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BANGLADESH JOURNAL OF POLITICAL ECONOMY

Vol. 10 No. 3

ALTERNATE INSTITUTIONAL APPROACHES TO RURAL DEVELOPMENT

1. Performance and Mangement of Rural Cooperative Socities in Bangladesh: *Muzaffer Ahmad and A.F.M. Mafizul Islam* 1

2. Cooperatives for Rural Development in Bangladesh-A Study from Management Perspective: *Md Mainul Islam* 23

3. Organizing the Rural Poor in Bangladesh-The Experience of NGOs, GB and BRDB: *Jahangir Alam* 42

4. Alternative Institutional Approaches to Rural Employment Generation-Framework for Comparative Analysis: *Debapriya Bhattacharya* 58

5. Internal Resources Division for Integrated Rural Development in Bangladesh: *Hafizul Kabir Shaikh* 71

6. Family Based Approch - A New Dimension in Rural Development: *M.A. Sattar Bhuiyan* 83

৭. উন্নয়নে এন জি ও তৎপরতা-একটি পর্যালোচনাঃ *ফ. র. মাহমুদ হাসান* 88

BANGLADESH AGRICULTURE : IMPACT OF GOVERNMENT POLICY

8. Recent Performance and Evolution of Policies in Agriculture: *Abu Abdullah* 101

9. A Methodology for Estimating Growth Rates of Major Cereal Crops in Bangladesh and its Policy Implications: *Khandakar Qudrat-I-Elahi, A.M. Muazzam Hossain, M. Lutfor Rahman* 142

10. Removing Constraints from the Agricultural Extension Systems

of Bangladesh - A Policy Brief: *M. Hassanullah* 160

11. Management of Irrigation by the Landless—Performance and Policy Implications : *M. A. S. Mandal* 169

12. Agricultural Credit Policy and the Farmers of Bangladesh - A Case of Deprivation: *W.M.H. Jaim*

13. Price Stabilization and Agricultural Production-The Case of Bangladesh: *Modan Mohan Dey* 199

১৪. বাংলাদেশের কৃষি ও পঞ্চবার্ষিক পরিকল্পনাসমূহঃ *মোঃ মাহফুজুর রহমান* 212

BASIC NEEDS APPROACH TO DEVELOPMENT PLANNING

15. A Critique of the Basic Needs Approch to Economic Development: *M. Solaiman Mandal* 224

১৬. বাংলাদেশ প্রেক্ষিত-খাদ্যে মৌলিক চাহিদা পূরণঃ *এম. এ. হামিদ* 234

17. Development Imperatives and the Basic Needs Approach for Bangladesh:*Sanat Kumar Saha, Tariq Saiful Islam, Dilip Kumar Nath* 242

18. Basic Needs and the Question of Distribution of National Income in Bangladesg : *M. Moazzem Hossain Khan* 255

বাংলাদেশ জার্ণাল অব পলিটিকাল ইকনমি

গ্রামীন উন্নয়নে বিকল্প প্রাতিষ্ঠানিক ব্যবস্থা, কৃষি উন্নয়নে সরকারী নীতির প্রভাব এবং মৌল চাহিদাভিত্তিক উন্নয়ন পরিকল্পনা সেমিনারসমূহে উপস্থাপিত প্রবন্ধাবলী

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PERFORMANCE AND MANAGEMENT OF RURAL COOPERATIVE SOCIETIES IN BANGLADESH

MUZAFFER AHMAD*
A.F.M. MAFIZUL ISLAM**

INTRODUCTION

Cooperatives, as an organization of the people for mutual benefit and organized around defined economic activities, have been considered as an important vehicle for improvement of economic well being of its members. The early success of the movement in Europe under various pioneering leaderships had its echo in this region as well. Because of certain appealing virtue of equality, humanism and brotherhood, such an organizational approach has always attracted the attention of reformists who would keep away from the concepts of class stratification of society but would like to see improvement in the level of living of the poor. The century old legacy of voluntarism, democracy, self-reliance and mutual support are enshrined in the ideals of cooperatives. Even though its history is littered with success and failures in this sub-continent and elsewhere, it has not lost its attraction as a method for evolutionary social change. It is still considered to have the capacity to provide the principles and modus operandi to unite the disadvantaged people to further the common goal of economic and social well being. This is all the more appealing in the poverty-stricken Bangladesh.

The cooperative movement of Bangladesh seem to have a schizophrenic personality being managed and controlled for all practical purposes by two separate organizations, namely Registrar of Cooperative Societies (RCS) and Bangladesh Rural Development Board (BRDB) under the same Ministry, While the promotional responsibility seem to be widely diffused. The cooperatives under the RCS are organized in three tiers, and are of many different types according to their sectors of operation while those under BRDB are organized (at least in theory) in two tiers and are limited to three types only. The BRDB cooperatives are federated at upazila

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level while the RCS ones have different levels of federation (at the district/division/National level) and CCBs at times provide a rallying point.

An alternative system with built-in flexibility and more intense supervision has been growing in the rural areas through intervension of the different types of NGOs. The approach of NGO is based on target group (e.g. women, landless, etc.) concept as compared to traditional open-door policy of cooperatives targeted at times at functional groups which do not draw the boundary on the basis of socio-economic status. BRDB's recent RPP programmes have accepted socio-economic status as a criterion for membership and in that sense has a target group. Similarly groups under RCS (e.g. landless) exist but are exceptions. Finally, there are people in the rural Bangladesh who are outside the net of cooperatives and NGOs.

The principal objectives of the paper are

(1) to compare the relative performances of two cooperative systems (RCS & BRDB's) under different control and management that operate in Bangladesh in respect of their impact and performances; and

(2) to elicit perception and understanding/opinions of the members of the cooperative societies with respect to operations of such societies and the scope of improvement that exists.

DATA SOURCE AND SURVEY DESIGN

In 1986-87, there were about 119,604 cooperative societies and as no a priori information was available as to their functional status, it was decided to select equal number of RCS and BRDB societies. The sample size of primary members was determined using the formula: $n = (\frac{z^r}{e})$, where n = sample size, z = standard normal value for specified level of significance and e=the allowable margin of error. We took annual income as the variable of interest as impact on income is one of our prime concern and also because it is a good indicator of socio-economic status. Taking the range of income in rural areas from BBS Household Expenditure Survey and varying value of r from 2.5 to 3.0 thousand taka and setting allowable error between 0.0 and 0.2 for a value of Z at 5% level, the sample size was calculated for various combinations of r and e. Finally, 1067 was found to be the size that would give us values of variables at 5% level of significance. It was decided to attepmpt a coverage of1250 samples for getting 1067 good responses from the primary society members. These 1250 samples were equally divided amongst the RCS abd BRDB cooperative societies. From the survey 1222 valid responses were found.

Twelve upazilas from all the four administrative divisions of Bangladesh

were selected on a random basis for the study with the proviso of presence of both BRDB abd RCS cooperatives. Chairman, Secretary, and Managing Committee Members of selected primary cooperative societies and of corresponding secondary societies were interviewed. Ten NGO members and 10 non-members from each selected upazila were selected on the basis of their socio-economic status to correspond to the members of cooperatives were selected. These were used as controlled groups.

FINDINGS AND ANALYSIS

Socio-economic Characteristics of Cooperatives and Control Group Members:

(a) Membership: Participation of Women

With in the cooperatives in the sample 82.7% are found to be male and 17.3% are female, which sharply contradicts with sex ratio of NGO members where 47.8% are male and 52.2% are female. We know that in certain NGOs (e.g. Grameen Bank, BRAC) the proportion of female is much higher than this. From this it can be deduced that BRDB/RCS copperatives have not yet placed as much importance on organizing the rural women as the NGOs seem to have done, but certain caution must be exercised by recalling the fact that the cooperatives are much older organizations and their open-door policy does not genarally provide for any special targeting of women except when it is programme-based.

(b) Age

The mean age of cooperative members is found to be 40.9 years while that for BRDB is 36.8 and RCS is 41.5 years. The mean age for NGO members is lower (30.77) and for non-members higher (42.1) than the average for cooperative society members. In terms of mean age it is possible to conclude that NGOs have more young people in their fold than the cooperatives as the differrences are statistically significant.

(c) Marital Status

The overwhelming majority of members of cooperative societies (87%) as well as that of NGO (86.7%) and non-members (88.2%) are married. But what is to be noted is that amongst the NGO members divorced/ deserted/widowed group constitute 8.1% of sample while it is only 3.9% for cooperative society members and 3.7% for non-members. This phenomenon seems to indicate that NGOs have been able to reach this special/disadvantaged women group (deserted/destitute) in a significant way, while cooperatives being within the fold of village 'Samaj' seem to have paid less attention to this vulnerable group.

(d) Status of Women in the Family

In respect of status in the family there is no difference between cooperatives and NGO members and most of the women describe themselves as non-head of the family even when they are divorced/ deserted/widowed. This is certainly a reflection of male-dominated society and deeply ingrained sense of inferiority of the part of women.

(e) Size of Family

The average family size is about 5.4 for cooperative society members while the NGO (3.4) and non-members (3.2) seem to have smaller family size. Whether this is an influence of age and marital status or this is the influence of family planning education, we have no way to deduce a conclusion except to present hypothesis to that effect.

(f) Literacy

The literacy levels of members of cooperatives, NGO as well as non-members are higher than national average. In terms of convertional literacy standard (Read and write) 64.5% of BRDB and 67.9% of RCS cooperative members, 52.2% of NGO and 75% of non-members are literate. Even here it is to be noticed that NGOs have gone to more disadvantaged groups compared to other cooperatives as literacy is closely related with poverty and rural women of lower socio-economic status.

(g) Ownership of Household

Like education it can be seen from the other end i.e. percentages not having any homestead at all. They are 7.5, 4.3 and 1.1., for NGO, RCS and BRDB groups respectively. Within BRDB group, BSS (8.1) and MSS have the largest group having no homestead. Within RCS this distinction goes to Frishermen (27.5%) landless (20%), and Mahila (12.8%) coopratives and these percentages are much higher than NGO groups. Thus in tems of non-ownership of homestead, NGOs seem not have reached the most disadvantaged group compared to cooperatives.

(h) Ownership of Land and other Assets

In terms of land ownership, NGOs cannot claim the distinction of reaching the most disadvantaged group on the average; but in terms of value of assets, they seem to have reached the target group better than others. This however, cannot be confirmed by income criterion.

2. Cooperative Society as a Credit Delivery System

(a) Access

Credit is an important element in the cooperative system. Access to

credit has been defined as the number of members who received loan within the last three years of operation. The access of members of BRDB cooperatives are estimated at 52.3% as against 31.1% for RCS cooperatives and the corresponding figures on an annual basis, are 17.4% and 10.4% only. As we compare these with NGOs, they stand out clearly as organizations that have provided loan to greater percentage of its members than cooperatives. Even in terms of disadvantaged groups, NGOs have performed better (85.5%) than BSS (47.2%), MBSS (40.0%), and MSS (57.8%) cooperatives. For the non-members, only 12.7% reported to have taken loan in the last three years, the major sources of which are friends, relatives, traders and money-lenders. However, only 2.1% of the non-members seem to have gone to institutional sources of credit. In terms of loan coverage, BRDB programmes for the disadvantaged group (BSS, MBSS, and MSS) is certainly better than RCS and NGO which is better than BRDB. This is possibly explained by the fund availability for these groups at the source.

(b) Loan Amount

Average loan amount received by loanees in the cooperative societies are small; on average BRDB cooperative society members received Tk. 1521 as loan and RCS members Tk. 1343 which is lower than NGO average of Tk. 1768 or non-members average of Tk. 3151.

(c) Repayment

Repayment as a percentage of loan taken is 127% for NGO, 113% for non-members which are significantly higher than BRDB (77.8%) and RCS (73.8%) cooperative members. The percentages are calculated as repayment inclusive of interest over original sum borrowed. For the BRDB group the best repayment rate is by the MBSS (107.3%) followed by MSS (94.8%) and BSS (82.6%). Within the RCS the poorest performer was the weavers cooperative society for which it is 19.4% only. This is possibly the reflection of recent weavers special credit scheme operation in this sphere.

(d) Outstanding Loan

In terms of outstanding loan (which includes interest payable) for BRDB society members the aggregate estimated percentages is 57.4% and for RCS it is 69.2%, these means are not significantly different; while the NGO members show a figure of 30.3% and non-members 53.7% which are lower. Within the RCS system, the best performance is by landless (17.4%) and amongst the BRDB cooperatives, lowest outstanding loan is reported by MBSS (14.2%)

(e) Overdue loan

In terms of overdue loan, non-members (3.7%) and NGO (12.3%) display very low percentage of overdue loan. Within the BRDB system KSS has the highest percentage of overdue loan; and within RCS system, as suspected, it is highest for the Weavers society (71.5%).

(f) Rate of Interest paid/Loan processing time/Transaction cost

The average rate of interst including service charge for BRDB is about 14.42%, for RCS 14.5%, while for NGO it is 17.48% and for non-members it is 26.42%. The real cost of loan is affected by waiting period and expenses incurred in this regard. It appears from our sample that on average, from the date when application has been properly filled in, BRDB system takes 39.38 days to sanction a loan and RCS system 42.60 days time. National NGO system can do it with marginally lesser time because of lesser formalities in their organization. Expenses incurred in getting loan ranges between 3.19% and 5.11% of the loan for BRDB system and 2.00% and 10.00% for the RCS system.

(g) Difficulty in Repayment

Respondents who had taken loan were asked whether they faced any difficulty in repayment of loan. 61.9%of the BRDB and 52.8% of RCS cooperative society members, 80.9% NGO members and 28.7% of non-members indicated no difficutly in repayment of loan. Within the BRDB sysytem, MSS members indicated least difficultly in repayment of loan, followed by BSS. Within the RCS system least difficulty was expressed by landless followed by women. Being more vulnerable to vagaries of nature agriculture (i.e. crop related) group in both the systems expressed difficulty in repayment due to loss of income. The conclusion that seem to be suggested is that homogenous female vulnerable target group offers prospect for better delivery and administration of the credit system. The other conclusion is that agriculture being a gamble also generates greater risk for loan administration and thus needs innovative approaches to build reserves and insurances against loss and delay.

(h) Reasons for Non-Repayment

The respondents who had taken loan were asked to indicate three reasons in order of priority for non-repayment of loan. The loss of income has been cited by almost all of them as the prime reason for non-payment of loan. The second most important reason revealed by the survey is by diversion of loan; but non-monitoring of loan and the increased incidence of non-payment of loan by people with access to power structure both

within and outside the society have featured noticeably as reasons for non-repayment by members of cooperative societies. The culture of patronage seem to be affecting adversely the discipline of self-help organisations.

(i) Opinion on Terms and Conditions of Loan

The loanee respondents were asked as to whether the terms and conditions was hard, reasonable or easy. The majority of the cooperative societies and overwhelming majority of NGO loanees found the terms and conditions and loan either easy or reasonable. About the procedure of obtaining loan, the general opinion is for simplification of procedure. With respect to the attitude of the officials/office bearers, except in the case of MSS, MBSS, BSS and similar groups under RCS, the majority found the attitude either indifferent or unhelpful. The response from the NGO loanees are totally differnt as 91.1% depict the attitude to be positive.

(j) Availability of Advice on Use of Loan

In response to questionnaire related to advice on use of utilisation of loan, supervision of use of loaned amount and motivation and training in skill for use of loaned money in income generating activities, NGOs seem to have excelled others. Group pressure as a mechanism to ensure repayment seem to be non-existent for RCS societies while it is quite an important factor for NGOs and BSS and MSS activities of BRDB.

3. Cooperative as a Delivery System for Production Input and Marketing Services

The cooperative societies have generally been organized around production activities (e.g. agriculture) or through promotion of income generating activities for target group (e.g. Mahila). In the context of production cooperatives, we have evaluated the cooperative societies as a delivery mechanism for credit. But the cooperative societies perform or may perform important functions or delivery system of input supply, marketing services and training for skill development for increased income generation.

(a) Supply of Inputs

The data suggest that neither the cooperative societies nor NGOs take total responsibility for supply of inputs. Only 48.9% of cooperative society members and 20.0% of NGO members received input wholly or partly, regularly or irregularly, from respective societies. The difference is significant, and it can be said that cooperatives more often help in obtaining inputs than the NGOs for their clients.

Majority of cooperative members do not receive any input from the societies and of the members who do, the milk cooperative members receive almost all or most of it. Following this, the performance of MSS and women societies seem to be better. The agricultural societies (KSS, Agriculture and UCMPS) are well but not so well in terms of total and regular supply.

(b) Quality of Input Supply

Those who receive regular supply was asked about quality and price of input. In general majority of the recipients of inputs of all types of societies thought prices of inputs charged were fair with exception of fishermen and weavers.

(c) Marketing of Output

Marketing of output is not important activity of these cooperative societies. About 44.8% of cooperative members and 62.2% of NGO members do not market any output through these societies. The target oriented cooperatives undertake some marketing activity, partly as a complement to its input supply activity. The hypothesis that seems to be suggested is that organising marketing activities on substantial and regular basis could have meaningful impact on the production by society members particularly in non crop sectors.

(d) Training

From the responses of the respondents the cooperative societies do not seem to have provided any meaningful training at any level for its members. Only 0.2% of the members under BRDB indicated receiving some income generation/augmentation skill training and they all belong to KSS. In the case with RCS societies where the percentage is 0.3% and such training was provided only by the women and fishermen societies. While percentage is 5.9% for NGOs. Thus it is easy to conclude that the cooperatives have neglected an important aspect of group activities.

4. Impact of Cooperatives on Income

In order to analyse the impact of cooperatives on income of members of societies certain regression equations of the forms $Yi=a+bxi+CDi$ were fitted;

where the dependent variable Y is own annual income (Y_o) or annual income of family (Y_f) and independent variables are education level (X_1), number of family members (X_2), number of earner (X_3) total land owned (X_4), value of total assests (X_5) and amount of loan taken (X_6).

Dummy variables were used for sex (femal = 0, male=1) and types of societies (disadvantaged = 0, agriculture or agro-related =1, others = 2). The strength of relationship is measured by the coefficient of correlation R.

These regression analyses were run for–

1. Total primary society members,
   (a) total primary society loanee members;
2. Total male primary society members,
   (a) total male primary society loanee members;
3. Total female primary society members,
   (a) total female primary society loanee members;
4. Total BRDB primary society members
   (a) total BRDB primary society loanee members;
5. Total RCS primay society members
   (a) total RCS primary society loanee members;
6. Total KSS society members,
   (a) total KSS loanee members;
7. Total agriculture society members,
   (a) total agricultural society loanee members;
8. Total agricultural/UCMPS/sugarcane society membe's,
   (a) total agri./multi/sugarcane society loanee members;
9. Total MSS society members,
   (a) total MSS society loanee members;
10. Total women society members,
    (a) total women society loanee members;
11. Total weaver and fishermen society members,
    (a) total weavers and fishermen society loanee members.

As many as 53 regression equation were fitted. The results are reported below (see appendix-I for Regression results).

(a) When total cooperative societies are included, we found loan amount, asset value, land ownership and education to have significant and positive impact on own income. In addition to those, number of earners and family size had similar impact on family income. Dummy for sex indicated greater impact in favour of male and dummy for type indicated greater impact for agriculture or agro-related or specialised functional cooperatives.

(b) The exercise also explains that a Tk. 1000 loan creates a income of Tk. 170-180 for the loanee and Tk. 340 for the loanee' family excluding repayment and service charges.

(c) While comparing impact of BRDB and RCS it is found that for BRDB cooperatives loan amount has a significant and positive impact on income while this is not so for RCS, implying that loan for effective income generation is significantly perceptible in the former case.

(d) While observing comparative impact of KSS and RCS agriculture and agro-based societies, it is found that for KSS/BRDB loan amount has positive and significant impact on income. For KSS the influence of value assets of owned is not always significant, similar is the case with land in respect of KSS. Higher education does not generate any positive and significant impact on income for KSS members either. Higher member of earners has no significant impact for KSS while higher family size seem to have a significant positive impact. The inference in respect of loan, value of assets, education and family size for the RCS societies is opposite to those mentioned above. However, in respect of land and numbers of earners they are similarly situated.

(e) In cases of BSS, MSS and women cooperatives, loan amount, land ownership has no significant impact in any of these cases. Value of assets ownership has positive and significant impact only in cases of BSS and women. Education seem to have positive impact on all the groups.

(f) For weavers group amount of loan and value of assets and fishermen groups only the latter seem to have significant positive effect.

(g) Differential impact on male and female cooperative members is observed. For male amount of loan, value of assets, and lavel ownership, education, number of earners and family size have positive and significant impact; while for female only education, number of earners and family size are the significant variables.

5. Impact of Coooperatives on the Level of Living

One of the purposes of the study was to find out impact of copperatives on the level of living. In our efforts to understand this, we adopted a three-fold approach related to means of improvement, mode of improvement and general indicators like, (i) income and productivity; (ii) actual employment opportunities for self, family members and others employed by him; (iii) savings and investment; (iv) food and nutrition; (v) housing; (vi) health, sanitation and family planning; (vii) education of family members; and (viii)

general economic condition and social status. We have no horizontal data; nor was it possible for us to collect data over a period of time. Under the circumstances the methodology adopted was to ask them about the position before they joined the society vis-a-vis presenttime; whenever possible to get a direct/indirect quantitative measure.

(a) General Economic Well-being

In respect of general economic well-being, overwhelmigl majority of the cooperative society members, irrespective of types, feel that their economic conditions have remained the same. However, in case of both RCS and BRDB coops, the loanee members response for being better is significantly higher than non-members loanee responses. NGO performance is much better for loanee and non-loanee respondents when compared to cooperative society members. When the cooperative society and NGO members are compared to non-members, the intervention for economic well-being is more distinctly established.

(b) Social Status

The social status of cooperative members has not changed generally. However, none reported lowering of social status, amongst the loanees while noticeablenumber of loanees particularly of MBSS and fuctional groups in RCS system reported improvement in social status.

(c) Productivity

So far as the productivity is concerned, nearly one-third cooperative members feel that their productivity has increased, despite limited activities by the societies for skill development. It is itself remarkable. However, in this respect the NGOs seem to have done remarkably better.

(d) Income

In respect of increase in income, more than one-fourth of BRDB cooperative society members, and more than one-fifth of RCS society members indicated increase in income. Notable is the fact that, except for women group, nearly three-fourth to four-fifth of cooperative members on average reported no improvement in income when 85% of NGO members recorded increase in income.

(e) Savings

Generally 5 to 10% of the cooperative members have indicated to have increased their savings and it is much higher for MBSS, firshermen and sugarcane cooperatives. In addition to that, about half of the members indicated to have retained their savings level; but it is much higher for BSS,

MBSS and MSS, Milk and Weaver societies. What can be concluded is that the cooperative members have generally made an effort to increase or maintain the savings level in the face of rising prices and demand.

(f) Employment

In general there has been an increase in gainful employment of the cooperative society members and NGO members. Unpaid family labour gets the first impact of increased production activity. The production activity of the members of cooperative societies created a minimal impact in the labour market of rural areas. The demand could come for production labour or for substitute labour to free themselves or family members for/from production work. It appears that more than 90% of the respondents did neither cause increase or decrease in wage labour employment.

(g) Food Intake

So far as the food intake and nutritional status is concerned, intake of milk has increased selectively for some of the cooperative society members' household. Cousumption of fish, meat, egg seem to have increased much more selectively. In terms of calorie, between $\frac{1}{4}$th and $\frac{1}{3}$rd of respondents, except for the weavers group, have better nutritional intake. The percentage is much higher for NGOs who start with a lower income group anyway.

(h) Children's Education

NGOs seem to have performed much better in respect of inducing members in sending their children to school. So far as the cooperative societies are concerned around 10% of respodents indicate that more of their children are in school now than before. From the new data it appears that nearly 76% of the school going age (5 to 15) are going to school. This rate is much higher than the national enrolment rate.

(i) Household

Noticeable impact on house improvement have taken place for members of the cooperative societies, the performance of which is comparable to that of NGOs. Knowledge on hygiene and sanitation is more than before amongst the cooperative society members, but behaviour in this respect did not generally reflect the practice of knowledge.

(j) Family Planning

In the area of family planning, our efforts were basically to find out whether the cooperative societies were the carrier of this knowledge. It was the women related societies and NGOs who have perfomed the job well

enough through their complimentary efforts but they have not taken any measure to provide a continuous Family Planning/Maternity & Child Health programme of their own which was also not the intention of the programme. In this respect, quantitatively, they are no worse than NGOs.

6. Participation and Management of Cooperatives

(a) The cooperatives are voluntary agencies organised for mutual benefit to be managed by an elected committee unless superseded. The basic management is vested in a managing committee, accountability of which is established through annual general meetings and participation, in case of BRDB societies, through weekly meetings. The legal instruments for control and direction is inspection and audit by competent authorities. We have examined these along with perception of officials in respect of the objective and achievement of the societies. In particular we have looked into the suggestion for changes in law and management practices for better performance of the cooperative societies.

(b) Annual General Meetings

Annual General Meetings have two purposes—one, to account for the past year and to plan for the next years. From the responsses it appears that in terms of meaningful participation in AGM, significantly high percentage of members of BRDB cooperatives, indicated that they could do so while the percentage of such members in RCS societies is much too small. The picture is better for NGO and disadvantaged groups within the cooperative societies.

(c) Weekly Meetings

Attendance of the cooperative societies members in the weekly meeting are not regular. Compared to NGOs even for the cooperative societies organized for the disadvantaged groups the attendance of members is far less.

(d) Difficulties Faced in Management

The cooperative movement is hindered by process of too many promotional/feeder agencies, lack of unification of the two systems and lack of fund for training, research and monitoring. Intervention by the government in suppressing the elected committees, appointment of nominated members, deputation of officers were also considered unhelpful for the growth and interest of cooperative movement.

(e) Government Intervention

The cooperative laws relating to registration process, inspection and

audit were said to have been used in a pre-judicial manner and they have seldom yielded the envisaged results.

(f) Availability of Fund

Availability of loan fund from the Bangladesh Samabaya Bank Ltd. or such other institutions were considered inadequate.

(g) Fund Management

Fund management in cooperative societies were found to be deficient, defective and inappropriate, not conducive to generation of surplus for self-reliance. The Managing Committee of the Cooperatives do not seem to have worked regularly in a responsive and responsible manner with due accountability. Personnel policies were also considered to be deficient to promote efficiency.

CONCLUDING OBSERVATIONS

1. Our investigation and interaction concerning cooperatives merely confirmed the feeling that there are no underlying unalterable laws, the cooperative organizations are potentially efficient but the most exciting ideas often have not worked. This need not dishearten us because cooperatives, conceived as organization of the people, like all such organizations are subject to multiplicity of variables and multiple inter-relationships make room for uncertainty or unviolability but the people have an interest and ability to override many of the adverse influences on their own provided they are allowed, encouraged and trained to do so.

2. Any organization, therefore the cooperatives can be discussed from many perspectives. The most important perspectives are the people concerned, the organization and its form and the systems and interactions; internal as well as external. These are inter-dependent. The first refers to people, that second to the political administrative system and the third to exercise of control and power. It is political in the wider sense that it involves hierarchies of control of power. Hence any discussion of the effectiveness has to confront this people-power-political triangle in order to underscore the nature, interactions of goals, objectives, memberships, groups, leadership responsibilities which contribute to organizational effectiveness.

3. The values of a cooperative organization is said to be manifested in unity, discipline, self-reliance, mutual support, honesty, commitment and spontaneity. Values are easily difined but much more difficult to practice and needs to be subjected to continuous vigilance of the cooperators. The basic tenant of cooperation is effective and active participation in the

management and governance of the cooperatives. This rules out the imposition of management and requires a democratically elected management to be able to work without interference, and obstacles. The second basic tenent is drive towards self-reliance, the commitment to which is manifested through incremental purchase of share capital, increase in savings deposits as well as proper utilization of capital accumulated so as to meet individual and group needs on the basis of social, economic and business considerations. This commitment to self-reliance may indeed be impaired through unplanned sponsored activities.

4. The principles of Assistance in the context of self-reliances should be:

a. promote, but do not sponsor;
b. support, but do not initiate;
c. discuss, but do not impose; and
d. develop, but do not depute.

5. The basic tenant is education and learning, the objective of which is to inculcate ability to take decisions on their own, plan their work, organize and deal with all relevant matters, determine and implement their operations and control their own affairs. The fourth basic tenant is the group activity and collective responsibility which needs to be internalised through participative management and planning of support services done in groups and for the group.

6. The promotional work for cooperative in various sectors need also be done by people who understands and respects the basic normative value of cooperation and hence recruitment in promotional agencies should be highly selective and their training very rigorous, otherwise hasty promotion and unnecssary intervention is likely to result. The promotion must have acceptability by the cooperators and the regulator must earn their respect. There is no reason to write off the cooperatives, there are all the more need to promote a self-reliant community of cooperators for socio-economic development of Bangladesh free of political or bureaucratic interference.

APPENDIX-1

Table - 1: Impact of Loan on Income

Society	Members' own annual Income ('000 Tk.)	Income from Activities related to coop. assisted activities (5)	No. of Loanees %	Average loan '00 Tk.	Return on Invesment	Income generation from the loan (% of income)
BRDB						
KSS	21.46	76.0	65.48	14.77	10.48	9.3
MSS	3.14	81.9	13.55	5.90	11.79	13.8
BSS	11.92	75.5	17.10	16.73	12.08	12.8
MBSS	2.00	84.00	3.87	5.63	8.33	6.6
RCS:						
Multipurpose	21.77	74.2	25.97	13.36	11.11	11.1
Agriculture	23.44	78.1	49.72	12.66	18.91	20.7
Landless	16.23	84.3	—	9.76	—	—
Women	7.63	80.8	2.21	12.00	12.50	10.0
Fishermen	19.70	74.7	6.08	10.18	13.80	10.0
Sugarcane	34.20	76.5	5.52	13.73	12.50	10.0
Milk	21.70	74.0	—	—	—	—
Weavers	18.10	69.0	10.50	18.43	6.80	5.2

Table-2: Constants and Coefficients of Regression Equations: All Members

Sample Dependent Variable	Constant	Level of Education	No. of Family Member	No. of Earning Member	Total Land (in acres)	Total Asset(a) Value ('000 Tk)	Total Loan Taken ('000Tk)	Dummy for Types(DT)	Dummy for Sex(DS)	N	R	F
All Observation Y_o	8.67 (1.42)	+4.1 (0.7)			+0.46 (0.1)	+0.022 (0.01)	+0.17 (0.02)			1191	0.29	27.75
All Observation Y_{OD}	-2.56* (2.29)	+3.60 (0.69)			+0.44 (0.1)	+0.24 (0.009)	+0.17 (0.03)	+3.96 (1.77)	10.31 (2.30)	1191	0.34	25.77
ALL Observation Y_F	-15.5 (5.5)	+4.15 (1.1)	+2.46 (1.65)	+10.5 (1.5)	+0.85 (0.15)	+0.16 (0.15)	+0.33 (0.05)			1191	0.48	59.5
ALL Observation Y_{FD}	-21.6 (6.02)	+3.84 (1.11)	+1.98 (1.66)	+10.82 (1.53)	+0.85 (0.16)	+0.16 (0.01)	+0.33 (0.05)	+3.05* (2.86)	6.0* (4.56)	1191	0.49	45.6
All Loanee Y_O	10.67 (1.78)	+2.82 (0.86)			+0.40 (0.14)	+0.02 (0.01)	+0.17 (0.02)			499	0.38	20.49
All Loanee Y_{OD}	-1.32 (3.14)	+1.93 (0.87)			0.18 (0.12)	5.54* (2.51)	0.18 (0.2)	5.54 (2.51)	10.07 (3.99)	499	0.43	
ALL Loanee Y_F	-26.79 (8.67)	-7.17 (1.80)	+5.35 (2.56)	9.64 (2,39)	+1.59 (0.28)	+9.64 (0.03)	+0.34 (0.5)			499	0.60	45.67

* Not significant

Table-3: Constants and Coefficient of RegressionEquation : BRDB

Sample Dependent Variable	Constant	Level of Education	No. of Family Member	No. of Earning Member	Total Land (in acres)	Total Asset(a) Value ('000 Tk)	Total Loan Taken ('000 Tk)	Dummy for Types(DT)	Dummy for Sex(DS)	N	R	F
ALL BRDB Y_o	9.6 (1.89)	+3.61 (0.93)			+0.21 (0.11)	+0.001 (0.01)	+0.18 (0.03)			611	0.30	14.6
All BRDB Y_{OD}	-0.001 (2.77)	+1.99 (0.96)			+0.15 (0.11)	-0.0003* (0.01)	+0.18 (0.03)	+8.06 (3.12)	+8.52 (3.70)	611	0.35	14.87
All BRDB Y_F	15.94 (7.15)	+2.71 (1.59)	2.92* (2.17)	+10.87 (2.24)	+0.41 (0.19)	+0.17 (0.02)	+0.31 (0.05)			611	0.48	30.63
ALL BRDB Y_{FD}	-23.88 (7.90)	+1.18* (1.67)	2.59 (2.17)	+11.42 (2.24)	+0.37 (0.18)	+0.16 (0.02)	+0.35 (0.05)	+8.79 (5.39)	+6.37* (6.44)	611	0.47	24.24
All BRDB Loanee Y_O	10.08 (2.64)	+2.78 (1.31)			+0.47 (0.17)	-0.007* (0.18)	+0.18 (0.29)			308	0.39	13.71
ALL BRDB Loanee Y_{OD}	(0.37) (3.93)	+0.58 (1.39)			+0.45 (0.17)	-0.02* (0.02)	+0.18 (0.03)	+10.94 (4.53)	+7.52* (5.38)	308	0.45	12.64
All BRDB Loanee Y_F	-32.86 (11.22)	-0.81 (2.51)	5.64 (3.19)	+10.74 (3.55)	+1.15 (0.037)	+0.37 (0.54)	+0.34			308	0.65	36.67
All BRDB Loanee Y_{FD}	-43.66 (12.99)	-2.85 (2.69)	+5.12 (3.20)	+12.71 (3.68)	+1.15* (0.33)	+0.36 (0.04)	+0.35 (0.05)	+11.92* (8.77)	+5.92* (10.55)	308	0.66	28.28

* Not significant

Table-4: Constants and Coefficients of Regression Equation-RCS

Sample Dependent Variable	Constant	Level of Education	No. of Family Member	No. of Earning Member	Total Land (in acres)	Total Asset Value	Total Loan Taken	Dummy for Types(DT)	Dummy for Sex(DS)	N	R	F
All RCS Y_O	9.00 (2.10)	+3.85 (1.04)			+1.10 (0.19)	+0.29 (0.01)	+0.21* (0.35)					
All RCS Y_{CD}	-5.021* (3.94)	+4.19 (1.03)			+1.10 (0.19)	+0.30 (0.01)	+0.1* (0.34)	+1.45* (2.70)	+14.07 (4.51)	579	0.38	16.88
All RCS Y_F	-14.14 (8.46)	+5.34 (1.55)	1.93 (2.55)	+10.28 (2.04)	+2.07 (0.28)	+0.11 (0.02)	0.04 (0.51)			579	0.51	34.06
All RCS Y_{FD}	-19.98 (9.40)	+5.45 (1.56)	1.53* (2.58)	+10.52 (2.05)	+2.07 (0.28)	+0.11 (0.02)	-0.02* (0.52)	+0.07* (4.1)	+8.09 (6.09)	579	4.52	25.82
All RCS Loanee Y_O	+12.25 (1.83)	+2.40 (0.86)			-0.06* (0.25)	+0.06 (0.01)	+0.04* (0.02)			190	0.41	9.18
All RCS Loanee Y_{OD}	-2.44 (5.94)	+2.57 (0.88)			-0.06* (0.25)	+0.06 (0.01)	-0.000001* (0.00001)	+3.91* (2.79)	+10.21 (5.92)	190	0.44	7.46
All RCS Loanee Y_F	-8.25 (12.26)	+0.04* (2.13)	+3.43* (3.70)	+6.94 (2.59)	+5.77 (0.63)	+0.021* (0.037)	+0.20 (0.42)			190	0.65	22.83
All RCS Loanee Y_{FD}	-3.66 (17.81)	-0.07 (2.20)	+3.65* (3.76)	+6.95 (2.61)	+ 5.77 (0.63)	+0.02* (0.04)	+0.21* (0.43)	-2.19* (7.03)	-2.58* (14.83)	190	0.65	36.49

* Not significant

Table-5: Constants and Coefficients of Regression Equation: KSS, Agriculture, women

Sample Dependent Variables	Constant	Level of Education	No. of Family Members	No. of Earning Members	Total Land (in Acres)	Total Asset Value (in 000 Tk)	Total Loan Taken (in 000 Tk)	N	R	F
All KSS Y_O	13.83 (3.15)	+2.72 (1.34)			+0.31* (0.20)	-0.003* (0.019)	+0.36 (0.05)	380	0.38	15.97
All KSS Y_F	-23.89 (11.14)	+0.61 (2.20)	+5.32 (3.24)	+11.7 (3.07)	+0.45 (0.32)	+0.24 (0.03)	+0.70 (0.08)	380	0.59	32.80
All KSS Loanees Y_O	12.92 (3.89)	+0.02 (1.66)			+2.56 (0.45)	-0.05 (0.02)	+0.32 (0.04)	204	0.61	29.40
All KSS Loanees Y_F	-55.05 (14.19)	-4.89 (3.09)	+12.37 (4.15)	+7.80* (4.90)	+5.94 (0.83)	+0.31 (0.02)	+0.59 (0.04)	204	0.77	49.70
All Agriculture Y_O	9.11 (4.74)	+7.21 (2.23)			-0.17 (0.4)	+0.06 (0.03)	-0.77 (0.96)	192	0.28	4.11
All Agriculture Loanees Y	5.27* (3.26)	3.75 (1.23)			+2.55 (0.64)	+0.08 (0.02)	-0.36, (0.41	94	0.60	12.57
All Agriculture Y_o	-27.38* (20.97)	+9.46 (3.68)	+2.90* (6.58)	+11.24 (5.21)	+1.23 (0.66)	+0.26 (0.06)	-1.36* (1.59)	192	0.52	11.84
All Agriculture Loanees Y_F	-9.62 (9.56)	+4.48 (1.55)	+7.73 (2.87)	+1.29* (0.83)	+1.85 (0.03)	+0.51 (0.52)	-0.72	81	0.56	6.26
All MAS Y_O	7.21 (9.56)	+5.67 (1.55)			+1.39 (0.27)	+0.03 (0.02)	-0.80* (0.83)	359	0.39	15.92
All MAS Loanees Y_O	11.85 (2.31)	+3.49 (0.97)			-0.15* (0.26)	+0.06 (0.01)	+0.06* (0.04)	152	0.47	10.42
All MAS Y_F	-18.21 (12.90)	+6.06 (2.29)	-0.37* (4.05)	+14.65 (3.19)	+2.39 (0.41)	+0.61 (0.04)	+0.06 (1.24)	359	0.56	26.48
ALL MAS Loanees Y_F	-14.15* (15.4)	+0.50* (2.57)	+3.18* (4.6)	+9.19 (3.3)	+5.67 (0.69)	+0.02* (0.04)	+1.00* 39.85	152	0.66	20.85

*Not significant

Table-6: Constants and Coefficients of Regression Equation: Male and Female Members.

Sample Dependent Variables	Constant	Level of Education	No. of Family Members	No. of Earning Members	Total Land (in Acres)	Total Asset Value (000 Tk)	Total Loan Taken (000 Tk)	N	R	F
All Male Y_O	10.40 (1.71)	+3.82 (0.82)			+0.42 (0.11)	+0.03 (0.01)	+0.35 (0.04)	981	0.33	30.47
All Male Y_F	-15.54 (6.7)	+2.90 (1.28)	+2.42* (2.01)	+10.13 (1.76)	+0.13 (0.17)	+0.75 (0.02)	+0.22 (0.07)	981	0.67	
All Male Loanees Y_O	12.57 (1.92)	+2.11 (0.89)			+0.29 (0.13)	+0.018* (0.01)	+0.37 (0.03)	459	0.50	36.17
All Male Loanees Y_F	-36.16 (10.00)	-1.42* (1.90)	+8.18 (2.92)	+9.63 (2.61)	+1.42 (0.29)	+0.29 (0.03)	+0.69 (0.07)	439	0.42	52.33
All Female Y_O	2.02 (0.07)	+2.17 (0.40)			+0.035* (0.08)	+0.009 (0.003)	-0.007* (0.01)	2072	0.425	10.05
All Female Y_F	-9.85 (4.09)	+7.00 (1.05)	+3.45 (1.28)	+5.63 (1.48)	+0.22* (0.21)	+0.03 (0.01)	-0.017* (0.03)	207	0.61	20.13
All Female Loanees Y_O	5.82 (0.8)	-1.65 (0.56)			-0.45 (0.01)	+0.004* (0.01)	+0.007* (0.005)	59	0.40	2.69
All Female Loanees Y_F	0.32* (5.3)	-1.87* (1.8)	+2.08* (2.01)	+0.76* (1.70)	+1.77* (1.43)	+0.27 (0.05)	-0.026* (0.02)	59	0.81	16.95

* Not significant

Table-7: Constants and Coefficients of Regression Equation: BSS, MSS, Women, Weavers and Fishermen.

Sample Dependent Variables	Constant	Level of Education	No. of Family Members	No. of Earning Members	Total Land (in Acres)	Total Asset Value (000 Tk)	Total Loan Taken (000 Tk)	N	R	F
All BSS Y_O	10.13 (0.90)	0.02* +0.49			0.007* (0.03)	+0.07 (0.02)	+0.001* (0.31)	110	0.42	5.79
All BSS Loanees Y_O	8.74 (1.87)	+0.77* (0.85)			-0.11* (0.4)	0.134 (0.06)	-0.002* (0.49)	51	0.38	2.02
All BSS+MSS Y_O	9.01 (0.87)	+1.17 (0.54)			0.009* (0.035)	-0.005* (0.005)	-0.02* (0.32)	140	0.20	1.50
All MSS Y_O	4.08 (0.52)	-0.35 (0.32)			-0.007* (0.28)	-0.01* (0.01)	-0.0003* (0.0004)	89	0.28	1.83
All MSS Loanees Y_O	5.37 (0.79)	-1.25 (0.54)			0.41* (0.35)	0.003* (0.01)	0.0002* (0.004)	39	0.40	1.64
All Women Y_O	1.31* (1.71)	+3.13 (0.80)			-0.05* (0.11)	+0.02 (0.008)	-4.36* (2.92)	69	0.60	9.16
All Loanees weaver Y_O	13.83 (3.79)	-2.44* (1.73)			-1.08 (4.01)	+0.14 (0.04)	+0.37 (0.17)	12	0.70	5.37
All weavers Y_O	12.10 (3.31)	-0.40 (1.88)			+2.18 (0.88)	+0.06 (0.03)	+0.27* (0.22)	69	0.39	2.97
All fisherman Y_O	15.49 (2.73)	-2.26 (1.71)			+2.59* (2.10)	+0.13 (0.07)	-1.85 (1.71)	69	0.42	3.43

* Not significant

COOPERATIVES FOR RURAL DEVELOPMENT IN BANGLADESH: A STUDY FROM MANAGEMENT PERSPECTIVE

MD. MAINUL ISLAM*

Co-operatives owe their genesis to the felt need among people of limited means for an organization based on popular initiative, participation and mutual help in order to solve their common problems, of particular importance is the practice of cooperatives in enabling people to participate to manage their own affairs and this kind of people's participation was particularly considered important by the programme of action adopted by the World Conference on Agrarian Reform and Rural Development which was subsequently endorsed by the General Assembly at its thirty-fourth session (resolution 34/14) or a genuine and meaningful rural development, the august body felt that ".....only through the motivation, active involvement and organization at the grass roots level of rural people, with special emphasis on the least advantaged, in conceptualizing and designing policies and programmes and in creating administrative, social and economic institutions, including cooperative and other voluntary forms of organizations for implementing and evaluating them."

Aim of this paper is to examine the present structure of cooperatives from both macro and micro-managerial perspective with a view to highlight the problems and prospects of this institution for rural development in Bangladesh. By cooperative we mean here an organization which grows from below and is based on spontaneous mutual cooperation in order to achieve certain common social and economic goals. As the very name implies, the concept of cooperative society owes its origin to the term "Cooperation" and such an endeavour is indeed ``a voluntary, evolutionary, democratic process resulting from initiative and enterprise at the `gross-roots' by individuals motivated by the principles of self-help and mutual aid.....".

METHODOLOGY

To give a very brief resume of the study, it is to be said here that it is based on the field work done by the author as a member of a team for the

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study on cooperatives in Bangladesh, 1988, sponsored by the Government of Bangladesh and some other international agencies. Mainly based on socio-anthropological method, the study has also been supplemented by secondary data from various published sources. Primary focus of attention was to examine the management of cooperatives as organizations at various hierarchical levels which we have meant here as micro-management. But we have also looked at the working of the cooperatives as instrument of government policy for rural development. This has been meant here as macro-management.

ORGANIZATION OF COOPERATIVES

Cooperatives in Bangladesh are organised on two distinct lines, namely, traditional and two-tier. This division is reflected at all levels of the movement. At the primary level there are agricultural societies of both the traditional and two-variety, often in the same village. However one distinguishing feature of this division is that two-tier cooperatives of the Comilla type are overwhelmingly village-based and primarily concerned with agricultural development, whereas the traditional cooperatives encompass both rural and urban societies with emphasis on specialised service or commodity based primary cooperative for fishermen, weavers, sugarcane growers, milk and salt producers, etc. As a matter of fact all the specialised primary cosieties mentioned above and all the urban cooperatives like transport, housing and thrift and credit unions belong to the traditional movement.

This division of two lines finds its expression at the secondary level as well. Whereas the UCCAs (Upazila Certral Cooperative Associations) are the central societies of the two-tier cooperatives, there are different types of central societies under the traditional mo ement. They include the Central Cooperative Banks (CCBs) through which credit from the Bangladesh Cooperative Bank (BSBL) is disbursed to the various types of traditional societies. Other Central Societies are Central Sugarcane Cooperative Society, Central Cooperative Multipurpose Societies (CCMPs), Central Fishermen's Cooperarive Society etc.

At the national level, too, apex bodies supposed to act as spokesmen for their affiliates and provide them with promotional and educational support, are divided. Bangladesh Jatiya Palli Unnayan Samabaya Federation (BJPUSF) or the National Cooperative Federation for Rural Development based on UCCAs as their affiliating units represents the two-tier Cooperatives at the national level. But such a national body for the

traditional Cooperatives is the Bangladesh Jatiya Samabaya Union (BJSU) or the Bangladesh National Cooperative Union, which is a federation of 17 apex societies of traditional cooperatives. It may be noted here that traditional cooperatives are three-tiered with primary, central and apex societies and this is considered to be an important feature distingushing traditional cooperatives.

