at \$ 4.0 billion, which is about 9% of GDP. *Along with power sector losses and low tax compliance, the large magnitude of non-performing loans is the most telling evidence of poor governance situation in Bangladesh with negative consequences for poverty reduction*³⁹.

Graph 2 : Bangladesh Non-Performing Loans



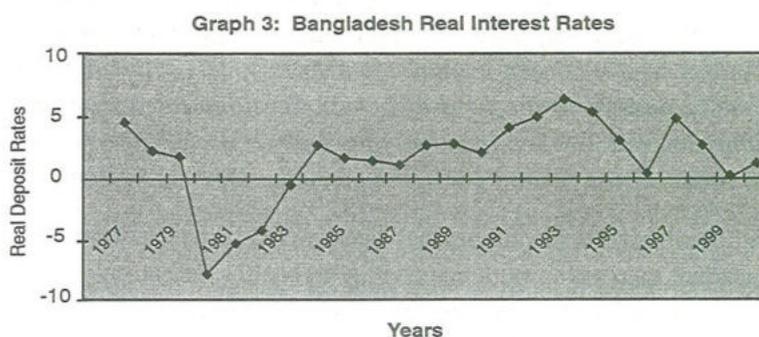
While the problem of non-performing loans is fundamentally a problem of political economy, there are many associated management problems relating to the inadequacy of the legal framework for banking control, banking supervision, inefficient management and overstaffing in public banks, and poor service standards in many banks, particularly in public banks⁴⁰. Reform efforts over the past several years have sought to improve the regulatory and legal environment. Much of this effort, however, was focused on private banks. As a result, the share of non-performing loans in the private banks has declined and progress has been made towards the application of international standards of loan classification and provisioning.

³⁸ Non-performing loans are defined in their broader context and include loans that are in the categories of substandard, 'doubtful', and 'bad/loss'.

³⁹ For a detailed analysis of governance and poverty reduction in South Asia, see Ahmed 2000.

⁴⁰ See World Bank 1998a.

One area where better progress has been made concerns the management of the interest rate. Graph 3 shows the trend in real deposit rates. In the early years, rapid inflation along with control over interest rates, caused deposit rates to become highly negative until 1975. High inflation of the early 1980s also caused deposit rates to become negative. However, since 1983, deposit rates have remained largely positive. Following years of control, interest rate policy was gradually deregulated in the 1990s. Along with reform of taxes on financial instruments and the proper management of returns on long-term government debt instruments (saving certificates etc.), the maintenance of positive real interest rates has played an important role in spurring financial saving while reducing the bias against the stock market.



Human Development Policies

As in other developing countries, public sector in Bangladesh is the dominant source of financing human development. But a notable feature of the Bangladesh experience is a successful partnership between government and the NGOs in the delivery of basic human development services. Indeed, this aspect of the Bangladesh experience with human development has important positive lessons for other South Asian Countries.

We noted earlier that successive governments placed strong emphasis on funding human development through the budget and that while significant increase in budgetary funding over the depressed levels of the early years of independence happened, the needed level of funding has not been possible due to a severe public resource constraint imposed by a weak tax effort. As well, cost recovery policies have been inadequate and there are serious concerns about the efficiency and equity of these services. For example, data for 1994 indicate that the poorest decile of the rural population receives only 6.9% of rural public expenditures on education. Overall, the bottom half of the population receives only 38.4% of education expenditures. In contrast, the top decile receives 15.4%. Primary education

expenditures are more evenly distributed with the poorest receiving 9.5%. But secondary and higher education benefits are not, with the poorest decile receiving 3.5% of the secondary education and only 0.8% of higher education⁴¹. *Perhaps, the most pressing problem is the low quality of public services, reflected in poor health standards, high mortality rates and low education achievements. Addressing this concern is a key development challenge for Bangladesh.*

A notable area of policy success in human development has been the **population control program**⁴². A combination of education, social marketing of population control materials, and technical advice based on family health workers meshed into an effective delivery system has enabled Bangladesh to sharply cut back the rate of population growth. Partnership between government, private sector NGOs and the donor community has also been exemplary. *Arguably, this is amongst the most important policy success in the field of human development and shows that a concerted effort coupled with strong partnership with concerned agents can provide the basis for attaining the desired goals of human development in Bangladesh.*

Progress with **health reform policies** has been mixed. Since independence there has been a gradual increase in public spending on health. Yet, at only 1% of GDP, public spending on public health services is grossly inadequate. Given this tight resource situation, tough spending priorities are essential. On the positive side, emphasis on child immunization and control of communicable diseases has yielded good results leading to a significant reduction in infant mortality. Partnership with NGOs has also played a positive role. As well, there has also been progress in regulating the pharmaceutical industries and import of drugs to ensure affordability of basic medicines and to improve public safety of drug usage. Yet, the agenda on the health side remains daunting, reflected in low life expectancy and still very high rates of infant, child and maternal mortality rates. Along with a larger allocation of public resources for health services based on higher resource mobilization, public expenditure needs to focus much more strongly on basic health care as opposed to tertiary care which should mostly be left to the private sector. A major policy weakness is the lack of an effective regulatory framework for private health care. As a result, while a flourishing private health care service has emerged in response to growing demand, there are serious problems of quality control, accountability and affordability. Additionally, pricing policies for publicly provided tertiary care are inappropriate, providing huge subsidies without regard to incomes.

⁴¹ See World Bank 1999b

⁴² See Barkat et al 1997 for a review of the population control progress in Bangladesh.

Bangladesh has rightly recognized the importance of **education** for development. The main policy elements for education have been a combination of public financing and provision, and partnership with the NGOs for service delivery. Public spending for education expanded noticeably, reaching 2% of GDP by 1990. Yet, this level of funding is inadequate to meet both the quality and quantity requirements, particularly at the secondary level⁴³. Regarding service delivery, Bangladesh has made remarkable progress in striking a strong partnership with the NGO community in the delivery of primary education. This has been the main factor underlying rapid increase in gross enrollment rates. Strikingly, an estimated 80% of total primary enrollment is in schools managed by non-government institutions⁴⁴. Another striking positive feature of Bangladesh education policy has been the strong emphasis on girls' education. The stipend program for girls' education has been a particularly successful policy. The main problem areas in the education sector concern the poor quality of education at all levels, the inadequacy of enrollments at the secondary level, inequity of public education spending, and inadequate policy framework for private provision. Notwithstanding the progress in raising enrollments at the primary level, particularly in increasing education participation of the girl child, these difficulties in the education sector pose a substantial policy challenge for reducing poverty as well as providing the skills base for supporting higher economic growth.

Low education quality is reflected in low education achievements, high dropouts, and poor link of education with the job market. Quality problems relate to a whole host of factors in the entire education chain involving the curriculum, teacher quality, inadequacy of education materials, examination and testing standards. There are also governance problems relating to absentee teachers in public schools and examination and testing related corruption. As well, the efficiency and equity of public spending is of concern. These problems are not insurmountable, but require a thorough overhaul of education management.

In the area of **water supply**, public spending along with supportive NGO role has enabled a sharp increase in the access to safe drinking water. However, water quality, particularly the problem of arsenic poisoning has emerged as a serious health hazard. More generally, urban water pollution and urban waste management are a serious problem in Bangladesh. The ability of urban municipalities to handle urban waste and other basic urban services is severely constrained by poor governance of these institutions.

⁴³ See World Bank 1999b

⁴⁴ See World Bank 1999b

Institutions and Public Governance

It is now increasingly recognized that good governance is necessary for achieving long-term rapid growth and to ensure sustained progress with poverty reduction⁴⁵. Good governance basically means that public administration needs to be responsive to the requirements of the citizens and that state institutions are supportive of the poor. On the positive side, Bangladesh has made good progress in emphasizing human development, reducing the anti-female bias, encouraging broader participation in economic activities through the NGO community, and ensuring public voice in the political process through the move towards a democratic government structure.

Unfortunately, though, the list on the negative side is overwhelming. On the economic front governance difficulties are reflected in high fiscal deficits, low tax compliance, inefficient public spending, high losses of state-owned enterprises, power sector thefts, and the large share of non-performing loans. Basically, what these indicators are showing is the substantial incidence of inefficiency and corruption in public administration. On the political front, the frequency of hartals and the sharp deterioration of law and order are a strong indication of serious political governance difficulties⁴⁶.

Detailed studies of institutions show a severe weakness in this area⁴⁷. Problems of weak institutions encompass the broad waterfront including local governments, civil service, public audit and accounts, the law and order enforcing institutions, and the judiciary. *Reform of institutions is the most fundamental policy challenge for Bangladesh in the new millennium.*

IV. Development Challenges for the New Millennium and the Way Forward

Fundamental Development Challenges

The analysis of Sections II and III shows that while Bangladesh has achieved impressive development progress over the past 30 years since independence she still has a long way to go.

⁴⁵ See Ahmed (2000) for an analysis of the link between governance and poverty reduction in South Asia. See also World Bank 2000; Kaufman 1999; Gray and Kaufman 1998; Rodrik 1998; Rose-Ackerman 1997; Wei 1999.

⁴⁶ See Sobhan 1998; Rodrik 1998; Rose-Ackerman 1997; Wei 1999.

⁴⁷ See World Bank 1997, 2000a and 2000b.

- Despite past progress, over 50% of the rural population and some 35% of the urban population are poor.
- Life expectancy is among the lowest in the region, the incidence of child mortality is high, and over 50% of the children suffer from malnutrition problem.
- Adult illiteracy is substantial and secondary school enrollment is low.
- Health and education standards are generally very low.
- The emerging health problems from urban environmental degradation and arsenic poisoning, along with the increasing risks of aids and other contagious diseases such as the dengue fever, provide a warning signal that there is no room for complacency.
- At the same time, there are some worrying signs that the macroeconomic discipline, generally an area of strength in the past, is weakening.
- Most fundamentally, the serious governance difficulties, especially corruption in banking sector, tax administration and power sector, along with the sharply deteriorating law and order problem pose a serious threat to the sustainability of past progress.

The development agenda for the new millennium although formidable, is by no means impossible. As the past experience shows, development is very much possible. Looking to the future, Bangladesh needs to build on the positive features of the past, correct the mistakes, and learn from the relevant international best practices. Among the main positive features of past development effort are: the strong emphasis on human development; removal of anti-female bias; partnership with NGOs; good macroeconomic management; trade reforms; industrial and agriculture sector deregulation. On the negative side, governance difficulties are amongst the most negative features of past development along with the continued strong role of the state in the provision of a host of commercial activities in agriculture, manufacturing, infrastructure and banking. The inability to deepen reforms in the agricultural sector is also a major negative factor of the past policy.

The Way Forward

Governance improvements and institutional development: Securing progress on this front is of the highest priority as continued difficulties pose a serious threat to the sustainability of even the past development progress. The agenda here is substantial. Given the inherent long-term nature of institutional change, progress in some areas can be faster than some others. Even so, the reform efforts need to be comprehensive, bold and ambitious. Where should one begin? *To my mind, the most pressing governance problem concerns the deteriorating law and order problem which is threatening to seriously erode the citizen's confidence in the state institution.*

This matter requires attention on a war footing and on a strict non-partisan basis. There should be no exception to the rule of law, which should be applied even-handedly. Indeed, establishing the rule of the law is a pre-requisite for any future development in Bangladesh. *At the same time, tackling corruption in banking, power, other state-owned enterprises and tax administration ought to be an urgent priority.* A comprehensive resolution of the corruption problem in banking, power and other state-owned enterprises will require privatization along with regulatory capacity in the public sector to safeguard public interest. Regarding tax administration, reform options include establishing an autonomous tax institution with proper incentives and accountability. Bangladesh can learn from the good international experience of a number of countries, including the Internal Revenue Service of the USA. Other areas of reform include the local governments, central civil service, the public audit and accounting bodies, public procurement, and the judiciary. Strong local governments with financial authority and accountability for performance can play a major role in improving service delivery leading to better poverty outcomes. Several World Bank studies have looked at the problems in these areas and suggested reforms which basically emphasize decentralization, accountability, legislation and incentives⁴⁸. What combination of specific elements of reforms in each of these areas will work in the Bangladesh context needs to be debated, agreed, and implemented fairly soon. Once again, lessons of relevant international experiences can be of great help.

Macroeconomic framework: As noted, the track record here is generally good except for fiscal policy. More recently, though, there are signs of an exchange rate appreciation and a weakening of monetary discipline. This is unfortunate and needs to be quickly corrected. Bangladesh has seen the disastrous consequences of weak macroeconomic management of the early 1970s in terms of the massive inflation which severely hurt the poor. It has also seen the beneficial effects of good macroeconomic management in terms of low inflation, good export performance, and private sector incentive for investment during the 1980s and most of the 1990s. It is imperative that sound macroeconomic management should prevail to support an acceleration in the rate of economic growth which is necessary to reduce poverty. In addition to maintaining export incentives through a competitive exchange rate policy and gearing monetary policy to support a low pace of inflation (aligned closely to international inflation), fiscal policy reforms require urgent attention.

⁴⁸ For example, the 1997 World Bank Study on the 'Government That Works' provides detailed suggestions for reforming public administration. There was considerable initial interest to implement many of the reforms, but implementation failed. More positively, there is ongoing effort to reform the judiciary under a Bank-financed project.

The current pattern of large fiscal deficits cannot be sustained for a long time. Although the past generous availability of highly concessional foreign assistance has allowed Bangladesh to accumulate a rapid rate of external debt and finance large fiscal deficits without straining the external and internal balances, this cannot be the basis for fiscal management in the future. The pattern of debt financing is changing from exclusive reliance on highly concessional official assistance to greater role of more commercial terms such as suppliers credit. Second, the stock of debt has grown rapidly and the interest cost of servicing this rapidly expanding debt is also creeping up. Thirdly, exchange rate adjustments can impose substantial capital losses on the stock of debt, increasing debt servicing burden in local currency terms⁴⁹. Finally, the overall availability of external financing has sharply fallen in recent years; consequently there has been a gradual increase in reliance on higher-cost domestic debt instruments for financing fiscal deficits in Bangladesh with adverse consequences for the fiscal burden of these deficits.

What are the reform priorities? Clearly, the **tax effort** has to rise significantly from its current low level of 7-8% of GDP (the lowest in South Asia) to around 13-14% of GDP. Apart from helping reduce the fiscal deficit, this will also allow the required increase in the financing of human development, agriculture support services, and other poverty programs. The main task is to strengthen tax compliance, which is the lowest in the South Asia Region, through reform of tax administration as discussed above. Along with greater tax effort, a thorough review of pricing policies of public services is needed to strengthen revenue mobilization, improve the quality of public services through better O&M, and improve equity. The privatization of state-owned enterprises will also help reduce budgetary subsidies to these enterprises. On the **expenditure** side, the main emphasis ought to be on quality and equity of public spending. Related reforms essentially concern better design and implementation of public programs through competitive procurement, strengthening of audits, involvement of beneficiaries, and service delivery through NGOs and private sector wherever possible.

Structural Reforms: The move towards greater openness and better integration with the world economy should continue. In particular, Bangladesh needs to make a strong effort to attract foreign private investment. This will be very important to strengthen the performance of the manufacturing sector and to finance the much needed investments in infrastructure. The strategy to attract foreign investment is no different from the strategy to improve efficiency and productivity of private investment in general. This entails a deepening of the deregulation program, reducing the cost of doing business through reforms in financial sector and infrastructure, and improving law and order situation.

⁴⁹ This happened in Pakistan. See Ahmed 1995.

Further reduction in **trade protection**, through additional cutbacks in the level and dispersion of tariff, will be important to further improve the efficiency of domestic production and promote exports. Concerning **industrial reforms**, the deregulation and privatization effort should continue. The progress on privatization seems to have slowed down considerably in recent years which needs to be corrected. Pending privatization, necessary restructuring of enterprise management, pricing adjustments and a hard budget constraint should be implemented.

There is a debate in the country about the future of **agriculture** in the country. Some see agriculture prospects severely handicapped by land and demand constraints. I think this debate is overdrawn. There is no reason why agriculture cannot be reformed to support value-added growth of 3-4% per annum. Indeed, the sluggish performance of **agriculture** can be reversed through further input and output market deregulation, public investment and better management of irrigation and flood control, intensification of agriculture research and extension, improvements in the functioning of the land market, including legal reforms to facilitate land transactions, and agricultural credit delivery based on the NGOs and community-based organizations. The multitude of research done on Bangladesh agriculture show the important contribution of each of these enabling factors. What is lacking though is a comprehensive policy framework that integrates these various elements consistently and the institutional set-up for effective implementation of this strategy. Agricultural diversification will also benefit from policies to promote agricultural exports including export financing, trade logistics and marketing information. With the global revolution in information technology, the benefits of using IT for raising productivity through the sharing of appropriate technology and marketing information needs to be seriously explored and promoted. The delivery of research and IT services will benefit from a strong public-private partnership, with the public role confined mostly to financing while production and service delivery can be assigned to the private sector.

The experience of a number of East Asian economies, particularly China, suggests that **rural non-farm** development follows or parallels rapid gains in agricultural production. Indeed, in these economies non-farm income and employment played a substantial role in reducing rural poverty⁵⁰. Already, there is positive evidence of this in Bangladesh based on the pioneering work of the *Grameen Bank*⁵¹. Bringing this to scale will require institutional reforms to provide micro-credits on a

⁵⁰ Kumar and Yusuf 1996.

⁵¹ Khandker et al 1996; Khandker and Pitt 1998.

commercial basis, development of rural infrastructure, including rural electricity on commercial terms, improved communications, and development of the IT network.

Infrastructure policies require a sea change. The main policy challenge is to redefine the public sector role away from service provision to regulation, while encouraging the role of private sector in service provision. A combination of deregulation policies to attract private investment and regulatory capacity of the public sector to protect public interest is needed. Foreign direct investment will be very important to bring in the necessary financing and technology. There is abundant good international experience regarding how to attract foreign investment in infrastructure while protecting public interest. For example, competitive bidding is particularly important to avoid the problems that countries like Pakistan faced in the area of private power generation. Similarly, Sri Lanka achieved good success in attracting foreign investment in the telecommunications sector and Bangladesh can learn from this.

Bold and far-reaching reform of the **banking sector** is of the highest priority. Public banks need to be privatized and the authority of the Central Bank augmented to allow prudent implementation of banking regulations without political interference. Tough measures are needed to collect all defaulting bank loans. These require strong political support along with required legal, administrative and management reforms. Pakistan's experience with banking reform can provide very useful insights on how such reforms can be implemented in the Bangladesh environment.

Human Development Policies: The emphasis on human development along with partnership with the NGOs in the provision of services should continue. A stronger resource mobilization could allow an expansion of public spending on human development to 5-6% of GDP. This will be a huge step forward to push the human development agenda to its next phase of quality enhancement and selective expansion. Along with higher allocation of public resources, steps need to be taken to improve the efficiency and equity of public spending in health, education, and water supply through decentralization of these responsibilities to the local level, through beneficiary participation in the design of associated programs, through stronger partnership with NGOs in the provision of these services, and through better pricing policies services based on incomes.

Other priority policy reforms in **health** concern clearer definition of public-private roles and ensuring service quality standards and accountability of private health service providers⁵². By and large, public health spending and management should

⁵² See World Bank 1997 for a good discussion of the changing roles of the State and private sectors in health.

focus mostly on: preventive public health services; providing basic health, nutrition, and population services to the poor; providing sectoral oversight to the financing of medical education, R&D, and quality control. Private health care should take care of all other services, within a proper regulatory framework.

In **education**, reform priorities include a thorough reform of education management, including curriculum, testing and examination standards. Bangladesh has fortunately crossed a major barrier in terms of drawing a very successful partnership with the non-government sector in the provision of primary education. This partnership needs to be further strengthened. There are many good examples of effective management of non-government schools. Lessons from these good examples can be drawn and applied to other schools. Better management of schools along with necessary reform of curriculum, testing and examination standards will go a long way to improve education quality.

Concerning **water supply**, in the rural areas coverage of safe rural water and sanitary latrines has to remain a policy priority. Along with higher public spending, involvement of communities in the design and maintenance of water schemes should remain central to the strategy for rural water supply. Rapid implementation of the ongoing arsenic poison mitigation program is essential. In the urban areas, municipal governance needs substantial improvement to ensure water supply quality and proper waste management. In light of the serious health hazard posed by ineffective management of urban solid waste, there is quite an urgency to move decisively in this area. Part of the governance reform of the municipal management ought to be a redefinition of the roles of the public and private sector. Options for private provision of water and waste management needs to be seriously considered.

References

- Abdullah, Abu and Quazi Sahabuddin, 'Critical Issues in Agriculture: Policy Response and Unfinished Agenda' in *The Bangladesh Economy in Transition* edited by M. G. Quibria, University Press Limited, Dhaka, 1997.
- Ahmad, Monawaruddin and Mohabbat Khan, 'Dimensions of Governance' in *The Bangladesh Economy in Transition*, edited by M. G. Quibria, University Press Limited, Dhaka, 1997.
- Ahmed, Raisuddin, 'Assessment of Past Agricultural Policies' in *Bangladesh Agriculture in the 21st Century*, edited by Rashid Faruquee, University Press Limited, Dhaka, 1998.
- Ahmed, Sadiq, 'Inflation in Bangladesh, Causes and Consequences', Ph.D. Thesis (Microfilm), Boston University, Boston, 1984.
- Ahmed, Sadiq, 'Explaining Pakistan's High Growth Performance Over the Past Two Decades: Can it be Sustained?' *Policy Research Working Paper*, No. 1341, World Bank, Washington D.C., 1994.
- Ahmed, Sadiq, 'The Political Economy of Poverty Reduction in South Asia: Role of Good Governance', Mimeo, World Bank, Washington D.C., 2000.
- Bakht, Zaid and Mashiur Rahman, 'Constraints to Industrial Development: Recent Reforms and Future Directions', in *The Bangladesh Economy in Transition*, edited by M.G. Quibria, University Press Limited, Dhaka, 1997.
- Barkat, Abul et al, *Family Planning Unmet Need in Bangladesh*, University Research Corporation (Bangladesh), Dhaka, 1997.
- Dollar, David and Art Kray, 'Growth is Good for the Poor', Mimeo, World Bank, 2000.
- Dreze, Jean and Amartya Sen, *Economic Development and Social Opportunity*, Oxford University Press, New Delhi 1995.
- Faruquee, Rashid, 'Linking Agricultural Growth With Macroeconomic Policies and Performance' in *Bangladesh Agriculture in the 21st Century*, University Press Limited, Dhaka, 1998.
- Gray, Cheryl and Daniel Kaufman, 'Corruption and Deveopment', *Finance and Development*, Number 35, March, 1998.
- Hossain, Akhtar and Salim Rashid, 'Financial Sector Reform', in *The Baangladesh Economy in Transition*, edited by M. G. Quibria, University Press Limited, Dhaka, 1997.

- Human Development Center, *South Asia Human Development Report 1999: The Challenge of Human Governance*. Oxford University Press, Karachi, 1999.
- Kauffman, Daniel et al, 'Governance Matters', Mimeo, World Bank, Washington D.C., 1999.
- Khandker, Shahidur et al, 'Credit Programs for the Poor: Household and Intra-household Impacts and Program Sustainability'. Bangladesh Institute of Development Studies and World Bank, Dhaka/Washington D.C., 1996.
- Khandker, Shahidur and Mark Pitt, 'The Impact of Group-Based Credit Programs on Poor Households in Bangladesh: Does the Gender of Participants Matter?' *Journal of Political Economy*, Number 106, 1998.
- Kumar, Praveen and Shahid Yusuf, 'Developing the Non-Farm Sector in Bangladesh: Lessons From Other Asian Countries', World Bank Discussion Paper Number 340, Washington D.C., 1996.
- Mahmud, Wahiduddin, 'Agricultural Development Strategy' in *Bangladesh Agriculture in the 21st Century*, edited by Rashid Faruque, University Press Limited, Dhaka, 1998.
- Rose-Ackerman, Susan, 'Corruption and Development', Paper prepared for the Annual World Bank Conference on Development Economics, World Bank, Washington, D.C., 1997.
- Sattar, Zaidi, 'Non-Traditional Exports and Economic Performance', in *The Bangladesh Economy in Transition* edited by M.G. Quibria, University Press Limited, Dhaka.
- Sen, Binayak, 'Bangladesh Poverty Analysis: Trends, Policies and Institutions' Mimeo, Dhaka, 2000.
- Sobhan, Rehman et al, *Growth or Stagnation: A Review of Bangladesh Development*, Center for Policy Dialogue, University Press Limited, Dhaka, 1996.
- Sobhan, Rehman et al, *Crisis in Governance: A Review of Bangladesh's Development in 1997*, Center for Policy Dialogue, University Press Limited, 1998.
- Stiglitz, Joseph, 'Towards a New Paradigm of Development', The 1998 Raul Prebisch Lecture, UNCTAD, Geneva, 1998.
- United Nations, *Human Development Report*, Oxford University Press, New York, 1990-1991.

- Wodon, Quentin T, 'Growth, Poverty, and Inequality: A Regional Panel for Bangladesh', *Policy Research Working Paper Number 2072*, World Bank, Washington, D.C., 1999.
- World Bank, *Bangladesh Trade Policy Reform For Improving the Incentive Regime*, Report Number 15900-BD, Washington, D.C., 1996a.
- World Bank, *Bangladesh Government That Works*, Report Number, Washington, D.C., 1996a.
- World Bank, *Bangladesh Public Expenditure Review*, Washington, D.C., 1997.
- World Bank, *Sector Strategy: Health, Nutrition, & Population*, Washington, D.C., 1997a.
- World Bank, *Bangladesh 2020: A long Run Perspective*, University Press Limited, Dhaka, 1998.
- World Bank, *Bangladesh Strategy for Establishing a Sound and Competitive Banking Sector*, Report Number 17941-BD, Washington, D.C., 1998a.
- World Bank, *World Development Indicators*, Johns Hopkins University Press, Baltimore, 1999-97.
- World Bank, *Bangladesh From Counting the Poor to Making Them Count*, World Bank Country Study, Washington, D.C., 1999.
- World Bank, Bangladesh: Breaking the Malnutrition Barrier-Key to Development'. Draft Report, Washington, D.C., 1999a.
- World Bank, *Bangladesh Education Strategy*, Draft Report, Washington, D.C., 1999b.
- World Bank, *Bangladesh: Progress Through Partnership*, A Country assistance Review, Washington, D.C., 1999c.
- World Bank, *Bangladesh Trade Liberalization: Its Pace and Impact*, World Bank, Washington, D.C., 1999d.
- World Bank, *World Development Report 2000/01*, Report Number 20595, Washington, D.C., 2000.
- World Bank, *Bangladesh Recent Economic Performance*, Memorandum for the Bangladesh Development Froum 2000, Washington, D.C., 2000a.
- World Bank, *Bangladesh Land Reform Study*, Report Number, Washington, D.C., 2000b.
- World Bank, *Bangladesh Paying for Corruption*, Draft Report, Washington, D.C., 2000c.

South Asia in the Twenty-First Century: Managing Growth in A Democratic Framework¹

Moazzem Hossain, Iyanatul Islam & Reza Kibria*

This comparative study of the four major South Asian economies-Bangladesh, India, Pakistan, Sri Lanka-has reflected on the key problem areas that seem to be hampering the quest for development in these polities.

These include:

- Low to moderate saving and investment
- Low level of human resource development (with the notable exception of Sri Lanka)
- Poor physical infrastructure
- Weak fiscal position of the government
- Significant reliance on generally inefficient state-owned enterprises (SOEs)
- Insufficiently competitive domestic markets
- Moderate levels of international trade and investment.

The standard prescriptions for policy reform to cope with these key problem areas include:

- Restoring and sustaining macroeconomic stability through greater fiscal prudence.
- Privatization and de-regulation, particularly in terms of the 'commanding heights' of the economy, such as power generation, telecommunications, banking.
- Trade liberalization, creation of a conducive climate for direct foreign investment and regional co-operation within the framework of multilateralism.
- More aggressive investment in the areas of basic health and primary education.

Underlying the current discussions of key problems facing South Asia and the policies for dealing with them is the fundamental issue of 'government failure'. The

* Dr. Moazzem Hossain works in Griffith University, Brisbane, Australia, Dr. Iyanatul Islam is currently with the ILO Office in Jakarta, Indonesia and Dr. Reza Kibria works in Dhaka University.

¹ This paper is drawn from The final chapter of the authors' book **South Asian Economic Development : Transformation, Opportunities and Challenges**, Routledge, London, New York.

state is over-extended, seeking to regulate and intervene in areas in which it lacks competence and failing at the same time to fulfill its core functions. This is a legacy of the 'dirigiste doctrine'-in other words, 'inward-oriented' industrialization driven by the public sector. The result has been disappointing. Despite optimistic predictions by prominent economists in the 1960s of impending success, South Asia has simply not grown fast enough to make a significant dent on its pervasive poverty.

The root causes of such unproductive state activism are complex. Some such as Bhagwati (1995) and Lal (1995) -can detect cultural antecedents. Only a handful of East Asian economies deviated from this trend. They are now widely recognized as rare exemplars of rapid, equitable growth. However, the literature on these economies also recognizes that East Asian growth was state-led, but it varied from other developing economies in crucial respects: the state fulfilled its core functions by investing in basic education and health, providing basic physical infrastructure, and engaging in 'outward - oriented' industrialization.

It was equally evident that the 'take-off' stage of the East Asian economies was characterized by a violation of civil and political liberties.

A tradition of 'soft authoritarianism' still seems to be ingrained in the region. Furthermore, a generic East Asian model is rather difficult to uphold. What is true for Korea, for example, does not seem to be true for Malaysia.

The implication is clear. Rather than seeking an uncritical emulation of East Asia, the aim should be to delineate the basic principles of good governance that transcend historical, cultural and geographical boundaries and are compatible with durable democratic institutions. This is the fundamental challenge that South Asia faces as it approaches the twenty first century.

While our book covered South Asia's four large nations, this presentation particularly focuses Bangladesh's experience in post 1991 period. To create durable democratic institutions it is needed to establish 'good governance'. We identified five core areas which facilitate 'good governance'.

1. Institutional Rules and Restraints
2. Role of the Bureaucracy
3. Transferring Non-core Functions to the Private Sector
4. Trade Liberalization and Integration
5. Creating a Constituency for Reform.

Since 1991, under a parliamentary democracy, Bangladesh has been striving to achieve progress in all these areas. However, over the last nine years, the country

was successful in making substantial progress in the trade liberalization front. The attempt on transferring non-core functions to the private sector has been progressing at a very slow pace.

The areas of institutional rules and restraints, bureaucracy's role, and creating a constituency for reform, however, have been drifting to pre-1991 status. Our aim in this paper is to investigate these three areas further in Bangladesh's context.

INSTITUTIONAL RULES AND RESTRAINTS

North (1994:359), in his lecture after being awarded the Noble Prize in economics, has highlighted the central role that institutions play in economic development. As he puts it 'Institutions from the incentive structure of a society and — are the underlying determinants of economic performance'. He makes a distinction between the formal and informal elements of institutions. Thus:

Institutions are the humanly devised constraints that structure human interaction. They are made up of formal constraints (e.g., rules, laws, constitutions) and informal constraints (e.g., norms of behavior, conventions, self-imposed codes of conducts) and their enforcement characteristics. Together they define the incentive structure of societies and specifically economies. (North 1994: 360).

Such a characterization of institutions provide an important clue to the way in which they shape economic performance. If, for example, a polity is characterized by predatory and corrupt behaviour by state officials and rent-seeking behaviour of societal groups, then the admixture of formal rules and informal norms may well be responsible for sustaining such an anti-growth incentive structure. To make matters worse, an anti-growth incentive structure may be subject to 'increasing returns to scale'-the more one indulges in rent-seeking behaviour, for example, the more the returns from it (Murphy et al. 1991).

Informal norms, on the other hand, by their very nature, change only very slowly. Formal rules and laws can, at least in principle, be changed with the stroke of a pen by the regime. Our discussion here focuses on devising and legitimizing formal rules and restraints that have the potential to promote macroeconomic stability in Bangladesh.

As is well-known, the fiscal deficits represent the major macroeconomic challenge facing Bangladesh. Ultimately, the desire and responsibility to devise new rules and laws to improve macroeconomic performance must lie with the national leadership.

There are several proposals pertaining to the control of unsustainable fiscal deficits that Bangladesh's policy makers could consider: a 'fiscal constitution'; less formal mechanisms for engendering fiscal prudence; and central bank independence (CBI). These proposals, however, are not new and we have provided a detailed account on each of these issues in the book.

Fiscal constitution and other mechanisms for enhancing fiscal discipline

A fiscal constitution imposes constitutional limits on the debt and money creation capacities of the government. As part of adopting a fiscal constitution, one could start with the extreme position that all unfunded spending programs be made constitutionally illegal, thus creation a balanced budget as the only constitutionally admissible possibility. The problem, of course, is that such a rule would lead to debilitating inflexibility. Governments, for example, would be unable to vary their fiscal policy to respond to internal and external shocks. In addition, it would lead to an excessive reliance on monetary (or exchange rate) policy as a tool of macro-management. A more moderate position is that limits on the debtcreating capacity of the government can only be varied through a super majority in the legislature, subject to the stipulation that the super-majority rule will not apply in times of national emergencies (e.g., the onset of a war). This practice is not unknown-see, for example, Niskanen (1992).

To the extent that fiscal deficits represent the primary source of inflation in developing countries, a fiscal constitution will contribute to the control of inflation. In addition, it forces the government to find other source of financing, and ultimately may force it to engage in reforms that raise the efficiency of the tax system.

Examples of a fiscal constitution can be found in both developed and developing countries. Among developing countries, Indonesia and Thailand may be cited as cases where a semblance of a fiscal constitution has apparently been followed. Chain is also steps which preclude... 'central bank finance of government deficits' (World Bank 1995: 105).

Fiscal prudence

This discussion will be incomplete if one does not highlight a range of mechanisms for fostering fiscal prudence that are less formal than a codified fiscal constitution. The World Bank (1997:50-1) draws attention to the need for the transparency of the budgetary system and the adoption of a hierarchical system for the formulation and approval of the budgetary process.

The need for transparency stems from the fact that budgetary ambiguity creates incentives for adopting such dubious practices as off-budget spending and generally

enables politicians to hide special favors to special interests. It also enables politicians to suppress the true long-run costs of short-term profligacy.

A hierarchical approach to budgeting entails granting considerable power over departmental spending total to the finance ministry. The alternative is a 'collegial' approach where there is considerable devolution of budgetary authority to individual ministries and the role of the finance ministry is to mediate different departmental spending targets. In principle the hierarchical approach ought to engender greater fiscal prudence relative to the collegial approach where there is considerable scope for slippage in terms of piecemeal expansion of the budget. The broad cross-country evidence generated from a study of twenty Latin American countries over the 1980-92 period suggests that it is the combination of transparency and hierarchy (rather than one or the other) as applied to the budgetary process that engenders fiscal control (Alesina 1991). Countries that managed to achieve such an enviable combination managed to attain an average fiscal surplus of 1.7 per cent of GDP. At the other extreme, countries with the least transparent and least hierarchical budgetary processes had the dubious record of running public deficits that averaged 1.8 per cent of GDP.

Central bank independence

A central assumption underlying the case for a fiscal constitution—or more generally, reform of the budgetary process—is that deficit financing often creates unsustainable monetary expansion causing bouts of destructive inflation and loss of competitiveness. This in turn suggests an alternative way of restraining macroeconomic instability. Recent research has shown that if the central bank can be made independent from other parts of the government and granted a mandate for maintaining price stability, then a government can strengthen its commitment to price stability. Note, however, that the emphasis is on 'instrument independence', not 'goal independence' (Fischer 1995). The central bank does not have the independence to pursue any goal, but is constrained to fulfil a clearly specified objective (price stability). In the effective pursuit of this objective, it is granted independence over the use of monetary policy instruments. This means that it is not obliged or required to finance government budget deficits.

However, it cannot be said that an independent central bank in Bangladesh will bring macroeconomic restraints over night. Observations by Fisher highlight that, in democracies when there is an urge to devise new rules and restraints, it is easy to overlook the key functions of conventional institutions—an effective parliament, a free press, a robust civil society. The aim of the new rules and restraints is to ensure that they supplement the capability of democratic institutions, not supplant their role.

ROLE OF THE BUREAUCRACY

One could argue that a well-trained, well-functioning bureaucracy or civil service is a *sine qua non* of a modern economy. However, it is not the quality of the bureaucracy per se that matters. The incentive that bureaucrats face may make them either a productive force or a dysfunctional institution in an economy. Krueger (1993), in a review of the process of policy reform in developing countries, highlights the failure to sustain reforms in many cases due to resistance by entrenched bureaucracies. Lal's (1995) hypothesis of anti-business, 'Brahmin' bureaucrats in India is also rather similar to the concerns raised by Krueger.

Another obvious point that needs to be made is that the civil service/bureaucracy is not a monolithic body. One can make a distinction between civil servants affiliated to 'line' ministries (specializing in a narrow portfolio, such as industries) and those closely involved in 'strategic ministries' which have a broad mandate (such as the Treasury). Line ministries typically tend to be interventionist and prone to 'capture' by special interests. Strategic ministries, on the other hand, tend to emphasize fiscal prudence and a more 'market-friendly' approach. This observation applies even to highly successful East Asian economies such as Japan (Okimoto 1988) and Korea (Chio 1991). The reason why the strategic ministries in these countries were able, at crucial junctures, to override the interventionist tendencies of the line ministries can partly be explained by supra-ministerial forum for mediating inter-ministerial conflicts and partly because they enjoyed the confidence of the political leadership (see Choi 1991 on Korea).

It also needs to be emphasized that bureaucracies have a natural predilection for secrecy. In Bangladesh, for example, documents pertaining to deliberations with aid donors and even background papers prepared by the donor community are typically classified as reports that cannot be disseminated to the public (World Bank 1996). This is largely a reflection of the incentive structure they face. Having been reared in an atmosphere of control and regulation, civil servants can easily develop an aversion towards the dissemination of information that contributes to the development of informed debate and discussion on policy issues.

Such examples show that while one needs a well-trained bureaucracy in Bangladesh, a great deal also needs to be done to reorient their focus by changing the incentive structure they face. This can be done in several ways. One obvious strategy is to have a tighter linkage between performance and pay and promotion so that 'time-servers' are penalized and those who generate results (based on agreed criteria and goals) are rewarded. Yet another mechanism is to include as a key component in the training programme of civil servants mechanisms that enable them to appreciate private sector ethos and operations. Apparently this is being implemented in India with considerable success (World Bank 1996:138).

Perhaps one of the most effective ways in which the bureaucracy in Bangladesh can be re-oriented to play a more productive role lies in the realm of accountability and transparency. This creates external pressures to reinforce internal systems that reward performance. Exposing the civil service to regular public scrutiny through the traditional instruments of democratic governments is certainly essential. This could be formalized by written commitments that entail a pledge—such as Citizen’s Charter—by the bureaucracy to uphold standards of service according to easily monitorable criteria. This is a broader example of a range of private sector type approaches that can be creatively adapted to the context of a bureaucracy in order to make it more accountable. A good example can be offered from the Philippines.

In 1994, the Philippines Civil Service Commission (CSC) launched a campaign entitled ‘Citizens Now, Not Later’ (Sot Tomes 1995). The campaign involved:

- specification of norms of conduct and courtesy to clients
- easily identifiable of employees—through easily read ID and obligatory introduction of serving officers in cases of telephone discussions with clients
- telephone complaint system that was widely publicized by the media.

The campaign has apparently been a success.

Finally, it needs to be noted that a broad movement that focuses on the ‘core’ functions of the state and reallocates ‘non-core’ functions to alternative delivery mechanisms (including, but not limited to, privatization) will help to demarcate the appropriate domain of the civil service.

Presently, the government’s policy towards decentralization and local government reforms can be regarded as a move to the right direction. This will in turn facilitate the dismantling of a culture of regulation and control that has, over decades, transformed bureaucracies in Bangladesh into dysfunctional institutions.

CREATING A CONSTITUENCY FOR REFORM

The political transition to good governance is rather difficult. As Lands Mills and Sera gelding (1992:319) note: ‘good governance is a fragile plant that will need constant nourishing. It will require a fundamental change in mentality and social expectations...’

The transition to good governance is likely to meet entrenched political opposition from those seeking to maintain the status quo. How does one create an admissible coalition for change in such an environment? The positive theory of government failure does not offer any obvious clue. In a world populated by rent-seekers and predatory political authorities, it is difficult to see how the momentum for reform will voluntarily develop. However, there is an emerging view—shared by economists

and political scientists—that one could build a feasible political context for reform based on the principle of compensation. This view conceptualizes the community in terms of gainers and losers from a given policy reform. Rodrik (1993 & 1996) has argued that a reform programme can be blocked if: (1) there is uncertainty about the identity of gainers and losers; and (2) if the benefits from reform (such as macroeconomic stabilization) are unevenly distributed.

Such a disaggregated approach offers hope for change that are not obvious in ‘... simple-minded public-choice models, with their selfish, rent-maximizing bureaucrats’ (Rodrik 1993:356). It allows one to delineate the role that the state can play in mediating the conflicts that inevitably accompany institutional and economic policy reform from a previously dirigiste regime. Policy reform efforts need not be blocked if gainers can compensate losers. Such compensation may not occur voluntarily, given high transactions costs and free rider problems. It is here that the state can step in by implementing a variety of non-distortive compensatory measures (Mosley et al. 1991; Rausser 1992). Examples of such measures include special worker adjustment compensation for industries facing international competition, privatization with compensation for adversely affected public sector employees and so forth. The importance of such measures are highlighted by Rausser (1992:150) in the following manner. ‘... since productive policies may harm members of special interest groups, compensation— may actually be politically necessary if society is to approach the optimal configuration of productive policies.’

A recent survey by Haggard and Web (1993:162) on the political economy of policy reform suggests that ‘... the evidence from the case studies points to the conclusion that compensation measures are usually necessary to sustain political support for adjustment’. Examples of compensation measures in South Asia include the National Renewal Fund (NER) in India set up in 1992 to assist retrenched employees in redeployment, retraining and counseling (Arun and Nixon 1997). A similar measure—the so-called ‘golden handshake’ package—exists in Pakistan as part of its privatization program (Cameron 1997).

While the principle of compensation has moral appeal and a political economy rationale, several observers have questioned the effectiveness of this principle in a South Asian context—(see Bhagwati on India, 1995:91 and Cameron on Pakistan, 1997:243). This is a reflection of certain risks associated with the principle of compensation. Haggard and Webb (1993:161) acknowledge this:

There are three possible counter-arguments to compensation. First, a country simply may not have the funds to compensate losers... Second, some types of compensatory measures may undermine the reform... Third, the likely recipients of politically motivated compensation may not be the poor.

These counter-arguments need to be put into perspective. The first observation is not really a critique but an argument in favour of adequate external assistance that can encourage reformist governments in developing countries to engage in 'adjustment with a human face' (Cornia et al. 1988). The second point recognizes the need to be careful in designing compensation programmes. Note that advocates of the principle of compensation seek non-distortive, incentive-compatible measures. Violation of this condition will obviously undermine reform efforts. Thus, for example, granting wage increases to workers to protect them from the inflationary consequences of a devaluation is self-defeating, as the former nullifies the expected benefits of the latter. On the other hand, measures to improve the distribution of education and health services and expanding the social safety net for the poor are broad-based, incentive-compatible compensation measures that are likely to engender public support.

The third critique is more problematic. One cannot deny the fact that the greatest political threat to stabilization and adjustment are not the poor but the vocal urban-based groups, such as organized labour (primarily in the public sector) and business groups in the protected industries. Lal (1995) sees this as the fundamental restraint on the capability for state to make credible commitments to economic reform in the case of India. Yet, the problem is not insurmountable. This leads one to a discussion of 'inclusive' policy and political-management as another route for creating the momentum for change.

The principle of compensation is, in effect, a 'bribe' offered to particular groups to engender support for a reform programme. Such 'bribes' are targeted measures. A broader, on-term and challenging approach is to engage in consistent advocacy of 'good' policies and legitimizing their implementation through coalition-building. The government has to both 'lead' and 'listen'. Here, a brief reflection on the East Asian experience is appropriate.