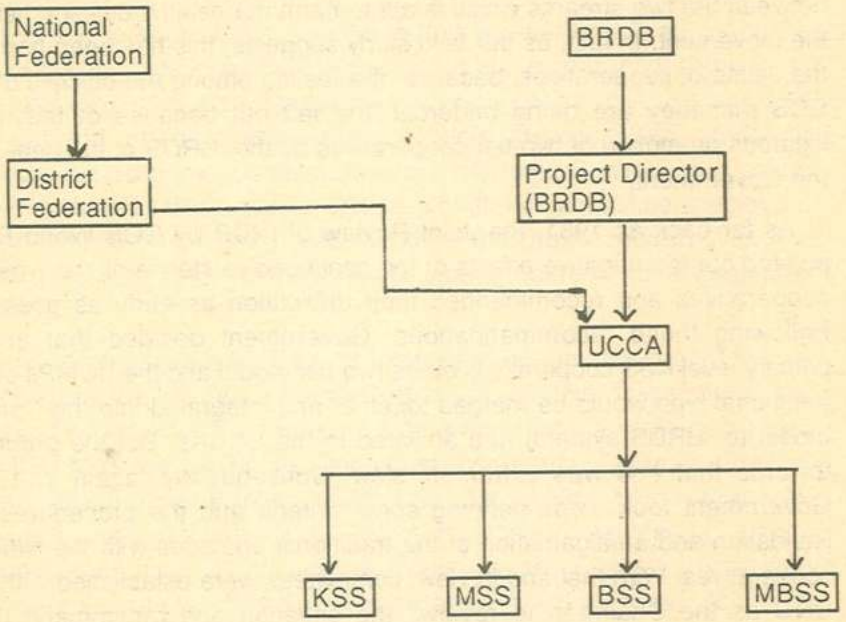
Interestingly enough these two streams of cooperative societies are promoted and controlled by two agencies of the same government, namely RCS (or the Registrar of Cooperative Societies) and the BRDB (Bangladesh Rural Development Board). However, it becomes clearly evident both from the field study as well as from the published materials that two-tier cooperatives are comparatively more expanding and active compared to the traditional ones. This has resulted into some kind of rivalry between the two streams which is apt to harm the healthy development of the movement. In fact, as our field study suggests, this has been harming the cause of cooperatives, because of a feeling among the officials of the RCS that they are being undercut and left out because of the more vigorous promotion of two-tier cooperatives by the BRDB at the behest of the Government.

As far back as 1981, the Joint Review of IRDP by GOB World Bank pointed out the negative effects of the continued existence of two types of cooperatives and recommended their unification as early as possible. Following these recommendations, Government decided that at the primary level KSS cooperatives of the two-tier model and the UCMPs of the traditional type would be merged together and integrated into the Comilla model (or BRDB system) and affiliated to the UCCAs. But the progress towards that end was extremely slow. Consequently, again in 1987, Government took steps defining some criteria and the procedures for liquidation and amalgamation of the traditional primaries with the two-tier cooperatives. With that end in view, committees were established with the UNO as the Chairman to review the situation and recommend their unification. But, it seems that the progress is extremely tardy with adverse effects for the movement.

THE ORGANISATIONAL STRUCTURE OF THE TWO–TIER COOPERATIVES

Structure in the context of two-tier cooperative implies the relationship that exists at different levels of the organisation and the manner in which communication flows from the apex down to the primary society and then

from the primary society up at the top. The Comilla type cooperatives are organised into a structure which in fact consists of four tiers, although it is commonly known as two-tier organization. At the base, there are primary societies of four types—KSS, MSS, BSS and MBSS—at the village level. These are affiliated with the UCCAs at the Upazila level which act as their supporting secondary organization. But in fact UCCAs are supported and controlled by the Project Director (PD) of the BRDB and PD and his office is the supporting and regulating agency of the BRDB which is again the highest parastatal body promoting and governing the entire two-tier cooperative movement of the country designed to promote rural development. To put diagrammatically, the structure of the movement stands as follows:



There are two other higher tiers at the district and national level, namely District and National Federation. These are merely paper organizations and play no visible role in promoting and supporting their affiliates.

ORGANISATION OF PRIMARY SOCIETIES

Primary societies are the cooperative organisations at the grass root level and therefore the basic units of the movement. The Managing Committee (MC) is the Chief Executive body entrusted with task of

managing the whole affairs of the society. The MC usually appoints a manager who is usually a non-salaried person and acts as the chief executive officer for conducting the day-to-day business of the society. But the ultimate resposibility for policy formulation in all matters remain with the MC.

Present study reveals that usually the relatively more affluent, educated and crafty people get into the MC. Same happens in case of managers. Consequently, MCs get dominated by the members belonging to the rural power elite who sometimes use these societies for indulging in malpractices and self-aggrandisement. But they can do it because of less stringent supervision exercised by the higher authorities nemely UCCA officials who are supposed to supervise and guide them and the RCS officials who are responsible for inspection and audit of the same.

Domination and corruption by the power elites is one aspect of the problem at the primary level. Another problem inhibiting the efficient running of the societies is the lower level of education of the members of the MC and the manager. One study found that majority members of the MC had only five to eight years of schooling.

Cooperatives, being democratic institutions, are usually supposed to be managed through a democratic process. Therefore, different types of meetings are prescribed to democratise their management. The following four types of meetings are held for the purpose:

1. Weekly meetings.
2. General Meetings of the MC.
3. Special general meetings of the MC.
4. Annual General meetings.

Weekly Meetings (WMs)

Weekly meetings of members is one of the ten guiding principles of the Comilla Cooperative Model. They are meant to serve the following:

i) Participation and involvement of general members in the activities and decision making process of the society;

ii) Promotion of group cohesion among members;

iii) Inculcation of Cooperative spirit and dissemination of skills and knowledge about cooperation and technology acquired by the manager chairman and model farmer (in case of a KSS) through training at the UTDC.

iv) Collection of weekly savings of the members;

v) Interaction amongst the members and management and better disposal of the problems of the members.

Present study shows that these meetings are held very irregularly and attendance in these meetings are very poor. Only during the period of loan disbursement and in the season of irrigated Boro crop these meetings are held at irregular intervals attended by small number of people to ensure their share of irrigation water and settle the accounts relating to it. This shows the low level of participation of members in the management of the cooperatives which does not bode well for the movement.

The reasons for such lower participation in the WMs are as follows:

1) Virtual discontinuation of training programmes at the UTDCs resulting in no new skill, knowledge or ideas to be relayed back to the general members by the leading members like chairman, manager or the model farmer.

2) Absence of regular activities involving discussion and decision about new things. Discussion about shares and savings hardly generates much interest among members because of being an old routine business and also because they hardly get any benefit from shares and savings, particularly from the shares as no dividend is being paid on them.

3) Very poor supervision and extension work done by the UCCA employees, particularly by the inspectors, which is again the result of low salary and poor motivation of the latter, as our field study suggests.

Besides weekly meeting, weekly saving is another important principle of the Comilla Cooperatives. Along with the weekly meeting, weekly savings programme is also very much on the decline. This is because only a very small amount of interest out of savings are paid to the primary societies for distribution among their members. Among the UCCAs visited it was found that out of 14½% interest earned by the savings deposit of the primaries UCCAs keep 8% of the same as service charges. Rest 6½% is supposed to be distributed among primary members but, that too, is done very irregularly. And so far as share money is concerned, ordinary members get no benefit at all because UCCAs can not earn any profit. Consequently, RCS officials do not allow any dividend to be paid against the share money.

But then again there is no punishment for those members who do not attend weekly meetings or make weekly savings. They however, do not fail

to get the benefit of the societies so far as loan money or irrigation water is concerned. All these factors were found to have led to the decline in the enthusiasm and motivation of the ordinary members but they are very vital for democratic participation, guidance and control of the cooperatives.

General and Special Meetings

General meetings are supposed to be held once in every month to review the activities of the society. But these meetings are not regularly held. Special meetings are held to discuss special issues like observance of national cooperatives day or for submission of the annual loan plan to the UCCA.

Annual General Meeting (AGM)

AGM is an important forum wherein various statutory functions are performed. According to rules, the AGM is supposed to examine the working of the society and, in particular the work of the managing committee. It should also scrutinize and pass the annual budget of the society. To be more specific and clear, the following functions should be performed in an AGM:

1. discusssion on the annual report of the manager as well as on annual income and expenditure, balance sheet and audit report of the society;

2. approval of the budget of the next years;

3. election of one third of the MC members;

4. distribution of prizes among members, and employees for good performance;

5. fixation of honorarium or pay for the manager of the society etc.

The present survey shows that the AGMs are held regularly in time in 8 of the 20 or in 40% of the societies studied. But a survey of a sample of 50 societies in Rajshahi Division in 1985 showed that only 18 societies ever had conducted an AGM since registration. Out of a total number of 272 AGMs fallen due over a number of years, less than 7 per cent had actually been conducted. This variation in the findings of the two studies may be explained by the fact that the present study is heavily influenced by the preponderance of good societies selected by BRDB officers in the UCCA through whom members of the study team conducted the work. But the overall impression that the team gained from their investigation is that the AGMs are very much on the decline. This indicates that the democratic control to be exercised by the general members is not working satisfactorily and that the work done by both UCCA and RCS inspectors in motivating

leading members and enforcing cooperatives laws leaves much to be desired.

Managers of the Primary Societies

As we have already said manager is the chief fuctional executive who is resposible to run the business of the society subject to the control of the MC and approval by the members at the AGM. He may be a paid or a honorary personnel. The functions supposed to be performed by a manager are as follows:

1. to receive all moneys on behalf of the society and issue receipts of the same;

2. to prepare budget and submit the same to the MC;

3. to collect money on account of shares and savings from members and deposit the same with the UCCA;

4. to maintain proper books of accounts and records of other activities;

5. to prepare reports, returns etc. to be submitted to the UCCA and keep the members of the MC informed of the same;

6. to arrange convening of meetings of the MC in consultation with the concerned members and chairman;

7. to act as a liaison between the MC and general members as well as between the society and the central cooperatives and supporting agencies;

8. to help conducting the audit of the accounts of the society by the RCS officials.

Manager is the real pivot around whom a primary society revolves. His effectiveness is therefore very vital for the organizational efficiency. But the main problems in this case were found to be the following;

1. low level of education: This is of course of reflection of the overall illiteracy prevailing in the country. But the fact remains that a minimum of education (at least upto SSC level) is necessary to perform the above functions effectively.

2. lower amount of training imparted by the UTDCs: Training in the UTDCs for the primary society officials like chairmen, managers and model farmers have virtually ceased with consequent adverse effect upon the quality of managers. Almost all the managers of the KSS that we came across in course of our field visit were found to have read at least upto class

V. They were found to be intelligent and if they were given intensive training in the UTDC and provided necessary support and motivation from the UCCAs, they are sure to be more efficient.

UCCA employees particularly the village accountants and inspectors are designed and deployed in the field to assist the managers of the primaries in accounting, record keeping and other functions noted already. This system is meant to ensure that the societies having no resources to employ professionally qualified personnel may have access to the know-how required, for proper management of their activities. In spite of this provision, many societies were found to be suffering from serious management ailments like poor book-keeping, inadequate control of funds and failure to keep other records such as minutes of MC and general meetings and up-to-date register of members etc.

A positive national policy with active support from the state at the macro level can only promote a live and active primary cooperatives at the grass root level which will find its expression in the active participation of its members ensuring democratic control and efficient management through all necessary meetings and managerial personnel.

But at the micro level and within the existing socio-economic context UCCA field staff can play a crucial role in promoting good management of the primaries in various ways and in the vital areas.

It was repeatedly reported by the respondents that a UCCA employee was not found to visit a primary society even within six months. One important reason for such a dismal performance and poor motivation of the UCCA employees was found to be the absymally poor sum of money that were being paid to them as remuneration and which has remained at that poor level for years together.

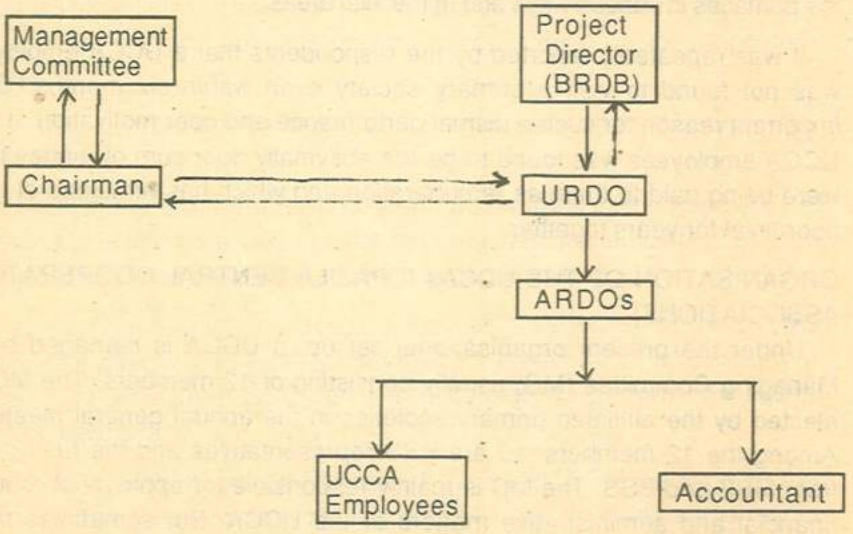
ORGANISATION OF THE UCCAs (UPAZILA CENTRAL COOPERATIVE ASSOCIATIONS)

Under the present organisational set up, a UCCA is managed by a Managing Committee (MC) usually consisting of 12 members. The MC is elected by the affiliated primary societies in the annual general meeting. Among the 12 members, 10 are KSS representatives and the rest 2 are from MSS and BSS. The MC is mainly responsible for approval of routine financial and administrative matters of the UCCA. But sometimes they formulate some policies as well within the guidelines of the BRDB of course.

The chief executive officer of the UCCA is the Upazila Rural Development Officer (URDO). He is the key man who gives notice and usually prepares the agenda for the meeting of the MC. Management Committee takes decision regarding all matters relating to the UCCA along with URD0. Though the URDO does not have any right to impose restriction or disregard any proposal of the MC his/her view is given importance in taking decision in the meeting. He is responsible to "advice and guide the Managing Committee of the UCCA on acts, rules and control policy decisions and to refer to higher authorities in case of doubt". Higher authorities mean in practice the Project Director (PD) of BRDB. URDO is also responsible to execute the decisions taken by the MC.

Besides URDO, there exists a minimum of two other officers—one Assistant Rural Development Officer (ARDO) and one Accountant—paid for and deputed by the BRDB to the UCCA. But this number goes up and additional number of ARDOs are deployed in UCCAs participating in implementation of special programmes like Rural Poor Programme (RPP), UNICEF programme for family planning and welfare etc. In addition to the officers deputed by BRDB, the UCCAs have their own staff appointed by the MC. The most senior UCCA staff member is the Chief Inspector who is responsible to supervise the inspectors and village accountants. The existing organization structure of the UCCA is given below:

PRESENT STRUCTURE OF THE UCCA MANAGEMENT



The major problems that afflict the UCCA as an organization at present appeared to be as folows:

a) Problems of Managing Committee and its members:

1) At present MC has very limited power. For example, in case of selection and promotion of UCCA employees, Chairman of the respective selection and promotion committees is the Project Director (PD) of the BRDB. Chairman of the UCCA and URDO are only members. Similarly, for incurring any expenditure of Taka 5000.00 and above needs approval of the PD even if there is provision in the budget and approval of the MC. These measures seriously impair the representative and autonomous character of the UCCA. Consequently the MC approves and sanctions only routine matters and can hardly take up and decide any important matter on its own initiative.

2) Secondly, most of the MC members are found to have poor educational background and experience in the UCCA work. Consequently, they can not effectively participate in the discussion and decisions of the UCCA.

3) Short tenure of office of the members acts as a disincentive to take any long-term plan or pursue any long term goal. At present the MC is elected for a period of 2 years only which is considered by the members inadequate to undertake long-term business activities. Consequently, initiatives are found to be lack in taking up long term plans. Rather, members are mostly inclined towards short term benefits.

4) In 3 out of 8 UCCAs visited by the author it was repoted that there is some kind of local power group conflict in the UCCA as well which hinders speedy decision making. But the conflict is not so overt as to seriously undermine the activities of the UCCA. There is a tendency among majority of the chairmen and some leading members of the MC to give some undue favour to the societies of their own villages, own kin group or own supporters in local power politics. Several instances of corruption and nepotism by the MC members were reported. Grabbing of good amount of loan money and defaulting in repayment of the same by the leading members of the MC are quite common.

5) Problems of the URDO: As it has already been said, URDO is the chief executive officer of UCCA and in that capacity he is to work under the general control of MC. But he is also to work under the supervision and guidance of the PD of the BRDB. In fact he is more under the control of the PD of the BRDB than the MC. But what is important for assessing his efficiency is the problem of dual subordination that he suffers from.

Another problem faced the URDO is in respect of managing the UCCA employees. According to his job description, he is "responsible for operational control, supervision and training of UCCA's staff." But the fact that the UCCA staff are responsible to the MC, creates problem for him. The problem is accentuated by the machinations perpetrated by the crafty UCCA employees with long experience and connection in assisting candidates from the primaries to get elected to the leading posts of the MC. These members sometimes, tend to protect and patronise the UCCA employees causing disciplinary problems.

6) Problems of the UCCA Employees: But by far the most important problem is the poor motivation and morale of the UCCA employees because of the very poor salary they are being paid. This is a fact which has been come across everywhere and repeatedly stressed upon by all important officials both at the UCCAs well as in the BRDB head office in Dhaka.

While basic pay of a Peon of the Government under the Modified National Pay Scale is Taka 500.00, the basic pay of a Chief Inspector having an educational qualification of at least HSC (many of them are graduates) is Taka 350.00 only. In UCCA, we are told that a Chief Inspector with 7 years of service draw a total monthly emolument of Taka 850.00 only. Whereas a peon recently appointed and posted by the BRDB as a part of a UNICEF programme was drawing a total wage packet of Taka 950.00.

Moreover, they are not entitled to any allowances and fringe benefits, although in the same office BRDB employees get much better salaries, allowances, Contributory Provident Fund, festival bonuses etc. This was found to have created enough of bad blood among the people working in the UCCA seriously imparting teamspirit and efficiency.

ORGANISATION OF BRDB AT THE DISTRICT LEVEL

Organisational structure of the BRDB can be divided into two parts. First is the structure at the Head Office (H.O.). Second is the structure at the field. The latter again operates at two levels: One in the district and other in the upazila level. Organization at the upazila level has already been discussed.

At the district level, BRDB is represented by an office headed by one Project Director (PD), who is usually assisted by one Deputy Project Director (DPD), an accountant and some supporting staff. This number goes up with increased activities for such special projects like Irrigation

Management Programme and the Rural Poor Programme etc. having one DPD looking after each of them.

Main functions of the PD and his office are as follows:

1) To represent BRDB in district level committees meant for rural development;

2) To liaise with various nation building agencies at the district level and particularly, with the Sonali Bank in matters of supplying credit to the Cooperatives;

3) To supervise BRDB personnel deputed to the UCCAs and to provide overall assistance and guidance to the UCCAs in dealing with managerial and other problems requiring external assistance.

4) To promote agricultural cooperatives as well as societies for women and landless people and to coordinate and supervise implementation of service activities in the areas of irrigation extension, input supply, crop marketing, cooperative education and skill development through training.

5) To moitor the performane of the cooperatives and the projects and to sent monthly, quarterly and annual progress reports to the BRDB HO.

Until recently PDs and their offices were located at the old districts. Consequently they had to look after the work of the BRDB at 3 to 4 new districts involving a huge work load. This is evident from the fact that so long a PD on an average had to spend at least 10 days of the month attending meetings with the Deputy Commissioners only, leaving rest 20 days for liaison with district level agencies and looking after his own office and then visiting and supervising 20 to 30 UCCAs under his jurisdiction. The situation became further problematic because of the setting up of the offices by all other ministries and government agencies at the new districts resulting into such adverse consequences as inadequate supervision of UCCAs and BRDB special projects and poor liaison and coordination with concerned agencies.

Situation is likely to improve, however, from the financial year 1988-89 as BRDB was going to set up its offices at 20 more new districts and this process will continue during the following year covering all the remaining districts.

THE BRDB HEAD OFFICE (HO)

The BRDB was created out of the recommendations of a Joint Review by GOB and the World Bank (hereafter only Joint Review) in October,

1981, which envisaged the establishment of a semi-autonomous Integrated Rural Development Board in place of IRDP. The proposed national organization was best visualized as one which will be a permanent nucleus providing necessary support services and coordination. While it will play a catalytic role in rural development it will have the attributes of:

1) Freedom from routinization;

2) Innovation in policies, procedures and systems;

3) Ability to respond expeditiously to changing realities; and

4) Climate of organizational motivation for IRDP employees based on pride of performance and recognition.

It was further proposed that the forthcoming body will have the functions of formulating policies and underking, planning coordinating and monitoring roles for nation-wide cooperative movement, "leaving to the district organization and TCCAs to implement and execute the programme on a decentralized basis." Subsequently the BRDB came into being in 1982 through an ordinance which broadly stated that it would formulate policies, coordinate activities and supervise implementation of various projects and programmes for rural development. The ordinance, however, specifically laid down the following main functions for the Board:

1) To promote village based cooperative societies and UCCAs with the aim of enabling them to be autonomous, self-managed and financially viable vehicles for increasing production, generating employment and developing rural areas;

2) To promote intensive irrigated agriculture as a means to cooperative development and also to utilize efficiently facilities for irrigation;

3) To encourage functional cooperatives for generating income and employment for the rural poor;

4) To channel and ensure productive utilization of institutional credit through the cooperatives and simultaneously promote accumulation of shares and savings of the members;

5) To encourage financially viable UCCAs to diversify activities especially in marketing of agricultural inputs and produces;

6) To arrange for effective training of members of the managing committees and model farmers of the cooperatives;

7) To liaise with concerned ministries, departments and agencies for mobilizing supplies, services and support for the cooperatives.

8) To promote the District and National Federations of UCCAs with a view to progressively handing over the promotional, motivational and educational fuctions relating to rural development.

Besides the functions noted above as per ordinance, BRDB has been assigned the tasks of developing irrigated agriculture together with the Ministry of Agriculture and promoting production and employment programmes in collaboration with Upazila Parishad and other concerned agencies according to the Rural Development Strategy of 1984.

BRDB Head Office (HO) is organised into two layers of authority. The apex body of the BRDB is the governing board concerned with making policy decisions whereas executive functions are carried out by 5 directorates. The Governing Board (GB) is composed of 21 members including a chairman and a vice-chairman. Minister in charge of MLGRDC and the secretary of the same ministry are the chairman and vice-chairman respectively, whereas the Director General of the BRDB is the member secretary. Out of remaining 18 members, only 6 directors represent the cooperative movement. Rest 12 members represent the line ministries and government sponsored autonomous bodies concerned with rural development.

This larger representation from government agencies shows on the one hand the dominant role played by the government in the cooperative movement and the muli-disciplinary nature of rural development work on the other. But to any careful reader of the BRDB ordinance it becomes obvious that the authority of the government over the BRDB is absolute not only in matters of composition and structure of the Board but also in matters of governmental power to appoint the Director General (DG) and such number of directors as government may determine from time to time.

WORKING OF THE BOARD

According to the ordinance the Governing Board (GD) is supposed to meet at least 6 times a calendar year. That means, there should be a meeting in every two months. But the record shows that only 16 meetings were held from 1983 to 1987 whereas there should have been 30 meetings. But those 16 meetings were only in paper. In fact 13 meetings were actually held. For example, 10th meeting was held on 30-12-84. 1th and 12th meetings were not held because of other preoccupations of the

minister who is the chairman of the Board. So when the next meeting was held on 2-3-85 it was designated as 13th meeting. Meeting number 14 was held on 30-11-86 and the 15th meeting was held on 12-8-87. This shows that meetings are held quite irregularly.

The single most important factor for such irregularity of meetings was found to be the inability of the chairman who could not give time and when he could, he failed to keep it because of his other pressing preoccupation as he was a minister. Consequently meetings were postponed systematically resulting in the delay of decision making and wastage of time and effort of those who had to prepare and process huge volumes of paper for the meeting. Since the 16th meeting held on 30th December, 1987, no other meeting has yet been held in 1988. 17th meeting was supposed to be held on May 31, but that too was postponed. This was the fourth time that the date was changed for the same meeting and till June 1988 no such meeting has yet been held although as per ordinance there should have been 3 meetings by now.

So far as attendance at the Board meetings is concerned it was found that while the secretaries of the concerned ministries are the members, they are in majority of cases represented by a Joint Secretary or even by a Deputy Secretary in the meetings. Similarly Managing Director of the Sonali Bank and the Chairman of BADC send their deputies to represent them. Consequently, these subordinate officers can not effectively represent their respective agencies, and participate meaningfully in the deliberations and decision making. Of particular significance in this connection is the attendance of chairman, BADC and Managing Director, Sonali Bank, with whom BRDB has the maximum interaction for irrigation equipments, seed and fertilizer with the former and for credit with the latter and they were found to have the least attendance. As against this, non-official members or cooperators had much better attendance showing the greater interest taken by them.

An analysis of the business transacted at the board meetings shows that a broad range of administrative and financial issues are discussed and decided in the meetings. These include, among others, delegation of administrative and financial matters of general nature and such usual matters like reviewing of budget, appraisal of loan performance, amendment of cooperative law and personnel management issues like promotion, creation of new posts, fixation of pay etc. But the board was not found to have taken any decision on substantive issues of administration

and finance. Even ordinary matters like changing designation of officers the creation of new posts within budget provision or the sale of old irrigation equipment lying idle in the warehouse for years together require approval of the ministry. In fact, many minor issues involving administrative and fifnancial decisions are referred to the ministries of LGRDC, Finance and Establishment Division. Approval or decisions from the concerned ministries are inordinately delayed, unless they were regularly pursued, causing serious bottlenecks at work.

Such a scrutiny and approval by the Ministry seems to be contradictory to the spirit of the composition of the Board with the Minister of MLGRDC as the chairman and the secretary of the same ministry as the vice-chairman. Director General of the BRDB acts as the member secretary. Secretaries of the 7 concerned ministries including the Ministry of Finance are the full-fledged members of the Board. All agenda and working papers are sent to them well ahead of time obviously with the aim of having their considered views about the matters concerned at the time of meeting. But as the proceedings show, decisions about all matters are referred to the concerned ministries again for further approval. Therefore, the Board acts as a mere recommending body and does not act as a high powered autonomous board headed by the minister and the secretary.

In fact in spite of all the apparent trappings of an autonomous parastatal body, BRDB runs like a department of MLGRDC. This is further confirmed by the fact that contracts between BRDB and other government ministries have to be routed through MLGRDC. BRDB neither enjoys the necessary autonomy nor it has the operational flexibility envisaged by the Joint Review leading to the birth of the BRDB in place of IRDP.

Lack of autonomy and infrequent meetings of the Board give rise to the following problems:

1) Interagency coordination, the main mechanism of BRDB to mobilise resources for its activities, suffers greatly as the meeting provide the necessary forum for liaison and coordination among ministries and agencies represented on the Board.

2) Execution of the development programmes and all other relating activities are largely hampered as the BRDB has to seek the approval of the Ministry on almost all operational matters.

CONCLUSION

In conclusion it may be said that many of the problems of management of

cooperatives at micro-level have arisen out of the macro-level policies pursued by successive governments considering them as instruments of their own. Adverse consequences that may follow from such government policies have been aptly pointed out although inaguarded manner by a report of United Nations in the following words:

"Governments in some developing countries also tend to see cooperatives as one instrument among others for carrying out development policies. Such policies are not always at variance with the interests of the cooperators but neither do they necessarily coincide. Governments have at times used cooperatives as vehicles to apply unpopular measures. Where this is done, it is because governments tend to look upon cooperatives as instruments of development rather than as organizations of people who could and should determine their own objectives and participate in decision-making and the benefits of development. Consequently members often look at cooperatives as another type of government institution rather than as their own organisation and, as a result, tend to loose interest."

Cooperatives are essentially voluntary and democratic organizations, supposed to grow spontaneously from below on the basis of popular initiative and mutual help. It was, therefore, rightly emphasized by the I.C.A. when they said:

"Cooperatives can not be imposed by edict from above. Neither Governments nor the ICA can plan or direct their formulation or expansion."

But even a cursory review of historical development of cooperatives in Bangladesh makes it clear that cooperatives, since their inception in 1904 in the sub-continent, have always been planned and promoted by successive governments or British India, Pakistan and Bangladesh either for alleviating the burden of rural indebtedness of to alleviate rural poverty. In the British India, the idea was first conceived and implemented by philanthropic colonial officers. Obviously it was planned and promoted from above and acted primarily as a delivery mechanism for cheap credit in order to keep the rural peasanty afloat from the crushing burden of debt.

Subsequently independent governments of Pakistan and Bangladesh took resort to the same institutions of cooperatives to alleviate rural poverty mainly by providing relatively cheap credit for agricultural production. Of late, of course, providing such vital agricultural inputs as irrigation equipments, seed and fertilizer have gained some importance in the list.

Therefore cooperatives, instead of growing spontaneously from below as mutual aid societies and out of the felt need of the people of limited means, have turned into primarily credit oriented institutions fostered from above with the objective to serve its policy of rural development.

But it is to be remembered here that cooperatives in Bangladesh are only the parts of a larger social system dominated by an undemocratic and authoritarian state run by successive regimes of military bureaucratic alliances in connivance with renegade and turn-coat politicians. Civilian bureaucracy which serves such masters, consequently feels no need to be accountable to the public. Starting from the national capital down to the village most of the public organizations are dominated and managed by the government bureaucracy in connivance with local power elites, who are in fact, touts and cronees of the ruling regimes and cooperatives are no exception to this rule. This become possible because of bureaucratic promotion and patronage of the same.

Various organisations built at different tiers by such governments for promoting cooperatives remains riddled with such bureaucratic muddlings as red tepism, undue caution, too much adherence to paper rules and procedures, too much control from above and above all an attitude towards public as a group depending on their mercy. As against this bureaucratic culture, the culture of the local power elite is to consider any public office as an office of profit and an avenue for self agrandisement through foulmeans which perverts the very concept of cooperatives. Consequently, culture of people is one of passivity. They have come to take these tyrannies of man with as much reluctance and docility as they take such tyrannies of nature as floods, droughts and tornados.

It is obvious that cooperatives which are essentially democratic institutions can not fuction effectively if they remain under the tutelage of such governments on the one hand and their members remain passive and docile on the other. But it is very much a fact of life in Bangladesh that cooperatives have come to be looked upon by ordinary public not as their own institution but only another kind of government office which once in a year dolesout some loan money and in many cases, not without some underhand dealings. Consequently, cooperatives even after 85 years of its existence has failed to serve as an effective vehicle for our rural development.

ORGANIZING THE RURAL POOR IN BANGLADESH: THE EXPERIENCE OF NGOS, GB AND BRDB

JAHANGIR ALAM*

1. BACKGROUND

1. The Status of NGOs

A large number of NGOs work in Bangladesh in various fields. Their focus is mainly on the poor and the disadvantaged. Their number exceeds 400 when only the nationally reputed organizations are considered. The number increases to over 10,500 when the local levels in voluntary organizations are also taken into account.

Some NGOs depend exclusively, for funds, on foreign donations. They are registered with the Social Welfare Department and operate under the foreign donations (voluntary activities) Regulation Ordinance/Rules, 1978 as amended in 1982. The number of foreign NGOs is 89. There are 173 national NGOs who also depent on foreign donations. They receive over 70 million US dollars per year from external sources. From 1982-83 to 1985-86, 16.39% of the total foreign aid were channelled through NGOs. The proportion was little less than 1% in 1972-73.

2. The Approach

Although the number of NGOs in Bangladesh is large their approach to rural development is similar. Many of characteristics of these organizations are common and the prime focus of their attention is almost the same. They work for combating the causes of rural poverty. Their activities are targeted to the landless rural poor. They follow a strategy of organizing the target population into informal groups. They address themselves to the problems and needs of the disadvantaged sections of the rural community through institutional changes and building up organizations of the poor. It is assumed that the organized efforts of the landless poor would enable them to stand on their own feet and to fight against social and economic deprivation.

3. Activities

The activities of NGOs include adoption of new production techniques, creation of employment opportunities, generation of additional income,

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and promotion of education, health care, nutrition, family planning, and sanitation facilities for the rural poor. They encourage their group members to bargain for higher wages, better terms of share cropping, legal rights to 'Khas' land, institutional credit facilities and so on. They also operative separate programmes to ensure economic independence and appropriate social status for poor rural women.

4. NGOs/GOs Covered

For the purpose of this report four NGOs and two GOs[1] were studied. In selecting those six, the principal determinant was their leading role. The organizations are:

1. Grameen Bank (GB)
2. Bangladesh Rural Advancement Committee (BRAC)
3. Rangpur-Dinajpur Rural Service (RDRS)
4. Proshika Manobik Unnayan Kendra (MUK)
5. Swanirvor Credit Programme (SCP)/Swanirvar Bangladesh (SB)
6. Rural Poor Programme (RPP)/Bangladesh Rural Development Board (BRDB).

II. REACHING THE TARGET GROUP

Most of the NGOs and GOs currently working for socio-economic development of the rural poor in Bangladesh have identified the poorest section of the rural community as their target group. For example, Grammeen Bank, SCP (Swanirvar Bangladesh) and RPP (BRDB) have restricted their group membership to a person whose family owns less than 0.5 acres of cultivable land[2]. RDRS has increased the land ownership ceiling for its group members upto one acre of cultivable land and proposed to make separate groups for landless (owning land upto 0.5 acre) and marginal farmers (0.5 to 1.0 acre). BRAC and Proshika did not identify their

1. To facilitiate comparisons with NGOs, the Grameen Bank and the Rural Poor Programme of BRDB were covered. This report treats those as Government Organizations (GO) because both GB and BRDB were established under the Government Ordinances, have allowed government pay scales for their staff members, and use government funds for programme operation.
2. Membership of GB is restricted to persons whose family own less than 0.5 acres of cultivable land, and the value of all the family assets together does not exceed the market value of one acre of medium quality land in the area. For the SCP, the membership is restricted to those whose family own upto 0.40 acre of land (excluding homestead) and whose household assets do not exceed the market value of Tk. 15,000. The RPP of BRDB limits its membership to a person whose family does not own more than 0.5 acres of cultivable land.

target groups on the basis of land ownership criterion. Their selection of group membership relate to main occupation of their clients. They attach importance to those land-poor families in the rural areas who must sell out their labour at least for 100 days in a year for survival.

The proportion of member households who have indeed satisfied the eligibility criterion of each organization to become a member of target group at the time of their enrolment as members is shown in Table 1. It can be noticed that 70 to 95 per cent of the members of each organization have come from the target households i.e. they have fallen within the eligibility limit set by the NGO/GO. They represented the land-poor section of the rural community who owned, on the average, from 0.14 to 1.10 acres of land per family. About 50 to 70 per cent of those member household did not claim ownership of any land other than their homestead land. Similar observations have been reported by the Bangaladesh Bank (1982); Hossain (1986) and Siddiqi (1984) on GB loanees and by Al-Hussainy (1986) on SB loanees. The membership of NGO/GO consists of the rural poor as defined in their eligibility criterion. It was observed that continuous pre-membership meetings and extensive enquiries from fellow members have ensured weeding out of ineligible ones so that membership was confined to the real poor section of rural population.

An encouraging feature of the NGO/GO is the attention paid to rural women among the landless. It appears from Table 1 tnat GB and SB have drawn 83% and 65% of the membership from rural women respectively. Other NGOs and GOs have also been paying increasingly more attention on rural women in recent years.

III. ECONOMIC IMPACT

The NGOs/GOs have pioneered a series of innovations related to productivity in agriculture, generation of employment and skill development.

They provided credit to group members for adoption of productivity-raising technology in agriculture and promotion of a wide range of activities in the non-agricultural sector. This has diversified the pattern of occupation of group members followed by an increase in employment and wage rate in rural areas. Thus the NGOs/GOs have made a positive contribution to a majority of group members to improve their economic condition.

The perception of respondents about their own economic condition were studied. It was noticed that 50% to 86% of group members followed

by an insignificant portion of non-members have reported an improvement in economic condition after the intervention of a new organization. In contrast, 50 to 65% of non-members followed by an insignificant portion of group members have reported that there had been decline in their economic condition during the same period. It is interesting to note that while a majority of the group members felt an improvement, a majority of the non-members experienced a deterioration in their economic life. Those who have reported an improvement in their economic condition have also noted that they harve been able to spend more on food, clothing, housing, medicine and education in recent years.

An analysis was carried out to quantify the effect of interventions made by NGOs/GOs on the level of income, poverty and income inequality. Results are presented in Table 2. It appears that the average household income and per cepita income of group members remained at a considerably higher stage than those of the non-members of neighbouring areas. The group members have earned 6 to 46% higher income per household and 7 to 67% higher income and a per capita basis than the non-members[3]. The difference in the level of income between these two groups was statistically significant for all the organizations, except BRAC (SIP) and Proshika.

A high level of income of the group members would mean that the proportion of households living above the poverty line would be higher for the group members than for the non-members. Evidence presented in Table 2 demonstrates that the hypothesis is true. One can notice from the table that 10 to 48% of the member household were living above the poverty line[4]. in the study areas. The improvement that has been noticed was attributed to agricultural and non-agricultural development, and additional employment and income generation activities of the NGOs GOs in their command areas. In a household where all the members of active age group had the opportunity to work have earned an income above the poverty line. Such an opportunity was low for the non-member.

It was examined whether the additional income generated by group

3. The percentage difference between members and non-members in per capita income was relatively higher than that in per-household income due to a relatively small size of population.

The poverty legal income of rural people was estimated (on the basis of a daily intake of 2150 k.cal. per person) to be an annual per capita income of Tk. 2296 in 1980-81 prices (Alam, 1988a). This amount has been inflated by 58.7% for Dhaka, 86.2% for Sylhet, 87.5% for Chittagong and 92.1% for Rangpur and Dinajpur regions to cover an increase in the cost of living index in 1987.

members was equally distributed among all the members of the NGOs/GOs. For that reason a measurement of income inequality among group members/non-members of the study areas was necessary. This was taken care of by calculating mean deviation of gini concentration ratios of household income of the two groups. The results are presented in Table 2. Data shows that the level of inequality in income was lower for group members than for non-members in all the organizations, except in BRAC (SIP). The evidence suggests that the benefits of NGOs/GOs, in most cases, have been distributed positively among their group members.

1. Capital Formation

NGOs and GOs have made positive impact on savings and capital formation. Each organization has made it mandatory for its group members to save every week. They pay at least one taka per week towards the group's savings fund. Some of the members deposit more money than what is stipulated by the group.

The accumulation of per capita savigns of group members of different organizations was examined. It appears that the GB members followed by GB members have shown maximum potential in group savings. They meet every w ek for payment of loan instalments when they also make the payment for savings. Group members of other organizations make fortnightly/monthly payments when sit rogether in group meetings.

Proshika, BRAC and RDRS members use savings funds for productive investments. They receive matching finds as loans from the organization when they undertake collective cnterprises. Others keep their savings in banks and receive loans from savings funds when their economic conditions deteriorates.

2. Repayment of Loan

The repayment performance of rural landless loanees is excellent. They have been excluded from the institutional credit sources on the ground that they do not have the asset to provide collateral security against which the loan can be granted and that their capacity of repayment is low because they generate a very low level of annual income. This has been challenged by GB, SB, BRAC and some other NGOs and GOs who have been working for the socio-economic development of the rural poor. They provide credit to the rural landless people without any collateral and observe that their repayment behaviour is much better than that of the rural land owners.

The year-wise recovery rate of loan of some NGOs and GOs is shown in Table 3. It is noticed that most of the NGOs and GOs have been able to

recover more than 70% of the outstanding credit in time. Defaults have been reported only in cases of sickness, accident and sudden loss of asset or property of the loanees. However, all the loanees were found to be serious in maintaining the regularity in repayment of weekly instalment. When a loanee failed to pay one instalment he paid a double amount in the next week to cover the missing one. Somtimes advance payments of instalments were made by the loanees when they were able to generate an income above the average level, presumably to cover any sudden default in future repayments. A small portion of the loanees were found to borrow from the local money lenders to pay instalments in advance with a view to get a repeat loan of larger amount as early as possible. Unless the loans were highly productive in generating additional income, such a repayment behaviour would not have been expected from those who operated under a serious limitation of asset and capital.

Other than the utilization of credit in highly productive channels, weekly repayment system, exertion of powerful pressure on individual loanees by the group, intensive supervision of loans and prompt delivery of a new loan made it possible for the borrowers to show an excellent perfomance in the repayment of credit.

IV. SOCIAL IMPACT

1. Literacy

The NGOs and GOs working for the rural poor have made provisions of functional/adult education through trained volunteers who teach the landless groups' reading, writing and simple arithmatic. Some of these organizations, for example, GB, SB, BRAC and RDRS have been operating primary education centres for the children of their group members. The groups manage those centres at their own initiative and receive encouragement and support from their mother organizations. Thus the NGOs and GOs have made positive impact on the literacy rate of the group members and schooling rate of their children.

2. Health and Family Planning

A number of NGOs have taken up health, nutrition and family planning programmes in their command areas. They have appointed trained health workers who activly participate in house visits. During each visit the health worker emphasizes a special health education subject by identifying the most obvious health problem in the member family. They motivate their clients on immunization, family planning, nutrition and health education, diarrhoeal disease control and promotion of safe drinking water and sanitation.

3. Khasland Distribution

Some NGOs have taken effective steps to distribute khasland among the group members. For example, BRAC (SIP) has been preparing to construct two clustered villages (one at Karcha and the other at Teleghori in Habiganj district) on 162 acres of khasland for its homeless group members. It is planned that arrangements will be made to accommodate 80 households in those villages. About 8 lack taka has been sanctioned by the BRAC at Dhaka to raise 'viti' (floor) in project areas. However, those khasland holding are yet to be captured from the possession of the local power structure. One landless group at Teleghori (Sulla) had moved faster and estabilised its command on a Khas plot of 5.5 acres in late 1987 which was under the illegal possession of a local elite earlier. All members (42) of the group have cultivated the plot jointly and transplanted paddy in 1987-88 boro season. Nevertheless, the group did not secure any occupancy right for the land from the local settlement office.

Another landless group representing a BSS of the BRDB at Tuk-Chandpur (Sunamganj) had moved even faster and secured the occupancy right for 100 acres of khasland from the local settlement office. All members (72) of the group have taken equal share of the land and divided it into 72 plots to cultivate those on individual basis. A number of landless groups (BSS) of the BRDB have jointly leased in two khas water areas of 117 acres in Kurigram district for fish cultivation. Several khas ponds have been leased in by RDRS group members in Panchagarh district for the same purpose. The organized efforts of the landless people made it possible for them to takeover possession of khasland from local power structure, this would not have been possible through individual efforts.

4. Class Solidarity

NGOs have been trying to organise greater unity forums of the landless beyond the village level. Initially they federated all target groups of a village into a village organization. Later all village organizations in each union are federated again into a upazila organization. Thus they plan to ensure class solidarity among the poorest at wider levels. Among others, BRAC, Proshika and RDRS have been following this procedure of consolidating the organization of the poor upto the upazila level. The BSS/MBSS of the BRDB do not form any unity forum of their own beyond the village level. They sent one of their representatives to the UCCA where he has the opportunity to settle up socio-economic issues mutually in consultation with representatives of his sister organizations (KSS/MSS).

In the case of GB, there is no provision for consolidation of landless organizations at the union and Upazila levels. The bank federates landless groups at the villages level and establishes separate centres for male and female members. The key leadership positions of each centre rotated every year so that if every member of the centre has the opportunity to be elected as a leader of the centre.

5. Status of Women

Some of the NGOs/GOs have given special attention towards alleviating the miseries of rural women. They have motivated the female group members properly and connected them with a wide range of income generating activities. This has enhanced their socio-economic independence within the household and ensured their appropriate status in the society.

With the enhancement of the status of rural women, incidence of dowry and cruelty to women has diminished. Almost every group members with whom these issues were discussed spoke of their opposition to both dowry and cruelty and expressed their determination to uproot these from the society. Some of them provided specific examples of "dowryless" marriages from amongst the member-families. Others referred to the fact that their relationship with their husband has improved with an improvement in household economy which has eroded all cruelties of their family lives. Referring to the same issue a male member told us: "we are now equal partners."

V. COST OF OPERATION

It was observed earlier that both NGOs and GOs have made significant impact towards alleviation of poverty and hardship of poor people in areas where their programmes were intensive. A question automatically comes: What was the cost of their programmes?

In answering the question data were collected on the cost of operation of each NGO/GO for the year 1986. Analysis of data presented in Table 4 shows that all NGOs with exception to SB had to incur a very high level of expenditure per member household compared to that of GOs. SB did not operate through regular staff but cadre volunteers in rural areas for which its operation cost was low. The evidence suggests that for a given level of of impact on rural poverty and inequality (Table 2) most of the NGOs require to invest more resources than the GOs.

For further confirmation of this view, data were collected on cost of project operation of GB, BRAC and BRDB from a comparable situation in

Manikganj. The activities of each of the organizations were intensive in that upazila and the impact of those activities on poverty alleviation was more or less similar for all the organizations. A analysis of cost figures presented in Table 5 indicates, however, that BRAC incurred a substantially higher expenditures than that of GB and BRDB. It was reported that the NGO compared to GOs engaged more personnel and paid them a higher salary to cover a lower number of household in that area.

While BRAC utilized a lions share of its resources in Manikganj, it spared a small share of its resources in Sulla. Comperative cost figures of these two regional offices showed that the total expenditure in Sulla was only 2.8% of that in Manikganj. The magniture of the impact of the organization was also very low at Sulla[5]. than that in Manikganj. A similar impression was gathered when the expenditure pattern of Proshika office in Saturia to that of Proshika office in Brahmanbaria was compared. The organization spent much lesser and made a much lower impact in Brahmanbaria than those in Saturia. On the basis of above evidence and instances one can conclude that most of NGOs tend to spend more of their resources in some suitable pocket areas and that the impact of their programme varies directly with the magnitude of their expenditure.

The question comes: How long those NGOs will be able to bear the burden of such a costly operation of development programmes. In answering this question we enquired how they generate funds for programmes operation. Results of our investigation is presented in Table 6. It appears that all the NGOs, excepting SB alone, generate more than 60% of their operational funds from foreign donors. Therefore, they will be able to continue operation programmes as long as the donors keep their pipe line open for contribution.

The RPP of BRDB is tagged with UCCAs for programme operation. About 15% of the UCCAs are currently operating on their own resources. They are running either at breakeven situation or generating little profit out of their programmes. Some other UCCAs depend marginally on grants from

5. It is learnt that BRAC has been retreating from Sulla in recent years because the organizers feel that the landless groups have become self-reliant there. Our observations suggest that the landless groups of Sulla are neither self-reliant nor self-managed. The group members have not been able to come out of the vicious circle of poverty even after 15 years of programme operation by BRAC. In fact, the organization was less successful in achieving its objectives at Sulla and so the organizers do not feel it any more rewarding to invest money and resources in an area which is located at one of the most remote corners of the country and nobody cares to see what is happening there.

BRDB for about 20 to 30% of their operational expenditure. It seems that the BSS/MBSS cooperatives will gain more economic strenght gradually as those UCCAs achieve economic self-reliance in programme operation.

SB requires relatively small fund to operate credit programme. It raises fund from GOB against its development programmes and meets part of the expenditure related to SCP from that fund. The commission for village level credit supervisors are paid by the loanees through their weekly subscription to the Swarnivar workers' trust fund. The programme as it stands is cost effective. However, it is not clear how long the organization will be able to run the SCP through almost unpaid supervisors.

The GB has been operating at a marginal profit in recent years. It earned a net profit of Tk. 4.8 million in 1984, 0.46 and 0.36 in 1986. The amount of profit has reduced since 1985 due to a large increase of salary and allowances following implementation of the revised pay scales announced by the Government. However, the bank incurs substantial losses on account of loan operations that made up by profits from the deposit of loanable funds in other banks (Hossain '86).

The number of landless and near landless households in Bangladesh accounts for more than 8 million. The NGOs and GOs have covered only a small portion (estimated 10%) of those households. An overwhelming majority of the poor households are yet to be covered by poverty focused programmes. While the expansion of most of the NGOs constrained by utilization of foreign funds, it would be reasonable to believe that they would limit their activities in some suitable pocket areas and concentrate on model building for the alleviation of poverty. The GOs, particularly the RPP of BRDB have already experienced a very rapid expansion. By all indicators, its performance has been satisfactory so far. However, it may not be possible for RPP to cover rest of the households in the near future. Therefore, it must spell out its expansion programme in terms of priority areas. Areas with highest incidence of poverty should receive priority.