Observers on East Asian economies have often drawn attention to the way governments engaged in a partnership with the private sector through booth structured modes—such as deliberation councils—as well as informal networks. In parts of East Asia, where the process of democratization is taking deeper roots, the government is changing its strategy and trying to provide 'voice' to an increasingly robust civil society. As Hang Sang-jin (1997:7) observes:

Almost everywhere in East Asia, the activities of non-governmental organisations (NGOs) and popular organisations (POs) have rapidly expanded and strengthened in the process of political transition... These groups... support various kinds of social movements, such as those related to economic justice, people's participation, problems of workers, women, the environment and the community.

It is this new-style East Asia, coming to terms with its democratic present and future, rather than old-style East Asia of the 1960s and 1970s, that is far more relevant to South Asia. Indeed, one can make the stronger argument that Bangladesh is better endowed than its Eastern counterpart in this respect. NGOs have a longer and durable presence in Bangladesh. To a considerable extent, their activism and prominence reflect weak public sector capacity. This has created opportunities for NGOs to specialize in service delivery to targeted groups. One well-known example is Grameen Bank in Bangladesh specializing in provision of micro-credit to the rural poor (especially women) (ADB 1997:). One is also witnessing the growth of broader, citizen-driven movements engaged in advocacy of better governance. One notable example is the Public Affairs Centre in Bangalore in India which aim to '... assess the quality and cost of citizen's interactions with public agencies' (World Bank 1997:118). Its activities have motivated a public agency to launch a citizen-government initiative to improve the provision of service. One can no doubt find emerging examples of such hope and promise in Bangladesh as well.

MANAGING GROWTH IN A DEMOCRATIC FRAMEWORK: FINAL THOUGHTS

Prescribing good policies—and exhorting governments to adopt them—is only the beginning, rather than the end, of economic analysis. It is this grim realization of the inherent limits of 'neutral' policy advice that underpin an emerging agenda of action that focus on improving the quality of governance as the key to economic development.

Advocacy of good governance still faces an uphill task. When one reflects on an underperforming South Asia struggling to cope with its pervasive poverty, one can succumb to a sense of despair. Thus, Kohli (1994) has offered his grim prognosis of the 'crisis of governability' in India. Dutt and Kim (1994) and Chibber (1995) offer a similar account of pessimism. Mascarenhas (1986) paints a tragic picture of a 'legacy of blood' in the case of Bangladesh. Political assassinations in the past have engendered a cycle of retribution and violence which represents a continuing threat to the nation's fledging democracy. Recent events suggest that such assassins are still alive in the country.

Given such a political context, what hope one can hold for Bangladesh? While it is easy to become cynical about the traditional institutions of democracy in Bangladesh - general elections, parliaments, multi-party system, a free press—the 'new' view on governance sees the need for an agenda of action that devises innovative 'rules of the game' to invigorate the policy-making capability of democracy. Rules and restraints to enhance the credibility and commitment of the state to 'good' policies, the need for a bureaucracy that operates within an accountable framework, and broader social reforms in particular are prominent examples of good governance that Bangladesh—and the rest of the region—can learn from. There is much that still needs to be understood about the complex process of economic development, but at least one is beginning to ask the right questions.

REFERENCES

- ADB *Emerging Asia: Changes and challenges*, Manial: Asian Development Bank, 1997.
- Alesina, A, 'Political Models of Macroeconomic Policy and Fiscal Reform', Working paper No. 970, November 1991, Washington, DC: World Bank.
- Arun, T.G and F.I. Nixson, 'Privatisation and Foreign Participation: The Indian Experience', *Jouranl of the Asia Pacific Economy*, 1997, 2,2:201:24.
- Bhagwati, J. 'The New Thinking on Development', *Journal of Democracy*, 1995 6,4.
- Cameron, J. 'Privatisation and the Real Economic Development Problems of Pakistan', *Jurnal of the Asia Paccific Economy*, 1997 2,2:239-49.
- Choi, B. S. *Economic Policy Making in Korea*, Seoul:O Chomyung Press, 1991.
- Chibber, P. 'Political Parties, Electoral Competition, Government Expenditures and Economic Reform in India', *Journal of Development Studies*, 1995 32, 1:74-96.
- Cornia, G. A., R. Jolly and F. Stewart (1988) *Adjustment with a Human Face*, Oxford: Clarendon Press, 1988
- Dutt, A.K. and K.K. 'Miracle and State Stagnation? The Development Experience in South Korea and India Compared', in A.K. Dutt, K. S. Kim and A. Singh (eds) *The State, Markets and Developments: Beyond the Neoclassical Dichotomy*, Aldershot: Edward Elgar, 1994.
- Fischer, S. 'Central Bank Independence Revisited', *American Economic Review, Papers and Proceedings*, 1995 85, 2: 200-206.
- Haggard, S. and Webb, S.B. 'What do we Know about the Political Economy of Economic Policy Reform?' *World Bank Research Observer*, 1993 8, 2:143-68.
- Hang Sang-jin, 'Human Rights and Growth in East Asia', *Korea Focus*, 1997, 5 (1): 1-13.
- Kohli, A. 'Centralisation and Powerlessness: India's Democracy in a Comparative Perspective' in J. Migdal, A. Kohli, and V. Shue (eds) *State Power and Social Forces: Domination and Transformation in the Third Worlld*, Cambridge: Cambridge Universsity Press, 1994.

- Krueger, A. 'Virtuous and Vicious Circles in Economic Development', *American Economic Association, Papers and Proceedings*, May 1993, pp. 351-5.
- Lal, D. 'India and Chian: Contrasta in Economic Liberalisation?', *World Development*, 1995, 23,9: 1475-94.
- Landes-Mills, P. and I Serageldine 'Governance and the External Factor' *Proceedings of the World Bank Annual Conference on Development Economics 1991*, Washington DC: World Bank, 1992.
- Mascarenhas, A. *Bangladesh: A Legacy of Blood*, London: Hodder & Stoughton, 1986.
- Mosely, P., J. Harrigan and J. Toye Aid and Power: *The 4 World Bank and Policy based Lending I, Analysis and Policy Proposals*, London: Routledge. 1991.
- Murphy, K.M., K. Shleifer and R. Vishy, R. 'The Allocation of Talent: Implications for Growth', *The Quarterly Journal of Economics*, 106, May 1991, 503-30.
- Niskanen, W. A. 'The Case for a New Fiscal Constitution', *Jurnal of Economic Perspectives*, 1992, 6 (2):13-24
- North, D. 'Economic Performance Through Time', *American Economic Review*, 1994, 84, 3:359-68.
- Okimoto, D, 'The Costs of Japanese Industry Policy', in D. Okimoto and T.P. Rohlen (eds). *Inside the Japanese System: Readings on Contemporary Society and Political Economy*, California: Stanford University Press, 1988.

Aid and Resource Allocation

M A Taslim *

Bangladesh has been the recipient of generous inflows of foreign aid since its birth. The simple sum of the total aid flow between 1972-73 to 1998-99 stands at US\$ 34.5 billion. This is equivalent to 6.7 per cent of the cumulative GNP of the country during the same period.¹ It was expected that the aid inflow would augment saving and contribute to higher investment and growth of the economy. However, actual outcome belied the expectations. Although foreign assistance was very helpful in tiding over frequent emergencies and supply shocks, its economic overall impact was not very favourable. With an increase in the aid flow, saving actually collapsed and fluctuated around a meager 2 per cent of GDP during the seventies and eighties.² Investment also declined from its moderate level during the pre-independence days and stagnated at around 12 per cent of GDP during the same period. The low rate of investment meant that the economy grew at a lack-lustre rate. The large inflow of aid that indebted the nation and mortgaged its future did little to stimulate the growth of the economy.

A persuasive argument in favour of aid inflow into developing countries was provided by the 'two-gap' theory.³ It suggested that many developing nations are unable to invest adequately to achieve the target growth rate due to a paucity of saving.⁴ The import requirements also exceeded the export earnings constraining

¹ Aid flow constituted 8.2 per cent of GNP during 1972-73 to 1989-90. It fell to 5.2 per cent during the nineties.

² Saving and investment both rose markedly in the 90's when aid inflow declined considerably.

³ See Chenery and Strout (1906).

⁴ The low rate of saving could be due to poverty. Low income of the people of these countries means they can save very little of their income such that the rate of capital accumulation is also low. This implies low productivity of the people and consequently low income. These nations are caught in a 'vicious circle of poverty'.

* The author is a professor in the Department of Economics in the University of Dhaka, Bangladesh.

the capacity of these nations to import modern machinery and inputs. Both these constraints could be overcome by an inflow of foreign aid. Aid provided the resources to invest in excess of saving, and bridged the gap between import needs and export receipts. It was also hoped that the higher investment permitted by aid would raise income which in turn would raise saving such that there would be a positive association between aid and saving.

Unfortunately, the story told by the two-gap theory proved to be at best optimistic and at worst, false. There are not many examples where aid promoted either saving or growth. There is now a very large literature that convincingly demonstrates that foreign aid has actually contributed to reducing saving in developing countries.⁵ There is also evidence that aid does not foster faster economic growth of developing countries.⁶ Such empirical findings are sufficiently robust and widespread to raise serious doubts about the efficacy of foreign aid in either raising investment and saving or accelerating economic growth.

Several hypotheses have been advanced to explain the unexpected perverse effect of aid on recipient countries. In the earlier years the concern was about an inverse relation that seemed to exist between aid and domestic saving. It was argued that aid fostered the growth of a larger government that was inefficient and corrupt. Such a government spent lavishly as resources were made available by foreign aid. Effort to raise revenue was relaxed such that domestic saving declined. Aid frequently encouraged conspicuous consumption and the importation of inappropriate capital intensive technology. Income distribution worsened leading to social strife. The potential beneficial impact of aid was thus swamped by such adverse effects.⁷

In a recent paper, an alternative explanation in terms of entrepreneurship has been advanced.⁸ It suggests that the apparent paradoxical effects of aid are due to the crucial role of entrepreneurship in investment and the operation of productive enterprises. The role of entrepreneurship in development is seldom recognised and it hardly ever receives more than a cursory mention.⁹ However, entrepreneurs are the central figure in the development of a private sector-led economy. The efficient running of the public sector also requires entrepreneurial talent. This paper explicitly recognises the role played by entrepreneurship in the economic activities of a nation.

⁵ See for example Rahman (1967), Weisskopf (1972), Schmidt Hebbel, Webb and Corsetti (1996) and Taslim and Weliwita (2000).

⁶ Schmidt-Hebbel, Serven and Solimmano (1996).

⁷ See Rehman (1967), Griffin (1970), Griffin and Enos (1970) and Weiskoff (1972) for details.

⁸ See Taslim and Weliwita (2000).

⁹ An exception is Leibenstein (1968)

It is demonstrated that the total investment effort is limited by the entrepreneurial stock. If part of this entrepreneurial stock is diverted to aid financed activities, less is available for private sector investment. To the extent the former is less productive dynamically, aid could impact on the economy perversely.

Private entrepreneurs engage in private investment activities. Investment in the public sector, too, requires some entrepreneurial quality if it is to be profitable. This paper explicitly recognises the role of entrepreneurship in the production process by positing that entrepreneurial skill is an important argument in the production function.¹⁰ Hence, output produced, q , depends on capital stock k and labour l employed for current production as well as skill of the entrepreneur, e : $q = q(k,l,e)$ where $q > 0$. For any firm the skill of its entrepreneur is given, and hence, the production function above reduces to the ordinary production function in k and l only. It is assumed to exhibit the standard properties of positive but diminishing marginal products and a positive cross product. It is also postulated that q_{le} , q_{ke} , $q_{ee} > 0$, i.e. marginal products of labour and capital both increase with an increase in entrepreneurial skill. Profit of the firm, Π , is equal to total revenue less cost: $\Pi = pq(k,l,e) - rk - wl$, where p is the price of the output, r is the rental cost of capital and w is the nominal wage rate. Profit maximisation by the individual firm yields the following optimal input demand functions:

$$k_i = k_i(p,r,w;e) \text{ and } l_i = l_i(p,r,w;e).$$

Assuming that output price, rental cost of capital and wage rate remain constant we may write that input demand function as functions of entrepreneurial skill alone,

$$k^* = k^*(e) \text{ and } l^* = l^*(e).$$

It can be readily shown that an increase in entrepreneurial skill will increase the desired employment l^* and capital stock k^* .¹¹ To derive the investment demand of the firm it is assumed that when the actual capital stock is less than k^* , the firm undertakes investment, i , in order to reduce or eliminate the discrepancy between the actual and desired capital stock,

$$(1) \quad i = a(k^* - k), \quad 0 < a < 1,$$

where a is an adjustment factor that depends, among other things, on the costs of adjustment. Assuming these costs to be constant we may write i as a function of entrepreneurial skill,

¹⁰ See Taslim (1995).

¹¹ The standard results that an increase in output price and wage, and a reduction in rental cost raise the desired capital stock also hold.

$$(2) \quad i = a(k^* - k) = i(e) \text{ and } i' > 0.$$

Investment of each firm is determined, *ceteris paribus*, by the amount of entrepreneurial input it possesses. Summing over all firms, the investment demand of the economy, i , can be expressed

$$(3) \quad \sum_j i = I = \sum_j i(e_j)$$

where the subscript j denotes firms. Let us assume that entrepreneurial skill may be aggregated across firms to derive an aggregate index of entrepreneurship, ϵ . Then equation (3) can be written as:

$$(4) \quad I = I(\epsilon), \quad I' > 0.$$

Just as profitable investment of individual firms is limited by the skill of their entrepreneurs, the total investment demand of the economy is limited by the total availability of entrepreneurial skill in the economy. Hence, a country with limited entrepreneurial talent cannot profitably invest more than that implied by the aggregate investment function above.

Since the investment function has been derived from the profit maximisation exercise of investment firms, it shows the maximal amount of investment that can be undertaken efficiently or profitably. Any investment in excess of this amount will be inefficient or wasted.

The investment function above has immediate implications for domestic saving. Total domestic investment *ex post* must be equal to total domestic saving and net receipt of funds from overseas. Unless the current rate of investment is below the optimal rate it cannot be profitably increased in the short term even if funds were available. Hence, an increase in foreign resources will not lead to an equivalent increase in investment; it will reduce domestic saving. This has been discussed in detail in Taslim and Weliwita (2000). Their arguments will not be repeated here; instead interested readers are referred to the paper.

In this paper we focus on the allocation aspect of aid-financed investment. In the earlier years, the government was the recipient of all aid resources. In more recent years a part of the total aid is allocated to the private sector, particularly NGOs. Regardless of where the aid resources are channeled, the utilisation of these resources requires entrepreneurial input. This will have to be diverted (attracted) from the existing pool of entrepreneurs or potential new entrants. In order to attract entrepreneurs into aid-financed activities, the expected pay-off in such activities must be greater than what they could earn in private business or other activities.

This condition may be satisfied even with a moderate return from aid-financed investment provided the return was sufficiently certain and the return from high profit private ventures uncertain. To simplify matters assume that aid-financed investment returns a profit of A with probability P_a and zero with $(1-P_a)$. Similarly, the private venture yields a profit of B with probability P_b and zero with $(1-P_b)$. The former will be preferred by a rational entrepreneur so long as

$$(1) P_a A > P_b B$$

If the return to private investment is more uncertain, $P_b < P_a$. Hence, so long as A exceeds the fraction P_b/P_a of B, the aid financed project will be preferred. The situation will be even more favourable for the aid-financed investment if the entrepreneurs are risk averse. In this case, the entrepreneurs will prefer aid-financed project if $EU(A) > EU(B)$ or

$$(2) P_a U(A) > P_b U(B)$$

Where U is the utility and E is the expectation operator. Since the utility function exhibits diminishing marginal utility for risk-averse people, the above condition will be satisfied at a lower pay-off A relative to B than in the previous case.

How likely are these conditions to hold? It is generally true that people with better connections with the government and donor agencies have better access to aid-resources than ordinary people. Essentially the costs of getting an allocation of aid money is the cost of lobbying. A bloated cost estimate of the projects ensures significant profit and rent-seeking opportunities with little possibility of loss-making. In contrast, the operation of a private business is fraught with risks. The business may suffer not only because of the inadequacy of the entrepreneurial skill, but also because of such exogenous factors as natural calamities that befall the nation frequently, vicissitudes of the international market, shifts in government policies and political instability and the poor quality of governance that goes with it. Even in the best of circumstances, the rate of business failure is very high. It is even higher where some of these factors impinge on the economy.¹²

The low probability of loss in aid-projects and high return ensure that condition (2) will be satisfied for a large number of both current and potential entrepreneurs. There will be competition among them for a slice of the aid pie.

The drawing away of entrepreneurs to aid financed projects will reduce that available to the private sector. If the aid projects were as productive and dynamically efficient

¹² These factors may not adversely affect the aid entrepreneurs. Indeed they may raise profit by coaxing out more aid-money citing these factors for cost over-run.

as the private sector projects, this relocation of entrepreneurs would not have any negative impact on output. However, many aid projects are to a large extent rent seeking activities with low productivity. Some of them may not be sustainable without repeated dosage of fresh aid. Such activities that yield large private gains for the entrepreneurs do not contribute much to the development of the national economy.

It can be established from the profit maximisation calculus of the entrepreneurs that there is an optimum level of capital and labour employment for a given skill of the entrepreneurs. Assuming that the entrepreneurs were employing the optimum amount of capital and labour, their profit would have been the maximum. When rent-seeking opportunities open up due to an inflow of aid money, some entrepreneurs may decide to exploit these opportunities, but without giving up or reducing the scale of their original activities. Entrepreneurship input will be spread more thinly resulting in a reduction in profit from the original activities.

If they become deeply involved in aid-financed rent-seeking activities, it is possible that the erstwhile profitable industries will become unprofitable such that these may be abandoned. If this happens, the rent-seeking opportunity will have caused the demise of socially productive enterprises. It is evident that when rent-seeking opportunities proliferate with large aid inflows, socially productive private enterprises may be starved of entrepreneurial skill and consequently decline (or not grow as fast as they should). In this event, the economic growth of the country may slow down. Thus, foreign aid may unwittingly subvert the very process that it purports to foster.

References

- Chenery, H., and A. Strout (1966), "Foreign Assistance and Economic Development", *American Economic Review*, Vol. 56, No.4, 679-733.
- Griffin, K.B., and J.L. Enos (1970), "Foreign Assistance: Objectives and Consequences", *Economic Development and Cultural Change*, Vol. 18, No. 3, 313-327.
- Leibenstein, H. (1968), "Entrepreneurship and Development", *American Economic Review*, papers and proceedings, Vol.58, No.1, 72-83.
- Rahman, M.A. (1967), "The Welfare Economics of Foreign Aid", *Pakistan Development Review*, Vol. 7, No. 2.
- Schmidt-Hebble, K., S. Webb, and G. Corsetti (1992), "Household Saving in Developing Countries: First Cross-country Evidence", *World Bank Economic Review*, Vol. 6, No. 3, 529-547.
- Schmidt-Hebbel, K., L. Servin, and A. Solimano (1996), "Saving and Investment: Paradigms, Puzzles, and Policies", *World Bank Research Observer*, Vol. 11, No. 1, 87-117.
- Taslim, M. A. (1995), "Entrepreneurship, Default, and the Problem of Development Finance", *Canadian Journal of Economics*, Vol. 28, No. 4a, 961-972.
- Taslim, M. A. and Weliwita, A. (2000), "The Inverse Relation between Saving and Aid: An Alternative Explanation", *Journal of Economic Development* Vol. 25, No. 1, June.
- Weisskopf, T. (1972), "The Impact of Foreign Capital Inflow on Domestic Saving in Underdeveloped Countries", *Journal of International Economics*, Vol. 2, 1, 25-38.

Money Supply Process in Bangladesh: An Empirical Analysis

Imam Abu Sayed*

Prologue

Money supply is one of the momentous variables to evolve the economy of Bangladesh in exact direction. This variable acts as a stabilizer in the economic fluctuations of the country. In Bangladesh, the expected rate of growth of money supply predominantly depends on GDP Growth, Inflation and Income Velocity of Money. This paper will try to analyze the interactions of deviant components of money supply including the Broad Money, Reserve Money and Money Multiplier. Section- I of this paper will try to enucleate the equations kindered to money supply of Bangladesh. This section explains (a) the objectives of money supply (b) quantification of the growth of money supply and (c) elements for change in money supply. Section-II illustrates that, like all other variables proper estimation of growth of money supply of Bangladesh also suffers from different types of lags such as Recognition Lag, Implementation Lag and Impact Lag. At length, Section-III deals with the brief empirical analysis on problems and prospects of money supply process in Bangladesh.

SECTION-I

(a) Objectives of Money Supply

The foremost concern of money supply is whether the enormity of monetary growth can preserve the par value of Taka, contain price level in adored direction and ensure the economic development of the country.

The author is Assistant Director (Research) of MMTU, Bangladesh Bank and Ex. Assistant Director (Training), BPATC, Savar, Dhaka. Views expressed in this paper are his own and do not reflect those of Bangladesh Bank.

(b) Quantification of the growth of Money Supply :

For this purpose we can use some congruous equations.

$$Y = y/p \dots\dots\dots(1)$$

Y= Real income, y=Nominal income and p= Price level.

However we can write : $y = Y.p$ for any period of time

$$y(1+\hat{y}) = Y(1+\hat{Y}).p(1+\hat{P})$$

$$\text{or } (1+\hat{y}) = (1+\hat{Y})(1+\hat{P})$$

$$\text{or } \hat{y} = (1+\hat{Y})(1+\hat{P})-1 \dots\dots\dots(2)$$

We can fathom the Broad Money in **Annex-1**= M1(Narrow Money)+ Time Deposits

Expected rate of growth of M2 for any particular year depends on Income Elasticity of

$$\text{nominal demand for money. } E = \hat{M}/\hat{Y} \dots\dots\dots(3)$$

Here \hat{M} is the growth of nominal broad money stock and \hat{Y} is the growth of nominal

income. E is assumed to be constant. Thus, $\hat{M} = E((1+\hat{Y})(1+\hat{P})-1) \dots\dots(4)$

To resolve the growth of broad money for a particular year we can assume that $\hat{Y} =$

6.0%, \hat{P} =(Rate of Inflation)=5.0% and $E = 1.30$

Therefore, \hat{M} (growth of M2)= $1.30((1.06)(1.05)-1) = 0.146$ or 14.60%

(c) Elements for change in Money Supply:

The mutation in M2 depends on domestic and international assets.

$$\Delta M = \Delta NDA + \Delta NFA \dots\dots\dots(5)$$

NDA= net credit to govt. + credit to other public sector + credit to private sector
± net other assets.

Change in NFA depends on gross foreign exchange reserves of central bank, foreign liabilities of central bank and net foreign assets of the scheduled banks. Overall surplus in the Balance of Payments increases the NFA as well as broad money if other things remain immutable. Other assets/liabilities also influence the increase

and decrease of broad money. Such as if the approbatory valuation adjustment occurs then the other assets will rise.

Historically, Income Velocity of Money 2.9% is assumed to decline in respect to the rate of Inflation and growth of real Income. Velocity of money can be trodden as,

$$MV=PY \dots\dots\dots(6)$$

Here M= broad money, V= income velocity, P= price level and Y= real income.

$$\text{Or } (1+\hat{M}) (1+\hat{V}) = (1+\hat{P}) (1+\hat{Y})\dots\dots\dots(7)$$

$$\begin{aligned} \text{Or } \hat{V} &= [(1+\hat{P}) (1+\hat{Y}) / (1+\hat{M})]-1 \\ &= ((1.05) (1.06) / (1+.146)) -1 \\ &= ((1.05) (1.06)/ 1.146)-1 \\ &= -0.029 \\ &= - 2.9\% \end{aligned}$$

Histogram of Income Velocity of money is symmetrical, i.e.

Mean, Median and Mode are almost equal showing **Annex-II**, so, the variation of Income Velocity of Money is **Stable**.

SECTION-II

Recognition Lag

Multiple Linear Regression for Broad Money

Multiple Linear Regression techniques are used to test all five hypotheses.

$$BM = \alpha + \beta_1 \text{ NFA} + \beta_2 \text{ Govt. (net)} + \beta_3 \text{ other public sector} + \beta_4 \text{ private sector} \pm \beta_5 \text{ net other assets} + e$$

Where α = the constant, and

e = the error term

The regression and correlation estimates of the five independent variables and expected consanguinity are presented in **Annex-III**.

Analysis of Correlation of Broad Money

To examine the correlation between the dependent and independent variables and with the dependent variable, Pearson's product moment correlation coefficients(r) were computed.

A correlation matrix of all the values of r for the explanatory variables along with the dependent variables was constructed and is shown in **Annex-III**.

The coefficient of the correlation between every other variables ($P \leq 0.01$), which tends to show the multicollinearity across the other variables. Inter variable multicollinearity is existing such as Central Govt. can receive credit from Govt.(net) or Other Public Sector. So, the dominion of the broad money between the two variables is not identifiable. On the other hand, Other Assets Net may increase or decrease. So, it is a peculiar variable and we cannot be able to chain it. External factors strongly influence the NFA. Credit to the private sector as a weighty component of broad money is determined considering the rampant economic situation.

We have excluded other assets(net) in our first OLS Regression model. Then, a second OLS Regression model using four variables were estimated for the new model. The F statistics and the t value of the second model are better. So, recognition of the intimated variables effecting the money supply should be considered delicately.

Implementation Lag

In monetary theory, money multiplier is the key indicator to determine the money supply, which is nothing but a ratio between money supply and monetary base or reserve money (balances with the Central Bank + Currency outside banks + Cash in tills)

We can cognize money multiplier = $(1+c)/(c+rr+er)$ or $(1+c)/(c+r)$

Calculated Money multiplier for 1990-91 :

RM= 6500.7 M2= 25004.4 cy= 3611.8 Total deposits= 21392.6

Reserve of DMBs= 2888.9

Money multiplier=M2/RM= 25004.4/6500.7= 3.846

$c=0.168834$ and $r=0.135042$

$mm = 1+c/c+r = 1+0.168834/0.168834+0.135042$

$=1.168834/0.30386 = 3.864$

Where c = currency deposits ratio

r = Reserve deposits ratio

Money multiplier is inversely related to excess reserve to deposits ratio and also inversely related to currency deposit ratio. To determine the money multiplier only the required reserve is a policy variable, while others namely the currency ratio, the excess reserves, the distribution between time and demand deposits are behavioral variables.

Money Multiplier for Narrow Money :

$$M/RM = 1/(c+r(1-c)) \text{ or } M2 = 1/(c+r(1-c)) \times RM$$

$$\text{Or } \Delta M1 = 1/(c+r(1-c)) \times \Delta RM$$

Money Multiplier for Broad Money :

$$\text{And } \Delta M2 = 1/c' + r'(1-c') \times \Delta RM$$

$$\text{Or Money Multiplier} = M2/RM$$

From our empirical analysis it has been found that the performance of money multiplier for broad money is more satisfactory and acceptable in Bangladesh rather than multiplier for narrow money which is varified in **Annex-IV**.

In **Annex-V** the regression output of NM - RM and BM - RM shows that R Square of the first regression model is 0.930 whereas the R Square of the second regression model is 0.947 which indicates that models are capable of explaining 93.0% and 94.60% of the variability. The adjusted R Square indicate that 94.6 percent of the variation in the dependent variable under model 4 is explained by variations in the independent variables. The F statistics and t value of the second model (BM - RM) is higher.

Impact Lag

The share of currency outside banks and the scheduled banks balances with the Bangladesh Bank to reserve money express an inverse relationship. It has been also found that currency ratio is gradually decreasing and this relatively low currency ratio would imply a high money multiplier. It is so only when there is not much of coordination between monetary and fiscal policy. On the other hand, high currency ratio implies low money multiplier, which may help prevent expansion in monetary resources from being excessive, but this would involve a cost in that it would keep financial intermediation, which ensures a better and efficient use of financial resources much below the adored level.

SECTION-III

Empirical analysis on problems and prospects of money supply process in Bangladesh.

Range of Govt. Treasury Bills yield curve in **Annex-VI** shows that in the last quarter of FY1999-2000 the banks were suffering from excess liquidity problem so the implicit yield of different maturities were supine. On the other hand, the implicit yield was high in the first quarter of the same year. Where there was low level of excess liquidity in the banking sector it indicates that the economic activities were low at the end of last quarter of FY 2000. To stabilize the economy and to roll the development program of the Govt. the excess liquidity of bank was mopped up

through govt. Treasury Bills by the central bank. Otherwise, the banks would have faced caustic excess liquidity problem. To maintain the economy in proper direction as well as to protect the distortion of the monetary sector central bank plays a requisite role indirectly for the sake of macro economic stability.

For resource mobilization from internal sources Govt. sector not only receives money from NSD, Bangladesh Bank or from DMBs. Govt. also pays a huge amount of interest and leads the less developed nature of economy like Bangladesh. By borrowing, Monetarists argue, Government is competing with the private business for funds.

Time Deposits as percent of MS2 is blossoming exposed in **Annex-VII**. For large time deposits M3 is needed to agglomerate for broader definition of money.

Stable pattern of Income Velocity of Money according to Monetarists indicate positive correlation between the money supply and nominal GNP as their position that money is the critical determinant of economic activity and the price level. Keynesians contend that velocity varies directly with the rate of investment because a lower interest rate will increase the size of zero-velocity asset balances and therefore lower the velocity of money. (McConnel / Brue, Eleventh edition).

Target Dilemma arises because monetary authority in Bangladesh cannot concurrently command the money supply and the interest rate. Due to lower financial deepening, poor interest rate sensitivity and leakages of the economy, growth of broad money is not always able to influence inflation in exact direction.

Conclusion

Fabrication and espousal of monetary policy in Bangladesh is impeded by administered prices and the high interest of risk free instruments like National Savings Directorate certificates. Moreover, efficacy of monetary policy suffers from the omnipresence of underground economy and the laggared structural adjustment of the financial sector. Consequently, it is very heterogeneous and technical to perceive the impact of tight or easy monetary policy on investment, GDP growth, inflation and the related variables in the process of money supply in Bangladesh. In this conjuncture, proper treatment of Recognition Lag, Implementation Lag & Impact Lag of the deviant components of money supply on the basis of rational expectation can sash the adored level of projected monetary growth of Bangladesh.

REFERENCES

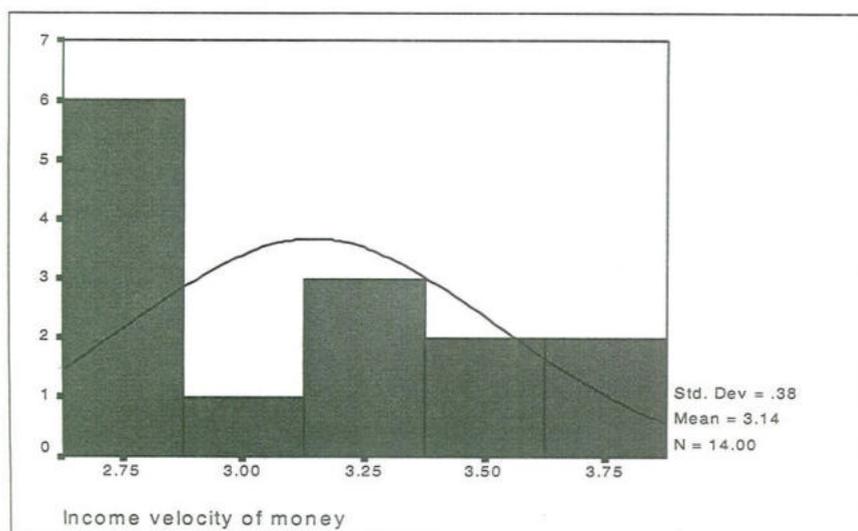
- Dornbusch, R and S. Fischer, 1994. *Macro Economics*, McGraw-Hill Book Company, 1994.
- McConnel / Brue *Economics*, McGraw-Hill Book Company, Eleventh Edition.
- F.Thomas and M. Duncal Mc Dougall, *Macroeconomics*, Fifth Edition,Mc Graw-Hill,Kogakusha Book Company.
- Mankiw N. Gragory, *Macroeconomics*, Second Edition, Worth Publications.
- Sohrabuddin M. and Ahmed Jasimuddin, "Controlling money supply in Bangladesh: the Money Multiplier Approach" *Journal of the Institute of Banker's Bangladesh*, June, 1977.
- Journal/Paper of the World Bank and IMF

SUMMARY OF BROAD MONEY

Financial Year	Net Foreign Assets	Domestic Credit			Total Domestic Credit	Net Other Assets	(Tk in Crores)	
		Govt(Net)	Other Public Sector	Private Sector			Net Domestic Assets	Broad Money
1974-75	179.10	626.90	587.50	289.40	1503.80	-423.30	1080.50	1259.60
1975-76	-14.90	721.20	689.10	346.30	1756.60	-344.80	1411.80	1396.90
1976-77	112.70	731.30	736.10	515.90	1983.30	-356.10	1627.20	1739.90
1977-78	29.10	824.30	925.10	723.20	2472.60	-360.70	2111.90	2141.00
1978-79	216.30	856.20	1235.60	925.80	3017.60	-473.90	2543.70	2760.00
1979-80	-40.80	1042.30	1511.30	1396.30	3949.90	-664.20	3285.70	3244.90
1980-81	-361.10	1662.80	1847.40	1763.00	5273.20	-776.10	4497.10	4136.00
1981-82	-1129.80	1662.40	2435.20	2364.60	6462.20	-783.70	5678.50	4548.70
1982-83	-457.30	1606.40	2462.60	3097.50	7166.50	-810.90	6355.60	5898.30
1983-84	-81.60	2069.00	2551.90	4914.50	9535.40	-1068.00	8467.40	8385.80
1984-85	-239.80	1988.30	3229.50	6890.60	12108.40	-1334.40	10774.00	10534.20
1985-86	-141.10	1853.20	3972.80	8356.20	14182.20	-1702.90	12479.30	12338.20
1986-87	176.10	1978.70	4355.60	8974.00	15308.30	-1131.40	14176.90	14353.00
1987-88	599.80	1717.50	4359.70	10896.30	16973.50	-1165.30	15808.20	16408.00
1988-89	777.30	1270.40	4633.70	13359.70	19263.80	-963.00	18300.80	19078.10
1989-90	427.50	2014.70	5011.60	16004.50	23030.80	-1160.70	21870.10	22297.60
1990-91	1751.70	2187.80	5357.70	17822.90	25368.40	-2115.70	23252.70	25004.40
1991-92	4024.90	3625.60	5643.60	17939.20	27208.40	-2707.30	24501.10	28526.00
1992-93	6081.10	3922.10	6034.30	19317.40	29273.80	-3819.30	25454.50	31535.60
1993-94	9152.80	4682.00	5040.70	20972.50	30695.20	-3445.00	27250.20	36403.00
1994-95	10463.70	4614.00	4906.60	26564.70	36085.30	-4336.70	31748.60	42212.30
1995-96	6735.90	6310.20	5482.40	31659.80	43452.40	-4497.80	38954.60	45690.50
1996-97	6544.60	8017.20	5874.50	35504.90	49396.60	-5313.70	44082.90	50627.50
1997-98	6793.50	9272.00	6250.20	40118.00	55640.20	-6564.60	49075.60	55869.10
1998-99	6402.30	11248.60	6021.00	45638.20	62907.80	-6283.40	56624.40	63026.70

Source: Economic Trends 1973-1999 Published by Bangladesh Bank

HISTOGRAM



Annex-III

PearsonsCorrelation Matrix

Variables	BM	NFA	Govt (net)	Oth Pub Sec	Priv Sec	net oth Asst
BM	1.000					
NFA	0.872	1.000				
Govt (net)	0.947	0.779	1.000			
Oth Pub Sec	0.872	0.695	0.731	1.000		
Priv Sec	0.996	0.83	0.954	0.862	1.000	
net oth Asst	-0.974	-0.874	-0.967	-0.804	-0.968	1.000

Summary of the Regression Output I(BM)

Model	R	R Square	Adjusted R Square	Std error
1	1.000a	1.000	1.000	2.239 E-04

Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	9.03E+09	5	1805716986	7.00E+16	.000a
Residual	1.002E - 06	20	5.012E - 08		

Variables in the Equation	Coefficients				
	unstandardized	std. Error		standardized	t
	B		Beta	sig.	
(Constant)	-2.0E-11	0.000		0.000	1.000
NFA	1.000	0.000	0.182	4.E+07	0.000
Govt (net)	1.000	0.000	0.149	1.E+07	0.000
Oth Pub Sec	1.000	0.000	0.107	2.E+07	0.000
Priv Sec	1.000	0.000	0.710	7.E+07	0.000
net oth Asst	1.000	0.000	0.103	8.E+06	0.000

Summary of the Regression Output 2(BM)

Model	R	R Square	Adjusted R Square	Std error
1	1.000a	1.000	1.000	298.6052

Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	9.03E+09	4	2256678116	25309.00	.000a
Residual	1872466	21	89165.065		

Variables in the Equation

Model	Coefficients				t	sig.
	unstandardized B	std. Error	standardized Beta			
(Constant)	111.392	175.523			0.635	0.533
NFA	0.852	0.031	0.155		27.093	0.000
Govt (net)	0.548	0.089	0.082		6.188	0.000
O Pub Sec	0.871	0.073	0.093		11.896	0.000
Priv Sec	0.999	std. Error	0.709		37.008	0.000

Annex- IV

Selected Economic Indicators

FINANCIAL YEAR	(Tk. in crores)			
	GDP at Current Market Price	Ann Rise of GDP at Constant Market Price(%)	Income Velocity Of Money	Rate Of Inflation (National) (%)
1985-86	46622.7*	4.30	3.70	9.95
1986-87	53920.10	4.20	3.80	10.35
1987-88	59713.60	2.90	3.60	11.40
1988-89	65959.80	2.50	3.40	8.4*
1989-90	73757.10	6.60	3.30	3.86
1990-91	83439.20	3.40	3.30	8.31
1991-92	90650.20	4.20	3.20	4.56
1992-93	94806.50	4.50	3.00	2.73
1993-94	103036.50	4.20	2.80	3.28
1994-95	117026.10	4.40	2.80	8.87
1995-96	130160.00	5.30	2.80	6.65
1996-97	140304.50	5.90	2.80	2.52
1997-98	154833.40	5.70	2.80	6.99
1998-99	174925.6p	5.20	2.7p	8.91

Note: *Base Year 1984-85

Sources: Economic Trends 1985-1999 Published by Bangladesh Bank.