VI. SUMMARY OF FINDINGS

Lessons to be Learnt for Co-operatives

This paper evaluates the impact of interventions made by NGOs and GOs on socio-economic conditions of the rural poor. Three important NGOs, namely DRAC, Proshika and Swanirvar Bangladesh, and important GOs, namely Grameen Bank and Rural Poor Programme of BRDB are covered. Observations suggest that the NGOs/GOs have made substantial positive impact on the level of income, poverty and income inequality of the

poorest section of the rural population. Their achievement seemed remarkable considering the fact that it has taken place in the context of a declining rural economy.

The target group for the organizations are poor landless men and women in rural areas. The membership of those organizations consists overwhelmingly of the rural poor as defined in their eligibility criterion. It was observed that continuous pre-membership meetings and extensive enquiries from fellow members have ensured weeding out of ineligible ones so that the membership was confined to the real poor section of the rural population. The lesson to be drawn is that it is possible to devise programmes which directly and immediately benefit the poorest strata of rural community if they can be organized in groups.

Another important lesson learnt from the experience of GB and SB is that for effective functioning of a collective organization the group must consist of a small number of like minded people. If it is too large such as KSS and BSS in BRDB, the members would not know each other very closely and in that circumstances the members would not take active interest in the functioning of the collective organization. Through trial and error the GB and SB have found five members to be the most practical size for effective functioning. It may be recommended from this experience that the cooperatives may be registered at the KSS, BSS level, but each of them should consist of 8 to 10 informal groups of five like-minded persons, and the penalties for failure to attend meetings, defaulting on loans etc. may be introduced at the group level rather than at the cooperative level (Hossain 1988).

The GB experience brings out the importance of appropriate training and orientation of the field staff for successful accomplishment of a programme. The key to the success of the Grameen Bank is the orientation, approach and human qualities inculcated in the bank workers through a training programme based largely on 'learning by doing', that is through observation of and participation in the on-going activities. Before they start work on their own, prospective bank staff are required to observe critically the workings of the rural economy and society and the plight of the poor. This helps them understand the philosophy and approach of the bank and to develop qualities required for inspiring trust and confidence in the target group. GB workers and branch managers have demonstrated that under appropriate conditions, the idealism and energy of the youth can be harnessed to combat poverty and under-development (Hossain 1988).

The NGOs and GOs have provided credit to group members for adoption of productivity raising technology in agriculture and promotion of a wide range of activity in the non-agricultural sector. This has diversified the pattern of occupation of group members followed by an increase in employment and wage rates in rural areas. Given the under-employment and desperate economic hardship of the landless and near landless households, it seems that for a programme to have an initial appeal to them it must offer them clear and immediate prospects for additional employment and income generation.

Some of the NGOs have demonstrated that the poor are able to achieve a high marginal rate of savings by operating a number of savings schemes and collective security programmes. The organizations have also demonstrated that the lack of collateral should not stand in the way of providing credit for the poor. The poor can utilize loans and repay them if effective procedures for credit operations with them, can be established. The organizations have accepted group solidarity and peer pressure as a susbtitute for collateral for providing credit, and introduced a weekly repayment system for timely recovery of loan. In Bangladesh there is a tendency to regard loans as a relief, especially if it comes from a government-supported organization. The organizations under study make it clear from the very beginning that the loan is for investment and only the income from it is for consumption.

The staff members ensure that loan money is properly utilised. They put a lot of pressure on defaulting members to repay the instalments in time thereby curb the loan-defaulting mentality of the people. Developing collective funds with compulsory savings from individuals for their mutual benefits at times of distress is also a noteworthy innovation for facilitating effective functioning of a credit programme. The cooperatives may adopt similar procedures for incresing savings and improving repayment capacity of cooperators which are pre-conditions for undertaking self-sustained and self-reliant development programmes at the grass-root level.

The organizations under study have made notable positive impact on education, health, sanition, family planning and nutrition status of the group members. There has been a general improvement in the awareness of group members about their socio-economic problems due to interventions made by those organizations. It seems that NGOs and GOs have been particularly successful in enhancing the skills, economic capabilities, income and productive employment of poor rural women. There have been

social gains in terms of consciousness raising of women and changes in attitudes on the role of women within the household and in the society. Such programmes were, however, less intensive in areas covered by the cooperatives. It is important that the practices evolved by these NGOs/GOs are adopted by cooperatives and pursued intensively in rural areas for human and socio-economic development of the poor cooperators.

The NGOs under study seemed to enjoy a high degree of flexibility in budget allocation, programme planning and project implementation. They have attracted a large unmber of young men and women for programme operation in rural areas. It appears that there should not be any difficulty for cooperative to find young men and women in required numbers to undertake poverty focused programmes. What would be needed is the flexibility in budget allocation and project implementation.

The replicability of NGOs are constrained by the inflow and utilization of foreign funds in large amounts. They may not be able to continue operation of programmes when the foreign donors withdraw their support or undertake a major cut on donations. In such a situation, the poor people of rural areas would be left with serious frustration and economic hardship. The cooperative structure draws its operational funds either from group savings or from the Government. Once it gathers a critical mass within its fold it would be able to exert pressure on the government for even a larger budget for programme operation. Therefore, it would seem helpful to rural poor people if the cooperative structure brings all informal groups within its fold after they are organized by the NGOs.

Table-1 Target Group Orientation of NGOs/GOs Working for the Rural Poor

Organization	Farm size of group members (in acres)*	Proportion of member house-holds falling within target group (%)*	Proportion of female members in total membership (%)+
GBP	0.20	92	83
BRAC (SIP)	1.10	70	55
BRAC (MIP)	0.41	87	61
RDRS	0.39	88	26
PROSHIKA	0.46	78	33
SCP (SB)	0.23	85	65
RPP (BRDB)	0.14	95	36

Note: * : Data have been generated from–Field Investigation
+ : Data were collected from Official Sources.
All figures refer to the year 1987.

Table-2: Level of Household Income, Poverty and Concentration of Income for Group Members and Comparable Non-members.

Type of organization and respondents	Average household income (Taka)	Per capita income (Taka)	Proportion of household above poverty line (%)	Concentration of Income	
				Measured by mean deviation	Measured by gini concentration ratio
GRAMEEN BANK					
Group members	1987	3259	48	0.36	0.264
Non-members	13406	1954	23	0.39	0.263
Difference (%)	46.28	66.79	25	-0.03	-0.017
BRAC					
Group members:					
SIP	10700	1486	10	0144	01294
MIP	14709	2493	37	0.38	0.251
Non-members:					
SIP	10290	1391	10	0142	01281
MIP	11423	1799	20	0139	01262
Difference (%):					
SIP	5.98	6.83	0	0.02	0.013
MIP	26.77	36.58	17	-0.01	-0.011
RDRS					
Group members	11628	2005	30	0137	01248
Non-members	9874	1580	15	0.39	0.265
Difference (%)	17.76	26.90	15	-0.02	-0.017
PROSHIKA					
Group members	10248	1708	20	0139	01261
No-members	9412	1518	15	0.39	0262
Difference (%)	6.88	13.17	5	0	-0.001
SWANIRVAR (SCP)					
Group members	14708	2427	35	0.38	0.253
Non-members	10893	1702	18	0.40	0.262
Difference (%)	25.24	42.60	17	-0.02	-0.009
BRDB (RPP)					
Group members	13914	2244	33	0.36	0.241
Non-members	11267	1662	15	0.39	0.262
Difference (%)	25.49	35.01	18	-0.03	-0.021

Note: The difference in average household income and Per capita income between members and non-members were found statistically significant (at least at 5% level) for all organizations except BRAC (SIP) and Proshika.

Table-3: Loan Repayment Rates of the Loanees who obtained Credit through NGOs/GOs.

Organization	Repayment Rate (precentage)		
	1985	1986	1987
Grameen Bank	97.22	97.13	98.04
BRAC	82.15	87.36	90.44
RDRS	–	54.00	62.00
Proshika	91.00	72.00	78.00
SCP (SB)	92.41	76.96	74.84
RPP (BRDB)	78.00	69.00	75.00
BSBL	20.00	15.00	20.00
KSS (BRDB)	55.00	62.00	85.00
MSS (BRDB)	80.00	87.00	74.00
BKB	44.21	30.57	47.77

Note: Data were collected from official sources.
Repayment rate for RDRS has been calculated from field observations. BSBL, KSS, MSS and BKB figures refer to the financial years ended on June 30, each year.

Table-4: Cost of Operation of Each NGO/GO (1986).

Organization	Operation cost ('000 taka)	Total No. of households covered	Number of members benefited	Cost per unit (Taka) Per household	Per member
Grameen Bank	89885	209467	234343	429.11	383.56
BRAC	114062	79600	121747	1432.94	936.88
RDRS	112307	42922	57229	2616.56	1962.41
Proshika	51898	125191	168255	411.26	308.45
Swanirvar	12552	434760	493760	27.08	27.07
BRDB	525600	2633713	3034021	199.57	173.24

Note: 1. Expenditure figures for Proshika, SCP and BRDB refer to the financial year 1986-87.
2. Number of households covered by RDRS and Proshika have been estimated by making a deduction of 25% from the number of members. Our field observations suggest that at least 25% of households covered by these organizations have been taken membership from both male and female groups.
3. BRDB proposed to make a deduction of female members from total membership to determine the total number of households covered by the organization.
4. The RPP operates through normal functionaries of BRDB at the field level. We, therefore, used total operating cost and total number of beneficiaries of BRDB to calculate per unit cost of operation of RPP of BRDB.
5. Source: Official Records of NGOs and GOs.

Table-5 : Cost of Operation of GB/BRAC/BRDB in Manikganj Upazila for the year 1987.

Organization (TK.)	Operating cost (Taka)	No. of staff employed	No. of household covered	No. of members benefited	Cost Per household	Unit (Tk.) Per member
Grameen Bank	3259078	78 (16.67)	9514	10015	342.56	325.42
BRAC	30610701	141 (17.02)	6332	18327	4834.29	167.25
BRDB	376144	18 (5.56)	8049	8672	46.73	43.37

Note: Bracketed figures indicate proportion of females in total staff.
Source: Official Records

Table-6: Generation of Operational Funds by Source

Organization	1986		1985		1984	
	Own Source	Contribution of foreign donors	Own Source	Contribution of Poreign donors	Own Source	Contribution of Foreign donos
BRAC	30.74	59.26	39.09	60.91	30.99	69.01
RDRS	16.35	83.65	18.00	82.00	19.20	80.80
Proshika	2.77	97.23	0.49	99.51	0.86	99.14
Swanirvar	100	–	100	–	100	–

Note: Figures for Proshika refer to the financial year from July to June. In the cases of RDRS and Swanirvar 'own source' refers to GOB contribution. In other cases, it refers to internal savings from commercial enterprises.
Source: Official records

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ALTERNATIVE INSTITUTIONAL APPROACHES TO RURAL EMPLOYMENT GENERATION : FRAMEWORK FOR COMPARATIVE ANALYSIS

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1. THE SETTING

In the context of previaling abject poverty and inequality in the country, ever since the independence successive regimes of Bangladesh have emphasised poverty eradication as one of the prime strategic objectives for national development. People at large bring direct victims of unemployment/under-employment, declining real wage rate, malnutrition, illiteracy, inadequacy of medicare, could not have desired a more noble goal for the national perspective. The advanced sections of the society also appreciated that, at least theoretically, there is an urgent need to raise the level of entitlements of the deprived communities, whereas, the more concerned sections got themselves involved into social actions. Ostensibly, the donor community also have had been channelling their resources into Bangladesh in order to contain some of the extreme manifestations of poverty and raise the economic base of the country.

In the backdrop of this widespread awareness regarding the dire necessity of taking appropriate actions to ensure the survival of the 'have nots' and enhance their well-being, the general policy direction during the period was to deal the problem by encouraging the core productive activities (i.e. activities those generate employment and income), primarily agriculture, in the rural areas, where most of the poor people live. Experience suggests that while the strategy of emphasising teachnological changes in crop production had been quite well taken (resulting both higher growth and higher labour absorption), it could not match the current magnitude and trend of unemployment/under-employment problem of rural Bangladesh (exacerbated by the population growth rate). The societal and structural constraints also imposed serious limitations on realisation of

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the idealised perspective, derived from causal nexus between aid and development on one hand, and between diffusion of modern technology induced growth and expanded savings, investment and employment on the other.

As a result, stubborn persistence of poverty and inequality, brought to the fore the limited scope of influencing the situation of the income-poor people through macro-policy variables and sectoral approaches. Realisation in this regard was basically two folds. First, the employment generation strategy should diversify itself into non-cereal crop in order to make a considerable dent on the poverty situation; second, poverty should be confronted directly through group targeting of gainful employment programmes.

However, process of policy evolution in Bangladesh relating to poverty eradication paralleled the process of experimentation with institutional arrangements geared to achieve this end. The government of Bangladesh (GOB) with its various line ministries (Local Government and Rural Development, Youth, Women and Social Wefare, Agriculture and Food, etc.) and concerned agencies (Bangadesh Rural Development Board, Bangladesh Small and Cottage Industries Corporation, Directorate of Cooperatives, etc.) pursued a variety of employment generation projects, targeted to different cross-section of people hinging on the lower end of the income scale. Diverse types of non-gevernmental organisations (NGOs) with explicit objective of reaching the rural poor launched a wide assortment of income-earning projects. In between these two emerged some quasi-NGOs/GOs such as the Swanirbhar and Grameen Bank. All these anti-poverty programmes, besides their diversity of institutional arrangements, also vary amongst themeselves in terms of approaches, functional objectives, areas of intervention, intended target group, etc. However, in all these efforts, irrespective of nature of executive organisations, the role of the donor agencies, in various degrees, remained to be significantly pronounced, not only as overwhelming dominant source of financial,resources, but also as a major actor in all the phase of the project cycle, namely, conceptualisation, execution, monitoring and evaluation (including provision of technical assistance).

Despite the plethora of institutional frameworks, programmes and approaches to the anti-poverty efforts focusing on core productive activities, there is a growing concern regarding their impact on the intended beneficiaries, relative success of different organisational structure, the

appropriateness of the nature of assistance provided and, last but not the least, their cost-effectiveness. Whilst a few of these programmes and types of approaches have been analysed in varying degrees of detail, it has become pertinent to collate fragmentary evidences and carry out comparative evaluation of these programmes involving exercise in understanding the extent of their successes and failures and their relationship to programme contents, impact, sustainability, alternative organisational structures and mechanisms for programme delivery and such other characteristics.

Comparative assessments of the above-mentioned order are already finding their place in literature, but most of them remain inadequate in terms of conceptualisation, analytical framework and coverage. In order to fill in this lacuna, BIDS is presently executing a review exercise, based on primary field level data and involving comparative analysis of employment programmes, carried out under various institutional arranagements, with a view to assess the potentials/limitations of these schemes in respect of their impact, sustainability and replicability. The present paper attempts to raise some of the pertinent (basically of methodological character) issues. regarding such a comparative exercise.

2. EVOLUTION OF RURAL EMPLOYMENT PROGRAMMES

Concerted efforts to promote rural employment may be traced back to 1950s, which are associated with Multi-purpose Cooperatives and Village Agricultural and Industrial Development Programme (V-AID). However, the first major attempt was the Comilla Integrated Rural Development Pilot Project (CIRDAP), launched in 1959. In 1969 the government set up the national Integrated Rural Development Programme (IRDP) with the task to extend the Comilla model all over the country. War of independence preempted launching of IRDP and it took of the ground formally only in 1972. Relative successes and failures of this group of programmes are already well documented in literature.

In the meantime the independence movement generated new social passion and impetus for more direct interventions in favour of the rural poor. Several of today's most successful NGOs (e.g. BRAC, Gano Shastha Kendro) came into being at that time. A number of international organisation (e.g. RDRS, CARITAS, CUSO) during those initial years of independence came down to Bangladesh in order to participate in the relief and rehabilitation activities.

By the middle of 1970's one may notice that the voluntary organisations, initially involved in relief operations are moving out to support more long term development activities from the realisation that provision of relief material would not significantly reduce poverty. This is the stage when multi-sectoral community development programmes were introduced into the work plan of the concerned organisations and agencies. In this context, the Swanirbhar Movement, launched in 1975, represented a government sponsored community development approach outside the formal cooperative framework.

The community development approach as a means of employment generation for the rural poor soon demonstrated its serious short-comings, manifesting primarily in appropriation of project benefits by the rural elites. IRDP and the Food for Work Programme in this sense were no expections. The general development programmes failed to make a dent on the poverty situation as the socio-political structure of the country appeared to be much too robust. It become quite obvious that a more direct intervention is necessary to have perceptible impact on the circumstances of the rural poor.

This reckoning ushered into initiation of target group oriented rural employment generation programmes. Of course NGOs were first to reconsider their strategies. During the second half of 1970s and early 1980s, we witness emergence of significance of new NGOs and at the same time committing themselves to anti-poverty programmes through mobilisation of socially homogeneous functional groups. Conscientisation and promotion of social action became the main feature of this approach.

A NGO programme with distictive features was of course the celebrated Grameen Bank (GB) launched as a project in 1977. GB was essentially a supply oriented project focusing primarily on disbursement of credit for income generating activities. Although the target population of GB was same as that of other NGOs (Proshika, Nijera Kori, BRAC, etc.), only it placed lesser emphasis on conscientisation and social action.

However, the government programmes could not remain immune to the evolving strategies for rural employment generation. Adjusting to the new realities IRDP started enrolling landless people in agricultural cooperatives (KSS), forming women's cooperatives (MSS), organising non-agricultural societies. Thus, when BRDB was established in 1982, as a successor of IRDP, a targeted Rural Poor Programme (RPP) was institutionally

incorporated into various other programmes of the Board. The RPP went out to mobilise the landless people into separate associated groups, viz. BSS and MBSS (for the women).

In the process of evolution of rural devolopment programmes, it is neccessary to distinguish another approach towards rural development. It is the government sponsored area development programmes (popularly known as Rent-a-Thana approach). The first generation of these area development programmes (e.g. RD-1), launched in the second half of the 1970s, ultimately transcended into integrated rural development projects for specific areas (e.g. NIRDP).

By the end of 1980s, one observes a proliferation of rural development programmes. Presently there are more than 25 national level government projects directly geared to generate rural employment, whereas about 150 NGOs, pursuing development objectives, are operating in Bangladesh. When one intends to carry out a comparative analysis among them, it becomes necessary, in the backdrop of the evolution of the rural development approaches, to delineate the process of metamorphosis of each of the concrete programmes (or institution) in order to identify their comparable and unique features.

3. RURAL EMPLOYMENT PROGRAMMES: THE MACRO RATIONALE

Per se the basic premises for augmenting rural employment programmes (REP) seem quite plausible but soundness of their policy implications need to be judged within the demand-supply macro framework. Evidence suggests that, demand for non-crop agricultural and non-farm products are significantly income elastic. Moreover, as cereals are income-inelastic commodities, in the absence of significant price support measures, there would be a tendency to shift away from cultivation of foodgrain to non-cereal agriculture. But demand prospect of the goods and services produced by the non-cereal agricultural and non-farm sectors are circumscribed by their low shares in the rural household budgets, insignificant penetration in the urban market and marginal contribution to the consumption basket of income-rich consumers. Competition from products and processes of foreign origin and improved local substitutes also have bearing on the situation. The pertinent question which needs to be answered while promoting particularly rural employment programmes in the non-crop agricultural and non-firm sectors is that, where output of these activities is going to satisfy previously unmet demand by casing the supply constrain or the enhanced supply of those goods and services is going to

give rise to new price equilibrium entailing redistribution of income and lower rate of return to the producers.

Thus, a comparative study of various rural employment generation programmes has to ascertain to what extent this issue has been squarely addressed in static and dynamic sequences, in the course of identification and selection of the schemes. In the absence of resolution of this issue of short and long run consequences of demand and supply for a particular project, it may be reckoned that the project was selected either on ad hoc basis or from extra-economic considerations. As it appears, whilst most of the REPs being designed and appraised, this macro aspects do not get due consideration, thus contributing to their achievement parameters.

4. NATURE AND AREAS OF INTERVENTION OF RURAL EMPLOYMENT PROGRAMME

The areas of intervention of REP are supposed to be prompted by the way the supply-demand issue is resolved. If it is reckoned that the programme activity is going to release the supply constraint, in that case it needs to be determined what type of supply side input is critically necessary for accomplishment of the programme, e.g. credit, skill development, technological upgradation, raw meterials, etc. On the other hand, if it is maintained that the employment generation programme is being inhibited by demand constraints, then the requisite interventions should be towards broadening the demand prospect of the output in the following directions: rationalisation and widening of marketing network, enhancement of product quality through improvement of skill, introduction of new products based on upgraded technology, exploration of linkage effects of the activities, etc. These above-mentioned issues are particularly important when self-employment schemes are identified and executed.

Whilst deliberating on the nature of intervention, it is necessary to distinguish between the core productive activities of the programmes and other associated programmes (health, nutrition, education, etc.). However, experience indicates that when the associated activities are combined with the core productive activities in an integrated anti-poverty programme, then the programmes stands a better chance to succeed in comparison to stand-alone programmes. As one sets out to do a comparative evaluation of these integrated, comprehensive package programmes, it becomes a hazardous task to compare different programmes, having different productive activities at their core with different areas of intervention supplemented by different associated activities. While assessing the impact it becomes difficult to

aggregate the relative impact of these various components and discreetely assess their respective costs and benefits.

Despite the variability of approaches in the nature of intervention of different poverty-alleviation programmes, one may identify two main approaches likely to remain important for the exercise: (i) conscientisation approach (radical-structuralist' type) and income generation approach (`reformist-evolutionary' type). Whilst elements of these two approaches may be present in the same programmes put more emphasis on `conscientisation' rather than on directly addressing the problem of income generation and vice versa. Under the circumstances, the issue of comparative assessment of impact of various anti-poverty programmes having different approaches to employment generation issue becomes interlinked with several methodological problems, particulary relating to the problem of estimating economic impact of programmes which mainly rely on `conscientisation' approach. An abovious way to address this issue would be to consider whether greater conscientisation of the target group has contributed to enhanced access to available public funds, improved bargaining position in the labour market and so on.

However, one may notice the emerging congruence in these approaches, as the income-generating schemes are supplementing themselves with awarness raising programmes, whereas proponents of conscientisation oriented approach are recognising that they can not go a long way without ensuring some sort of material gains to their members.

5. TYPOLOGY OF THE RURAL EMPLOYMENT PROGRAMMES

Probably the most commonly used classification of the rural employment programmes is according to their institutional arrangement and mode of delivery, i.e. government and non-government (local and international). However, it does not exhaust the scope for other types of classification. For example (a) according to functional objectives of the programme, mix of objectives and relative emphasis of a particular objective; (b) according to the intended target group within rural poor (women, youth, landless labourers, etc.); (c) according to the circumstances under which the programme has come into being (local initiative government's intervention, donor's initiative, etc.).

As one moves forward towards a comparative assessment of these programmes, it is necessary to distinguish what type of classification is appropriate and fundamental and relate it to the potential objectives, it will

be more reasonable to distinguish the REPs according to the type of employment the programmes envisage to generate, viz. (i) wage employment, (ii) self-employment and (iii) collective (group) enterprises. Then within the each type of employment programmes one should compare different institutional arrangements. In other words keeping the types of employment as dependent variable, the mode of delivery (institutional arrangement) should be used as explanatory variable. For a third stage probing, it will be useful if under each employment group and within each major types of institutional framework intra-differentiation is made. For example, for self-employment programmes, a NGO-led REP besides being compared with another GO-led REP, should be also compared with another type of NGO-led REP. Sectoral approach (agriculture, non-farm, infrastructure, etc.) may be also incorporated in the cross-institution analysis.

6. ASSESSING THE IMPACT

The basic question one would have like to have answered in a comparative study is which type of rural employment programmes seems to have the most positive outcome, firstly, on the direct participants of the programme, secondly, on the other members of the households and thirdly, on the village population at large.

Assessment of outcome of these programmes, captured in changes in level of income, consumption or employment, is constrained by the absence of longitudinal information. Thus, a "before" and "after" situation analysis has to depend upon memory recall based responses (which at times are quite unreliable). Alternatively (or may be concurrently), a "with" and "without" situation analysis, using comparable control sites, may provide more insights.

However, measurement of changes in levels of income, consumption and employment must obviously give only a partial picture of the impact of programme interventions. With large variation in approaches, scale and mode of operation, it is assumed economic indicators should be supplemented by other correlates such as dependency ratio, number of school going children, decision making process, etc. in the household. What is advocated is generation of quantitative as well as qualitative measures of estimates, the indicators stemming from perception survey of the participants.

While most of the comparative studies usually stop by explaining the

differences between programmes, it is expected one should go beyond this stage by addressing the question – what makes certain programme or set of interventions more successful than others. Such a determinant analysis may involve assessing the contribution of such factors as: method of mobilisation, sources of fund, combination of input /services offered to the members, effectiveness in responding to demands, capability of staff to monitor and supervise programme operation, moral of project staff, institutional arrangement including staffing pattern, training of staff etc.

7. COMPARATIVE COSTS AND COST EFFECTIVENESS OF RURAL EMPLOYMENT PROGRAMMES

The issue of comparative costs and cost effectiveness of alternative rural employment programmes (REP) is a vexed question. Agencies executing REP have tended to stress benefits, or likely benefits, over cost effectiveness. Moreover, due to the pragmatic approach followed by self-employment and other schemes, there is little theoretical justification of alternative uses of resources. As a result, the relavance of cost effectiveness nesessarily becomes related to the relative performance of the project itself or achievement in terms of stated objectives. Here again performance information is either scantly, fragmentary or totally not available, thereby limiting the scope of cost-benefit analysis. The issue of comparative assessment of various REP having different approaches and pursuing different objective is also complicated by the limited scope of evolving a common yardstick or denominator for their evaluation.

The methodogical issues involved in this regard are:

i) The difficulty in ascertaining the total costs of the schemes. Available data quite often relates only to the grant and loan component of the schemes.

ii) Estimating the administration and implementation costs is complicated by the involvement of more than one agency in a project.

iii) The problem of estimating cost-effectiveness of the programmes in a situation where cost elements are very specific to the nature of the project.

iv) The difficulty in disaggregating the relative contribution of the non-programme/overhead costs, when the executing agency is running more then one project concurrently.

v) The pragmatic nature of schemes do not lend itself to rigorous analysis of efficiency in resource allocation.

vi) The difficulty in estimating private and social benefits of the schemes.

vii) The problem of estimating direct benefits and more particularly the indirect favourable changes in circumstances those may be occured to a particular project, i.e. the intengible benefits.

viii) The problem of ascertaining whether a programme has been able to strike a balance between efficiency and welfare objectives.

ix) The problem of assesssing the qualitative aspects of the mode of delivery such as proper formulation of eligiblity criteria of beneficiaries, scope of participation of the beneficiaries in the decision making, process, level of clientele satisfaction, etc.

Regarding the cost-effectiveness of the REP in Bangladesh, one can hardly arrive at any definitive conclusion at the present level of probing in this area. Whatever indicative at figures are available, extreme care must be exercised in interpreting the REP performance figures as different methodologies may be used to derive the same set of indicators. Moreover, short evaluation surveys fail to gather accurate labour-use information and it is quite hazardous to impute costs of family labour which is essential for estimating the rate of return on capital.

Research has show many rural activities register high benefit cost ratios, although coefficient of variations in these activities is also quite high, implying promotion of such schemes for employment must closely relate to specific project profiles taking into consideration not only direct costs and benefits, but also other factors (externalities, demand and supply constraints, etc.). Thus, positive benefit-cost ratios do not necessarily indicate a proper measure of viability of the activities.

Calculating the cost-effectiveness of programmes demands consideration of capital-output ratios and productivity generated. The costs per se of employment creation in relatively higher technology industries are considerably higher in the cottage industries. However research revealed that, cost effectiveness of employment generation is greater in "mass" activities (due to higher rates of participation despite their low labour productivitty), that in selective varieties of entrepreneurship development.

Estimation of incremental capital-output ratio remains to be a remote concept in the context of carrying out cost benefit analysis for REPs.

As it is known that there is a strong association between cost-effectiveness and scale of operation. This also holds true in case of REPs,

carried out under alternative institutional arrangements. It is argued that a NGO which may be very successful at the present level of operation, may lose its comparative edges when entrusted with a task of greater magnitude. This line of reconing needs to be probed.

Moreover there is a strong need to estimate actual costs to society of reallocating substantial resources to REP, weighted against alternative streams of benefits.

Until and unless, the performance of REP is extensively supported by comaparative and comprehensive benefit – cost analysis, taking account of a viried number of variables, the claim of relative 'superiority' of the project can not be deemed vindicated.

8. TI IE ISSUE OF SUSTAINABILITY

The term sustainability may have two different connotations in the given context. First is the sustainability of the employment generation programmes, i.e. whether schemes, be it of wage-employment or self-employment, can be continued for a prolonged period of time. Second is the sustainability of the impacts, i.e. whether the results achieved can be consolidated in the event of withdrawal of institutional support mechanism.

There is lack of unanimity regard to the scope of sustainability of wage employment programmes. As most of the wage employment schemes are associated with infrastructural projects (Rural Works Programme), one view argues such programmes could not be sustained, since all infrastructural projects will be eventually completed with no further scope for productive public employment. Maintenance activities would be able to provide only a small number of employees. The opposite view maintains that even if major infrastructural projects such as roads, bridges, embankments, dams and major irrigations were exhausted, only additional projects will be needed. Then special employment scheme may also diversify itself into minor irrigation, soil conservation and social forestry.

On the other hand, self-employment has a crucial advantage over wage-employment by dint of its very self-sustaining nature. An unemployment individual after acquiring an asset of skill can generate employment and income opportunities for himself and/or other members of his household, provided, of course, appropriate merketing and input delivery infrastructure to exploit the asset/skill are present.

Whilst expansion of self-employment decreases indefinite dependence

on government sponsored wage-employment programmes, the sustainability of the former is critically dependent on the existence of infrastructure and support service (viz. banks to provide credit, marketing organisations to help realise and other assisstance, etc,). Due to absence of these structures, bankruptcy has quite often engulfed the participants of the self-employment schemes (particularly livestock, forestry and small industries).

Regarding the second notion of sustainability, beyond some speculations, almost no evidence is available in literature. As wage employment schemes are primarily designed to provide short term slack season income support, their immediate impact is of more importance. Alternatively, there exists a common reckoning that, the 'spoon-fed' nature of some of the self-employment schemes, coupled with their dependence on support services, make them totally vulnerable when the beneficiaries of these schemes are left along exposed to the interplay of market forces. However, it is also not rare when one hears case histories about destitute widows graduating themselves into prosperous petty entrepreneurs, thanks to credit induced self-employment activities.

9. THE SCOPE FOR REPLICABILITY

Whilst the question of replicability of employment generation schemes is closely inter-linked with the issue of sustainability; its (replicability) scope may be traced in two lines. First, the possibility of its quantity-wise multiplicatic within the very project, second, the possibility of its quality-wise—examples of successful nation-wide replication of innovative schemes (e.g. the Township Enterprises of PR China and the Maharashtra Employment Guarantee Scheme of India) without a significant loss of quality of effectiveness and quite often concept and design of such projects, as Grameen Bank or Small Farmers' Development Programmes of Nepal are recommended for replication beyond the national boundaries of their origin, one still has to be cautious whilst considering the prospect. As many employment schemes are initiated, developed and management by NGOs and are dependent on enterprising, committed individuals (social worker, politician, professional), the scope of their replicablity in other parts of the country or planet remain contingent to the avialabity of specific factors contributing to intial success (e.g. leadership). Whilst successful rural employment generation programme failed when extended to a large geographical or beneficiary coverage, the answer possibily lies in the form of institutionalisation of such programmes.

Whilst the issue of replicability of self-employment schemes centres around identifying an appropriate format, the question of replicability of wage employment is basically or ascertaining an optimal scale of operation. It is quite often maintained that wage employment scheme should be undertaken within the country on a minimum scale, only to absorb the residually unemployees (those not finding agricultural and non-farm employment). The wage employment programmes needs to have the flexibility of expanding and contracting in synchronisation with the slack and peak seasons of agricultural crop cycle. In this context, descending view argues to launch wage employment programmes on a massive scale, guided by the consideration that as long as these programmes allow a wage rate above the opportunity cost of the labour and capable of underwriting nutritionally adequate diet for the participants, these programmes should be deemed beneficial.

However, whatever type of schemes may be taken up for large scale extension, it is pertinent to assess, on the basis of improved evalution teachniques, its prospect in the specific context of the area of replication.

Two other societal factors are sometimes mentioned as constraints to mass level extension of income generating schemes. The first refers to the hostility from local vested interest groups. For example, a rich farmer, needing considerable amount of wage labour for his holdings will only be happy to not to have these employment creation schemes, which will release the dampening pressure on the agricultural wage rate. Second factor affecting the scope of replicability is the prevailing not so conducive government policy regime, determined by the configuration of class interest embodied in the state apparatus. It is quite natural, any state power, which does not derive its sustenance from the support of the assetless and incomeless people will look upon their economic empowerment and conscientisation as a step towards their enhanced political and social barganing capability. Thus, such a state power will only allow large scale involvement of the rural poors in these income generating activities as long as they do not disturb the existing socio-political status quo.

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INTERNAL RESOURCES DIVISION FOR INTEGRATED RURAL DEVELOPMENT IN BANGLADESH

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Internal Resources Division (IRD) in the Ministry of Finance is responsible for more than 90% of the revenue earning of the Government. The main sources of revenue earning are Customs Duties, Excise Duties, Sales Tax and Income Taxs, etc. Though revenue collection is the main function of IRD, it serves many other purposes like protection to domestic industry, expansion of certain types of industry, export policy materialization, agriculture sector development, etc. All these are taken care of through fiscal measures like increased taxes, tax rebate, tax reduction, bond facility, etc. Among all these facilities, IRD framed certain fiscal policies which aimed at mechanization of agriculture, increase of agricultural yield, investment in the non-urban areas, expansion of non-agriculture rural oriented investments and so on. Therefore, it reflects that IRD is concerned for not only industrialization but also development in the rural areas which can be termed as rural development and in this way IRD is also contributing to rural development in Bangladesh.

Rural development has been defined in many ways. A more comprehensive concept and method of rural development has been suggested by world bank rural development is a strategy to improve the economic and social life of a specific group of people, that is, the rural poor including small and marginal farmers, tenants and the landless, (Mehta 1984). However, in simple words rural development means alleviation of rural poverty. But to speak the truth, any single definition cannot define rural development of any specific country since each country has its own peculiar social, regional, economical, ethical and religious phenomenon which make it different from others. In my opinion, rural development in Bangladesh cannot be housed in one single word or sentence. It must contain the main ingredints of the rural economy calling for a change and

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prescribing ways for total development in that sector. Therefore, I would like to define rural development in Bangladesh in the following words.

Rural Development in Bangladesh means:

(a) Elimination of poverty outside urban Bangladesh.

(b) Reduction of the number of population dependent on agriculture.

(c) Increasing agriculture yields; and

(d) Creation of non-agriculture rural based employment opportunities.

Now I would like to quote statistical information about our rural sector for refreshing your memory. The per capita GNP in Bangladesh stands somewhere near US$ 170 and that in the rural areas turns to be even lower, only around $\frac{2}{3}$ of the urban incomre (Household expenditure survey, 1985-86). Estimates based on the FY 86 House Expenditure survey conducted by Bangladesh Bureau of Statistics indicates than 44.2 million rural people representing 51% of rural population were below poverty line. And the 'hard core' or extreme poverty (consuming less that 1805 cal./person/day) numbered 19.1 million i.e. 22% of the rural population. Over the seventies absolute rural poverty accelerated the number of those below poverty line increased from 57.4 million in 1973-74 to 609 million in 1981-82, 'hard core' rural poverty increased sharply from 30.7% to 43.1%. But over 1983-84 to 1985-86 period the proportion of poverty line in rural population declined from 47 million to 44.2 million (57% to 51%) with simultaneous decrease in hard core poverty. On the other hand, the surplus labour force in agriculture sector increased from 28.1% in 1960 to 32.4% in 1983-84.

Our planners always kept in their mind the above facts and in fixing objectives for the plans the above facts were given priority. As such in all our plans due consideration has been given for eradication of poverty, food self-sufficiency, population control and reduction of unemployment, which relate directly to the rural population and therefore it can be said that plans of Bangladesh put adequte emphasis for rural development and the definition given earlier is in conformity with the objectives of the 5 Year Plans of Bangladesh.

Now let us see how Internal Resources Division or to be more specific, the tax policies matter in respect of rural development. Esmen and Uphoff has given a clear idea about the role of different government and non-government agencies, including fiscal institutions, in rural development. They have outlined the elements of rural development strategy. These elements have been divided into four categories:

(1) Public investments in physical and social infrastructure. This includes roads, water supply for irrigation, etc.

(2) A policy environment which is sensitive and responsive to the interest of rural constituencies including the poor. This includes, for example, a structure of market price that provides production incentives to farmers and small entrepreneurs, a set of import duty, tax and credit policies with progress aimed at employment creation for landless labourers and marginal farmers.

(3) Technologies suitable to the circumstances the capabilities of small farmers and other rural producers. Such technologies and farming practices should foster improved productivity, yet be; within the financial means of small operators. Similar technological improvements can increase the productivity of crafts and other small rural industries. These are important because the increasing proportion of rural employment and income will have to come from non-agricultural activity.

(4) Effective institutions , according to them, two kinds of institutions are required for rural development:

(a) Units of Government agencies, and

(b) Local institutions.

In their opinion, all four of these components are necessary for rural development but planners, development assistance organizations and academic writers on rural development have emphasized the first three neglecting the instutional dimension, and at a very great cost.

From the above, it appears that the IRD fall under the second category of component that has a great role in rural development and therefore it is my aim to put before you the policies so far taken by the IRD for increasing investment in the rural areas, creation of employment opportunities there, development of agriculture and increase in income of the rural people.

The fiscal planners of IRD kept in front of them the following objectives in formulating the fiscal policies:

1. Rural investment or capital transfer from urban to rural areas and employment creation;
2. Poverty alleviation and income generation;
3. Incentive for rural-based industrial sectors;
4. Incentive for transport and fishing sectors;

5. Mechanization of agricultural sector;
6. Increase of agricultural yield; and
7. Socie-Economic change of rural areas.

RURAL INVESTMENT (OR CAPITAL TRANSFER FROM URBAN TO RURAL AREAS) AND EMPLOYMENT CREATION

Transfer of capital from urban to rural areas means more capital investment in the rural areas. We have seen expansion of industrial areas in Tejgaon, Tongi, Savar, Pahartali, Daulatpur, Narayanganj; but all these places grew centering Dhaka, Chittagong and Khulna. Since there were acccessible roads, railway communication, electricity, banking facilities, it was easier for the investors to go for investment in these areas. But we found very few to invest even on the other sides of the rivers Buriganga, Karnaphuli or Rupsha. When they get more facility in Daulatpur, why going to the other side of Rupsha with less facility but no incentive. This was the picture till 1976. This aspect has been well taken care of by IRD and below are the few fiscal measures offered by IRD for alluring the investors for going there. The measure may look small but has far reaching effet on the total investment schedule. Let us see what those measures are:

1. Customs Duties

Till 1976, there was no incentive in the form of reduced rate of customs duty for investment in the rural areas. In 1976 government first felt necessay that there should be some concession of customs duty for investment in the rural areas. With this aim in view, government decided to give preferential rate of import, duty for installation in the underdeveloped areas than those for installation in the developed areas. For this purpose, the whole country was divided into three zones:

Developed, Less Developed, and Least Developed areas.

While an investor is required to pay 15% import duty on capital machinery to be installed in the developed area, he is subjected to only 7.5% duty for less developed and 2.5% duty for least developed area.

This substantial relief in customs duties reacted positively and significant number of investments in the rural areas were marked side-by-side, generating employment opportunities in those areas. Apart from this, any investment in the BSCIC Industrial Estate is subjected to 2.5% customs duties (on capital machineries and thus there was marked increase in investment in the BSCIC Industrial Estates too. Subsequently the customs duties on capital machineries for installation in the developed areas was

enhanced to 20% from 15% and thus investment in the least developed area was made more attractive. This was again reduced to 15%. The success of this incentive could not be achieved fully due to lack of institutional facilities like banking facilities, loan facilities, information back up, cooperation of the government departments, etc.

2. Income Tax

Income tax department also undertook certain policy for more investment in the rural area. Those are as follows:

(a) Tax holidy for new industrial undertaking including tourist industries located in the under-developed, least developed and special economic zone is available for seven, nine and twelve years respectively as against five years for those located in the developed area. The ultimate date for availing of the tax holiday facility earlier fixed as on 3 June, 1990, has now been extended upto June 30, 2000.

(b) As an alternative to the tax holidy facility, accelerated depreciation allowance (ADA) is available for new industrial undertaking. If the industrial undertaking is set up in the less developed area ADA is available @100% for the first year of the actual cost of the machinery or plant used in the undertaking as against 80% for the first year and 20% for the following year of the actual cost of the machinery or plant used in the undertaking set up in the developed areas. Besides, an industrial undertaking covered under ADA is also eligible for investment allowace @ 25% for least developed and @ 20% for the developed area of the cost of machinery or plant used. The ultimate date for availaing of the ADA facility has been extended upto June 30, 2000 from June 30, 1990.

3. Excise

There is no excise duty on cottage industry having a total capital not exceeding 3 lakh taka. This has been done with definite intention for increasing cottage industry and small investment in the rural areas for providing employment therein.

POVERTY ALLEVIATION AND INCOME GENERATION

Rural investment and employment creation also alliviate poverty and generate income. But apart from this there are other methods through which extra income can be generated and thereby poverty can be alleviated. What is that method is a big question. According to the tax planners, reduced income tax, cost minimization and auxiliary source of income tax can generate extra income thereby alleviate poverty. Quite a

number of tax policies have been adopted for such income generation. Let us see what those policies are:

1. Income Tax

In the income tax sector the following tax policies have been adopted for higher income and axuliary investment.

(a) If an assessee owns any small or cottage industry in the less developed area and is engaged in production of goods he is entitled to income tax rebate @ 2.5% if his production is 15% higher than that in the previous year and 5% if his production is 25% higher than that in the previous year. In the budget 1989-90, these rate have been enhanced to 5% and 10% over 2.5% and 5% respectively.

(b) Income of a cooperative society engaged in cottage industry agricultural or rural credit or marketing of agricultural produce of its members is exempted from payment of income tax.

(c) Income from fish farmimg, poultry. duckery, dairy and cattle farming. frog farming and horticulture is exempted from income tax. The time limit for this exemption has been extended upto June 30, 2000.

(d) Income from cultivation of mulberry, cocoon, mushroom as well as floiculture has been exempted upto June 30, 2000.

2. Customs Duty

For poverty alleviation and income generation through cost reduction, easy availability of raw materials and production maximization, quite a number of steps have been taken in customs duty structure. Those are as follows:

(a) For development of dairy and poulty farming government has allowed concessional rate of duty on dairy and poultry machinery and equipment.

(b) For development of fisheries, government has exempted fish for spawning (pona) totally from customs duties. On the other hand, artemia, imported for shrimp culture has also been exempted from duty.

(c) For expansion of sericulture (silk cultivation) government has totally exempted the eggs of silk worm from customs duty and subjected silk cocoon to only 10% duty.

(d) For expansion of flower and fruit gardening, the seeds, fruits and spores of a kinkd used for sowing have been kept at nil rate of duty.

INCENTIVE FOR RURAL BASED INVESTMENTS

For creation of rural based employment opportunity quite a number of measure have taken. Those are as follows:

1. Raw cotton-yarn spinning

Spinning by hand driven (charka) was once a good employment opportunity for the rural women. The duty on raw cotton is 'nil'. So, there is scope for hand spin yarn production for supply to non-mechanised looms in the rural areas which can produce shari and lungi (also cotton gamcha) having huge demand throughout the country.

2. Cotton-waste

Cotton waste has a huge demand as filler of pillows, quilts, etc. There is substantial employment opportunity there. The duty on cotton waste is also 'nil'. There is also no excise duty on cotton waste which comes as waste in mechanised spinning mills in the country.

3. Cotton and synthetic yarn

Once upon a time the handloom industry had booming business with shari. But due to many reasons, this non-mechanised rural industrial sector is on the wane. For this business the duty on cotton and synthetic yarn has been kept at a low level of 20%. There is no excise duty on yarn produced on cotton industry basis.

4. Marble Stone

Marble stone has a potential for a very low investment, labour intensive 'chips' and marble power manufacturing industry. To encourage these two types of industries, there is no duty no marble stone.

5. China Clay

Hand made clay products is another potential investment in the rural areas. This has been observed in Comilla area. To encourage this industry, there is only 20% duty on China clay.

6. Lime Stone

Lime stone has various use in different industries some of which are rural based. It has use in earthen-ware, brass and copper ware manufacturing. The duty on limestone is only 20%.

7. Inedible Copra

Inedible copra is used in extracted coconut oil. There is huge demand of it in the country. Quite a number of mechanized coconut oil extraction plants have been established in the remote areas of the country. Apart from that non-mechanized extraction plants (Ghani) is also there. To encourage

extraction of coconut oil locally (and to decrease importation of coconut oil), the duty on copra has been kept at 10%.

8. Fishing

Fishing is another big sector which can provide employment to a good number of people in the rural areas. To encourage this sector, fishing trawlers have been included in the list of machineries entitled to 2.5% duty. Side by side fishing gears (including nets, etc.) are also subjected to 2.5% duty.

Income Tax

In the income tax side also due importance has been given for tax exemptions on non-agricultural investments.

(a) Special depreciations allowance is available on fishing trawlers @ 40% for the 1st year and @ 30% for the second and third year. Besides, on investment allowance @ 20% of cost is also available. The facility can be availed upto June 30, 1990.

(b) Under the self assessment procedure, a tax amnesty facility has been granted and a new assessee investing in small or cottage industry can invest initial capital upto three lakh without any question being asked by the tax department about the source of such capital

INCENTIVE FOR TRANSPORT AND FISHING

Transport plays a vital role in development of any area. This includes passenger transport as well as goods transport. If the transport sector is not developed, any area remains a hinterland and in spite of all best wishes of the government and the people, the socio-economic picture of that area remains unchanged. With definite intention for improving the communication system, to be more precise, the transport system, some fiscal measures have been taken by the government due to which we find a network of road communication system in the country. Those are as follows:

1. Income Tax

The income tax sector has introduced the following tax relief measure for transport sector.

(a) Income tax rebate is available of 50% of the income tax payable on the income of passenger buses and passenger launches.

(b) For passenger vessels plying on inland water and fishing trawler, a special depreciation allowance is available @ 40% for the first year and 30% for the second and 3rd year. Besides, an investment allowance @ 20% of

the cost is also available. This facility can be availed of upto June 30, 1990.

(c) As an alternative to regulate method, the owner of bus, minibus, truck and tank lorry can pay income tax on presumptive income basis at the following rates:

* In case of note more than two vehicles:

(i)	Bus having seating capacity exceeding 52 passenger:	Tk. 2,000.00
(ii)	Bus having seating capacity upto 52 passengers:	1,500.00
(iii)	Minibus	1,000.00
(iv)	Truck/truck lorry of more than 5 ton capacity:	2,000.00
(v)	Truck/Truck lorry upto 5 ton capacity:	1.000.00

** In case of more than two vehicles there is additional Tk. 500 tax for each category. The above facility was available upto June 30, 1989.