FY	NARROW MONEY(M1)	BROAD MONEY(M2)	RESERVE MONEY(RM)	Money Multiplier for M1	Money Multiplier for M2
1990-91	7203.70	25004.40	6500.70	1.11	3.85
1991-92	8257.20	28525.90	6912.10	1.19	4.13
1992-93	9062.60	31535.60	8994.80	1.01	3.51
1993-94	11167.10	36403.00	11507.90	0.97	3.16
1994-95	13179.40	42267.90	11125.00	1.18	3.80
1995-96	14459.40	45760.00	11302.50	1.28	4.05
1996-97	15167.00	50711.00	12394.50	1.22	4.09
1997-98	15888.50	55869.00	13617.60	1.17	4.10
1998-99	17249.40	63026.70	14742.70	1.17	4.28

Annex-V

Summary of the Regression Output 3(NM - RM)

Model	R	R Square	Adjusted R Square	Std error
1	.965a	0.930	0.930	1396.5568

Analysis of Variance

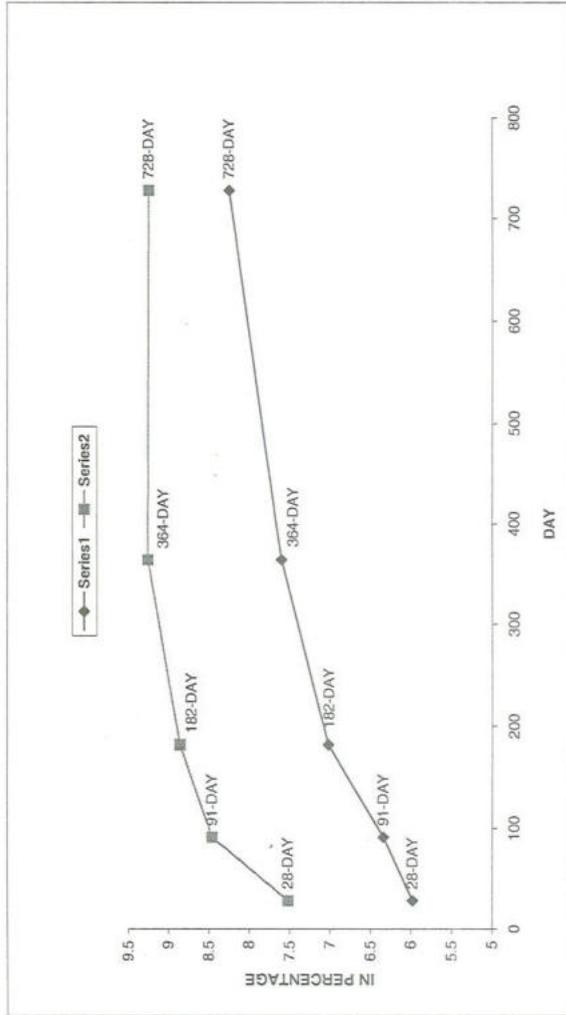
	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.89E+09	1	2888336271	1480.92	.000a
Residual	2.16E+08	111	1950370.842		

Variables in the Equation

Model	Coefficients			t	sig.
	unstandardized B	std. Error	standardized Beta		
(Constant)	616.935	189.166		3.261	0.001
RM	1.172	0.030	0.965	38.483	0.000

Annex-VI

RANGE OF GOVT TREASURY BILLS YIELD CURVE 1999-2000



Figures collected from National News Paper

Annex-VII

Broad Money and the Distribution of Components 1972-Mar 2000

Tk. in Crore

Name of Months	Currency Outside Banks©	Demand Deposits (D)	Time Deposits (TD)	Broad Money (MS2)	C as % of MS2	D as % of MS2	TD as % of MS2
Mar-72	231.75	248.18	174.38	654.31	35.42	37.93	26.65
June	175.60	310.10	213.51	699.21	25.11	44.35	30.54
Sept.	246.45	320.18	244.17	810.80	30.40	39.49	30.11
Dec.	289.77	389.68	254.66	934.11	31.02	41.72	27.26
Mar-73	311.59	387.49	281.81	980.89	31.77	39.50	28.73
June	286.43	409.60	293.08	989.11	28.96	41.41	29.63
Sept.	296.56	425.55	317.71	1039.82	28.52	40.93	30.55
Dec.	320.79	487.15	344.46	1152.40	27.84	42.27	29.89
Mar-74	348.52	480.38	364.33	1193.23	29.21	40.26	30.53
June	331.14	485.64	399.75	1216.53	27.22	39.92	32.86
Sept.	349.85	471.29	423.93	1245.07	28.10	37.85	34.05
Dec.	402.76	535.00	430.53	1368.29	29.44	39.10	31.46
Mar-75	395.16	494.47	481.40	1371.03	28.82	36.07	35.11
June	293.12	521.41	473.17	1287.70	22.76	40.49	36.75
Sept.	292.36	494.01	445.07	1231.44	23.74	40.12	36.14
Dec.	378.87	554.35	475.04	1408.26	26.90	39.36	33.73
Mar-76	352.53	577.29	500.41	1430.23	24.65	40.36	34.99
June	338.05	563.13	536.90	1438.08	23.51	39.16	37.33
Sept.	388.32	562.28	567.61	1518.21	25.58	37.04	37.39
Dec.	387.58	682.61	690.79	1760.98	22.01	38.76	39.23
Mar-77	425.96	579.99	699.87	1705.82	24.97	34.00	41.03
June	389.22	580.36	745.29	1714.87	22.70	33.84	43.46
Sept.	452.62	645.38	788.52	1886.52	23.99	34.21	41.80
Dec.	503.82	749.70	909.67	2163.19	23.29	34.66	42.05
Mar-78	539.32	684.93	873.87	2098.12	25.70	32.64	41.65
June	521.39	735.21	964.58	2221.18	23.47	33.10	43.43
Sept.	620.87	769.60	937.76	2328.23	26.67	33.06	40.28
Dec.	660.85	877.53	1080.09	2618.47	25.24	33.51	41.25
Mar-79	658.43	855.25	1105.13	2618.81	25.14	32.66	42.20
June	631.98	883.08	1230.32	2745.38	23.02	32.17	44.81
Sept.	672.88	787.68	1396.94	2857.50	23.55	27.57	48.89
Dec.	724.97	885.57	1554.87	3165.41	22.90	27.98	49.12
Mar-80	723.53	846.75	1544.61	3114.89	23.23	27.18	49.59
June	709.87	879.49	1594.16	3183.52	22.30	27.63	50.08
Sept.	760.48	957.14	1706.30	3423.92	22.21	27.95	49.83
Dec.	866.08	1062.90	1820.15	3749.13	23.10	28.35	48.55
Mar-81	950.71	1072.68	1896.48	3919.87	24.25	27.37	48.38
June	940.73	1144.53	2048.46	4133.72	22.76	27.69	49.55
Sept.	973.50	1158.25	2158.26	4288.01	22.70	27.01	50.33
Dec.	974.06	1232.14	2279.52	4485.72	21.71	27.47	50.82

Name of Months	Currency Outside Banks©	Demand Deposits (D)	Time Deposits (TD)	Broad Money (MS2)	C as % of MS2	D as % of MS2	TD as % of MS2
Mar-82	980.00	1170.17	2296.22	4446.39	22.04	26.32	51.64
June	913.16	1165.42	2367.15	4445.73	20.54	26.21	53.25
Sept.	1011.73	1212.64	2437.00	4661.37	21.70	26.01	52.28
Dec.	993.75	1490.30	2838.76	5322.81	18.67	28.00	53.33
Mar-83	1099.85	1296.84	2904.91	5301.60	20.75	24.46	54.79
June	1140.39	1346.80	3192.18	5679.37	20.08	23.71	56.21
Sept.	1369.92	1490.50	3513.76	6374.18	21.49	23.38	55.12
Dec.	1379.29	1905.67	4268.16	7553.12	18.26	25.23	56.51
Mar-84	1495.79	1747.86	4311.38	7555.03	19.80	23.14	57.07
June	1623.20	2029.70	4872.54	8525.44	19.04	23.81	57.15
Sept.	1733.60	1935.30	4965.90	8634.80	20.08	22.41	57.51
Dec.	1725.00	2501.50	5831.40	10057.90	17.15	24.87	57.98
Mar-85	1672.30	2144.10	5658.10	9474.50	17.65	22.63	59.72
June	1722.90	2508.70	6302.40	10534.00	16.36	23.82	59.83
Sept.	1809.30	2318.40	5907.80	10035.50	18.03	23.10	58.87
Dec.	1767.20	2827.90	6832.10	11427.20	15.46	24.75	59.79
Mar-86	1960.60	2625.80	6666.10	11246.50	17.43	23.35	59.27
June	1953.10	2974.30	7410.20	12337.60	15.83	24.11	60.06
Sept.	2035.70	2623.90	7581.60	12241.20	16.63	21.43	61.94
Dec.	1902.70	3096.80	8279.40	13278.90	14.33	23.32	62.35
Mar-87	2010.60	2727.80	8498.80	13237.20	15.19	20.61	64.20
June	2074.90	3186.20	9090.20	14351.30	14.46	22.20	63.34
Sept.	2326.70	2332.10	9781.10	14439.90	16.11	16.15	67.74
Dec.	2244.00	2851.00	10664.20	15759.20	14.24	18.09	67.67
Mar-88	2431.20	2297.70	10502.90	15231.80	15.96	15.08	68.95
June	2415.00	2632.70	11360.30	16408.00	14.72	16.05	69.24
Sept.	2625.60	2340.70	11585.20	16551.50	15.86	14.14	69.99
Dec.	2528.20	2788.30	12595.60	17912.10	14.11	15.57	70.32
Mar-89	2653.90	2414.00	12924.00	17991.90	14.75	13.42	71.83
June	2615.60	2845.10	13617.40	19078.10	13.71	14.91	71.38
Sept.	2735.50	2495.10	13899.60	19130.20	14.30	13.04	72.66
Dec.	2728.60	3271.80	15253.50	21253.90	12.84	15.39	71.77
Mar-90	2914.30	2655.70	15166.60	20736.60	14.05	12.81	73.14
June	3188.30	3180.40	15928.90	22297.60	14.30	14.26	71.44
Sept.	3191.30	2921.90	16169.20	22282.40	14.32	13.11	72.56
Dec.	2995.00	3578.70	16847.50	23421.20	12.79	15.28	71.93

Name of Months	Currency Outside Banks©	Demand Deposits (D)	Time Deposits (TD)	Broad Money (MS2)	C as % of MS2	D as% of MS2	TD as% of MS2
Mar-91	3152.40	3060.50	16787.10	23000.00	13.71	13.31	72.99
June	3611.80	3591.90	17800.70	25004.40	14.44	14.37	71.19
Sept.	3229.30	3274.20	18281.70	24785.20	13.03	13.21	73.76
Dec.	3133.00	3947.40	19487.30	26567.70	11.79	14.86	73.35
Mar-92	3730.40	3368.40	19453.90	26552.70	14.05	12.69	73.27
June	4072.60	4184.60	20268.70	28525.90	14.28	14.67	71.05
Sept.	3822.90	3744.00	20724.80	28291.70	13.51	13.23	73.25
Dec.	3799.00	4245.20	21760.50	29804.70	12.75	14.24	73.01
Mar-93	4776.50	4136.50	21612.70	30525.70	15.65	13.55	70.80
June	4480.10	4582.50	22473.00	31535.60	14.21	14.53	71.26
Sept.	4481.10	4312.80	22658.10	31452.00	14.25	13.71	72.04
Dec.	4498.70	4829.40	23602.20	32930.30	13.66	14.67	71.67
Mar-94	5278.80	4793.10	23473.20	33545.10	15.74	14.29	69.98
June	5416.00	5751.10	25235.90	36403.00	14.88	15.80	69.32
Sept.	5515.40	5203.70	26079.40	36798.50	14.99	14.14	70.87
Dec.	5724.80	5871.70	27693.10	39289.60	14.57	14.94	70.48
Mar-95	6267.90	6015.70	28040.30	40323.90	15.54	14.92	69.54
June	6565.10	6614.30	29032.90	42212.30	15.55	15.67	68.78
Sept.	6495.80	6474.50	29506.40	42476.70	15.29	15.24	69.46
Dec.	6452.30	7081.90	30539.60	44073.80	14.64	16.07	69.29
Mar-96	7096.00	6857.90	29530.30	43484.20	16.32	15.77	67.91
June	7123.30	7336.10	31231.10	45690.50	15.59	16.06	68.35
Sept.	7090.20	6740.60	32113.50	45944.30	15.43	14.67	69.90
Dec.	6819.50	7348.10	34630.30	48797.90	13.97	15.06	70.97
Mar-97	7473.70	6807.50	34023.30	48304.50	15.47	14.09	70.44
June	7574.60	7592.40	35460.50	50627.50	14.96	15.00	70.04
Sept.	7753.70	6872.20	36368.00	50993.90	15.21	13.48	71.32
Dec.	7607.40	7655.90	38381.30	53644.60	14.18	14.27	71.55
Mar-98	8155.20	7142.30	37749.30	53046.80	15.37	13.46	71.16
June	8153.30	7735.20	39980.50	55869.00	14.59	13.85	71.56
Sept.	8332.60	7224.40	40821.90	56378.90	14.78	12.81	72.41
Dec.	8075.60	8321.50	43358.50	59755.60	13.51	13.93	72.56
Mar-99	9043.70	7649.50	43281.50	59974.70	15.08	12.75	72.17
June	8686.60	8562.80	45777.30	63026.70	13.78	13.59	72.63
Sept.	9001.50	8003.30	47649.10	64653.90	13.92	12.38	73.70
Dec.	9387.00	9105.50	50496.70	68989.20	13.61	13.20	73.20
Marh2000	10896.10	8937.30	51644.20	71477.60	15.24	12.50	72.25

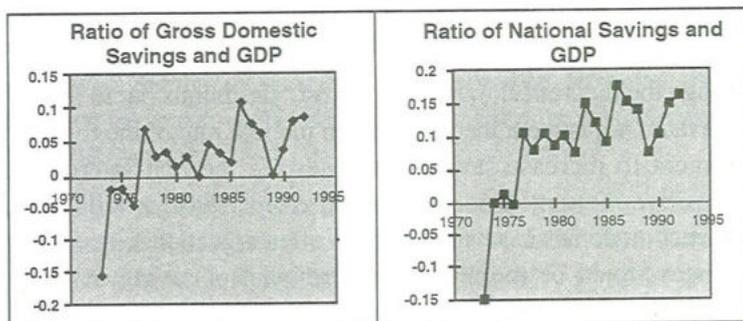
Source: Economic Trends(1972-Mar.2000)Published by Bangladesh Bank

Savings In Bangladesh—An Econometric Model

Rahima Tasneem Rahman*

1. Introduction

The low savings rate and hence the low investment rate can possibly be identified as the most serious macro-economic problem in the Bangladesh economy. The current savings rate in Bangladesh is quite low even by the standards of many low-income countries and so is clearly inadequate for sustaining any socially acceptable economic growth rate. Gross national savings during the eighties and in the early nineties varied between 4%-6% of GDP with no clear trends. A major part of it is likely to have generated from savings out of worker remittances. While the annual remittance inflow has been around 3%-4% of GDP, findings show that as high as two-thirds of the remittance income may be saved by the recipient households. But the rate of savings out of domestic income nonetheless has remained negligible.



The ratio of GDS/GDP in constant prices shows that though it has an increasing trend, the present level is still very low even by the third world standard. However, the ratio became positive in 1977 from being negative for four years (1973-76). This indicates a greater self-reliance rather than dependence on foreign savings which are in fact, current account deficit i.e., that part of foreign aid disbursement which goes into investment through imports. The ratio of national savings over GDP shows an overall better situation than the GDS/GDP ratio. It was negative for only one year in 1973 and became positive thereafter. The positive range of GNS/GDP was 0 to 0.2 while the positive range of GDS/GDP was 0 to 1.25. Nonetheless, the GNS/GDP ratio can not be considered satisfactory compared to the neighboring countries.

* The author is an Assistant Commissioner of Taxes in the Bangladesh Civil Service (Taxation).

This paper examines the behaviour of domestic savings. Section I presents the current domestic savings scenario. Section II outlines the theoretical framework and interpretation of empirical findings with a brief discussion of reasons of low domestic savings. Section III contains some recommendations and concluding observations of the paper.

The endeavour is to find out the reasons behind the low savings rate and suggest ways to mobilise domestic resources through financial developments, i.e., through improvement in the structure and operation of the financial sector. Ways in which public savings might be increased to enhance resource mobilization through financial development will also be considered knowing that if the private sector is to play the active role it has been assigned in promoting economic development, efforts will be to no avail unless public savings is also increased at the same time. An important consideration here is that public savings as well as private savings must be greater, and a greater proportion of that savings has to be channeled through the financial sector.

However, the paper has some practical limitations. A major limitation is the lack of most recent published data on national income accounting. Again, most of the research works done in this field focus their attention mostly on investment and sometimes consumption but seldom savings leading to serious data constraint.

2. Empirical Findings

A glance through the theoretical frameworks of savings points out to the Adjustment Theory as relevant. Adjustment theory relies on the real rate of interest as the major policy instrument to increase savings. But despite the real interest rate being sufficiently positive throughout the 1980s and early 1990s, it failed to have any significant impact on domestic savings. So it is often argued that income rather than real interest rates would be the primary determinant of saving in a low income country like Bangladesh. However, to determine what factors are really significant, the two estimates of the savings function (Equations 1 and 2) are obtained from secondary source that used the annual time-series data from 1974/75 to 1987/88.

$$\text{LnS} = -10.28 + 1.58 \text{ Ln GDP} - 1.14D \quad (\text{Equation 1})$$

(-1.21) (2.2) (-2.81)

$$R^2 = .40$$

$$DW = 1.85$$

$$\text{LnS} = -9.08 + 1.47 \text{ Ln GDP} + 0.77 \text{ Ln RRI} - 1.51D \quad (\text{Equation 2})$$

(-1.13) (2.1) (1.0) (-2.7)

$$R^2 = .41$$

$$DW = 1.79$$

Where,

S = Real savings

RRI = Real Rate of Interest

GDP = Gross Domestic Product.

D = Dummy variable with value of 1 in 198/83 and 0 otherwise.

Soure : BIDS Journal, June- September, 1992.

In *interpreting* the estimated savings functions (Equations 1 and 2), we find that though they have low explanatory power, they capture the effect of income (GDP) and the real interest rate. The income elasticity of savings is around 1.5 and significant at the 5% level of significance while the real interest rate elasticity is not statistically significant at an accepted level. So, savings will grow with GDP growth and at a higher rate as income elasticity is greater than unity.

The nominal interest rate was determined by policy makers throughout the adjustment decade and upward adjustment to the rate were made at discrete time intervals. This may account mainly for the low explanatory power of the estimated savings functions. The interest rate, in principle is freely' determined by banks since 1989 but in reality, because of predominance, the nationalised commercial banks demonstrate oligopolistic price setting behavior with respect to the interest rate. Unpegging the nominal interest rate and increasing it further is a major policy under financial sector reforms of the adjustment package, the concern being that the pegged rate was below what the market determined rate would be. However, the limitations of attempting to raise real savings should be clear from the results shown above as it depends on GDP growth.

A modified equation (an extension of the earlier model) for the purpose of this study using the annual time-series data for the period 1974/75 to 1998/99 has been run. The new equation (Equation 3) has one more explanatory variable, population per branch of scheduled banks (POPBR). Due to unavailability of specific data on the population having access to scheduled banks, total population has been used as a proxy. Total population has been divided by the number scheduled bank branches to arrive at POPBR. Real rate of interest has been calculated as the difference between the price level and inflation ($P-i = RRI$). 1975/76 has been considered as an outlier in this regard as inflation was too high in that year (67.17). GDP at constant market prices has been used with 1984-85 as the base year. The dependent variable in the modified equation has been changed to financial savings (FS) defined as the sum total of Time Deposit and Post Office Deposit because the explanatory variables seem to have been more closely related to this particular kind of savings.

$$\text{Ln FS} = -40.16 + 2.73 \text{ Ln GDP} + 0.04 \text{ Ln RRI} - 2.27 \text{ Ln POPBR} \quad (\text{Equation 3})$$

(1.00) (0.12) (0.02) (0.12)

$$R^2 = .9986$$

$$DW = 1.03$$

Where,

FS = Financial savings

GDP = Gross Domestic Product.

RRI = Real Rate of Interest on Deposits

POPBR = Population per branch of scheduled banks

OUTLIER = 1975/76

The *objectives* of estimating the modified equation are:

- i) To extend the annual time-series data of the earlier model that covered the period only upto 1987/88. Financial liberalisation has taken place in the economy from the following decade (1990s) justifying a conscious effort to capture any changes in the effect of those explanatory variables on the financial savings the importance of which has been greatly emphasised in The Financial Sector Reform Package.
- ii) To provide an assessment of the effect of population per branch of scheduled banks on the financial savings in addition to GDP and real rate of interest that were the explanatory variables in the earlier model.
- iii) To check the stationary status (run Unit Root Test) or stability of each of the variables used in the equation and also determine whether there is any degree of Autocorrelation present. If so, remove such effect of serial correlation.

The model of financial savings provides an outstanding fit-R2 is very high almost close to 1 (.9986). All explanatory variables are statistically significant at the 5% level of significance or more. Even the real rate of interest though small (elasticity .04) is statistically significant at the 5% level which is not so in the case of real savings at the same level. Income (GDP) with an elasticity estimate of 2.73 again proves its importance in financial savings mobilisation. Population per branch of banks has a negative relation with financial savings indicating that if there were more bank branches, it could have a positive impact. So, here POPBR points out to a directional relationship only.

The population per branch of scheduled banks may be viewed as a proxy for financial deepening in the sense of increased access of the people to the banking system. Its importance in the determination of financial savings has strong policy significance.

The Equation-3 with its elasticity estimates demonstrates that GDP and population per branch of scheduled banks, respectively, are more important variables in mobilising financial savings from policy point of view than real rate of interest. This finding is

consistent with the practical experience of having small influence of real rate of interest on financial savings in low income countries. The finding also points out that the real rate of interest is more pertinent for boosting financial savings than it is for real savings.

Before, suggesting the ways to increase financial savings, a discussion of the reasons of low savings seem relevant. Low specifically negative real rate of interest is the major bottleneck in increasing financial savings in a developing country like Bangladesh. This picture, however, is a common phenomenon in all other low income countries as well. But from 1990 onward when real rate of interest became positive, financial savings did not increase according to expectation because interest rate in the then bullish stock market was still higher and a major portion of urban savings naturally switched to that market. Hence, until the stock market eventually crashed, financial savings was greatly hampered.

(i) *Chronic Public Sector Dissavings*: Undoubtedly constant erosion in the public sector savings has contributed a great deal to the low aggregate domestic saving in the country. The major cause for public sector dissaving is the huge amount of government revenue deficits reflecting a complex set of factors like the inadequacy of resource mobilization, vast tax concessions given in the face of recent fiscal adjustment programmes, subsidies in the agricultural sector, growing interest burden, immense defense expenditure and high level administrative expenditure. As a result, the public savings has been persistently negative, though less so since 1980. The net contribution of the government's fiscal operations to national savings has continuously declined because of the rapid growth in current expenditures from 5%-6% of GDP in the FY 1980-81 to 8%-9% in FY 1990 along with a stagnant level of revenues at around 9% of GDP.

The current expenditure components of the development budget show chronic dissaving by the public sector, the extent of which has increased over the years. Viewed from another perspective, current expenditures have accounted for an increasing share of the government's overall expenditure programme (from 30% in FY 1981 to about 50% in FY 1990 and hence resulting in a declining share of development expenditure).

(2) *External Assistance*: A structural imbalance between aggregate domestic savings and investment is reflected in the fact that consumption plus investment has always exceeded income (GDP), i.e., $Y > C + I$. The gap between aggregate gross investment and savings (the resource balance) shows the presence of external resources into the economy. On one hand, the low savings rate due to its persistence seems to have been accepted as a fact of economic life and, on the other, external resources are marshalled to fill the total resource gap. But the large flow of external assistance has failed to improve economic performance and repayment capability of the country. Apart from economic mismanagement, the total dependence on external resources has created a cultural transformation including unproductive demonstration effects which now acts

as a major deterrent to rely more on local resources. Access to foreign aid and its control over the foreign exchange resources have allowed the state to wield enormous power in the past. The state has exercised this power without accountability under political regimes that were either autocratic or weakly democratic, i.e., maintained a democratic facade. The result has been the development of deeply entrenched vested interests and rent-seeking. Hence, even though the critical importance of external aid for Bangladesh is widely recognized by the donors, they have expressed increasing concerns about the utilization of aid and its effectiveness in recent years. It has been suggested that external funds merely substitute for the government's own resources in funding the development program's facilitating the allocation of government funds to less essential current expenditure. Additional external assistance, therefore, indirectly supports government consumption and substitute for public sector savings.

(3) *Adverse Socio-Economic and Cultural Environment:* When we compare ourselves with other Southeast Asian economies, we find that they had three advantages which countries in South Asia do not enjoy. These are:

- Socio-economic environment conducive to high domestic savings.
- Public policies in general and financial sector policies in particular helped promote savings and discourage conspicuous consumption.
- Confucian ethics of frugality and austerity helped strengthen societal propensity to eschew consumption and make domestic savings.

3. Recommendations and Concluding Remarks

1) *Financial Sector Reforms:* Increase in financial savings is an apparent silver lining. Financial sector development through sustainable reforms is suggested from the findings to be a more efficient means of expediting savings mobilization and channeling loanable funds. The number of scheduled bank branches must be increased in order to have an optimum population per branch and thus creating greater access to credit institutions. One important thing to note here is that Bangladesh is a predominantly agrarian economy and the rural areas are most poorly serviced in terms of banking. So, extension of banking services throughout the country including the poorly serviced rural areas must receive priority attention within the adjustment policy package. If private sector does not seem to be interested due to low profitability, the public sector must come forward. It is a more important determinant of financial savings than the real interest rate. Policies permitting the transformation of financial savings to real savings and investment also need to be focused.

2) *Efficient public Resource Management:* It is alleged that much of the rapid increase in current expenditures in recent years has occurred without a careful

consideration of alternative priorities for the use of scarce public resources. This is a prerequisite not only for the efficient use of resources but also for mobilizing public opinion in favour of domestic resource mobilisation. The growth of current expenditures, therefore, has to be restrained that depends on the government's ability to resist demand for additional fund allocations, and pressures for wage increases and job creation in the public sector.

3) *Liberalization of Interest Rates* : The government should liberalize the interest rates further, reducing and eventually removing the deposit rate floor so that lending rates can have one less reason to remain as high as the present 10 to 12 percent real levels. The government should also lower the interest rates on virtually risk free postal and savings certificates, since this causes financial disintermediation from the banking system and potentially dampens interest in equity markets. While the government's concern about raising private savings and offering high returns to households is welcome, the evidence is clear that total domestic savings (meaning savings not just in financial instruments but all income that is not consumed) responds more to income growth than to interest rates. Thus, further lowering deposit interest rates will bring down lending rates, and total savings over the medium term would be higher to that extent (increase in investment will induce additional income and hence savings).

4) *Less government Intervention* : Financial market variables should be determined by the free market mechanisms instead of government interventions. This is to some extent possible when domestic norms are operative in an environment of political stability. To do so, to provide incentives for private savings, it must be guaranteed that the rate of interest remains positive in the real term. Government must allow banks to operate independently according to real economic and business cycles so that the banks are able to cover cost of fund, risk premium and a profit margin.

To sum up, the single most critical challenge confronting Bangladesh now is to raise the domestic savings rate markedly in the short run and at least to levels comparable with other countries in the region in the medium term. In the long run, the domestic savings rate must be between 25%-30%.

The savings rate must receive a central focus in future macroeconomic policy packages designed for Bangladesh. In fact, massive injections of foreign aid have had a negative impact on domestic resource mobilization and domestic savings rate. Targeting only the investment is the cause of such unsustainable dependence on external resources. Since rapid economic growth holds the key to raising real savings in Bangladesh, so economic growth has to be accelerated through increase in the investment, both public and private. An appropriate incentive structure is therefore essential to stimulate savings and investment.

References

- Ahmad, Q. K., 'Anatomy of Economic Liberalization Efforts and Results in Bangladesh' in *Structural Reforms, Growth, Poverty Alleviation and Human development in Bangladesh*, BUP Working Paper, Vol. 2, Dhaka, 1994.
- Bangladesh Bureau of Statistics, *Statistical Yearbook*, 1994.
- Bangladesh Bureau of Statistics, *Twenty Years of National Accounting of Bangladesh (1972-1992)*, July, 1993.
- Bangladesh Bank, *Economic Trends*, various issues.
- Chand, S. K., 'Towards a Growth-Oriented Model of Financial Programming'. *World Development*, Vol. 17, No. 4, 1989.
- Dornbusch, R. and S. Fischer, *Macro Economics*, sixth edition, Mc Graw-Hill, New York, 1994.
- Haque, W. and S. H. Rahman, 'An Optimal Macroeconomic Planning Model for Bangladesh Economy : Strategies for Self-Reliant Development', BIDS Research Monograph No. 9, 1988.
- Ministry of Finance, *Economic Survey of Bangladesh*, 1994.
- Rahman, S. H., 'Structural Adjustment and Macroeconomic Performance in Bangladesh in the 1980s', *The Bangladesh Development Studies*, Vol. XX, June-September 1992, BIDS, Dhaka.
- Rahman, S. H. and F. J. Shilpi, 'A Macroeconomic Model of the Bangladesh Economy', BIDS, Mimeo, Dhaka, 1990.
- Report of the Task Forces on Bangladesh Development Strategies for the 1990s: *Developing the Infrastructure*, Vol. I, University Press Limited, 1991.
- Todaro, M. P., *Economic Development in the Third World*, Orient Longman Limited, third edition, 1985.
- World Bank, *Bangladesh: Implementing Structural Reform* (Report No. 11569-BD), Washington, D.C., 24th March, 1993.
- World Bank, *Bangladesh: From Stabilization to Growth* (Report No. 12724-BD), Washington, D.C., 17th March, 1994.
- World Bank, *Bangladesh: Recent Economic Developments and Priority Reform Agenda for Rapid Growth* (Report No. 1375-BD), Washington, D.C., 16th March, 1995.
- Zaman, A., 'Comments on Alternative Growth and Adjustment Strategies of Newly Industrializing Countries in Southeast Asia' in P. Streeten (ed.), *Beyond Adjustment: The Asian Experience*, IMF, February, 1988.

Balance of Payment: Problems and Prospects for the Developing Countries

Md. Julhas Uddin¹

I. Introduction

The issue, "Balance of Payment (BOP) : problems and prospects for the developing countries" is a matter of deep concern to the economists and intellectuals of the world. This issue has now become more important particularly after the recent financial turmoil in the South-East Asian countries and in the world, at large, following the matchless advancement of market based economy. In this backdrop the paper attempts to highlight the problems of BOP in some developing countries, and in particular the experiences of Bangladesh in her BOP discourse in recent years.

The paper is designed as follows: after this introduction, section-II will be devoted to analyze the theoretical concept of BOP. Causes and main problems in BOP for developing countries will be discussed in section-III. Overall BOP scenario of Bangladesh and a short review of latest BOP situation of some selected developing countries will be discussed in section-IV. Section-V will be devoted to analyze the policy options and ways to correct the BOP constraints of the developing countries. Finally, section-VI contains some recommendations on the basis of overall observations.

II. Theoretical concept of BOP

The balance of payment (BOP) is, in fact, a comprehensive record of all economic transactions of the residents of a country with the rest of the world for a given period of time. In another words, it is a tabulation of the credit and debt transactions of a country with foreign countries and international institutions. According to the definition given by the International Monetary Fund (IMF), the balance of payments is a statistical statement for a given period showing:

- a) Transactions in goods, services and income between an economy and the rest of the world;
- b) Changes in the economy's monetary gold, special drawing rights (SDRs) and other financial claims on and liabilities to the rest of the world; and

¹ Deputy Director ((Research), Monetary Management and Technical Unit ((MMTU), Bangladesh Bank. Views expressed in this paper are his own and do not reflect those of Bangladesh Bank. The author is indebted to Mr. Kabir Ahmed Chowdhury, Deputy General Manager of Research Department, Bangladesh Bank for his valuable suggestions in the preparation of this paper.

- c) Transfers and counterpart entries that are needed to balance, in an accounting sense, any entry for the foregoing transactions and changes which are not mutually offsetting.

The main purpose of compilation of BOP is to inform the government about the international economic position of the country and to help it make decisions about monetary and fiscal issues, on one hand, and about trade and payment on the other hand. When a payment is received from a foreign country, it is a credit transaction while a payment made to any foreign country is a debit transaction. The principal items shown on the credit side are export receipts and value received for providing services to foreign countries, unrequited or any transfer receipts in the form of gift etc. from foreigners, borrowings from abroad, foreign direct investment and official sale of reserve assets including gold to foreign countries and international agencies etc. On the other hand, principal items shown on the debit side are import payments and value of services paid to foreign countries, unrequited or any transfer payments in the form of gift etc. to foreigners, any type of capital outflows or increase of liability due to increase in official reserve of gold and foreign currency assets in the country etc. The credit and debit items are shown vertically in the BOP account of a country and horizontally they are divided into two categories, i.e., (i) the current account and (ii) the capital and financial account. As per the fifth edition of the BOP manual of IMF, the standard components of BOP may be shown briefly by the following BOP account chart:

BOP ACCOUNT CHART

Credit ((Receipt)/Debit(Payment))	Balance: Deficit (-)/Surplus(+)	
CURRENT ACCOUNT		
a. Merchandise	Exports ((+)	Imports (-)
b. Services	Receipts (+)	Payments ((-)
c. Income	Receipts (+)	Payments (-)
d. Current transfers	Receipts (+)	Rendered (-)
I. Current A/C Balance : Surplus (+)/Deficit(-)		
CAPITALS AND FINANCIAL ACCOUNT		
a. Capital transfers	Net inflow (+)	Net outflow (-)
b. Direct investment	Net inflow (+)	Net outflow (-)
c. Portfolio investments	Net inflow (+)	Net outflow (-)
d. Other investment	Net inflow (+)	Net outflow (-)
e. Reserve assets	Decrease of liab. (+) Increase of liab. (-)	
II. Capital and Financial A/c Balance: Net inflow (+)/Net outflow (-)		
Errors and Omission : Net understated records (+)/Net overstated records (-)		
OVERALL BALANCE : Surplus (+)/Deficit (-)		

III. Causes and main problems in BOP for developing countries

The adverse balance of payment situation of developing countries can be attributed to the following causes which are mainly responsible for disequilibrium in BOP.

1. Slow Growth of Production:

- * The developing countries have few items of exports. They have to depend mainly on primary commodities. Either other commodities are not produced in large quantity or quality is inferior and cannot compete in international markets.
- * Exports of the developing countries are mainly affected by the political uncertainty and disturbances. As a consequence, the economic growth of most of the developing countries has been interrupted which has badly affected the BOP of various developing countries.
- * The developing countries are undertaking massive programs of development in agriculture, industry, transport, communications, education etc. For all these efforts, import of various kinds of machinery and raw materials are needed. So, the imports of the developing countries are rising rapidly. But, exports of developing countries are not increasing so vigorously. As a result, huge trade deficits are of common phenomenon of the developing countries.
- * The developing countries utilize the services of foreign banks, airlines, shipping companies, insurance companies and other agencies. As a result, the net value received under services account for the developing countries always shows a negative sign.
- * Almost all the developing countries have got remarkable amount of foreign loans. So debt servicing has become a heavy drain on foreign exchange reserves of these countries.

All these problems are mostly associated with the slow growth of production of goods and services as compared to the aggregate demand of the developing countries.

2. Fiscal Policies :

Fiscal policies are sometimes serious obstacle to expansion of exports of the developing countries. In some cases import duties on the raw materials required for the production of certain manufactures which have an export potential are as high as to raise the production costs to that level at which the manufactures become uncompetitive in the world market. Such import duties are really export duties and have the same impact on exports as export duties.

3. Inflation:

Inflationary conditions of the developing countries are serious obstacle to the promotion of exports. Inflation results in a rise in the domestic cost of production so that the goods produced cannot compete in the world market, if the rate of exchange is not suitably adjusted.

4. Trade Restriction of Developed countries:

Trade barriers raised by developed countries against the import of manufactures from the developing countries is one of the important factors preventing greater production and export by some industries in developing countries. Moreover, subsidies provided by government of the developed countries to their own producers and imposition of various restrictions on some export items of developing countries some time creates serious impediment to improve the BOP position of the developing countries.

5. Depreciation of Currency:

Currencies of the developing countries are in a continuous pressure of depreciation against the leading currencies. For an example, during June 30, 1996-June 30, 2000 the yearly average depreciation of domestic currencies per US dollar were 5.69% in India, 10.76% in Pakistan, 8.92% in Srilanka and 7.11% in Bangladesh. The continuous process of depreciation, has badly affected the overall BOP position of the developing countries. Because, growth of imports of the developing countries are always much higher than that of their exports; and as a result, net gains of depreciation always remained unfavorable for the developing countries. Moreover, due to continuous depreciation, the value of the domestic assets of developing countries are also shrinking continuously in terms of world leading currencies.

6. The impacts of budget deficit on BOP:

Developing countries are generally facing the problem of deficit financing in their budgets. The problem is arising either by revenue side or by expenditure side. On the revenue side, most of the developing countries depend for revenue on taxes, especially income taxes and indirect sales taxes, which are very uncertain in nature to achieve the targets. Moreover, target of revenue earnings from taxes are often over stated and finally are not achieved. On expenditure side, in developing countries, the budget allocation for operational expenditures are usually higher than that of the allocation for investment expenditures. And, operational expenditure always exceeds the predetermined target.

Moreover, to achieve higher economic growth, government of the developing countries need more capital than what they can internally collect for allocating investment expenditure. To fulfill the gap government takes external debt from such financial institutions as the International Monetary Fund (IMF), the World Bank, the Asian Development Bank etc. Disbursement of external debt for financing the budget deficit later on creates contractionary impact both on the current account and on the capital & financial account of BOP; because, governments have to repay both the principal and the interest of external debts.

Now it would be quite persistent to highlight on the existing BOP situation of some developing countries.

IV. BOP scenario of Bangladesh and a short review of latest BOP situation of some developing countries

BOP SCENARIO OF BANGLADESH:

Bangladesh has experienced serious difficulties in balance of payments since her inception in the international trade in early seventies. The balance of payments of Bangladesh characterized a continuous deficit in trade balance since 1971. A review of BOP situation of Bangladesh reveals that during 1990/91-1998/99 there were substantial amount of deficit in the trade balance which is mainly responsible for creating obstacles to improve the overall BOP situation of Bangladesh. Deficit in the trade balance, which was US \$ 1801 million in 1990/91 consistently increased amid fluctuations and stood at as high as US \$ 3063 million in 1995/96.

Thereafter, deficit in the trade balance slightly decelerates for two consecutive years and finally stood at US \$ 2694 million in 1998/99. These deficits have been partially offsetting by the remarkable surplus in unrequited transfers; particularly, in the form of workers' remittances during the period under report. But the current account balance showed a consistent and remarkable deficit during the period mentioned above due mainly to a large deficit in trade balances. During 1990/91-1994/95, the overall balance showed a moderate surplus due mainly to a remarkable surplus in capital account (net) which mainly attained by borrowed capital. The overall balance in BOP recorded a deficit of US \$ 1017 million in 1995/96 due mainly to a larger deficit in trade balance followed by acute political unrest and a smaller surplus in net capital account which occurred due to net outflow of portfolio investment. Deficit in the overall balance declined and stood at US \$ 169 million in 1996/97 from US \$ 1017 million in 1995/96. After that, the overall balance showed a surplus of US \$ 82 million in 1997/98; but, further declined to US \$ 171 million

in 1998/99. A summary of Bangladesh's balance of payments during 1990/91-1998/99 has been given in annexure-I.

From the above discussion we see that a large amount of trade deficit is the main obstacle to improve the BOP disequilibrium in Bangladesh. It is perhaps known to us that Bangladesh has a remarkable amount of trade deficit with India. But a review of latest trends of trade gaps of Bangladesh with selected six South-Asian countries reveals that during 1990/1991-1998/99 Bangladesh has a substantial amount of trade deficit not only with India but also with Pakistan, Srilanka, Nepal, Myanmar and Bhutan. In fact, there is no single country in this region where Bangladesh has an absolute and consistent advantage of trade surplus. The total trade deficit of Bangladesh with these six countries which was US \$127.76 million in 1990/91, steadily increased to US \$ 1171.17 million in 1995/96 and thereafter slightly decelerates for two consecutive years and finally stood at US \$ 1279.31 million in 1998/99. The shares of Bangladesh's total trade deficits with these countries have also substantially increased during the period. The pressure which was built up on Pakistan's balance of payments during 1996-97 was eased to a large extent in 1997-98. Deficit in trade balance improved by 40.6% to US \$1, 867 million in 1997-98 lowest during the last one decade. Its ratio to GDP also came down to 2.9% from 5.0% in 1996-97. The current account deficit was reduced by one-half and stood at US \$1,921 million in 1997-98, reflecting an improvement of US \$. 1,921 million and as percentage of GDP reduced to 3.0% against 6.1% a year ago (1996-97). The private transfers witnessed a significant increase of 8.5% and workers' remittances increased by US \$81 million or 5.7%. However, long term capital (net) declined by US \$ 310 million in 1997-98 i.e. to US \$1,708 million from \$2,018 million in 1996-97 and the year ended with a draw down of reserves by US \$306 million.

The imposition of economic sanctions leading to the suspension of new bilateral and multilateral disbursement for non-humanitarian assistance created serious difficulties for the country's balance of payments in 1998-99.

SRILANKA:

Sri Lanka's balance of payments showed a reduction in current account deficit in 1998. In line with a sharp contraction of world exports, the growth rate of Sri Lanka's exports also decelerated by 2% in 1998. Despite an increase in the import volume, the value of imports increased marginally (0.5%) as prices of major import commodity such as crude oil, wheat, fertilizers and sugar declined sharply under depressed world market conditions. Private transfers continued to increase, making

a positive contribution to the balance of payments and thus, there was a significant reduction in the current account deficit in 1998. Freeing long term private capital inflows continued to increase. As a result, the surplus in net capital account increased in 1998. A lower current account deficit and a surplus in capital account contributed to make a moderate surplus in overall balance of payments in 1998. However, Srilanka's balance of payments characterized a continuous deficit in trade balance and current account balance which often creates immense pressure on their overall BOP position.

INDIA:

India's balance of payments also characterized a remarkable deficit in total current account (net). The net total current account deficit which was Rs. 17,366 crores in 1990/91 slightly declined to Rs. 16,282 crores in 1996/97, but sharply increased to Rs. 20,883 in 1997/98 and then declined to Rs. 16,787 in 1998/99. The overall balance however steadily improved during 1996/97-1998/99 in India. The net overall balance showed a deficit of Rs. 4471 crores in 1990/91 which sharply improved and stood at surpluses of Rs. 24,220 crores, Rs. 16,653 crores and Rs. 18,245 crores in 1996/97, 1997/98 and 1998/99 respectively. The net overall balance improved due to increase of surplus in net total capital account. India's overall balance of payments during 1990/91 and 1996/97-1998/99 may be seen in annexure-III.

These are the common scenario of balance of payments of the developing countries.

V. Policy Options and the way to correct the BOP Situation

Having studied the major problems confronting disequilibrium in BOP and the common scenario of balance of payments of the developing countries, the policy option to rectify the situation is a challenge to the policy makers particularly in the new millennium 2000 when the economy of the world is being rapidly globalized.

In order to correct BOP disequilibrium the developing countries have to make their exports more competitive by reducing cost of production as well as improving the quality of production and diversifying of export items. The imports of luxury items needs drastic reduction. The import of raw materials which are available in the country may be disallowed. The export surplus can be increased by greater production. The existing trade gap with other countries can be reduced by increasing bilateral trade. High quality exportable goods should be produced at competitive cost for capturing foreign markets.

Reduction in export duties, allowing incentives to the exporters on non-traditional goods, payment of export rebates can boost exports substantially. The establishment of joint ventures needs to encourage for production of export goods through which substantial foreign exchange can be earned for the country. Reduction of the balance of payment deficit depends on rapid growth in industrial production and to maintain the quality of products. The developing countries need to fully utilize the idle capacity of industrial sector. Modern technology for industrial production is of paramount importance.

The control of inflation is essential for keeping the goods of developing countries competitive in the international markets for promoting exports. The anti-inflationary policy combined with a flexible exchange rate regime may be pursued vigorously to provide more stable conditions for restoring an overall balance in external payments conditions.

The ability to overcome the balance of payments problems depends on sound macro economic management, implementation of structural reforms in the key trade related sectors, and the adoption of a more aggressive export-led growth strategy. Rapid and sustained improvements in export performance combined with efficient import substitution will need to be supported by policies which help restructure and reorient growth towards a more dynamic export sector. Moreover, there are broadly four areas where action will be needed to achieve the desired objective of maintaining healthy situation of BOP for developing countries:

1. In industry, the enactment of a more efficient set of pricing and trade incentives aimed at fostering greater competitive efficiency will be necessary. It should be remembered that allowing low wage is not the way to reduce the cost of production and generation of higher profit margin which usually induces to invest by the entrepreneurs. Quality is important rather than reducing the cost of production only to make a commodity competitive in the world markets. But, overstuffing particularly in the public sector of the developing countries should be considered as a detrimental issue to make the product competitive in the market. However, raising production with high quality in the industrial sector is essential to reduce the trade gaps of the developing countries.
2. In agriculture, a substantial improvements in yields, product quality, marketing efficiency and the development of a complete support system for the grower to exploit fully the potential for exports of high value agriculture commodities will be required.
3. Exploration and prudent utilization of available natural resources; such as natural gas, oil and other valuables and invention of new resources is essential to improve the overall BOP constraints of the developing countries. Foreign Direct

Investment (FDI) may be encouraged to fulfill technological gaps of the developing countries for this purpose.

4. Fourth, in the area of trade policies, an effective exchange rate policy guided by the need to accelerate the flow of exports and diversify its composition and restrain imports is needed to improve the overall BOP situation of the developing countries. Moreover, in order to maintain an advantageous trade policy and an effective exchange rate policy greater cooperation is needed among the developing countries.

VI. RECOMMENDATIONS

Reaffirming that efficient export-led growth can make a significant contribution to reduce trade deficit and external financing needs, the measures which the government of developing countries should adopt are:

- * Highest priority on improvements of export unit values and export quality through enhanced fiscal concessions, the development of technology institutions, and trade houses;
- * a more effective and comprehensive system of export compensation;
- * import of modern technology and machinery to facilitate quick modernization and technical upgradation of export industry as well as improvement of quality standards;
- * forging a closer link between export and import flows through trade diplomacy and special incentives for the export of engineering and manufacturing goods;
- * establishment of efficient mechanisms for implementing and monitoring export specific measures;
- * increasing the exports of local products can open new vistas of employment, we can import advanced technology for increasing home production, even joint ventures with friendly countries can prove very effective bringing more economic benefits;
- * expansion of trade communications with neighbouring countries for exploration of greater trade benefits; and neighbouring
- * finally, some non-economic factors such as restoration of proper law and order; maintaining a congenial political atmosphere by establishing wide-spread consensus among the political parties; stimulation of patriotic feelings among the common masses particularly for using local products, etc. are very much important to improve the existing BOP situation of the developing countries.

REFERENCE

1. Annual Balance of Payments, Bangladesh Bank (various issues)
2. Annual Report, Bangladesh Bank (different issues).
3. Annual Reports of different central banks.
4. Balance of Payment Constraint on Growth and External Competitiveness of Bangladesh Economy-A Time Series Analysis-N.C. Nath, paper presented at the 11th biennial conference of BEA.
5. Balance of Payments Manual, Fifth Edition, IMF Publication.
6. Reserve Bank of India Bulletin, June 2000.
7. The International Monetary System and its Reforms (Part III), Sidney Dell.

Annexure-I

A Summary of Bangladesh's balance of payments during 90/91-98/99

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99
	(in million US dollar)								
Trade Balance	-1801	-1559	-1688	-1657	-2361	-3063	-2735	-2352	-2694
Export Receipts	1669	1904	2383	2534	3473	3884	4427	5172	5324
Import payments	-3470	-3463	-4071	-4191	-5834	-6947	-7162	-7524	-8018
Services A/C Balance	-26	-21	3	-10	-95	-104	163	182	198
Invisible Receipts	-460	-565	-614	-680	-914	-657	-493	-525	-509
Unrequred Transfers (net)	846	975	1067	1247	1426	1876/1	2038/1	1917/1	2102/1
i) Current Account Balances	-981	-605	-618	-420	-1030	-1291	-534	-253	-394
ii) Capital Account (net)	1427	1298	1277	1262	1393	778/2	691/2	1064/2	817/2
Errors and Omission	-99	-79	-64	-135	97	-504	-326	-729	-594
Overall Ballance	347	614	595	707	460	-1017	-169	82	-171

Source : Annual report, Bangladesh Bank

Note : Since FY 1995/96, figures have been arranged as per the BOP manual 5th edition of IMF.

1/Includes income (net) and courrent transfers.

2/ Includes capital account (net) and financial account.