2. Customs Duty

In the customs sector also, due inportance has been given for the transport sector. The duty of minibus (petrol operated) is 20%, Truck (petrol operated) is 20%, van-10%, motor cycle-50%, ferry boats-10%, engine for autorickshaw is nil. Marine engine and engines for propulsion of vehiciles is 20%. As has been stated earlier, fishing trawlers are entitled to 2.5% duty as industry.

MECHANIZATION OF AGRICULTURE SECTOR

For development of the rural economy, mechanization of agriculture is very assential. Quite a number of steps have been taken to reduce the cost of the mechanical appliances of the agricultural sector. Those are as follows:

1. Customs Duty

The steps taken by the government are all in customs sector. In the agriculture; power pump, tractor, sprayers are the most important one. Let us have a look as to the steps taken by government for cost reduction.

(a) All the agricultural pumps imported by BADC enjoy a concessional rate of duty. On the other hand, the raw materials and spares imported by Bangladesh Machine Tools Factory (BMTF) Joydevpur and Bangladesh Diesel Plant for manufacturing pumps are also subjected to concessional rate of duty.

(b) The tractors imported in CKD (completely knocked down) condition are subjected to 5% duty while duty on CBU (completely built up) tractor is 15%.

(c) Spray guns are subjected to 50% duty while there is no duty on hey presses.

INCREASE OF AGRICULTURAL YIELD

Increase of per acre yield of agriculture produce is another way of rural development. This directly increase the income of the farmers which in turn change the life style. For increase of agriculture produce, some steps have been taken in customs sector by way of reduction or elimination of customs duties on those directly or indirectly help boosting up agriculture produce. With this intention, duty on rock sulphur and rock phosphate for the manufacture of fertilizer has been abolished. There is no duty on fertilizer, seeds of a kind used for sowing (this includes potato for use as seed and leguminous vegetables). On the other hand, duty on prepared animal fodder has also been abolished.

SOCIO-ECONOMIC CHANGE OF RURAL AREAS

Investment opportunity alone cannot change the life of rural people. Proper guidance is also required. Government departments are unable to perfom this task due to built-in defect. This task has therefore, been taken up by the NGOs. Quite a number of NGOs are working in the country with specific programme for job creation, agricultural development, development of the cottage industry, infrastructure development in the rural areas. Notable among those are CARE Bangladesh, Mennonite Central Committee (MCC), CARITAS Bangladesh, etc.

CARE has undertaken nationwide development in the rural Bangladesh. They cover major portion of the relief works undertaken by the government of Bangladesh. The activity of CARE in Bangladesh centre round three major fields:

(a) Health/Health education, (b) Farming, and (c) Community development.

In the first one, the mothers are taught simple health neasure to keep their children well. CARE taken a grassroot approach to health and nutrition, using methods that even the poorest people can learn and afford to practice. Their health measures are preventive, like helping people build safe water and waste disposal system. Training midwives in safe delivery and health workers in giving immunization, teaching mothers to treat

diarrhoea. They also help reducing infant and child mortality rates.

In the second one, they help farmers save more fund and increase income by better seeds, irrigation, storage, marketing and safe use of pesticides.

In third one, their aim is at community development. Construction of roads, bridges and other community project.

From the above, it appears that the entire effort of CARE is basically rural oriented and aimed at rural development. They are trying to better the health and living, improving infrastructure, create job opportunity, increase agricultural produce and thus increase revenue.

Mennonite Central Committee (MCC) on the other hand, is working on agriculture development and rural employment creation. Side by side they are also distributing relief materials to the distressed. Their activities are mainly concentrated in greater Noakhali, Comilla, Kushtia, Barisal districts. In their efforts, they are trying to explore appropriate technology for the rural people for income generation and they have undertaken quite a number of projects in this respect and are working for exploring more. Notable, power pump, tubewell technology, cook stove, vegetable garden, livestock, etc

CARITAS is also giving financial and commodity aid to Bangladesh through Ministry of Agriculture. Currently they are running a training school in Mirpur (MATS) wherein they are training up rural boys in agriculture based technologies so that they can go back to village, take up a profession which will help develop agriculture and side by side will earn his bread.

Apart from the above, there are many more NGOs who are working in the rural areas for developing the lot of our rural people. Their objective is the socio-economic development of the rural Bangladesh. But question may arise as to what is the role of IRD in this activity of the NGOs. Apparently, it appears that the foreign non-government social organizations are contributing to our rural development and own government is allowing inflow of such aids without any contribution. But this is not true. It is IRD who is their local financial partner on behalf of the government. All the materials imported by these NGOs for their projects in Bangladesh are exempted from payment of duties and sales tax by NBR (IRD attached department); and thus it becomes possible for these NGOs to operate smoothly. If IRD would not have exempted the customs duty and sales tax on these goods, it would not have been possible for many NGOs to work and for the other to expand their activities. Therefore, it is clear that IRD is indirectly contributing

to a great extent to the socio-economic development activities of the NGOs in Bangladesh.

From the above discussion, I hope, it is now clear to our readers that the tax policies in Bangladesh have positive role in the integrated rural development in Bangladesh. The tax policies are quite substantial for transfer of capital from the urban to the rural areas, for creation of employment in the villages, for mechanization of our agriculture side by side with increase of agriculture produce and changing the socio-economic pattern of the non-urban areas towards a better side. But the main question, even after so much fiscal measures, why there is not expected level of change. The answer to this question, in Esman and Uphoff's observation that, four components i.e. public investment, policy environment, appropriate technology and effective institutions are neglecting their duty and at a very great cost that means: no development of the rural areas. The fiscal planners have the incentives, it is other agencies – Government agencies (like agricultural department, industries department, banking institutions, information media) and local agencies, which should mobilize the people, popularise the offers make the people acquainted with system and give suggestion and assistance to the ordinary people in materializing their dreams. But this role is totally absent. Since the object of this paper is not to evaluate the success of these policies also, I am not going further into it. If in future I get an opportunity I would like to speak a few words on that. So far the role of IRD in the integrated rural development of Bangladesh is concerned I am not sure whether I could satisfy you. If I am not, I beg to be excused for my shortcomings. On the other hand, if I could give you slightest idea about the whole fiscal scheme, I would consider my effort to be a success.

Bangladesh Journal of Political Economy Vol. 10 No. 3

FAMILY BASED APPROACH : A NEW DIMENSION IN RURAL DEVELOPMENT

M. A. SATTAR BHUYAN

While the focus of development efforts in recent years on rural development by national governments as well as by international agencies is certainly a positive indication, the unfortunate part of the trend however, is that rural development in the process has turned into a fad and at the same time, reduced to the level of a tautology. But what happens in practies in the name of rural development, that bulk of the Governments time and resources is apparently spent but what turns out is neither rural nor development. New models are evolved, more resources are directed toward rural development by allocative machinery but rural poverty, unemployment and social inequity accentuate all the same. So emphasis becomes rhetorical and sometimes counterproductive unless backed by will and real efforts.

Rural development programmes slarted in this part of the sub-continent in the early 1950s, nominal though at the beginning. An impressive number of development programmes and models have been undertaken in the intervening period in the name of rural development. Yet the grips of poverty has been tightened in many respects. The trials and errors in Rural Development continues and the question of continuity and consolidation of experiences, becomes all the more prominent. To quote A.M.A. Muhith, a former Minister of Finance we went on experimenting with new ideas. Indeed it seemed that we were too free with experiments and new models. It is true that a tested technology in rural development does not exist as it does for, say, power generation or textile manufacturing. But innovations within a given framework surely are more likely to succeed that frequent change in the framework itself.

Rural Development experiments starting, from V-AID, Green Revolution to IRDP-BRDB in essence ended up with a bureaucratic approach with programmes reduced merely to distribution of modern inputs to land-based class bypassing the non-land based social forces. This situation reduced rural development to production oriented agriculture development only bereft of distributive justice. Poverty is so endemic and ubiquitious in Bangladesh both in relative terms and so voluminous in absolute terms that

more than 80% of the people live below the poverty line deficient not only in income, nutrition and hence physical capacity but also in the favourable and attitudinal factors such as passivity, fatalism, reluctance towards development programmes. So far initiating a meaningful rural development process, alternative approaches were innovated to alleviate rural poverty. Prominent approaches are the Grameen Bank approach, BRAC and other NGO approaches, family based Group Approach of the Ministry of Youth and Sports.

Grameen Bank was founded by the noble initiative of Dr. Muhammed Younus which extended credit to the rural poor without collateral. As per Grammer Bank model 5 like-minded landless persons of homogeneous occupation from five different families forms a group & several such groups are federated into a centre. Group members receive loan on recommendation of group chairman and Centre Chief. The laon is supervised one and repayment on weekly instalments basis is compulsory. Grameen Bank has so far extended its operations in 210 Upazilas and achieved tremendous success.

FAMILY BASED GROUP APPROACH

The Family Group Approach was conceived and developed by a civil servant Mr. M. Asafuddowlah while he was Director, BARD and subsequently as Secretary Ministry of Youth and Sports he has incorporated this comprehensive concept in a poverty alleviation project named as Upazila Resource Development and Employment Project (URDEP), implemented through the Department of Youth Development. The emphasis of the project will be maximum utilization of internal resources of the family and the community by mobilizing youths as intruments of change.

The comprehensive family based approach has been developed to overcome the attentdant malaise of the target group approach. It is claimed that in the name of target-group outreach programmes the parents are bypassed to reach the children, husbands bypassed to reach the women the family is bypassed to reach the youth. To quote Mr. Asafuddowlah, 'It is my strong personal observation that these segmented, mutually exclusive target group approaches based on artificial differences of age, sex or relative situations in life are subverting family and social relationships. In our eastern societies a close sense of belonging to each other inhabits growth of polarisations. Famines, instigation of communal riots, political struggles, world wars and even the war of liberation have not been able to destroy the

unique stability of our society. The unannounced equity of distributive income and sharing of surplus and sacrifices is often not understood by those who romanticise hatred, and differences. Perhaps the decay of liberalism into a doctrine of liberation, or perhaps strident individualism finds 'reactionay' even restraints associated with a co-operative/collectivity as basic as the family. Proponents of group interests and parochial preoccupations do not always realise that the segmented approach to development broadly results in bypassing of traditional institutions and introduction of soft programmes that are not adequately insured against eventual dissolution. It is also not often ackowledged that the logic of segmentation will proliferate further segmentations remorselessly.

I would, therefore, think it judicious to handle the problems of the disadvantaged groups more comprehensively having due regard to the reality and desirability of their integrated situation in a familyfold-re-inforcing traditional mores and time-honoured customs. The segmented approach in my opinion is engendering the forces of disintegration, ironically enough, in the name of integration. The rich and the poor (since the rich is not so rich and the poor is not so poor) have interacted as one 'area institution' in their politics, prayers and poverty. Any artificial polarisation is boud to bring abount a conflict whose resolution will not remain the hands of those who propagate the rhetoric.

In the implementation of the project, each family will be taken as unit of development. Individual families will be surveyed to assess the material and human resource avaible and indentify other assistance needed to make the best use of such resources for the improvement of the quality of life.

Through the project technical and managerial guidance as well as training and credit, facilities will be extended to enable the families involved to maximise resource utilization, physical as well as human. It is also considered that development should not be confined to the achievement of meterial gains only. It should be balaced with the qualitative development of the participants enabling them to become responsible members of the community. Various extensional methods and techniques of mobilising local resouces will be tried out in the process.

In Family Group approach, family members are organised in a 'Group'. Both male and female members are eligible to be members of 'Family Group approach'. In a family where the required 5 adult members are not available, a group may be formed with the neighbours and relatives. A senior member of the family is selected as group chairman. Credit as input for increasing

and generating income is given to the family group members through the family group chairman. As a result, economic and social development of a family takes place. The number of dependents on the income of a particular number of a family is reduced due to participation of all the adult members in income generating activities. The younger generation learns to respect the superior members of their family. Five groups are federated into a 'Centre'. The 'Centre' is a place where they will discuss their social and economic problems and solve these through the decisions of the superiors. Motivated government employees should work as catalistic agents to assist them. The credit will be supervised credit. In the process 100 per cent loan realisation is expected. There should be provision of individual and group savings. Credit repayment should be compulsory on weekly basis. This approach has similarities with Grameem Bank approach. The basic difference is that in Grameen Bank approach, group should be formed with 5 persons of hemogeneous occupation of a village, taking only one person of a family while in 'Family Group Approach' group should be formed with the 5 adult members of a family.

Family group formation is considered a long and continuous process covering interlinked stages such as conscious raising, establishing group function, leadership development, non-formal education, local socio-economic analysis, identification of potential employment opprotunities, skills training articulation of demand for different services action to create productive activities and remove constraints. All these family based groups have to be formed by the own efforts of the family members and not imposed from above.

The rural poor who have only the homestead and whose total assets are less than Tk. 50,000 or the annual income is writhin Tk. 6,000 and at the same time are not related to agricultural works are being selected as the beneficiaries of the Project through family survey in the Project area. Group formation would be encouraged on the basis of mutual friendship and trust by individual group members.

The loan ceiling under the Project is Tk. 2,500 per member or Tk. 12,500 per family group. For the operation of credit scheme Tk. 105.00 million would be allocated through the Project and maintained in Bank savings account as a revolving fund. The Branch Manager along with the concerned Group Animators would scrutinize and recommen the loan application of the individual group member to the Area Manager. Finally Area Manager approves the loan application. No loans should be granted

for those having a record of loan default to bank or if applicant's age is below 15 years. No members should be given a second loan before the complete recovery of the first loan.

Achievements of the projects is that upto June 89, 1037 Groups involving 5182 group members received loan of Tk. 104.74 lakh and thus ensured their employment and income generation. In the Second instalment 539 groups covering 2695 members received loans amounting Tk. 76.37 lakh. Upto June, 89, Tk. 117.87 lakhs has been recovered on weekly instalment basis. By gathering Tk. 9.08 lakh in Group Savings Fund, weekly saving of Tk. 3.74 lakh & accumulated interset of Tk. 3.95 the project has achieved 100% target. Besides credit, 1223 members have accepted family planning methods and 1882 attained literacy of signing their names. If we analyse the itemwise loans, we find that 1819 member received loans for small business, 1002 member for rice husking, 497 for rickshaw purchase, 400 member for seasonal business. In all loans were received for 21 trades.

Encouraged by the phenomenal achievements, Government was pleased to expand the programme to five more Upazilas in addition to the existing two Upazilas this year. Project proposal has also been submitted to the Government for expansion of the URDEP in 100 more Upazilas. Feasibility study is also going on to extend the programme to more areas under Asian Development Bank assistance.

The project is expected to make a frontal attack on the large scale scour of rural poverty and thus free the country from the centuries malaise. Initial success of the project lies on the dependence of the model on local thoughts, mores, culture and local resources. No expatriate consultant is hired for implementation of the project. It is a nationalistic effort based on the solemn objective of self-reliance. In order to sustain the programme on a long term basis political commitment and non-intervention by donors are required.

The achievement of the projects falsified the apprehension of the donors that rural poverty alleviation programme at micro level with similar spirit and dedication of NGO is not possible in Government sector. It is a good beginning to conquer the war against poverty with a model rooted in the tradition and culture of Bangladesh. Instead of wasting our scarce resources and time, in unending experiments, we may concentrate our all efforts in replicating the successful models like the Grameen and the URDEP.

Bangladesh Journal of Political Economy Vol. 10 No.

উন্নয়নে এন জি ও তৎপরতা-একটি পর্যালোচনা

ফ র মাহমুদ হাসান*

এন জি ও তৎপরতা ও আলোচনা প্রসংগ

এন, জি, ও, আজকের বাংলাদেশে বহু পরিচিত শব্দ। তবে এন, জি, ও, সম্পর্কে সাধারণ মানুষের ধারণা বড় জোড় বিভক্ত। গ্রামের শ্রমজীবী মানুষ এন, জি, ও, চায়; এন, জি, ও, কে বেসরকারী স্বেচ্ছাসেবী প্রতিষ্ঠান হিসাবে নয়, তারা প্রধানত সাহায্য দাতা হিসেবে দেখে।

শহরের মানুষের এন, জি, ও, সম্পর্কে নানান রকম দৃষ্টিভংগী রয়েছে। শিক্ষিত, অল্প-শিক্ষিত, অনভিজ্ঞ বেকার কর্মসংস্থানের পথ হিসাবে দেখেন, সরকারী বেসরকারী লোকজন অনেকেই মনে করেন এটা 'করে খাবার' একটা উৎকৃষ্ট পথ; আর রাজনীতি করে বা বোঝে এমন বেশীরভাগ মানুষের কাছেই এন, জি, ও, এবং দালালী প্রায় সমার্থক শব্দ। তবু সামনা সামনি হলেও এন, জি, ও, কে লোকজন খাতির করে।

আমাদের ধারণা যারা এন, জি, ও, কে খাতির করেন তারা প্রধানতঃ দুটো কারণে করেন। প্রথমত; এন, জি, ও, দের হাতে অগাধ টাকা আর অগাধ টাকা থাকেলে যা যা সুবিধে, এরাও কমবেশী সে সব সুবিধে ভোগ করেন। দ্বিতীয়ত এন, জি, ও,রা গ্রামে কাজ করে বলে গ্রামে এদের ব্যপক পরিচিতি। এ পরিচিতি এক অর্থে এক ধরনের রাজনৈতিক ভিত্। ক্ষমতার উৎস যার টাকা আছে এবং খানিকটা বাড়তি ক্ষমতা আছে, তাকে লোকে খাতির করেই।

এন, জি, ও'রা প্রায় গত দু'দশক ধরে কাজ করছে। স্বাধীনতা যুদ্ধের সময় থেকেই এদের তৎপরতা শুরু। নানান পরীক্ষা নিরীক্ষার ভেতর দিয়ে এরা অব্যাহতভাবে কাজ করে চলেছে। এই দু'দশকে কাজের মূল দু'টি ধারার পত্তন ঘটেছে। সত্তর দশকের শেষে সচেতন ও উদ্বুদ্ধকরণের ভেতর দিয়ে ভূমিহীনদের সংগঠিত করে দেশব্যাপী দরিদ্র মানুষের একটি নিজস্ব সাংগঠনিক কাঠামো দাঁড় করাবার প্রচেষ্টা ; এবং এই দশকে ক্রমান্বয়ে এই দৃষ্টিভংগী বর্জন এবং এর জায়গায় ভূমিহীনদের প্রধানতঃ ব্যক্তি পর্যায়ে ঋণ দানের মাধ্যমে আয় বৃদ্ধি কর্মসূচী দিয়ে অভাব মোচনের তৎপরতা।

এই দু'দশকের এন, জি, ও, দু'টি বড় কাজ করেছে (ক) দারিদ্র মোচন এবং ভূমিহীনদের আয়-উন্নতি বাড়াবার প্রশ্নটিকে প্রতিষ্ঠানিক রূপ দিয়েছে। (খ) গরীব মানুষকে বিশেষ করে যে সব অঞ্চলে ব্যাপক সাংগঠনিক কাজ হয়েছে বুঝতে শিখিয়েছে দারিদ্রের কারণ ভাগ্য, আল্লাহ, নিরক্ষরতা বা ছেলেমেয়ে বেশী হওয়া নয়, বরং দারিদ্রই এই বিশ্বাসের কারণ। দারিদ্রের কারণ সম্পদ ও ক্ষমতাহীনতা এবং অব্যাহত শ্রেণী শোষণই সম্পদহীনতা ও ক্ষমতাহীনতার কারণ।

* গণ সাহায্য সংস্থা

এই দু'টি ক্ষেত্রে এন, জি, ও'র স্বার্থকতা সকল বিতর্কের উর্দ্ধে এবং আমার দৃষ্টিতে এই দুটিই এন, জি, ও'র সম্ভবত সব চাইতে বড় স্বার্থকতা।

এন, জি, ও,র অন্যান্য কাজ বিচ্ছিন্ন। এর কোন সমন্বিত রূপ নির্ণয় করা মুসকিল। এই সব কাজকে চট করে স্বার্থকতা বা ব্যার্থতা বলে আখ্যায়িত করলে একটু সরলীকরণ হয়ে যাবে। আমি দুটো মূলধারা বিশ্লেষণ করার চেষ্টা করব; পাঠক তাঁর নিজস্ব মতামত গঠন করে নেবেন, ইচ্ছেমত মত বিনিময় করবেন।

এন, জি, ও, কর্মীরা প্রধানত চাকুরী করেন। বেশীর ভাগ ক্ষেত্রেই বেতন ভাল, বাড়তি সুযোগ সুবিধে আছে। বিদেশ যাওয়া–যাওয়ি আছে। তাছাড়া নিজেকে উন্নয়ন কর্মী ভেবে কেউ কেউ আত্মপ্রসাদ লাভ করতে পারেন। আবার কেউ সত্যি সত্যি ভাবেন, সমাজ পরিবর্তনের জন্য কাজ করছেন; এভাবেই সমাজ পরিবর্তন হবে, গরীব মানুষের অধিকার প্রতিষ্ঠা হবে। এই কর্মীরাই স্বভাবতই এন, জি, ও,–র সবচাইতে শক্ত সমর্থক।

এন, জি, ও–র প্রধান সমালোচনা কয়েক রকমঃ

(ক) সরকারের দৃষ্টিতে এন, জি, ও–র কোনো জবাবদিহির প্রশ্ন নেই, এন, জি, ও, সরকারের পাশাপাশি একটা প্রায় স্বাধীন সরকারের মত কায়–কারবার করে।

(খ) রাজনৈতিক দলগুলোর কাছে এন, জি, ও, সাম্রাজ্যবাদের টাকা খেয়ে সাম্রাজ্যবাদের দালালী করছে, বাজার পোক্ত রাখছে, স্থিতিশীলতা বজায় রাখছে, গ্রামে গঞ্জে সাধারণ মানুষের মধ্যে সাম্রাজ্যবাদের মুক্তির বাণী ছড়িয়ে দিচ্ছে।

(গ) বুদ্ধিজীবীদের মনে হয়েছে–এন, জি, ও, কর্মসূচী কোনো সমন্বিত কার্যক্রম হিসাবে দাঁড়ায়নি। কোন সিষ্টেম হিসাবে দাঁড়ায়নি। যে যার মত কাজ করছে। কার্যক্রমের দীর্ঘমেয়াদী ফল কি হবে, উৎপাদন সম্পর্কের ওপর এর কি প্রভাব পড়বে, কার্যক্রম টিকিয়ে রাখা সম্ভব হবে কিনা এ সব প্রশ্ন এন, জি, ও, ভেবে দেখছে তার কোনো প্রমাণ নেই। তাছাড়া, এন, জি, ও'র গৃহিত কিছু কিছু কর্মসূচী পরস্পর বিরোধী নয়, কিম্বা সব কর্মসূচীই গরীব মানুষের উন্নতি লক্ষ্যে এমন কথা বলা শক্ত। বুদ্ধিজীবীরা আরো সম্প্রতি বলেছেন, বেশীরভাগ এন, জি, ও, সচেতন ও উদ্বুদ্ধকরণের পক্ষে; এরা বলেন তাদের এই কর্মসূচী ফ্রেইরীর পরীক্ষিত দৃষ্টিভংগী ও প্রক্রিয়া ভিত্তিক। আসলে এক আধটা এন, জি, ও, ছাড়া বাকি সবাই ফ্রেইরীর বক্তব্য বিরোধী কাজ করছে।

(ঘ) এন, জি, ও'রা নিজেরা উপলব্ধি করে –এন, জি, ও, দের যেমন দল আছে, তেমনি দলাদলিও আছে। দল আছে প্রগতিশীল পার্টির পাল্টা, সরকারের পাশাপাশি, ডোনারদের মুখোমুখি দলাদলি দল নিয়ে, দখল নিয়ে। সাম্রাজ্যবাদের অভিযোগ ঝেড়ে ফেলা সহজ নয়; দালালীর দায় খানিকটাতো ঘাড়ে নিতেই হয়।

এন, জি, ও'র রকমফের আছে; দেশী–বিদেশী, দাতা–গ্রহীতা, প্রভু–পোষ্য। এদের কর্মসূচীর ও বহুমুখী ঋণ দান, চিকিৎসা, শিক্ষা, ত্রাণ, পথঘাট ও ঘরদোর নির্মাণ, প্রচার

প্রযুক্তি, শিল্প, ব্যবসা, মহাজনী, ঠিকাদারী, সংস্কৃতি–মোটা মুটি প্রতিরক্ষা বাদ দিয়ে সরকার যা যা করে এন, জি, ও–রা তাই করে। কর্মসূচী প্রয়োগে মিল অমিল দুইই আছে। সরকার যেভাবে করে, এন, জি, ও, করে মোটামুটি সে ভাবেই। বিদেশের টাকা নিয়ে গুটি কতক মানুষ নিজেদের মত তাদের চিন্তা–চেতনা ওপর থেকে চাপিয়ে দেয়। তবে সরকার যেখানে রাষ্ট্রযন্ত্র এবং স্থানীয় বিত্তবান ও প্রভাবশালীদের ওপর ভর করে কর্মসূচী বাস্তবায়নে যায়, এন, জি, ও, সরাসরি গ্রামে থেকে আমলা, পুলিশ, মোড়ল মাতব্বর এড়িয়ে কম বেশী গরীব মানুষের মধ্যে কাজ করে। দুয়েরই কর্মসূচী লক্ষ্য মূলত; এক, অর্থাৎ উন্নয়ন, প্রয়োগ প্রক্রিয়া ভিন্ন।

সরকারের যা দায়িত্ব তার দায় মোটামুটি প্রতিটি ক্ষেত্রেই এন, জি, ও, কম বেশী নিজের ঘাড়ে তুলে নেবার চেষ্টা করেছে। এন, জি, ও,দের কেউ কেউ বলেন এন, জি, ও, উন্নয়নের বিকল্প সিড়ি, সুযোগ সুবিধা জনগণের হাতে পৌছে দেবার বিকল্প কাঠামো।

দেশের নাগরিকের প্রতি সাংবিধানিক দায়–দায়িত্ব সরকারের। এই দায়িত্ব ভাগ করে নেবার কথা বললে, সরকার দায়িত্ব পালনে ব্যর্থ হচ্ছে এমন একটা ইংগিত এসে যায়। এমন ইংগিত করার এক্তিয়ার এন, জি, ও,–র আছে কিনা ভাবা দরকার। দারিদ্র, বেকারত্ব ও নিরক্ষরতা অপসারণ, শোষণ মোচন, আইন ও ন্যায়ের সমাজ গড়ে প্রকৃত গণতন্ত্রের উন্মেষ, অর্থনৈতিক এবং রাজনৈতিক উভয় ক্ষেত্রেই উন্নয়নের দায়িত্ব সরকারের। আমাদের সকলেরই উন্নয়নের লক্ষ্যে নিজ নিজ সাধ্যমত কাজ করার অধিকার আছে, দরকারও আছে। কিন্তু সরকার যেভাবে সরকারকে দেখে, শোষণকে বোঝে, আইন ও ন্যয়কে ধারণ করে, আমরা যারা সাধ্যমত কিছু করার চেষ্টা করছি তারা যদি একই ভাবে দেখি, ব্যাখ্যা করি, তাহলে আমরা কেবল সরকারী দৃষ্টিভংগি ও কার্যক্রমের বর্ধিত রূপই হবো, বিকল্প নয়।

বিকল্প পথে এই সব ধারণা বুঝব্যার প্রক্রিয়ায় শ্রেণী রাষ্ট্র, সরকার ও আইন বুঝতে হবে। বুঝতে হবে রাষ্ট্র যদি শ্রেণী–স্বার্থ রক্ষার হাতিয়ার হয় তাহলে সবার স্বার্থ সমান ভাবে রক্ষা করার ব্যাপারে সরকারের বড় রকম সীমাবদ্ধতা থাকার কথা। শ্রেণী পরস্পর বিরোধী হবার কারণে শাসক শ্রেণীর স্বার্থ রক্ষার ক্ষেত্রে রাষ্ট্র যতটা শক্তিশালী শোষিত শ্রেণীর প্রয়োজন মেটাতে রাষ্ট্র তত দুর্বল।

কর্মসূচীর ভিত্তিতে এন, জি, ও–কে মোটামুটি তিন ভাগ করা যায়; যারা প্রধানত সচেতন ও উদ্বুদ্ধ করার কাজ করে, যারা এই কাজটি বাদ দিয়ে অন্য ধরণের, মূলত পার্থিব সাহায্য ভিত্তিক উন্নয়ন কাজ করে এবং যারা দুটোই করে। বলা যেতে পারে মূল কর্মসূচী তিন ধরণের, ঋণ দান, পরিবার পরিকল্পনা এবং সচেতন ও উদ্বুদ্ধকরণ।

ঋণ দান ও পরিবার পরিকরনা কর্মসূচীর উদ্দেশ্য ব্যাখ্যা নিস্প্রয়োজন। সচেতন ও উদ্বুদ্ধ করণের লক্ষ্য অধিক সংখ্যক মানুষের অধিকার প্রতিষ্ঠান মাধ্যমে দারিদ্র থেকে মুক্তি। অল্প সংখ্যক লোক যাদের সম্পদ এবং ক্ষমতা আছে তারা সংখ্যাধিক শ্রমজীবীদের ঠকায়, শোষণ করে। দারিদ্র মূলতঃ ক্ষমতাহীনতা এবং সম্পদহীনতা। শ্রমজীবীদের ক্ষমতা এবং সম্পদ না

থাকার কারণেই বিত্তবান এবং ক্ষমতাশালীদের পক্ষে এদের ঠকানো এবং শোষণ করা সম্ভব হয়। এই সংখ্যাধিক শ্রমজীবী প্রধানত বিত্তবান এবং ক্ষমতাশীলদের সম্পদ ও ক্ষমতা বাড়াতে ব্যবহৃত হয়। এই সংখ্যায়িত শ্রমজীবী প্রধান বিত্তবান এবং ক্ষমতাশীলদের সম্পদ ও ক্ষমতা বাড়াতে ব্যবহৃত হয়। এই সংখ্যাধিক শ্রমজীবীরা উৎপাদন করে বিত্তবানরা ভোগ করে, শ্রমজীবীরা ভোট দেয় (বা দেয়া না,) বিত্তবান ও প্রভাবশালীরা নির্বাচিত হয়।

শ্রমজীবী শক্তির প্রধান উৎস তাদের সংখ্যাধিক্য, তাদের সম্পদের প্রধান উৎস তাদের ক্ষমতা। তাদের ক্ষমতা ও সম্পদের উৎস তাদের সচেতন সংগঠন। সংগঠিত হলে শ্রমজীবী ন্যায্য মজুরী নেবে, বর্গা জমিতে অধিকার পাবে, খাস জমি জলাশয় দখল পাবে, হাট-ঘাট ইজারা নেবে, পথ-বাঁধ মেরামত করবে, সেচের পানি বিক্রি করবে, কাজ বাড়বে, উৎপাদন বাড়বে, কাগজী আইন কার্যকর করবে, নতুন আইন দাবী করবে, নিজেদেরকে ভোট দেবে, নিজেরা সিদ্ধান্ত নেবে, ঘরে বাইরে সরকারের সংগে উঠবে-বসবে, দেন-দরবার করবে। দেশ গড়বে। ৮০ ভাগের শরিকানা ছাড়া দেশ গড়া অসম্ভব। এদের শরিকানা বাড়াতে হবে এদেরকে সংগঠিত করতে হবে। এগুলো দেশ গড়ার পূর্বশর্ত।

সনাতনী সংজ্ঞায় আমরা উন্নয়ন বলতে যা বুঝি তা বড় সংকীর্ণ। সমান অধিকার প্রয়োগের স্বাধীনতা, এমন কি গণতন্ত্রকেও আমরা উন্নয়নের অন্তর্ভূক্ত করিনা। কেউ উন্নয়নের কর্মশালায় গণতান্ত্রিক অধিকারের প্রশ্ন তুললে আমরা 'রাজনৈতিক বক্তব্য' বলে লেবেল চড়িয়ে সেই বক্তব্যকে হিসাবের বাইরে রাখি।

দারিদ্র যদি সম্পদ এবং ক্ষমতার অভাব হয়, তাহলে অর্থনীতি এবং রজনীতি যে উন্নয়নের অবিচ্ছিন্ন প্রক্রিয়া সেটা না মেনে উপায় নেই। রাজনৈতিক স্বাধীনতা বাদ দিয়ে গরীবের অর্থনৈতিক মুক্তি সম্ভব নয়। গরীব মানুষকে যদি উন্নয়নের অংশ নিতেই হয় তাহলে উৎপাদন, বন্টন ও বিনিময় উৎপাদনের সর্বক্ষেত্রে তার গণতান্ত্রিক অংশিদায়িত্ব মেনে নিতে হবে। এই অংশীদারিত্বের পূর্বশর্ত তার সংগঠন। তার নেতৃত্বে তার সংগঠন গড়ে তোলার অধিকার তাকে দিতে হবে। এই প্রক্রিয়ায় তাকে সক্রিয়ভাবে সহায়তা করতে হবে। রাজনীতিকে অর্থনীতির পাশাপাশি রেখে উন্নয়নের সমন্বিত সংজ্ঞা রচনা করতে হবে। এই সংজ্ঞার ব্যবহারই উন্নয়নের অনুশীলন। এই অনুশীলন বাদ দিয়ে ২০ ভাগের একচেটিয়া রাজত্বের দাপট কাটিয়ে সব মানুষের সাম্যবাদ সম্ভব নয়। এই অনুশীলনই অর্থবহ গণতন্ত্র।

ঋণ, আয় বৃদ্ধি কর্মসূচী ও ভূমিহীন সংগঠন

যে সমস্ত প্রগতিশীল সংস্থা আয় বৃদ্ধি কর্মসূচী গ্রহণ করেন, তাদের অনেকে মনে করেন ঋণ দিলে গরীব মানুষের আয় উন্নতি হবে, অভাব দূল হবে; খেতে পারবে, পরতে পারবে। হাঁস-মুরগী, ছাগল-গরু পুষে এরা ধীরে ধীরে নিজের পায়ে দাঁড়িয়ে যাবে। আবার কেউ কেউ বলেন-এগুলো মুখ্য নয় অধিকার প্রতিষ্ঠাই মূল কাজ; তবু আয়-উন্নতি না হ'লে, পেটে ভাত না থাকলে অধিকারের জন্য লড়বে কি করে? এদের অনেকেই তাদের লক্ষ্য হিসাবে গণ সংগঠনে বিশ্বাস করেন; তবে মনে করেন কেবল মাত্র চেতনা বৃদ্ধি ও সংগঠন করে গ্রুপ ধরে

রাখা যায় না। গ্রুপ ভেঙ্গে যায়। সেকারণে, প্রাথমিক চেতনা বৃদ্ধির পর ঋণের মাধ্যমে নানা রকম কাজের সৃষ্টি করে তারা স্থানীয় পর্যায়ে গ্রুপ গুলিকে ধরে রাখার চেষ্টা করেন। এদের অনেকেই বিশ্বাস করেন যে ঋণ দান অব্যাহত থাকলে উৎপাদন সম্পর্কের ওপর তার প্রবাব পড়বেই। যে সমস্ত সরকারী এবং বেসরকারী সংস্থা সচেতনতা ও গণ সংগঠনের কর্মসূচী ছাড়াই আয় বৃদ্ধির জন্য ঋণ দিয়ে থাকেন, তারাও মাঝে মধ্যে এই যুক্তি দিয়ে থাকেন। অথচ আজ অবধি কোনো রিপোর্টই গরীবদের ভেতর ঋণ দেবার পর তাঁরা আত্মনির্ভর হয়েছে, সেখানকার দিন মজুরদের মজুরী অস্বাভাবিক রকম ভাবে বেড়েছে, বর্গাশর্ত সহজতর হয়েছে কিম্বা মহাজনদের দাপট কমছে এমন কথা প্রমান করতে ব্যর্থ হয়েছে।

আমার ধারণা আয় বৃদ্ধি কর্মসূচীর প্রবর্তকরা মূলতঃ গ্রুপ ধরে রাখার কারণেই এর সূচনা করেন। গণ সংগঠনের ওপর এর দীর্ঘ মেয়াদী প্রভাব সম্পর্কে তারা সচেতন এবং বিশেষ করে সেকারণে এই কর্মসূচীর যথার্থতা প্রতিষ্ঠা করার উদ্দেশ্যে উৎপাদন সম্পর্কের ওপর ঋণ প্রকল্প ও আয় বৃদ্ধির একটা ইতিবাচক প্রভাব পড়ে–এমন একটা কথা তারা বলে থাকেন।

আয় বৃদ্ধি কর্মসূচী গ্রহণের আরো অন্তত দুটি কারণ আছে। প্রথমতঃ সত্তর ও আশির দশকের মোড়ে গুটি কতক প্রগতিশীল এন, জি, ও, অগাধ টাকা অর্থ সাহায্য পায়। এই বিপুল পরিমাণের অর্থ সময়মত খরচ করার তাগিদেই ঋণ দান কর্মসূচী গুরুত্ব লাভ করে এমন ধারণা খুব আযৌক্তিক নয়। দ্বিতীয়ত; সত্তর–এর দশকের যে সব কর্মীর উদ্যোগে বা নেতৃত্বে সচেতনতা ও গণ সংগঠন কর্মসূচী গড়ে ওঠে তাদের একটি বড় অংশ ছিলেন স্বাধিকার ও স্বাধীনতা কেন্দ্রীক রাজনীতির উর্বর ভূমিতে বেড়ে ওঠা তরুণ–তরুণী; আর কেউ কেউ ছিলেন স্বাধীনতা সংগ্রাম কিম্বা বিপ্লবী বাম আন্দোলনের বলিষ্ঠ যোদ্ধা। এই সব সচেতন কর্মী নির্যাতিত জনগোষ্ঠিকে সংঘবদ্ধ করা ও রাজনৈতিকভাবে সচেতন করার কর্মসূচীতে আগ্রহী হন। ৭০ দশকের শেষ ভাগে গ্রামের স্থবির, অনড়, গরীব জনগোষ্ঠি সংঘবদ্ধ হয়ে অন্যায়ের বিরুদ্ধে এবং অধিকার প্রতিষ্ঠার দাবী নিয়ে যখন বিত্তবান, থানা–পুলিশ ও সরকারী অফিস আদালতের মোকাবিলা করতে থাকেন, খাসজমি ও জলমহল দখল করতে লাগেন তখন এরাই দোর গোড়ায় বিপ্লবের ডাক শুনতে পান। আবার এরাই এইসব মোকাবিলা, দখল দাবীর শেষ পর্যায়ে শাষক গোষ্ঠির সার্বিক শক্তির হুমকী, হয়রানি ও নির্যাতনের মুখে গ্রামের পর গ্রামে গ্রুপ ভেঙে যেতে দেখে হতাশায় এন, জি, ও, ছেড়ে যান। কেউ কেউ নতুন এন, জি, ও, গড়েন, কেউ নতুন এন, জি, ও'তে যোগ দেন, আর কেউ অন্য কোথাও একটা কিছু করে খাবার পথ করে নেন। যারা এন, জি, ও, কাঠামোয় থেকে গেছেন তাদের কাছে, এপর্যায়ে, আয় বৃদ্ধি কর্মসূচী কোনো সমস্যা বলে মনে হয়নি। কেন বলা মুশকিল। অনেকেই সংহতির ওপর আয় বৃদ্ধি কর্মসূচীর সামগ্রিক প্রভাব হয়তো বিশ্লেষণ করে দেখেননি; অনেকেই হয়তো মনে করেছেন বিপ্লব না হলেও গরীবের আর্থিক অবস্থার খানিকটা উন্নতি অন্ততঃ হোক, আবার অনেকেই হয়তো মনে হয়েছে গরীবের কি হলো না হলো সেটা academic প্রশ্ন বই তো নয়।

এতো কিছু অনিশ্চয়তার ভেতরে একটি কথাই সম্ভবঃ নিশ্চিত করে বলা যায়–৭০ দশকের মাঝামাঝি থেকে বি–রাজনৈতিককরণের সক্রিয় ও সামগ্রিক প্রক্রিয়া এই সব কর্মীদের হতাশাকে তীব্রতর এবং নির্লিপ্ততাকে ত্বরান্বিত করেছে। এই সময় হাটে ঘাটে গজিয়ে ওঠা অসংখ্য এন, জি, ও, যে বিপুল সংখ্যক কর্মী নিয়োগ করে তারা তারুণ্য লাভ করে এই বি–রাজনৈতিকরণের দশকে। এদের বেশীর ভাগ শোষণ প্রক্রিয়া, সংগঠন এবং সংহতির বাহ্যিক বক্তব্য যান্ত্রিকভাবে শিখেছে। রাজনৈতিক প্রক্রিয়া বহির্ভূত অনুশীলন রাজনৈতিক সচেতনার অনুশীলন নয়। আর এই সচেতনতা ছাড়া আয় বৃদ্ধি কর্মসূচীর সমিাবদ্ধতা বোঝা কষ্টকর।

একটা কথা এখানে বলে রাখা দরকার, যারা সচেতনতা ও গণ সংগঠনের কাজ করছেন তারা ঋণ বা আয় বৃদ্ধি কর্মসূচী বিরোধী নন। তবে সংগঠনের একটি পর্যায়ে কতগুলো শর্ত সাপেক্ষেই কেবল এই ধরণের কর্মসূচী নেয়া যেতে পারে। এগুলো মোটামুটি নিম্নরূপঃ

(১) এই ধরণের কর্মসূচী গ্রহণের আগে এবং কোন রকম পার্থিব সাহায্য ছাড়াই শ্রমজীবী মানুষের নেতৃত্বে ব্যাপক এলাকা ভিত্তিক সংগঠন একটি সুনির্দৃষ্ট কাঠামোর রূপ নিতে হবে; অর্থাৎ গ্রামের অধিকাংশ মজুর সচেতন হয়ে সংগঠিত হবেন এবং বেশীর ভাগ গ্রামে গ্রাম কমিটি এবং পর্যায়ক্রমে ইউনিয়ন কমিটি গঠন করবেন।

(২) কর্মসূচী সরাসরি উৎপাদন মুখি হবে, এবং যেখানে সম্ভব উৎপাদন যন্ত্র উন্নততর করার প্রয়াস নেবে;

(৩) ঋণ এবং প্রকল্প যৌথভাবে গৃহীত এবং পরিচালিত হবে;

(৪) প্রকল্পের ব্যবস্থাপনা–অর্থাৎ শ্রম, উৎপাদিত ফসলের বন্টন ও বিনিয়োগে–আলোচনার মাধ্যমে যৌথভাবে পরিচালিত হবে;

(৫) স্বেচ্ছাসেবী সংস্থা কোন রকম ঋণ দান কর্মসূচী গ্রহণ করবে না; সংগঠন রাষ্ট্রায়াত্ব ব্যাংক থেকে ঋণ নেবে যাতে ক'রে স্বেচ্ছাসেবী সংস্থার ওপর নির্ভরশীলতা না বাড়ে।

এধরণের যৌথ উৎপাদন কর্মসূচী গ্রহণের জন্য পর্যাপ্ত সম্পদ স্থানীয় পর্য্যায়ে নেই একথা সত্যি। কোথায় কি কতটুকু আছে সেটা জানবার দরকার আছে। সেকারণে গ্রাম কমিটি বা ইউনিয়ন কমিটি স্থানীয় পর্যায়ে যাবতীয় খাস, পরিত্যাক্ত, অর্পিত ও শত্রু সম্পত্তি ও জলাশয় এবং বিভিন্ন সরকারী প্রতিষ্ঠানের (পানি উন্নয়ন বোর্ড, আভ্যন্তরীণ নৌ–চলাচল কর্তৃপক্ষ, বিদ্যুৎ উন্নয়ন বোর্ড, পল্লী বিদ্যুৎ বোর্ড, সড়ক ও জনপদ কর্তৃপক্ষ, বাংলাদেশ রেল কর্তৃপক্ষ) মালিকানাভূক্ত পতিত বা লিজ দেয়া সম্পত্তি ও জলাশয়ের একটা পূর্ণাংগ তালিকা প্রণয়ন করতে পারেন। আমি মনে করি polarisation বা শ্রেণী মেরুকরণ রোধ করার জন্য বিভিন্ন সরকারী প্রতিষ্ঠানের আওতায় যে লক্ষ লক্ষ একর সম্পত্তি রয়েছে এবং সেই সব প্রতিষ্ঠান যে নতুন সম্পদ সৃষ্টি করছে। যেমন সেচ, সড়ক ও বিদ্যুতায়নের মাধ্যমে তা বাধ্যতামূলকভাবে আইনের৹মাধ্যমে সংগঠিত শ্রমজীবী মানুষের মধ্যে যৌথ উৎপাদনের জন্য দীর্ঘ মেয়াদী

বন্দোবস্ত দেয়া উচিৎ এবং এটা সম্ভব।

সংগঠিত ভূমিহীনদের এই সমস্ত সম্পদের দীর্ঘমেয়াদী হস্তান্তর তাদেরকে সেচাবাদি এলাকায় পানির মালিকানা দেবে যে মালিকানার বিনিময়ে তারা ফসলের এক তৃতীয়াংশ দাবী করতে পারবে। ফলে উৎপাদিত ফসলের দুই-দৃতীয়াংশ এমনিতেই তাদের ঘরে আসবে। যে এলাকা বাঁধের এলাকাভূক্ত নয় অথচ সেচযোগ্য সেখানে ভূগর্ভের পানির মালিকানা ভূমিহীন সংগঠনের হাতে হস্তান্তর করা হলে, সে ক্ষেত্রেও তারা ফসলের একটা বাড়তি অংশ দাবী করতে পারবে।

শ্রম বিক্রি এবং উৎপাদনের ক্ষেত্রে যৌথ ব্যবস্থাপনা একদিকে স্থানীয়ভাবে মজুরী বৃদ্ধি করবে, অন্যদিকে বেকারত্ব হ্রাস পাবে; ফলে ভূমিহীনদের প্রকৃত ভূমিহীনের কাতারে নেমে যাবার প্রবনতা রোধ পাবে। সামগ্রীক অর্থে এ পরিস্থিতি কাঠামোকে অনেক বেশী স্থিতিশীল করবে। কিন্তু এ পরিস্থিতিতে, অর্থাৎ ফসল উৎপাদন যদি এখনকার তুলনায় কম লাভজনক হয় (দুই তৃতীয়াংশ দিন মজুরের ভাগে যাবার কারণে) তাহলে কৃষিতে ধনতন্ত্রের বিকাশ কি ব্যাহত হবে না? দেশ ফসল উৎপাদনের ক্ষেত্রে স্বয়ংসম্পূর্ণতা হবার লক্ষ্যে কি আরো পিছিয়ে যাবেনা?

এ দুটো প্রশ্ন আলোচনা করার আগে আর একটা প্রশ্ন উথাপন করা দরকার। দুই যুগ ধরে কখনো ভর্তুকী কখনো সহজ ঋণ এবং ব্যক্তি মালিনাকায় সেচ যন্ত্রের সুবিধা দিয়ে সরকার বড় কৃষককে কৃষিতে বিনিয়োগ বাড়াতে উৎসাহিত করে দুঃখজনকভাবে ব্যর্থ হয়েছে কেন? প্রকৃতপক্ষে কৃষককে কৃষিতে ধনতন্ত্রের বিকাশ না ঘটার সবচাইতে বড় কারণ ধনতন্ত্র; সেই পুরোনো কথা-পুঁজি সেখানেই বেশী বিনিয়োগ হবে যেখানে মুনাফা সর্বাধিক। বাংলাদেশের ফড়িয়া, লিজ, মহাজনী ও বিনিয়োগের অন্যান্য বিকল্প পথ কৃষিতে বিনিয়োগের তুলনায় অনেক বেশী লাভজনক; স্বভাবতই বড় কৃষকের উদ্ধৃত্ব এবং ঋণ লভ্য অর্থের একটা বিরাট অংশ এখানেই ব্যয় হয়। এই বিকল্প বিনিয়োগের পথ সহজ এবং সম্প্রসারিত করার ক্ষেত্রে রাষ্ট্রযন্ত্রের ভূমিকা প্রত্যক্ষ। সরকারী প্রতিষ্ঠানই গণতন্ত্রের নামে অবাধ নিলাম তাদের নিয়ন্ত্রণাধীন লক্ষ লক্ষ একর জমি, জলাশয় ও নদ-নদী ফি-বছর প্রধানতঃ ঠিকাদারদের লিজ দিয়ে থাকেন যেখানে নিরঙ্কুশ সংখ্যাধিক ভূমিহীন কেবল যে প্রতিদন্দিতাই করতে পারেনা তা নয় একাধিক মধ্যসত্বভোগীর ভোগ মেটাতে প্রাণান্ত হয়; সরকারী ব্যাংক-কর্মকর্তারা দুর্নীতির আশ্রয় নিয়ে প্রভাবশালীদের বিরাট অংকের কৃষি (?) ঋণ দেন যে ঋণ ফেরত আসে না।

একথাগুলোর সত্যতা সরকার প্রতিদন্দিতা করবেন না। সেক্ষেত্রে এর অর্থ দাঁড়ায় সরকারই সরকারের কর্মসূচী বাস্তবায়নের পথে প্রধান অন্তরায়; সরকারের সদিচ্ছাকে প্রশ্ন করার প্রশ্ন নয়; প্রকৃত পক্ষে সরকারের উচ্ছা-অনিচ্ছা এখানে অর্থহীন একথা বর্তমান সরকারের ক্ষেত্রে যেমন; কিছু কিছু বিরোধী শক্তি যাদের হয়ত সরকার গঠনের শক্তি আছে-তাদের ক্ষেত্রেও একই রকম প্রযোজ্য।

আসলে এই বিকল্প বিনিয়োগের পথ রোধ করার শক্তি রয়েছে ভূমিহীনদের-যদি তাঁরা

সুসংঘবদ্ধ হয়। ভূমিহীন সংগঠনের পক্ষেই কেবল স্থানীয় পর্যায়ে অরাজকতা ও দুর্নীতি বন্ধ করে তাদের পক্ষে যে সমস্ত কাগজী কর্মসূচী ও আইন রয়েছে একদিকে সেগুলো বাস্তবায়ন এবং অন্যদিকে তাদের বৃহত্তর নিরাপত্তার লক্ষ্যে নতুন আইন দাবী করা সম্ভব। গণ সংগঠন কেবল স্বল্প মেয়াদে মজুরী বৃদ্ধি এবং বর্গা ব্যবস্থাই দূর্বল করবেনা, মহাজনী, ফড়িয়া, লিজ ও অন্যান্য বেশী লাভজনক বিনিয়োগের বিকল্প পথের মূলে আঘাত করে ধনী চাষী ও জোতদারকে কৃষিতে বিনিয়োগ করতে নতুবা জমি বিক্রি –বর্গা দিয়ে শহরে যেতে বাধ্য

আমার দৃষ্টিতে ভূমিহীনদের ক্রমবর্ধমান সংখ্যা ও অনিশ্চিয়তার পরিস্থিতিতে আমাদের বংশধরদের কথা মনে রেখে, দীর্ঘমেয়াদে বর্তমান কাঠামো ধরে রাখার এটাই–অর্থাৎ ভূমিহীনদের সংগঠনই সম্ভবত একমাত্র গ্রহণযোগ্য পথ। সে কারণেই ঋণ ও আয়বৃদ্ধি কর্মসূচীকে ঢেলে সাজিয়ে উৎপাদন কর্মসূচীতে রূপান্তরের দরকার আছে এবং এ উৎপাদন প্রক্রিয়া এমন ভাবে পরিচালিত হওয়া বাঞ্চনীয় যেখানে রাজনৈতিক উৎপাদান (সংগঠন), অর্থনেতিক কর্মকান্ড (উৎপাদন, আয় বৃদ্ধি ও বনিয়োগ) থেকে বিছিন্ন না হয়ে বরং পরস্পরকে জোরদার করে। এ প্রক্রিয়া ছাড়া অর্থনীতিবাদী কর্মসূচীর রেড়াজাল থেকে মুক্তি দুরূহ।

সচেতনতা ও গণ সংগঠনের কর্মসূচী কেবল শ্রমজীবী মানুষের মুক্তির লক্ষ্যে সমাজ পরিবর্তনের প্রস্তুতি নয়, বিরাজমান কাঠামোতে কৃষিতে ধনতন্ত্রের বিকাশ এবং সামগ্রিকভাবে বাজারজাতযোগ্য উদ্বৃত্ত (marketable surplus) বৃদ্ধির ক্ষেত্রে একটি বলিষ্ঠ পদক্ষেপ বলে আমি মনে করি।

আমি আগেই বলেছি সরকারী বা বেসরকারী বা স্বেচ্ছাসেবী সংস্থার ক্ষুদ্র ঋণ এবং আয়বৃদ্ধি কর্মসূচী, উৎপাদন এবং গরীব ও বিত্তবানের নির্ভরশীলতার সম্পর্কের ওপর অস্বাভাবিক কোনো প্রভাব ফেলতে সমর্থ হয়নি। অন্যদিকে যে সমস্ত সেচ্ছাসেবী সংস্থা আগে সচেতনতা ও গণ সংগঠন কর্মসূচীকে প্রধান্য দিতো এবং এখনও দেয়, তাদের এলাকায় সংঘবদ্ধ ভূমিহীনদের স্থানীয় বিচার ব্যবস্থা হাতে নেওয়া, খাসজমি ও জল মহলের ওপর তাদের ন্যায্য অধিকার প্রতিষ্ঠা করা, সরকারী নিলামে ধনীদের সংগে প্রতিদ্বন্দিতা ও বিজয়, 'কাজের বিনিময়ে খাদ্য' কর্মসূচীর আওতায় পথঘাট নির্মাণের ক্ষেত্রে স্থানীয় সরকারী কর্মকর্তা ও চেয়ারম্যান–মেম্বারদের যোগসাজস ও জোচ্চুরীর মোকাবিলা করে ন্যায্য পাওনা আদায়, এমনকি বেশ কিছু এলাকায় হলেও মজুরী বৃদ্ধির আন্দোলন করার দৃষ্টান্ত কম নয়।

স্থানীয় পর্যায়ে ভূমিহীনদের নেতৃত্বে ভূমিহীন সংগঠনের হস্তক্ষেপ সংস্কারবাদ বা economism নয়। এই ক্ষুদ্র ক্ষুদ্র সংগ্রামে মুলত অন্যায়ের বিরোধীতা (শালিশ ও বিচার), আইনগত অধিকার প্রতিষ্ঠা (ন্যুনতম মজুরী, কাজের নিবিময়ে খাদ্য কর্মসূচী ও খাস জমি) এবং অগ্রাধিকার প্রতিষ্ঠার (সরকারী প্রতিষ্ঠানের জমি বা জলমহল লিজ) রূপ নেয়। এই সংগ্রামের সচেতনতা মধ্যবিত্তের নেতৃত্বাধীন ট্রেড ইউনিয়ন আন্দোলনের মালিক শ্রেণী বা কর্তৃপক্ষের স্বার্থে সুবিধাবাদী লেন–দেন ও শান্তিপূর্ণ সহ অবস্থানের চেতনা থেকে ভিন্ন।

এই ক্ষুদ্র ক্ষুদ্র সংগ্রামই, যা পার্টি রাজনৈতিতে ইস্যু ভিত্তিক অন্দোলন, তাই এন, জি, ও মহলে social action বলে পরিচিত। এই social action বা হস্তক্ষেপ একদিকে শ্রমীক শ্রেণীর সচেতনতা ও সংহতি প্রয়োগ; অন্যদিকে বিত্তবান, ক্ষমতাবান ও স্থিতাবস্থার বিরুদ্ধে শ্রমজীবীদের প্রথম সংঘবদ্ধ চ্যালেঞ্জ। উপর্যুপরি হস্তক্ষেপ একাধারে ঝুলে যাওয়া সংগঠন চাঙা করে, সাংগঠনিক প্রক্রিয়া তরান্বিত করে, গণ সংগঠনের শক্তি যাচাই করে এবং শ্রেণীর নেতৃত্ব গড়ে তোলার সুযোগ সৃষ্টি করে।

এই হস্তক্ষেপের লক্ষ্যে আলোচনার মধ্য দিয়ে সিদ্ধান্ত নেবার প্রক্রিয়া, সিদ্ধান্তের প্রয়োগ ও পুনরালোচনার মাধ্যমে ধারণা এবং বাস্তবের সমন্বয়করণ ও সত্য উৎঘাটনের পদ্ধতিই praxis. এই উপর্যুপরি এবং অব্যাহত হস্তক্ষেপই গণ সংগঠনের সচেতনতা, শ্রমিকের নেতৃত্ব প্রতিষ্ঠা ও গণ আন্দোলন গড়ে তোলার প্রস্তুতি।

অথচ এন,জি, ও'রা বিশেষ করে প্রগতিশীল এন জি ও–বা কেউ স্বেচ্ছায় social action বর্জন করেছেন, আবার কেC social action এড়াবার জন্য আয়বৃদ্ধি কর্মসূচী বেছে নিয়েছেন। প্রাচ্যাত্যের অর্থে সংগঠন, সরকারী অনুমোদন, ক্ষুদ্র ঋণ ও আয়বৃদ্ধি কর্মসূচীর ব্যাপক ব্যাবহার এবং social action বর্জন–এসব কিছু থেকে এন জি ও'রা সক্রিয়ভাবে স্থিতাবস্থা বজায় রাখার লক্ষ্যে কাজ করছে না এমন কথা প্রমান করা খুবই কঠিন। স্বভাবতই এন, জি, ও, সমালোচকরা, বিশেষ করে বৃহত্তর বাম আন্দোলনের অনেকেই বলে থাকেন–এন, জি, ও, সাম্রাজ্যবাদের দালাল; এন, জি, ও'র টাকা আন্তর্জাতিক পুঁজির টাকা; আন্তর্জাতিক পুঁজির উদ্দেশ্য বিপরীত শ্রেণীর দ্বন্দ্ব সংঘাত হ্রাস করে স্থিতাবস্থা অব্যাহত রাখা এবং সংখ্যাধিক লোকের ক্রয় ক্ষমতা বৃদ্ধি করা যাতে করে বাজার ঠিক থাকে। এই দৃষ্টিভংগির উপস্থাপকদের আরো মনে হতে পারে সরকারত 'সাম্রাজ্যবাদের ক্রীড়ানক আছেই, সাধারণ শ্রমজীবি মানুষ কোনো দিন এই পুঁজিবাদী সমাজের বিরুদ্ধে যাতে বিদ্রোহ না করে তাই আগে ভাগেই তাদের ভেতর থেকে কাজ করে সাম্রাজ্যবাদের সেবামূলক কার্যকলাপের মাধ্যমে এবং গরীব লোকের ক্রয় ক্ষমতা খানিকটা বৃদ্ধি করে এন, জি, ও'রা সাধারণ জনসাধারণের মধ্যে পুঁজিবাদী সমাজ ব্যবস্থার পক্ষে এক ধরণের জনমত গড়ে তোলার চেষ্টা করছে। ফলে সমাজ পরিবর্তনের লক্ষ্যে শ্রমজীবী মানুষের মধ্যে গণ সংগঠন করা এবং তাদেরকে আন্দোলনের দিক নিয়ে যাওয়া কঠিন হবে।

এ যুক্তি অকাট্য না হলেও আগ্রাহ্য করার মত নয়। কিন্তু সাম্রজ্যবাদের টাকা সাম্রাজ্যবাদ সুদৃঢ় করার কাজে ব্যবহৃত হতেই হবে এমন কোনো বাধ্যবাধকতা নেই। যেমন সমাজতন্ত্রী দেশের টাকা ব্যবহার করলেই দেশে সমাজতন্ত্রের পথ সুগম হবে–এমনো কোনো কথা নেই। তবে সাম্রাজ্যবাদের টাকা সাম্রাজ্যবাদ শক্ত করতে কি শোষিত শ্রেণীর মুক্তির জন্য ব্যবহৃত হবে তা নির্ভর করবে কর্মসূচী ও তার প্রয়োগ, কর্মসূচীর ব্যাখ্যা, প্রশিক্ষণ এবং দলীয় ও নির্দলীয় রাজনৈতিক কাঠামোয় শ্রমিক শ্রেণীর নেতৃত্বে শ্রমিক শ্রেণীকে সংঘবদ্ধ করার প্রচেষ্টায় সক্রিয় সহযোগিতার ওপর অর্থাৎ লক্ষ্য যদি স্পষ্ট হয় এবং পরিস্থিতি যদি পরিচিত হয়

তাহলে কি করতে হবে এবং কি করতে হবেনা। সেটা স্পষ্ট রাখা সম্ভব এবং কেবলমাত্র সেই লক্ষ্যে এন, জি, ও'র টাকা ব্যয় করাও সম্ভব। দাতা দেশ ও সংস্থাগুলো অর্থাৎ donor রা যে অর্থ সাহায্য দেয় তা সাম্রাজ্যবাদের টাকা কিনা এবং তা হলেও পুরোটাই সাম্রাজ্যবাদের টাকা কিনা সে বিতর্কে আমি যাব না। তবু যে টাকা সাম্রাজ্যবাদের টাকা বলে পরিচিত–অর্থাৎ দেশকে দেওয়া বৈদেশিক সাহায্য এবং donor–দের স্থানীয় স্বেচ্ছাসেবী সংস্থাকে দেওয়া টাকার ভেতরে মৌলিক না হলেও পার্থক্য আছে। প্রথমতঃ বৈদেশিক সাহায্যের প্রধান দাতা দেশগুলো স্থানীয় এন, জি, ও'র প্রধান দাতা দেশ নয়। দ্বিতীয়তঃ সরকারের অপছন্দ স্বত্বেও donor-রা এ অর্থ সরাসরি এন,জি,ও–দের হাতে তুলে দেয়। তৃতীয়তঃ প্রধান donor-রা সাধারণতঃ এন, জি, ও'র ওপর কোন programme বা কর্মসূচী চাপিয়ে দেবার চেষ্টা করেনা।

অতএব donor এর টাকা হালাল এবং তাদের এই বিনিয়োগের উদ্দেশ্য তাদের নিজেদের স্বার্থ ছাড়া অন্য কিছু–এর কোনোটিই আমার বক্তব্য নয়। বরং আশি বিশ্বাস করি যে সাম্রাজ্যবাদের টাকার মতই এই টাকার প্রকৃত উদ্দেশ্য দেশের স্থিতাবস্থা রক্ষা করা। তথাপি আমার দুটি বক্তব্য আছে। এক, মূলদাতা দেশগুলির এক বিশাল জনগোষ্ঠি গত দশ বছরে তৃতীয় বিশ্বের সংগে তাদের দেশের সম্পর্ক ও সহযোগিতার ক্ষেত্রটি নতুন করে বিবেচনা করছে এবং এর কিছুটা প্রভাব তাদের উদার নৈতিক দলগুলির ওপর পড়েছে; এমন হওয়া অসম্ভব নয় যে এন,জি,ও'কে দেওয়া donor দের মোটামুটি শর্ত মুক্ত সাহায্য এই নতুন দৃষ্টি ভংগীরই প্রতিফলন। দুই, অনেকটা এই কারণে এবং চিন্তার ক্ষেত্রে যদি শঠতা না থাকে এবং প্রয়োগের ক্ষেত্রে যদি আত্মনিবেদনের অভাব না থাকে, তাহলে সুনির্দিষ্ট লক্ষ্যে এই অর্থ ব্যয় করা সম্ভব।

এর অর্থ এই নয় যে এন,জি,ওরা কোনো সুনির্দিষ্ট লক্ষ্যে কাজ করছেনা। এন,জি,ও'দের ব্যক্ত লক্ষ্য বিভিন্ন; এবং বেশীরভাগ ক্ষেত্রে অস্পষ্ট। যদিও বৈঠকে, সেমিনারে বহু গরিবদের ক্ষমতাসীন করার পক্ষে জোর বক্তব্য রাখেন এবং এটাই তাদের প্রকৃত লক্ষ্য বলে দাবী করেন। তাদের কর্মসূচী, কিভাবে তাদের প্রকৃত লক্ষ্য অর্জনে সহায়তা করবে তা বোঝা মুস্কিল।

সমস্যার গুরুত্ব বোঝানোর জন্য প্রগতিশীল এন,জি,ও অর্থাৎ যে সমস্ত এন,জি,ও'র সচেতনতা ও গণ সংগঠন কর্মসূচী আছে তাদের পরস্পর বিরোধী চিন্তা ও প্রয়োগ তালিকাভূক্ত করছিঃ–

(১) এরা সচেতন করার প্রক্রিয়াকে অভীষ্ট দলগুলির তাৎক্ষণিক এবং আপতঃ অভিজ্ঞতার ভেতর সীমিত রাখেন। রাষ্ট্রের স্বরূপ এবং রাষ্ট্রের ভূমিকা অর্থাৎ রাষ্ট্রই যে সবরকমের শোষণ ও উৎপীড়নের চূড়ান্ত ধারক বাহক–সে সম্পর্কে অভীষ্ট দলগুলিকে সচেতন করেন না। সেকারণে তাদের সচেতনা থেকে যায় অসম্পূর্ণ। এই অসম্পূর্ণ সচেতনার রাজনৈতিকরণ অর্থাৎ অধিকার প্রতিষ্ঠার লক্ষ্যে সর্বোচ্চ পর্যায়ে রাজনৈতিক সচেতনতার সংঘবদ্ধ প্রয়োগ সম্ভব নয়।

(২) যদিও সচেতনতা ও গণ সংগঠন কর্মসূচীর মর্ম সব রকম নির্ভরশীলতা থেকে মুক্তি, এন,জি,ও'রা ঋণ দিয়ে এবং বেশীরভাগ এন,জি,ও তাদের কর্মকান্ডের এলাকা থেকে প্রত্যাহারের কোনো রকম পরিকল্পনা না নেওয়ায় অভীষ্ট দলগুলিকে তাদের ওপর অব্যাহতভাবে নির্ভরশীল থাকতে বাধ্য করেন।

(৩) ব্যক্তি পর্যায়ে ঋণ দিয়ে, ভূমিহীনদের মধ্যে ব্যক্তিত্বে ব্যক্তিত্বে প্রতিদ্বন্দ্বিতা বাড়িয়ে এবং ব্যক্তির উচ্চভিলাষকে উৎসাহিত করে গণ সংহতি দূর্বল করেন।

(৪) বিভিন্ন এন,জি,ও একই এলাকায় কাজ করে এবং পরস্পর বিরোধী কর্মসূচী নিয়ে অভীষ্ট জনগোষ্টিকে দ্বিধাবিভক্ত করেন।

(৫) এন,জি,ও গরীব মানুষের মুক্তির একচেটিয়া এজেন্সি দাবি করে, অন্যান্য সাংগঠনিক প্রক্রিয়ার সাথে নিজেদের অথবা তাদের অভীষ্ট দলগুলির ওঠা বসার মাধ্যমে পরস্পরের মধ্যে সমঝোতা বৃদ্ধির প্রক্রিয়াকে নিরুৎসাহিত করে।

(৬) এন,জি,ও'দের বাম দলগুলির কঠোর সমালোচনা থেকে আমরা ধরে নেই যে এন,জি,ও'র ভূমিহীন শ্রেণী সংগঠনের একচেটিয়া অধিকার দাবী করে তাহলে বলতেই হবে যে এ দৃষ্টিভংগী সামগ্রীক শ্রমিক শ্রেণীর সংহতির জন্য ক্ষতিকর; কারণ কেবলমাত্র শহরে–কলকারখানাতেই নয় গ্রামেও বিপুল সংখ্যক নিগৃহীত দিনমজুর ইতিমধ্যেই দল–রাজনৈতিক প্রক্রিয়ায় সংগঠিত। সেকারণে এন,জি,ও'দের এই দৃষ্টিভংগীর ব্যাখ্যা আর যাই হোক নির্যাতিত জনগণের মুক্তির লক্ষ্যে শ্রমিক শ্রেণীর ক্ষমতা লাভ–এমন যুক্তি দেখানো মুস্কিল।

এই সমস্ত পরস্পর বিরোধী চিন্তা ও কর্মসূচী যতক্ষণ পর্যন্ত আলোচনার মাধ্যমে ঢেলে সাজানো না হয় এবং যতক্ষণ পর্যন্ত এন,জি,ও'রা সচেতনতা এবং গণ সংগঠন কর্মসূচীর কেবলমাত্র সহায়ক এবং কর্মসূচী ততক্ষণ পর্যন্ত, এন,জি,ও–গণ সংগঠন প্রক্রিয়া, প্রকৃতই শোষিত শ্রেণীর মুক্তির লক্ষ্যে শ্রেণী সংগঠন–এমন কথা বলা ঠিক নয়। অন্যদিকে বুর্জোয়া বামপন্থী এবং বিপ্লবী বামপন্থী আন্দোলন পছন্দ করুক আর না করুক, এন,জি,ও'রা যে প্রধানতঃ দুস্থ দিন মজুরদের ভেতরে দীর্ঘদিন ধরে এক নাগাড়ে কাজ করছে, এদের এক বিরাট অংশকে সুসংঘঠিত করেছে, এদের মধ্যে কিছুটা শ্রদ্ধাবোধ জাগাতে সাহায্য করেছে, এদের হাতে বেশ কিছু সম্পদ মজুদ হবার ক্ষেত্রে একটা সক্রিয় ভূমিকা রেখেছে এবং সব চাইতে গুরুত্বপূর্ণ, এদের সংগঠনে এদেরই ভেতর থেকে নেতৃত্ব সৃষ্টি করার সচেষ্ট হয়েছে–সে কথা অগ্রাহ্য করার উপায় নেই। এ ক্ষেত্রে এন,জি,ও–দের সংগে বাম পার্টির শক্তি পরীক্ষার প্রতিদ্বন্দ্বিতায় নামার সবচাইতে দুঃখজনক এবং ভয়াবহ অর্থ হবে শ্রমিক শ্রেণীকে বিভক্ত করা, গণ সংগঠনের প্রক্রিয়াকে দূর্বল করা এবং শ্রমিক শ্রেণীর রাষ্ট্রীয় ক্ষমতায় অংশীদারিত্বের যদি কোন সম্ভাবনা থেকেও থাকে, তবে তা বিলম্বিত করা।

উন্নয়ন কর্মসূচী ও মূল্যায়ন

এন,জি,ও মূল্যায়নের বেলায় যেসব পদ্ধতি প্রাতিষ্ঠানিক রূপ পেয়েছে তাতে এন,জি,ও

কর্মসূচীর বিবরণী থাকে; এন,জি,ও প্রকৃতই গরীবদের মধ্যে কাজ করে কিনা; গরীবরা ঋণ পায় কিনা, পরিশোধ করে কিনা; সঞ্চয় করে কিনা, কর্মসূচী বাস্তবায়নে মাথাপিছু এন,জি,ও কত খরচ করে, কতটা গরীব মানুষের হাতে গিয়ে পৌছায়; কতগুলো স্বাক্ষরতা কেন্দ্র আছে, তাতে কত লোক সই,-স্বাক্ষর বা লেখা পড়া শেখে; কত লোকের কর্ম সংস্থান হয়েছে; সচেতনতা বা উদ্বুদ্ধ করণের কাজ যদি থাকেত' দু'চারটটে অধিকার আদায়, আন্দোলন, নারী নির্যাতন রোধ, গমচুরি, চেযারম্যান ঘেরাও-এসবের লোমহর্ষক কথাবার্তাও থাকে। সব শেষে দু'চারটে ভাল কথা, এক আধটা মন্দ কথা দিয়ে উপসংহার।

এগুলোই এন,জি,ও কর্মকান্ডের ফল। কিন্তু কেউ যদি বলে গরীব মানুষকে ঋণ দিলে ফেরৎ পাওয়া যাবে; সঞ্চয় করতে বললে করবে; রাজা-মায়া দিলে লোকে তা হাত পেতে নেবে, প্রত্যাখ্যান করবেনা; সই-স্বাক্ষর শিখবে; আর সব কিছু যদি তেমন তেমন হয়-তা হলেও সেটা কাজের ফল নয়, কর্মসূচী বাস্তবায়নেরই অংশ। অর্থাৎ performance.

এই কর্মসূচীর মাধ্যমে সে যদি খেতে পরতে পারে, রাজা-মায়ার কারণে সত্যি সত্যিই যদি দুটি সন্তানই হয়; সঞ্চয়ের কারণে যদি পরিবারের বিপর্যয় কাটে, মহাজনের দেনার দায় কমে, সই-স্বাক্ষর শিখে যদি সে লিখতে পড়তে পারে-তাহলে এগুলো কর্মসূচীর ফল বা effect.

কিন্তু সব ফলই স্থায়ী নয়; অর্থাৎ effect এবং impact এর মধ্যে একটা গুণগত পার্থক্য আছে। অব্যাহতভাবে ঋণ নিয়ে খাওয়া-পরা সম্ভব, বাধ্যতামূলক সঞ্চয়, তহবিলে দুটাকা জমানোও সম্ভব কিন্তু ব্যক্তি-ঋণ যদি ব্যক্তি পর্যায়ে বিনিয়োগের জন্য পর্যাপ্ত পুঁজি গড়ে আত্ম নির্ভর হতে না দেয়, তাহলে দেশের সম ভূমিহীনকে অনাদিকাল পর্যন্ত ঋণ দিয়ে বাঁচিয়ে বাঁচিয়ে তাদেরকে বোঝা বানিয়ে সেই বোঝা টেনে নিয়ে বেড়াতে হবে। মধ্যবিত্ত-দাতা এবং শ্রমজীবী-গ্রহিতার সম্পর্কে অপরিবর্তিত থাকেব; যেদিন এই অব্যাহত ঋণ দান বন্ধ হবে এই অসংখ্য শ্রমজীবী যে অনিশ্চয়তার মধ্যে ছিল-ক্রমে সেখানে ফিরে যাবে। এটাই অব্যাহত ঋণ দানের impact বা স্থায়ী ফল। তবে এই ঋণদান কর্মসূচীর কারণে যদি গ্রামে মজুরের সংখ্যা কমে, মজুরী বাড়ে, বর্গা সর্ত সহজ হয়, শ্রমজীবীদের সম্পদ বাড়ে শ্রমজীবীরা সংগঠিত হয় পল্লী পরিষদ, ইউনিয়ন পরিষদ ও উপজেলায় শ্রমজীবীদের সংখ্যাধিক্য প্রতিষ্ঠিত হয়-তাহলে সেটাও স্থায়ী ফল।

যদি স্কুল হয, গরীব মানুষ লেখা পড়া শিখতে আসে কিন্তু শিখতে পারে না; কিম্বা যদি সই-স্বাক্ষর শেখে, একটু আধটু হয়ত পড়তে লিখতেও পারে কিন্তু সেই লেখা পড়া কোন কাজে লাগবেনা-তাহলে সেটা ফল, স্থায়ী ফল নয়।

Impact বা স্থায়ী ফল চিহ্নিত হয় আত্মনির্ভরশীলতা এবং পরিবর্তনের স্থায়ীত্ব দ্বারা।

কোন কার্যক্রমের impact লক্ষ্য করতে হবে তিনটি পর্যায়ে-অর্থনীতিতে; রাজনীতিতে এবং মানুষের ধারণা, চিন্তা, বিশ্বাস, ভাষা ও সংস্কৃতি, অর্থাৎ ideology তে এবং এর অনুশীলনে। সুনির্দিষ্টভাবে, উন্নয়নের কার্যক্রমের ফলে যদি সম্পদের মালিকানার লক্ষ্যনীয়

পরিবর্তন হয়–যদি ভূমিহীনরা সমস্ত খাস জমি ও জলাশয়ের মালিক হয, যদি বিভিন্ন সরকারী প্রতিষ্ঠানের একোয়ার করা বা নিয়ন্ত্রণাধীন বিপুল সম্পত্তি বন্দোবস্ত পায়; যদি প্রতিটি অঞ্চলে এবং প্রতিটি সরকারী প্রতিষ্ঠানের আওতাভূক্ত সকল কর্মসূচীতে শ্রমজীবীর ন্যূনতম মজুরী (take home pay) নিশ্চিৎ করতে পারে; যদি বর্গা–আইন কার্যকর করতে পারে–তাহলে অর্থনীতির ক্ষেত্রে সেগুলো স্থায়ী প্রভাব। যদি ভূমিহীনরা নিজেদের নেতৃত্বে সংগঠিত হয়, সংগঠনের মাধ্যম দেশের আইন (ন্যূনতম মজুরী, বর্গা আইন) বাস্তবায়ন নিশ্চিৎ করে, নারী নির্যাতন রোধ করে, স্থানীয় শালিশ–বিচার নিয়ন্ত্রণ করে এবং সবচাইতে গুরুত্বপূর্ণ, যদি প্রতিষ্ঠানিক রাষ্ট্রীয় কাঠামোয়। (পল্লী/ইউনিয়ন/উপজেলা) সংখ্যাধিক শ্রেণীর আনুপাতিক প্রতিনিধিত্ব প্রতিষ্ঠিত হয়–তাহলে রাজনীতিতে সেটা স্থায়ী ফল।

যদি সংখ্যাধিক মানুষ উপলব্ধি করে যে তারা খাটে, উৎপাদন করে আর মালিকরা খাটায় এবং ভোগ করে, যদি দেখতে পায় যে বড়লোকের নেতা বড়লোক, মধ্যবিত্তের নেতা মধ্যবিত্ত, কিন্তু শ্রমজীবীর নেতা শ্রমজীবী হতে পারেনা, নেতা হয় মধ্যবিত্ত; ৮০ ভাগ গরীবের প্রতিনিধিত্ব করে উপরের ২০ ভাগ লোক গ্রামে, ইউনিয়নে উপজেলায়, জেলায়, পার্লামেন্টে; এরাই আইন করে, আইন ভাংগে কিন্তু সাজা ভোগ করে না, গরীব আইন ভেংগে না–ভেংগে সাজা খাটে;

যদি তারা বোঝে, যারা সংস্কৃতিকে ধিক্কার দিয়েছে স্বাধীনতার বিরোধীতা করেছে দেশকে মানেনি–তারা আজ দেশদ্রোহী নয়; এই সচেতনতার সক্রিয় অনুশীলনই ideologyর ক্ষেত্রে কার্যক্রমের স্থায়ী ফল বা Impact.

এন, জি, ও, চলে গেলে, কার্যক্রম বন্ধ হলে–ফল শেষ হয়ে যাবে না; কার্যক্রমের প্রবল গতিশীলতা এ ফল ধারণ করবে। অর্থনীতি রাজনীতি ও সংস্কৃতিতে সেই ফল নিজস্ব জায়গা করে নেবে।

ঋণ দেবার ক্ষেত্রে, সেচ যন্ত্র নিয়ন্ত্রণের মাধ্যমে সংগঠিত শ্রমজীবীদের কৃষিতে অর্থবহ অংশিদারিত্ব, এক আধটি ক্ষেত্রে লাগসই প্রযুক্তি উৎভাবন; ওরাল সেরাইন ব্যবহারের প্রচার; দুর্যোগকালে সহযোগিতা–এমন বেশ কতগুলো ক্ষেত্রে এন,জি,ও, সুন্দর দৃষ্টান্ত স্থাপন করেছে। এসব প্রচেষ্টার প্রভাব কোথাও স্থানীয়ভাবে, কোথাও ব্যাপকভাবে পড়েছে।

এখানে দু'টো কথা বলা যেতে পারে। প্রথমত, এসব প্রচেষ্টা সুন্দর এবং প্রশংসনীয়। তবে স্বার্থক প্রচেষ্টা বলার আগেই স্থানীয় এবং বিচ্ছিন্ন এইসব কার্যক্রমের এলাকার ওপর কি impact হয়েছে–সে মূল্যায়ন দরকার। দ্বিতীয়তঃ এইসব খন্ডচিত্র জোড়া দিলে এমন কিছু দাঁড়ায়না, যা পরিচিত; এমন কোন সুনির্দিষ্ট আকার নেয়না, যা সহজে চিহ্নিত। এই সমস্ত কার্যক্রমের সামগ্রীক রূপ কি তা দেখা দরকার। শুধু এন,জি,ও'ই নয় যে কোন কর্মসূচীকে সামগ্রীক অবস্থান থেকে বিচ্ছিন্ন করে তার মূল্যায়ন করলে, হিসেবে মেলালে–তা বড় অস্পষ্ট থেকে যাবে–সেটা বড় খেয়ালী হয়ে যাবে।

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RECENT PERFORMANCE AND EVOLUTION OF POLICIES IN AGRICULTURE

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1. INTRODUCTORY REMARKS ON DATA

Any description or analysis of Bangladesh agriculture has to take account of the fact that the reliability of the data base is open to serious doubt. This is perhaps less so for the major cereals, since even in the days of "subjective" estimates these took as their starting point a comprehensive benchmark survey [4]. Recent changes in data collection procedures, involving crop-cutting experiment on sample plots, represent a significant improvement, though area estimates still remain questionable. It is also unfortunately true that cereal output figures, being highly sensitive politically, are also not infrequently finalised not through scientific debate but through negotiations among the Ministry of Agriculture (MOA), the Ministry of Food, and the Bureau of Statistics.

Data on "minor" crops are in the nature of things much more difficult to collect, and must be treated with considerably more scepticism. It is difficult to take seriously the masses of figures produced by the BBS on the quantities of brinjal, karola, jackfruit ect. Field crops like pulses and oilseeds would probably fare better.

A comparison of some of the figures given in the 1983-84 Census of Agriculture by the BBS with corresponding figures from the MOA reveal some glaring discrepancies (Table 1).

If we accept that the Agricultural Census is a more reliable base, then the Ministry statistics are particularly misleading for ``minor" crops, specially pulses and oilseeds. An examination of recent issues of the BBS Monthly Bulletin suggests that the figures (i.e. BBS's own time series.) have been partly revised upwards, but not to the full extent of the Census estimates.

Even for the rice crop the discrepancy between the two sources is disconcerting, being upwards of 3 million acres or about 12 per cent of the area given in the annual statistics. If the census figure is the right one, then production of rice must be less, or yield per acre more than official figures

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indicate. In our present state of knowledge, it is impossible to be sure one way or another, or indeed whether the census figures are to be relied on to that extent.

The current situation with regard to agricultural statistics is therefore not very satisfactory either methodologically or organizationally. Improvements in the system are badly needed, and could well be an area of benefication donor assistance.

2. RECENT PERFORMANCE

(a) Overview

The story of Bangladesh agriculture since independence appears to be one of progressive decelaration. This is captured vividly in the following figures (Table 2).

The picture is perhaps not quite as bleak as this table suggests, since the terminal year for the most recent period was an abnormal one with extensive flood damage to crops and livestock. Nevertheless, the perceived "slowdown" in agriculture in the eighties caused widespread anxiety, and various task forces were set up and review exercises initiated to identify the underlying causes and propose solutions. It cannot be claimed that the task was accomplished, though a number of insights were undoubtedly gained, and certain policy directions were indicated. One thing seems to be generally agreed, that the problems of Bangladesh agriculture are not primarily technical ones. In crop agriculture in particular, if, as seems indicated, the green revolution has lost some of its early momentum, it is not because a technical ceiling has been reached. In the phraseology favoured by the Agriculture Sector Review, a number of large and unfilled techno-economic niches remain, the main one being irrigated crop agriculture say new varieties of seed, are not needed. It is to say, however, that at this stage the economic and institutional policy environments are more critical determinants of agricultural performance.

(b) Major Cereals

Tables 3, 4, and 5 persent data on production, acreage and yield of the major cereal crops, rice and wheat. Figure 1 presents the production figures graphically. There is a discernible slowdown in Boro output after 1982-83, but this seems to have ended after 1985-86. Wheat has been basically stagnant since 1980-81, apart from the one peak year of 1984-85. Aman output has also stagnated, with three successive declines in the last three years. The first decline, from FY85 to FY86, was probably due to a liquidity crisis brought on by a combination of a cutback in institutional

credit (disbursements dropped from Tk. 11.50 billion in FY84 to Tk. 6.42 billion in FY85 and Tk. 6.67 billion in FY86)[1]. and declining earning from jute (gross values were: FY84 -Tk. 13.32 billion; FY85-Tk. 7.72 billion; FY86-Tk. 4.55 billion)[2]. The declines in 1987 and 1989 are more straight forwardly attributable to the floods.

But perhaps the most striking aspect of recent developments in the cereals sector is the acceleration in Boro production starting from FY87. Even if the forecast for FY89 is off by as much as half a million tons, this would still be as impressive achievement. A number of factors are probably jointly responsible for this:

i) Climatically, flood years tend to be good for the Boro crop, since residual moisture allows larger areas to be sown even without irrigation.

ii) Economically, farmers who have suffered losses in the Aman season are likely to be more determined, indeed desperate to recoup their losses through a good Boro crop.

ii) The government's flood rehabilitation measures, which included distribution of seeds and subsidized inputs and a rescheduling of overdue loans (thus making defaulters eligible for loans), definitely helped, through the precise aggregate impact cannot be yet estimated[3].

iv) Government policy changes regarding distribution of minior irrigation equipment (see below) may have played a role in the 1988-89 Boro season, though obviously not in the 1986-87 or 1987-88 recovery, since the policies were announced only in October 1988. It is possible, however, that some of the more restrictive government regulations, e.g. with respect to sitting of shallow tubewells, were never very effectively implemented.

It should be noted that the expansion in Boro rice production, actual as well as projected, is almost entirely due to area expansion, with productivity hovering around 0.98-1.00 tons per acre. In two out of the last three years,

1. Bangladesh Bank Sources.
2. Ministry of Agriculture sources.
3. 3. As one eminent observer put it, after travelling 2000 kilometers through flood-devastated Bangladesh in October 1989:
   "Without exaggeration, the tale of post-flood recovery is largely one of people's heroism.....The state and other agencies have played a subsidiary if not insignificant role beside this active response from the ground"[5].

this area expansion has taken place largely at the expense of Aman and Aus acreage (Table 6). In the case of Aman, this is no doubt to a large extent forced on the farmers when floodwaters recede too late for retransplanting, but there could also be an element of rational adjustment to a perception of heightened risk, limited financial resouces being reallocated to the safer Boro crop.

Yield per acre of the major cereal crops has grown very sluggishly if at all. For wheat there has been a long decline since 1983-84, with apparently partial recovery in 1988-89. Boro appears to have done relatively well, which is not surprising since this is where HYVs have replaced local varieties to the largest extent (Table 7). Undoubtedly the sunshine and temperature regimes of the winter months are more suitable for HYV cultivation. This is why not only the realised but also the "potential" Yield of HYV Boro is higher than for Aus and Aman[4]. Equally important is the farmers' perception that Aus and Aman are riskier crops. Under the circumstances, efforts to breed HYVs suitable for flood-prone areas may have lower retuns than expected.

(c) Growth Opprtunities

From a purely technical point of view, there would appear to be ample scope for increasing cereal production. A task force set up by the government has identified these potential opportunities as follows:

1. Expansion of HYV area

The task force suggests that of the area potentially suitable for HYVs in the different seasons, 25%, 27% and 88% are being currently so utilised in the Aus, Aman and Boro seasons respectively. There is therefore scope for further replacement of LVs with HYVs.

2. Expansion of irrigation

About 2.02 million hectares of land are irrigable, but a little less than half

4. BARC estimates are as follows:

Crop	Potential yield (achievable)	Realised Yield
HYV Aus	3.9	1.80
HYV Aman	4.2	2.15
HYV Boro	4.6	2.80

(Tons per hectare).

Source: [6; 3].

For an elaboration of the botanical/climatic reasons for the natural advantage of Boro see [7: 40-1].

of this is being irrigated. Furthermore, command area per irrigation device is very low, well under half the rated capacity for all devices except MOSTT.

3. Supplementary Irrigation for T. Aman

Losses due to moisture stress run between 20-40 per cent for T. Aman.

4. Increased fertiliser use, in particular sulpher and zinc

Micronutrient deficiencies can affect yields by 40-60 per cent.

5. Yield ga

Yields achieved by farmers with HYVs are way below achievable yield potential-=2.23 tons/ha. compared to 4 tons/ha.

And they proceed to draw up an "action plan" based on the assumption that the identified opportunities can be at least partly exploited to attain 20 million tons of cereal output by 1992.

What is missing in such an exercise is an appreciation of the fact that it is the farmer who will decide what to grow, what inputs to use, etc., and that therefore the task is to find policies that will motivate and enable the farmer to adopt certain practices. Identifying technical opportunities is an essential first step, but the first step will not take on very far unless one can take the next, which is to ask why these opportunities remain unexploited and what the private and social marginal costs are exploiting them. A simple answer should not be expected. The economic policy environment and the rural social structure are likely to play a combined and complex role.

(d) The Recent Floods: Reactions and Policy Implications

Moderate flooding is a perennial and benign feature of Bangladesh agriculture. It provides moisture and nutrients for the Aman harvest, it offers some degree of pest control, and it augments inland capture resources for fishing. In years of "normal" flooding, the damage to crops in the more flood-prone areas is more than compensated by adequate water supplies in drought-prone areas. Over centuries, the peasants of Bangladesh have evolved a life-style appropriate to living with floods.

Every once in a while, however, floods of above-normal severity will cause extensive damage to crops, livestock, infrastructure and even lives. Such events bring in their wake a somewhat obsessive preoccupation with floods and with grant and final solutions to them. Thus the 1955 floods, which, in terms of area affected, were not equalled till 1974, gave birth to the Krug Mission, the Water Development Board, and the IECO Master Plan. After three record floods in a decade (1984, 1987, and 1988), we are again living through a phase of intense flood-awareness.

Table 8 provides a comparative statements of crop damage due to the three recent floods. The loss to the Boro crop in 1984 is untypical, and due to the very early onset (about mid-May) of an unusually heavy monsoon. In that sense 1987 and 1988 are more representative, with the brunt bring taken by the Aman crop.

A number of commentators, including the Agriculture Sector Review, have suggested that flood losses are usually overestimated, partly for political reasons, but also because account is not taken of the fact that flood conditions are likely to benefit drought-prone areas. One independent estimate, based on a sample survey of forty villages put the net loss to the Aman crop in 1988 at 0.8 million tons [8].

The implications of possible patterns of global climatic changes, in particular the "Greenhouse effect", on flood frequencies in Bangladesh remain to be fully explored. On the basis of current knowledge, however, the 1987 and 1988 floods have been assisgned return periods of 30-70 and 50-100 years respectively. The probablity of recurrence is therefore low, and crop damage can be expected to be also lower in future as HYV Boro increases in importance, as it is bound to do. There would seem to be little justification, therefore, for any drastic changes in investment strategies, along the lines of "Making Bangladesh flood free". Selective flood control on the basis of "controlled flooding" as recommended by the Agriculture Sector Review is probably a preferable alternative. Immediate action should concentrate on disaster preparedness--improvements in prediction, early warming, flood shelters etc.

(e) Crop Diversification

Increased production of non-cereal crops, like vegetables, pulses, oilseeds etc. has long been a stated objective of government policy. The main preoccupation seems to be the quality of the diet, but other reasons for a concern with crop diversification are also adduced. A recent report of the Agriculture Division enumerate the objectives of crop diversification as follows:

"The goal of CDP is the accelerated production of minor crops in order to reduce pressure on rice and wheat; to improve daily diet of the people; to generate rural employment by intensive cropping; to increase farm income and thereby to increase purchasing power of rural masses; to improve balance of payments by promoting import substituting and export-oriented crops" [9].

The first objective is obscure. The second is premised on the assumption that consumption of, say, vegetables and pulses is constrained by supply rather than purchasing power, which is probably untrue (it might be true if increased supplies could be assured at lower prices). Import subtitutions and export promotion are real possibilities, but little work has been done on effective protection rates or domestic resource costs.

Crowth rates of acreage and production of minor crops by broad categories are shown in Table 9, along with base and terminal year acreage. Most important in terms of acreage are pulses and oilseeds, and for both acreage and production declined over the period FY79 to FY87 -for pulses at compound rates of-4.53 and-2.67 respectively (this does imply however that productivity yield per acre has improved). Area under spices has also declined but at a slower rate. Area under vegetables grew at a respectable rate for both summer and winter vegetables, as did production, but for summer vegetables this seems to be the net result of a spurt in the first subperiod, FY79-FY84, followed by negative growth in the seemed, while for winter vegetables there was a more modest decleration. The growth rates for maize are misleading, basically acreage has been fluctuating between 2000-3000 hectares (clearly and approximation to the nearest thousand).

Why has there been this decline in minor crops? The usual answer is that irrigation makes HYV Boro more attractive, and hence acreage is relocated from minor crops to Boro rice. If this is the only reason, then it would be hard to argue that this is an undesirable development, either from the individual farmers or from society's point of view.

Information on relative profitability is not easily available, and what there is, is somewhat ambiguous. The Crop Division Report referred to above gives the following estimates of costs and returns to selected crops (Table 10).

It would appear that apart from pulses and oilseeds (which however are the main minor crops in terms of acreage. and also the ones about which most concern is voiced), all other crops considered here yield higher net returns per hectare, and all without exception yield higher benefit-cost ratios. However, what the report fails to note is that some of the returns are bound to be highly location-specific e.g. fruits and vegetable returns be will be high in locations with easy access to towns, but very low otherwise, given the highly perishable nature of the commodity. Others, like spices, are likely to face highly inelastic domestic demand. Going back to Table 9,

one thing worth noting is that minor crops fared worse in the second period (1985 to 87) compared to the first. Since the second period also saw a slowdown in the growth of cereal output, there is a presumption that minor crop output is demand-driven.

The situation with regard to changes in incentive structures is unclear. Time did not permit compilation and analysis of such time-series data on costs and returns as exist. We have already seen that the current incentive structure is quite favourable to minor crops compared to HYV Boro, with pulses and oilseeds being significant exceptions (Table 10). Relative price changes over the last decade or so seem to indicate that the relative profitability of pulses, oilseeds and spices has been increasing (Table 11).

The trade regime is another factor that can affect incentive. Important here are relative volumes traded and the relationship between world and domestic prices. Tables 12 and 13 provide some data on imports and exports of minor crops and related products, only products whose export or import values generally exceeded Tk. 1 million during the last five years have been included. Also, since the focus is on minor crops, standard items like rice, wheat, tea, jute, shrimp, milk power ect. have not been included.

The first thing to note is that agricultural imports greatly exceed exports. This is true in the aggregate[5], but is clearly also true for minor crops as well, since the number of commodities that qualify for inclusion in our table by the Tk. 1 million criterion are much greater for imports.

The second feature is that apart from a few items like betel nuts and oranges, the share of imports or exports to domestic production is quite small for most items, generally well under ten per cent, usually in the 1-5 per cent range. It is doubtful, therefore, that the trade regime has a large effect on incentives at the moment, though its long run implications could of course be highly significant.

5. 5. Over the last five years, aggregates imports and exports of "agricultural products and requisites" were as follows (in Tk. million):

Year	Imports	Exports
1983-84	17888.89	7124.89
1984-85	26600.05	8359.07
1985-86	18262.26	9173.41
1986-87	19568.53	9170.20
1987-88	30849.19	10721.61

Source: BBS

Vegetable export are doing well, as, less expectedly, are tamarind and molasses. The last specially merits further investigation, as it might have implications for sugarcane and sugar policies. It would also be intersting to know whether the decline in animal feed exports is due to loss of external markets or rising home demand.