Annexure - II

Trade Gap of Bangladesh with Six Selected South-Asian Countries

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99
(in million US dollar)									
1) Bangladesh's Exports to India:	24.22	7.66	7.58	21.37	28.62	24.44	28.01	49.92	48.24
Bangladesh's Imports from India:	180.65	231.32	341.97	414.48	688.53	1100.14	922.16	933.92	1234.82
	(-156.43)	(-223.66)	(-334.39)	(-393.11)	(-659.91)	(-1075.70)	(-894.15)	(-894.00)	(1186.58)
2) Bangladesh's Exports to Pakistan:	31.87	50.79	26.79	22.06	21.17	29.19	41.17	33.57	28.08
Bangladesh's Imports from Pakistan	65.48	68.78	95.89	91.41	132.63	116.95	67.27	80.04	82.79
	(-33.61)	(-17.99)	(-69.10)	(-69.35)	(-111.46)	(-87.76)	(-26.10)	(-46.47)	(-54.71)
3) Bangladesh's Exports to Sri Lanka	11.32	6.68	12.03	3.39	8.61	6.91	0.66	4.03	3.14
Bangladesh's Imports from Sri Lanka	5.10	5.08	6.11	6.73	8.23	10.68	11.96	5.92	6.83
	(+6.22)	(+1.60)	(+5.92)	(-3.34)	(+0.38)	(3.77)	(-11.30)	(1.89)	(-3.69)
4) Bangladesh's Exports to Nepal:	15.84	0.47	3.55	11.00	12.66	4.46	0.69	11.04	12.16
Bangladesh's Imports from Nepal:	0.13	0.09	0.33	0.45	0.44	7.75	6.75	10.16	17.73
	(-15.71)	(+0.38)	(+3.22)	(+10.55)	(+12.22)	(-3.29)	(6.06)	(+0.88)	(-5.57)
5) Bangladesh's Exports to Myanmar :	0.19	0.59	(6.73)	10.41	5.07	1.62	0.51	0.30	1.29
Bangladesh's Imports from Myanmar :	0.29	0.13	2.48	6.70	9.10	1.85	3.78	8.55	15.44
	(-0.10)	(+0.46)	(+4.25)	(+3.71)	(-4.03)	(0.23)	(-3.27)	(+8.25)	(14.15)
6) Bangladesh's Exports to Bhutan:	0.15	0.21	0.23	0.11	0.21	0.19	0.21	0.49	0.46
Bangladesh's Imports from Bhutan	4.70	4.33	2.26	8.19	2.21	5.19	4.66	5.04	4.11
	(-4.55)	(+0.25)	(+4.02)	(+3.60)	(4.24)	(0.42)	(-3.48)	(-8.74)	(-14.61)
Total Trade Deficits of Bangladesh with six South-Asian Countries	-172.76	-238.96	-386.08	-447.94	-767.04	-1171.17	-944.36	-948.47	-1279.31
Share (%) of Bangladesh's total trade deficit	9.60	15.30	22.90	27.00	32.50	38.60	34.50	40.30	47.50

Source : Annual Export Receipts and Import Payments, Bangladesh Bank.

Note : Figures in the parenthesis indicate Bangladesh's trade balance with respective countries; Figures have been converted into US \$ by using Taka per US \$ (annual average).

Annexure - III

<i>India's Overall Balance of Payment</i>		(Rs. crores)			
	1990-91	1996-97	1997-98	1998-99	
A. Current Account Balance	-47366	-16282	-20883	-16787	
B. Capital Account Balance	12660	42614	36605	36355	
C. Errors & Omissions	235	-2112	931	-1323	
D. Overall Balance	-4471	24220	16653	18245	
(A+B+C)					
E. Monetary Movements	4471	-24220	-16653	-18245	
i. I M F	2178	-3460	-2286	-1652	
ii. F. E. Reserves	2293	-20760	-14367	-16593	

Source : Reserve Bank of India Bulletin, June 2000.

Should Central Bank in Developing Countries be Independent of Government?

M. A. Kashem*

1. Introduction

Many countries have either recently made, or have been considering, significant changes to their Central banking arrangements aimed at making their banks more independent in the formulation and operation of monetary policy. A large body of theory and empirical work has purportedly established the welfare improvements and the superior inflation performance resulting from central bank independence. However, this literature suffers from fundamental weaknesses, which decisively limited their persuasiveness (Lapavitsas, 1997). In fact, the actual trend towards central bank independence is a complex issue, which calls for a detailed analysis of the political economy of financial and monetary instability of post Bretton-Woods world. The question, therefore, arises whether the development of an independent monetary policy is necessary to achieve the objective of price stability and for better financial management in the developing countries. Such situations naturally raise fundamental questions about the appropriate relationship between central banks and the governments.

2. Role of Central Banking in Developing Countries

2.1 The major functions of central banks in developing countries are: (i) to provide bank deposit and borrowing facilities to the government and acting as fiscal agent and underwriters to the government, (ii) to issue currency and manage foreign reserves, print and distribute notes and coins, manipulate foreign exchange markets to maintain the local currency's exchange rates, and manage reserve of foreign assets to regulate the external values of currency; (iii) to act as bankers to domestic commercial banks and act as a "lender of last resort" to commercial banks in difficulty. (iv) to manipulate monetary and credit policy instruments in seeking to achieve the government's chosen macroeconomic goals and/or constitutionally mandated objectives; and (v) to ensure that commercial banks and other institutions conduct their businesses on a sound, prudential basis and according to the laws and regulations in force.

* The writer is the Director of IMED of the Ministry of Planning, Govt. of Bangladesh.

2.2 The above fiscal and monetary functions and activities of central banks are being performed without being bound by a profit motive or monetary rules. Such a wide range of functional responsibility, however, may only be able to manage, as Todaro suggested (Todaro,1996), when they operate within highly integrated economies with matured financial system and an educated and well- informed population. This is not always the case in developing countries. In developing countries, financial institutions are often poorly established or too closely related to the government by either personal ties or dependence on government's favours (Collins, 1983:8). As developing countries, financial systems tend to be less matured and have a limited range of exports and a much larger range of imports, financing of their exports and imports and domestic industries are dominated by foreign banks. The foreign-owned banks, however, rarely want to get too closely involved in domestic politics and, therefore, without the backing of these influential lobbies, developing countries' central banks are often susceptible to political persuasion. Moreover, the rural and urban informal economy of the developing countries is, generally served by an informal and often exploitative credit network. Thus, due to the problem of currency substitution, uneducated and unskilled manpower, ill-informed population, etc. the financial systems of developing countries are often subject to a large degree of political and fiscal influence and control. These wider ranges of functional responsibility, however, may only be able to manage when they operate within highly integrated economies with matured financial system and an educated and well- informed population (Todaro, 1996).

3. Theroretical Framework and Conceptual idea of Central Bank Independence

(a) Theoretical basis for Central Bank Independence:

The modern case for central bank independence (CBI) begins from the inflationary bias that would otherwise be present in the monetary policy. Modern theory attributes the inflationary bias either to dynamic inconsistency of monetary policy in an expectational Phillips-curve model of output determination or to the revenue motive of the inflation tax, in which the fiscal authority weighs the social costs of inflation.

Two main strands of theory that have added precision to the analytical argument for central bank independence are the "Conservative-Central-banker approach" of Kenneth Rogoff (1985), and the "Principal-Agent approach" of Carl Walsh (1995), and Torsten and Guido Tabellini (1993). In the Rogoff approach, the social loss function weighs deviations of both output and inflation from optimal levels, and

dynamic inconsistency produces higher inflation than is socially optimal. This loss can be reduced in multiperiod models in which the central bank is allowed to develop a reputation. It can also be reduced as, Rogoff points out, by entrusting monetary policy to a person or institution who weighs inflation deviation more heavily than the social welfare function– the conservative central banker. This results in improved overall performance, in which inflation is on an average lower and more stable than with a less conservative central banker, but output is more variable.

In the alternative Principal-Agent approach, the inflationary- bias problem is solved by structuring a contract that imposes cost on the central banker when inflation deviates from the optimal level. As Walsh (1995) shows, inflationary penalty is linear in inflation in the standard model and is thus conceptually easy to design.

Two approaches point to different forms of central bank independence. Guy Debelle and Fisher (1995) and Fisher (1995) introduce the distinction between goal independence and instrument independence. A central bank that is given control over the levers of monetary policy and allowed to use them has instrument independence.

A central bank that sets its own policy goals has goal independence. The most important conclusion of both the theoretical and empirical literature is that a central bank should have instrument independence, but should not have goal independence.

(Critical views on the theoretical framework are avoided due to space constraints).

(b) Conceptual Idea of independence:

In the developing countries the main objectives of CBI aim at achieving three types of independence, namely, political, macroeconomic and financial independence.

Political independence implies, preferably, a single objective like price stability, separate from others, independent board of directors, appointed for relatively long staggered terms, accountability of the central bank's action to the public and legislature, and mechanisms for conflict resolution (Ibid, p 312).

Macroeconomic independence represents the freedom to formulate monetary and exchange rate policy, to choose appropriate policy instruments, and limit on credit to government and banks. Typically, market based policy instruments strengthen central bank's independence.

Financial independence requires transparency of accounts, prudential norms such as prohibition of quasi-fiscal subsidies– for example, preferential interest rates, exchange rate guarantees, prohibition of distribution of non-cash profits, and linkages of losses and net worth to the government budget. Moreover, since the essence of

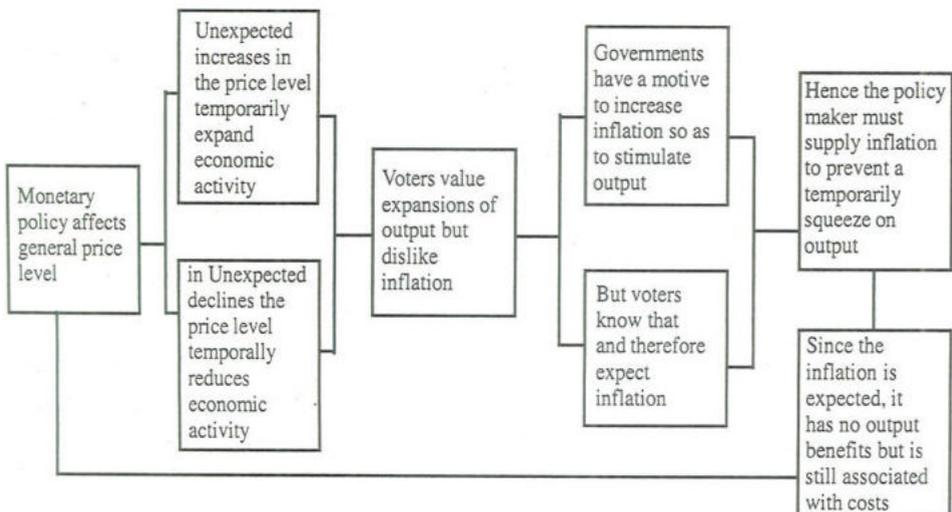
the matter is the wish to promote a stable monetary environment over the longer term in order to achieve and maintain price stability, this could in principle, be attained insulating monetary policy from day- to- day political pressures through the relatively simple expedient of legislating some form of monetary policy “rule”. In the absence of a monetary rule, central banks can also be endowed with monetary policy independence in a fuller sense when they are both insulated from political pressures and have considerable discretion in the determination and operation of monetary policy, such as could be the case under a floating exchange rate regime.

Again, the World Bank and the IMF, since the debt crisis of the developing countries, have involved themselves in the policy-making processes of their central -bank borrowers (Brodlow and Grossman,1996). The result is that the Bank and IMF play a role both in formulation and implementation of central bank policies in many developing countries. Thus, defining central bank independence is never straightforward.

4. The Case for Independence of Central Banks with Empirical Evidence

Theoretical framework constructed by Barro and Gordon(1983a), predict that monetary policy produces higher than desirable inflation levels when run by government. This can be seen from their theoretical model as shown in Fig. 1 below:

Figure 1: The Barro and Gordon Theoretical Model



The outcome can be prevented in one of two ways. The policy makers can make a commitment not to inflate, or monetary policy can be removed from the hands of the politicians and given to a body with no incentive to curry favour with electorate (i.e. to an independent central bank).

In addition to many theoretical texts, surveyed by Cukierman (1992), there are also studies that compared actual monetary regimes between different countries. The factors influenced by the government- central bank relationship and most often examined include inflation and its variance, output growth and fiscal deficits, and are as follows:

First, Bade and Parkin's (1987) study identified two types of inflation- "financial type" concerning government influence in agreeing the banker's budget, appointing board members and determining their salaries, and distribution of profits, etc. The other was "policy type" - referring to government influence over the board and whether or not it had the final say on monetary policy. Bade and Parkin found that central banks free of the "policy type" influence delivered lower inflation than did those that were susceptible to it. Wood, Mills and Capie (1993) also found that the independent central bank delivered lower inflation than did dependent bankers. Their conclusions supported Bade and Parkin, as did related works by Laney, Willet and Banaian(1983), Burdekin and Lanely(1988), Alesina(1988 and 1989), Cukierman,Webb and Neypti (1992), and Scaling(1995), which all indicated that inflation was lower on average in countries with independent central bank.

Second, unlike Bade and Parkin, other writers such as Burdekin and Willet(1990), Alesina and Summer(1991), and Grilli,Masciandro and Tabellini(1991),found a clear correlation between central bank independence and reduction in the variability of inflation.

Third, the well-known Rogoff (1985) model predicted a clear association between central bank independence and the variability of real output growth.

Fourth, Masciandro and Tabellini (1988) concerned themselves primarily with the relationship between central bank dependency and fiscal deficits,(also examining that between dependency and inflation). Their inflation findings supported Bade and Parkin while their conclusions about fiscal deficits were in line with the conclusion of Lanely et. al.(1983), and Burdekin and Lanely(1988). They all found evidence that countries with more independent central banks were associated with more restrained fiscal policy.

Fifth, among industrialised countries, average inflation performance is negatively related to the degree of legal independence of central bank (Alberto. Alensina and I. summers, 1993). On the otherhand, Posen(1993) argues that countries in which

financial sector is politically powerful, become effectively inflation-averse (Switzerland). That is, to reduce inflation central bank seemed to be effective.

Sixth, the more independent central banks are better at stabilisation than the less efficient banks, because their fiscal policy is more disciplined in countries with more central bank independence.

Overall, these empirical works display what could be interpreted as a remarkable consensus.

5. Case Against Independence of Central Banks

Although there is a strong theoretical case for central bank independence, and although there is some suggestive evidence to support it, the view that independence is necessarily desirable is far from universal. The principle of un-elected bankers determining a major part of economic policy can be seen as undemocratic. It can also be argued that independent central banks actually deliver inferior monetary policy outcomes. Indeed, a good case against central bank independence can be extracted from the very studies often cited in its favour. Moreover, several methodological issues indicate that the above evidence is less than compelling.

First, no central bank, particularly in the developing countries, is ever completely independent of government. The government can always change the independence legislation and exert influence over central bank policy through a variety of formal and informal mechanisms. A more substantive variant of this criticism involves potential conflicts between an independent central bank's (C.B) monetary policy and other areas of economic policy, especially fiscal policy (Blackburn and Christensen, 1989). Helzel's (1990) study, on the true meaning of independence, concluded that, in reality, independence remains a fairly elusive concept. Swineburn and Castello-Branco (1991), and Downes and Vaez-Zadeh (1991), on the detail of independence arrangement, argue that the institutional framework of the bank-government relationship is likely to be more important in practice than the formal status of the central bank. Studies by Acheson and Chant (1973), Weebtraub (1978), Fry and Scheneider (1981) and Auerbach (1985), which concluded that central bank behaviour is likely to be coloured by a wish to avoid conflict with those that have power over its status, are a statutory reminder of the political realities of independence, especially in developing countries.

Second, study undertaken by Wood, Mills and Capie (1993) does not provide support that C.B. independence lowers the inflation rate. Bodart's (1990) study finds no relationship between inflation performance and independence of C.B's in developing countries. Similarly, Bade and Parkin (1987) and Schalin (1993), find no correlation

between C.B. independence and variation of inflation. Contrary to the prediction of the Rogoff model, Schalin(1995), Alesini and Summers(1991) find no association between C.B. independence and variability of real output growth.

Lastly, there are no methodological grounds on which one could question the reliability of many of the pro-independence conclusions.

(i) Formal legislative arrangements are not always a good measure of actual independence. Irrespective of formal mechanism the political leadership often has a range of methods for exerting influence, and the incentive to use them.

(ii) There are empirical problems with several of the above studies in that they cover overlapping time periods, and in some cases, overlapping set of countries (Friedman Schwartz, 1991). This implies that they may have a result unique to a particular set of data.

(iii) There is also a causality problem. Rather than C.B. independence leading to lower inflation and better fiscal policies, it may be that both are due to other factors. For example, it might be argued that the German public's often quoted fear of inflation has exerted a strong influence on the decisions of policy makers, as well as being behind the creation of an independent Bundesbank.

Thus, the independence evidence to date, though suggestive, is less than conclusive in linking the degree of central bank independence with macroeconomic performance. There is some important "anomalous" cases where inflation performance has been superior despite the absence of C.B. with formal independence. For example, in the case of France, the EMS arrangements (which provide an important external source of discipline and are a sign of commitment to financial restraint) may be more independent than the political status of the bank. In all cases, the separate contribution of central bank independence to levels of economic performance, inflation and financial discipline is, therefore, questionable.

The implication is that the exact nature of the institutional arrangements for shaping monetary policy must be taken into account.

6. Alternative Propositions

In the light of above discussions some alternative propositions and views may be advanced for operation of central banks in developing countries, and these are as follows:

(i) The long term aim of monetary policy could be attained by legislating some form of monetary policy. The central bank can also be given monetary policy independence with considerable discretionary power in determining and operating

monetary policy. On the other hand, different degrees of independence are possible that C.B can conduct monetary policy at least in consultation with the politicians, since ultimate responsibility for monetary policy lies with the political leadership (Swineburn Castello,1991).

(ii) Downes and Vaez-Zadeh,1991) claim, however, the institutional framework for determining and operating monetary policy is likely to have important as the central bank's level of statutory autonomy, especially in the developing countries. This is because, in practice many decisions are made outside the status, and depend on formal political and ethnic influences.

(iii) An effective accountability and transparency mechanism may be fixed for policy success or failure, to the executive arms of the government or legislature. However, such accountability requires an educated, interested and empowered population, without which it may be difficult to guarantee the independence of C.Bs, even though accountability could be built into legislation (Collins,1983).

(iv) Capital markets are now virtually global, and international capital flows have reached vast proportions (Kurtzman,1993). Since international capital and commodity flows comprise a major part of national economic activity, the monetary situation is likely to be dominated by the world financial and commodity markets. In such a situation the C.Bs, therefore, have a role to play in promoting and regulating a stable and respected financial system.

(iv) Swineburn and Castello-Branco(1991) argue that formally independent C.B.s should have narrowly focussed and clearly defined objectives, such as exchange rate stability. This is because it is difficult to monitor the performance of an independent monetary authority if it has multiple macroeconomic objectives, which weaken the mechanism of accountability by reducing the transparency of monetary policy.

(v) The respective roles of C.Bs and the political authority need to be clearly set out and consistent, and the relationship between the two need to be transparent. The role and the structure of C.B.'s boards, and appointment and dismissal procedure for senior executives and board-members are also likely to be important, as arrangements for funding the central banks and central bank's financing of the government.

(vi) Placing senior government official on the board of directors of a completely subservient central bank may not serve useful purpose. However, government representation to the C.B. board may provide co-operative rather than non-co-operative strategy for macro-economic policy making. The outcome of co-operative policy making may provide satisfactory results, which could increase central bank's self-esteem and its feeling of independence.

(vii) Again, the central bank itself can not guarantee monetary policy credibility. This depends very importantly on the credibility of economic stabilisation and adjustment policy as a whole. For example, where exchange rate policy or fiscal policy is widely seen as inappropriate, the best that can be hoped for is that an independent central bank may help to make the costs of those inappropriate policies more visible and bring some discipline to bear indirectly before the situation becomes unsustainable.

(viii) A key ingredient of C.B. independence lies in the acceptance by the government of the benefits to the economy playing on a level playing field with all other borrowers in order to produce marketable good debt, which in turn is essential for C.B. open market operations. Once the government accepts the case against financial repression for raising funds at below market rates, the C.B. can assume the responsibility of funding the government by auctioning treasury bills, and finally,

(ix) M.J.Fry (1996) in his study on the C.B. independence measured the C.B. independence by its reaction to increase credit demands by the central government. He estimated monetary policy reaction functions showing that larger deficits and greater reliance by governments on the inflation tax and financial repression are associated with less C.B. independence.

7. Conclusion

Although the theoretical ground for central bank independence are now on a rather firm footing than previously, the empirical evidence is yet to be strong enough for definitive conclusion to be drawn about the desirability of former central bank independence in practice. Analysis of the recent arguments that granting central banks independence will improve monetary performance highlights that the empirical evidence, though suggestive, is less than conclusive in linking central bank independence with macroeconomic performances. Notwithstanding these reservations, central bank independence has the potential to improve longer-run inflation performance or to buttress other arrangements, which provide a disciplinary check on monetary policy. The major point to emphasise is that the detail of the exact nature of institutional framework is likely to be an important determinant of the contribution which formal central bank independence makes in practice, and indeed to the sustainability of such formal independence of statutory autonomy, especially in developing countries. Finally, it can be said that the real challenge facing the developing countries' central banks, is how to evolve and implement a popular consensus against monetary instability rather than focusing too exclusively on the mere statutory primacy of price stability. Until this is achieved, it may make little difference whether the monetary authority is a central bank or whether it is independent of government.

REFERENCES

- Alesing A. and I.H. Summers (1983)**, "Central Bank Independence and Macroeconomic performance : Some Comparative Evidence", *Journal of Money, Credit and Banking*, 25:151-62.
- Bank of England (1995)**, "Symposium on Central Banking in Developing Countries".
- Bowles, P. and G. White (1994)**, "Central Bank Independence: A Political Economy Approach". *The Journal of Development Studies*, 31:235-64.
- Brain Bridge, Mark John (1998)**, "Central Bank Independence", Ph.D. Thesis, Department of Social and Economic Studies, University of Bradford, U.K.
- Burdekiin, Richard C.K. (1987)**, "Swiss Monetary Policy: Central Bank Independence and Stabilisation Goals." *Kredit and Kapital*, Vol, 20, no. 4.
- Chandravarkar, A. (1996)**, "Central Banking in Developing Countries". ST. Martin Press, INC. N.Y.
- Clesske, Leonhard (1989)**, "German Central Banking and the Bundesbank's Structure", Address to Fundacion de investigaciones Economicas Latinoamericanas, Buenos Aries.
- Collins, Charles (1983)**, "Alternative to The Central in the Developing World", IMF Occasional paper no. 20, Washington, D.C.
- Cukierman, Alex (1986)**, "Central Bank Behaviour and Credibility: Some Recent Theoretical Developments." *Federal Reserve Bank of St. Louis Review*, 68.
- Cukierman, Alex (1990)**, "Central Bank Behaviour, Credibility, Accommodation and Stabilisation", In Preparation for MIT press.
- Dowd, Kevin (1992)**, "The Experience of Free Banking", London, Routledge.
- Forrest Capie et. al (1994)**, "The Future of Central Banking", Cambridge University Press.
- Goodhart, C.A.E. (1995c)**, "Central Bank Independence" *In The Central Bank and Financial System*, Cambridge, Mass. Mit Press, London.

- Hetzel, Robert L. (1990)**, "Central Banks' Independence in Historical Perspective: A Review Essay," *Journal of Monetary Economics*, Vol. 25.
- IMF (1991)**, "Central Bank Independence: Issue and Experience". IMF working paper no. 58.
- Issing, Otmar (1993)**, "Central Bank Independence and Monetary Stability", Institute of Economic Affairs, IEA Occasional paper-89.
- Lapavitsas, Costas (1997)**, "Central Bank Independence: A Critical Perspective", University of London, Soas working paper no. 77.
- Malcom, Knight (1997)**, "ICS, Central Bank Reform in the Baltics and the Other Countries of the Former Soviet Union" IMF Occasional paper no. 157, Washington D.C.
- Maxwell, Fry J. (1996)**, "Assessing Central Bank independence: do Action Speaks Louder Than Words?", Institutional Finance Group working paper no. 6, University of Birmingham, U.K.
- Maxwell, Fry J. (1995)**, "Central Bank Relations With Their Governments in Some Developing Countries". Institutional Finance Group working paper no. 10, University of Birmingham.
- Rogoff, Kenneth (1985)**, "The Optimal Degree of Commitment to an Intermediary Monetary Target," *Quarterly Journal of Economics*, 100.
- Schuler, Kurt (1996)**, "Should Developing Countries have Central Banks? Currency Quality and Monetary Systems in 155 Countries", Institute of Economic Affairs, London.
- Smith, George A. and Lawrence H. White (1990)**, "The Rationale of Central Banking and The Free Banking Alternative," Indianapolis: Liberty press.
- Sundarajan (1991)**, "Central Bank Independence; Issue and Experience", IMF Working paper no. 58, W.D.C.
- Waller, Christopher J. (1989)**, "Monetary Policy Games and Central Bank Politics," *Journal of Money, Credit and Banking*, Vol, 21, No. 4.

Water as a Scarce Resource: Policies on Water Pricing and Cost Recovery in Bangladesh

Quazi Shahabuddin*

I. Introduction

Water is an increasingly scarce resource requiring careful economic and environmental management. To manage water resources more effectively, a balanced set of policies and institutional reforms should be sought that will harness the efficiency of market forces as well as strengthening the capacity of the government to carry out its essential roles. The present focus should be away from an emphasis on developing new water supplies toward a focus on comprehensive demand management, financial discipline, policies to overcome market and government failures and incentives to promote more efficient water use. The lessons of collective experience gained by different countries demonstrate that the government must make a decisive break from past policies to embrace a new demand-side approach that is comprehensive, market-oriented, participatory and environmentally sustainable.

Demand management for water transcends the standard techniques of using market clearing price, because water is both a public and a private good. Its benefits cannot be denied to those who cannot pay for it and at the same time it is an economic good that should be consumed with its value in mind. Many developed countries have addressed problem through regulatory measures that allocate water, encourage conservation and protects its quality. These have, however, been costly and mostly inefficient to administer. In recent years there has been a tendency to employ alternative approaches such as economic incentives to encourage voluntary control by the users.

This paper deals with the issues related to valuation of alternative uses of water so as to ensure its rational allocation among competing sectors, system of water pricing, cost recovery for public sector investment and water markets in Bangladesh. The paper essentially provides an analysis of the conceptual problems inherent in comprehensive demand management and present some empirical evidence available pertaining to the issues mentioned above.

* Research Director at the Bangladesh Institute of Development Studies, (BIDS).

II. Water Pricing and Valuation of Water in Alternative Uses – A Framework of Analysis

The present focus, as mentioned above, should be away from an emphasis on developing new water supplies toward a focus on comprehensive demand management, economic behaviour, and incentives provided to the users for better services and technologies to increase the efficiency of water use. Incentives for financial accountability and improved performance should be created through greater use of pricing, decentralization of administration and services, financial autonomy, user participation, and private sector involvement.

The absence of financial discipline has a negative impact on the incentives and accountability of public authorities in providing high quality services especially to the poor. Moreover, lack of pricing of water has a disproportionately negative effect on the poor, yielding a vicious cycle of unreliable service, low willingness to pay, and further decline in capacity to provide services. The importance of pricing and other incentives, on the other hand, depends on the relative value of water. But since demand is price responsive, it becomes increasingly worthwhile to measure, monitor, and price water carefully as it becomes scarce.

Rogers, Bhatia and Huber (1996) has recently formulated the concept of water as an economic good and the economic tools used to effect the environmentally, socially and economically efficient use of water. Two of the most important economic tools are pricing and subsidiary property rights that make effective markets possible. These are probably the most poorly understood concepts applied to water management. Rogers et al (1996) explains the wide variety of pricing and property rights mechanism that are possible and how their contribution may lead to, more or less, efficient solutions. The role of economic tools in providing socially acceptable public decisions is not widely appreciated, particularly in many highly regulated situations. The widely accepted principles of "User Pays" and "Polluter Pays" are also related to different definition of the "full-cost" principle. It is suggested that with the improvement of the use of economic tools, the role of the government regulation in managing water as an economic good is increased, not decreased.

Some discussion about the general principles regarding pricing of water in the context of costs and values may be in order. The goals of using economic instruments in the efficient use of resources are arrived at by setting appropriate prices. The efficient use of water recognizes the basic right of all human to have access to clean water and sanitation and further, the need to protect and preserve ecosystem function. Depending upon the nature of the problem, whether in data or in conceptual terms, we need a set of different economic instruments that may help achieve the goal of efficient resource use. The economic tools that have the best effects on water policy

are those in which each user of the water resource is charged the full-cost of their usage. This cost include the cost of providing the supply plus the cost imposed upon the system by externalities caused by that usage, and the opportunity cost of taking the resource from other potential users, including the ecosystem. This reflects the full cost of using the resource. This philosophy can also be used for wastewater treatment charges placed upon municipalities and industries for use of the public service of treatment.

Pricing, it may be emphasized, has a three-fold role in water policy. First, as discussed above, increasing prices tend to ration environmental amenities or discourage environmental deterioration by cutting uneconomical consumption. The second aspect of pricing, and the one most frequently overlooked, is that of increasing the supply of the commodity. Where the price is higher, the more expensive sources of supply become more economically viable or conservation options become more attractive. Thirdly, higher prices tend to give utility service more revenue. This revenue can be spent on improving the quality of the labour force by training, which leads to better performance of the service, which in turn could make the consumers more willing to pay for the services.

To sum up then, for physical, social and economic reasons, water is a classic non-market resource. Even for commodity uses, market prices for water are seldom available or when observable often are subject to biases. Water-based environmental values and external effects are rarely, if ever, priced. However, because of the increasing scarcity of water for both its commodity and environmental benefits, and scarcity of the resources required to develop water, economic evaluation should play an increasingly important role in public decisions on water projects, reallocation and other water policies.

Valuation of water presents the economic analyst with a wide range of challenging issues and problems. Because water values tend to be quite site-specific, each case presents its own unique issues, and typically requires its own original evaluation. Effective measuring of water values demands skill and rigour in application of all of the tools of the applied economist's trade. These tools include primary and secondary data collection, statistical analysis, discounted cash flow analysis and optimization models. Analysis of the demand side of water management decisions require as much specialized skill as is required from engineering and hydrology to perform the supply-side studies. However, those who are prepared to exercise the necessary skills and given the time and resources to implement them effectively can derive conceptually consistent and empirically valid measures of the value of water and thereby provide a valuable contribution to water resources management (Young, 1996).

III. Cost Recovery in Public Water Investments in Bangladesh

The major water user in Bangladesh is irrigated agriculture. Although groundwater irrigation through shallow and deep tubewells currently predominates (with a share of 70% of total irrigated area), the public sector investment in large surface water irrigation projects (with and without flood control and drainage facilities) still claims a large share (40%-50%) of development expenditure in the agriculture sector. However, the performance of these large surface water irrigation and flood control projects leaves much to be desired. What is more important, while the tubewell irrigation has now been mostly privatized and operates without any subsidy, specially the shallow tubewells, public sector projects appear to be the most heavily subsidized mode of irrigation, even if water charges are fully realized.

The 1983 Ordinance promulgated by the Government fixed the water charges to be collected from farmers receiving irrigation at Tk. 100 to Tk. 300 per acre for the wet season, depending on the location of different public irrigation projects in the country. For example, for the Ganges-Kobadak project, one of the largest surface water irrigation system in the country, the water charges were fixed at Tk. 250 for the dry season and Tk. 100 for the wet season. The operation and maintenance cost of this project, on the other hand, was estimated to be Tk. 466 at 1983/84 prices. Thus the water rate is not only quite low compared to what is required for operation and maintenance of the project, this rate was much lower than the water charges for small scale irrigation equipment operated by cooperatives and private owners. A BIDS survey conducted in 1987 estimated water charges at Tk. 1135 per acre for low-lift pumps, Tk. 1680 for deep tubewells and Tk. 1640 for shallow tubewells.

Not only the water charges of public irrigation system are very modest, but even these modest charges are not actually realised. In fact, public water resources investments have become an enormous burden on the government budget, because cost recovery has fallen far short of even modest targets. It has been observed that the actual collection was a mere 5.7 per cent of the amount assessed for all projects taken together (Table 1).¹ The recovery rate was the highest (36 per cent) for the ground water development projects, for which cost of maintenance is relatively low. On the other hand, cost recovery of surface water development projects involving high cost of operation and maintenance is very disappointing. Of course, the problem is not confined to Bangladesh. It is endemic to public irrigation system in South

¹ There appears to have been some improvements in cost recovery in recent years. During 1995/96, the target of collection of water rate was fixed at Tk 25.00 million against which Tk 8.77 million (35.1%) was actually realized. During 1996/97, the target was fixed at Tk 30 million, against which Tk 8.59 million has been collected upto April, 1997 (The Fifth Five Year Plan, 1998).

Table 1: Collection of Water Rates in BWDB Project, 1984-91

Projects	Water Charges Assessed (Milion Tk.)	Water Charges Realised (Million Tk.)	Rate of Recovery (%)
Ganges-Kobadak (GK) Project	104.5	2.13	2.0
Dhaka-Narayanganj			
Demra (DND) Project	11.3	0.11	1.0
Ground Water Development Project	14.2	5.16	36.3
Chandpur Irrigation Project	5.8	0.35	6.0
Other Surface Water			
Development Projects	1.8	0.06	4.3
Total	137.6	7.81	5.7

Source: Hossain and Dhaly (1991).

Asian countries. A thorough investigation of irrigation cost recovery by IIMI came to similar conclusions (Repetto, 1986).

Evidence suggests that farmers want and are willing to pay for reliable supplies of irrigation water. Information on communal and private irrigation systems in various countries of Asia shows that even very poor farmers will pay high fees for reliable irrigation services that can raise and stabilize their income. Thus the critical issue is providing these poor farmers with reliable, profitable and sustainable irrigation services. However, the practical problems of pricing for irrigation services are sometimes quite complex. For example, in large irrigation systems in South Asia, hundreds and thousands of farmers receive varying degrees of service in areas covering more than one million hectares. It is difficult, and in many of these very large systems, extremely costly to measure the volume of water each farmer receives. Many irrigation systems cannot even identify all the farmers who receive water.

One way to circumvent the costs of metering individual use is to measure the water delivery to an extra village or water user association, which in turn is responsible for delivery of water to farmers and collecting fees. Under such an approach, the user association monitors use and determines households fees, and consults with the water supply authorities about how much water is to be delivered to the village

and at what price. This approach uses the ability of local organizations to monitor use and to apply peer pressure for collecting fees. Experience shows, however, such pressure works best when the association is strong enough to withstand the inevitable tensions arising from collection of fees.

A number of studies that have recently been carried out indicate that the low rate of collection of water rate in BWDB projects has been primarily due to the procedural complexities including complete absence of focus on participation of the beneficiaries in the assessment and collection process. The Revised Water Rate Act, 1990 has been designed to remove the procedural complexities as well as to ensure participation of the beneficiaries. The new law marks a shift from individual and crop-based collection to annual assessment and links collection to rated capacity of pumps involving participation of the beneficiary groups. The concept of cost recovery under the new approach hinges on the premise that farmers should be charged only for assured supply of water for irrigation.

While, in Bangladesh, the tradition of non-payment for public services is pervasive, it is clear from recent field survey data that the payment status of all farmers, large and small, ranges between 88% - 96% in Chandpur (CIP), Muhuri (MIP) and Karnafully (KIP) project areas. This gives sufficient evidence that most farmers have been able and willing to pay water charges because they benefit from irrigation. Therefore, in order for the government to attain a performance level prevailing in the private sector, the management of public irrigation projects need to become more business-like and should focus on the timely delivery of services.

The success of the cost recovery, it should be emphasized, depends on charging a water rate reflecting the farmer's ability and willingness to pay. This in turn depends on factors such as irrigation system performance affecting farmer's productivity, the reliability and adequacy of water supply, the cost of water from alternative sources, and accountability for expenditure incurred in operation and maintenance. In short, farmers pay when the use of water is profitable, when the supply is ensured and when the rate does not exceed the cost of obtaining water from an alternative source.

IV. Water Markets in Bangladesh: Potentials and Constraints

The primary function of formal water markets, it may be emphasized, is to facilitate the transfer of abstraction rights between users in order to achieve a more optimal allocation of the resources available. However, the need for such a mechanism which is normally used to re-allocate resources from irrigation to urban water supply, is not likely to be strong in, at least, the near and the medium-term future. Another factor militating against this option is the strongest institutional, legal and socio-

political requirements for it to be operated effectively. Successful markets in water rights are not yet in wide use even in high income countries with substantial greater water resource constraints than Bangladesh. For the foreseeable future, a more appropriate and simpler means of reallocating water from irrigation to urban water supply in those limited areas where this becomes necessary is through a conventional water regulation and permit system. Formal water markets could eventually be introduced, but this is considered to be an option for the longer-term future (NWMPP, 1999).

The inability of government to respond quickly to changing demands has led to the spontaneous development of local and informal water markets. Informal water markets are widespread in South Asia, including Bangladesh. In a typical trade, a farmer sells surplus ground or surface water for a specified period to a neighbouring farmer with a greater need. In this way, water is reallocated to more valuable users without formalizing existing water rights. At the same time, the ability to sell provides an incentive for conserving water and using it more rationally. Moreover, informal water markets in South Asia operating without government intervention are able to increase access to water for some of the poorest farmers.

In Bangladesh, in the wake of rapid expansion of tubewell irrigation, following the policy of market liberalization and privatization over the last decade, water market for irrigation has been developing fast and maturing over the years. With the expansion of water market in the private sector, the pricing system has also been undergoing changes to suit the needs of the farmers. In the initial stage, the most common practice was sharing of one-fourth of the harvest with the owner of the equipment in exchange for water. It gave way to a flat fee per season, the rate depending on the availability of electricity and the price of diesel. In recent years, the market is moving to charging fees per hour of operation of the tubewells, the rate varying from Tk. 30 to Tk. 40 per hour, depending on whether the receiver of the service brings fuel for running the machine. The hourly charge provides incentives to adoption of supplementary irrigation during the aman season at the time of droughts, and has led to expansion of cultivation of modern varieties in the wet season.

The main concern for the development of a private sector water market was that the irrigation equipment would be concentrated in the hands of the higher income groups, which might lead to a differential pricing and inequitable access to irrigation against small and marginal farmers. In Table 2, we present findings of two large-scale sample surveys conducted by BIDS covering the same households. The sample was drawn from 62 villages randomly selected through a multi-stage sampling method. The number of sample households were 1208 in 1987 and increased to 1293 by 1994. It can be observed from Table 2 that irrigation has increased substantially

over the 1987-94 period, more for the relatively large farmers than for the medium and small ones. The difference in access to irrigation between the small and large farmers remained. The unit cost of irrigation for large farmers was only half of that for small and marginal farmers, and about 25% lower than that for medium farmers. The inequity increased marginally during the 1987-94 period. The important point to note however is that during this period of large scale expansion of the private water market, irrigation charge paid by farmers did *not* increase. The average water charge in fact declined by 4% during this period, when the price of rice increased by nearly 30 per cent. Thus, in real terms irrigation water has become substantially cheaper after liberalization of the water market (Hossain, 1996).

V. Concluding Observations

Given the value of water to life and livelihood, governments allocate it on the basis of political and social considerations rather than purely economic criteria. Pricing water below its economic value is prevalent throughout the world. In many countries, this has created tremendous strain on the water dependent eco-system. Farmers who pay little for their publicly supplied water often misuse it by growing water-intensive crops. City dwellers fail to conserve water when it is cheap, as for example in many cities of South Asia.

Table 2: Access to and the cost of irrigation by size of farm, 1987 and 1994; estimates from sample surveys

Farm Size (acres)	% of rice area irrigated			Irrigation cost per acre of irrigated land (Tk.)		
	1987	1994	Change	1987	1994	Change
Less than 1.0	29.9	45.7	15.8	1242	1206	-2.9
1.0 to 2.5	23.1	45.0	21.9	939	1031	9.8
2.5 to 5.0	24.1	43.4	19.3	825	759	-8.0
5.0 and over	24.5	50.8	26.3	628	580	-15.0
Total	24.5	46.4	21.9	850	815	-4.2

Source: Hossain (1996).

For preserving the financial viability of a public water institution and for establishing a water market for private sector activities, it is essential to price water according to some reasonable standard. Because demand is responsive to price, it is worthwhile to measure, monitor and price water carefully to cut back on waste without cutting back on needed service. Determining the opportunity cost could be an important step in guiding policies for pricing of water and to establish the magnitude of penalties to be imposed on polluters. Experience has shown that the poor are willing to pay for good water services and that cost recovery is feasible with good management. For instance, water charges could be applied on a graduated scale such that beyond a set standard, the user has to pay increasingly higher amounts. Water pricing policies of the government has to take into account the various factors that affect the growth of an efficient water market, with an active private sector.

Besides setting the right prices, government policy also has to address the issue of cost recovery. Nonpayment and non-collection of water dues are sadly common in many parts of the world, including Bangladesh. Two reasons for this failure are fairly obvious; low incentive to collect and low willingness to pay for lack of adequate service quality. The former is mostly for political reasons and the latter is almost a consequence of the former. Failure to recover cost results in low financial outlays and reduced services which again leads to non-payment of dues by beneficiaries (Faruquee, 1995).

To conclude, policy on water pricing is a sensitive issue for any country. However, rationalization of water pricing is essential for ensuring efficient use of water, eliminating waste, allowing development of an efficient water market, and reducing the strain on government budget.

References

1. Hossain, M. and M.R. Dhaly, Tracer Study on Recent Agricultural Policies in Bangladesh, Mimeo, 1991.
2. Hossain, M., Agricultural Policies in Bangladesh: Evolution and Impact on Crop Production, in State, Market and Development, Essays in honour of Rehman Sobhan, UPL, Dhaka, 1996.
3. National Water Management Plan Project, NWMPP, Regulatory and Economic Instruments, Topic Paper No. 9, (Draft), WARPO, 1999.
4. Planning Commission, The Fifth Five Year Plan, 1997-2002, 1998.
5. Repetto, R., Appropriate Incentives in Public Irrigation System, The World Resources Institute, Washington DC, Mimeo, 1986.
6. Rogers, P., R. Bhatia and A. Huber, Water as a Social and Economic Good: How to Put the Principle into Practice, Mimeo, 1996.
7. Young, R.A., Measuring Economic Benefits for Water Investment and Policies, World Bank Technical Paper No. 338, 1996.

Some Reflections on Multipurpose and Economic Use of Water Resources and Regional Co-operation with Particular Reference to the Ganges Basin

Murshed Ahmed*

Objective and Approach of the Study

The objective of the study is to ensure optimisation of water resources toward mitigation of water related disaster of restoring environment and promoting social, institutional and economic development of the GDA in Bangladesh. It aims at elaborating a framework of how the Ganges dry season flow, as stipulated in the Ganges Water Treaty (GWT), can be secured for optimal use and to determine the water related social and environmental cum ecological needs of GDA to grow out of the present state of under-development and poverty syndrome through a unified and joint regional planning approaches.

Ganges Dependent Area

The GDA within Bangladesh constitutes about 37 percent of the total area of the country. The GDA is the area directly influenced by the Ganges river. It comprises the whole of the Southwest region and most the South central region excluding Bhola island, It also includes some portion along the left bank of the Ganges-Padma of Northwest region. About one-third of the population of the country lives in this area¹. In recent years, reduced flow in the Ganges caused by the upstream withdrawal has affected almost all the sectors of the economy in the Ganges dependent area of Bangladesh. In specific terms, the manifestations of reduced flow in the Ganges are in the form of:

* Director, Project Evaluation, BWDB, Dhaka. The paper is based on author's earlier work in SADMC of IUBAT. The present paper is part of a long-run perspective study on Disaster Management Plan under the supervision and guidance of Dr. M.A. Miyan, IUBAT. Views expressed herein are the author's own and do not in any way reflect those of BWDB or SADMC of IUBAT.

¹ GDA studies have been carried out by WARPO. For further details see; National Water Management Plan, Inception Report, vol. 1, December 1988.