In Table 14 we compare harvest prices with import prices of a few minor crops. We have taken a considerable liberty in labelling as NPC (nominal protection coefficient) the ratio of harvest to import price, but this was considered preferable to deriving import parity prices by adding an arbitrary mark-up to the harvest price.

Keeping this in mind, and also that for ginger the prices for the first three years are export prices, we can say that chillies and rape seed generally enjoyed a high degree of protection, usually much higher than for rice or wheat, and ginger also received reasonable protection in the last year. A 20-30 per cent markup over harvest prices to convert them to import parity prices would also yield some protection to lentils in the one year when they were imported, but negligible or negative protection to onions. On the whole, therefore, the trade regime is not a source of disincetives for these minor crops. In any case, quantities traded are not large (unless, as is likely, there are large volumes of unrecorded trade), and so no particular action in this area seems to be called for.

This is not to suggest that nothing can or should be done directly for minor crop development. Yield enhancing innovations, particularly in pulses and oilseeds, would certainly add to farm incomes. Studies should be undertaken to examine the viability of certain agro-based industries, e.g. (a) edible oil cum animal feed plant based on maize, (b) fruit juices, preserves, jellies etc. (though a first initiative with Swedish private investment appears to have run aground, mainly due to problems with fruit supply), and (c) ground, spices. Such efforts would require multinational involvement, at least for packaging and distribution. The Agriculture Sector Review has alreay pointed out that import duties on containers would also have to be reduced.

(f) Fisheries

Most Bangladeshi farmers are part-time fishermen as well, and a fishnet, as well as other indigenous fishing devices, are to be found in every houses. Traditionally, fishing was done in ponds, canals, and inundated paddy-fields. River and ocean fishing require specialised skills and

equipment, and tended to be full-time occupations. Restocking was natural. The concept of fish culture was unknown.

Different types of fisheries can be distinguished based on different critera. One typology, based on the nature of the water body as well as culture practice, would distinguish between based on the organization and technology of production, would distinguish between the "domestic", artisanal", or "petty commodity" sector and the commercial mechanised sector, i.e., trawlers. All these distinction are important, and have bearings on appropriate policy formulation. Unfortunately, data are not available to allow us to give full empirical content to all these distinctions. Overall productions trends by type of fishery are given in Table-15.

Currently, inland capture fishery contributes more than 50% of the total catch. This consists partly of part-time fishing primarily for self-consumption (this component is probably under estimated in the aggregate statistics), and partly commercial fishing by self-employed fishermen who however are usually tied into a credit-and compulsory-sale relationship with a mahajan, who may also own the boat and net. Inland capture fishery has been declining both absolutely and relatively: from 471.6 milliom tons in 1983-84, which was 63 per cent of the total catch, to 426.1 million tons (52% of the total) in 1987-88. The main reasons are generally supposed to be related to resource-use conflicts, in particular with FCD and FCDI projects, as well as rural road building on raised embankments without adequate provision for natural restocking. With increasing population, there is also a tendency to overfish, i.e. to deplete young stock. In some areas, increased pesticide use, and industrial effluents near major urban centres are also believed to be contributory factors, but probably not of major dimensions.

Inland culture fishery, on the other hand, is increasing at a fairly respectable rate--its share in the total rose from about 16% in 1983-84 to just over 20% in 1987-88. However, cultivation practices are still by and large elementary, and yields are low.

In marine fishing, while trawlers have high visibility, they in fact contribute only about 5% of the total marine catch, the rest coming from "artisanal" fishermen. Even their contribution to shrimp export is only 16% as compared to 47% from shrimp farms. Future fisheries policy in Bangladesh should concentrate on inland capture, inland culture, and artisanal marine fishing.

For inland capture fishery, the following broad policy guidelines should be kept in mind.

1. All FCD and FCDI projects should be carefully vested for possible adverse effects on fish availability before being approved.

2. Artificial restocking of beels, floodplains and rivers should be undertaken as a major poverty alleviation and nutritional intervention. It would probably not be possible to recover the costs, but the social returns would be enormous. During the 1988 floods, it was found that fishing in the floodplains kept many people alive.

3. The existing yearly leasing system for beels, haors and baors should be replaced by longer-term (say 4-10 year) leases to discourage stock depletion and encourage conversion to scientific culture.

4. Certain pesticides, based on DDT or other chlorinated hydrocarbons, should be banned.

5. Prohibitions on capture or sale of fish below breeding age are unlikely to be very effective. Banning the production or import of fine-meshed nets (the "current net" is a particularly destructive device) might be somewhat more effective, though illegal trade (its main source) is difficult, to contend with. The only real hopes of relieving the pressure on inland capture fishery lie in massive artificial restocking as proposed in (i), and more importantly, in the development of fish culture.

In freshwater aquaculture, the main problems would seem to be inadequate finance and incomplete technology transfer. The technical capacities of the department of Fisheries need to be considerably expanded. More intractable are problems relating to uncertain and multiple property rights (for ponds), protection against theft, and, particularly for shrimp farming, conflict with rice cultivation, which is reportedly leading to the formation of private shrimp empires with private armies in the coastal areas. The following actions may be considered.

1. Setting up demonstration fish farms to impart practical knowledge about semi-intensive and intensive fish culture.

2. Initaiting on a compulsory basis necessary legal steps to abolish multiple ownership of ponds. For example, if one co-sharer submits a viable fisheries project for financing, steps may be taken to expropriate other co-sharers with compensation.

3. The urgent problem in shrimp culture is the coercion of small rice farmers in the shrimp areas, the destruction of their crop without compensation, physical harassment etc. Not unnaturally, this leads to

retaliatory action. It is not clear that law enforcement at the local level can be significantly improved. One possible solution, perhaps the only one, though its feasibility is also open to question, is to assist in the rapid transition to intensive shrimp farming methods that would generate enough employment to compensate rice farmers for the loss of their crop.

4. Artisanal marine fishermen may benefit from access to credit for owning their own boats and for mechanisation of their crafts.

(g) Livestock

According to the 1983-84 Livestock Survey, there were in that year about 21 million heads of cattle, less than half a million buffaloes, 9 million goats and half a million sheep in Bangladesh. Cattle are clearly the most important form of livestock, both in terms of numbers and of draft power, meat, and milk, and along with goats the major source of hides and skins as well. The share of livestock in total GDP is estimated at around 5 per cent of GDP, but this does not include the draft power contribution.

The data base for livestock is notoriously weak with only four livestock censuses to-date. But broadly one can say that over the last thirty years the cattle population has been growing very slowly, at about half of one per cent annually. Goats have done better, growing at around 3 per cent per year, while the numbers of buffaloes and sheep have basically stagnated. Poultry (which is sometimes included in livestock) grew quite rapidly at 5-6 per cent per year.

Bangladeshi cattle are of poor quality, partly genetically, partly because they are overworked, underfed, and generally uncared for. Their performance as providers of draft power, or meat or milk, is therefore generally poor. It is unlikely that much can be done to improve this as long as their owners, the farmers of Bangladesh, remain poor.

There has been increasing concern in recent years about a draft power constraint in agriculture. A 1981 estimate by the World Bank put the shortfall at 22 per cent of annual requirement and 37 per cent of peak seasonal requirement. What remains unclear, however, is whether this "Shortfall" in fact causes a loss in production. Farmers seem convinced enough about the reality of draft power constraint to be eager to aquire power tillers, and the government was also moved to abolish customs duties and sales taxes on power tillers or components for them. The Agriculture Sector Review, while recommending such and abolition for irrigation equipment, had suggested a customs duty of the order of 20-

30% on tillage equipment to minimise adverse effects on employment, and had also expressed some scepticism about the extent of output gain that can be expected. I believe these concerns remain valid, and power tillers should not be treated on a par with irrigation equipment. However, it must be recognized that replacement of animal tillage by mechanical tillage may have the beneficial side-effect of improving the supply and quality of meat, milk, and hides, provided appropriate supplement policies are adopted. These policies need not, however, await further expansion of mechanical tillage, since any major impact on the availability of animal draft power would take a long time. These policies would include Grameen Bank type interventions to encourage beef-fattening and milk-cow rearing activities, which should become relatively more profitable as cattle prices decline due to declining demand for animal draft power. (Modern capital intensive slaughterhouse or dairy activities are less likely to be efficient, specially the letter). The private sector is already showing some interest in producing finished leather rather than wet blue for export, and this deserves government support.

Poultry development should also be pursued through government NGO collaborative efforts, as part of rural (as well as urban both government and NGOs have neglected the unban poor for too long) employment generation, rather than the proliferation of battery chickens and eggs. The gains to consumers are largely cosmetic from the latter, while the loss of livelihood to small producers is potentially substantial.

3. INPUTS AND POLICIES

(a) Minor Irrigation

Minor irrigation development has been perhaps the success story of Bangladesh agriculture. Even though total coverage remains a modest 30-35 per cent of total cultivated area, it has profoundly transformed not only the technical basis but the fabric of social relations in rural Bangladesh. Areas like Barisal and Faridpur, which were once among the most prosperous districts, illustrate what Bangladesh would have been like without the development of minor irrigation.

Over the last decade, important changes have taken place in the relative importance of modes of irrigation, in the pace of expansion, and in policies. Table 16 summarises some of the basic information on the first two aspects. One noteworthy feature is the stagnation in area under power pumps, and the contrasting rapid expansion of tubewell irrigation. Something not shown in this table is the fact that shallow tubewells caught up with deep tubewells in terms of coverage in 1985-86; in that year area irrigated by

shallow tubwell came to 1.29 million acres as opposed to 1.07 million under deep tubewells[6].

Tubewell irrigation has clearly been the cutting edge, with annual growth rates usually exceeding 20% and in two years (1982-83 and 1983-84) reaching over 50 and 60 per cent respectively. After this gowth slackens off, precipitately so in 1985-86 and 1986-87. This of course is the much-discussed "slowdown".

The evolution of policy in this sector has broadly been one towards increased private sector participation in procurement and distribution of equipment (though with occasional hesitations of which much--indeed far too much--has been made in some quarters), and reduction of subsidies (complete elimination in the case of shallow tubewells). BADC's monopoly of STW importation and sales was abolished in 1978-79, and the preferentail 15% import duty on STW engines, previously reserved for the BADC, was also extended to private sector imports. DTW sales to private individual purchases were also allowed for a brief period (1980-84), but since 1985 they could be sold only to cooperatives or informal groups (since the current year, even informal groups are banned, and only registered BRDB KSS's are eligible).

Around 1984, however, there was some concern (in official as well as academic circles) about drawdown externalities—interference between wells placed too closely together, or aquifer depletion in some localities. Regulations were introduced banning STW installation in some parts of the country, and also about optimum distances between shallow tubewells. These regulations, together with standardisation, and all customs duties and sales taxes, were abolished in 1988.

Some commentators have seen in those attempts by government to regulate STW installations a sufficient explanation of the retardation of 1985-87. While the argument has an attractive simplicity and a surface plausibility, it is doubtful that it will stand up to serious secutiny. For one thing, it seems to be based on an exaggerated notion of the government's implementation capacity. Governments everywhere, and in third world countries in particular, express grave concern over, and pass regulations on a wide range of issues, but usually the only result is an addition to the avenues for rent seeking.

6. These figures do not add up to figure in the table because they are from BADC sources, though reported in the same BBS publication (Statistical Yearbook 1989) from which Table 10 is taken.

Secondly, in this kind of explanation certain acts are ascribed to certain agencies, but no plausible reasons are given why these acts should have been performed. It is claimed, for example, that in 1985-86 and 1986-87, BADC deliberately refused to sell to farmers the models of engines that they wanted to buy, in spite of adequate stocks. It is not explained what possible benefit BADC as an organization or individual BADC employees could possibly have gained from this. The logical action, its demand were as strong as these "supply-side" commentators like to claim, would have been for BADC staff to sell the desired makes at stake clearing prices and pocket the difference. It what was at market was preserving BADC's empire, leaving the field completely to private traders is surely the last tactic anybody would want to adopt.

It is not my contention that these attempts to regulate STW installation were necessay or wise. They were almost certainly premature, and their abolition was, at least for the time being, appropriate. But as an explanation of the "slowdown" this is indequate.

The alternative explanation is in terms of a temporary saturation of demand, caused by (a) the same factors that caused the first downturn in aman production (see above), i.e., a liquidity crisis caused by declining earings from jute and the credit crunch, and (b) declining profitability of HYV Boro cultivation. The first point has already been documented. A few words about the second are in order.

The eighties were a period when subsidies were being reduced on both fertilizer and irrigation equipment, while output (rice) pricess were comparatively stable. The paddy-fertiliser price ratio, after being mostly in the range 1.4 to 1.6 in the period 1975-77 to 1979-80, was mostly between 1.0 and 1.1 for the rest or the period [3;44]. Since HYV Boro yields also seem to have been basically stagnant, rising from 1.05 mt/acre in 1979-80 to 1.14 mt/acre in 1982-83, then declining more or less steadily to 1.06 in 1987-88 (Table 17), profitability of HYV Boro cultivation must have declined. This is also borne out by empirical studies, e.g. Mandal 1989, Quasem 1989. [10,11][7] .

7. An international World Bank report contradicts this, suggesting that "Despite rising input costs over the past decade, profitability has increased because of yield increases". The yield increases is supposed to be the result of shifting from LVs to HYVs ("Price incentives to foodgrain production" [3]. For comparing the profitability of HYV cultivation over time (which is the appropriate comparison since LVs are seldom irrigated), the varietal shift is clearly irrelevant.

It is sometime contended that while retuns to irrigation may indeed have declined over this period, those returns still remain attractive enough so that no slackening of demand for irrigation equipment should be expected. This ignores the fact that the average return is precisely an average. What one has on the ground is an array of returns on different plots of land, depending (given available technology and input-output prices) on soil types, elevation, access to markets etc. an adverse move in input-output price relatives will move some of these farms below the margin of profitability, even if average retuns remain "attractive". One of Quasem's intriguing findings is precisely that over the period 1981-82 to 1985-86, the general downward trend in profitability was composed of a decline in the percentage of profitable STWs in the study areas, combined with a rise in profits per STW for the profitable ones. [11: 33].

It must be admitted that the demand-side explanation is also not completely free from problems. In particular, the renewed buoyancy of STW sales starting from 1986-87 is not easily explained in terms of resurgent demand. It is true that both jute sale proceeds and credit disbursements improved somewhat, and the various remissions and reschedulings of credit must also have helped. At the same time, if the 1988-89 projection is validated, the recent policy changes towards unimpeded movement of equipment must get due credit.

Reservations about these policies are prevalent, on a number of grounds. Some people fear that farmers will be fleeced by unscrupulous traders selling gimcrack contraptions for a quick kill. Reportedly some high officials of the Krishi Bank are in favour of reintroducing standardisation because increased breakdowns are causing loanees to default. While such episodes are not unlikely in the beginning, it should not take too long for farmers to become brand-wise. The Engine Marketing Survey of the AST (September 1989) reflects considerable sophistication among buyers, who definitely weigh price against reliability before making a choice. As for the Krishi Bank's problem, they should certainly be allowed to charge farmers a risk premium for brands they consider unreliable. Provided this is based on real technical knowledge, they would in fact be providing an important service if they advise farmers on brand selection.

More substantialy, there is some concern about the loss in revenue due to the abolition of the 15% CDST. If the MOAs indicated target of 48,000 new installations over the next plan period are fulfilled, [1; 43] and if 40,000 of these are imported, the amount of CDST that could have been earned at

15% can be conservatively estimated at Tk. 37m per year (assuming that cheaper, Chinese and Korean brands, with an average landed cost of US$ 170, come to predominate-- which is in fact unlikely). Too little is known about the price elasticity of demand for irrigation equipment to decide whether this is a worthwhile expenditure. There is some anecdotal evidence to suggest that importers earn high scarcity premia, about 100% over costs. This would suggest that at least the 15% CDST can be reintroduced without affecting imports or sales. This would also allow a modicum of protection to domestic manufactures. Since the resulting (nominal) rate of protection is far below prevailing or even recommended protection rates for other industries, it may in fact be desirable to use the proceeds of this duty to offer some further susbsidies to domestic manufactures.

DTWs continue to oe heavily subsidised, to the extent of 70 per cent. This is the result of a fear that any significant reduction in these subsidies would impede irrigation development in areas where shallow tubewells cannot operate. Yet this level of subsidy cannot be sustainded if any expansion of DWT coverage is anticipated. Subsidies per deep tubewell have been estimated to be as high as Tk. 515,000 (World Bank 1989, p. 78). The MOA's development programme calls for the installation of 4800 DTWs each year. The total subsidy per year would therefore be Tk. 2472 million per year. This compares with Tk. 1793 million spent on groundwater in FY89 [3; 5].

With reasonable command area development DTWs are not less cost-efficient than STWs. The problem is not therefore that returns are essentially lower. There are basically two problems: first, the large initial investment and second, the organizational complexities involved in developing a command area that may include the property of as many as fifty to a hundred members.

Since BRDB cooperatives are not known for their pro-poor bias, it is difficult to defend either the large subsidies on DTWs or the restriction of their sales to KSS's. Policy changes in DTW distribution, which have been, since 1985, in the opposite direction to that followed for STWs, were probably misguided. Subsidies should be brought down in phases, and private individuals and informal groups (in particular landless groups) should allowed free access to the DTW market.

(b) Institutional Credit

The provision of institutional credit for agriculture continues to be

bedevilled by problems. The main problem, or perhaps the major symptom of underlying problems, is poor recovery (Tables 18-19). This had improved somewhat in 1986-87, as a result of variety of measures, including stricter enforcement of the pass book system, in vocation of the Public Demands Recovery Act to bar defaulters from contesting in Union Parishad elections, and the introduction of interest rebates for timely payment as well as penal rates for late payment. Since then, however, repeated natural; calamities have necessitated a relaxation of credit discipline. Already in 1986, borrowers with outstanding debts of up to Tk. 10,000 were exempted from interest payment provided they repaid principle and service charge by a specified date. It was also decreed that any borrower who had, as at 31st June 1986, repaid at least 125% of his initial loan would be considered to have fully repaid debt. In 1988 all crop loans were resheduled for three years. Not surprisigly, recovery rates plummetted.

One could no doubt decide that this state of affairs is inevitable and live with it, periodically writing off bad debts. In effect one would be running a dole programme under the guise of a credit programme. But it would be simpler and cheaper to run a straight cash transfer programme.

Building a viable credit programme for agriculture faces formidable difficulties. Strict credit discipline is a must, but agriculture is a risky business, and at least some borrowers, probably a good many, could legitimately plead force majeure for non-repayment. Even when they cannot, recovering hundreds of thousands of small debts through the courts would be an immensely time-consuming process, which would almost certainly cost more than it yielded by way of loans recovered. Thus any agricultural credit programme would have to live with a fairly high default rate, even apart from the occasional humanitrian waiver. The only way such a high-risk lending operation can be viable is of course through charging high interest rates. This would not be a fair arrangment--the good borrowers would be subsidising the bad ones--but it would be the only way to run a credit as opposed to a welfare programme. The Ariculture Sector Review, as well as many others, have also argued for higher interest rates, on the ground that higher rates would yield larger incomes that would permit closer supervision of credit and hence help improve recovery.

Another moot question is whether it makes sense to more or less coerce the NCBs to participate in the agricultural lending programme. If higher lending rates are allowed, and if the government undertakes to cover losses (which it effectively does through easy refinancing), the NCB may

lose some of their reluctance. It might make more sense, however, to leave agricultural lending entirely to the Krishi Bank, since they have, or at least are expected to have, the appropriate subject-matter expertise. This does not mean that they should be given a monopoly, but simply that for all banks, nationalised or private, the sectoral pattern of lending should be a matter of free choice. Private banks as well as NCBs should also be allowed to determine their own interest rate as NCBs should also be allowed to determine their own interest rate policies, though the government may use explicit subsidies to influence the sectoral pattern of lending.

A model recently proposed [12] of nationalised banks and NGOs going into partnership to ensure proper loan utilisation and repayment has definite points of interest. It remains to be seen, however, whether the NGOs can handle this addition to their responsibilities without overextending themselves. Existing NGOs would have to take on more staff, and/or new NGOs would have to come forth. There would be additional expenditures, which would probably be funded by donors. This may be an excellent use of donor resources.

(c) Fertiliser

Policy changes in fertiliser distribution have followed a pattern similar to that in minor irrigation, i.e., progressively greater involvement of the private sector. For some reason, this even more than irrigation policy has been the subject of long, intensive, and sometimes acrimonious debate. There are two issues involved, which are sometimes confused, public vs. private distribution, or the appropriate mix of the two, and subsidised vs. unsubsidised sales to farmers. Invariably, those who want greater, in the limit complete, transfer of the distribution function to private traders are also opposed to subsidising farmers.

The distribution system for fertiliser has evolved from the "Old Marketing System (till 1978), in which BADC sold to farmers and retail traders from Thana Sales Centres, through the New Marketing System under which BADC sold to wholesalers from 90 (later 75) Primary Distribution Centres, to the current system where the PDPs continue to operate, but bigger wholesalers can also lift fertiliser from 9 Transit Distribution Points.

Overall it is fair to say that none of the distribution systems performed particularly badly. Growth rate of fertiliser consumption was 11.3 per cent per annum during 1971-77, i.e. under the Old Marketing System, and fell to 7.6 over the period 1977-84, but this slowing down cannot be attributed to the new Marketing System, or can perhaps only partly be attributed to the

uncertainties of the transition process. In general sales have continued to grow strongly. Table 20 shows sales figures from 1980-81 to-date. Apart from one drop in 1981-82 and another in 1985-86, annual increments have mostly been well over ten per cent, and there is no reason to believe that when all the figures are in, the year 1988-90 will be an exception. A monthly comparison (Table 21) shows that if we compare equivalent subperiods the increnent was 9 per cent, with demand particularly strong in the Boro months.

Except for imports (currently nonexistent for urea) privatisation is virtually complete, with direct BCIC sales to private traders amounting to about 90% of all sales by December 1989 (Figure 2)[8], the shift has been particularly rapid in recent months--private traders' share was as low as 6% even in March 1989. It has been claimed that this change has been accompanied by an appreciable drop in farmer level prices (Samad et. al. 1989,Table 8, pp. 37.9, and Figure 3). The prices reported there are from the IFDC Formers' Survey. Data collected by the directorate of Agricultural Marketing, however, diverge considerably from these, as the following table shows.

SELECTED MONTHLY RETAIL PRICES OF UREA, 1988 AND 1989 (TK./50 KG)

Month	1988		1989	
	IFDC	DAM	IFDC	DAM
April	249.83	248	254.14	259
May	248.48	248	248.70	254
June	250.23	250	243.26	253
July	247.58	251	242.48	253
August	247.12	251	238.64	253
September	248.58	252	237.32	254

According to the DAM figures, monthly prices in 1989 remained higher than in 1988 for each month in the table, though the gap closes a trifle between April and September. More up-to-date figures, given in Table 22, do show that prices from November 1989 to January 1989 were lower than the corresponding figures for the preceding year. The author is not in a position to pass judgement on the comparative merits of the two price series. It is extremely disconcerting that such a major discrepancy should persist between two data sources, and an evaluation and reconciliation by

8. Prepared by Raymond Renfro of USAID for his presentation at the MOF-IFPRI workshop on Food Policy, Dhaka, 27-29 January 1990. Permission to use is gratefully acknowledged.

some neutral agency is desirable. Even of the DAM prices are to be relied on, farmer level prices are perhaps reasonably competitive. Even the highest price in recent months (Tk. 5.07/kg), implies a marketing margin of Tk. 1045/ton (over an ex-factory price of Tk. 4023/ton). If one assumes movement and handling costs to be Tk. 600 per ton (less than BADC's estimated "incidental costs", which were reported at Tk. 692 in 1987-88 and Tk. 818 in 1988-89 (see Samad et. al. Table 2, p. 150), the profit per ton is Tk. 445, or about 11%. Keeping in mind that BADC costs cover only movement to TDPS and PDPS, and furthermore that the margin is distributed between wholesalers and retailers, this seems to be a very reasonable margin. This in turn raises serious doubts about the credibility of the IFDC prices for recent months: how could private distributors make any profits at all if farmer-level prices were really that low? Two conclusions seem to follow: (1) the DAM prices are more reliable than the IFDC prices: and (2) these prices indicate that the fertiiiser trade does not so far display any marked monopolistic tendencies, and the transition to almost complete elimination of BADC from fertiliser trading has not been attended by any adverse consequences for farmers.

The performance of the fertiliser distribution system also stands up quite well to an international comparison on some selected dimensions (Table 23). Note that (a) the ex-factory price is somewhat lower than the import prices paid by most importing countries, so to that extent the industry may be said to be taxed (the Industry does, however, receive significant subsidies in the form of cheap nitrogen gas), and (b) marketing costs are the second lowest among the countries compared. Also, and in particular, not that according to this definition (the budgetary one), farmers in Bangladesh were being taxed on urea consumption in this year. If the import prices paid by other countries (except Nepal) is a reasonable indicator of world price, then using the world price would reduce this tax but not eliminate it. Future price policy changes should attempt to avoid the recurrence of this phenomenon.

It seems inevitable therefore that BADC should phase itself out of the fertiliser distribution system. A minimal role may be retained, however, to serve particularly inacessible areas, until such time as the development of transport infrastructure integrates those areas more closely with the rest of the country. Privatisation of international trade in fertiliser is also very much on the cards, provided suitable stops can be taken to prevent the transmission of year-to-year fluctuations in world prices to domestic consumers.

4. CONCLUSION AND A LOOK AHEAD

It would be unfair to say that agriculture in Bangladesh is ailing. The whole economy is ailing, agriculture no more than industry. No quick fixes are in sight, ideologies of the left or the right notwithstanding.

Recent developments in agricultureal policy represent a partial disengagement and a reorientation of direct intervention, with a concomitant induction of private sector initiative in these areas. By general consensus, minor irrigation has emerged as the "leading sector", with shallow tubewells in particular as the most dynamic component. Policy initiatives have concentrated on freeing up supplies of shallow tubewells by involving the private sector and removing customs duties and sales taxes, as well as various restrictive regulations. Marketing of the other major input, fertiliser, has also been largely privatised, with more complete privatisation anticipated.

The government has also acted with some success to control seasonal and year-to-year fluctuations of foodgrain prices. This success may however have been brought at a rather high cost, since it appeared to depend on building very large foodgrain stocks, with high foreign exchange and storage costs. Domestic procurement have suffered, with possible disincentive effects.

Channelling institutional credit to agriculture has proved a frustrating experience so far, though not more so than for industry. Most of the loans disbursed are defaulted. There is considerable scope here for facing up the system, in terms of allowing banks to decide to which sector to lend and how much, and what interest to charge.

All these changes, and recommendations for further changes, have been and will no doubt continue to be debated. In my opinion the changes in fertiliser pricing and distribution policies were neither particularly useful nor particularly harmful, though futher change should be introduced with caution, it at all. The changes in minor irrigation policy, however, can be, at least at this point in time, fully endorsed. The qualifying clause, however, merits consideration.

Groundwater is a classic example of a public good, a common resource whose uncoordinated private exploitation is likely, indeed at some point certain, to lead to wasteful over-exploitation. Thus the fact that sitting restrictions are inappropriate today does not mean that they may not be appropriate five or ten years hence. The recent abolition of these

restrictions is to be welcomed, but it shoud not be seen as a permanent commitment to a "hands-off" policy.

In any event, there are areas of the country where the water table in winter is usually too low for shallow tubewells, and others where optimum densities have been reached or are being approached. Improving the management of DTWs is a task that cannot be shirked for long. According to the National Water Plan, even DTWs, STW and LLP's together will not be able to meet Bangladesh's water requirements much beyond the year 2000. This does not leave much time to build up the administrative and organizational capacities needed to operate large scale water control schemes. And if Bangladesh agriculture can continue to grow only on the basis of such highly complex and expensive schemes, it may become uneconomic to do so. Investing those resources in industrialisation may be the superior alternative.

Even DTWs appear to offer a fundamental challenge to the existing property relations on the land. It seems certain that as long as landed property remains fragmented and unequally possible solutions. One is that the owner of a DTW (2 cusec, or bigger) take charge of the production process, leasing in all the land in the command area. The production process becomes organized around the irrigation device and not the land. The entrepreneure could also be the owner of a rice mill. Of course the process need not be restricted to rice or cereal crops. There are occasional reports of such "irrigation capitalists" emerging in the countryside, and the process could be consciously encouraged.

The other solutions is of course an egalitarian land redistribution. This is no longer discussed in policy discourses, no doubt because it is so manifestly unlikely to occur. Also, it would not in itself solve the central problem-creating productive employment for surplus labour. This employment will have to be found largely outside agriculture. This seems to be happening already, but at wretchedly low levels of productivity and income. If these basic parameters remain unchanged, no amount of tinkering with prices or distribution systems will succeed in getting agriculture really moving paradoxically the key to agricultural development may lie in industrial development.

REFERENCES

1. Ministry of Agriculture: Crop Agriculture Development Programme for the Fourth Five Year Plan, Government of Bangladesh, Dhaka, 1990.
2. Samad, A., A.K.M. Ansarul Haque, Surjit S. Sidhu: Low Cost Intervention Study for the Fertiliser Market of Bangladesh, IFDC, Dhaka, 1989.
3. World Bank: Selected Issues in Agricultural Development (Draft), Dhaka, March, 1989.
4. Ishaque, H.M.S.: Agricultural Statistics by Plot-to Plot Enumeration, 1944-48 3 Vols. Bengal Government Press, 1946.
5. Hossain Mahabub et. al.: Economic Impact of the 1988 Floods, Impressions from Field Visits, BIDS, Dhaka, December, 1988.
6. BARC: Action Plan for Production of 20 Million Tons of Foodgrains by 1991-92, Ministry of Agriculture, Government of Bangladesh, Dhaka.
7. Cobbald, T.: "Climatic Contraints to Grain Production in Bangladesh" in the Agricultural Sector in Context, Compendium Vol. 1. Agriculture Sector Review, UNDP, Dhaka, 1989.
8. Hossain Mahabub: Effects of the 1988 Floods on Rural Economy (Mimeo), BIDS, Dhaka, 1988.
9. Ministry of Agriculture: Crop Diversification Programme for the Fourth Five Year Plan of Bangladesh, Government of Bangladesh, Dhaka, July, 1989.
10. Mandal, M.A.S.: "Market for and Returns from Groundwater Irrigation in Bangladesh" in Land, Water and Irrigation, Compendium Vol.III, Ariculture Sector Review, UNDP, Dhaka, 1989.
11. Quasem Abul: Financial Return of Irrigation Equipment to Owners and Users—The Case of Shallow Tubewells in Banglasedh, 1981-85, CMI/DERAP, Bergen, 1987.
12. Steenwyk, Mark A. Van: An Agricultural Credit Programme in Support of Accelerated Cereal Production in Selected Areas, Report Prepared for the FAO, Dhaka, September, 1989.

Table-1: Acerage Under Differnt Crops, 1983-84: Census Vs. Annual Data

Area in 000 Acres

Crop	Annual Statistics* (Av. of 1982-83 and 1983-84)	Ag. Census 1983-84
Rice	26112	22839
Wheat	1292	1323
Minor cereals	133	572
Pulses	716	2139
Oilseeds	650	1439
Spices	402	727
Vegetables, of which,	776	1136
Potatoes	272	330
Sweet potatoes	162	146
Others	342	660

* The averaging was done because the Census figures are in fact also bienial averages.

Soures : O.D.K. Norbye, "Internal Inconsistencies in Agricultural Statistics" in Agriculture Sector Review Compendium Volume I.

Table-2: Average Growth Rates by Subsectors

Subsector	Period			
	FY 73-76	FY 77-81	FY 82-87	FY 73-87
Crop agriculture	7.9	2.6	2.0	3.0
Livestock	1.4	9.3	2.6	6.2
Fisheries	−3.0	8.0	2.8	2.2
Total	6.0	2.6	2.2	2.9

Source: Internal World Bank Document.

Table-3: Cereals: Production in "000" MT (1975-76 to 1989-90)

YEAR	AMAN	AUS	BORO	WHEAT	TOTAL
1975-76	7158	3282	2323	218	12981
1976-77	7017	3058	1676	259	12010
1977-78	7541	3154	2275	349	13319
1978-79	7548	3341	1960	595	13444
1979-80	7420	2854	2466	823	13563
1980-81	7963	3289	2630	1092	14974
1981-82	7209	3270	3152	967	14598
1982-83	7603	3066	3546	1095	15310
1983-84	7936	3222	3350	1211	15719
1984-85	7930	2783	3673	1464	15850
1985-86	8542	2828	3671	1041	16082
1986-87	8267	3129	4010	1091	16497
1987-88	7690	2993	4731	1050	16464
1988-89	6863	2856	5830	1023	16572
1989-90*	8500	2500	7000	1000	19000

* Provisional.

Table-4: Cereals: Area In "000" Acre (1975-76 to 1989-90)

YEAR	AMAN	AUS	BORO	WHEAT	TOTAL
1975-76	14230	8447	2836	370	25883
1976-77	14348	7948	2112	395	24803
1977-78	14254	7810	2702	467	25233
1978-79	14340	7990	2648	655	25633
1979-80	14753	7501	2838	1070	26162
1980-81	14911	7687	2865	1460	26923
1981-82	14847	7770	3218	1319	27154
1982-83	14805	7803	3540	1282	27430
1983-84	14837	7753	3460	1299	27349
1984-85	14106	7257	3890	1670	26923
1985-86	14869	7027	3787	1334	27017
1986-87	14950	7173	4080	1445	27648
1987-88	13809	6889	4905	1476	27079
1988-89	12790	6633	5971	1369	26763
1989-90*	13870	6500	7000	N.A.	–

* Provisional.

Table-5: Cereals: Yield In (MT/Acre) (1975-76 to 1989-90)

YEAR	AMAN	AUS	BORO	WHEAT	TOTAL
1975-76	0.50	0.38	0.81	0.59	2.28
1976-77	0.48	0.38	0.79	0.65	2.30
1977-78	0.52	0.40	0.84	0.74	2.50
1978-79	0.53	0.41	0.74	0.81	2.49
1979-80	0.50	0.38	0.87	0.76	2.51
1980-81	0.53	0.42	0.91	0.74	2.60
1981-82	0.48	0.42	0.97	0.73	2.60
1982-83	0.51	0.39	1.00	0.85	2.75
1983-84	0.53	0.41	0.96	0.93	2.83
1984-85	0.56	0.38	0.94	0.87	2.75
1985-86	0.57	0.40	0.96	0.78	2.71
1986-87	0.55	0.43	0.96	0.75	2.69
1987-88	0.55	0.43	0.98	0.58	2.54
1988-89	0.54	0.43	0.98	0.75	2.99
1989-90*	0.61	0.38	1.00	N.A.	–

* Provisional.

Table-6: Changes In Area Sown By Season

	Change in area (000 acres)				
Fiscal Year	Aman	Aus	Aman+Aus	Boro	Aman+Aus +Boro
1986 to 87	-1141	-284	-1425	+825	-600
1987 to 88	-1019	-256	-1275	+1066	-209
1988 to 89	+1080	-133	+951	+1029	+1980

Table-7: Share of HYV In Total Production of Rice By Season

Year	Share of HYV in total production		
	Aman	Aus	Boro
1973-74	0.29	0.16	0.73
1974-75	0.18	0.24	0.72
1975-76	0.17	0.27	0.71
1979-77	0.13	0.27	0.72
1977-78	0.08	0.29	0.66
1978-79	0.11	0.29	0.71
1979-80	0.23	0.30	0.78
1980-81	0.26	0.33	0.76
1981-82	0.23	0.31	0.80
1982-83	0.27	0.31	0.85
1983-84	0.26	0.31	0.85
1984-85	0.29	0.31	0.86
1985-86	0.29	0.33	0.88
1986-87	0.31	0.31	0.87
1987-88	0.32	0.30	0.91

Source: BBS, Statistical Yearbook, 1989.

Table-8: Flood Damage to Main Crops, 1984,1987, and 1988 (M. Tons)

Crop	CROP LOSS		
	1984	1987	1988
Local Boro	11,717	–	–
HYV Boro	349,231	–	–
Pajam Boro	12,877	–	–
Total Boro	386,702[1]	–	–
Local Aus	378,835	187,620	n.a
HYV Aus	125,522	66,565[2]	n.a
Total Aus	504,357	254,185	50,509
B. Aman	256,953	246,045	644,810
L.T. Aman	94,574	485,683	604,420
HYV Aman	27,768	341,456[3]	810,590[3]
Total Aman	379,295	1,073,184	2,059,820
Total Rice	1,270,354	1,377,369	2,110,329
Jute (Bales)	1,055,846	142,817	144,644

Notes: 1. Recalculated to include Pajam.
2. Including Aus Pajam.
3. Including Pajam T. Aman.

Source : BBS, Yearbook of Agricultural Statistics of Bangladesh, 1987-88, pp131-2

Table-9: Growth of Acreage and Production of Minor Crops

Crop	Annual compound growth rate (%)						Area in hectares	
	1979-80 to 1984-85		1984-85 to 1987-88		1979-80 to 1987-88			
	Acreage	Production	Acreage	Production	Acreage	Production	1979-80	1987-88
Spices and condiment	-0.45	1.59	-0.88	0.42	-0.94	0.98	154,000	142,900
Fruits	1.40	0.97	1.77	0.77	1.41	0.65	145,290	164.710
Winter vegetables	2.72	3.39	2.20	2.27	2.25	2.50	78,500	95,100
Summer vegetables	7.25	6.96	-1.12	-3.92	4.80	2.14	40.500	55,400
Pulses	-4.26	-1.68	-5.18	-4.10	-4.53	-2.67	331,000	231,000
Oilseeds	-1.28	1.63	-3.67	-2.25	-1.81	0.49	311,000	265,000
Maize	13.70	24.75	-3.53	0.00	8.40	18.12	2,000	3,000
Total							1,062,290 (2.6 million acres	957,110 (2.4 million acres)

Source : Report on Crop Diversification Programme Agriculture Division, appendix Tables 1-50 to 1-9

Table-10: Benefit: Cost Ratio of Different Vegetables, Fruits, Spices, Pulses, Oilseeds and HYV Boro Rice

Crops	Cost and Return (Tk./ha)				
	Total Cost	Gross Return	Net Return	Benefit: Cost Ratio	
				Gross	Net
Vegetables	19900	56483	36583	2.84	1.84
Potato	30658	95625	64967	3.12	2.12
Sweet Potato	15536	51166	35630	3.29	2.29
Pulses	8499	19080	10581	2.24	1.24
Oilseeds	12337	27149	14812	2.20	1.20
Fruits	28572	167071	138499	5.85	4.85
Spices	25538	85789	60251	3.36	2.36
Maize	12094	28860	16766	2.40	1.39
Boro HYV (TADP)	18123	38319	20196	2.11	1.11
Boro HYV (IDA DTW-2)	15915	32281	16362	2.03	1.03

Table-11: Minor Crop/Paddy Price Ratior, 1978-79 to 1987-88

Year	Fruits		Oilseed	Pulses	Spices		Vegetales		
	Banana	Mango	Rape & Mustard	Masur	Chillies	Onion	Karala	Brinjal	Potato
1978-79	1.05	1.81	1.93	1.42	3.25	0.65	0.64	0.62	0.64
1979-80	1.12	2.16	2.01	1.42	3.26	0.83	0.75	0.69	0.49
1980-81	1.33	2.89	2.58	2.13	4.43	1.39	0.62	0.63	0.55
1981-82	1.42	2.31	1.94	1.95	3.30	1.01	0.78	0.49	0.38
1982-83	0.92	0.87	1.84	1.73	3.33	0.82	0.51	0.44	0.33
1983-84	1.01	0.85	2.42	1.53	7.78	0.58	0.78	0.65	0.62
1984-85	1.23	1.19	1.83	1.18	5.70	0.87	0.88	0.61	0.44
1985-86	1.42	1.16	2.48	2.23	3.15	1.13	1.04	0.65	0.64
1986-87	1.13	1.89	2.02	2.08	4.48	0.82	0.76	0.85	0.63
1987-88	—	—	1.52	1.72	4.73	1.05	0.95	0.39	0.37
1988-89									

Source: Calculated from Statistical Yearbook of Bangladesh 1987.

Table-12: Exports of Selected Agricultral Product Value in Tk. Million, Quantity in M. Tons 1983-84 to 1987-88

	1983-84	1984-85	1985-86	1986-87	1987-88
1. Vegetables (fresh/frozen)					
Quantity	—	—	—	—	—
Value	77.64	105.84	470.12	526.90	460.62
2. Thamaind, fresh or dried					
Quantity	880	555	5112	1219	35
Value	4.38	2.75	31.75	17.87	2.23
3. Fruits, n.e.e.					
Quantity	—	—	—	—	—
Value	5.39	7.81	22.58	9.74	23.28
4. Molasses					
Quantity	3188	13542	nil	nil	12007
Value	5.20	18.18	nil	nil	23.19
5. Ginger	252	209	115	nil	nil
Quantity	(0.65)	(0.53)	(0.28)		
Value	8.27	7.48	2.97	nil	nil
6. Animal feed[1]					
Quantity	—	—	—	—	—
Value	75.35	79.90	4.86	3.56	nil

1. Chietly bran. Export discontinued after 1984-85

Source: BBS, Yearbook of Agricultural Statistics in Bangladesh, Table 12.3.

Note: (i) A(-) means "not available".

(ii) Figures in brackets under "Quantity" show exports as a percentage of total production (productions figures from same source, various tables).

Table-13: Imports of Selected Agricultural Products into Bangladesh 1983-84 to 1987-88

	1983-84	1984-85	1985-86	1986-87	1987-88
1. Lentils					
Quantity	—	—	—	563	21773
			(0.38)	(13.72)	
Value	—	—	—	5.15	255.50
2. Grams. dry, white	154	—	221	1300	710
Quantity	(0.18)*	—	(0.28)	(1.59)	(0.95)
Value	0.119	—	3.59	13.31	7.19
3. Vegetables, leguminous, fresh/dried/frozen					
Quantity	600	—	590	1098	22968
Value	2.67	—	5.69	9.83	212.12
4. Onions, shallots leeke					
Quantity	246	3741	5625	3270	12866
	(0.18)	(2.66)	(4.12)	(2.51)	(9.15)
Value	0.967	20.08	40.38	18.94	146.17
5. Oranges (fresh/dried)					
Quantity	6033	5762	7630	8618	2786
	(245)	(271)	(441)	(568)	(286)
Value	24.83	24.28	51.48	53.67	21.99
6. Betel nut					
Quantity	10104	13517	9098	6179	3630
	(41.75)	(59.55)	(39.46)	(28.39)	(16.19)
Value	96.94*	308.75	243.27	131.92	76.07
7. Other fresh fruit n.e.c.					
Quantity	—	—	—	—	—
Value	43.70	52.53	87.05	76.64	57.53
8. Chillies, dry, unground					
Quantity	1942	4175	12	565	3452
	(4.22)	(9.33)	neg.	(1.31)	(7.63)
Value	33.83	84.22	0.56	9.50	68.90
9. Ginger					
Quantity	172	—	—	936	6009
	(0.44)	—	—	(2.31)	(15.13)
Value	4.96	—	—	9.46	69.16
10. Rape seed					
Quantity	19940	15572	—	87495	127587
	(7.86)	(5.46)	—	(38.28)	(57.47)
Value	177.69	208.54	—	587.42	1006.47

Source: BBS, Yearbook of Agricultural Statistics for Bangladesh, Table 12.4.

Notes: (1) A (-) means "not available"
(2) An asterisk (*) means the figure is suspect, possibly a mispoint.
(3) Figures in brackets indicate imports as per cent of domestic production.

Table-14: Import and Harvest Prices, Selected Minor Crops, 1983-84 to 1986-87 (Price in Tk./ton)

Crop/Price	Year			
	1983-84	1984-85	1985-86	1986-87
1. Lentils:				
Harvest price	6802	6256	10395	11473
Import price	–	–	–	11735
NPC (Harvest over Import price)	–	–	–	0.98
2. Onions:				
Harvest price	2565	4597	5261	4931
Import price	3930	5368	7179	5792
NPC	0.65	0.86	0.73	0.85
3. Ginger*				
Harvest price	20295	19285	27770	41415
Export/Import price	32817	35789	25826	36966
NPC	0.62	0.54	1.08	1.12
4. Rape seed				
Harvest price[2]	10764	9717	11541	12130
Import price	8911	13392	–	6713
NPC	1.21	0.73	–	1.80
5. Chillies, dried, unground Harvest	34541	30227	14708	26869
Import price	17420	20172	46667	16814
NPC	1.98	1.50	0.32	1.60

Source : For harvest prices, BBS op. cit, Table 9-2, 1-2. For import prices, same as for Tables 11 and 12.

* Harvest prices have been mutiplied by 2.5 to arrive at dry-weight equipment prices.

Table-15 : Fish Production by Sources, 1983-88

	1983-84					1984-85					1985-86		
	Area[a] '000' (ha)	Yield kg/ha	Prodn '000' MT	Relative Share Inland	Total	Area '000' (ha)	Yield kg/ha	Prodn '000' MT	Relative Share Inland	Total	Area '000' (ha)	Yield kg/ha	Proch '000' MT
INLAND-CAPTURE	1831.6	208	207,786	36.6	27.6	1031.6	213	219,88	37.5	28.4	1031.6	200	–
Rivers, Sunderbons	–	–	–	–	–	–	–	–	–	–	–	–	7,112
Flood lands	2832.8	71	200,718	34.1	28.6	2832.8	86	184.130	33.1	25	2832.8	66	187,396
Beals	114.2	450	51,373	8.7	8.8	114.2	402	45,893	7.8	5.8	114.2	396	45,258
Kaptai lake	68.8	59	4,067	0.7	0.5	68.3	39	2,730	<1	<1	68.3	35	2,433
Sub-total	4047.4	–	471,595	80.1	62.8	4047.4	–	462,605	79	58.8	1047.4	–	441,799
INLAND CULTURE													
Ponds	145.9	735	107,944	18.3	14.3	148.9	760	111,567	18	14.4	164.9	843	123,804
On bow lakes	5.5	157	862	0.1	–	5.5	175	962	<1	<1	5.5	176	968
Shrimp polders	51.8	159	8,219	1.4	–	64.2	176	11,282	1.9	1.5	87.3	229	19,961
Sub-total	204.2	–	117,025	20	15.5	216.8	–	123,311	21	16.0	239.7	–	144,723
INLAND TOTAL	–	–	588,520	100	78.1	4264.0	–	586,416	100	75.8	4287.1	–	586,522
MARINE				(Marine)					(Marine)				
Industrial	–	–	14,500	3.8	1.8	–	–	12,440	6.6	1.6	–	–	11,899
Artisanal	–	–	150,382	91.2	20.0	–	–	175,123	93.4	22.6	–	–	195,503
Sub-total	–	–	164,882	100	21.9	–	–	187,553	100	24.2	–	–	207,401
COUNTRY TOTAL	–	–	753,502	1000	100	–	–	773,979	100	100	–	–	783,823

* Fishery area under permanent water will possibly remain unchanged, but the floodlands fishery is likely to shrink with time.

According to one estimate (Marr, 1985) the floodlands fishery area in the year 2005 will be reduced no 2.1 million ha.

Source: Ministry of Fisheries and Livestock.

Table-15 (Contd.)

	1985-86				1986-87					1987-88			
	Relative shares		Area[a] '000'	Yield	Prodn '000'	Relative share		Area '000'	Yield	Prodn '000'	Relative shares	
	Inland	Total	(ha)	kg/ha	(MT)	Inland	Total	(ha)	kg/ha	(MT)	Inland	Total
INLAND-CAPTURE	–	–	1031.6	188	201,152	32.7	24.7	1031.8	189	195.000	32.8	23
Rivers Sunderbons	36	26	–	–	–	–	–	–	–	–	–	–
Flood lands	32	24	2832.8	65	183,796	30.8	22.6	2832.3	63	179,000	30.0	22
Beels	8	6	114.2	308	42,077	7.0	52	114.2	421	48,000	8.0	6
Kaptai lake	<0.5	<0.5	68.8	58	3.981	<1	<1	68.8	59	4,100	0.7	0.6
Sub-total	75	55.7	4047.3	–	431,008	72.2	52.9	4047.3	–	426,100	71.3	51.6
INLAND CULTURE												
Ponds	21	16	146,9	973	142,876	24	17.5	146.9	1000	147,000	24.5	13
On-bow lakes	<0.1	<0.1	5.5	214	1,174	<1	<1	5.5	218	1,200	0.2	0.1
shrimp Polders	3	2	87.3	253	22,050	3.7	2.7	87.3	279	24,400	4.0	2.7
Sub-total	25	18.2	239.7	–	166,100	27.8	20.4	739.7	–	172,600	28.7	29.8
INLAND TOTAL	100	73.9	4287.0	–	597,106	100	73.3	4287	–	588,700	100	72.4
MARINE	(Marine)					(Marine)					(Marine)	
Industrial	5.7	1.5	–	–	12,356	5.7	1.5	–	–	10,364	4,5	1.2
Artisanal	94.3	24.6	–	–	205,223	94.3	25.2	–	–	218,638	95.5	26.4
Sub-total	100	28.1	–	–	217,579	100	26.7	–	–	229,000	100	27.6
COUNTRY TOTAL	100	100	–	–	314,685	100	100	–	–	827,700	100	100

* Fishery area under permanent water will possibly remain unchanged, but the floodlands fishery is likely to shrink with time. According to one estimate (Marr, 1985) the floodlands fishery area in the year 2005 will be reduced no 2.1 million ha.

Source: Ministry of Fisheries and Livestock.

Table-16: Area Irrigated by Methods

(000 Acres)

Method	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
Power Pumps	1370	1434	1536	1645	1740	1845	1647	1681	1504	1630	1303
Annual growth rate		0.047	0.071	0.071	0.058	0.060	-0.11	0.021	-0.11	0.084	-0.20
Tube-wells	314	396	446	548	670	1018	1648	2171	2379	2426	3624
Annual growth rate		0.261	0.126	0.228	0.223	0.520	0.619	0.318	0.095	0.020	0.49
Canals	296	246	302	371	404	396	331	364	403	384	285
Annual growth rate		-0.17	0225	0.230	0.086	-0.02	-0.16	0.101	0.106	-0.05	-0.26
Doons	980	962	977	912	809	726	689	454	421	441	
–											
Annual growth rate		-0.02	0.016	-0.07	-0.11	-0.10	-0.19	-0.23	-0.07	0.048	
Swing baskets	154	171	182	205	212	209	207	196	207	233	
–											
Annual growth rate		0.111	0.059	0.130	0.034	-0.01	-0.01	-0.05	0.057	0.128	
Others	474	452	430	369	358	372	322	254	269	319	588*
Annual growth rate		-0.05	-0.05	-0.14	-0.03	0.040	-0.13	-0.21	0.059	0.186	
Total	3589	3662	3873	4050	4264	4566	4744	5121	5183	5434	
Annual growth rate		0.020	0.058	0.046	0.053	0.071	0.039	0.079	0.012	0.048	

Source: Agricuture Statistics B.B.S.

* Including doons and swing baskets.

Table-17: Yield of Boro

	Area (000 acres)	Production (000 acres)	Yield
1979-80	1788	1990	1.08
1980-81	1845	1990	1.08
1981-82	2218	2515	1.13
1982-83	2670	3031	1.14
1983-84	2635	2832	1.07
1984-85	3040	3348	1.10
1985-86	2998	3219	1.07
1986-87	3311	3580	1.08
1987-88	4050	4294	1.06

Source: Statistical Yearbook 1989, p. 160.

Table-18: Agricultural Credit Programme: Disbursements and Recovery 1987-88 and 1988-89

(In Tk Crores)

Name of Banks	Programme for crop year		Disbursement				Amount recoverable		Amount recovered		Overdue	
			Crop year		Fiscal Year							
	1987-88	1988-89	1987-88	1988-89	1987-88	1988-89	1987-88	1988-89	1987-88	1988-89	1987-88	1988-89
1. Sonali	124.50	200.00	137.40	106.19	81.00	111.00	383.00	462.00	59.00	65.00	334.00	400.00
2. Janata	65.00	95.00	36.17	55.29	41.00	58.00	157.00	194.00	32.00	37.00	125.00	157.00
3. Agrani	71.00	95.00	34.42	41.31	32.00	58.00	98.00	108.00	25.00	24.00	73.00	84.00
4. Rupali	25.00	51.00	12.58	17.29	14.00	19.00	56.00	66.00	7.00	6.00	49.00	60.00
Sub-total	295.50	441.00	220.57	220.08	174.00	23.00	704.00	830.00	123.00	132.00	581.00	701.00
5. Krishi Bank	475.00	500.00	327.82	380.46	336.00	441.00	1112.00	1286.00	351.00	335.00	761.00	961.00
6. R K B	125.00	110.00	38.91	44.83	43.00	48.00	368.00	459.00	51.00	45.00	316.00	414.00
Sub-total	800.00	510.00	366.83	425.29	379.00	489.00	148.00	1745.00	402.00	360.00	1077.00	1365.00
7. B R D B	126.50	146.00	**	42.44	86.00	46.00	168.00	180.00	58.00	56.00	118.00	127.00
8. B S B L	35.00	46.00	11.43	14.28	14.00	18.00	110.00	113.00	10.00	11.00	106.00	102.00
Sub-total	161.50	182.00	11.43	54.72	100.00	68.00	278.00	283.00	60.00	87.00	218.00	229.00
9. Pubali	3.00	7.00	3.37	0.00	3.00	4.00	60.00	50.00	11.00	4.00	50.00	46.00
Total	1050.00	1250.00	602.20	702.05	556.00	796.00	2522.00	2913.00	596.00	583.00	1926.00	2341.00

* Included under Sonali Bank.

Table-19: Distribution and Recovery of Agricultural Credit

(Tk. Crores)

Year	Programme	Disburse-ment	Achive-ment	Amount recover able	Recovery	Outstanding	Recorery	Rate of Recovery
1980-81	548.31	373.42	68.10	452.36	221.35	678.51	234.91	48.93
1981-82	653.74	423.84	64.83	648.30	314.34	839.87	324.30	48.49
1982-83	817.20	678.55	83.03	817.27	342.33	1351.51	456.56	41.89
1983-84	1115.00	1005.30	90.16	1240.22	517.57	2077.05	755.67	41.73
1984-85	1150.00	1149.84	99.986	1515.00	583.90	3034.24	1158.89	38.54
1985-86	1275.00	631.72	49.55	2375.19	607.15	3514.25	1778.77	25.56
1986-87	1075.00	667.28	62.07	2683.54	1107.56	3294.41	1575.98	41.27
1987-88	1050.00	656.31	62.51	2528.16	595.78	3863.49	1932.38	25.36
1988-89	1250.00	807.62	64.61	2862.23	571.59	4616.83	2290.61	19.97

Table-20: Fertilizer Sale by Year

(in '000' m. tons)

Year	Fertilizer sale	% increase (+) or decrease (-) from the previous year
1980-81	875.18	-
1981-82	829.20	-5
1982-83	968.86	+17
1983-84	1129.68	+16
1984-85	1261.60	+12
1985-86	1151.78	-9
1986-87	1320.94	+15
1987-88	1513.65	+14
1988-89 (upto May)	1547.33	+2

Source: BADC

Table-21: Sale of Fertilizer by Month

(In '000' m. tons)

Month	Actual Sale		% (+) or (-) over last year
	1987-88	1988-89	
July	74.92	78.35	(+) 4
August	69.74	109.31	(+) 57
September	135.68	128.20	(-) 6
October	126.61	154.10	(+) 22
November	166.04	177.00	(+) 7
December	155.13	105.39	(-) 32
January	172.74	193.21	(+) 12
February	227.01	249.72	(+) 10
March	175.43	219.96	(+) 25
April	51.15	78.55	(+) 54
May	65.52	52.54	(-) 20
Sub-total	1419.97	1547.33	(+) 9
June	93.69	–	–
Grand Total	1513.66		

(Source: BADC & D.G. Food)

Table-22: Farmers Purchase Price (National Average) of Urea From 1987-88 to 1989-90 (Tk./KG)

Month	1987-88	1988-89	1989-90
July	4.89	5.02	5.06
August	4.95	5.02	5.05
September	4.96	5.03	5.07
October	4.95	5.04	5.05
November	4.95	5.04	5.03
December	4.97	5.02	4.95
January 88	4.97	5.02	4.90
February	4.99	5.02	—
March	5.02	5.10	—
April	4.96	5.18	—
May	4.96	5.08	—
June	5.00	5.06	—

Source: Department of Agricultural Marketing.

Table-23: International Comparison of Urea Costs and Price, 1987-88 (US$ Per Ton)

Country	Cost Items					
	Import Price	Ex-factory Price	Marketing Cost	Total Cost	Farmer's Price	Subsidy[1]
Bangladesh		117.09	21.91	139.00	153.60	-14.60
India:						
Public		266.92	29.53	296.45	181.19	115.26
Private		266.92	27.99	294.91	181.19	113.72
Indonesia		85.70	23.75	189.45	97.06	12.39
Malaysia (Public)	118.00		32.95	150.95	Zero	150.95
Nepal	143.00		76.26	219.26	178.18	41.08
Pakistan		95.15	18.53	113.70	144.10	-30.40
Philippines	120.29		41.08	161.77	161.77	0
Republic of Korea		224.52	32.24	256.76	243.17	13.59
Sri Lanka	125.00		48.16	173.16	98.95	74.21
Thailand	110.06		39.32	149.38	149.38	0

Source: Agro-Chemicals News in Snit, September 1989.

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A METHODOLOGY FOR ESTIMATING GROWTH RATES OF MAJOR CEREAL CROPS IN BANGLADESH AND ITS POLICY IMPLICATIONS

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INTRODUCTION

One of the factors significantly affecting the growth of the agricultural sector in Bangladesh is the government policy. Policies based on a methodologically correct and objective assessment of the various parameters determining agricultural production and growth are apt to be successful in guiding the development process in the right direction. At the same time, policies based on erroneous data or incorrect methodology may lead to undesirable consequences and poor performance of the policies themselves.

In recent times there has been a slowdown in the growth rate of the cereal crop sector in Bangladesh. But question may arise about the exact nature of this fall. According to Parthasarathy and Chowdhury (1989) the growth rates of area, production and yield of cereal crops were 0.89%, 2.86% and 1.97% respectively during 1976-87 and 0.19%, 2.22% and 2.03% during 1981-87. These estimates are subject to criticism due to a questionable methodology used to drive the results, and hence any policy prescription based on these estimates are apt to be inappropriate.

In this paper discussion is focused on a specific methodological aspect relating to the estimation of growth rates in the cereal crop sector and consequent policy implication of the same.

The main objective of this paper is to develop a new methodology for consistently estimating/computing relevant parameters. The paper has been organized as follows: The next section discusses the deficiencies of the methodology used in the past studies. In Section III, methodology of the present study is developed. Results and discussion are furnished in

Section IV. finally, conclusion and policy implications are presented in Section V.

DEFICIENCIES OF METHODOLOGY USED IN PAST STUDIES FOR ESTIMATING GROWTH RATES OF AGRICULTURAL CROPS

Several studies have estimated growth rates in area, production and yield of agricultural crops fitting semi-log functional forms by using OLS method [3,5,6,10] 1987. This methodology may be described as follows:

$$Y_t = Ae^{bT}E \quad \ldots\ldots (1)$$

where, Y_t is dependent variable; T is time period, A & b are constants and E is the disturbance term.

This function can be linearized as follows:

$$\text{Ln } Y_t = \text{ln } A + bT + \text{ln}E \quad \ldots\ldots (2)$$

The OLS estimate of b is growth rate of the dependent variable.

The above methodology has been used to estimate growth rates of areas, production and yield of individual crops as well as crop aggregates. Econometrically, it is a correct procedure to estimate growth rates of area and production of individual crops fitting semi-log functional form by the OLS method. But it is not conceptually correct to estimate growth rates of area and production of crop aggregates or yield by the OLS method, particularly when these results are presented together. This is because, there is an identity relationship between area and production of individual crop and area and production of crop aggregates and yield. Consequently, estimated growth rates of area and production of crop aggregated and yield may be incorrect.

METHODOLOGY USED IN THE PRESENT STUDY FOR ESTIMATING GROWTH IN AREA, PRODUCTION AND YIELD OF MAJOR CEREAL CROPS

To estimate growth rates of cereal crops, three types of variables may be considered; (i) area and production of individual cereal crops; (ii) yield of individual cereal crops; and (iii) area, production and yield of cereal aggregates. This section shows the mathematical model for estimating growth rates of the above mentioned variables.

To illustrate the procedure of growth rate estimation, two important cereal crops in Bangladesh viz. Aman and Boro are used as examples. Area, production and yield of Aman and Boro are defined as follows:

Pa = Production of Aman

Pb = Production of Boro

Aa = Acreage of Boro

Ab = Acreage of Boro

T = Time

TP = Pa+Pb = Total production

TA = Aa+Ab = Total area

$Ya = \frac{Pa}{Aa}$ = Yield of Aman

$Yb = \frac{Pb}{Ab}$ = Yield of Boro

$Ya+b = \frac{TB}{TA}$ = Yield of Rice

To estimate growth rates, the following equations may be written:

$$Pa = C_1 e^{d_1 T} E_1 \quad \ldots\ldots (3)$$

$$Pb = C_2 e^{d_2 T} E_2 \quad \ldots\ldots (4)$$

$$Aa = C_3 e^{d_3 T} E_3 \quad \ldots\ldots (5)$$

$$Ab = C_4 e^{d_4 T} E_4 \quad \ldots\ldots (6)$$

$$TP \equiv Pa+Pb \quad \ldots\ldots (7)$$

$$TA \equiv Aa+Ab \quad \ldots\ldots (8)$$

$$Ya \equiv \frac{Pa}{Aa} \quad \ldots\ldots (9)$$

$$Yb \equiv \frac{Pb}{Ab} \quad \ldots\ldots (10)$$

$$Ya+b \equiv \frac{TP}{TA} \quad \ldots\ldots (11)$$

Taking natural logarithm of both sides, we have —

$$\ln Pa = \ln C_1 + d_1 T + \ln E_1 \quad \ldots\ldots (12)$$

$$\ln Pb = \ln C_2 + d_2 T + \ln E_2 \quad \ldots\ldots (13)$$

$$\ln Aa = \ln C_3 + d_3 T + \ln E_3 \quad \ldots\ldots (14)$$

$$\ln Ab = \ln C_4 + d_4 T + \ln E_4 \quad \ldots\ldots (15)$$

$$\ln TP \equiv \ln (Pa+Pb) (\ln Pa + \ln Pb) \quad \ldots\ldots (16)$$

$$\ln TA \equiv \ln (Aa+Ab)(\ln A+\ln Ab) \quad (17)$$

$$\ln Ya \equiv \ln Pa-\ln Aa \quad (18)$$

$$\ln Yb \equiv \ln Pb-\ln Ab \quad (19)$$

$$\ln Ya+b \equiv \ln TP-\ln TA$$

$$\equiv \ln (Pa+Pb)-\ln (Aa+Ab) \quad (20)$$

The time derivatives are growth rates. The differentiation of equations (12) to (20) with respect to time will yield the following:

$$\frac{d \ln Pa}{dT} = d_1; \qquad \frac{d \ln Pb}{dT} = d_2; \qquad \frac{d \ln Aa}{DT} = d_3$$

$$\frac{d \ln Ab}{dT} = d_4;$$

$$\frac{d \ln Ya}{dT} = \frac{d \ln Pa}{dT} - \frac{d \ln Aa}{dT} = d_1 - d_3$$

$$\frac{d \ln Yb}{bT} = \frac{d \ln Pb}{dT} - \frac{d \ln Ab}{dT} = d_2 - d_4$$

$$\frac{d \ln Tp}{dT} = \frac{d}{dT} \ln (Pa+Pb)$$

$$= \frac{1}{Pa+Pb} \frac{d}{dT} (Pa+Pb)$$

$$= \frac{1}{Pa+Pb} \left(\frac{d Pa}{dT} + \frac{d Pb}{dT} \right)$$

But $$\frac{d Pa}{dT} = Pa \frac{d \ln Pa}{dT}$$

and $$\frac{d Pb}{dT} = Pb \frac{d \ln Pb}{dT}$$

$$\frac{d \ln Tb}{dT} = \frac{1}{Pa+Pb} \left(Pa \frac{d \ln Pa}{dT} + Pb \frac{d \ln Pb}{dT} \right)$$

$$= \frac{Pa}{Pa+Pb} d_1 + \frac{Pb}{Pa+Pb} d_2$$

This states that the growth rate of a sum is a weighted average of the rates of growth of components (Chiang 1984)—

$$\frac{d \ln TA}{dT} = \frac{Aa}{TA} d3 + \frac{Ab}{TA} d_4$$

$$\frac{d \ln Ya+b}{dT} = \frac{d \ln (Pa+Pb)}{dT} - \frac{d \ln (Aa+AB)}{dT}$$

$$= \left(\frac{Pa}{TP} d_1 + \frac{Pb}{TP} d_2 \right) - \left(\frac{Aa}{TA} d_3 + \frac{Ab}{TA} d_4 \right)$$

The coefficients d_1, d_2, d_3, and d_4 can be consistently estimated by the OLS method and other growth rates can be computed.

It will be conceptually wrong to estimate growth rates of TP, TA, Ya, Yb and Ya+b. To estimate the growth rates of these variables, the following functional relationship must be assumed:

$$\ln TA = f_1(T) + \ln E_5$$

$$\ln TA = f_2(T) + \ln E_6$$

$$\ln Ya = f_3(T) + \ln E_7$$

$$\ln Yb = f_4(T) + \ln E_8$$

$$\ln Ya + b = f_5(T) + \ln E_9$$

This means that total production and yields are no longer identities. Consequently, estimated TP, TA, Ya, Yb and Ya+ b may not be equal to computed TP, TA, Ya, Yb, and Ya+b. Additionally, estimated growth rates may not be equal to computed growth rates.

To summarize, growth rate of area or production of an individual crop may be estimated directly from data. But growth rate of area and production of crop aggregates must be calculated as an weighted average of growth rates of components. And the growth rate of yield must be calculated as the difference between the growth rates of production and acreage.

RESULTS AND DISCUSSION

In this study, means and growth rates of area, production and yield were estimated/calculated for four major cereal crops in Bangladesh, viz. aus, aman, boro and wheat. Eighteen variables were analysed for area, production and yield of each crop: aus local (AL), aus HYV (AH), aus total (AT), aman local (AML), aman HYV (AMH), aman total (AMT) , boro local (BL), boro HYV (BH), boro total (BT), wheat local (WL), wheat HYV (WH), wheat total (WT), rice local (RL = AL + AML + BL), rice HYV (RH = AH + AMH + BH), rice total (RT = AT + AMT + BT), cereal local (CL = RL + WL), cereal HYV (CH = RH + WH), and cereal total (CT=RT + WT). The time series data used in the study cover the period 1972-73 to 1987-88. Thus, data since independence to the most recent years were analysed.

In order to compare changes in area, production and yield over time,

analyses were done for three time periods i.e. 1972-73 to 1987-88; (ii) the 70's i.e. 1972-73 to 1979-80; (iii) the 80's i.e. 1980-81 to 1987-88.

The major objective of the discussion is to examine the nature of changes in different variables between the 70's and the 80's. The results are discussed below. Detailed estimates are given in the appendix.

Means and Growth Rates of Area

The mean of total cereal area increased by about ten million acres from the 70's to the 80's (Table-1). In the 70's the mean area was 251·3 million acres while it increased to 261·6 million acres in the 80's. The increase in mean total cereal area was mainly due to increased wheat area because the mean total rice area hardly changed between the 70's and the 80's. It should be noted that area under aus and aman decreased while area under boro increased. Area under local variety of all cereal crops decreased while the same increased under the HYV in the 80's.

Table-1: Mean Acreage of Major Cereal Crops in Bangladesh

(Million Acres)

Crops	Time period		
	1972-73 to 1987-88	1972-73 to 1979-80	1980-81 to 1987-88
AAL	66.4	70.7	62.1
AAH	9.8	7.4	12.1
AAT	76.2	78.1	74.2
AAML	120.1	128.7	111.3
AAMH	19.1	13.4	24.8
AAMT	139.2	142.1	136.2
ABL	10.1	11.6	8.6
ABH	21.5	14.6	28.5
ABT	31.6	26.3	37.1
AWL	1.0	1.5	0.5
AWH	8.5	3.4	13.6
AWT	9.5	4.8	14.1
ARL	196.5	211.0	182.1
ARH	50.4	35.4	65.4
ART	247.0	246.5	247.5
ACL	197.5	212.5	182.5
ACH	58.9	38.8	79.1
ACT	256.5	251.3	261.6

Growth rate of total cereal area declined in the 80's (Table-2). The growth rate of total cereal area in the 80's was 0.32% while it was about 2% during the 70's. The growth rate over the entire time period was 1.05%. The

decreased growth rate of cereal area in the 80's was due to decreased growth rates of area under both rice and wheat. The growth rates of area under local varieties of all crops except wheat was negative. On the other hand, the growth rates of area under the HYV of all crops were positive. But except HYV and total boro and local wheat, all growth rates in the 80's were lower than those of the 70's.

Table-2: Growth Rates in Area of Major Cereal Crops in Bangladesh

(in Percentage)

Crops	Time period		
	1972-73 to 1987-88	1972-73 to 1979-80	1980-81 to 1987-88
AAL	-1.78	-1.16	-2.97
AAH	3.14	14.91	0.49
AAT	-1.14	0.36	-2.40
AAML	0.76	1.78	-0.92
AAMH	6.80	7.52	4.31
AANT	0.27	2.32	0.03
ABL	-4.20	1.68	-4.78
ABH	8.31	1.23	9.52
ABT	4.31	1.42	6.20
AWL	-12.00	-24.00	0.48
AWH	23.00	41.93	2.19
AWT	19.30	22.20	2.12
ARL	-1.28	0.78	-1.80
ARH	6.73	6.47	5.87
ART	0.35	1.60	0.22
ACL	-1.33	0.60	-1.79
ACH	9.07	9.57	5.23
ACT	1.05	1.99	0.32

Means and Growth Rates of Production

Table-3 shows that the mean total cereal production increased by 33.5 million tons in the 80's. The average cereal production was 121.5 million in the 70's which increased to 155.0 million tons in the 80's. This increased cereal production was due to both increased rice and wheat production. Rice production increased by 25.4 million ton while wheat production

increased by 8.0 million ton. Production of local varieties of all cereal crops declined but production of all HYV cereal crops increased.

Table-3: Mean Production of Major Cereal Crops in Bangladesh

(Million tons

Crops	Time period		
	1972-73 to 1987-88	1972-73 to 1979-80	1980-81 to 1987-88
PAL	21.5	22.2	20.8
PAH	8.2	7.0	9.5
PAT	29.7	29.2	30.3
PAML	56.4	56.5	56.3
PAMH	16.5	11.5	21.5
PAMT	72.9	68.0	77.8
PBL	5.7	6.1	5.2
PBH	22.9	15.2	30.6
PBT	28.6	21.3	35.8
PWL	0.3	0.4	0.2
PWH	6.8	2.6	11.0
PWT	7.1	3.0	11.2
PRL	83.6	84.8	82.3
PRH	47.6	33.7	61.6
PRT	131.2	118.5	143.9
PCL	83.9	85.2	82.5
PCH	54.4	36.3	72.6
PCT	138.3	121.5	155.1

Table-4 shows that the growth rate of total cereal production declined in the 80's. In the 70's the growth rate was 4.82% which decreased to 1.64% in the 80's. The growth rate for the entire period was 2.27%. Diverse pattern of growth rates of production of different crops for different varieties are observed. First growth rates of both local and HYV aus and wheat were negative in the 80's. Yet, compared to the 70's the growth rates of local varieties increased while that of HYV decreased in the 80's while that of

HYV aman and boro increased. Third, the growtth rates of production of rice local, rice HYV and rice total were respectively – 0.44%, 5.39% and 1.81% in the 80's but they were 3,83%, 4.21% and 3.93% in the 70's.

Table-4: Growth Rates in Production of Major Cereal Crops in Bangladesh.

(In Percentage)

Crops	Time period		
	1972-73 to 1987-88	1972-73 to 1979-80	1980-81 to 1987-88
PAL	– 0.71	– 2.67	– 0.49
PAH	1.20	19.00	– 2.16
PAT	– 0.18	2.52	– 1.01
PAML	– 0.50	7.17	.07
PAMH	6.55	– 3.12	3.51
PAMT	1.09	5.42	– 1.02
PBL	– 3.11	– 3.42	– 5.75
PBH	6.96	2.95	9.06
PBT	4.95	1.12	6.91
PWL	– 9.9	– 21.27	– 0.65
PWH	15.02	49.79	– 0.56
PWT	13.97	40.31	– 0.57
PRL	– 0.73	3.83	– 0.44
PRH	5.82	4.21	5.39
PRT	1.64	3.93	1.81
PCL	– 0.76	3.71	– 0.44
PCH	6.96	7.47	4.49
PCT	2.27	4.82	1.64

Means and Growth Rates of Yield

The average cereal yield increased in the 80's (Table-5). The mean cereal yield was 0.48 ton/acre in the 70's which increased to 0.60 ton/acre in the 80's. The increased cereal yield was due to a significant increase in the yield of local varieties. Both mean rice HYV and cereal HYV yields

declined in the 80's because of a significant fall in the yield of aus HYV.

The growth rate of yield of cereal production decreased in the 80's. The growth rate was 2.8% in the 70's which decreased to 1.32% in the 80's. This is because of a significant fall in the growth rates of local varieties of rice and wheat. The growth rates of yield of HYV rice and cereal were negative in both the 70's and the 80's; but they were less negative in the 80's.

Weighted average growth rates of yields of all HYV crops were negative in the 80's; yet the growth rate of HYV aman increased. Growth rates of yield of local aus and aman were positive while those of boro and wheat were negative. Among the local varieties only the growth rate of local aus showed a significant increase in the 80's.

Table-5: Mean Yield of Major Cereal Crops in Bangladesh

(Ton/Acre)

Crops	Time period		
	1972-73 to 1987-88	1972-73 to 1979-80	1980-81 to 1987-88
YAL	0.33	0.31	1.34
YAH	0.88	0.97	0.78
YAT	0.39	0.37	0.41
YAML	0.50	0.44	0.56
YAMH	0.91	0.88	0.95
YAMT	0.56	0.48	0.63
YBL	0.56	0.53	0.60
YBH	1.06	1.04	1.08
YBT	0.89	0.81	0.96
YWL	0.33	0.29	0.36
YWH	0.75	0.70	0.80
YWT	0.68	0.56	0.79
YRL	0.43	0.40	0.47
YRH	0.94	0.95	0.94
YRT	0.54	0.48	0.59
YCL	0.43	0.40	0.47
YCH	0.93	0.94	0.92
YCT	0.54	0.48	0.60

Table-6: Growth Rates in Yield of Major Cereal Crops in Bangladesh

Crops	Time period		
	1972-73 to 1987-88	1972-73 to 1979-80	1980-81 to 1987-88
YAL	1.07	– 1.51	2.48
YAH	– 1.94	4.09	– 2.65
YAT	1.32	2.16	1.38
YAML	0.26	5.39	0.99
YAMH	– 0.25	– 10.64	– 0.80
YAMT	0.83	3.11	0.99
YBL	1.09	– 5.1	– 0.97
YBH	– 1.35	1.72	– 0.46
YBT	0.64	– 0.29	0.71
YWL	2.10	2.73	– 1.13
YWH	– 7.98	7.86	– 2.75
YWT	– 5.34	18.11	– 2.68
YRL	0.55	3.05	1.36
YRH	– 0.91	– 2.26	– 0.48
YRT	1.29	2.30	1.59
YCL	.57	3.11	1.35
YCH	– 2.11	– 2.10	– 0.74
YCT	1.22	2.80	1.32

CONCLUSION AND POLICY IMPLICATIONS

Several conclusions can be drawn from the mean analysis. First, mean cereal area increased by about ten million acres in the 80's due to mainly increased wheat acreage. Rice acreage increased by only one million acres. Area under local varieties of all cereal crops decline while that of HYV increased. Second, mean cereal production increased by about 33.5 million tons in the 80's due to both increased rice and wheat production. Production of the HYV increased. Finally, mean cereal yield increased by 0.6 ton/acre in the 80's due to significant increase in the yield of local varieties. Mean yield of all HYV crops increase except aus. There was a big fall in the mean yield of HYV aus rice.

The growth analysis suggests that there has been a slow-down in the growth of the cereal sector in the 80's. First, the growth rate of cereal acreage declined to 0.32% in the 80's which was about 2% in the 70's due

to decreased growth rates of rice and wheat area. Growth rates of area under all local varieties were negative in the 80's. All the growth rates of area under the HYV were positive, they were lower than those of the 70's. Second, growth rates of cereal production decreased to 1.64% in the 80's from 4.82% in the 70's due to both decreased growth rates of production of cereal local and cereal HYV. Compared to the 70's growth rates of production increased for aus local, aman and boro HYV. Growth rates declined in case of other crops.

Finanlly weighted average growth rates of cereal yield decreased to 1.32% in the 80's from 2.8% in the 70's due to significant fall in the weighed average growth rates of local varieties of all cereals. Growth rate increased for aus local, aman HYV and boro local.

The results reported in this study are substantially different than those obtained by Parthasarathy and Chowdhury (Table-7). Although it may be noted that the data period of these two studies are not exactly the same, it is possible that the different results may be, do to different methodologies used. The rates of growth of area of rice all cereals and all HYVs are higher in EHR than those of PC. But rate of growth of production and yield are much lower in EHR than those of the the rates of growth of rice and all cereals were 1.81% and 1.64% respectively in a EHR while they were 2.23% and 2.22% in PC. The rates of growth of yield of rice and all cereals were 1.59% and 1.32% in EHR while they were 2.09% and 2.03% in PC. Thus, EHR shows much grerter slow-down of the cereal sector in the 80's than PC does.

Table-7: Comparison Rates of Growths in the 80's in Parthasarathy and Chowdhury (PC) and The Present Study (EHR).

	Area		Production		Yield	
		PC	EHR	PC EHR	PC	EHR
All Rice	0.14	0.22	2.23	1.81	2.09	1.59
All Cereal	0.19	0.32	2.22	1.64	2.03	1.32
All Locals	-1.69	-1.79	-0.14	-0.44	1.55	1.35
All HYVs	4.93	5.23	5.28	4.49	0.35	-0.74

Is this slow-down of the cereal sector due to government policies? An appropriate answer will require a more rigorous analysis of the problem which is beyond the scope of the paper.

Moreover, complications in policy analysis arises from the fact that policies are determined in a partial equilibrium framework while outcomes of the policies are determined a general equilibrum framework. However, intutively the government policies can be linked to the slow-down of the cereal sector.

Among the government policies which have affected the cereal sector, policies related to the withdrawal subsidies on key agricultural inputs are thought to have a direct bearing [196]. The withdrawal of subsidies on irrigation equipment and fertilizers has reduced the output price ratio which means low profitability of cereal cultivation, particularly the modern varieties that use these inputs more intensively. Thus reduced profitability have played a significant role in slowing down the rate of growth of the cereal sector.

Other government policies which may have contributed to the slow down of the cereal sector including reduction of the supply of agricultural credit since 1984-85, reduction of real government expenditure on agricultural activities etc. [1].

REFERENCES

1. UNDP: "Bangladesh Agriculture Sector Review" in Bangladesh Agriculture Performance and Policies, Dhaka, 1989.
2. Bangladesh Bureau of Statistics : Statistical Yearbook of Bangladesh, Government of Bangladesh, Dhaka, Various Issues.
3. Boyce, James K: Agrarian Impasse in Bengal: Institutional Constraints to Technological Change, Oxford University Press, London, 1987.
4. Chiang, Alpha C.: Fundamental Methods of Mathematical Economics, Third Editions, McGraw-Hill Book Company, New York, 1984.
5. Hossain, Mahbub: "Agricultural Development in Bangladesh: A Historical Perspective", The Bangladesh Development Studies, Vol. XII No. 4, 1984.
6. Hossain, Mahbub: Green Revolution in Bangladesh: Impact on Growth and Distribution on Income, University Press Limited, Dhaka,1989.
7. Hossain, Md. Iqbal: Regional Agricultural Productivity Differences in Bangladesh, Unpublished Ph. D. Thesis submited to the Dhaka University, 1987.
8. Maddala, G.S.: Econometrics, McGraw-Hill Book Company, London, 1977.
9. UNDP: "Cereal Production since the Middle of 1970's and Regional Variations" in Bangladesh Agriculture Performance and Policies, Compendium Volume 1, Dhaka, 1989.
10. Yesmin, F. and W.M.H. Jaim: "Accelerated Programme for Rice Production in Bangladesh and its Impact on Other Crops", Bangladesh Journal of Agricultural Economics, Vol. XII. No. 1, 1989.

Table-AI: Estimation of Growth Rates of Acreage with Dummies for 1972-73 to 1987-88

Variable	Trend	Dummies					$R^2/\bar{R}^2$	D-W
		D1	D2	D3	D4	D5		
AAL	-0.0178	-0.064	0.059	0.491			.93	2.03
	(-11.94)*	(-2.32)*	(2.28)*	(1.99)**				
AAH	0.0314	-1.52	-0.87	-0.14			.98	1.67
	(7.33)*	(-16.45)*	(-9.6)8*	(-1.56)				
AAML	-0.0079	-0.99	-0.08				.98	1.17
	(-2.95)*	(-21.66)*	(-1.89)**					
AAMH	0.068	-1.13	-1.06	-0.75	0.43	-0.45	.97	.97
	(11.39)*	(-12.03)*	(-10.52)*	(-8.10)*	(4.22)*	(-4.70)*		
ABL	-0.042	-0.15	-0.27	0.10	0.08	-0.11	.97	1.69
	(-17.50)*	(-3.72)*	(-6.99)*	(2.75)*	(2.11)**	(-2.76)*		
ABH	0.0831	0.23	-0.20	-0.17	0.26		.95	1.80
	(14.78)*	(2.29)**	(-2.18)**	(-1.89)**	(2.66)*			
AWL	-0.12						.78	.30
	(-7.09)*							
AWH	0.23	0.86	0.96				.86	.68
	(9.26)*	(1.83)**	(2.05)**					

Table-AII: Estimation of Growth Rates of Production with Dummies for 1972-73 to 1987-88

Variable	Trend	Dummies					$R^2/\bar{R}^2$	D-W
		D1	D2	D3	D4	D5		
PAL	-0.0071	-0.10	-0.11	-0.13	-0.13		.75	3.17
	(-3.04)*	(-2.50)*	(-3.09)*	(-3.22)*	(-3.19)			
PAH	0.012	-1.58	-0.77				.96	1.64
	(1.89)**	(-14.69)*	(-7.02)*					
PAML	-0.005	-0.26	-0.22	-0.17	0.13	-0.18	.86	1.76
	(-1.49)	(-4.86)*	(-4.37)*	(3.74)*	(3.00)*	(-3.64)*		
PAMH	0.0655	-0.36	0.62	-0.89	-0.55	0.20	.98	2.28
	(18.53)*	(-5.76)*	(9.46)*	(-14.63)*	(-9.10)*	(3.30)*		
PBL	-0.0311	-0.28	0.25	0.20	0.17	0.16	.93	2.10
	(-11.05)*	(-5.37)*	(4.95)*	(3.85)*	(3.34)*	(3.09)*		
PBH	0.0696	-0.40	-0.25	-0.39			.94	1.40
	(12.79)*	(-3.86)*	(-2.42)*	(-3.88)*				
PWL	-0.099	0.46	0.54	-0.49	-0.43	-0.39	.84	1.04
	(-5.61)*	(1.80)	(2.15)**	(-2.07)**	(-1.84)**	(-1.67)		
PWH	O.252	-1.79	-1.47	-0.68	0.59	-1.43	.94	1.19
	(6.42)*	(-4.34)*	(-3.83)*	(-1.73)	(1.73)	(-3.60)*		

Table-AIII: Estimation of Growth Rates of Acreage with Dummies for 1972-73 to 1979-80.

Variable	Trend	Dummies			R^2/R^2	D – W
		D1	D2	D3		
AAL	0.0116	-0.04	0.06	-0.04	.92	3.04
	(-3.76)*	(-2.33)	(4.39)*	(2.52)**		
AAH	0.1491	-0.96			.85	1.76
	(3.01)*	(-2.81)*				
AAMH	-0.0752	0.41	-0.57	0.91	.94	2.89
	(-3.13)**	(3.21)*	(-4.50)*	(6.00)		
ABL	-0.0168	-0.27			.65	.1.89
	(-1.46)	(-3.43)*				
ABH	0.0123	-0.31	-0.25		.72	1.77
	(0.77)	(-2.78)*	(-2.73)**			
AWL	-0.2400	-0.21	0.22	-0.14	.99	2.96
	(-25.64)*	(-3.27)*	(4.14)	(-2.86)**		
AWH	0.4193	-.35	0.21		99	2.36
	(34.68)*	(-4.17)*	(2.52)**			

Table AIV: Estimation of Growth Rates of Production with Dummies for 1972-73 to 1979-80

Variable	Trend	Dummies				R^2/R^2	D-W
		D1	D2	D3	D4		
PAL	-0.0267	-0.15	0.12			.48	3.0
	(-2.66)**	(-2.34)**	(2.05)				
PAH	0.1900	-0.70	0.35	0.37	-0.42	.95	1.90
	(5.37)*	(-3.40)**	(2.13)	(2.43)	(-2.32)		
PAML	0.0717	-0.29				.89	2.7
	(7.71)*	(-4.44)*					
PAMH	-0.0312	0.62	-0.51	0.67		.87	1.9
	(-0.98)	(3.65)*	(-3.00)	(3.30)*			
PBL	-0.0342	-0.27	0.26			.86	2.33
	(-3.43)*	(-4.01)*	(3.80)*				
PBH	0.0295	-0.32	-0.23			.58	1.70
	(1.87)	(-3.12)*	(-2.08)				
PWL	-0.2127	0.34					
	(-11.33)*	(2.58)*				.96	2.11
PWH	0.4979	-0.35	0.44	0.23		.99	2.60
	(56.97)*	(-5.66)*	(7.31)*	(3.78)*			

Table-AV: Estimation of Growth Rates of Acreage With Dummies for 1980-81 to 1987-88

Variable	Trend	Dummies			$R^2/\bar{R}^2$	D – W
		D1	D2	D3		
AAL	-0.0297	-0.07			.90	2.00
	(-7.90)*	(-2.56)**				
AAH	0.0049	-0.05	0.10		.79	2.31
	(1.27)	(-1.89)	(3.66)*			
AAML	-0.0092	-0.05	-0.98		.99	3.01
	(-7.04)*	(-7.23)*	(-108.14)*			
AAMH	0.0431	-0.97			.99	2.72
	(7.15)*	(-23.26)*				
ABL	-0.0478	-0.07	-0.08		.97	1.90
	(-15.85)*	(-3.39)*	(-3.68)*			
ABH	0.0952				.93	1.86
	(8.93)					
AWL	0.0048	-0.12	0.07	-0.11	.86	1.72
	(1.04)	(-3.79)*	(2.40)**	(-4.04)*		
AWH	0.0219	0.16	0.21		87	2.21
	(3.47)*	(3.69)*	(5.92)*.			

Table-AVI: Estimation of Growth Rates of Production with Dummies for 1980-81 to 1987-88

Variable	Trend	Dummies		$R^2/\bar{R}^2$	D – W	
		D1	D2			
PAL	-0.0049	-0.12	-0.13	.91	3.35	
	(-1.57)	(-5.83)*	(-5.81)*			
PAH	-0.0216	-0.08	-0.12	.86	3.05	
	(-4.94)*	(-2.66)**	(-4.14)*			
PAML	0.007	0.06	-0.07	.48	2.19	
	(0.11)	(1.69)	(-1.69)			
PAMH	0.0351	-0.20		.89	1.23	
	(4.50)*	(-3.73)*				
PBL	-.0575			.82	2.62	
	(-5.16)*					
PBH	0.0906			.88	1.95	
	(6.72)*					
PWL	-0.0065	-0.25		.36	1.20	
	(-0.42)	(-2.36)*				
PWH	-0.0056	-0.14	0.29	.80	2.39	
	(-0.60)	(-2.18)**	(4.77)*			

Table-AVII: Estimation of Growth Rates of Area without Dummies for 1972-73 to 1987-88

Variable	Reg. Co-efficient	T-Values	R^2	D-W
AAL	-0.017	-9.30*	.86	1.35
AAH	0.089	4.35*	.57	.47
AAML	-0.027	-2.15*	.25	1.21
AAMH	0.052	2.18*	.25	1.02
ABL	-0.036	-7.26*	.79	2.43
ABH	0.077	10.73*	.89	1.07
AWL	-0.120	-7.09*	.78	.30
AWH	0.230	7.94*	.82	.31

Table-AVIII: Estimation of Growth Rates of Production without Dummies for 1972-72 to 1987-88

Variable	Reg. Co-efficient	T-Values	R^2	D-W
PAL	-0.008	-2.50*	.31	2.44
PAH	0.061	2.94*	.39	.53
PAML	0.006	1.06	.07	.64
PAMH	0.067	3.67*	.48	1.18
PBL	-0.027	-3.83*	.51	2.64
PBH	0.077	8.57*	.84	.95
PWL	-0.099	-5.76*	.70	.35
PWH	0.252	7.26*	.79	.33

Table-AIX: Estimation of Growth Rates of Production without Dummies for 1972-73 to 1979-80

Variable	Reg. Co-efficient	T-Values	R^2	D-W
AAL	0.0125	-2.24**	.46	1.95
AAH	0.2293	3.87*	.71	0.74
AAML	0.01	1.59	.30	1.31
AAMH	0.0439	-0.62	.06	1.53
ABL	-0.0201	-1.05	.16	2.87
ABH	0.0553	1.57	.29	1.65
AWL	-0.2358	-11.10*	.95	1.39
AWH	0.4294	15.97*	.98	2.53

Table-A-X: Estimation of Growth Rates of Production without Dummies for 1972-73 to 1979-80

Variable	Reg. Co-efficient	T-Values	R^2	D-W
PAL	-0.0073	-0.67	.07	2.66
PAH	0.1959	3.21*	.63	.80
PAML	0.0479	3.11*	.62	1.25
PAMH	-0.0304	-0.47	.04	1.75
PBL	-0.028	-1.12	.17	3.21
PBH	0.0121	0.52	.04	2.02
PWL	-0.2247	-8.87*	.93	1.28
PWH	0.5078	13.48*	.97	2.34

Table-A-XI: Estimation of Growth Rates of Area without Dummies for 1980-81 to 1987-88

Variable	Reg. Co-efficient	T-Values	R^2	D-W
AAL	-0.0241	-5.67*	.84	1.16
AAH	0.0101	1.46	.26	2.58
AAML	-0.0918	-1.97**	.39	1.57
AAMH	-0.0378	-0.81	.10	1.59
ABL	-0.0444	-7.43*	.90	1.78
ABH	0.0952	8.93*	.93	1.86
AWL	0.0052	0.48	.04	3.15
AWH	0.0109	0.75	.09	2.56

Table-A-XII: Estimation of Growth Rates of Production without Dummies for 1980-81 to 1987-88

Variable	Reg. Co-efficient	T-Values	R^2	D-W
PAL	-0.0109	-1.13	.17	1.75
PAH	-0.0201	-2.30**	.47	2.39
PAML	-0.0033	-0.46	.03	1.66
PAMH	0.0470	3.74*	.70	2.69
PBL	-0.0575	-5.16*	.82	2.62
PBH	0.0906	6.72*	.88	1.95
PWL	0.0084	0.46	.03	1.95
PWH	0.0064	0.31	.02	1.87

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REMOVING CONSTRAINTS FROM THE AGRICULTURAL EXTENSION SYSTEMS OF BANGLADESH – A POLICY BRIEF

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1.0. INTRODUCTION

The agricultural extension system of Bangladesh is composed of a dozen government and non-government organizations of which the Department of Agricultural Extension (DAE) is the largest and most important. While efforts have been made to reorganize the DAE and improve its effectiveness, never have there been efforts to consider the improvement of the entire agricultural extension system of the country. As a result problems relating to the development of the overall agricultural extension have mostly remained unattended. Unless the system as a whole is improved, the improvement of no one organization alone can fulfil public expectations.

The Bangladesh Agricultural Extension Society has been organizing monthly seminars on issues relating to agricultural extension in Bangladesh. During discussions, participants have commented on the constraints affecting the entire extension system, although those have often been outside the domain of a particular issue under discussion. Extension professionals therefore eager to identify the general problems of the extension system and to suggest steps for improving it.

One session was therefore devoted to discussing and identifying the general constraints on the existing extension system and approaches to their removal. A list of these constraints has been prepared from these discussions (Appendix–A). From the list, major problem areas have been identified. Appropriate policies are recommended with their programme implications.

In the second Section of the paper, problems and their probable solutions are discussed. Appropriate courses of action are also recommended. A summary of all recomended policy options are presented in the Third Section.

2.0. PROBLEM AREAS AND POLICY OPTIONS

Constraints relating to eight areas of the extension system were identified. Alternative courses of actions were discussed in solving identified problems and one course recommended. In pursuance of the policy recommendations probable programme implications are also identified.

2.1. Socio-economic Conditions

Four socio-economic conditions were identified as constraining extension work in Bangladesh, namely:

a. the tenancy system;
b. the level of education of farmers;
c. the prices of agricultural products; and
d. the client participation.

The tenancy system of share cropping or leasing is perceived as the first constraint for effective extension. It has developed with the polarization of land ownership and absentee land lordism. Share cropping, or cropping on a temporary leasing arrangement, acts as a disincentive for using high cost production technologies, and for using long term land improvement practices. This problem is, in fact, deep rooted in the country's social security system, and in the tradition of socio-political patronage to the priviledged.

Policy Recommendation

If appropriate tenancy arrangements are not made to ensure the share of benefits to share crop and temporary lease holders, technological change will be slow in agriculture. Extension may either ignore the problem and endeavour to marginally improve its clients or it may play a bold and definite role in mobilizing public opinion to help farmers solve this problem. Extension cannot ignore this problem as it affects agriculture development negatively. It is therefore recommended that extension organizations adopt a policy of playing a significant role in helping people solve this problem.

Programme Implication

If the policy is adopted, extension organizations need to identify appropriate tenancy arrangements and to constantly draw public attention to their inequities. These organisations will then have to organize people to adopt the appropriate tenancy arrangements by sensitizing them to the need for such arrangements for their social security, for rural investment opportunities, for resource sharing, and for greater people's participation in rural development.

The second constraint is poor formal education among farmers. Higher levels of formal education among clients increase the effectiveness of extension work, because educated farmers more quickly comprehend the problems of agricultural development and their solutions. Communication increases had becomes more effective with higher levels of education.

Policy Recommendation

What role should extension play in promoting formal education among the farmers? Extension is in reality a complementary system of providing functional education for working people and has no scope on opportunity to impart formal education to its clients. Although the extension system cannot provide formal education, it should adopt a definite policy for motivating and showing people how they can use the available educational facilities to increase their literacy and improve their level of formal education.