- increased salinity both in soil and water
- siltation and shoaling resulting in drainage congestion
- disturbance in the ecological balance of the Sundarbans
- diminished potential of the Sundarbans mangrove forests
- depletion in soil moisture
- blockade in navigational inland waterways
- decreased fish production, both capture and culture fisheries
- damage to pumps and intakes, specially in Khulna industrial area and
- deterioration in groundwater quality and quantity

The Ganges used to sustain a diverse eco-systems along with flora and fauna of its dependent area of Bangladesh. Reduction of fresh water flows in the area has caused widespread degradation of the environment producing adverse impact on demographic, social and economic variables. The Gorai river is the main distributory of fresh water from the Ganges to the Southwest region. During the last few decades, the low flow of the Gorai have changed. The Gorai river remains dry during the entire dry season due to sedimentation of the river at its offtake from the Ganges². The current morphological changes in Gorai shows many of the features which give rise to the concern that this closure syndrome may become a permanent feature.

Degradation of environment and ecological imbalance due to water crisis have threatened natural resource base in SWR where 40 million people stake their existence. It is apprehended that existing situation or further decrease in dry season flows if not arrested will lead to the siltation of the offtake of the Gorai river to disconnect it from the Ganges River. Morphologists are of opinion that if some interventions are not undertaken immediately to revitalize the Gorai it may be cut off from the parent source, the Ganges, as happened to the Bhairab in the past. Some interim measures to induce flow into the Gorai may be expensive and not sustainable and the ultimate solution lies in construction of the Ganges Barrage to push water into the Gorai. This is the only way to save the region from an irreversible environmental degradation.

Socio-Economic and Environmental Profile of GDA

The SWR of the country suffers low flow during the dry season mainly due to inadequate flow in the Ganges due to withdrawal of water of the Ganges upstream.

² See SWMC, Gorai River Re-Excavation Project for GRRP Priority Dredging and Ancillary Works, Mathematical Model Study (Phase-1) for Optimization of Dredging, Final Report, July 1997.

For at least 20 years or so the dry season flows (December-April) of the Gorai have been decreasing resulting in increased salt intrusion with negative environmental impact in south-west region. Every year, the flow is disconnected from the river Ganges to the Gorai in the month of December or January. It is apprehended that the existing situation or further decrease in dry season flows will lead to the siltation at the mouth of the Gorai to an extent that the river may permanently be disconnected from the Ganges. This will deprive the SWR of its most important source of fresh water supply.

The SWR of the country is entirely dependent on the waters of the Ganges for its agriculture, navigation, fisheries and above all salinity control. Due to severe reduction in the Ganges flows during the dry season, the Gorai river which is the main artery carrying water into the region, gets completely choked at its offtake resulting in zero flow. Apart from hindrance to the agriculture, this phenomenon has allowed salinity penetration inland to about 150 km leading to top-dying of the mangrove Sundarbans, damage to industrial installations, unprecedented spread of diarrhoeal diseases heading towards total environmental degradation. Besides, potable water around Khulna consumed by people is three times more polluted than the permissible limit prescribed by World Health Organization (WHO).

Reduction of fresh water flows has caused widespread degradation of the environment producing impact on social and economic development. Environmental impact is very serious in terms of increased salt water intrusion in the GDA, threatening both eco-system and bio-diversity. Flora and fauna of southwestern Bangladesh have evolved in response to natural conditions to form a climax ecosystem. It was threatened with degradation due to reduced freshwater flows and increased salinity levels resulting in changes in water balance as well as in flora and fauna. It has both short and long term consequences that can further aggravate the fragile ecological balance of the area. Low flows on the Ganges has led to reductions in crop yields and capture fisheries. Environmental degradation is continuing to affect livelihoods, nutrition, health and the well-being of the population as a result of lack of adequate fresh water supply, water pollution and salinity increase. Environmental degradation has forced paddy farmers to migrate to seek new livelihoods. Thus the region has been under apprehension of turning into adverse eco-system, creating economically losing scenario, if the present veritable effort for reviving Gorai System is not continued.

Apart from environmental decay, numerous disease vectors have resulted in due to the change in ecological condition which is eventually causing a progressive deterioration of health and sanitary condition. The GDA has been a food deficit area

and there is a high incidence of malnutrition, decrease of riverine fisheries, illiteracy and diarrhoeal disease in the GDA prompting out-migration and thus increasing poverty. Besides, land degradation in the southwest, a creeping effect of desertification is apprehended in the region. The region might turn into a subhumid ecosystem with concomitant collapse of the present agroecosystem and creation of an economically irreversible scenario, if present surface water shortage scenario continues.

Justification and Rationale of The Study

Water has been increasingly scarce resource, requiring careful economic and environmental management. As demand for water for human, industrial, agricultural, navigational, environmental and other uses has escalated, so have the different uses been under severe competition. In order to meet basic social, environmental and economic demands, it is essential to make availability of freshwater for avoiding socio-economic disruption and water management crisis. As water is largely a public good, its integrated management has to be based on the perception of water as an integral part of ecosystem, a natural resource and a social and economic good. While management of this scarce resource has been a challenge for the Governments concerned, nevertheless efforts to integrate water needs with environmental management plan has still been a far-cry, resulting in economic, environmental and even political crisis among co-riparian countries.

Serious environmental degradation and catastrophic damage to agro-socio-economic consequences has occurred due to low flows in the Ganges. Such a deterioration would mean decay and destruction of world's largest mangrove forest, the Sundarbans. The phenomenal degradation has already taken place. Caputre fish has reduced drastically, salinity intrusion has increased causing harm to water supply to agriculture, domestic and industrial use. Khulna News Print Mill and Goalpara power station have suffered serious set back due to want of fresh water. This agro-socio-economic and environmental conditions provides justification for multi-sectoral water resource development aimed at alleviating poverty in the GDA. This paper addresses the fundamental issues of environmental degradation and poverty alleviation, trying to bring real growth to the area and assuring that basic needs which can be met by arresting ecological degradation of the GDA.

Water Sharing of Cross-Boundary Rivers and The Ganges Water Treaty

As there was no long-term water sharing treaty between Bangladesh and India for the last 25 years there has been serious adverse impact on the national economy at large and agriculture, navigation, fisheries, environment in particular. Desired results

could not be achieved from the completed projects and no long-term plan and programmes could be undertaken for water resources development. The cost of not taking appropriate and timely measures for sustainable development and management of water resources has been enormous for Bangladesh. However, the signing of the Treaty on the sharing of the Ganges water at Faraka on December 12, 1996 between Bangladesh and India has added a new dimension to the water management for optimum development of the Ganges water.

GWT: A Milestone in Water Sector

The GWT, a milestone in water sector, has opened a new avenue towards the development of country's water resources. The Treaty sets out arrangements to share the flows arriving at the Farakka Barrage in India during the dry season months from January to May. It is now anticipated that a reliable minimum flow in the Ganges would be available during these months. This agreement makes it possible to plan the management of the Gorai with more confidence than in recent years. To promote the issue of funding feasibility of the Ganges Barrage in future (which is also vital for this Gorai re-excavation project) an International Seminar was held in Dhaka with participation from all the major donors/governments historically contributing to water resources development in Bangladesh. Responses have been obtained from few donors for financing the Technical Assistance part of Ganges Barrage. The signing of the long awaited GWT will reduce the problems and sufferings that ensued from the upstream withdrawal.

The Water Treaty

The GWT provides a formula for sharing of the Ganges water from January 1 to May 31 in 10-day periods. According to the formula, when the flow is more than 75,000 cusec, India's share will stand at 40,000 cusec, Bangladesh receiving the rest. When the flow is between 70,000 and 75,000 cusec, Bangladesh will receive 35,000 cusec and India will receive the rest. When the water available at Farakka is 70,000 cusec or less, India and Bangladesh will share equally. If the water availability at Farakka falls below 50,000 cusec, the two countries will meet immediately to decide the shares. The sharing is based on the average water availability of the Ganges at Farakka in 10-day periods from 1949 to 1988. The focal point of this treaty is to ensure 35,000 cusec of water for Bangladesh in alternate 10-day periods during the leanest period (March 11 to May 10). The GWT has finally broken the deadlock in the water sharing negotiations between the two countries and created a favorable atmosphere.

Not only sharing Ganges water in the lean season, the water sharing of the other common rivers as well has emerge from the GWT. The Ganges Water Treaty of 1996

valid for 30 years and renewable on the basis of mutual consent states in Article XI that both Bangladesh and India should endeavour to 'agree to conclude water sharing treaties/agreements with regard to other common rivers.' It has further paved the way for regional and basin-wide approach to water resources development and management which have ensure the benefits of water sharing for the floodplain population. Following the 1996 Treaty, the Indo-Bangladesh Joint Rivers Commission (JRC) agreed to set up Joint Committee of Experts (JCE) for arranging long-term/permanent sharing of the waters of common rivers between the two countries in phases. Another bi-lateral treaty has enabled to develop a good neighbourly relationship towards integrated flood management along the right bank of the river Teesta, by way of tying the embankments across the no-man's land at Kaligonj bordering the two countries. Further, the transfer of relevant data related to the locations upstream the rivers in India, useful for flood forecasting and warning, has been ensured. Besides, the international development partners have been encouraged to invest in water sector.

The Ganges Barrage Multipurpose Project³

The Ganges barrage multipurpose project is a comprehensive long term plan for restoring ecological balance in the GDA. Ganges Barrage project is one of the best option of ensuring optimum use of the water resources of south west region. Reopening of the Gorai mouth through Gorai River Restoration Project (GRRP) would provide short term solution at a relatively low cost for ensuring fresh water supply⁴.

GRRP is meant for creating larger avenues for sustainalbe dry season flows as a direct benefit from the Ganges water sharing treaty. In this connection, SWMC has been carrying out mathematiiical modeling and forming a data base on way to assisting in seeking a permanent solution of the problem. NWMP is involved in the studies on development of the GDA including Ganges Barrage. The study will provide a framework for decisions on GRRP. The GWT has now opened up opportunity to achieve long-cherished goal of sustained growth through and overall integrated water resources development in the GDA in Bangladesh as well as for overcoming the adverse effects due to large scale diversion of the Ganges water at Farakka. This would be possible now by construction of the Project. The implementation of the project would bring widespread benefits to all sectors of the economy including restoring the environmental balance of the area. The proposed Ganges Barrage Multipurpose Project

³ BWDB, Proposal for Construction of The Ganges Barrage Project, Prepared by Preliminary Work Plan Committee for the Feasibility Study and Detailed Engineering of which the author was a member. Planning Commission, The Fifth Five Year Plan (1997-2002), P-278-280, March 1998.

⁴ The efforts are now on to augment the flow of the Gorai by dredging initially for a length of 30 km from the offtake as a short term

is likely to be constructed at a location near Pangsha about 60 km downstream of Hardinge Bridge on the Ganges River from the point the point of view of optimal water use and various other engineering and environmental considerations.

Objectives

The major objectives of the multipurpose barrage project are:

- Overall regional development through restoration of the region's fundamental resources structure for protecting the environment
- ensure long term sustainable development by restoration of the regional water resources through cost-effective solutions of the Gorai system.
- revival of the flows of the rivers dependent on the Ganges for strengthening aquifers and providing water for domestic and drinking purposes
- mitigate dry season salinity for agricultural and industrial growth and protect the Sundarbans
- create physical infrastructural facilities by providing a vital communications including Gas and power transmission across the Ganges
- greater physical production through provision of irrigation to an area of 1.35 million ha by utilizing the Ganges Water.

Salient Features

The proposed Ganges Barrage Project having a net benefited area of 1.35 million ha. has the following salient features:

- a) the Ganges barrage, a 1,940 metre long structure is proposed to be constructed incorporating a road and rail bridge and gas, power and other services lines as required to be connected to either bank by the structure;
- b) a right bank main command canal, 74 km long, running south-west from the barrage to feed water into the Gorai, the Kumar, the Nabaganga, the Chitra and the Kobadak Rivers, with a headwork's capacity of 26,500 cusec will be the second integral part of the project;
- c) a second right bank main command canal, 43 km long, running south-east from the barrage to feed water into the Chandana, the Old Kumar Scheme with headworks capacity of 3,000 cusec will be the third integral part of the project;
- d) a third right bank canal of 10 km long from the barrage pond near the Hardinge

Soultion under the Gorai Restoration Project (Priority Works) costing about taka 224.00 crore which is under implementation including project preparation study. See: BWDB, Project Proforma for Gorai Restoration Project (Pilot Priority Works), January 1999.

- Bridge to serve the area to the west of the Ganges-Kobadak scheme with headworks capacity of 3,000 cusec will be the fourth integral part of the project;
- e) irrigation development in both the banks of the Ganges by a combination of surface water gravity supplies, high or low lift pumps and shallow tubewells, which will serve the entire GDA. GWT envisages the augmentation of the Ganges flow (through construction of storage dams or by other means of desilting may be seen from the treaty as a long term solution. Therefore, with the increased flow in future, water would be available for irrigating the arable area lying on both the bank of the Ganges; and
 - f) drainage and flood control by embankments and sluices in low-lying areas covering 1.44 million ha within the command area will be the related objective in addition to irrigation.

Benefits and Justification

Environmental disaster began in South Western Region which depended on the Ganges River-the major source of fresh water supply. Most of the rivers including the Gorai dried up particularly in dry season causing growth of salinity and arsenic in underground water. The proposed Ganges Barrage is the best among other proposed solutions for the revival of damaged rivers. The construction of the Ganges Barrage down to the river Gorai can save more than 2.5 million people living in GDA from the attack of increasing salinity and arsenic hazard and can boost agro-based economy by reviving at least one hundred large or small rivers and their tributaries which are either dead or severely damaged during the last 50 years due to the upstream withdrawal in the past and change in the morphological characteristics of the Ganges. The time for construction of the Ganges barrage is estimated around a range of 10 to 15 years and the full benefit will be achieved after nearly 18 years. According to a study by GOB in 1993, the rate of return against investment in Ganges Barrage Project was estimate at around 14%.

The Ganges Barrage Project when implemented will generate the following benefits, as envisaged in Fifth Five Year Plan:

- a) restore the basic resource (land) to its original position and increase agricultural production from 2.20 to 5.21 mt/ha/year. The net economic benefit out of the increased agricultural production only will be about US \$ 1020 million a year (FIFYP, P 273);
- b) provide the required quantum of flows through the Gorai in the dry season to check the salinity intrusion in the SWR of Bangladesh to maintain ecological balance and protect environment of the region;
- c) restore livestock and fisheries resources and the natural bio-mass (including

- the Sunderbans);
- d) improve soil moisture condition;
 - e) provide crossings for traffic, gas and power across the Ganges and improve the communication system in the region;
 - f) increase job opportunities and revive economic potential for proper growth of regional economy;
 - g) safeguard public health and sanitation condition; and safeguard the industries in the area;
 - h) help developing a balanced ecosystem of the region to safeguard environmental degradation.

Costs

The tentative cost of the project which includes barrage, main irrigation and drainage canals, has been estimated at Tk. 141,000 million⁵. Initiatives shall turn the proposed Multipurpose Ganges Barrage Project into realities. A provision of Tk. 17,175.50 million has been made in the Fifth Plan to undertake detailed feasibility and to prepare engineering works as well as to complete a part of the barrage construction. However, a TAPP costing Tk. 6355.50 lakh with a project aid of Tk. 5899.50 lakh for Feasibility Study and Detailed Engineering Design of Ganges Barrage Multipurpose Project has been prepared and approved by the competent authority⁶

International Law and Riparian Rights for Basin-Wise Development

The Ganges water issue illustrates the importance of international law and politics. The historical Ganges water dispute involved a series of technical negotiations and political dialogues between Bangladesh and India. More than two decade long outstanding problem was resolved with the signing of historic GWT with India. Both the countries may enhance the rationality and creativity of their water policy making processes through arriving at problem solving by new approaches leading to judicious and remunerative sharing of the Ganges waters. The GWT has ultimately broken the deadlock in the water sharing negotiations between the two countries and created a congenial atmosphere for agreement on sharing of the water of 53 other common rivers. The treaty itself addresses various development opportunities and options. It is the responsibility of all the co-riparians to abide by the international treaties and agreements. It is expected that if there occurs any discrepancy in the sharing process

⁵ Planning Commission, The Fifth Five Year Plan (1997-2002), P-280, March 1998.

⁶ BWDB, TAPP for Feasibility Study and Detailed Engineering Design of Ganges Barrage Multipurpose Project, Sept, 1997.

the agreement itself takes care of this situation through mutual negotiation and consultation.

Basin Wise Development

Given the fair and rightful covenants in the GWT as signed, a new dimension of water sharing understanding with Nepal deserves for tripartite agreement. Since Nepal, India and Bangladesh are the three co-riparians on the Ganges they should enter into tripartite agreement on the basin-wide development. Finally, basin-wide integrated development be undertaken for all the common rivers, with priority on the Ganges through co-operation between Nepal, Bangladesh and India covering all aspects of human development and ecosystem conservation. But, long term arrangements for sharing river water can only be on the basis of water to be available from storage's on the river system. It may be suggested here that the creation of storage reservoirs in the upper reaches of the Ganges in Nepal and India will augment the dry season Ganges flow as a long term solution of the water scarcity problem. The proposal made by Bangladesh for storage reservoirs in the Ganges basin⁷ is not only the best means of augmentation of the dry season flow of the river but it also fits with the concept design and strategy of multi-purpose river basin development. The principles of co-ordinated basin management should be included into the compact agreement of the co-riparian countries. But due importance for the proposal of a multilateral basin approach which would be of substantial assistance has yet to be obtained with the active cooperation from the riparian countries.

Lessons and Experiences from the France Water Policy

Problems of water sharing of the common rivers flowing across the regions in Europe or in America have been solved through systematic consultations, deliberations, political negotiations and formation of institutional framework. Bangladesh has many lessons to learn from France River Basin Agencies for solving water related problems. France has solved its water management problem through three organizational infrastructures that have been found responsible for administrative management in water resources development. They are: (i) Basin committees, (ii) River Basin Agencies and (iii) Administrative council which determines Agencies' operational activities. These outfit may also be gainfully applied with necessary modifications by Bangladesh for long term plans and programmes and river basin Planning⁸ can offer a broader framework of methodology for organizing water projects within a river basin as well as in inter-basin water transfer.

⁷ In Ganges basin in Bangladesh there do not exist any site for creation of reservoirs, but there are good number of sites for creation of storage reservoirs in the river basins in Nepal.

The Need for a Regional Planning Approach

The origins of the 57 common rivers flowing through Bangladesh are from India and Myanmar. Water resource development is a vital issue in all the countries within the basins of GBM region. There is considerable potential for development of hydro-electric, irrigation, flood control, drainage and navigation which remains almost unutilized in the co-basin countries. It is in the best interest of all co-riparian countries to take a comprehensive basinwide approach for the water resources development. Sharing of the water for fulfilling the cross sectoral demands like irrigation, domestic and industrial use, fishery, navigation and above all to check ecological and environmental degradation will ensure the just relationship among co-riparian countries. For developing better interstate relationship this regional co-operation is the need of the time. It will eventually foster mutual ties and trust which has been hampered in the past by not achieving good neighbourly relation. International co-operation and regional planning are essentially required among co-basin States for deriving economies of scale in water development project. The emergence of the SAARC Family comprising Bangladesh, India, Nepal and Bhutan provides a great promise for water based cooperation in the region. The Male declaration (1997) and the recent Colombo Declaration (1998) of the SAARC Summit were a clear boost to sub-regional cooperation when it endorsed the idea of two or more countries cooperating in project-based development works within the SAARC framework. Hence, the four countries of the GBM region can now look ahead for collaborative approach in harnessing the region's water resources. The National Water Policy (NWP) has been framed inter-alia, for the proper management and utilization of all water resources to pave the way for regional cooperation. NWP thus endorses the importance of regional cooperation through integrated watershed management for preventing the deterioration of hydromorphological conditions of common rivers.

Co-operation With Upstream Nations

Although India is pursuing a policy of bilateralism regarding water-sharing of the transboundary rivers, nevertheless there is a considerable potential for strengthening co-operation between upper and lower riparians. Closer cooperation can be made and worked out through (i) sharing available data and information for both structural and non-structural measures; (ii) integrating regional topography and terrain for regional water development; (iii) drawing of external assistance in multipurpose barrage interventions; and (iv) holding regular consultation on a continuing basis.

⁸ The term becomes an umbrella for various problems. River basin planning helps attain rational and integrated planning of the water resources in a basin.

Need for a Comprehensive Framework

Optimal use of water resources from the basin perspective can be derived through multi-sectoral flow regulation. The topography of Bangladesh does not offer prospects for construction of storage projects to regulate the flows in the rivers. Lower riparian countries, India and Bangladesh could get enormous benefits from the regulated flow of any storage project built in Nepal, the upper riparian country. Multipurpose projects built in Nepal will substantially benefit the lower riparian countries. Projects of multipurpose nature whose benefits extend beyond national borders would provide multiplicity of benefits such as (i) power (ii) irrigation, (iii) flood control and (iv) navigation to all the countries of the Ganges Basin. As the Ganges river basin is shared by Nepal, Bangladesh and India, cooperation among these countries for the development of water resources through sound thinking and practices would entail benefits to all countries. For the benefit of the countries of this sub-region, there is a need for working out a formula or method of sharing the benefits accruing from the multipurpose projects. Given realistic plan of action formulated for creation of multipurpose reservoirs in Nepal, effective and durable solutions to the problems of floods and droughts through multiple use of water resources could be found out.

A Framework for Regional Co-operation

The framework for regional cooperation in water resources offers to all countries in the region gains that are far beyond anything that can be achieved by isolated national efforts. The potential benefits of wider sub-regional cooperation include (i) economies of scale (ii) optimization of resources utilization (iii) multiplier effects on related sectors (iv) more equitable distribution of project costs and benefits (v) more attractive and manageable project financing and (vi) enhanced regional stability. GWT has paved the way for regional and basin wide approach to water resources development and management which shall ensure the benefits of water sharing for the betterment of the living conditions of the people in the area. In the international seminar on Water Resources Management⁹ a plan of action has been agreed upon unanimously among others in the following lines, "it is desirable to continue the process of co-operation within the region over a broad range of development issues. The Sub-regional Development Quadrangle provides a possible framework for strengthening co-operation among the participating countries". Nepal, as an overall coordinator of South Asia Growth Quadrangle, can play its role in a

⁹ Ministry of Water Resources, Seminar Proceedings of International Seminar on Water Resources Management and Development in Bangladesh with particular reference to the Ganges river, Dhaka, 8-10 March 1998.

positive manner and work for the sub-regional cooperation among the countries. The wider scope of sub-regional economic development cooperation for deriving mutual benefits in the case of the Ganges basin include: (i) Optimal sizing of infrastructure and, therefore, reduced investment costs (ii) more reliable dry season flow conditions in the long term, (iii) and dry season flows over and above current estimates that could result from upstream reservoir projects. All these realities and constraints call for the need of a strong mechanism for regional cooperation at least among the three countries Nepal, India and Bangladesh.

Need for Sound Political Approach

Water resources management in Bangladesh is a multi-faceted problem entailing administration, politics, finance, technical database and economics of programme evaluation. The GWT has now opened up opportunity for Bangladesh to achieve its long-cherished goal of sustained growth through balanced and systematic development and management of land and water resources of the GDA. The treaty has been the outcome of strong political commitment of both the governments. The track-record of upkeeping the spirit of this co-operation has, however, been discouraging in the past, but this should not preclude the parties from coming to a consensus when they are equally interested to share the water resources for mutual development.

An integrated water resources development can be possible now by construction of the Ganges Barrage Multipurpose Project. The project would bring widespread benefits to all sectors of the economy including restoring environmental balance of the area. A long-run perspective study is essential for a growing Bangladesh for restoring ecology and environment upto 2050. The regional approach should be pursued to draw multilateral understanding at the diplomatic and professional level expertise to support the socio-economic and environmental concern of the GDA leading to a sustainable and integrated water resources development. Studies of viable technical alternatives should be formulated in line with the on-going NWMP. Tripartite involvement along with co-ordinated approach towards existence of technical problems of water management and a real political environment and sound political process constitutes the key to bringing about a long lasting solution of the problem of too little water for too great a demand for it in the countries.

References

1. BWDB, *Project Proforma for Gorai Restoration Project (Pilot Priority Works)*, January, 1999.
2. BWDB, *TAPP for Feasibility Study and Detailed Engineering Design of Ganges Barrage Multipurpose Project*, September, 1977.
3. Planning Commission, *The Fifth Five Year Plan (1997-2002)*, March, 1998.
4. SWMC, *Gorai River Re-Excavation Project for GRRP Priority Dredging and Ancillary Works, Mathematical Model Study (Phase-1) for Optimization of Dredging*, Final Report, July, 1997.
5. WARPO, *National Water Management Plan, Inception Report*, vol. 1, December 1988.

Microfinance in Bangladesh: Sustained Progress or Emerging Problems?

Rushidan Islam Rahman *

1. Introduction

Provision of microcredit (MC) has been widely recognized as an important instrument for achieving the objective of poverty alleviation in Bangladesh. The attractive feature of microcredit is its ability to address the credit needs of the poor. Microcredit Institutions (MCI) in Bangladesh have developed procedures for providing collateral free loans to the poor and assetless households. After two decades of operation of the MCIs, it is pertinent that we examine whether the microfinance institutions (MFI) in Bangladesh are making a sustained progress in achieving the objectives or are being faced with emerging second generation problems. This will be examined in the present paper through an analysis of the following questions:

- a) Whether microfinance (MF) can lead to an increase in income and employment on a sustained basis
- b) Whether the MFIs are successful in targeting the poor and the poorest;
- c) Whether the dropout cases display features of graduation and success or financial difficulty.

II. A Sustained Positive Impact on Income and Employment?

Data from a number of studies on the impact of MC highlight the fact that access to MC resulted in an increase in income. A summary of the results from a few studies have been presented in Table 1. The changes range from 8 per cent to 40 per cent. In some of the impact assessment studies such information have been supplemented by direct opinion of the MC recipients. An overwhelming majority of the credit recipients reported that increases in income had taken place as a result of the access to MC. The combination of the evidences provides a strong basis to conclude that MF leads to an increase in household income/expenditure and results in poverty alleviation.

* Research Director, Bangladesh Institute of Development Studies, (BIDS), Dhaka.

Table 1: Impact of MC on household income/expenditure

Source ¹	Name of MCI	Income/expenditure per annum (Tk.)	Project (P)	Control (C)	% change $\frac{(P-C)}{C} \times 100$
Hossain 1984	GB	Income, per capita	1762	1346	30.9
Hossain 1988	GB	Income, per capita	3524	2523	39.9
IMEC 1995	Proshika	Income, per household	22244	17482	27.2
Rahman 1996	PKSF	Expenditure, per household	26390	23802	10.9
Khandker 1998	GB	Expenditure, per capita	5180	4202	23.3
Khandker 1998	BRAC	Expenditure, per capita	5050	4335	16.5
Halder 1998	BRAC	Expenditure, per capita	8244	6480	27.2
BIDS 1999	PKSF	Expenditure, per household	36528	33732	8.3
IMEC 1999	Proshika	Income per household	48635	43584	11.6

II.1 Stagnation of the impact of MF on income

In this section we shall present data from a recent survey on members of BRAC. The differences in performance of members of various durations will be examined. Data on average household income/expenditure and other indicators of material well being among these groups are presented in Tables 2 (Hussain 1998).

Table 2 shows that the per capita expenditure is almost same in the three categories of members. Other indicators show a better performance of member of 12-24 months duration compared to the new (membership duration of 1-11 months) members. But the members with duration 48 and above months show a deterioration of performance compared to the middle group (and compared to both groups, in the case of clothing).

It may be argued that the per capita expenditure and other indicators had a lower value at the time of entry of the older groups. Factors that determine the entry level situation should be compared for members of various duration and if there are differences in the value of these indicators this should be taken into account while the impact of MC is being considered. This may be accomplished through a multiple regression analysis, which controls for the initial endowment of households which are exogenous and may influence the level of expenditure/income at the current

¹ Each source provides more than one comparison to demonstrate the impact of MF. In this table the control group from control village or from new members has been chosen as the basis for comparison and only one comparison has been shown. Results across studies are not comparable, because of variations in methodology and the areas covered.

Table 2: Average Household Expenditure and other Indicators of material gains among BRAC members of various duration

Indicators	Length of membership (months)		
	1-11	12-47	48+
Per capita monthly expenditure (taka)	686	686	689
Per cent of houses with durable roof	2.1	7.0	4.7
Per cent of respondents with an extra saree	62.5	77.5	61.0
Per cent of HH with net worth more than taka 20,000	60.8	68.6	61.8

Source: Husain (1998) compiled from Appendix tables.

period as well as at the entry period. Two important variables of this category are education of the members of MFI and their landownership. Multiple regression analysis based on the monthly expenditure of a household as the dependent variable has been conducted (Hossain 1998). In addition to education and landownership, other explanatory variables have been included. The length of membership with BRAC has been used to capture BRAC's contribution. Four dummy variables representing the length of membership have been used (these are: 1-11, 12-24, 48-84, 85+ months, the group with 1-11 months duration has been used as the base, which is not in the equation).

The results of regression (Table not presented here) shows that the dummies for length of BRAC membership of 12-47 months and 48-84 months have positive coefficients, i.e. such members have higher income compared to members with duration of 1-11 months. In contrast, the dummy variable representing greater than 84 months of membership has a negative coefficient (though not statistically significant). Thus the members with longest duration did not achieve an increase in income. The coefficient of the dummy for 48-84 months is slightly smaller than the coefficient of 12-47 months² thus indicating that the 48-84 group did not achieve an increase over the immediate younger group (The difference is small and may be considered insignificant). These results are indications of stagnation of income among the members of longer duration, even after the other endowments are controlled for. In addition, the longer duration of membership, especially above certain limit, may imply a less active participation of members in the use of MFI inputs including credit. Qualitative information is required on these issues, so that the observed statistical results may be explained better.

² The significance test for the difference could not be conducted because the results have been quoted from published materials.

One may argue that the impact of longer duration of membership may take place through the accumulation of assets. Such accumulation may itself be viewed as a positive benefit of MF because the durable assets may serve as a form of insurance for old age. Therefore, the determinants of assets and the impact of length of membership with BRAC on asset ownership have been examined. The regression equation shows that none of the coefficients of the dummy variables representing length of membership has been significant. This result is difficult to explain. Data from the same survey on BRAC households has shown that only 5% of the loan are used for consumption. Therefore, MC is expected to lead to the increase in assets. There is also a possibility that the length of membership is not the most appropriate measure of the programme inputs.

II.2 Employment and Microfinance

From the early days of the expansion of MFIs, the sceptics have put forward the views that the MC financed activities bring in a low return and MC cannot therefore be instrumental in raising household income. A deep rooted apprehension is that, given the low rate of return from most rural activities, investment opportunities would soon be exhausted and the scope for further expansion of MC would be limited.

Some of the hypotheses about the reasons of stagnation of income are:

- a) Family workers especially women do not have time for being involved in income generating activities and MC cannot increase family labour supply.
- b) With the length of MC activities, the scope for profitable investment opportunity shrinks for both new and old borrowers and the impact of investment on income gradually declines.

MC has been found to increase women's labour force participation and employment. Many women who did not previously have any involvement in directly productive employment, started such activities. Positive changes in labour force participation among both men and women from households borrowing from GB have been revealed by the data in Hossain (1988). The increase is much higher among women. Similar findings have been reported by Rahman and Khandker (1994). However, the latter study found an increase in labour force participation rate only among women. The study found a positive impact of GB loans on the hours of employment among both male and female workers. It was found that employment impact extends to the non-participants as well. Employment among both participants and non-participants in the project villages were found to be larger than the control village target group households. A number of other studies provide data on female participants of MC programmes and reveal their greater involvement in IGA compared to the control groups (Husain 1998, Kabeer 1998).

Studies have also demonstrated that supply of labour among the female workers of households who are members of various MC programmes do not show a negative response to the number of times they receive loan (Table 3). Data from an earlier survey conducted by the present authour shows similar findings. The surveys was conducted in 1986. Regression analysis conducted with data from the survey shows that both the amount of loan and square of loan have positive impact on women's self-employment (Rahman 1992).

The other related question is whether the return from the MC financed activities is low and is inadequate for loan repayment. Empirical exercises (Hossain 1984, Rahman and Khandker 1994) confirm that the returns to labour from some of the activities are lower than the market wage rate. But the return may be considered as sufficient for loan repayment as long as it is positive after taking into account the payment of interest on capital. It will be worthwhile to pursue the MC financed activity if it is not taken up at the cost of other activities with higher return and this may be possible because wage employment opportunities are often insufficient.

**Table 3: Employment of family workers by programme inputs
(Length of membership and Number of loans)**

Length of membership (Years)	Hours of employment per family worker per month					
	GB		BRAC		BRDB	
	Male	Female	Male	Female	Male	Female
Less than 1	237.9	56.7	166.6	13.3	221.9	35.7
1 to 2	210.3	58.4	167.4	32.8	171.5	84.5
2 to 3	182.2	82.5	183.8	59.0	187.4	44.8
3 to 5	177.4	66.5	174.3	45.8	173.2	41.9
5+	180.2	59.6	172.9	44.1	177.1	32.4
Number of loans received						
0	189.9	14.2	169.0	40.3	173.1	47.0
1	189.6	55.6	174.2	43.4	190.5	52.1
2	197.4	55.4	181.2	63.9	178.7	43.7
3 to 4	172.4	73.6	176.6	38.0	166.0	39.0
5 to 6	186.4	59.4	173.2	17.4	148.7	57.0
7+	186.1	61.3	86.2	15.5	137.7	53.6

Source : Rahman and Khandker (1994).

The point of concern in this respect is the opportunity cost of labour in alternative uses. It is widely recognized that such opportunity cost is low especially among women who are not currently engaged in directly productive activities. Many of the male borrowers undertake the MC financed activities during extra hours of work or during slack seasons or as an extension of one's main activity. The opportunity cost of labour is low in such cases and it will be meaningful to pursue the MC financed activities even if the returns from such activities are lower than the prevailing wage rate.

III.1 Success in Targeting the Poor and the Poorest

The analysis of success in targeting is usually based on the criterion of landownership only. The effectiveness of land based criterion in ensuring the inclusion of the poor has not been examined. In addition the analysis of targeting should look at the changes in the success of targeting over the years. It is easier to make targeting effective during the early years of the activities of MFIs in a new area. Nonetheless, the objectives and policies of MFIs have been changing; the financial environments in which they operate have been transformed to some extent. Therefore the success of targeting should be examined especially with reference to the new entrants.

In the following analysis we shall present relevant data to examine the trend in the success of land based targeting. This will be supplemented by an analysis of the extent of inclusion of the non-poor on the basis of an assessment in terms of poverty line expenditure.

Data on BRAC members show an increase in the percentage of non-target households among the members of BRAC over the years. Pertinent data are presented in Table 4.

It is observed that about 40 per cent members were non-poor at the time of entry. This can be easily observed from the group of new members with 1-11 months duration. Among the groups with longer duration of membership, some of the current non-poor would have been below the poverty line, to start with. The extent of such graduation is in the range of 1.5 to 1.8 percentage points per year (fifth column, Table 4). Using this average figure, it can be said that about 41 per cent of new members were non-poor at the time of entry into BRAC.

It should also be pointed out that there is a large discrepancy between the extent of infiltration of non-target members identified on the basis of landownership and on the basis of head count ratio of poverty (based on expenditure data). The former shows that among the new member category only 21.4 per cent is in the non-target group (who owns above .50 acres of land), whereas, on the basis of household expenditure based poverty line, 42.8 per cent among the new members are non-poor.

Table 4: Success of BRAC in targeting the poor: land based and poverty line based assessment

Length of membership	Percent of members with landownership above .50 care	% of hh above poverty (h)	Percentage point change of (h) over the previous group	Percentage point change of (h) per year
New members (1 to 11 months)	21.4	42.8	-	-
Medium old (12-47 months)	13.9	48.1	5.3	1.8
Older members (48+months)	18.3	52.5	4.4	1.5
All	17.6	47.9	-	-

Source: Calculated from Halder (1998).

Halder et al. (1998) provides an analysis of the coverage of the poorest households by their programme (and a comparison with other MC programmes). Using wealth ranking in BRAC villages it was found that the poorest households were more or less proportionately represented among the BRAC members (Table 5). It has been pointed out by Halder et. al (1998) that a comparison of BRAC with other MF programmes shows that the poorest (represented by absolutely landless or chronic deficit category) have a larger percentage representation among the BRAC members. It should however be emphasized that the poverty targeted MF programmes are expected to achieve a much higher coverage of the poorest and the percentage representation of the poorest should be higher than the poorest within the total sample. Moreover, a comparison of the new members of BRAC and the national distribution shows that the percentage of non-poor among the 1-11 months duration

Table 5: Extent of coverage of the poorest by BRAC

Category	Total Sample	Number covered by BRAC	% of households covered
Total target households	2212	1040	47.0
Poorest households	1640	804	49.0
All	3852	1844	47.9

Source: Halder et al. (1998) compiled from Table 8.14.

members is more or less close to the national distribution whereas the extreme poor are under represented among BRAC members (compared to national percentage Table 6).

Table 6: Distribution of BRAC members by poverty status and length of membership

Poverty Status	Length of BRAC membership (months)				National figure for rural areas
	1-11	12-47	48+	All	
Extreme poor	31.9	26.4	21.7	27.0	39.8
Moderate Poor	25.3	24.5	25.8	25.1	16.9
Non poor	42.8	48.1	52.5	47.9	43.3
Total	100.0	100.0	100.0	100.0	100.0

Source: Compiled from Halder (1998) Figure 5.3, 5.1, BBS 1997.

III.2 Reasons for poor performance in targeting

The major stated objective of most MC programmes is poverty alleviation and extending credit services to the poor. To demonstrate a greater success in poverty alleviation, the MFIs may therefore, be inclined to exclude the poorest of the poor. They will be encouraged to include those just below the poverty line, termed as borderline poor because it is easier for the MFIs to lift the middle poor or borderline poor above poverty.

An overriding concern among the MFIs is to achieve financial sustainability along with achieving the objective of poverty alleviation. Donors who provided a major source of fund to the MFIs is currently emphasizing the need for financial sustainability. The donors' attitude gets reflected in the priorities of MFIs and financial sustainability is increasingly being considered as an important indicator of success of MCIs. The percentage of revolving loan fund of the MFIs coming from donors is declining and the MFIs are considering various means for ensuring a continuous increase in the resources for expanding the coverage of the poor. Thus the importance of achieving financial sustainability cannot be ignored.

A two pronged approach may be useful to achieve this. The first is to reduce cost through increasing the scale of credit activity. The second strategy is to ensure that the good repayment practice already achieved by most NGOs is sustained. It can be

argued that the inclusion of the poorest may raise the cost of operation of MCIs and may not be compatible with the first strategy. The MFIs struggle to achieve financial sustainability may encourage the inclusion of some households who are just above the poverty line, and will accept larger loans and help the MFIs to reap the scale economies. However, on the grounds of good repayment performance, the poorest cannot be excluded because there is no evidence that the borderline poor or non-poor households perform better in this respect.

VI. The Dropouts: Graduation or Financial Difficulty

A direct enquiry among the dropouts may be useful to throw light on the reasons for the poorest remaining outside MFI programmes. The dropout members lose the prospect of joining a MFI and thus are among the most disadvantaged in this respect.

A study (Alamgir 1997) among the dropouts obtained the following results (Table 7). Inability to repay the loan in weekly instalments and to deposit the compulsory weekly savings have been cited as the reasons for dropout in 25 and 17 per cent cases respectively. 13 per cent of dropouts left the area. In fact, these three reasons are likely to be the outcome of failure to generate a sufficient income using MC.

Table 7: Reasons for dropouts from MCIs membership

Major reason for dropout	Per cent of cases
Could not pay weekly installment	25.2
Could not deposit weekly savings regularly	16.8
Did not attend group meeting regularly	22.4
Left the concerned area	22.4
Objection from relatives	13.1
All	100.0

Source: Calculated from Alamgir (1997), Halder et al (1998).

The reasons of dropout among BRAC members show that the inability to repay the weekly instalments due to loss incurred in the income generating activities account for 69 per cent of the cases of dropouts. The next important reason of dropout is that savings have been retained by the staff for adjustment of overdue loan (Husain 1998, P. 282). An analysis of the characteristics of the dropouts from BRAC membership shows that lack of members' own savings, small amount of loan and

low income are the characteristics which distinguish the dropouts from current members. The two groups did not show significant difference in terms of asset ownership or expenditure. It should however, be mentioned that the average figure does not fully capture the factors behind dropout by the poorest because the dropouts may come from both extremes, the poorest and the borderline poor who have graduated. The average values of the characteristics of the dropouts (which is compared with current members) will not reveal the seriousness of the problems faced by the poorest households who were forced to dropout due to failure in the use of credit.

Concluding Observations

MFIs in Bangladesh are facing new challenges. Evaluation of the impact of microcredit on poverty and household income and the assessment of success of targeting reveal a number of emerging problems of MFIs. The challenges are quite critical because they involve certain dilemmas. For example,

- a) To expand the coverage of the poor, MFIs must enhance their resources which may require that interest rates are raised which will discourage the poor and the poorest clients,
- b) Larger size of loan may enable them to increase the degree of financial sustainability but it may lead to worsening repayment performance and exclusion of the poorest.
- c) Financial sustainability requires an increase in the number of clients within a branch but this may imply investment in less profitable activities, thus reducing the impact on poverty alleviation.

However, these problems are not insurmountable. Early identification of these shortcomings may enable the MFIs adopt suitable remedies. In fact, the remedies involve appropriate balancing between the two conflicting objectives.

MFIs made significant progress in providing collateral free loans to assetless households and achieved impressive loan repayment and solved the problems that baffled the traditional commercial banks who could not reach the poor. Institutions with such innovative approaches to banking can also be expected to succeed in the new balancing process.

REFERENCES

- Alamgir, D.A.H. (1997), *Review of current interventions for hard core poor in Bangladesh and how to reach them with financial services*, Paper presented at Dropout Features, Extending outreach and how to reach the hard core poor, Organized by CDF, Dhaka.
- Bangladesh Bureau of Statistics (1997), *Household Expenditure Survey 1995-96*, Government of Bangladesh.
- Bangladesh Institute of Development Studies (BIDS), (1990), *Evaluation of Poverty Alleviation Programmes in Bangladesh*, Main Report (Mimeo), BIDS, Dhaka.
- Bangladesh Institute of Development Studies (1999), *Benchmark Report, BIDS Study on PKSF's Monitoring and Evaluation System*, BIDS, Dhaka.
- Halder, S.R. (1998a), *Social and Material Well-being of the Participants, in Poverty Alleviation and Empowerment* by (ed) A. M. M. Husain, BRAC, 1998.
- Halder, S. (1998b), "Measurement of Poverty and its Correlates", in *Poverty Alleviation and Empowerment* by (ed.) A.M.M. Husain, BRACM Dhaka.
- Halder S., Husain, A.M.M.; Amin, N and Farashuddin, F. (1998), "Analysis of Member Performance and Coverage in Poverty Alleviation and Empowerment", *The Second LAS of BRAC's Rural Development Programme*, by (ed.) A.M.M. Husain, BRAC, 1998.
- Hossain, M. (1984), *Credit for the Rural Poor.: The Experience of Grameen Bank in Bangladesh*, Research Monograph No. 4, BIDS, Dhaka.
- Hossain, M. (1988), *Credit for alleviation of rural poverty: the Grameen Bank in Bangladesh*, Research Report 65, International Food Policy Research Institute, Washington, D.C.
- Hossain, M. and Sen, B. (1992), *Determinants of Poverty, in Rethinking Rural Poverty. A Case for Bangladesh* by (eds.:) H.Z. Rahman and M. Hossain, BIDS, Dhaka.
- Husain, A.M.M. (1998), *Poverty Alleviation and Empowerment. The Second IAS of BRAC's Rural Development Programmes*, BRAC, Dhaka.
- Impact Monitoring and Evaluation Cell, Proshika (IMEC, PK), (1995), *Impact Assessment Survey Report*, Proshika Manobika Unnayan Kendra.

- Kabeer, N. (1998), "Money Can't Buy Me Love" *Re-evaluating Gender, Credit and Empowerment in Rural Bangladesh*. Discussion Paper 363 IDS, Sussex.
- Khandker, S.R. (1998), *Fighting Poverty with Microcredit Experience in Bangladesh*, OUP, New York.
- Matin, I (1998), *Mis-Targeting by the Grameen Bank: A possible Explanation*, IDS Bulletin, Vol. 29, No. 4.
- Rahman, R.I. (1992), *An Analysis of Labour Supply Function for Self-employed Workers of Bangladesh*, The Bangladesh Development Studies, Vol. XX, March.
- Rahman, R.I. (1996), *Impact of Credit for Rural Poor: an Evaluation of Palli Karma Sahayak Foundations Credit Programme*, Research Report, BIDS.
- Rahman, R.I. and Khandkar, S.R. (1994), *Role of Targeted Credit Programmes in Promoting Employment and Productivity of the Poor in Bangladesh*, in the Special Issue of the Bangladesh Development Studies on Women, Work and Changes, BIDS, Dhaka.

Development Potentials of Micro-enterprises in Bangladesh: An Analysis of Issues and Constraints

Momtaz Uddin Ahmed*

Paper presented at the 13th Biennial Conference of the Bangladesh Economic Association, held in Dhaka during 10 - 12 August, 2000. The paper is a revised and up-dated version of a background paper prepared by the author for the study on Agriculture Sector Investment Project (ASIP). The author acknowledges comments and suggestions received from the core research team members involved in the study.

I. Introduction

The present paper examines the potentials of micro-enterprises as sources of income and employment generation for the rural poor in Bangladesh and their possible contributions towards supporting agricultural growth and generating agro-industrial linkages in the Bangladesh economy. Though agriculture continues to be the mainstay of Bangladesh economy by supplying bulk of the food grains and employing directly and indirectly over two-thirds of the labour force, the sector in its present undiversified form and slow pace of technological change is unable to achieve sustained future growth and ensure substantial increase in the real incomes at the household levels, create enough employment opportunities for the ever increasing rural workforce and achieve any significant increase in productivity required to achieve higher overall economic growth and progressive reduction in rural poverty.¹ It is commonly believed by many experts and researchers (Mahmud, W. et. al. 1994 and Mahmud, W. 1995) that as Bangladesh cannot realistically hope to achieve major expansions in the crop-based agriculture and the likelihood of any major break – through in large-scale urban manufacturing sector is also limited,² the case for encouraging the development of micro-enterprises, i.e. small-scale agro-processing industries, manufacturing and processing units, service activities, etc., particularly

¹ According to John McIntire (1998), the central problem of Bangladesh agriculture is low productivity and it employs 60 percent of the labour force to produce only a third of the national income.

² Besides tiny size, the modern large-scale industries sector of Bangladesh suffers from high capital intensity, low and unstable growth and productive inefficiencies (Ahmed M.U. et. al. 1999).

* The author is a Professor in the Department of Economics in the University of Dhaka, Bangladesh.

in the rural and peri-urban areas becomes irrefutable. Indeed, given the questionable prospects for sustained future growth of the current weather-dependent, rice-led agriculture even under conceivable high rates of technological and other changes, vigorous efforts are needed in the non-agricultural and social sectors as well to achieve faster and higher rate of economic growth, create more jobs, alleviate poverty and raise the standard of living of the vast rural populace. Modernization and diversification of agriculture and establishment of agro-industrial linkages, through encouraging growth of non-crop activities in general and promoting the growth of micro-enterprises in particular in the rural areas are vital to generate employment, raise productivity and incomes and supply investible surpluses for promoting growth of agriculture itself as well as for supporting the growth of the modern industrial sector. Thus, the development of a modern and dynamic micro-enterprise sector is crucially important for Bangladesh to generate income and employment for the rural poor and provide support to agricultural growth through generating agro-industry linkages. The primary objective of this paper is to analyse the development potentials of the micro-enterprises in Bangladesh by exploring these possibilities and highlighting constraints to their sustained future growth.

The Case for Micro-enterprise Development

The economic case for promoting micro-enterprises in Bangladesh can be made on the basis of many positive advantages which are intrinsic to their various structural characteristics and therefore merit due considerations.

The growth of MEs, especially the agro-support and agro-based small-scale enterprises in the rural areas and market towns constitutes a promising means of stimulating rural non-farm employment. Available evidences (BUP, 1992 and Ahmed M.U. 1997) suggest that the MES are generally labour intensive and help create substantial self-employment and wage-employment opportunities with relatively modest capital investments per work place.

By creating low-cost job opportunities in the rural areas for the rural poor, the landless and the asset-less, the MEs help reduce rural poverty and the flow of rural to urban migration. In the same way, the concentration and growth of MEs in the rural and peri-urban areas localise employment and income earning opportunities for people who leave agriculture and act to stimulate a degree of decentralisation of urban growth. This has been the most important feature of rural industrial development in Taiwan which is often cited as a case of industrial dispersal in the rural locations and agriculture-industry linkages (Ranis et. al 1990 and Stewart, F. 1993). The MEs supply wide range of goods and services to agriculture (i.e. agricultural tools and equipments and irrigation equipment and spares, etc.) and help

raise income levels of the rural population which contribute to the growth of agricultural output and improvement in the living conditions of the rural people. Thus, the MEs can serve as important instruments for generating close agriculture-industry linkages, maximize utilisation of local raw materials, local skills and exploitation of local markets. The MEs also supply inputs to manufacturing industries and earn foreign exchanges through exports of processed and semi-processed agricultural products. The MEs, especially the agro-based and agro-support rural industries, are also viewed as elements of export-oriented labour-intensive industrial policy.

Data and Methodology

The basic objective of this exercise is to explore the potential roles that the MEs can play in the poverty-focussed, employment-augmenting development strategy of Bangladesh. This is done by analysing the size, location, product composition, input requirements, efficiency in resource use and other relevant functional characteristics of the MEs. Depending on the availability of information, the operational constraints facing the MEs and policy support and promotional incentives put in place for assisting their growth and expansion are also analysed. The exercise is essentially a review work based on an extensive survey of available literature and research works in the field. Besides review of existing literature the relevant stakeholders comprising knowledgeable persons, policy makers and representatives of promotional organizations and donor agencies have been consulted to supplement the secondary information gathered from various published and unpublished documents and reports.

The paper is organized as follows : After making the economic case for the MEs in the introductory Section, Section II outlines the status, profile and important functional characteristics of the sample MEs. Section III analyses the efficiency of the MEs in factor use and examines their productivity and prospects for future growth. Some of the important structural characteristics including personal background of the MEs are discussed in Section IV. The promotional policies and incentive structures put in place to assist growth of the MEs are highlighted in Section V. The conclusions and policy recommendations are placed in the final Section.

I. Profile of Micro-Enterprises in Bangladesh

A meaningful discussion of the development potentials of the MEs needs to be preceded by a workable definition of these enterprises for at least two reasons : One, the concept of 'micro-enterprise' has not yet gained popular currency in Bangladesh.

The general practice is to use the terms “small” and/or “cottage” while discussing the economies of small-scale industries. Two, even when an attempt is made to identify an ME, the task becomes difficult in the absence of adequate literature on the subject which is an outcome of the absence of analytical studies of these activities as a separate area of research. As a result, various conceptual ambiguities arise and definitional problems persist. Given these limitations, an attempt is made here to provide an operational definition of the MEs to help the researchers and policy planners use the concept without ambiguity and carve a place for the MEs alongside small-scale and cottage industries as viable instruments for income and employment generation in Bangladesh.

An Operational Definition of the MEs

A common practice in defining an ME is to identify it as a tiny enterprise employing a few workers (i.e. 5 to 20 workers) and generating income from non-farm production, encompassing manufacturing services and trades. For example, IFAD defines an ME for non-farm project development purposes as an enterprise which is larger than a ‘mini’ enterprise and smaller than a typical small-scale enterprise. Another common tendency is to treat the MEs as being identical to informal enterprises, although a typical ME cuts across commercially operated small-scale enterprises in the manufacturing, agro-processing, and service activities in both formal and informal sectors. These practices make the task of defining an ME rather difficult. Nevertheless, increasingly, a large number of researchers are trying to provide various workable definitions of the concept subject to their needs and objectives. According to Marilyn Carr (1989), for example, a noted researcher on the subject, the MEs generally operate in the informal sector without an official registration and a documentation of their numbers, needs and constraints. She further states that MEs are widely dispersed and are often mobile and located in the rural areas; they are generally sparing in their use of capital, draw heavily on local resources and skills and produce basic consumer and producers goods, use tools and techniques which tend to be less complex and have limited access to improved production techniques, formal training, credit or technology institutions. Economic informality, tiny size, and limited access to formal technology and credit institutions are also identified as leading characteristics of the MEs by a Canadian International Development Agency (CIDA) sponsored study of the sector in Jamaica (CIDA, 1985).

Summarising the proceedings of an International Conference held in Oslo, Norway, on the MEs in 1989 Jack Levitsky, a representative of the World Bank, concludes that the small micro-businesses include a wide spectrum of economic activities ranging from rural traditional crafts to economically variable establishments,

embodying an impressive array of initiatives, skills and talents of their owners. Thus, most researchers tend to identify the MEs closely with the informal sector or reversely claim the informal sector activities to consist overwhelmingly of the MEs. A commonly held view is also that the MEs generally consist of small, non-farm income generating units including artisan operations, family businesses, cottage industries and other productive enterprises.

Most research studies and surveys examining the operations of the MEs as production entities are seen to have frequently used the "Size" of an establishment as the important criterion for identifying an ME. While there seems to be considerable variation in the "Size" chosen by different surveys and studies as the cut-off point, it has been the most frequently used indicator for identifying the MEs. For example, MEs have been defined sometimes as enterprises with less than 5 workers, sometimes less than 10 workers and sometimes less than 20 workers. In addition to "Size", the other frequently used indicator has been the type of structure in which it operates especially with a view to deciding on the divider between formality and informality. However, most studies emphasizing the potential economic viability of the MEs focussed on the relatively modern segment consisting of small manufacturing and service activities (i.e. metalwork, woodwork, mechanical and electrical repairs, etc.) and having strong backward and forward linkages to the formal sector enterprises.

Based on the above discussions and drawing on the insights generated by the BUP (1992) and the Kranti Associates Study (1997) on the subject, an ME may be defined as follows: An ME should be distinguished from a "mini" or a household enterprise. A mini enterprise is an informal sector activity, run by an individual assisted by the family members without much divisions of labour, uses minimum fixed (including, equipment and tools) capital, requires rudimentary technology and skills, uses local raw materials, produces goods and services, for low-income consumers and sells goods and services mostly through personal contact with the final customers at work or market places. An ME, on the contrary, is larger and more capitalised than a mini-enterprise which relies more on hired labour than on family labour and often practises the division of labour. The investment required in machinery, equipment and tools is relatively large, the production processes are relatively more complex (but labour intensive) and worker skills required are relatively improved in an ME than in a mini-enterprise. Some MEs may use certain types of imported materials, though their overall dependence is on indigenous raw materials. An ME produces more diverse products for the consumers of both low-income and high-income brackets. The MEs can be in both formal and informal sectors with marketing of products exhibiting both simple and complex characteristics (i.e. both through personal contacts and via intermediaries). They may be located in the rural areas, rural towns

and in the urban centres. They are conceived as activities with potentials for dynamic growth.³

In keeping with the general practice, we choose the employment criterion as the measure of size of an ME for the present exercise. Accordingly, a commercially run industrial enterprise cutting across the manufacturing, agro-processing, trade and service activities and employing between 5 to 20 workers including both family and hired workers (majority being hired) is defined as an ME in the present study. While there may be considerable overlaps between manufacturing units and agro-processing units (comprising agro-support and agro-based enterprises), agro-processing industries are emphasised as a separate category of micro enterprise in view of the fact that they help stimulate agricultural development both through producing and supplying agricultural inputs and consuming / using agricultural products. Thus, the micro enterprises falling under both agro-based and agro-support enterprises provide significant vertical linkage benefits to the agricultural sector and stimulate thereby both agricultural and industrial growth.

PRODUCT COMPOSITION

In the absence of any nation-wide study on the ME sub-sector, it is not possible to provide an accurate estimate of their contributions to industrial output, employment and value added in Bangladesh. However, an analysis of their important profiles and functional characteristics will highlight their economic significance and development potentials as instruments for employment and income generation, especially for the rural poor and support the growth of the rural economy. Classified on the basis of end-use of the products produced and the types of raw materials used, the micro-enterprise products are identified in Bangladesh into three broad sectoral categories, i.e. agro-processing, manufacturing and services. As seen from Table 1, manufacturing units comprising small non-agro-based rural industries and agro-based enterprises together constitute the dominant categories followed by service activities. In the BUP (1992) study, agro-based and agro-support MEs together constituted nearly 60 per cent of the total sample units (54 enterprises) with service activities accounting for roughly 22 per cent and miscellaneous categories the remaining 20 per cent (Appendix 1-A). Agro-processing activities dominated the BUP sample as the survey purposively selected agro-based MEs for project development purposes as desired by IFAD, the sponsor of the BUP study.

Table 2 presents data on the number of MEs and their contributions to employment by disaggregated industry types comprising the broad sectors. The sub-industry

³ A major study analysing the growth and dynamics of the MEs in Bangladesh and in selected other Asian countries is one jointly authored by Yusuf and Kumar (1996).

Table 1: Distribution of MEs by Broad Industry Sectors

Industry Sector	No. of Enterprises		Employment	
	No.	%	No.	%
Manufacturing	160	41.00	899	38.39
Agro-processing	76	19.00	571	24.38
Services	156	40.00	872	37.23
Total:	392	100.00	2342	100.00

Source : Baseline Survey on Micro-enterprises, carried for MEDU, Agrani Bank, Dhaka, 1997.

classification has been made in such a way that the products produced by an ME fall under a single product heading. It will be noted from the table that four industry sub-sectors dominate the MEs; these are food and allied products, textiles, fabricated metal products, and wood products. A similar ranking of sub-industry categories also emerged from the BUP study of 54 MEs, with these four major sub-sectors together accounting for about 98 per cent of the sample MEs and about 99 per cent of the workers engaged in them. In the Kranti sample, these proportions are respectively 87 per cent of the total enterprises and 92 per cent of the total work force engaged in them. Thus, the industry composition of the MEs broadly resembles the product and industry composition of the small scale and micro industries in the rural areas at the national level.⁴

⁴ Similar industry and product composition of the rural industries in Bangladesh emerged from the Rural Industries Study Project (RISP) carried out by BIDS (1981) of a sample of roughly 57000 small and cottage industry units.

Table 2: Number of ME Enterprises and Employment by Disaggregated Industry Types

Industry Types	Enterprises		Employment	
	No.	%	No.	%
Food and Allied Industry				
Poultry raising	14	4.5	34	1.9
Bakery products	15	4.8	144	7.5
Milk products	11	3.5	79	4.1
Rice mills	3	0.9	7	0.4
Rice boiling and milling	23	7.3	319	16.6
Flour mills/Wheat crushing		3	0.9	10
Chira / Muri processing	4	1.3	18	0.8
Oil mills	11	3.5	42	2.2
Ice and ice-cream making	4	1.3	19	0.9
Fisheries	1	0.3	6	0.3
Dairy forms	1	0.3	4	0.2
Beef fattening	1	0.3	1	0.1
Sub-total	91	29.4	686	35.8
Fabricated Metal Products, Machinery and Equipment				
Aluminium household goods	2	0.6	24	1.3
Engineering workshops (lathe)	20	6.3	136	7.1
Engineering workshops (welding)	34	10.8	197	10.3
Bobbin manufacturing	3	0.9	27	1.4
Brass works	3	0.9	22	1.1
Blacksmithy	1	0.3	4	0.1
Radio assembling	1	0.3	3	0.1
Rickshaw/Van Assembling	9	2.9	27	1.4
Shakha manufacturing	1	0.3	3	0.1
Poultry case making	1	0.3	7	0.4
Sub-total:	75	24.2	449	23.3

	No.	%	No.	%
Textiles				
Tailoring	40	12.6	227	11.8
Ornaments	19	6.1	145	7.6
Screen printing	1	0.3	4	0.2
Handlooms	11	3.5	124	6.5
Fish net making	1	0.3	11	0.6
Plastic rope making	1	0.3	7	0.4
Sub-total:	73	23.6	518	27.1
Wood, Cane and Bamboo				
Cane and bamboo works	4	1.3	30	1.6
Wood work	22	6.9	17	0.8
Saw mills	11	3.5	77	4.1
Sub-total:	37	11.9	124	6.5
Others				
Printing press	5	1.6	22	1.1
Packaging	1	0.3	4	0.2
Photography	16	5.1	44	2.3
X-ray	2	0.6	18	0.9
Footwear making	2	0.6	14	0.7
Pottery	3	0.9	13	0.6
Sanitary ware	3	0.9	13	0.6
Tiles making	1	0.3	11	0.6
Sub-total:	33	10.3	139	7.0
GRAND TOTAL:	309	100	1916	100

Note : Decimals are rounded off.

Source : As Table 1.

SIZE AND LOCATION

The evidence with respect to size of MEs available from the BUP (1992) study shows that on average, there are 9 persons per enterprise. In the Kranti (1997) study, the average employment size comes to be around 6 persons per enterprise. In both

studies, the average employment per ME is found to vary significantly among different industries. The average enterprise size was relatively large in the 1032 MIDAS financed MEs between 1993-1998 which had 7 workers per enterprise. A list of the MIDAS' micro enterprise development initiative (MIDI) approved projects and those financed by Agrani Bank and Rupali Bank under the ADB sponsored Agro-Industries Credit Project by sub-industries is provided in annexures 2-A and 2-B respectively.

The relatively small average size and wide range of diversity allows the MEs to have a relatively dispersed locations as well. In the BUP study over two-thirds (69 per cent) of the sample units were village based, being located in the market places and growth centres around the Upazilla head quarters. The rest were located in rural towns and these were industry categories which tend to be located in the urban areas for securing better access to the utility services and the consumers. Of the 50 rural agro-based projects established in the four divisions of the country between 1987-1990 under an ADB loan (No. 773-BAN) project, 56 per cent were located in the rural areas and 44 per cent in the urban areas. While a predominantly rural location, (nearly 80 per cent) was also chosen by the overwhelming majority of the Kranti sample of 392 MEs, at least 20 per cent of the relatively modern and organized MEs chose to locate themselves nearer to the sites having better infrastructural and service facilities. The MEs having dominantly urbanized locations include metal products, printing and publishing, wooden furniture, ice-cream making, and radio assembling, etc.

Another common characteristic of the typical small-scale enterprises is that they are predominantly owned by single/individual proprietors. There seems to have been no exception to this common trend with the sample MEs covered by both Kranti and BUP studies. In the Kranti sample, for example, 81 per cent of the units were owned by individuals, 17 per cent were family enterprises and only 2 per cent were under partnership.

EMPLOYMENT CHARACTERISTICS

In order to understand the nature of their production organisation, it is important to discuss the composition and characteristics of the workers employed by the MEs. Data in Table 3 exhibit some important information relating to employment status of the ME workers covered by the Kranti and BUP studies. It will be noted from the table that in both samples there is clear dominance of the hired workers, followed by the family workers, the proportions being 78 per cent and 19 per cent in the BUP sample and 75 per cent 24 per cent in the Kranti Sample. The incidence of apprentice is rather insignificant in both the studies; the proportion of such works being only 0.2 per cent and 1.8 per cent respectively.

Table 3: Type of Workers by Sex

Type of Workers	Male				Female				Both Sexes			
	Kranti		BUP		Kranti		BUP		Kranti		BUP	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Family workers	534	95.5	91	94.5	37	6.5	5	5.5	571	10	96	100
									19.8		19.8	
Hired workers	1580	89.2	361	95.2	191	10.8	18	4.8	1771	10	379	100
									15.4		78.3	
Apprentice	6	100	9	100	-	-	-	-	6	10	9	100
									0.2	0	1.8	
All workers	2120		461		228		23		2348		484	
	90.3		95.2		9.7		4.8		1000		10.0	

Source : Same as Table 1.

Among both the hired and the family workers, the overwhelming majority are male in both the studies; female workers constitute only 9.7 per cent in the Kranti Study and 4.8 per cent in the BUP Study. However, in the MIDAS sponsored MIDI project, the proportion of female workers was 22 per cent as promoting female participation both as entrepreneurs and workers was a deliberate policy followed by the MIDI project. Yet the overall female participation was less than a quarter of that of their male counterparts. Among the apprentices, there is no incidence of female workers in either of the two studies. Another notable feature that could be observed relating to employment characteristics of the workers in both the studies was the higher incidence of wage employment and very low incidence of unpaid family workers i.e. 4.5 per cent in the BUP study. Thus, as compared to the traditional cottage type household units and mini-enterprises characterised by relatively high incidence of unpaid family workers, hired workers and wage employment predominate in the micro-enterprise. This is suggestive of the practice of modern production organization along capitalist lines in the MEs. While there is considerable variation in the use of unpaid family workers and paid hired workers among various industries, the incidence of hired workers is in general high in those MEs which have relatively more urbanised locations and organise their production along modern capitalist lines. Such MEs included rice mills, printing press, engineering workshops bakery products, etc. in both BUP and Kranti samples.

DURATION OF EMPLOYMENT AND WAGE RATES

The incidence of part-time employment was relatively high (about 30 per cent) in the BUP study compared to that (about 10 per cent) in the Kranti Study. Seasonal nature of operations, relatively high incidence of non-production workers and family workers and use of apprentices appeared to be the important reasons underlying high incidence of part-time employment in the BUP study compared to the Kranti study. The incidence of full-time employment varied between 71 per cent to 78 per cent in the BUP Study and between 75 per cent to 82 per cent in the Kranti Study among various industry categories.

Irrespective of gender and skill categories, the average monthly wage rate was found to be Taka 2107 for the workers in the Kranti Study and Taka 2097 for the workers in the BUP Study. While there were significant variations in the average wages received by the workers among sample industries wages were generally high in the industries in which the large majority of the workers were hired and vice versa. These wage rates, if any indicators of the workers' economic conditions, would not perhaps enable the sample ME workers to earn subsistence living as they were even below the national average earnings of the unskilled workers during the period under study.

CAPITAL REQUIREMENTS

Since the MEs are generally undertaken on a small scale basis and produce products of every day use using relatively simple technology, both initial (fixed) capital and current capital requirements for these activities are rather modest. Though the ME owners generally face serious difficulties in raising both short-term and long-term loans from the organized capital market for modernizing and expanding their businesses, they are able as well as willing to start on a shoe-string budget using their own or their wives' meagre savings.⁵

The analysis of initial capital requirements of the sample MEs by the BUP study revealed that the initial capital required to set up an ME during 1990-91 varied between Taka 18,000 to 30,000 for chanachur making and boat making to Tk. 0.6 to 0.9 million for metal works and printing and publishing industries. While there are wide variations in the initial capital requirements per enterprise among various types of industries, the Kranti Study revealed that at one end of the spectrum there are industries like handloom manufacturing and radio repairing which require Tk. 2000 to 5000 worth of fixed assets and at the other there are industries such as saw mills and rice boiling and milling requiring initial fixed assets worth of Tk. 0.7

⁵ An exhaustive survey of literature providing evidence on this point is available in Ahmed M.U. (1981).

million to Tk. 0.14 million respectively per enterprise. An IFAD Appraisal Report (1995) estimated the initial fixed capital requirement for a typical existing ME enterprise to vary between Tk. 32,000 to Tk. 1.0 million in Bangladesh. The minimum working capital requirement for ME operation on the other hand was found to vary between Tk. 20,000 to Tk. 0.5 million.

The average working capital requirement per ME, while typically less than that for fixed capital was found by the BUP study to vary between Tk. 23,000 for ice and ice-cream factory to Tk. k3.5 lakhs for saw milling. In the Kranti study, the range varied between as low as Tk. 2672 for pottery to Tk. 5.5 lakhs for rice boiling and milling industries. Although the working capital requirement may not be very large for most of the typical MEs, its shortage appears frequently to be the most pressing problem perceived by the owners of the MEs and the small-scale industries.⁶ The observed inter-industry variation in the initial as well as current fixed and working capital requirements is generally explained by differences in the types of building structure (pucca vs. temporary sheds) used, scale of operation, product mix and degree of mechanization, etc.

SOURCE OF INITIAL CAPITAL

Despite the fact that the initial or the start-up capital requirement of the typical MEs is modest, varying between a few thousand to few million Taka the owners find it quite difficult to raise it, especially from the institutional credit market. Nearly 96 per cent of the respondents in the BUP study, 93 per cent in the RISP (1981) study and over 60 per cent of the Kranti (1997) study perceived capital storage as the major problem encountered by them while establishing their MEs. This supports the commonly held view that lack of institutional credit for funding initial as well as expansion capital requirement is an overriding constraint to the growth and expansion of the small scale enterprises in the developing countries (Ahmed M.U. 1988 and Sarder J. 1995).⁷ The other important problems faced at start and reported by the micro-enterprise owners (MEOs) included shortage of regular and adequate supply of electricity, raw materials, lack of space, marketing and workers skills and so on. The majority of the MIDAS sponsored MEs cited shortage of working capital, stiff competition, complicated banking rules and lack of technical know-how as the most pressing problems.

The discussion so far boils down to two important conclusions. First, since the MEs operate on a small-scale basis, require modest amount of capital and are located mostly where the rural poor live and work, their promotion can be instrumental in

⁶ Such evidence has been found by many studies in Bangladesh, Notably, Ahmed M.U. (1984 and 1988).

⁷ It is disconcerting to note that the small entrepreneurs remain at the margin as recipients of institutional credit compared to their large counterparts (Ahmed M.U. 1999) even when there is deliberate expansion of term loans facilities from the banking system for financing industries by the Government.

attacking rural poverty directly and distributing the benefits of growth more equitably. Second, besides augmenting employment opportunities in the rural and peri-urban areas, the growth of MEs based on agricultural and related products may be instrumental in developing agriculture - industry linkages and supporting sustained high growth of agriculture, raising productivity and achieving faster long-term overall economic growth.

II. INPUT REQUIREMENTS AND PRODUCTION EFFICIENCY

The focus of analysis in this section is on the input requirements and factor productivity of the MEs to shed some light on the degree of efficiency of their resource use and potentials for economic efficiency and growth. The evidence on these issues are provided from the earlier quoted Kranti (1997) study as the analysis in this study is based on a larger sample (392) of MEs compared to that (54) of the BUP study.

FACTOR INTENSITY

The two indices of factor intensity often used in empirical studies of micro and small-scale industries to measure their efficiency of resource utilization are the capital-labour (labour intensity) and capital-output (capital intensity) ratios. The simultaneous use of both capital-labour and capital-output ratios for measuring labour (and or capital) intensity helps avoid the inconsistency of identifying a given enterprise as both labour and capital intensive at the same time. For example, Enterprise A may be more labour intensive than Enterprise B on the basis of capital-labour ratio but more capital intensive on the basis of capital-output ratio. But such contradictions may be avoided if both the ratios are used together to cross-check the results. Like most studies in this field (i.e. Ahmed M.U. (1976); Liedholm and Kilby (1989); RISP (1981); and BUP (1992), we have used both these ratios together in the present paper. Yet a general limitation affecting most studies of MEs is that since these industries do not maintain books and accounts and provide information from their memory recalls, the data set are always subject to some degree of inaccuracy. To that extent, the findings relating to these analyses and conclusions drawn from them need to be interpreted with caution.

Two indices of factor intensity, i.e. capital-labour ratio and capital-output ratio, were used to measure efficiency of resource use by the sample MEs. The index of labour intensity based on FC_1/L and capital intensity based on FC_1/VA were estimated; where FC_1 represents fixed capital excluding the value of land, VA represents gross value added and L represents total number of employees. The results obtained are presented in Table 4 and Table 5 both of which are based on the data presented in Appendix Table A-1.

The important findings emerged from the Tables are the following: In 18 out of 39 MEs, less than Tk. 5,000.00 is seen to be required for generating one unit of employment (Table 4). The fixed capital estimated per worker (FC_1/L) is found to vary between Tk. 5000.00 and Tk. 25,000.00 in another 15 industries. In the BUP sample, the fixed capital investment per employee was less than Tk. 2500 for eight out of nineteen industries and between Tk. 5000 to Tk. 25000 for another seven industries. Thus, on the basis of capital-labour ratios, the overwhelming majority of the MEs in both studies were found to involve modest fixed capital investment for providing employment to a worker. Similarly in the fifty agro-processing industries financed by Agrani Bank and Rupali Bank between 1987-1991, under ADB financed Agro-Based Industries Credit Project the average capital investment per employee was Tk. 0.19 million. The average fixed capital investment per employee in the 1032 micro enterprises financed under the Micro-Enterprise Development Initiative (MIDI) programme of MIDAS during 1993-1998 worked out to be Tk. 0.19 million, While the MEs financed under these programmes seemed to have slightly higher capitalization, the average investment requirement per employee in both cases were modest as in the case of the Kranti and BUP studies.

Table 4 : Categorization of MEs by Degree of Capital Intensity (Measured by Capital-Labour Ratio), Values are Fixed Capital per Worker, i.e. FC_1/L

Range of Fixed Capital per Worker (in Taka)	Distribution of Industries
Below Taka 5,000.00	Rickshaw/Van Assembling, Dairy Farms, Bakery Products, Electrical Goods Repairing, Printing Press, Sanitary Ware, Poultry Raising, Rice Boiling and Milling, Footwear Making, Garments, Engineering Workshops (Lathe), Engineering Workshops (Welding), Bobbin Manufacturing, Tiles Making, Plastic Rope Making.
Taka 5,000.00 to Taka 25,000.00	Packaging, Rice Mills, Handloom Manufacturing, Handlooms, Blacksmithy, Photography, Shakha Manufacturing, Cane and Bamboo Works, Radio Assembling, Tailoring, Fishnet Making, Aluminium Household Products, Pottery, Poultry Case Making, Beef Fattening, Wood Work, Milk Products, Brass Works.
Taka 25,000.00 to Taka 50,000.00	Flour Mills, Chira/Muri Processing, Ice and ice-cream Factory.
Taka 50,000.00 and above	Oil Mills, Saw Mills, Fisheries.

Source : Derived from Appendix Table A-1.

The majority of the sample MEs also exhibit modest capital requirement when their capital intensity is cross-checked in terms of capital requirement per unit of output (Table 5). As observed from the table, as many as 20 out of 39 MEs require less than Tk. 1.00 for producing one unit of output. While capital requirement per unit of output exceeds Tk. 1.00 for the remaining 19 ME, FC_{11}/VA appears to be relatively high for 6 industries which use relatively more mechanized production technologies. This reinforces our earlier observation that the nature and level of technology used (often dictated by product mix) is the most important factor explaining differences in the inter-industry capital requirements. These results are broadly in conformity with the similar results obtained by the BUP study.

**Table 5: Categorization of MEs by Degree of Capital Intensity
Measured by Capital Output Ratio**
(Values are Fixed Capital Per Unit of Value Added, i.e. FC_1/VA)

Fixed Capital Required Per Unit of Value Added (Tk.)	Distribution of Industries
Upto Taka 0.49	Radio Assembling, Cane and Bamboo Works, Rice Boiling and Milling, Pottery, Wood Work, Milk Production, Footwear Making, Aluminium Household Products, Electrical Goods, Brass Works, Fishnet Making.
Taka 0.50 to Taka 0.99	Rice Mills, Flour Mills, Beef Fattening, Bakery Products Garments, Shakha Manufacturing, Tailoring, Handloom Manufacturing, Sanitary Ware.
Taka 1.00 and above	Poultry Raising, Chira/Muri Processing, Oil Mills, Saw Mills, Fisheries, Dairy Firm, Handlooms, Engineering Workshop (Lathe), Engineering Workshop (Welding), Bobbin Manufacturing, Photography, Tiles Making, Poultry Case Making, Blacksmithy.

Source : As Table 4.

FACTOR PRODUCTIVITY AND EFFICIENCY

Productivity expresses the technical relationship between input and output and is recognized as a key indicator of economic dynamism. Productivity can be measured in two ways: (i) in relation to a particular input or partial productivity and (ii) in relation to all inputs or total factor productivity. The partial productivity measures used here are respectively: value added per production worker per year (VA/L_1) and value added per unit of fixed capital per year (VA/FC_1) where L_1 stands for

production workers and FC_1 stands for fixed capital excluding the value of land. Total factor productivity (TFP) measures have been used to provide a comprehensive index of economic efficiency and at the same time to overcome the limitations affecting the partial productivity measures. Finally, an index of profitability has also been estimated to indicate the prospects for generation of surpluses required to accumulate capital for future expansion of the enterprises.

LABOUR PRODUCTIVITY

The average labour productivity index VA/L_1 presented in Table 6 shows that productivity per worker varies widely among the sample MEs, ranging from Taka 2265 for blacksmith to Tk. 2,03,559 for oil mills. This range of variation in labour productivity among the MEs covered by the BUP study was between Tk. 9,583 for wooden furniture to Tk. 1,68,197 for metal works. The industries exhibiting medium to fairly high average labour productivity are poultry raising (Tk. 29,687) fisheries (Tk. 25,150), radio assembling (Tk. 34,800), flour mills (Tk. 58,575), rice boiling and milling (Tk. 60,998) and oil mills (Tk. 2,03,559). The higher average productivity of labour was found to be associated with relatively high capital intensity of these industries.

Table 6: Categorization of MEs According to Labour Productivity
(Measured by Value Added per Production Worker, i.e. VA/L_1)

Value Added (Tk.) Per Worker	Distribution of MEs
Upto Taka 5000.00	Handlooms, Tailoring, Rickshaw/Van Assembling, Bobbin Manufacturing, Brass Works, Photography, Handloom Manufacturing, Sanitary Ware, Tiles Making, Poultry Case Making, Blacksmithy, Packaging, Pottery.
Taka 5001 to Taka 20,000	Rice Mills, Chira/Muri, Saw Mills, Beef Fattening, Dairy Farm, Cane and Bamboo Works, Bakery Production, Milk Products, Aluminium Household Products, Garments, Engineering Workshops (Lathe), Printing Press, Fishnet Making, Plastic Rope Making, Shakha Manufacturing, Ice and ice-cream Factory
Taka 20001 to Taka 50,000	Poultry Raising, Fisheries, Footwear Making, Electrical Goods, Radio Assembling.
Take 50,000 and above	Rice Boiling and Milling, Flour Mills, Oil Mills.

Source: Same as Table 5.

CAPITAL PRODUCTIVITY

As noted from Table 7, as many as 20 of the sample MEs had average value added per unit of fixed capital exceeding Tk. 1.00. This is indicative of a fairly high average rate of return on capital. Like in the case of labour productivity, wide inter-industry variation was noted in the average capital productivity ranging from as low as Tk. 0.21 for saw mills to as high as Tk. 4.26 for pottery. In the BUP study this range varied between Tk. 0.29 for printing and publishing to Tk. 10.99 for chanachur making. Further, it is also noted from Table 7 that with some negligible exceptions, the least capital-intensive industries (measured by both FC_1/L and FC_1/VA) such as pottery, wood works, cane and bamboo works, tailoring, bras works, blacksmithy, handlooms, etc. are seen to have markedly high capital productivity and thus appear to be highly efficient users of the scarce factor, capital. Hence, the argument that the labour intensive industries generally tend to be less efficient users of capital is not tenable for the Kranti sample of the MEs.

Table 7: Categorization of MEs According to Capital Productivity
(Measured by Value Added per Unit of Fixed Assets, i.e. VA/FC_1)

Value Added per Unit (Taka) of Fixed Assets	Distribution of MEs
Upto Taka 0.99	Poultry Raising, Chira/Muri Processing, Oil Mills, Saw Mills, Fisheries, Dairy Firm, Handlooms, Engineering Workshop (Lathe), Engineering Workshop (Welding), Printing Press, Rickshaw/ Van Assembling, Bobbin Manufacturing, Photography, Tiles Making, Poultry Case Making, Blacksmithy, Packaging.
Taka 1.00 to Taka 2.00	Rice Mills, Flower Mills, Beef Fattening, Bakery Products, Milk Production, Tailoring, Garments, Handloom Manufacturing, Sanitary Ware, Shakha Manufacturing.
Taka 2.00 and above	Rice Boiling and Milling, Cane and Bamboo Works, Pottery, Wood Works, Footwear Making, Aluminium Household Products, Fish Net Making, Radio Assembling.

Source : Same as Table 6.

TOTAL FACTOR PRODUCTIVITY

The estimated TFP index expresses value added as a ratio of the weighted sum of labour and capital. The weights are respectively the shadow (scarcity) prices of labour and capital. Symbolically expressed, the TFP index is as follows:

$$\text{TFP} = \frac{\text{VA}}{\text{TAr} + \text{Lw}} \quad \text{Where VA is value added,}$$

TA is total assets

r is the shadow price of capital

w is the shadow price of labour, and

L is the number of workers employed in the ME.

The accounting rate of interest (ARI) which measures the opportunity cost of capital was estimated to be 14.2 percent by the Trade and Industrial Policy (TIP) Reform Project, Bangladesh and the same rate has been used to represent r (Rab, 1988). Similarly in estimating w in accounting terms (or for estimating the marginal product of labour) a conversion factor of 0.82 was applied to the average wage rates received by the adult workers in Bangladesh in 1987/88.⁸ Based on the TFP estimates, the major industries have been listed in Table 8 according to four levels of TFP ratios. A TFP ratio greater than 1 is interpreted, following Liedholm et al (1989), to designate an ME to have positive effect on the total output of the economy, while a ratio less than 1 to indicate having a negative effect. As observed from the table, high TFP ratios (i.e. 2.1 and above) are exhibited by 14 of the sample MEs which have low to medium capital intensity as revealed by the values of FC_1/L and FC_1/VA ratios (Table 7). On the contrary, MEs which tend to be inefficient on the basis of the values of the TFP ratios include those which exhibit medium to high capital intensity (i.e. poultry raising, fisheries, ice and ice-cream factories, tiles making, plastic rope making, etc.) Thus, the TFP results suggest that many of the sample MEs tend to be more productive even using less capital intensive technologies.

⁸ The conversion factor was estimated and used by A.R. Bhuya, et.al. (1988) for arriving at the marginal product of the adult workers in Bangladesh.

Table 8: Distribution of Sample MEs According to Values of TFP

Value of TFP	Distribution of Industries
Less than 1.0 (Inefficient)	Ice and ice-cream Factory, Radio Assembling, Sanitary Ware, Dairy Firm, Chira/Muri Processing, Tiles Making, Plastic Rope, Bobbin Manufacturing, Milk Products, Fisheries, Saw Mills, Poultry Raising, Photography.
1.0 to 2.0 (Marginally efficient)	Oil Mills, Beef Fattening, Handlooms, Bakery Production, Engineering Workshops (Lathe), Engineering Workshops (Welding), Printing Press, Rickshaw/Van Assembling, Poultry Case Making, Blacksmithy, Packaging.
2.1 to 2.5 (Efficient)	Flour Mills, Pottery, Wood Work.
2.51 and above (Highly efficient)	Rice Mills, Rice Boiling and Milling, Cane and Bamboo Works, Footwear Making, Aluminium Household Products, Tailoring, Garments, Electrical Goods, Brass Works, Handloom Manufacturing, Fishnet Making.

Source: Same as Table 7

PROFITABILITY

The prospects for earning profits constitute an important guide for allocation of resources to any economic activity. Profitability of the sample MEs has therefore been computed and expressed as a ratio of total assets of an ME.

Profit rates have been calculated by deducting wages and salaries of the hired workers⁹ from value added and then expressing as a ratio of total assets (i.e. VA-W/TA). The sample MEs have been listed in Table 9 according to values of G_1/TA ratios. In 25 out of 39 MEs, profits earned have been medium to high, varying between 10 to 50 per cent. In the BUP study, profit rates were above 20 per cent for all sample MEs except two. Interestingly, as in the case of TFP, degree of profitability tended to be high in those industries which ranked low to medium in terms of capital intensity in the sample MEs in both studies (Table 9). On the contrary, MEs characterized by highest capital intensity appeared in general to have exhibited lowest profit rates, implying perhaps, among other things, low capacity utilization and inefficient production organization. Thus, the results of both TFP and G_1/TA tend

⁹ In case of family labour imputed values (equivalent to average wages for the skilled workers employed in the MEs as hired workers) have been deducted from family income to estimate profits.

to suggest (except a few MEs) that the use of intermediate technology might prove more useful and effective towards ensuring better utilization of resources by the MEs.

Table 9: Distribution of MEs According to Values of G_1/TA
(Values are ratio of Profits to Total Assets)

Profit Rates	Distribution of MEs
Upto 10 percent	Handlooms, Dairy Firm, Fisheries, Rickshaw/Van Assembling, Bobbin Manufacturing, Brass Works, Photography, Plastic Rope Making, Sanitary Ware, Fishnet Making, Ice and ice-cream Factory, Packaging, Engineering, Workshop (Lathe), Engineering Workshop (Welding).
10 to 25 percent	Rice Mills, Beef Fattening, Handloom Manufacturing, Poultry Case Making, Shakha Manufacturing, Cane and Bamboo Works, Wood Work, Bakery Products, Garments, Electrical Goods.
25 to 50 percent	Flour Mills, Poultry Raising, Rice Boiling and Milling.
50 percent and above	Chira/Muri Processing, Saw Mills, Milk Products, Footwear Making, Aluminium Household Products, Tailoring, Oil Mills, Printing Press, Fishnet making.

Source: Same as Table 8.

MAJOR STRUCTURAL CHARACTERISTICS OF THE MEs

Based on the fragmented evidence available from various micro studies some observations can be made on the major structural characteristics of the MEs.

TECHNOLOGY

The MEs are small-scale units, which are labour intensive and use mostly traditional technologies that are widely known. While overwhelming majority of the sample MEs covered by both Kranti and BUP studies were found to be dependent on traditional technologies, certain mechanized production techniques were in use by industries such as rice mills, wheat crushing, oil mills, saw mills, flour mills, metal works, printing and publishing, ice-cream plants and engineering workshops. It is because the range of technologies used by these industries covers the entire spectrum, from simple indigenous techniques learned at home to sophisticated imported machine tools. Lack of knowledge about modern technology, non-availability of foreign exchange, low production capacity and high running costs, etc. were the major problems prohibiting use of modern technology. While nearly two-thirds of the micro-enterprise owners (MEOs) in both studies indicated their willingness to introduce new and improved technologies to achieve savings in production costs and

increase profitability, majority of them had no idea about how to introduce technological changes and adopt modern technologies. Further, unwillingness resulting from inertia and lack of innovativeness and above all liquidity crisis appeared to be important reasons for predominant use of traditional technologies by the MEOs. Thus, like their counterparts in other small-scale rural industries, the MEOs do not appear to have adequate awareness about the virtues of change and modernization.

DEMAND AND LINKAGES

The bulk of the products and services produced by the MEs constitute light consumer goods and services which are used primarily by the rural households although some find markets in the urban households and overseas markets as well. The manufacturing component of the MEs which ranges from the construction of prefabricated bamboo walls or doors to fabrication of tools and equipment for agriculture, fisheries, to the production of goods for household requirements which are based on the use of wood and iron, to pottery, brassware or blacksmithy generally find markets in the urban areas. The largest sub-component in the manufacturing enterprises is handicrafts using cane, bamboo, jute, cotton, silk and leather which thrive on widespread traditional skills and are carried out in the widely dispersed rural households. These are the products which have good prospects for being produced on enlarged scale involving improvement in quality and design to penetrate both domestic urban markets and foreign export markets. The MEs operating in the formal sector, particularly the fruits and vegetables processing units represent another important sub-component which is a major industry having wide backward and forward linkages and significant export potentials. Categorized as agro-processors, such fruits and vegetable processing units produce variety of products such as fruit juice, squash, sauces, ketch up, jam jelly, etc. Currently, 62 agro-processors are reported (Salahuddin, 2000) to be registered with the Bangladesh Agro-Processors Association (BAPA). The most widely known agro-processing enterprise in Bangladesh is PRAN which has twelve production lines and serves both domestic and export markets. However, despite having great potentials for exports, penetration of foreign markets by agro-products of Bangladesh is being impeded by lack of proper processing, post-harvest losses and poor quality standards.¹⁰

Thus, unlike the traditional rural industry products, the future market prospects for all kinds of products produced by the MEs are not dependent on the direct contact between the producers and the consumers and the low-income rural market segments.

¹⁰ For details on the prospects and problems of exporting agro-products in Bangladesh the reader is referred to Salahuddin (2000).

The other important sources of demand for the products of many MEs, particularly those which produce goods that can be used in agriculture and by other industries as intermediate inputs have significant linkage potentials and those producing high quality consumer goods may find outlets in both domestic urban markets and export markets abroad.

PRODUCTION LINKAGES

As discussed earlier, the MEs through having both forward and backward production linkages with other sectors of the economy, especially agriculture and modern small-scale and large-scale industries, may stimulate faster rate of growth of the economy. There may be backward linkages from the MEs in the form of demand for outputs produced by other sectors of industries. Similarly, there may be forward linkages from the MEs with their products being used by other industries. The BUP study found that the MEs tend to have very strong backward linkages with agriculture by way of using many agricultural products as their raw materials. However, the strength of such linkages between MEs and agriculture depends significantly on the choice of location and technology by them.

The other variant of backward linkages generated by agriculture to the MEs is in the form of demand from agriculture for improved implements, irrigation pumps and accessories and other simple tools and spare parts produced and fabricated in the light engineering workshops which use intermediate technologies and are located in the rural towns. However, the advantages arising from such backward linkages could not yet be fully explored because irrigation pumps and motors are still allowed to be imported. Thus, there exists vast potentials for generating employment and incomes through expansion of the MEs producing agricultural machinery and spare parts. Among many developing countries where production of farm implements and tools undertaken by rural craftsmen proved a substantial source of backward linkage from the MEs, the case of Pakistan and the Indian Punjab is most frequently referred to (UN, ESCAP 1990).

The discussion in this section implies that the MEs having modest requirements for capital inputs for both establishment and expansion, have high potentials to generate substantial employment opportunities and raise their owner/operators permanently out of poverty. Growing agricultural surpluses and the increasingly commercial orientation of production creates high demand for setting agro-processing MEs to satisfy both rural and urban demands. Similarly, demand for manufactured products, such as tools, equipment and spare parts, etc. to serve the farmers and consumer goods including household items such as furniture, utensils, etc. is also increasing. All these provide bright markets prospect for the MEs and enhance their potentials for growth. Further, if supported by appropriate market promotion policies and that

other necessary incentives to realize their export potentials the agro-processing units within the MEs may turn into viable sources of foreign exchange earnings. In India, the agro-processing industries contributed to nearly 40% of the country's total export earnings in 1987/88, indicating tremendous prospects of these industries as sources of export earnings.

A NOTE ON THE MEOs

In so far as the MEOs are concerned, the proprietors or the operators are individual/sole proprietors in 80 per cent of the cases and play the key role in managing their business, starting from conception of the business idea to implementing it and to organizing and running the operations. The proportion of individual ownership shoots upto 90 per cent if the family enterprises are counted which are generally owned and managed by the household heads. As expected, MEOs are predominantly male, with female entrepreneurs constituting only 2 per cent of the sample of 392 enterprises covered by the Kranti Survey. The majority of the MEOs were relatively young with over 60 per cent of them falling under the age group 20-45 when they entered their business. A positive sign of their better ability to perform as entrepreneurs is indicated by their high educational background. In the BUP study, 87 per cent of the MEOs had formal education and in the Kranti Sample the proportion was 95 per cent with the level of formal education varying between primary to post-graduate levels. Further, a considerable proportion of the MEOs (17 per cent in the BUP study and 20 per cent in the Kranti study) also received training from the formal institutions before entering their present occupations and more than one-third received informal training, either on-the-job or through apprenticeship in their present enterprises and from other enterprises. The higher incidence of the trained MEOs was in the engineering workshops and poultry raising activities.

V. PROMOTIONAL POLICIES, INSTITUTIONS AND OPERATIONAL CONSTRAINTS FACING THE MEs

POLICIES

As a key element of the poverty alleviation efforts, GOB emphasizes creation of large-scale employment opportunities by undertaking integrated poverty reduction programmes supported by credit, training and extension services and promotion of small scale and cottage industries (SCIs) sector which was declared as a "Priority Sector" in the 1986 Revised Industrial Policy. Unfortunately, the MEs as a sub-category has been left unattended. Whatever promotional assistance has been provided, it has gone primarily to either very large enterprises or very small

enterprises within the SCIs sector. As noted earlier, the MEs have thus fallen in a grey area and have been by-passed by all the assistance programmes like credit and extension services. As noted already, this is not surprising since the MEs are not officially recognized as a separate category of non-farm activities.

Similarly, the operational characteristics of the MEs such as independence and rapid decision-making, etc. render them unsuitable for programmes involving group lending and have therefore remained beyond the purview of the NGO programmes. While the institutional providers of credit are in general unwilling to accept risks of lending to the MEs without collateral, there has been very little development of private business advisory services (except MIDAS) to support small and micro-enterprise growth.

INSTITUTIONS

Theoretically, there are a large number of institutions and organizations in the public as well as private sectors which are directly or indirectly involved in the promotion of SCIs in Bangladesh. However, except handlooms and sericulture, there is no specialized institution for catering to the specific needs of various sub-sectors. The Bangladesh Small and Cottage Industries Corporation (BSCIC) is the prime mover organization concerned with promotion of SCIs. The BSCIC having nation-wide network of 64 district offices and four regional offices is ideally placed to assist the MEs, but it is over burdened with responsibilities in almost all fields of SCI assistance. More importantly, it suffers from all weaknesses of a Government bureaucracy and as a result suffers from inertia, bureaucratic sloth and inefficiency. More importantly, BSCIC does not have any tailor made programme designed to cater to the special needs of the MEs.

The Micro Industries Development Assistance and Services (MIDAS), established originally with US financial assistance in 1982 provides credit and extension facilities to the micro industries. More importantly it has introduced the MIDI programme since October 1993 under which 1032 projects have been approved and 1009 projects have been financed till December 1998. The projects generated 7117 employment opportunities of whom 1621 or 22 per cent are female. Barring the performance of these projects, it can be noted that MIDAS operation is too limited in coverage given the vast needs for enterprise development and employment generation. Another feature of the MIDAS interventions is that its projects are mostly located in the urban areas and do not, therefore, cater to the needs of the rural development.

Some of the NGOs such as Grameen Bank and BRAC also promote productive self-employment and income generating activities (IGAs) as part of their poverty alleviation programmes. While BRAC activities promoted through its Enterprise

Project are more organized and have better prospects for long-term growth, their operations are confined to limited activity types and the overall coverage is also small. To reiterate, there is no conscious policy intervention backed by any institutional infrastructure to assist growth and expansion of MEs in Bangladesh except a few donor assisted projects.

OPERATIONAL CONSTRAINTS

It is thus evident that micro-enterprise development needs are not being met by formal sector institutions. Not surprisingly, therefore, the MEs suffer from various types of operational constraints which impede their growth and expansion. Lack of institutional credits, limited access to modern technology and almost total non-availability of market information and other promotional support and extension services are the major constraints hindering the ME growth. Discussion with a MIDAS stakeholder revealed that among the most severely faced constraints by the MIDAS assisted MEOs, shortage of working capital, stiff competition from domestic and foreign goods, marketing problems and bureaucratic hassles involved in obtaining trade licenses and other support services are the most important. Unlike their SCI counterparts, the MEs also do not have membership of any trade associations or their own Chambers of Commerce and Industries to protect their interests against intended and unintended policy discriminations. They are thus extremely vulnerable to various possible supply and demand related constraints arising from policy-induced discriminations and their own structural weaknesses.

However, as the MEs constitute a vibrant and productive segment of the SCIs, spread over agro-processing manufacturing and service activities, they should be vigorously promoted to augment both agricultural and industrial growth. Their scale of operation, location, input requirements, and efficiency in resource utilization, etc. qualify them as the most effective instruments for attacking rural poverty and accelerating rural development.

VI. CONCLUSIONS AND RECOMMENDATIONS

The MEs occupy potentially a very important place in the national economy of Bangladesh as sources of non-farm employment and income generation, especially in the rural and peri-urban areas. Generation of low-cost employment opportunities and sources of incomes for the poor and the marginal farmers, establishment of linkages between agriculture and industry and raising standards of living for the rural households, etc. are some of the important perceived advantages of the MEs. Their export augmenting potentials are almost limitless but remain to be realized through putting in appropriate policies and incentive structures.

Based on the end-use of the products produced and the type of raw-materials used, three broad sectoral categories, i.e. manufacturing, agro-processing and services dominate the ME sub-sector in terms of both number of enterprises and the number of persons employed in them. While an extensive array of products are produced by the ME sub-sector, they fall primarily into three important broad industry types, such as food and allied products, fabricated metal products and wood, cane and bamboo products industries when ranked into various industry categories.

The MEs operate on a small-scale basis and have on average about 7 workers per enterprise. The overwhelming majority are located in the rural market places and growth centres near the upazila headquarters and display predominantly rural locations. However, unlike the typical rural-based SCIs, they are characterized by dominance of hired workers and wage employment as opposed to family workers and non-wage employment. Similarly, the incidence of part-time employment is also quite low in the MEs, varying between 10 to 20 per cent.

Due to small-scale operations and use of predominantly simple indigenous technology, the MEs appear to use modest amounts of fixed as well as working capital. Similarly the average initial capital required for starting an ME is also rather small.

The overwhelming majority of the MEs are organized as individual or sole proprietorships. The MEOs are relatively young, educated and trained and thus seem to have necessary background to be able to set up and run an enterprise efficiently.

The majority of the sample MEs are labour intensive as indicated by the modest amount of fixed capital required to employ a worker and generate an unit of output. The MEs having low to medium capital intensity tend to have relatively high total factor productivity as well as high rates of profitability. These results suggest that in order to ensure optimum utilization of resources and ensure high long term growth the MEs may use intermediate technology.

While the MEs offer commendable prospects for low-cost employment and income generation and also have high potentials for generating agro-industrial linkages, and augmenting foreign exchange earnings their promotion and dynamic growth remains unattended. Consequently, they suffer from various operational bottlenecks which impede their growth and expansion. Shortage of working capital, limited access to modern technology, stiff competition, lack of access to market information, and bureaucratic hassles involved in obtaining trade licenses and other essential support services figure as the most critical constraints confronting these enterprises.

POLICY RECOMMENDATIONS

The existing policy support and institutional infrastructure geared to promote the small industries sector serve the needs of either very large or very small SCIs and therefore by-pass the MEs. Needless to mention, the MEs are left out as a "grey area" despite having immense potentials for growth and expansion. It is thus imperative that the MEs should be officially recognized as a separate category of industrial enterprises and declared as a "priority" sub-sector to stimulate their growth. An important first step in this direction would be to use an operational definition of the MEs to give them official recognition and identify them as separate categories.

In the interest of higher and sustained agricultural growth through diversification and modernization, GOB should assist growth of MEs, especially the agro-based and agro-support categories through encouraging and facilitating private investment in these industries. In order to do this effectively, a conducive environment for private investment by the small scale ME owners has to be created by putting in place a comprehensive policy package and an appropriate institutional network to implement such policies and deliver the extension services. A careful balance in the policy mix relating to the supply and demand related assistance measures should be maintained.

All policies and regulations (i.e. legal, administrative, regulatory and promotional, etc.) should be supportive of ME growth and should contain no elements of disincentives or discrimination. Appropriate policy measures should be undertaken to remove the anomalies in the existing import duties on raw-materials and finished goods to enhance SME competitiveness. A reduction in the VAT rate imposed on the MEs may be seriously considered. The present ad-hoc arrangements for developing the ME sub-sector through undertaking and implementing donor sponsored targeted Income Generating Activities (IGAs) as poverty focussed programmes will not be enough to cater to the development needs of the ME sub-sector. A comprehensive support and assistance programme suggested along the above lines has to be designed and implemented.

Appendix Table : A-1

**Capital (Labour) Intensity, Productivity and Profitability (Tk.)
in the Sample Micro-Enterprises Covered by Kranti Study**

Name of Enterprise	FCI/L	FC/L	FCI/VA	VA/FCI	V/L1	TFP	G1/TA
Poultry Raising	18389	60424	2.08	0.48	29688	0.85	0.16
Rice Mills	2033	7033	0.53	1.88	11465	2.64	0.21
Rice Boiling and Milling	14691	80086	0.33	3.07	60998	3.11	0.43
Four Mills/Wheat Crushing	33125	105000	0.75	1.33	58575	2.13	0.40
Chira/Muri Processing	25078	51678	1.35	0.74	6887	0.45	0.54
Oil Mills	130789	557618	1.18	0.85	203559	1.36	0.91
Saw Mills	57692	67000	4.75	0.21	8191	0.63	0.58
Beef Fattening	4650	15150	0.67	1.48	13790	2.08	0.23
Fisheries	80908	94241	2.98	0.33	25150	0.60	0.08
Dairy Firm	8750	41250	1.38	0.73	5700	0.45	0.04
Cane and Bamboo Works	396	396	0.43	2.31	5943	4.16	0.33
Pottery	480	5280	0.23	4.27	2048	2.22	0.42
Handlooms	4500	7894	1.83	0.55	2920	1.36	0.03
Wood Work	2481	7975	0.34	2.95	11725	2.48	0.28
Bakery Production	8938	18114	0.96	1.04	13668	1.94	0.22
Milk Products	1538	33865	0.19	1.91	10479	0.68	0.70
Footwear Making	15086	50800	0.44	2.29	43997	3.43	0.78
Alluminium Household Products	3625	3625	0.29	3.48	13771	2.62	0.66
Tailoring	1385	2569	0.60	1.67	3006	5.46	1.00
Garments	128099	16137	0.95	1.05	17660	2.87	0.36
Electrical Goods	7033	19033	0.39	2.55	24444	3.64	0.42
Engineering Workshops (having Lathe)	18933	28528	2.56	0.39	9884	1.50	0.16
Engineering Workshops (Welding)	16925	40157	2.27	0.44	11531	1.21	0.13
Printing Press	9229	9229	2.57	0.39	10103	2.06	0.62
Rickshaw/Van Assembling	5450	5450	1.37	0.73	4981	1.65	0.08
Bobbin Manufacturing	10402	10772	1.82	0.55	2873	0.80	0.04
Brass Works	1364	3318	0.44	2.29	3820	2.54	0.08
Photography	3333	10083	3.27	0.31	2474	0.97	0.02
Handloom Manufacturing	193	193	0.95	1.05	4668	3.76	0.25
Fish Net Making	1154	2662	0.30	3.31	7636	4.88	0.61
Plastic Rope Making	18857	47429	1.96	0.51	11233	0.78	0.10
Sanitary Ware	6838	32685	0.89	1.12	2911	0.38	0.05
Tiles Making	12364	21455	1.24	0.81	2963	0.76	0.05
Radio Assembling	1833	1833	0.37	2.67	34850	0.25	2.59
Ice and ice-cream Factory	46000	70473	2.68	0.37	5920	0.34	0.09
Poultry Case Making	4729	4729	1.36	0.74	4060	1.36	0.14
Shakha Manufacturing	4767	4767	0.98	1.02	7325	2.03	0.13
Blacksmithy	3000	4300	1.99	0.50	2265	1.37	0.08
Packaging	125	125	1.75	0.57	3966	1.66	0.09

Source: Based on the Kranti Baseline Survey Data.

Annexure : 1-A
Distribution of MEs by Industry Types

Industry Type	No.	%
Agro-Based Industries:		
Rice mills	6	11.1
Chanachur making	1	1.8
Wheat Crushing	1	1.8
Flour Mill	1	1.8
Chira mill	1	1.8
Oil mill	1	1.8
Saw mill	6	11.1
Wooden furniture	1	1.8
Sub-Total:	18	33.0
Agro-Support Industries:		
Cartwheel making	3	5.8
Boat making	3	5.8
Engineering works (dhalai)	8	14.8
Sub-Total:	14	25.9
Service Industries:		
* Rice mill	3	5.6
Pulse crushing	2	3.7
Chira mill	1	1.9
Oil mill	2	3.7
Saw mill	1	1.9
Yarn dyeing	2	3.7
Printing and publishing	1	1.9
Sub-Total:	12	22.4
Other Manufacturing		
Ice-cream making	1	1.8
Handlooms	8	11.1
Loom manufacturing	1	1.8
Van and Rickshaw body making	1	1.8
Iron and steel furniture	1	1.8
Sub-Total:	10	18.5
Grand Total:	54	100.0

Note : * Providing only rice husking/crushing facilities excluding boiling and other operations.

Source : Adopted from BUP (1992) study.

Annexure : 2-A
Sub-sector wise Distribution of MIDAS Approved MIDI Projects
During August 1993 and December 1998

Sl. No.	Sub-Sector	No. of Projects
1.	Food Processing	42
2.	Poultry	19
3.	Fishery	09
4.	Floriculture	03
5.	Mini Garments/Textiles	336
6.	Grocery	66
7.	Specialized Store	178
8.	Handicrafts	48
9.	Engineering	57
10.	Electrical	28
11.	Leather	13
12.	Plastic	11
13.	Chemical	20
14.	Medical Services	41
15.	Specialized Service	61
16.	Printing/Publication	30
17.	Furniture	10
18.	Dairy	02
19.	Miscellaneous	80
	Total :	1054

Source: MIDAS, Dhaka, 1999

Annexure : 2-B
Sub-Industry Categories of ADB Sponsored Projects Financed by
Agrani and Rupali Banks During 1987-1991

Sub-Sectors	No. of Projects
Livestock and poultry (feed mills, dairies, leather produce, etc.)	5
Fisheries (fish processing, fishing net, fishing boats, etc.)	2
Services/equipment (ice plant, cold storage, engineering workshop, agricultural equipment, etc.)	4
B M R E	1
Non-agro-based rural industries (handlooms, silk weaving ceramics, salt production, etc.)	11
Transportation	11
Food Processing	4
Textiles	1
Crop-based activities (edible oil processing agro-based chemicals, etc)	2
Other manufacturing	9
Total :	50

Source : ADB, Dhaka, 1993

References

- ADB, Project Completion Report, "Rural and Agro-Based Industries Credit Project", Dhaka, Bangladesh, 1993.
- ADB, *Appraisal of the Rural and Agro-Based Industries Credit Project in Bangladesh*, Dhaka, 1985.
- Ahmed, M.U. "Financing Small-Scale and Cottage Industries in Bangladesh : A Perennial Problem", paper presented to a BSCI Seminar, 1999.
- Ahmed, M.U., "Institutional Financing of Rural Industries in Bangladesh, Case Study No.6", BIDS, Dhaka, 1981.
- , *The Financing of Small-Scale Industries - A Study of Bangladesh and Japan*, Dhaka University Press, 1988.
- , "Financing Small-Scale and Cottage Industries in Bangladesh : A Perennial Problem",
- , "Financing Rural Industries in Bangladesh", *Bangladesh Development Studies Special Issue*, March-June, Volume 1+2, 1984.
- BIDS, *Final Report, Rural Industries Study Project (RISP)*, Dhaka, 1981.
- BUP, *Studies for Project Design of the Micro-Enterprise Development Project*, Report prepared for IFAD, Rome, 1992.
- Carr Marilyn, "Institutional Aspects of Micro-enterprise Promotion" in Levitsky, J. (ed.), *Micro-enterprises in Developing Countries*, 1989.
- CIDA, *An International Development Program for Pre-micro, Micro and Small Business in Jamaica*, 1985.
- IFDA, Rome, 1995, *Appraisal Report on Bangladesh - Employment Generation Project for the Rural Poor*, Dhaka, 1995.
- Kranti Associates Ltd., *Report of the Baseline Survey on Micro - Enterprises*, prepared for the MEDU, Agrani Bank, Dhaka, 1997.
- Levitsky, J. (ed.), "Micro-enterprises in Developing Countries", in Papers and Proceedings of an International Conference, held in Oslo, Norway, 1989.

- Liedholm, C. and Kiby, P., "The Role of Non-Farm Activities in the Rural Economy", in Williamson, G. et.al. (ed) *The Balance between Industry and Agriculture in Development*, Macmillan, 1989.
- Mahmud, W. "Agricultural Growth, Diversification and Sustainability in Bangladesh - Medium term Outlook", paper presented at the Symposium on Environment and Sustainable Development, jointly organized by NSU and World Bank, Dhaka, 1995.
- McIntire, John, "The Prospects for Agricultural Growth", in Rashid Faruquee (ed.), *Bangladesh Agriculture in 21st Century*, UPL, Dhaka, 1998.
- MIDAS, *Micro Industries Development Assistance Services*, MIDAS Profile, Dhaka, 1999.
- Rab, A., *A Handbook of Industrial Project Appraisal*, TIP, 1988.
- Ranis, et. al., "Rural Non-Agricultural Activities in Development : Theory and Application", *Journal of Development Economics*, 1993.
- Salahuddin Ahmed, "A High-Value Added and Agro-based Industries", paper prepared for DCCI-CIPE, ERRRA Project, January 2000.
- Sarder, J. *An Evaluation of Support Services for Small Enterprise Development in Bangladesh*, Ph.D.Thesis (1995), submitted for publication to Dhaka University Press.
- SEDP, *Small Enterprise Development Project*, Project Document on Credit Line Project for Small-Scale Enterprise in Bangladesh, Dhaka, October, 1995.
- UN, ESCAP, *Strategy for Rural Poverty Alleviation : Agriculture Industry Linkages*, Bangkok, 1990.

বাংলাভাষায় অর্থনীতি শিক্ষা ও গবেষণার সমস্যা ও সম্ভাবনা

বিনায়ক সেন

১। প্রথমেই বলে নেয়া ভালো যে বাংলাদেশে অর্থনীতি-চিন্তা ও বাংলা ভাষায় অর্থনীতি-চর্চা সমার্থক নয়। কেননা আমাদের অর্থনীতিবিদদের অধিকাংশ গুরুত্বপূর্ণ রচনাই লেখা হয়েছে ইংরেজিতে। একথা দেড়শো বছর বা আরো আগে রাজা রামমোহন বা রমেশচন্দ্র দত্তের ক্ষেত্রে যতটা প্রযোজ্য, আজ স্বাধীনতা লাভের প্রায় তিরিশ বছর অতিক্রান্ত হবার পরেও প্রায় ততটাই প্রাসংগিক। তারপরও বাংলা ভাষায় অর্থনীতি-চর্চার ঐতিহ্য অকিঞ্চিৎকর নয়। সেই ইতিহাস কিছুটা বয়ানের দাবী রাখে।

২। ভবতোষ দত্ত তার একটি লেখায় রাজা রামমোহন রায়কে 'বঙ্গদেশে অর্থনৈতিক চিন্তার পথিকৃৎ' বলেছেন। কিন্তু রামমোহন অর্থনীতি সম্পর্কে বাংলায় কিছু লিখেছিলেন বলে জানা নেই। রামমোহনের 'সম্বাদ কৌমুদী'র (১৮২১) কোন সংখ্যা এখনও পাওয়া যায় না। হয়তো এই পত্রিকায় তার অর্থনৈতিক চিন্তার কিছুটা প্রকাশ ঘটেছিল। উনিশ শতকের মাঝামাঝি দুটি পত্রিকায় অর্থনীতির আলোচনা থাকত, যা দেবেন্দ্রনাথ ঠাকুরের 'তত্ত্ববোধিনী পত্রিকা' (১৮৪৩) এবং দ্বারকানাথ বিদ্যাভূষণের 'সোমপ্রকাশ' (১৮৫৮)। পরবর্তীকালে 'বঙ্গদর্শন' এর পাতায় অর্থনীতি-চর্চার বিস্তৃতি ঘটে। এসব পত্রিকায় যেসব লেখা প্রকাশিত হয়েছে তার প্রধান উপজীব্য বিষয় ছিল চিরস্থায়ী বন্দোবস্তের বাংলায় ভূমি-রাজস্ব ও ভূমি সমস্যা। চলতি ঘটনাপ্রবাহের অর্থনৈতিক দিক বিশ্লেষণ যেমনটা একালে হয়ে থাকে সে যুগেও তা দেখতে পাওয়া যায়। 'সোমপ্রকাশ' চিরস্থায়ী বন্দোবস্তের ক্ষয়ক্ষতির প্রতি পাঠকের দৃষ্টি আকর্ষণ করেছিল। বংকিম চন্দ্র সম্পাদিত বঙ্গদর্শনের পাতায় থাকত কৃষকের খাজনা, কৃষি ঋণ নিয়ে সম্যক আলোচনা।

৩। প্রাপ্ত তথ্যের বিচারে একথা পরিষ্কারভাবেই বলা যায়, যে, বাংলা ভাষায় অর্থনৈতিক বিচারের পথিকৃৎ ছিলেন বংকিম চন্দ্র। অর্থনীতিতে তিনি ছিলেন স্ব-শিক্ষিত, কিন্তু এতে তার অধিকার ছিল ব্যাপক। পর্যবেক্ষণ ছিল তীক্ষ্ণ। উনিশ শতকের শেষার্ধ্বে যুরোপ এবং এদেশে সবচেয়ে গুরুত্বপূর্ণ পাঠ্যবই হিসেবে স্থান পেয়েছিল জন স্টুয়ার্ট মিলের 'প্রিন্সিপলস্ অব পলিটিক্যাল ইকনমি' (১৮৪৮)। বংকিম চন্দ্র মিলের তত্ত্ব শুধু আত্মস্থই করেননি, একে সম্প্রসারিত করেছিলেন এদেশের উন্নয়ন-সমস্যা অনুধাবনের ক্ষেত্রে। অর্থশাস্ত্রের ক্ষেত্রে তিনি কতটা অগ্রসর হয়েছিলেন তার সাক্ষ্যবাহী রচনা 'বঙ্গদেশের কৃষক'। যদিও তার নিজের এ নিয়ে নম্র কুণ্ঠাবোধ ছিল। মূল রচনাটির পঁচিশ বৎসর পরের পুনর্মুদ্রনের ভূমিকায় তিনি লিখেছিলেন; 'অর্থশাস্ত্র ঘটিত ইহাতে কয়েকটা কথা আছে, তাহা আমি এক্ষণে ভ্রান্তি শূণ্য মনে করি না। কিন্তু অর্থশাস্ত্র সম্বন্ধে কোন কথা ভ্রান্তি, আর কোন কথা ধ্রুব সত্য, ইহা নিশ্চিত করা দুঃসাধ্য। অতএব কোন প্রকার সংশোধনের চেষ্টা করিলাম না।' এই বিনীত মন্তব্য সত্ত্বেও 'বঙ্গদেশের কৃষক' এর আজকের পাঠক মাঝেই এর দ্বি-বিধ মৌলিকত্ব লক্ষ্য করবেন। প্রথমত, দেশের গড় শ্রীবৃদ্ধি বাড়লেও বন্টনের সমস্যা যে দূরীভূত নাও হতে পারে তা বংকিমের দৃষ্টি এড়ায়নি। দ্বিতীয়ত, গুরুতর শুষ্ক প্রয়োগের মাধ্যমে দেশীয় পণ্য সংরক্ষণের নীতিকে

তিনি 'মহাত্মামাত্রক সমাজনীতিসূত্র' বলে অভিহিত করেছিলেন। দ্বারকানাথ ঠাকুরের মত তিনিও ছিলেন মুক্ত-বাণিজ্যের সমর্থক। তাঁর ভাষায় 'আধুনিক অনর্গল বানিজ্য প্রণালী (Free Trade) সংস্থাপন' দেশের শ্রীবৃদ্ধির স্বার্থেই গ্রহণ করা জরুরী: 'Protection' হইতে ইউরোপে কি অনিষ্ট ঘটিয়াছিল, তাহা যিনি জানিতে ইচ্ছা করেন, তিনি বক্তৃকার গ্রন্থ পাঠ করিবেন।

বংকিম আজকের অর্থে প্রবৃদ্ধি-বাদী (Growth Fundamentalist) ছিলেন না। তিনি শ্রীবৃদ্ধির পর্যালোচনার পাশাপাশি বন্টনের সমস্যা তুলে ধরেছিলেন। আবার তিনিই সংরক্ষণমূলক নীতির বিরুদ্ধে কলম তুলে মুক্ত-বাণিজ্যের পক্ষে অবস্থান গ্রহণ করেছিলেন। এর মধ্যে দিয়েই বংকিমের অর্থনৈতিক চিন্তার বিশিষ্টতা ফুটে উঠেছিল। আজকের যুগেও এর তাৎপর্য অনস্বীকার্য।

বন্টন-সম্পর্কিত বংকিমের মতটি পরবর্তী বাঙালী অর্থনৈতিক চিন্তাকে প্রভাবিত করেছিল এবং এখনো প্রথমে তা করে আসছে। বংকিমের অননুকরণীয় জবানীতেই তা শোনা যাক :

'আজি কালি বড় গোল শুনা যায় যে, আমাদের দেশের বড় শ্রীবৃদ্ধি হইতেছে। এতকাল আমাদের দেশ উৎসন্ন যাইতেছিল। এক্ষণে ইংরেজের শাসনকৌশলে আমরা সভ্য হইতেছি। আমাদের দেশের বড় মঙ্গল হইতেছে। --- এই মঙ্গল ছড়াছড়ির মধ্যে আমার একটি কথা জিজ্ঞাস্য আছে, কাহার এত মঙ্গল? হাসিম শেখ আর রামা কৈবর্ত দুই গ্রহরের রৌদ্রে, খালি মাথায়, খালি পায়ের, এক হাঁটু কাদার উপর দিয়া দুইটা অস্ত্রচর্ম্ববিশিষ্ট বলদে, ভোঁতা হাল ধার করিয়া আনিয়া চষিতেছে, উহাদের কি মঙ্গল হইয়াছে?-- তাহার পরদিন প্রাতে আবা সেই এক হাঁটু কাদায় কাজ করিতে যাইবে। যাইবার সময়, হয় জমিদার, নয় মহাজন পথ হইতে ধরিয়া লইয়া গিয়া দেনার জন্য বসাইয়া রাখিবে, কাজ হইবে না। নয়তো চষিবার সময় জমিদার জমিখানি কাড়িয়া লইবেন, তাহা হইলে সে বৎসর কি করিবেন? উপবাস-সপরিবারে উপবাস। বল দেখি চশমা নাকে বাবু! ইহাদের কি মঙ্গল হইয়াছে? তুমি লেখাপড়া শিখিয়া ইহাদিগের কি মঙ্গল সাধিয়াছ? আর তুমি ইংরেজ বাহাদুর। -- তুমি বল দেখি যে, তোমা হইতে এই হাশিম শেখ আর রামা কৈবর্তের কি উপকার হইয়াছে?-- আমি বলি অনুমাত্র না, কণামাত্রও না। তাহা যদি না হইল তবে আমি তোমাদের সঙ্গে মঙ্গলের ঘটায় উলুধনি দিব না। দেশের মঙ্গল? দেশের মঙ্গল, কাহার মঙ্গল? তোমার আমার মঙ্গল দেখিতেছি, কিন্তু তুমি আমি কি দেশ? তুমি আমি দেশের কয়জন? আর এই কৃষিজীবী কয় জন? তাহাদের ত্যাগ করিলে দেশে কয়জন থাকে? হিসাব করিলে তাহারা ই দেশ--দেশের অধিকাংশ লোকই কৃষিজীবী। তোমা হইতে আমা হইতে কোন কার্য হইতে পারে? কিন্তু সকল কৃষিজীবী ক্ষেপিলে কে কোথায় থাকিবে? কি না হইবে? যেখানে তাহাদের মঙ্গল নাই, সেখানে দেশের কোন মঙ্গল নাই'।

জমিদারী প্রথা নিয়ে অন্ততঃ বংকিমের মনে কোন সংশয় ছিল না। একথা তিনি তীব্র স্বরে বলেছেন। বাক্তসি লক্ষ্য করার মত। 'জীবের শত্রু জীব, মনুষ্যের শত্রু মনুষ্য, বাঙ্গালী কৃষকের শত্রু বাঙ্গালী ভূস্বামী। ব্যাঘ্রাদি বৃহৎ জন্তু, ছাগাদি ক্ষুদ্র জন্তুগণকে ভক্ষণ করে; রোহিতাদি বৃহৎ মৎস্য, সদরীদিগকে ভক্ষণ করে; জমিদার নামক বড়মানুষ কৃষক নামক ছোট মানুষকে ভক্ষণ করে।

সবশেষে তার অনুসিদ্ধান্ত :

"এই চিরস্থায়ী বন্দোবস্ত জমিদারের না হইয়া প্রজার সঙ্গে হওয়াই উচিত ছিল। তাহা হইলেই নির্দোষ হইত। তাহা না হওয়াতেই ভ্রমাত্মক। অন্যায় এবং অনিষ্টজনক হইয়াছে।"

আজকের দিনে সম্পদ-বন্টনে আদি-বৈষম্য কীভাবে পরবর্তী অর্থনৈতিক প্রবৃদ্ধিকে মন্দীভূত করে সে সম্পর্কে বিস্তৃত তত্ত্ব ও তথ্য পাচ্ছি। কিন্তু বংকিম উনিশ শতকেই তা প্রত্যক্ষ করেছিলেন। তাকে আমাদের পুনর্মূল্যায়ন করা প্রয়োজন।

৫। শ্রীবৃদ্ধি ও বন্টনের মধ্যে যে আন্তঃসম্পর্ক বংকিম চন্দ্রের রচনায় ধরা পরেছিল তা পরবর্তীতে সামাজিক ইনসার্ফের সাথে প্রবন্ধি' (Growth with Social Justice) তত্ত্বের মধ্যে বিকাশ পায়। 'স্বদেশী সমাজ' রচনায় পল্লী জীবনের পুনর্গঠনের কথা বলে বাঙ্গালী অর্থনৈতিক চিন্তায় পল্লীমুখীনতা, সমতামুখীনতা ও জনমুখীনতার প্রবণতাকে আরো উষ্ণে দিয়েছিলেন। রবীন্দ্র-প্রভাবিত প্রশান্ত চন্দ্র মহলানবীশ এই ধারার সপক্ষে দাঁড়িয়েছিলেন। সমগ্র শান্তিনিকেতন সংস্কৃতিই ছিল এই ভাবাদর্শের বলয়ে। এই প্রভাব আজকের অমর্ত্য সেন অবধি প্রবহমান। ষাটের দশকের বাঙ্গালী অর্থনীতিবিদদের রচনায় পূর্ব-পশ্চিমের মধ্যে বৈষম্যের যে প্রসঙ্গ ঘুরে ফিরে আসত তার পিছনে উপর্যুক্ত বন্টনমুখী ঐতিহ্য ক্রিয়াশীল ছিল। এই ঐতিহ্যের আশ্রয়েই নুরুল ইসলাম রেহমান সোবহান, আনিসুর রহমান, আখলাকুর রহমান, মোজাফ্ফর আহমেদ, মোশাররফ হোসেন, স্বদেশ বোস, আজিজুর রহমান খান প্রমুখ পূর্ব-পশ্চিমের মধ্যে Parity-র কথা বলতেন। গ্রামীণ অর্থনীতির ও গ্রামীণ দারিদ্রের কথা বলতেন। এই ঐতিহ্য স্বাধীনতা পরবর্তীকালে অর্থনীতি-চর্চায় যারা অগ্রসর হয়েছেন তাদের মধ্যেও সঞ্চারিত হয়েছে। বাঙ্গালী অর্থনৈতিক চিন্তায় কৃষি ও গ্রামীণ অর্থনীতি এক প্রধান অংশ জুড়ে আছে আজ অবধি।

৬। দেশের শ্রীবৃদ্ধি বেগবান করার ক্ষেত্রে বহির্বাণিজ্যের গুরুত্ব নিয়ে বংকিমের দ্বিতীয় মতটি নিয়ে সেদিন যেমন ছিল, আজও তা বিতর্কের বিষয়বস্তু হয়ে আছে। বাণিজ্যের ক্ষেত্রে সংরক্ষণশীলতা, সামগ্রিকভাবে অন্তর্মুখীনতা (Inward Orientation) যে শেষের বিচারে দেশের মঙ্গল বয়ে আনতে পারে না এ বিষয়ে বংকিমের দৃঢ় মত ছিল। বহির্বাণিজ্য-জনিত প্রতিযোগিতায় 'ক্রেতাদিগের যে ক্ষতি নাই' তা তিনি প্রথমে দেখালেন। তবে এর ফলে যে দেশীয় কোন কোন শিল্পে ক্ষয়-ক্ষতি হতে পারে এই অভিযোগের পরিপ্রেক্ষিতে তার জবাব ছিল দেশের শ্রীবৃদ্ধির জন্য অলাভজনক পেশা বা ব্যবসার পশ্চাপসরনই কাম্যঃ 'বাণিজ্যের হেতু গ্রাহকদের পূর্বব্যবসায়ের হানি হয়, নুতন ব্যবসায়াবলম্বনে তাহাদের ক্ষতিপূরণ হয়। অর্থাৎ, প্রবৃদ্ধির প্রক্রিয়ায় কাঠামোগত পরিবর্তন অনস্বীকার্য, তাতে স্বল্প মেয়াদী কায়ক্ৰেশ থাকলেও।

উপরোক্ত মতে সবাই সায় দেবেন সেই আশা করি না। কিন্তু বংকিম চন্দ্রের বাণিজ্য চিন্তার মধ্যে আধুনিক অর্থশাস্ত্রের একটি প্রধান ধারার সূচনা দেখা যায়। বাঙ্গালীর অর্থনৈতিক চৈতন্য মানেই বাণিজ্য-বিরোধী এবং সংরক্ষণশীল, ইতিহাস বিচার করলে তার পক্ষে সমর্থন মেলে না। আন্তর্জাতিক বাণিজ্য ও বিশ্বায়নকে তাঁরা এড়িয়ে চলতে চাননি। এই অর্থে তাঁরা বিস্ময়কর ভাবে সর্বাধুনিক।

৭। 'স্বদেশী সমাজ' প্রবন্ধে রবীন্দ্রনাথ আরো দুটি আধুনিক উন্নয়ন-প্রসঙ্গের আলোচনা করেছিলেন। একটি হচ্ছে, উন্নয়নে রাষ্ট্রের ভূমিকা। অন্যটি হচ্ছে, জনশিক্ষা ও জনস্বাস্থ্যের গুরুত্ব।

রাষ্ট্রের সমালোচনা রবীন্দ্রনাথের উন্নয়ন-চিন্তার একটি মৌলিক বৈশিষ্ট্য। এ দিকটায় আরো মনোযোগ দেওয়া প্রয়োজন। অনুদান থেকে শিক্ষাদান, স্বাস্থ্য ব্যবস্থা থেকে পল্লী-উন্নয়ন সবকিছুর জন্যই রাষ্ট্রের কাছে দ্বারস্থ হওয়ার মনোবৃত্তি রবীন্দ্রনাথ সমর্থন করেননি। যুরোপের ইতিহাস তার মতে, যতটা রাষ্ট্রনৈতিক, আমাদের ইতিহাস ততটাই সমাজনির্ভর। উন্নয়নে সিভিল সমাজের ভূমিকা নিয়ে রবীন্দ্রনাথ গভীরভাবে ভেবেছিলেন, যার উদাহরণ ছড়িয়ে আছে 'আত্মশক্তি', 'ভারতবর্ষ' ও 'কালান্তর' পর্বের রচনাসমূহে।

সমাজের শিক্ষিত শ্রেণীর উচ্চ বিদ্যালয়, আরোগ্য নিকেতন প্রতিষ্ঠা থেকে শুরু করে পল্লী মঙ্গলে এগিয়ে আসা ক্ষেত্রে স্থানীয় সরকারের স্বাধীনতার উপর তিনি জোর দিয়েছিলেন। পঞ্চায়েতের পঞ্চায়েত তত্ত্ব ঘুচিল। অধ্যাবধি আমরা স্বনির্ভর শক্তিশালী এবং স্থানীয় সরকার ব্যবস্থা প্রতিষ্ঠায় ব্যর্থ হচ্ছি।

শুধু তত্ত্বগত রচনা নয় নীচে থেকে এবং রাষ্ট্রের বাইরে থেকে উন্নয়ন-প্রয়াসকে উৎসাহ দেবার জন্য তিনি শ্রীনিকেতন করেছিলেন, বৃত্তিমূলক শিক্ষার বিস্তারের উপর জোর দিয়েছিলেন। কৃষি উৎপাদনশীলতা বাড়ানোর জন্য আধুনিক কৃষি বিজ্ঞানের প্রতি দৃষ্টি আকর্ষণ করেছিলেন (এবং সে কারণে এমনকি জামাতা নগেন্দ্রনাথ ও পুত্র রথীন্দ্রনাথকে কৃষি বিজ্ঞানে উন্নতর প্রশিক্ষণ নিতে বিদেশে পাঠিয়েছিলেন)।

রবীন্দ্রনাথের উন্নয়ন চিন্তার আরো একটি দিক ছিল তার শিক্ষা চিন্তা। শিক্ষার প্রসঙ্গ তার বিপুলায়তন রচনা-কর্মের নানা স্থানে ছড়িয়ে আছে। এর সাক্ষ্য মিলবে বিশ্বভারতী থেকে প্রকাশিত রবীন্দ্রনাথের শিক্ষা চিন্তা সংকলনের মধ্যে। এসবের মধ্যে মূল সুস্টি বৃহত্তর জনমানুষের জন্য প্রাথমিক শিক্ষার ব্যবস্থা করার কথা। বিশেষ ভাবে তিনি জোর দিয়েছিলেন স্ত্রী শিক্ষার উপর। অশিক্ষার অন্ধকার থেকে বৃহত্তর জনগোষ্ঠীকে মুক্ত করতে না পারলে দেশের শ্রীবৃদ্ধি (বা আজকের ভাষায় অর্থনৈতিক প্রবৃদ্ধি) বেগবান করা অসম্ভব বলে তিনি মনে করতেন। জনশিক্ষার গুরুত্ব বড় করে ধরা পড়েছিল বিপ্লবোত্তর রাশিয়ায় গিয়ে, যার প্রতিফলন হয়েছে 'রাশিয়ায় চিঠি'-তে।

রাশিয়ায় গিয়ে সমবায় এর গুরুত্ব তাঁর কাছে ধরা পড়েছিল। সমবায় নিয়ে তাঁর উচ্ছ্বাসের বিবরণ অনেক লিখায় দেখতে পাওয়া যায়। তবে ব্যক্তিগত সম্পত্তি বিলোপে তার মত ছিল না, যেমন ছিল না পুঁজিবাদী মুনাফার মানদণ্ডে অর্থনৈতিক বিকাশের পথ খোঁজার। মানব মঙ্গলের মাধ্যমে অর্থনৈতিক বিকাশ ঘটুক, তিনি চেয়েছিলেন। মানুষকে নিছক পুঁজি হিসাবে (Human Capital) দেখতে চাননি।

গ্রাম-মুখীন উন্নয়ন চিন্তায় রবীন্দ্রনাথের সায় ছিল ঠিকই, কিন্তু তিনি আধুনিক প্রযুক্তি ও শিল্পোন্নয়ন অস্বীকার করেননি। গান্ধীর সাথে লাগসই প্রযুক্তি বাছাইয়ের প্রশ্নে তাঁর যে ঐতিহাসিক বিতর্ক হয়েছিল তাতে তিনি চরকা-নির্ভর স্বল্পোন্নত অর্থনীতিকে অস্বীকার করেছিলেন। দাদা ঠাকুর দ্বারকানাথের প্রতি তার দৃষ্টিভঙ্গী যাই হোক না কেন শিল্পোদ্যোগ হওয়াকে তিনি কখনো অবজ্ঞার চোখে দেখেননি, যেমনটা দেখেননি বহির্বাণিজ্যের মাধ্যমে বিশ্ব অর্থনীতির সাথে যুক্ত হওয়ার প্রয়াসকে।

তবে যন্ত্রসম্ভার অন্ধকার দিক তার চোখে ধরা পড়েছিল। যন্ত্র যাতে মানুষের চেয়ে বড় হয়ে না দেখা দেয় এ কথা তিনি মানতেন। তার রক্তকরবী-র রাজা নিজেরই সৃষ্ট যন্ত্রের ফাঁদে আবদ্ধ। এ কথা তিনি তুলে ধরেছেন। শেষ পর্যন্ত মানুষকেই তিনি উন্নয়নের প্রধান বিন্দুতে স্থান দিয়েছেন। জনশিক্ষা, জনস্বাস্থ্য, স্থানীয় সরকার ও সমবায়, প্রযুক্তি ও বিশ্বায়ন এসব ধারণা মিলিয়ে রবীন্দ্রনাথের অর্থনৈতিক ভাবনা অনন্ত সমৃদ্ধ ঐতিহ্য ভিত্তি ধরে নিয়ে গেছে। একালেও এসব ধারণার প্রাসংগিকতা রয়ে গেছে।

৮। বলা দরকার যে অর্থনীতি সম্বন্ধে রবীন্দ্রনাথের প্রথম পূর্ণাঙ্গ রচনা পাই 'সমবায় নীতি' সংকলনে। বইটি তার জীবদ্দশায় বের হয়নি। 'ভান্ডার' কাগজে যেসব রচনা বেরিয়েছিল তা পরবর্তীতে সংগ্রহ করে 'সমবায় নীতি' যখন বের হয়, রবীন্দ্রনাথ তখন প্রয়াত। অর্থনীতিবিদ নন, কিন্তু অর্থনৈতিক সমস্যা নিয়ে লিখেছিলেন এরকম উদাহরণ আরো পাওয়া যায়। গত শতকের বিশেষ দশকে যেমন বেরিয়েছিল প্রমথ চৌধুরীর 'রায়তের কথা' শীর্ষক বইটি। বস্তুতঃ উনিশ শতক থেকে শুরু করে জমিদারী বিলোপ পর্যন্ত দীর্ঘ

সময়ে বাংলার বিপ্লবের রচনাবলী সংগ্রহ করে একটি সংকলন প্রকাশিত হওয়া উচিত। এতে করে বাংলায় অর্থনৈতিক চিন্তার একটি ইতিহাস ফুটে উঠবে।

৯। উপর্যুক্ত রচনাসমূহের বাইরেও বাংলায় প্রথাগত অর্থশাস্ত্র সম্বন্ধীয় পাঠ্যবই রচনার চেষ্টা হয়েছিল সেযুগেই। আজকের যুগে অর্থনীতি-চর্চার কথা উঠলে সে কথাও স্মরণ করতে হবে বৈকি। এর মধ্যে তিনটি বইয়ের উল্লেখ করা প্রয়োজন। একটি হচ্ছে রাজকৃষ্ণ রায়চৌধুরীর লেখা ‘অর্থ ব্যবহার’ (১৮৬১)। অন্য দুটি বই হচ্ছে নৃসিংহ মুখোপাধ্যায়ের লেখা ‘অর্থনীতি ও অর্থ ব্যবহার’ (১৮৭৪) এবং গোপালচন্দ্র দত্তের লেখা ‘ধনবিজ্ঞান ও ধনবিষয়ক সরল পাঠ’ (১৮৬২)। এর মধ্যে নৃসিংহ মুখোপাধ্যায়ের বইটি সবিশেষ উল্লেখযোগ্য। এর ভূমিকাতে লেখক বলেছিলেন ‘হোয়েটলি, মিল, ফসেট, এডাম স্মিথ ও অন্যান্য সুপ্রসিদ্ধ ইংরেজি ও ফরাসী গ্রন্থকারদিগের গ্রন্থ অবলম্বনপূর্বক এই ক্ষুদ্র পুস্তক আমি রচনা করিলাম। ইহা পুস্তক বিশেষের অনুবাদমাত্র নহে। উক্ত গ্রন্থকারদিগের গ্রন্থ পাঠ করিয়া আমার যেরূপ সংস্কার জন্মিয়াছে তাহাই বাংলা ভাষায় প্রকাশিত করিয়াছি।’

দুঃখের বিষয় বাংলা ভাষায় পাঠ্যবই রচনার ধারা প্রতিষ্ঠিত অর্থনীতিবিদদের আজো তেমন আকৃষ্ট করেনি। এরকম বই রচনার জন্য অর্থশাস্ত্র ও বাংলা ভাষা উভয় ক্ষেত্রেই পারদর্শিতার অভাব নেই। আনন্দ পাবলিশার্স থেকে ‘অর্থনীতি গ্রন্থমালা’ সিরিজে যেসব বই বেরিয়েছে তাতে অনেক লক্ষ প্রতিষ্ঠানের অর্থনীতিবিদেতা লিখেছেন, যেমন অশোক রুদ্র, প্রনব বর্ধন, ধীরেশ ভট্টাচার্য, অন্নান দত্ত, অমর্ত্য সেন, কৌশিক বসু প্রমুখ। শেখোক্ত দুজনের গ্রন্থ অবশ্য ইংরেজি থেকে অনূদিত। যদিও মূল লেখকেরা অনুবাদ নিষ্ঠার সাথে দেখে দিয়েছেন।

পশ্চিমবঙ্গে ‘অর্থনীতি গ্রন্থমালা’ প্রকাশিত হলেও এদেশে সেই ধারা এখনো তেমন ভাবে শুরু হয়নি। বরং এক্ষেত্রে অপেক্ষাকৃত নবীন প্রজন্মের লেখকেরাই বেশী করে সচেতন হয়েছেন। এর মধ্যে নজরুল ইসলাম, আনু মোহাম্মদ, এম,এম, আকাশ, সেলিম জাহান, আতিউর রহমান প্রমুখের নাম উল্লেখ করতে হয়। এর মধ্যে বিশেষ ভাবে বলতে হয় নজরুল ইসলামের দুটি বইয়ের কথা। একটি হচ্ছে, ‘বাংলাদেশের উন্নয়ন-কৌশল প্রসঙ্গে’। ১৯৮২ সালে সেন্টার ফর সোশ্যাল স্টাডিজ থেকে প্রকাশিত। অন্যটির নাম ‘বাংলাদেশের উন্নয়ন-সমস্যা’। ১৯৮৬ সালে জাতীয় সাহিত্য প্রকাশিত। দুটি বইই বিষয়বস্তুর উপস্থাপনা ও মৌলিক বিশ্লেষণে সমৃদ্ধ। বই দুটির প্রসাদগুণ হচ্ছে এর অনবদ্য প্রকাশভঙ্গী ও পরিভাষার চমকপ্রদ ব্যবহার।

আশির দশকে বাংলায় অর্থনীতি বিষয়ক গ্রন্থ প্রকাশনার ধারা যেভাবে বেগবান হয়েছিল তাতে করে এমন মনে হয়েছিল যে, অচিরেই এই শাখাটি সমৃদ্ধ এক পর্যায়ে উন্নীত হবে। বাংলায় অর্থনীতি চর্চার সাথে অনেকেই যুক্ত হয়েছিলেন যার প্রমাণ মিলবে বিআইডিএস থেকে প্রকাশিত ‘বাংলাদেশ উন্নয়ন সমীক্ষা’ ও ঢাকা বিশ্ববিদ্যালয় থেকে প্রকাশিত ‘সমাজ নিরীক্ষণ’-এর পাতায়। নব্বই-এর দশকের শেষে এসে দেখতে পাচ্ছি বাংলায় রচনার ধারা বাস্তবিকই বিলীয়মান, দু’একটি উল্লেখযোগ্য ব্যতিক্রম ছাড়া। গত কয়েক বছরের মধ্যে বাংলায় অর্থনীতির গ্রন্থ বড় একটা প্রকাশিত হয়নি। অবশ্য পত্র-পত্রিকার কলাম লেখকদের অনেকেই অর্থনীতি বিষয়ে লিখেছেন সমকালীন বিভিন্ন বিষয়ে। এর মধ্যে আবু আহমেদ, আব্দুল বায়েস প্রায়শ লিখেছেন। নব্বইয়ের দশকে আরেকটি প্রাসংগিক উল্লেখ্য বিষয় হলো অর্থনীতির বিভিন্ন বিষয় নিয়ে পত্র-পত্রিকায় ‘সংলাপ’ আয়োজন ও তার প্রকাশ। প্রথম আলো, ভোরের কাগজ, সংবাদ, জনকণ্ঠ প্রভৃতি দৈনিকে এ জাতীয় অনেক সংলাপের বিবরণী প্রকাশিত হয়েছে এবং সাধারণ পাঠকদের মধ্যে তা যথেষ্ট প্রশংসা কুড়িয়েছে। অর্থনীতির নানা বিষয়ে সংলাপ-আয়োজনের ক্ষেত্রে সেন্টার ফর পলিসি ডায়ালগ যথাযথ

এগিয়ে এসেছে এই সময় কালেই। অবশ্য উক্ত প্রতিষ্ঠান থেকে প্রকাশিত বেশীর ভাগ সংলাপই বের হয়েছে ইংরেজি ভাষায়।

নব্বইয়ের দশকে বাংলা ভাষায় অর্থনীতি বিষয়ক গ্রন্থসমূহের মধ্যে বিশেষভাবে উল্লেখ্য বিআইডিএস থেকে রুশীদান ইসলাম রহমান সম্পাদিত দারিদ্র বিষয়ক সংকলন পর্যালোচনা-র গ্রন্থমালা। এ বইগুলো বাংলা ভাষায় উন্নয়ন অর্থনীতি চর্চা ও গবেষণায় উৎসাহী ছাত্র-ছাত্রীদেরই শুধু উপকারে এসেছে তা-ই নয়, বরং অর্থনীতি সম্পর্কে জানা-বোঝায় আগ্রহী এমন সাধারণ পাঠকের দৃষ্টি আকর্ষণ করতে পেরেছে।

এসব বিচ্ছিন্ন প্রয়াস সত্ত্বেও বাংলা ভাষায় অর্থনীতির লেখা এখনো বয়ে গেছে প্রাথমিক পর্যায়েই। অথচ এসব লেখার চাহিদা আগের যেকোন সময়ের চেয়ে এখন অনেক বেশী। বিশ্ববিদ্যালয় ও কলেজের উচ্চশিক্ষার জন্য বাংলায় লেখা অর্থনীতি বইয়ের বিপুল চাহিদা রয়ে গেছে। শুধু অর্থনীতির শিক্ষার্থীদের জন্য নয়, বিশ্ববিদ্যালয়ের অন্য অনেক বিভাগেই আজকাল উন্নয়ন-অর্থনীতি বা উন্নয়ন বিজ্ঞান পড়ানো হয়ে থাকে। এদের জন্য আলাদা করে কোন পাঠ্যবই চোখে পড়ে না। সম্ভবতঃ অর্থনীতির বাইরের ছাত্র-ছাত্রীরা যাদেরকে উন্নয়ন শাস্ত্র পড়তে হয় (যথাঃ গণসংযোগ ও সাংবাদিকতা, ইতিহাস, সমাজবিদ্যা বিভাগের শিক্ষা কার্যক্রমে) তাদের জন্য এমনকি ইংরেজীতেও সরল পাঠ সহসা পাওয়া যায় না। পাঠ্যসূচীতে ঠিকই নানাবিধ বিষয়ের অবতারণা করা হয়ে থাকে, কিন্তু শিক্ষাদান অসম্পূর্ণ থেকে যায়।

১০। চাহিদা সত্ত্বেও কেন বাংলা ভাষায় অর্থনীতি-চর্চার ধারা বেগবান হয়ে উঠছে না এর সহজ উত্তর খুঁজে পাওয়া ভার। এর একটি সরল ব্যাখ্যা হতে পারত বাংলা ভাষায় লেখাতে অসামর্থ্য। কিন্তু এ যুক্তিকে মেনে নেওয়া যাচ্ছে না। কেননা ইংরেজীতে বেশীর ভাগ সময়েই লিখে থাকেন এমন অনেক অর্থনীতিবিদই কোন না কোন সময় চমৎকার ঝরঝরে বাংলায় প্রবন্ধ রচনা করে থাকবেন। নামোল্লেখ করে আমি তাদের বিব্রত করতে চাই না। চাপের মুখে পড়ে হোক বা হঠাৎ তাগিদের ঝলকানিতে স্ব-প্ররোচিত হয়ে হোক এরা যখনই বাংলায় লিখতে চেয়েছেন তখন তা অসাধ্য কর্ম হয়ে থাকে নি। মাহবুব হোসেন বা আবু আবদুল্লাহ-র মত প্রাজ্ঞ সাধু গদ্যে অর্থনীতি সমিতিরই অনেক বৈঠকে তারা বাংলায় তাদের বক্তব্য লিখিত আকারে উপস্থাপন করেছিলেন।

ঘাটতির আরেকটি উত্তর হতে পারে সাধারণ ভাবে বাংলা ভাষায় রচনায় অনীহা। একথা অধিকাংশ অর্থনীতিবিদদের জন্যই প্রযোজ্য হতে পারে না। কেননা অর্থনীতির বাইরের এমন বিষয় নিয়ে (যথাঃ রাজনীতি, সমাজনীতি) এরা পত্র-পত্রিকায় লিখেছেন কখনো কখনো বা এখনো লিখছেন। সম্ভবত ইংরেজীতে লেখার প্রধান কারণ বিশেষজ্ঞ ও নীতিনির্ধারণী ক্ষেত্রের বৃহত্তর পাঠকবর্গের প্রতি লেখকের দৃষ্টি। ভবতোষ দত্তও তার লেখায় এমন একটি কারণের উপর জোর দিয়েছেন। 'প্রসঙ্গ অর্থনীতি' গ্রন্থে তিনি বলেছেন, 'রামমোহনের অর্থনীতি সঙ্কীর্ণ বক্তব্য বিলেতি গভর্নমেন্ট সদস্যদের জন্য ইংরেজিতে লিখতে হয়েছিল। রমেশচন্দ্রের অর্থনৈতিক ইতিহাস বা বাঙালী কৃষক ও প্রজা সম্বন্ধে বইও শাসক ও বিদগ্ধ ইংরেজী পাঠকের উদ্দেশ্যেই লেখা। 'আজকাল যে সব বাঙ্গালী তরুণ অর্থনীতিবিদ তাদের গবষণা ও নুতন চিন্তা দিয়ে বিশ্বময় খ্যাতি অর্জন করেছেন ও করছেন, তাঁদেরও ইংরেজীতে লেখা ছাড়া গত্যন্তর নেই। তারপরও তিনি এ আশা ছাড়েন নি যে, 'যারা ইংরেজীতে উঁচু দরের বই বা প্রবন্ধ লিখেছেন তাঁরা সঙ্গে সঙ্গে বাংলায়ও সেই রকমের উঁচু মানের বই লিখবেন। ইংরেজী লেখা হবে অল্প শিক্ষিতের জন্য- এই বিপজ্জনক ধারণা থেকে আমাদের মুক্ত হওয়া প্রয়োজন।

আমার ধারণা, বিশেষজ্ঞ অর্থনীতিবিদেরা কেন বাংলায় বিশেষজ্ঞ পাঠকদের জন্য উন্নত মানের রচনা কর্মে অগ্রসর হন না তার বড় কারণ পৃষ্ঠপোষকতার অভাব। সরকার, বিশ্ববিদ্যালয়, বাংলা একাডেমীর মত প্রতিষ্ঠান, প্রকাশনা সংস্থাগুলি যদি এদিকে বিশেষভাবে মনোযোগ দিতেন, অর্থনীতি সমিতি যদি এক্ষেত্রে বিশেষ ভাবে এগিয়ে আসত, সাহিত্য আকাদেমীর পুরস্কার বা জ্ঞানপীঠ পুরস্কারের মত করে যদি এ বিষয়ে মৌলিক ও উন্নতমানের রচনা কর্মের জন্য উৎসাহদানের ব্যবস্থা থাকত তাহলে লক্ষপ্রতিষ্ঠ অর্থনীতিবিদরাও বাংলা ভাষায় মৌলিক গবেষণা কর্ম রচনায় এগিয়ে আসতেন। এখন যারা মূলত পত্র-পত্রিকায় আগ্রহে বাংলায় স্বল্পায়তন কলাম রচনায় ব্যাপৃত তারা আরো বেশী করে মৌলিক গবেষণা ভিত্তিক রচনায় এগিয়ে আসতেন। গবেষণা ভিত্তিক রচনায় এগিয়ে আসতেন। এমন হতে পারে যে বাংলায় মৌলিক গবেষণা-গ্রন্থের বিশেষ কাটটি নেই। আর সে কারণে ব্যক্তিখাতের প্রকাশনা সংস্থাগুলি এসব রচনার পৃষ্ঠপোষকতায় অনগ্রহী। এটা এক ধরনের Market Failure বা বাজার দৌর্বল্যও বটে। কিন্তু সে কারণেই আরো বিশেষভাবে সরকার, বিশ্ববিদ্যালয়, বাংলা আকাদেমী, জনহিতৈষী প্রতিষ্ঠান বা পেশাগত সমিতিতে এক্ষেত্রে পৃষ্ঠপোষকতা দানে এগিয়ে আসতে হবে।

১১। অনেক সময় পরিভাষার অভাবের কথা তোলা হয়। যেন সে কারনেই বাংলায় অর্থনীতি চর্চা হয়ে উঠছে না। এটা অবশ্য খোঁড়া যুক্তি। পরিভাষাও এক ধরনের ভাষা। ভাষার মতই ব্যবহারেই তার প্রাণচঞ্চলতা। অধিকাংশের কাছে যদি গ্রহণযোগ্য হয়ে উঠে তাহলে ভাবার্থ নিয়ে বিশেষজ্ঞ তর্ক যাই থাক না কেন পরিভাষা ক্রমশঃই চলতি ভাষার রূপ পায়। আগে সবাই ঐকমত্যে পৌছাব পরিভাষার বিষয়ে এবং অতঃপর লেখালেখি শুরু হবে এমনটা আশা করা অসংগত দাবী। বরং লিখতে লিখতে পরিভাষা আমাদের ভাষার মধ্যে স্থান করে নেবে।

একটি উদাহরণ দিলে বিষয়টি স্পষ্ট হয়। 'জীবনযাত্রা ও অর্থনীতি' গ্রন্থের প্রারম্ভে অমর্ত্য সেন তাঁর পছন্দের বেশ কিছু পরিভাষার প্রস্তাব রেখেছেন। এর মধ্যে একটি হলো - Economic Growth, যার বাংলা তিনি করেছেন 'আর্থিক প্রসার' আমাদের এখানে অবশ্য 'অর্থনৈতিক প্রবৃদ্ধি' শব্দটি চালু হয়ে গেছে। Utility শব্দের তিনি বাংলা করেছেন 'তৃপ্তি' আমাদের চলতি অর্থনৈতিক আলোচনায় 'উপযোগিতা' স্থান করে নিয়েছে। খুব বেশী অর্থ-বিকৃতি না ঘটলে সর্বজনগ্রাহ্যতা গ্রহণযোগ্যতার মানদণ্ড হিসেবে বিবেচিত হতে পারে। তবে সতর্ক না থাকলে অর্থ-বিকৃতি এড়ানো সম্ভব নয়। উক্ত গ্রন্থেই অমর্ত্য সেন দেখান যে Elasticity-র ভুল বাংলা হিসেবে 'স্থিতিস্থাপকতা' ব্যবহৃত হয়ে আসছে। এ প্রসঙ্গে তিনি যা বলেছেন সেটা শিক্ষণীয়ঃ 'অর্থনীতিতে Elasticity-র ব্যবহার হয় এক জিনিসের প্রভাব অন্য জিনিসের উপর কত তার পরিমাপ হিসেবে। যেমন, দামের প্রভাব চাহিদা পরিমাপের উপর কতটা সে মাপ প্রকাশ করে Price elasticity of demand। রজী Elasticity শব্দের এই অর্থ পদার্থবিদ্যার Elasticity শব্দের সম্পূর্ণ ভিন্ন। দুর্ভাগ্যক্রমে বাংলা অর্থনীতিতে পদার্থবিদ্যার আনুগত্য Elasticity অনুবাদ করা হয়েছে 'স্থিতিস্থাপকতা'। পদার্থবিদ্যার পা চেটে বড় হওয়ার প্রচেষ্টা অর্থনীতিতে অবশ্য নুতন নয়। কিন্তু Elasticity-র দুই অর্থের বিভ্রান্তি খুবই আশ্চর্যজনক। 'তাঁর নিজের মত হল Elasticity-র বাংলা হওয়া উচিতঃ প্রভাব গ্রাহ্যতা। অমর্ত্য সেন কতগুলি চমকপ্রদ পরিভাষার প্রস্তাব করেছেন যেমন, Basic needs (যাকে আমরা ভুলক্রমে 'মৌলিক চাহিদা' বলে থাকি)-র বাংলা হিসেবে 'প্রাথমিক পণ্যপ্রয়োজন'। এক্ষেত্রে অমর্ত্য সেনের ভাষা হচ্ছে 'যদিও ইংরেজি ভাষায় Basic needs-এর অর্থ শুধু পণ্যের মানদণ্ডে করার প্রয়োজন নেই (যেমন, লোকের স্নেহ ভালোবাসা পাওয়াও প্রাথমিক প্রয়োজন হিসেবে গণ্য হতে পারে, তবুও এটা বলা আবশ্যিক যে, অর্থনীতিতে এই টার্মটির ব্যবহার করা হয়েছে জিনিসপত্রের প্রয়োজনের ক্ষেত্রেই'। একইভাবে Axiom-এর বাংলা 'স্বতঃসিদ্ধ

সত্য' (যা সচরাচর করা হয়ে থাকে) না করে সেনের পছন্দ 'প্রাক-স্বীকারোক্তি'। এক্ষেত্রেও তার যুক্তি হলো, জ্যামিতির Axiom- 'অমোঘ সত্যতাকে নির্দেশ করে। কিন্তু অর্থশাস্ত্রে Axiom বলতে যে উক্তিগুলি যুক্তির গোড়াতেই মেনে নেওয়া হয় সত্য বলে, সেটাকেই বুঝানো হয়ে থাকে। এক্ষেত্রে কেন মানা হচ্ছে ('স্বতঃসিদ্ধ সত্য বলে, না সমাজে স্বীকৃত বলে, না শুধু যুক্তির খাতিরে), তার ভিত্তিতে কোন পার্থক্য করা হয় না। একইভাবে তার প্রস্তাব হচ্ছে Endowment হচ্ছে 'প্রাক-অধিকার', Equilibrium হচ্ছে 'সমস্থিতি' ('ভারসাম্যতা' নয়), Normative হচ্ছে 'নীতিভিত্তিক'। অন্যত্র Commodity Fetishism এর পরিভাষা করেছেন 'পণ্যমোহবদ্ধতা'। ব্যাখ্যাটিও লক্ষ্য করার মতঃ

'ধনতান্ত্রিক সমাজে পণ্য কেনাবেচার গুরুত্ব এতটা যে অনেকসময় মানবিক সম্পর্কগুলিকে পণ্যের সম্পর্ক বলে মনে হতে চায়। পণ্যের মূল্য যে সম্পূর্ণ অবস্থাসাপেক্ষ এই বড় সত্যটি ভুলে যাওয়া কঠিন নয় এমন সমাজে, যেখানে সাফল্য বিচার হয় প্রধানতঃ পণ্য মালিকানার মাপকাঠিতে। মানুষের জীবনের দিকে লক্ষ্য করে শুধুমাত্র পণ্যকেই মূল্যবান মনে করার প্রবণতা বিষয়ে কার্ল মার্কস এর সুন্দর আলোচনা আছে। এর নাম তিনি দিয়েছিলেন Commodity Fetishism যার বাংলা এখানে করা হয়েছে 'পণ্যমোহবদ্ধতা'।

সুষ্ঠু পরিভাষার জন্য চাই ভাষাবিদ অর্থনীতিবিদদের মধ্যে ঐক্যোট। আরো ভাল হয় যদি অর্থনীতিবিদ নিজেই ভাষার মণিমুজ্ঞে খুঁজতে ভালোবাসে। টি,এস, এলিয়ট বলেছিলেন, একমাত্র একজন কবি পারেন কবিতার সফল অনুবাদে প্রবৃত্ত হতে। একথা সম্ভবতঃ অর্থনৈতিক পরিভাষা নির্মাণের ক্ষেত্রে আরো বেশী করে সত্য। অর্থনীতিবিদেরা এগিয়ে এলে ক্রিয়াপদগুলি বাংলায় আর টার্মগুলি ইংরেজিতে বলা বা লেখা বা শোনার যন্ত্রণা থেকে আমরা মুক্তি পাব।

Growth Trend of Aged in Bangladesh and Related Issues

M. Zainul Abedin*

1. Introduction

In terms of population Bangladesh is the ninth largest, and a populous country of the world. She had a total population of 113.2 million in 1993. In the same year population per square kilometre were 765 in Bangladesh as against 273 in India, 156 in Pakistan, 145 in Nepal, 266 in Srilanka and only 32 in Bhutan¹. In that year (1993) life expectancy at birth was 58 years for Bangladesh as against 61 years for India, 62 years for Pakistan, 72 years for Srilanka, 54 years for Nepal and 48 years for Bhutan.²

Bangladesh is not only a thickly populated region but also one of the poorest countries of the world. In 1993 per capita GNP in Bangladesh was only Us\$220 as against \$290 in India, \$430 in Pakistan, \$600 in Srilanka, \$160 in Nepal and \$170 in Bhutan.³ Poor per capita income partly demonstrates her poverty situation. Again, poverty is very much linked with high birth rate as well as high death rate. However, thanks to the development of medical facilities which retarded high death rate, specially during the post-liberation period (after 1971). As a result life expectancy at birth rose from nearly 47 years in early 1970s to 58 years in early 1990s. Since the birth rate could not be brought down simultaneously, the growth rate of population remained over 2 per cent during 1970s and 1980s. Only in the early 1990s, the government claimed that the growth rate of population went below 2 per cent. The purposes of this article are to show the growth trend of Bangladesh population in general and the aged in particular, and to suggest some measures for solving the the problems of the senior citizens. Secondary sources of data are used for this purpose.

2. Growth Trend of Population

The population of Bangladesh was only about 29 million at the beginning of the 20th century (1901). Before the First World War it rose to over 31 million in 1911

* Professor of Economics, Institute of Bangladesh Studies, Rajshahi University

1. Statistical Pocket Book of Bangladesh, BBS, 1995, P. 355

2. Ibid., P. 356

3. Ibid., P. 355

(Table 1). The total increase of the decade was slightly over 9 per cent and the exponential annual growth rate was less than 1 per cent. This slow growth rate of population declined further during 1911-1931.

Table 1: Growth Trend of Bangladesh Population (1901-1991)

Census year	Population	Change in %	Growth rate (exponential)
1901	28,927,786	-	-
1911	31,555,056	9.08	0.94
1921	33,254,096	5.38	0.60
1931	35,604,170	7.07	0.74
1941	41,997,297	17.96	1.70
1951	44,165,740	5.16	0.50
1961	55,222,663	25.04	2.26
1974	76,398,000	38.35	2.48
1981	89,912,000	17.69	2.35
1991	111,455,185	23.96	2.17

Source: BBS, *Statistical Pocket Book of Bangladesh, 1995*, p. 130.

During the next decade (1931-41) the total population went up by about 18 per cent with an alarming annual growth rate of 1.7 per cent. The decade of 1941-51 experienced a very slow growth rate of population not because of the fall of birth rate but for the migration of minority population to India during 1947-51. The real population boom took place during the decade of 1951-61 when population jumped from about 44 million to over 55 million with a rise of over 25 per cent and an annual growth rate of 2.26 per cent.

The post-liberation period (1971-91) experienced a very high growth rate (over 2%) of population in Bangladesh. As a result the total population swelled from about 70 million in 1971 to over 111 million in 1991. With the boom of total population, the size of aged in Bangladesh also increased.

3. Growth of Aged by Sex

Table-2 exhibits the growth trend of aged (55 years and over) in Bangladesh by sex. Within a period of seven years (1974-81) the total population of Bangladesh increased by 22 per cent while the number of aged rose by 21 per cent. Among the aged, the number of male went up by 20 per cent as against that of female rose by 22 per cent.

**Table 2: Growth Trend of Aged in Bangladesh By Sex
(1974-2000 A.D.)**

		(in '000')		
Census year		Total Population	Age Group	
			1-54	55+
1974	Both sex	71478(100)	66069(92)	5409(8)
	Male	37069(100)	34001((92)	3068(8)
	Female	34409(100)	32069(93)	2340(7)
1981	Both sex	87120(100)	80595(93)	6525(7)
	Male	44919(100)	41244(92)	3675(8)
	Female	42201(100)	39351(93)	2850(7)
Decade (7 years) Variation (%)	Both sex	22	22	21
	Male	21	21	20
	Female	23	23	22
1991	Both sex	106315(100)	98662(93)	7653(7)
	Male	54728(100)	50432(92)	4296(8)
	Female	51587(100)	48231(93)	3356(7)
Decade variation(%)	Both sex	22	22	17
	Male	22	22	16
	Female	22	22	18
2000	Both sex	139693(100)	128229(92)	11464(8)
	Male	71916(100)	65943(92)	5973(8)
	Female	67777(100)	62286(92)	5491(8)
Decade Variation(%)	Both sex	31	30	50
	Male	31	31	39
	Female	31	29	64
Variation in 1991 over 1974(%)	Both sex	49	49	41
	Male	48	48	40
	Female	50	50	43

Source: BBS, *Statistical Pocket Book of Bangladesh*, different issues. Figures in parentheses show percentages.

During the next decade (1981-91) the number of aged rose by 17 per cent. Among them, the number of male went up by 16 per cent as against that of female increased by 18 per cent.

It was estimated that the number of aged in Bangladesh would increase by 50 per cent during the decade of 1991-2000. Among them the number of male population would rise by 39 per cent while that of female would record a rise of 64 per cent.

At the end of Table-2 it was estimated that the number of aged in Bangladesh went up by 41 per cent during a period of about two decades (1974-91). But it is interesting to note that the same group of population will rise by 50 per cent within only a decade (1991-200). From Table - 2 it is also clear that the rate of change in the number of aged female group remains higher than that of the male group.

Table-2 also reveals that the percentage shares of the aged in total population were 8 in 1974, 7 in 1981 and 7 in 1991. However, this share is expected to be 8 in the year 2000.

4. Urban and Rural Distribution of the Aged

Table - 3 displays the urban and rural distribution pattern of the aged in Bangladesh over a period of nearly two decades (1974-91). It also exhibits the changing pattern of the growth of aged in urban and rural Bangladesh. Over a period of seven years

Table 3: Bangladesh Population by Age Group, Sex, Urban and Rural Distribution (1974-94)

(in '000')

Census Year		Urban: Age Group			Rural: Age Group		
		Total	1-54	55+	Total	1-54	55+
1974	Both sex	6274	5916(94)	358(6)	65204	60153(92)	-
	Male	4541	4327(95)	214(5)	33532	30678(91)	2854(9)
	Female	2733	2589(94)	144(6)	31673	29476(93)	2197(7)
1981	Both sex	13228	12371(94)	857(6)	73892	68224(92)	5668(8)
	Male	7370	6861(93)	509(7)	37549	34383(93)	3166(8)
	Female	5858	5510(94)	348(6)	36343	33841(93)	2502(7)
Decade variation (%)	Both sex	111	109	139	13	13	12
	Male	62	59	138	12	12	11
	Female	114	113	142	15	15	14
1991	Both sex	20872	19642(94)	1230(6)	85443	79019(92)	6424(8)
	Male	11301	10588(94)	713(6)	43427	39843(92)	3584(8)
	Female	9571	9054(95)	517(5)	42016	39175(93)	2840(7)
Decade variation (%)	Both sex	58	59	44	16	16	13
	Male	53	54	40	16	16	13
	Female	63	64	49	16	16	14

Source: BBS, *Statistical Pocket Book of Bangladesh*, various issues.

Note: Figures in the parentheses indicate percentage.

(1974-81) total urban population increased by 111 per cent while the urban aged jumped by as high as 139 per cent. On the contrary, the total rural population rose by 13 per cent as against the rise of rural aged by only 12 per cent during the same period.

However, the next decade (1981-91) experienced 58 per cent rise of total urban population as against 44 per cent increase of the aged in urban areas. In the rural areas there was 13 per cent increase of the aged as against 16 per cent rise of total population during that decade. It is interesting to note that the rise of female group was always higher than that of the male group in both the urban and rural areas.

The growth rates of urban population as well as urban aged are much higher than the same of national averages. The main factor is the migration of rural population to urban areas for many reasons. In case of the aged it is more important because the urban working male member of the family shifts his dependents and aged mother and father from rural to urban areas. This occurs in many cases. The share of the aged in total population also increases because of the declining fertility since it has⁶ significant effect of decreasing the proportion of the young and of increasing the proportion of the elderly⁴ (UN 1994).

5. Problems of the Aged

Most of the aged in Bangladesh suffer from various diseases and health problems. A study recorded the following common diseases of the aged: Pain (15.4%), Diarrhoea (13%), Anaemia weakness (10%), Asthma (10%), Cough and cold (7%), Peptic ulcer, (7) and blood pressure (6%), Eye disease (5%), Diabetes (4%) and cardica problems⁵ (3%). Islam and Stator observe that dysentery, respiratory fever and diarrhoea are the major causes of deaths of older people in Bangladesh.⁶

Other major problems of the aged include their dependence on others, feeling of loneliness and emptiness, psychological and social isolation, etc. The recent change in the role and status of the aged in the modern families also brings new problems of adjustment for the aged in Bangladesh⁷. The break away of the joint families also brings serious disasters for the elderly population.

4 U.N.O., (1994), "The cause of the Aging populations: Declining Mortality of Delining Fertility?" *Population Bulletin* No. 4, 1994.

5 BAAIGM: Epidemiolgy Research: Health of the Elderly, Dhaka, 1988.

6 Islam, M. N. and Sattar, M. A. (1996), "Epidemiology of Aging in Bangladesh-An Overview" *The Elderly in Bangladesh and India*, Department of Stutisties, Rajshahi University.

7 Similar Problems were observed in India also. See kirpal Singh Soodan, *Aging in India*, Calcutta: Minerva Associates (Publications) Pvt. ltd. 1975, P. 126

6. Remedial Measures

The mass media including radio, television, video, cinema, newspapers etc. should project motivational programs for influencing the younger members of the families for taking necessary care of the elderly people. They are the experienced, wise and mostly devoted people whom we should love and respect. The media should focus on this aspect. Specific motivation programs may be introduced highlighting the merits and the social bondage of the traditional joint family system that our forefathers enjoyed.

Secondly, the government should frame a comprehensive old age policy covering financial and medical assistance. Old age pension scheme should be implemented for all the senior citizens of the country. For this purpose the government can accept contributions from the able citizens under certain rules.

Special medicare for elderly people should be introduced in all hospitals, health care centres and public dispensaries. The private sector may also provide the aged with medical facilities on reasonable prices.

Thirdly, old age insurance schemes should be expanded and popularized in such manners that these might cover almost all the adult people of the country. The private insurance companies may also participate in large scale in this gigantic but suggest task.

Western styled old age homes with medical, recreational and other facilities may be developed in the public and private sectors. In this regard the NGOs may play a pivotal role.

7. Conclusion

The aged built our present and the future by their hard labour, devotion and sacrifices. Among us, they are the most experienced and the wisest people. They kept no stone unturned for our betterment. So, we should make all our efforts for ensuring the welfare of the aged.

Cultural Values and Economic Development: Some Reflections on Bangladesh Experience

Ashraf Uddin Chowdhury*

Two important developments in Bangladesh have given rise to hopes and despair regarding prospects of economic development among economists, business community, policy makers, development partners, and other quarters. The hope-related development is the emergence of Bangladesh in recent years as a leading LDC in terms of per capita growth performance. The despair-related development refers to the deteriorated or static debilitating forces relating to some aspects of the cultural milieu of the society. An attempt is made here to appreciate the significance of these forces to economic development and gain some insights into the prospects of economic development of Bangladesh.

The Place of Cultural Values in Economic Development

The stepwise and backtracking framework of analysing the causes of economic development is helpful to make sense of the role of cultural values to economic development. In explaining economic development, defined, at the cost of oversimplification, as the per capita growth of GDP, the framework involves (i) identification of the sources of growth; (ii) identification of the factors behind the sources of output growth; (iii) formulation of economic policies needed to produce the necessary factors, and (iv) ensuring their efficient use and implementation of the policies through a set of institutions.

The policies through some rules and regulations and the subjective mental constructs and filters called cultural values are used by individuals of the society to interpret the real world around them and make choices. Thus the significance of the cultural values or for that matter non-economic factors is particularly felt in the fourth step, though the recognition begins at the third stage of policy formulation, in the way of whether some particular values will facilitate the introduction and implementation of the required economic policies.

* Professor of Economics, University of Dhaka.

Linkage Between Institution and Cultural Values

Institutions generally evolve or are created in keeping with the socio-economic and political values of the society. The most universal example of this is the institutionalisation by the Western capitalism of the most influential values descending from the Age of Enlightenment. Many institutions around the world including Bangladesh have been established by adapting the Western models to local conditions. Also, people are trained and motivated to learn and recognise the institutional role and value. The interrelationship between institutions and cultural values implies that the effectiveness of institutional role depends on the compatibility of the institution and cultural values of the society.

Institutional Quality and Growth Performance

That some cultural practices are more productive than others are because enormous variations in entrepreneurial skills, transaction cost, attitude to education, work habit and response to rules and regulations etc. can be found in different societies. East Asian growth performances owe greatly to institutions, which embody these qualities. This is also true for postwar European growth. Postwar European growth was fueled by wage moderation and high investment, which in turn were possible due to the establishment of well-suited institutions. Domestic social and economic institutions disseminated information and monitored the compliance of the capitalists and trade unions with the terms of their agreement to moderate wage-claims and boost investment. Also, at the international level, institutions were established to coordinate various national programmes along export-oriented lines.

Prerequisites of Rapid Growth

East and Southeast Asian development experience provides some useful guidelines as regards the prerequisites of rapid growth. These refer to (1) the initial socio-economic and political conditions; (b) the role of the government in respect of making effective economic policies; (c) the level of skill and knowledge of the population, and (d) the existence of appropriate institutions. The situation prevailing with respect to these factors in the early years of rapid growth of the successful Asian countries is considered to be the threshold level of the requirements. The socio-economic conditions are represented by human development index (HDI), rice yield, and labour productivity while political condition refers to the political stability of the country. The role of the government refers to its ability to maintain macroeconomic stability and provide friendly economic environment. The level of skill and knowledge of the population can be judged in the absence of more relevant informations, by the enrollment ratio of the secondary education. Appropriate

institutions imply the existence of institutional facilities and conditions to enforce property rights over goods and services.

The Status of the Prerequisites for Bangladesh

Bangladesh is required to move along an accelerated growth path taking lessons of late development of the East and Southeast Asian countries, which caught up or are in the process of catching up with the rich countries by growing rapidly over a shorter period of time. Bangladesh is to grow by over 6.0 per cent per annum in GDP terms for at least ten years to ensure a per capita growth of GDP of over 4.0 percent in order to enable an average poor Bangladeshi to cross the poverty line. The most important question that remains is what prospects are there for accelerated growth paths for Bangladesh. This is attempted by looking into the strength and weaknesses of the economy in light of the prerequisites considered above from the development experience of the successful Asian countries.

The first prerequisite considered is the initial social and economic conditions of the economy represented by the HDI, rice yield, and labour productivity. In respect of all these three criteria, Bangladesh was at a very low ebb in the 1950s and 1960s, and the indices have shown improvements in the recent years. This explains partially why, in respect of growth performance, the country experienced sloth in the earlier years and buoyancy in the recent years. The question of political stability is considered later. The second prerequisite taken up is the role of the government i.e., the ability of the government to maintain a stable macroeconomic environment and its capability to put in place market-friendly opportunities to the economy. Regarding the former, Bangladesh has been successful to tide over the initial macroeconomic weaknesses and made appreciable progress in achieving macroeconomic stability measured by the rate of inflation, real deposit rate of interest, export performance, budget deficit, and most importantly, savings and investment. The government has also made considerable progress in respect of its role as the provider of the market-friendly opportunities. However, Bangladesh has failed to increase the efficiency of production, measured by total factor productivity, for the aggregate economy though there is evidence of some increase in efficiency at some disaggregated levels. The third prerequisite, the skill and knowledge of the population, presents a mixed picture. In terms of the enrollment ratio, Bangladesh looks well placed—the current enrollment ratio appears to be higher than those prevailing in the early 1980s in some of the high growth countries. However, doubts remain as to the compatibility of the quality of Bangladesh's secondary education with that of the countries under consideration. This is in view of the inadequate educational facilities, and most importantly, the change in the social value system, which puts more importance on getting certificates rather than on learning. The fourth prerequisite, the institutional,

cultural conditions of the country, also presents a mixed picture. Definitive positive developments are taking place in the social sector, literacy, empowerment of women, health and sanitation etc. At the same time, the absence of a proper political environment, deteriorated law and order situation, ineffectiveness of the judiciary and law enforcing agency like the police, endemic corruption, very high rate of bank defaults etc. have been matters of concern for everyone. These negative developments are reportedly corroding incentives to investment, increased trade, and other economic activities.

Conclusion

The central issue that remains is to give an indication of the growth prospects for Bangladesh in the coming days. To do this, it is necessary to recall the status of the preconditions of growth. First, although in respect of the initial socio-economic conditions Bangladesh is lagging far behind the East and Southeast Asian countries, the rather comforting fact is that this country has well attained some levels which are comparable to those of the successful Asian countries at their earlier stages of development. Bangladesh appears to have fulfilled, barring the political conditions which is mentioned later, an important ingredient of accelerated growth. Second, regarding the macroeconomic management, the government has been able to maintain reasonable macroeconomic stability: low inflation, positive real deposit rate of interest, increasing export ratio, decreasing budget deficit and most importantly increasing savings and investment ratios. In respect of these indicators, Bangladesh's performance is comparable and in some cases better than the performance of the successful Asian countries under consideration during the earlier stages of their development. Bangladesh appears to have fulfilled an important aspect of the second precondition of growth. However, it must be noted here that the increase in productive efficiency significantly propelled the growth of advanced capitalist as well as successful Asian countries, whereas the growth of Bangladesh has been due to the growth of inputs only, by 'perspiration not by inspiration'. Stagnation in the productive efficiency is an important weakness of the production process. With respect to the provision of 'helpful policies', which include openness to competition, the use of the international markets, public provision of incentives for investment and export etc., the positive role of the government cannot be over-emphasized. Bangladesh fulfils the third prerequisite', e.g., the level of skill and knowledge of the population in quantitative terms, but it turns out to be inadequate when the qualitative aspect is brought into the picture.

Coming back to the cultural aspect, a society's culture generally consists of two types of values, the core and the peripheral values. Core values are the time-honoured values that remain relatively resistant to change. Peripheral values are those which

are either imposed, imitated or artificially created ones or are practised in response to the exigency of the period and are amenable to change. There is no meeting of minds as to which values are core and which are peripheral. One line of opinion is that our time-honoured cultural values track the same morals that Adam Smith considered to be the basis of the wealth of nations: frugality, industry, honesty and fidelity. This ideology has been an important support for the excellent performance of the Bangladesh professionals, students, businessmen and workers abroad. The same Bangladeshis are said to be caught up in the vicious circle of some derogatory cultural practices at home. The difference greatly owes to the lack of a proper environment: the absence of appropriate institutions, lack of proper incentive structure, and the lack of enforcement of the rules of the game.

The last point mentioned above would point to the fact that the unwholesome cultural practices are mostly peripheral and not the core values of our society's culture. Proper rules and regulations and their enforcement will change the situation in the right direction. Who could imagine that the culture of holding political meetings on the streets of Dhaka city would ever be over? Enforcement of the law and the social value both had their role to put an end to the problem. Likewise, other positive changes, noted earlier, are also taking place. In cases of all the four prerequisites of growth under consideration, there are elements relating to the value system and these are relatively the weaker aspects of the economy. Thus, the overall institutional-cultural barriers would seem to be the major debilitating forces to sap the country's social and economic strength. Accelerated growth prospects would, therefore, crucially depend on redressing these problems by ensuring the policy and institutional reforms.