Programme Implication

Adoption of this policy implies that the extension system needs to organize periodic educational campaigns to make farmers aware of the available educational facilities and to motivate them to invest part of their income for educating their children. They themselves may also utilize adult educational programmes to address their illiteracy. This would help improve credibility of extension workers in that they could be looking after the total welfare of their clients.

The third socio-economic constraint is the lack of assured fair prices for agricultural products. Extension services help people increase production. However, increased production tends to decrease prices and likewise the income of farmers. Unless fair product prices are assured, farmers will not adopt improved technology.

Policy Recommendation

Extension organizations may either ignore the problem (as is generally done) or develop definite programmes for helping farmers develop markets and marketing systems. Instead of remaining passive witnesses, agricultural extension systems need to adopt a policy of playing a direct role in educating farmers about the principles and practices of marketing and organising them to exercise greater control over market forces—through marketing cooperatives, associations, unions, etc.

Programme Implications

Extension organizations will have to organize programmes to help farmer understand the rules and procedures for organizing groups like marketing,

cooperatives, associations and unions and help them improve their management so that farmers can establish corporate control oever marketing process. Marketing management education should become an integral part of the overall extension programmes of DAE's Block Supervisors and Upazila Agricultural Officers. Marketing specialists could also be employed in the extension system to help field extension personnel strengthen the marketing part of their extension programme.

The fourth constraint is the lack of participation of small farmers. As small farmers from the majority of rural people, rural development depends on improving their economic and social conditions. Small farmers, by nature and habit, are eager to participate and to change their unfavourable socio-economic conditions. Ensuring their participation in development programme is therefore a major challenge. Analysis shows that their lack of participation is the result of:

a. the selective client orientation of extension and rural development services, i.e., targeting only the Contact Farmers or the Model Farmers, and

b. collusion between extension agency staff and local elites in exploiting the socially disadvantaged.

The former problem is structural and the latter behavioural. Both prevail in Bangladesh. Contact Farmers constitute only about 10.0% of the total clientele. A recent study shows that about 31.0% of DAE's clients have developed client-patron relations with extension personnel.

India draws one-third of its Contact Farmers from small and marginal farmers. Although not as a policy, efforts have been made in Bangladesh to select Contact Farmers from small and marginal farmers. To become effective, extension needs universal participation in educational processes and representative participation in decision making processes. Selective client approaches and lack of institutional provision for client participation in decision making restrict both forms of participation and promote the growth of client-patron relationships.

Policy Recommendation

The extension should take steps to change its orientation. Two policies are recommended:

a. changing the orientation of extension from merely technology transfer to problem solving,

b. giving prioty to those clients who need the service most.

These policy options are likely to increase small farmer's participation in educational processes. Informal advice or efforts to associate Contact Farmers in planning processes may not serve the need to ensure participation of small farmers in decision making unless some form of institution is built at all administrative levels with provision of representative participation from small and marginal farmers.

Programme Implication

The adoption of a problem solving approach may imply changes to operational systems and procedures including the need for revising organizational structures and staffing patterns. This would also call for a change of orientation of extension personnel through changes in inservice training programmes as well as the introduction of new concepts and methods. The second policy implies that extension personnel should give importance and priority in inviting small and marginal farmers for participation in all educational activities like meetings, demonstrations, etc.

2.2. The Nature of Extension

Extension, is an out-of-school educational service. Within extension process the intangibility of outputs from extension and the invisibility of extension agents themselves are most frequently mentioned constraints upon the extension services.

Analysis shows that some extension outputs such as changes in attitude, knowledege and skills are intangible and even invisible, but changes resulting from effective extension work such as changes in technology use, productivity, income, and standard of living are both tangible and visible. Visits by extension workers, meetings and demonstrations, field days, etc. are tangible events. If an extension agent uses all the available hours (2,100 hrs/yr.) to organize those educational activities, as required, and if they continue this through the years, the presence of extension agents will not only be felt by people, but they will also win a claim locally and nationally. The intangibility and invisibility of the extension function is a reflection of the poor performance of the extension system rather than an inherent character of it. The basic reason for the invisibility of extension agents is due to the absence of offices and residences inside their working units.

Policy Recommendation

Extension organisations could remain content with the present situation trying to vaguely coordinate the activities of different agencies. They could

also prepare a formal and tangible ground for coordination and visibility of extension services. To overcome the problems mentioned above the extension systems should pursue two policies:

a. adopting universal working units and establishing a 'single extesion centre' in each working unit, housing offices of all extension agents in the same centre;

b. intensifying educational activities and promoting the attainment of the economic goals of extension work.

Programme Implications

The first policy option implies that both government and non-government organizations should agree to a fairly workable operational unit and financially contribute to building a common 'extension centre' for housing all extension agents in the same vicinity. The second policy implies that each extension agent develop an annual extension programme specifying the educational activities such as meetings, demonstrations, field days, visits, etc. so that acitivities of all extension workers are known well in advance to the farmers.

2.3. Public Image and Perception

In western countries, extension services were established through public demand. Their demand and perception have been continuously shaped through the work of professionals and political leaders. Public services are decentralized and jointly controlled by public representatives and professionals. In South Asia, extension is part of the state bureaucracy, with no system to encourage public participation. Thus professionals and political leaders have been playing a very small role in shaping public perception and demand for extension services. While client participation is often advocated, it has never been implemented. Experts generally believe that such participation may allow vested interest to control the extension services. However, such anxiety has no logical basis. Rather it serves to avoid participation of clients in decision making. It is through client participation that extension builds its image at the same time as helping to build rational leadership within the client system. The morale of extension personnel is also thereby safeguarded.

Policy Recommendation

Since client participation is likely to uphold the image of extension services as well as attune extension organization to the needs of its clients,

the government should adopt policies:

a. to encourage client participation, irrespective of a client's social or political affiliations, in the management of extension services.

b. to support professional societies and also citations to uphold the image of extension services.

Programme Implications

If the extension system adopts a policy of ensuring public participation, adequate structural arrangements will have to be made to facilitate the participation of clients. This in turn creates improved perceptions and increased demands for the service. Government also needs to take an active interest in supporting the professional activities of the extension societies and associations.

2.4. Adequacy of Support Services

The local availability of all agricultural inputs in convenient packages and their availablity at reasonable prices with credit facilities are the preconditions for practical the application of extension advice. The inputs and services needed for such a large scattered farmimg community as found in Bangladesh, are large and varied. The production and distribution of such inputs and services through an independent centralized system or even through extension services itself can never be effective. Traditionally extension alone tried to meet these needs in addition to meeting the educational needs, but this never succeeded.

Policy Recommendation

The present government policy of privatization provides a great opportunity for stimulating entrepreneurs to produce and organize the sales of such inputs and services locally. This provides an opportunity for income earning by small and landless labour. Government should also adopt a policy of ensuring quality of inputs by checking for adulteration through strict application of rules and regulations.

Programme Implication

The Extension system, with the help of its specialists, could organize massive educational programmes to train selected small and landless farmers in such specialized skills as raising seeds and seedlings, pruning, budding, layering of fruit trees, spraying chemicals, vaccinating livestock and poultry and raising fish fingerlings. This would help them to earn a living or to supplement their income. The extension system might also organize programmes to educate farmers as to how to manage scarce resources and

to pursue public leaders to adopt favourable policies and programmes for the production and distribution of industrial products like fertilizers and chemicals.

2.5. Capability of Extension Agents

Capable extension agents are a precondition for effective extension work. Their capability depends on:

a. the level and quality of their education,

b. the logistic support; and

c. the quality of management of the organization itself.

An important question is, who are the extension agents – the Block Supervisors or the Upazila Agriculture Officers and their equivalent positions.

In the USA, the Country Extension Agents are the extension workers and the sub-professionals like the Block Supervisors or their equivalents, are treated as "Aides". These Aides assist the Country Agents in organizing educational activities and maintaining contact with client families.

In Bangladesh, the Upazila Agricultural Officer and his colleagues are adequately qualified and to some extent equipped as extension agents, but their task structure has been organized in such a way that they are unable to be directly engaged in educating their clients. Rather they can only act as Supervisors of the Block Supervisors. The Block Supervisors (or their equivalents) are not adequately qualified or equipped to play the role of primary extension agents.

Policy Recommendation

There are three policy Options:

a. maintain the status quo and try to improve the capability of Block Supervisors as extension agents;

b. employ professionally qualified persons as Block Supervisors and their equivalent positions; or

c. consider Upazila Agricultural Officers and their equivalent positions as extension agents and utilize the sub-professionals like Block Supervisor as Aides.

Experts are often take the view that at the present stage of agricultural development more qualified extension agents are not required. Rather, they argue that the capability of the existing technician type extension

agents be increased through a massive inservice training programme. Unfortunately, these people fail to recognize that the farming community of Bangladesh gained knowledge and adopted seed-fertilizer-irrigation technologies and have been passing through a transitional period of stifting toward high technologies such as using mechanical power, intensive culture and using instruments in evaluating their activities. They also fail to recognize that at this stage, the extension system must shift from merely communicating information to problem solving; requiring extension agents capable of making major programme decisions in the field.

There is also an opinion that the present Upazila Agriculture Officers are the Extension Agents and that the Block Supervisors are the Aides. The limitations of this view is that the Extension Agent – client ratio will be wide. This would still be more effective than depending on the technician type of extension agents.

The second alternative, i.e., employment of qualified Extension Agents, the Block Supervisors and their equivalents seems to be more appropriate. If only qualified extension workers were recruited from now, it would take almost two decades to replace the entire corpus of technician type of workers. Japan began replacing its technician type extension agents as early as 1945. The Philippines and Indonesia followed Japan's path. In Bangladesh, some NGOs are already employing Bachelor or Master of Arts or Science to work with clients.

Should a policy decision be taken to have adequately qualified extension agents then persons holding Bachelor of Agriculture degrees or their equivalents in the respective technological fields should be employed as Block Supervisors and their equivalent positions. They should also be provided with the necessary logistics (audio-visual aids, vehicles, offices and residences) as well as financial and administrative authority to plan and implement the extension programmes independently. Employment of Bachelor of Agriculture degree holders as Extension Agents would not increase the cost of services much because the total emolument of a staff extension agent including allowances for overtime and fringe benifits is not much less than an Officer Extension Agent. The dividends would almost certainly outweigh the increased cost. It may not seem to be appropriate time to appoint Bachelor of Agriculture degree holders as Extension Agents because there are not enough graduates from Bangladesh Agricultural University and the three colleges of agriculture. This would however necessitate upgrading the ATIs to affiliated colleges or out-

campuses of the Agricultural University or of the nearest general universities; a less coslty approach than to set up more Agricultural Universities.

2.6. Appropriate Extension Methods

The appropriateness of extension methods and the approaches adopted also constrain extension work. Extension methods and approches have evolved in developed countries so that they are appropriate to the particular social context. In Bangladesh these systems have been aquired through books and journals, through training abroad, or through the advice of expatriates. The infrastructre and facilities for testing and experimenting with the extension system have not yet been developed in Bangladesh. Though a good number of research institutes were developed for conducting experimentation in different disciplines of agricultural science, extension methods have been adopted without empirical validation. The effectiveness of the adopted methods and approch are not adequately known. A model or approach is adopted and thereafter a decade of work; a shift is made to another model because the previous model is found to be ineffective. In the interim, millions of Takas have been spent. This trial and error approach extension development costly.

Policy Recommendation

The government has two options, namely (1) depend on expatriates for extension concepts and methods, and (2) develop its own institution and manpower for evolution of appropriate extension approaches and methods. The second alternative is recommended as it seems to be more cost effective. Extension, by nature, has to evolve from the local technological, economic and socio-cultural background.

Programme Implication

If government opts for developing its own approach and methods, it should develop a national extension research either by creating a new institution or by upgrading an existing one Research institutes like BARI, BRRI etc. may also consider establishing divisions for conducting extension research in respective technological fields.

2.7. Adequate Resources

Extension is perceived as being operated with insufficient resources in terms of working capital, logistic support and staff numbers. As in other resource deficit countries, Bangladesh has been deficit financing in most of its development programmes and projects. Resources are thinly distributed requiring programme staggering without reducing the scale of operation

and manpower requirements. Due to many contingencies, budgets are often cut without changing the scale of operation. This is a problem of orientation and approach in project planning and implementation. Projects establishing industries or civil works receive priority in the allocation of funds compared with those projects which aim at social or economic change. Even within a project, the civil or engineering work is usually accomplished with the utmost priority while behavioural and economic change components lag.

In addition to the problem of deficit-financing, resource allocation is unbalanced. Disproportionately high amounts of resources are allocated for administrative functions as opposed to professional activities, for headquarter sites rather than for woking level operations, and for prestigious projects rather than for productive ones. Allocation is not based on principles rather than on the personal influence of executives. There is a need to establish financial discipline in the allocation and use of funds.

Policy Recommendation

The policy should be to adjust work programmes according to the availability of funds and to implement the programmes in full. Then one may easily shift programmes and projects or to the next phase of a programmes and project. Extension services are capital intensive requiring a large working capital to finance its day-to-day educational activities. If there are no funds to finance activities, there is no reason to employ extension agents.

Programme Implication

Extension organisations must have the flexibility to adjust work programmes and manpower according to the availability of funds, a type of flexibility usually not possible in a bureaucratic structure. When the organizations attain certain scale of operation its working capital must be met even allowing the extension organisation receiving local puplic contributions.

2.8. Organizational Structure

Structural organization refers to the size of operational units, their relationships, how they are linked into operational whole and their chain of command. The most frequently mentioned structural constraints include:

a. the agent-client ratios;

b. power sharing between the national government and the Upazila Parishad;

c. inter-service linkage; and

d. the complexity of administrative and financial mechanisms.

The first constraint is size of operational units. Research shows that the smaller the working unit, the greater the effectiveness: thus making the service more costly.

The bottom of geographic-political unit such as a village, a ward, a block or a union should be picked as a extension working unit for all organizations. All agents must be housed in a common premises constructed and named "Rural Extension Centres". This is required because rural people will get access to all agents in a single premises without wasting time running after different agents at different places. This approach has been practiced in some of the developed countries, for example the Netherlands. Merely reducing the number of clients per extension worker, as some organizations try, has failed because of the immense increase in the cost of the service without increasing the quality of extension agents.

Policy Recommendation

There are two policy options: (a) reducing the size of working units to narrow down extension worker-farmer ratios (thereby escalating the cost of extension services; and (b) increasing the capability of extension agents and equiping them for better mobility and more effective work. The former is costly as well as ineffective while latter is less costly and more effective.

Programme Implications

At present the agent-to-client ratio varies widely among different organizations. The existing size of a DAE Block is 900 farm families. This may be optimal for reaching all families in a block, if qualified persons are employed as Block Supervisors (i.e., those with a Bachelor of Agriculture degree), if the required logistics are provided, and if educational activities such as visits, meetings, demonstrations, etc. are organized by Block Supervisors seven hours a day, 300 days per year.

The second most frequently reported structural constraint is the distribution of power and authority among the administrative agencies and the Upazila administration.

It is reported that with the introduction of the Upazila system the Ministry of Agriculture (through the Department of Agricultural Extension) lost control over the extension function. Upazila administrations have not yet demonstrated that they have the capability to administer the extension service. Indeed they often utilize the budget and personnel for non-

extension functions. In a democratic society, the responsibility and control of the extension function would be shared by both the central agency and the local gevernments, because public participation, the unique requirement of an effective extension system, can only be ensured through such a shared system. The problem is therefore how to appropriately share the authority and resposibility between the DAE and the Upazila administrations. The specifics of who will command whom and about what functions, should be fully spelled out and abided by in the course of taking action.

Policy Recommendation

The government seems to have three options: (a) centralization of power and authority in the MInistry of Agriculture on whose behalf the Department of Agriculture Extension; (b) complete decentralization of the extension function to the Upazila administration; and (c) a balanced and shared authority and power system. Extension has to be attened to the needs and aspirations of farmers. A centralized system can never achieve this client orientation. A completely decentralized system on the other hand may use the extension services for entirely different purposes. The third alternative seems to be more appropriate. (The Cooperative Extension Service of USA eventually opted for the shared system and is reported to be most workable and effective).

Programme Implication

In planning and implementing programmes as well as the use of resources, power and authority should be explicitly defined and protected by legislation so that the nature and operation of extension services for the common interest of the people is preserved and protected.

The third frequently mentioned problem is the absence of interservice linkages and the resultant problem of coordination. The extension system in Bangladesh is fragmented and isolated. Interservice linkages, particularly between the DAE and the BRDB and functional interaction at all administrative levels, among the governemnt as well as non-government organizations is therefore an important issue. It is often reported that the organizations most frequently overlap in respect of technological information and clientale, do not share scarce resources although some of them remain underused and occasionally conflict on technological and policy issues.

Policy Recommendation

The government could either (1) allow the organizations to operate

independently with their plans and programmes or (2) formally link them together through a superior system. The former will stretch scarce ressources, and present problems of imbalances in providing services will continue unabated. The latter will help develop a mutually supportive and share system of public services aiming at common goal of promoting the welfare of rural people.

Programme Implications

The only way of establishing linkages and coordinating their activities is to tie them both at the top and at the bottom. At the top it is necessary to create a central or national interministerial organization, may be in the name of a Council or Consultative Committees as an institutional arrangement to link them, to provide them with the opportunity of interacting, to help them share resources, to remove overlapping, to direct them to complement or supplement activities where necessary and to provide support services. Unless the government adopts the policy of creating such an organization and coordinate their activities they will not perform to expectations – in spite of being a large service system with an enormous number of staff and spending a large amount of money. At the bottom, a common housing of all extension agents is needed, as earlier stated.

A fourth frequently mentioned structural constraint is the complexity of administrative and financial procedures. Extension being part of state bureaucracy is governed by rules and procedures which have not changed with the frequent changes of structural-functional aspects of the organizations. However, there are instances in which some organizations enjoy some exceptions from the normal rules and procedures to meet their special reqirements. DAE must have enough operational flexibility to accommodate various local contingencies.

Policy Recommendations

The government may either (a) strictly govern the DAE services as per bureaucratic rules and procedure or (b) grant required flexibilities as programmes demands. The latter seems to be more plausible as well feasible within the bureaucratic structure if the provisions are well defined and supported legislatively.

Programme Implication

Both government and non-governemnt extension organizations should evalute their operational rules and procedures and formulate specific measures to be adopted with legislative support which will eventually be approved by the government.

2.9. Management Development

The environment, structure, manpower, and resources – all become more workable and favourable if organizations are managed properly that is, if managerial functions are accomplished according to appropriate values and practices. Poor supervision, absenteeism, alienation, inefficiency and lack of commitment anxiety, and conflict are the next most frequently mentioned problems. In fact, all of these are the outcome of poor management.

Until recently extension management was intuitive and experience based, a risky and costly approach. Extension executives, having adequate technical education, accomplishing the management function on the basis of their intuition and experiences guided by administrative rules and procedures. The need for training on administrative science to mid-level executives has been recognized when the PATC started to give administrative training to a few selected executive in different government organizations as well as to organize collaborative training with organizations in their own institutions. DAE has developed such a programme but most other organizations are deprived of such training facilities.

This type of training cannot be effective for extension management. Unlike civil service management, extension management has an entirely different orientation and practice. A civil services training academy or centre aims at developing administrators in the classical sense while extension executives need to be managers of out-of-school educational systems. Extension management is a distinct discipline in the developed countries. Extension managers, particulary those in the top and middle ranks have been receiving overseas training in a limited scale.

Policy Recommendation

Extension services is the largest subsector of public services, both within government and in non-gevernment organizations. In order to increase extension managerial capability the government has three policy options:

a. Utilize existing civil service training programmes for all extension managers.

b. Create specialized management institution for extension management within the framework of a management/administrative training institution.

c. Create specialized management institutions in the framework of existing agricultural research and education institutions.

Each of these options has genuine advantages as well disadvantage. Considering these, the second alternative seems to be most effective. Extension managers should be expected to have higher technical education. They should also attend periodic training in research and educational instituations on current technical issues. Management training could better be organized through creation of specialized institutions of extension within the institutional framework of management training institutions. This would provide a strong base or management research and training in which extension management could easily emerge as specialized discipline of management.

Programme Implication

Some kinds of institutions like agro-management centres or centres for the management of extension and rural development services should be created in the existing institutions of higher learning of management, like the Institute of Business Administration, BMDC and PATC to organize, research training and consultancy programmes in the management of extension and rural development services and after higher training to extension and rural development managers.

3.0. SUMMARY OF POLICY RECOMMENDATIONS

The policy options recommended earlier are categorised as short and long term policy recommendations and are presented. Those which could be implemented immediately are grouped as short term and those which would require a longer time are grouped as long term policies.

3.1. Short Term Policy Recommendations

1. Extension services should highlight the role of the tenancy system as being the major barrier to technological change and they should promote appropriate tenancy arrangements for rapid technological change and progress.

2. Extension services should make their clients aware of all the educational facilities which are available, both formal and non-formal and motivate and show people how they can use those facilities to increase their levels of literacy and formal education.

3. Extension services should institute an educational programme to improve the marketing system and help people organize themselves into corporate bodies like cooperatives, associations, unions, etc., so as to establish greater control over market forces.

4. Extension services should change their approach of merely technology transfer to problem solving.

5. Extension services should give greater importance and priority to meeting the educational needs of small and socially disadvantaged rural people.

6. Extension services should ensure that their agents organize more visits, meetings, demonstrations,etc. to educate all their clients.

7. Extension services should allow participation of clients representatives in decision making process at all hierarchical levels.

8. Extension services should support professional societies and similar institutions in launching mass communication programmes, both centrally and locally, to focus on the role of extension in shaping public opinion and expectations.

9. Extension services should develop individuals or groups of small and marginal farmers to locally produce and sell inputs like seeds, seedlings, saplings, fingerlings, feedstuff, nets, etc. through intensive training under close supervision by the respective subject matter officers or specialists.

10. Extension services should organize educational programmes for local dealers handling seeds, fertilizers, biocides, etc. to improve systems of stortage, marketing and sales, including advice to users.

11. Extension services should educate unemployed rural youths to provide services such as chemical spraying, equipment repair, and soil and plant testing, etc. on a commercial basis.

12. Government should ensure the quality of inputs through enforcing the existing rules and procedures.

13. Research institutes as well as central mass communication institutions like AIS should maintain a mailing list of all extension agents in all organizations and they should communicate technological information directly to them.

14. The extension services should mobilize resources to meet the working capital needs of extension systems or else reduce their scale of operations according to their resource availability.

15. The government should adopt a system of shared responsibility and authority between the government departments and the Upazila system.

16. The concerned authority should identify the special administrative and financial requirements of the extension services and approve the required changes for effective extension work.

3.2. Long Term Policy Recommendations

1. Extension services in the long term should begin to employ Bachelor degree holders from the respective technological fields to improve the effectiveness of extension work in the future.

2. Extension services need to adopt a common working unit and pool resources to construct "Extension Centres" with officers and residences for all extension agents in all working units to make the agents available to clients at call.

3. Research Institutes as well as Department of Agricultural Extension should create institutions and facilities for extension research to identify and evolve methods and approaches to extension work appropriate to the culture of Bangladesh and to local variations in the socio-culture landscape and the agro-ecological zones.

4. Extension organizations as well as internal and external funding agencies should give more attention to equipping extension workers for work in the field in a phased manner.

5. The government need to create and develop a central or national organization to provide scope for continuous interaction among all extension organizations and to help continuously to increase their efficiency through evaluation, training, advice and funds.

6. Extension services should launch an intensive and continuing management training programme for all extension managers in government as well as for NGOs to improve the quality of management.

Appendix-A

List of Constraints on the Agricultural Extension System

I. Socio-economic Conditions:
   a. Tenancy System
   b. Fair Price for Agricultural Products
   c. Literacy among Farmers
   d. Small Farmers Participation

II. Nature of Extension Functions:
   a. Tangibility of extension input
   b. Visibility of extension activities

III. Public Image and Perception:
   a. Correct public perception and demand for extension work

IV. Support Services:
   a. Adequate, and timely supply of production inputs at fair prices.

V. Capability of Extension Agents:
   a. Training facilities for extension personnel

VI. Extension Methods:
   a. Communication of technological information
   b. Appropriate extension methods.

VII. Adequate Resources:
   a. Adequate working capital
   b. Adequate logistic support

VIII. Structure:
   a. Extension agent-client ratio
   b. Authority and responsibility system
   c. Financial and administrative procedures.

IX. Management Effectiveness:
   a. Coordination and linkage among extension services
   b. BRDB-DAE linkage
   c. Supervision.

MANAGEMENT OF IRRIGATION BY THE LANDLESS : PERFORMANCE AND POLICY IMPLICATIONS

M.A.S. MANDAL*

1. INTRODUCTION

In view of the alleged unfavourable income distribution impact of the mechanized irrigation technologies, there have been a number notable attempts to suggest and try alternative institutional forms of ownership and management of minor irrigation equipment in Bangladesh. The underlying intention of such attempts has been to seek for appropriate management approaches which could guarantee equity along with an improvement in productivity and efficiency of irrigation. One such institutional form is the management of irrigation by landless groups, which has been in existence since 1980.

The purpose of this paper is to discuss the performance of landless irrigation with special reference to two important programmes sponsored by PROSHIKA and Grameen Bank. The theoretical framework behind landless irrigation is discussed in section II, while the status of landless irrigation programmes is discussed in section III. Section IV and V discuss the performance of landless irrigation programmes of PROSHIKA and Grameen Bank respectively, Conclusions are drawn in the final section.

II. A CASE FOR LANDLESS IRRIGATION: THEORETICAL FRAMEWORK

Landless irrigation is a recent innovative approach towards organizing landless groups to acquire, manage and operate small-scale tubewells and pumps and sell irrigation water for mainly boro paddy production against payment as a share of output. The theoretical framework of and advantages for providing irrigation water by landless groups have been extensively discused in [15,16, 13, 17]. The major arguments in favour of landless irrigation, as put forward in the above literatures, are as follows: Firstly, since water can be bought and sold like any other commodity, the ownership of water, hence tubewells and pumps to extract water, can be separated from that of land; therefore the landless members of the rural households, being

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functionally engaged in farm production activities, can take up entreprenurial roles and gain control over irrigation equipment to sell water. Secondly, highly fragmented land holdings and smallness of farm size necessitate negotiation with and active cooperation of a large number of farmers for utilizing irrigation equipment anywhere near its full potential. Landless groups have over other forms of groups advantages to negotiate and organize irrigators' groups because they have low opportunity costs for their time and as they have very little or no land in the command area, there is no question of giving preference to their own land in allocating water. Thirdly, since landless groups do have the production skills and need to ensure food security and minimum income, they are likely to have a greater incentive to maximize returns from water by gaining ownership of irrigation equipment and control over on-farm water distribution. Fourthly, in situations where monopolistic controls over irrigation water have been established by the landed rich, access of landless groups to irrigation equipment is likely to break the clutches of "water lordism" and improve the access of the small and poor farmers to irrigation. Fifthly, since landless group controlled irrigation may have larger command area and higher productivity (because of low negotiation and contractual costs, and reliable water supplies), aggregate employment and income of labour will also improve. Finally, landless members, who can increase income from water sellings as well as from land rents, can lessen their dependence on money lenders and traditional power elites, and ultimately burgain from a stronger position with the state bureaucracy and politics for more access to political power and resources. Rahman found that the Grameen Bank landless groups engaged in different activities have demonstrated countervailing force to influence the decision frame of the rural dominant classes [14].

III. LANDLESS IRRIGATION PROGRAMMES IN BANGLADESH

A number of government and non-government organizations have been involved in landless irrigation programmes in Bangladesh. PROSHIKA has been involved in landless irrigation with three minor irrigation technolgies, DTWs, STWs and LLPs, since 1980. In 1987 irrigation season, 108 STWs 35 LLPs and 20 DTWs were operating, covering a total of 6000 acres [2]. In the initial years PROSHIKA supported the landless groups by providing security for Bangladesh Krishi Bank (BKB) loan to the landless groups, which covered the bulk of capital and operating costs. From 1985, the irrigation programme has been financed from the Revolving Loan Fund (RLF), which is the PROSHIKA's own credit service to the landless group members. The current dominant form of charging for

water is one-fourth share of crop, although PROSHIKA groups used to charge one third share in the initial years. In recent years, in areas of intense competition between tubewells for command area land such as in Saturia and Ghior, share of crop as payment for water, from many tubewells are reported to have declined.

Grameen Bank started its landless irrigation programme in 1983, and in 1986 the bank financed 29 STWs and 10 DTWs, and 80 per cent of these tubewells were paid-off on time (Mortuza, 1986), Bangladesh Rural Development Board (BRDB) through its Bityaheen Samobay Samity (Association of the Resourceless) and Bangladesh Rural Advancement Committee (BRAC) have also provided financial supports to landless groups to buy or rent and operate irrigation equipment and sell water. Cooperative for American Relief Everywhere (CARE) also embarked on a collaborative landless DTW irrigation programme with PROSHIKA, BRAC and Grameen Bank. In this programme, which is called Landless Owned Tubewell Users Support (LOTUS), CARE provides agricultural extension advisory services, while PROSHIKA, BRAC and Grameen Bank provide institutional supports to organize landless groups to take up irrigation water selling as a business. Table-1 presents an account of different landless irrigation programmes.

IV. PERFORMANCE OF PROSHIKA LANDLESS IRRIGATION: MIXED ACHIEVEMENT

The performance of PROSHIKA landless irrigation schemes has been measured and discussed in terms of four important criteria: Loan recovery, Command area, Labour employment and Small farmers' access to irrigation water, and drop-out of irrigation schemes. These are discussed in turn below.

4.1 Loan Recovery

This section draws on the work of R.W. Palmer-Jones documented in Wood, et al. [17]. The analysis shows that the landless groups repaid 75 per cent of BKB loan, the remainder 25 per cent loan was either written off by PROSHIKA or adjusted with loans from Revolving Loan Fund. The analysis also revealed that only 29 per cent of RLF loan for irrigation were outstanding upto the end of July 1987. This compares favourably with the low recovery rates of agricultural loans e.g. less than 50 per cent in recent years. No doubt, some landless groups had incurred frequent lossess due to physical, technological and natural calamities and consequently could not repay loans, or repaid loans from other sources rather than income generated from their irrigation. However, Palmer-Jones indicated the

possibility of under-reporting of incomes by landless groups in an attempt to partly avoid loan repayments.

4.2 Command Area Performance

A comparative analysis showed that in the initial years the command areas of PROSHIKA landless shallow tubewells were significantly larger than under privately organized tubewells (Table-2). But the average command area of landless tubewells has declined over the years because of intense competition between tubewells. A survey conducted in Saturia and Ghior in Manikganj district in 1984/85, showed no significant differences in command area, yield output and return over operation and maintenance costs between landless controlled and private shallow tubewells. In Saturia, where soils and topography are more favourable for boro paddy cultivation, landless STWs, appeared to have performed little better than private STWs but the results were reverse in Ghior which is a comparatively low lying area with more frequent incidence of floods (Table-3). Besides, Ghior landless STWs had problems of mechanical breakdowns, and group management problems caused late start of tubewells, which resulted in lower command area and lower yield.

One important change to be noted is that the profitability of PROSHIKA landless irrigation schemes achieved in the initial years has significantly declined over the years, because the irrigation equipment are being gradually installed in more unfavourable sites and costs of capital, and operation and maintenance cost have risen significantly. This has been the case not only with landless irrigation schemes but also with other forms of irrigation schemes. But the declining return from irrigation has affected the landless irrigation groups more seriously than others, because the farmers depend for bulk of their capital and operating expenses on borrowed capital from the restrictive institutional and non-institutional sources.

4.3 Labour Employment and Small Farmers' Access

There are also mixed evidence on the intensity of labour use by farmers in landless and private schemes. Table-4 shows that there was no significant difference in pre-harvest labour use between landless and private STW schemes in a few selected villages of Manikganj. As a matter of fact, increased command area, rather than increased labour intensity per unit of land, appeared to be more important source of increased employment in landless irrigation schemes. But the potential of enhancing employment has diminished to some extent because of the declines in tubewell command area and also yields over the recent years. This implies

that the major advantages of landless irrigation have to be sought not on productivity and employment grounds in the main, but on broader equity ground encompassing greater access of the poor to irrigation water and incomes.

As far as access to irrigation is concerned, small farmers in landless controlled irrigation schemes did not necessarily have any special advantage, except to the extent that they benefited from larger command areas providing opportunities to the small farmers to have their plots irrigated [8]. Again, the declining tubewell command areas will have reduced this opportunity.

4.4 Drop-out of Irrigation Schemes

The discontinuation of PROSHIKA landless irrigation groups has been a problem, although the drop-out of irrigation schemes is common to other landless irrigation programmes including private tubewells and pumps (for example, we will see later the drop-out of Grameen Bank landless irrigation schemes). As Palmer-Jones reports, nearby 50 per cent of the 309 PROSHIKA groups that started one time or another have dropped out from the programme within five years of starting. The main reasons for discontinuation are related to financial losses caused by poor yields and small command areas, which are again the results of poor quality soil, uneven topography, mechanical troubles, less than optimal use of inputs and the interactions of the social and political forces of the command area farmers. While more discontinuations were reported for two years in 1984/85 and 1987/88 following severe flood damages of irrigated crops, a favourable decling trend of discontinuation has been observed in recent years. Ahmed reports that nearly 70 new irrigation schemes were added in 1988. This may mean that landless groups are gaining important experience in successfully running water selling business [2].

5. GRAMEEN BANK LANDLESS IRRIGATION: LANDLESS GET AHEAD COLLECTIVELY?

The performance of Grameen Bank landless irrigation programme is evaluated in terms of command area and yield, loan recovery and drop-out of schemes. A comparative study conducted by Mandal in 1985 revealed that command area and yield performance of Grameen Bank landless STWs were at least as good as private STWs, and significantly better than BRDB-KSS STWs (Table-5). As far as tubewell loans are concerned, all the STWs groups paid-off their loans completely within the stipulated period of 50 weeks. The Grameen Bank tubewells achieved high performance because

of greater trust and confidence put in landless groups. The landless group members provided adequate water supplies to all the plots because they had very few plots of their own to give prefenece to with respect to water delivery. Such a good performance of Grameen Bank landless irrigation prorgamme is encouraging, because the landless groups had to operate their tubewells in a competitive environment but without any supports from major government institutions dealing with credit, input supplies and irrigation services.

However, there are evidence of drop-out of schemes from the programme, and the concentration of tubewell ownership by a few landless members. The results of a resurvey conducted in 1989 on 3 DTWs and 8 STWs studied in 1986 are presented in Table-6. The following points emerge from the table.

Firstly, a number of tubwells were sold out to either a few landless members or outsiders or a combination of both, and withdrawn from the original sites. The prominent reasons that the groups could not stay on the water selling business were as follows: Heterogeneity amongst the shares (to buy an STW at least 5-6 groups had to cooperate), problems of cooperation and management, machine breakdowns, and social rivalry from the competing tubewell owners for command area plots. Secondly, for tubewells that were still being operated on the same sites, their ownership appeared to have been concentrated gradually in the hands of a few dominant landless group members with the supports from a few outsiders. Thirdly, some of the tubewells that were still operating were controlled and managed privately, but the owners could still negotiate individual loans from Grameen Bank for operating expenses. Apparently, Grameen Bank did not object to such concentration of tubewell ownership by a few group members because the loans were paid-off, but this is an example of how the absolute emphasis of the bank on loan recovery paved the way for a few individual landless members to take advantage of the joint liabilyty loan and then gradually divert the productive resource such as tubewell from collective utilization to serve private interests. However, Grameen Bank discontinued landless irrigation programme and has taken up direct management of collective enterprises such as tubewell irrigation since 1986. The major programmes include DTW projects in Tangail, Thakurgaon and Barind Tract.

VI. CONCLUSIONS

The evidence presented above suggest mixed results about the

performance of landless irrigation programmes in Bangladesh. But in the context of considerable inequality in the access of the landless to irrigation technologies, inputs, credit services, government bureaucracy and political power, landless pump groups owning unsubsidized equipment performed at least as good as private water sellers, and still better than cooperative groups which receive back-up supports from main-stream government institutions. Moreover, since the accumulation from landless group water selling against payment in terms of a share of crop, accrue by and large to the rural poor in terms of profits, increased production, and employment generated by on-farm irrigation management, landless irrigation can make considerable favourable impact on income distribution. Indeed, landless groups do need aprropriate policies continues institutional supports in the form of credit, input supplies and back-up services in building up their management capabilities so that they can withstand the adverse social, technical and natural conditions and sustain their irrigation business.

Landless irrigation constitutes an insignificant proportion of total mechanized irrigation, hence its contribution to overall agricultural production is still negligible. But the existence of thousands of landless irrigation groups in the country has aroused interests to seek for new type of irrigation management organizations. The groups have not only created new increased demands for political, administrative and institutional supports and services, but also supplied remakable insights into the knowlege and experience about the potential and constraints of group action. In certain situations they have demonstrated their bargaining strength with other social forces in an attempt to secure plots from the competing command areas or obtain electricity connections to irrigation equipment.

It seems justified on both productivity nad equity grounds to promote landless irrigation not as a substitute for but as complementary to mainstream irrigation management progrommes. Government should take steps to remove the rigidities of the credit and irrigation-related agencies and thus facilitiate the access of the landless people to irrigation market as supplier of water.

Table-1: Landless Irrigation Programmes in Bangladesh

Organizations	Status of the Programme
PROSHIKA	108 STWs, 35 LLPs and 20 DTWs in 1987, 6000 acres irrigated.
Grameen Bank	29 STWs and 10 DTWs in 1986, now discontinued. (Currently running DTWs through direct management in Tangail, Thakurgaon and the Barind Tract)
BRDB-BSS	33 STWs and LLPs in 1983-84, 62 STWs and LLPs in 1984-85
BRAC	380 STWs, 34 DTWs, 2 LLPs and 13 HTWs in 1986-87, 1950 acres irrigated

Source: [2, 12, 1, 5].

Table-2: Average Command Area of PROSHIKA Landless vis-a-vis Private Irrigation Schemes, 1983-84

Areas	Command area (Acres)	
	Landless	Private
Saturia (STW)	16.61 (8)	11.93 (56)
Ghior (STW)	12.86 (5)	15.60 (73)
Kalkini (LLP)	28.20 (9)	7.70 (7)

Figures in the parentheses are number of STWs in the sample.

Source: Adopted from [9; Table -8.1]

Table –3: Command Area, Yield, Output and Return from Landless and Privately Managed Shallow Tubewell Schemes, 1984/85

Items	Saturia			Ghior		
	Private	Landless	%	Private	Landless	%
	1	2	(2-1)	3	4	(4-3)
COmmand area (ha)	5.45	5.71	4.8 (0.35)	5.89	5.24	-11.0 (0.65)
Yield (Kg/ha)	2583	2527	-2.04 (0.10)	3413	2426	-29.0 (1.62)
Gross output (1000 kg)	14.3	14.8	3.1 (o.12)	19.4	12.9	-33.1 (1.6)
O & M costs (Tk.)	15183	13828	-8.9 (o.95)	13570	15841	16.7 (1.19)
Return over O&M costs (Tk)	2417	5368	122.0 (0.56)	10260	624	-93.9* (1.91)

Figures within parentheses are estimated 't' values.

* 't' values significant at 10 per cent level.

Note: Estimates are based on data from 10 private STWs and 8 landless STWs in Saturia, and 8 private STWs and 10 landless STWs in Ghior.

Source: [3; Table –6]

Table-4: Average Pre-harvest Labour Days per Acre of Boro Paddy in the Selected PROSHIKA Landless vis-a-vis Private Irrigation Schemes, 1983-84.

Area	Landless STWs			Private STWS		
	Family	Hired	Total	Family	Hired	Total
Saturia (STW)	43.1	61.4	104.5	49.7	55.1	104.8
Ghior (STW)	73.7	50.5	124.2	67.1	41.0	108.1
Kalkini (LLP)	40.7	124.9	165.6	43.3	92.1	135.4

Source: Adopted from [9; Table –8.5].

Table-5: Performance Indicators of Shallow Tubewells under Different Management Institutions in Ghatail-Kalihati, Tangail, 1985.

Management institutions	Command area (ha)	Paddy yield (Kg/ha)	Gross output (1000 Kg)
BADC-Private	4.93	5636	28
BRDB-KSS	3.13	4961	16
BKB	4.98	5409	27
Grameen Bank	5.26	5789	31

Note: Number of sample STWs under each institution was 10, except for Grameen Bank which had 8 STWs.

Source: [II; Table-1].

Table–6. Grameen Bank Tubewells in Ghatail-Kalihati Areas of Tangail District

Started	Present Status	Remarks on owhership changes
DTW		
1, 1985	Operating Privately	Rented DTW, 65 members dominated by nominally landless manager operated on $\frac{1}{4}$ cropshare contract for 3 years, currently run by a few nominal landless and dominant members of the village.
2. 1985	Operating privately	Gave up to a local landowner/contractor for 3 years for electrical connections, the contractor and his partners run it privately on $\frac{1}{4}$ cropsharing.
3. 1984	Sold	5o members sold to 3 members and 3 non-members because of problems of group cooperation and management, run on $\frac{1}{4}$ cropsharing.
STW		
1. 1984	Operating privately	33 members sold to 8 in 1986; currently bought and run by only 2 brothers including the original landless group manager.
2. 1983	Operating	15 members reduced to 4 including three brothers, one of whom is manager and another the driver; manager also dealer in diesel fuel for tubewells, and bought the STW privately with brothers.
3. 1983	Operating privately	30 members reduced to 18, futher reduced to a few dominat landless members.
4. 1983	Sold	10 members reduced to 5 and two non-GB shareholders; oil-crushers sold their shares, now bought by non-GB members.
5. 1984	Operating privately	10 members reduced to 7, further reduced to 3/4 members.
6. 1983	Sold	22 members reduced to 8 in 1985 after initial conflict within group over vested interest of nominally landless member; then further reduced to 1 shareholder who sold the STW because he could not manage it and another that he owned privately.
7. 1983	Sold	32 members reduced to 10, then sold because of breakdowns.
8. 1984	Sold	15 members sold STW because management problemas, non-cooperation and with serious breakdowns resulting in poor performance

Source: An updated Table from [8]

REFERENCES

1. Ahmed, B: Implementation of the Pilot Project Irrigation Assests for Landless Groups", In Water Market in Bangladesh-Inefficient and Inequitable?, IWM-12, Dept. of Irrigation and Water Management, Bangladesh Agricultural University, Mymensigh, November, 1986.
2. Ahmed, Q.F.: Socialization of Minor Irrigation—A Strategy for Growth with Equity, Paper Presented at the "World Bank Colloquium on "Access of the Poor to Groundwater", Washigton, April, 1989.
3. Ali, S.A.: Returns from Irrigation under Landless and Privately Owned Shallow Tubewell Schemes, Unpublised Research Paper, 1987.
4. Barua, D.C.: "Deep Tubewell Projects, Tangail: First Season Experience", Udyag, Grameen Bank Periodical, August, 1988.
5. BRAC: Rural Development Programme, Annual Report, December, 1987.
6. Devereux, S.: Joint Liability Group Credit Schemes for the Rural Poor with Reference to the Grameen Bank of Bangladesh, M. Phil, Economics Thesis, Balliol College, University of Oxford, April, 1986.
7. Hossain, M.: Credit for Alliviation of Rural Poverty — The Grameen Bank in Bangladesh, Res. Report No. 65, International Food Policy Research Institute, February, 1988.
8. Mandal, M.A.S.: "Observation on Some Grameen Bank Irrigation Schemes: Landless Get Ahead Collectively?" In Water Market in Bangladesh, Inefficient and Inequitable, Res; Report No. IWM-12, Dept. of Irrigation and Water Management, BAU, Mymensingh, 1986.
9. Mandal, M.A.S.: "Employment for Boro Paddy Production in Landless and Privately Controlled Irrigation Schemes". In G.D. Wood, et al. Social Entrepreneurialism in Rural Bangladesh: Water Selling by the Landless, Res. Monograph, PROSHIKA, Dhaka, 1988.
10. Mandal M.A.S.: "Access of Small Farmers to Landless and Privately Controlled Irrigation Schemes" In G.D. Wood, et al. Social Entrepreneurialism in Rural Bangladesh: Water Selling by the Landless, Res. Monograph, PROSHIKA, Dhaka, 1988.
11. Mandal M.A.S.: "Imperfect Institutional Innovation for Irrigation Management in Bangladesh", Irrigation and Drainage Systems, 1(3), 1987.
12. Mortuza, M.: "Irrigation Management and the Landless - the Experience of Grameen Bank in Tangail District", In Water Market in Bangladesh — Inefficient and Inequitable?, WM-12, Dept. of Irrigation and Water Management, Bangladesh Agricultural University, Mymensingh, November, 1986.
13. Palmer-Jones, R.W.: "Research on the Landless Irrigation Programme of PROSHIKA" in Water Market in Bangladesh — Inefficient and Inequitable?, IWM-12, Dept. of Irrigation and Water Management, Bangladesh Agricultural University, Mymensingh, November, 1986.
14. Rahman, A.: Impact of Grameen Bank Intervention on the Power Structure, Res. Report No. 61, Bangladesh Institute of Development Studies, Dhaka, August, 1987.

15. Wood, G.D.: The Socialization of Minor Irrigation in Bangladesh. Res. Report. PROSHIKA, Dhaka, October, 1982.

16. Wood, G.D.: "Provision of Irrigation Services by the Landless – An Approasch to Agrarian Reform in Bangladesh," Agricultural Administration, 17, 1984.

17. Wood, G.D. Palmer-Jones, R.W., Ahmed, Q.F., Mandal, M.A.S. and Dutta, S.C.: Social Entrepreneurialism in Rural Bangladesh – Water Selling by the Landless. Res. Monograph, PROSHIKA, Dhaka, August, 1988.

AGRICULTURAL CREDIT POLICY AND THE FARMERS OF BANGLADESH—A CASE OF DEPRIVATION

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INTRODUCTION

Credit is thought to be an instrument for agricultural development. Credit is needed to support use of new inputs like HYV seed, fertilizer, irrigation and insecticides. However, although supply of agricultural credit has been increased substantially during the last few years, research findings indicate that agricultural credit has played an insignificant role in increasing crop production (or more specifically, foodgrain production) in Bangladesh, [4, 1]. The important reason for week correlation between foodgrain production and credit supply may be that total production of foodgrain does not depend not only on supply of credit (which is supposed to increase use of new inputs) but also on variety of other factors like natural hazards (i.e., flood, drought etc.), inter-crop price relationships, etc. Therefore, it can not be concluded that there is no impact of credit on agricultural production and hence there is no need for agricultural credit. In this paper an attempt has been made to investigate some of the important reasons for insignificant effect of agricultural credit on crop production. The important questions which have been investigated in this connection are as follows:

1. What is the share of agricultural credit to total bank credit?

2. What is the share of credit for crop production to the total agricultural credit?

3. How agricultural credit helps those who need it most?

4. To what extent disbursed agricultural credit is utilized for crop production?

SOURCES OF DATA

The findings are mostly dependent on macro-level data collected from Annual Reports of Bangladesh Bank. In addition to macro-level data, micro-level data have been collected from 320 bank loanees of 33 bank branches

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spreaded over 17 Upazilas of old 17 districts. The field survey was conducted under a research project on supply of agricultural credit [5].

SHARE OF AGRICULTURAL CREDIT TO TOTAL BANK CREDIT

With about 85% of the population living in the countryside, and almost 80% of the workforce directly engaged in agriculture, the character of the Bangladesh economy is overwhelmingly rural. On the other hand, small urban based manufacturing sector which is capital intensive employs about 10% of the labour force. Agriculture also accounts for about 40% of the GDP of Bangladesh [3]. The high share of agriculture in output and employment is not reflected in an equally high share in public and private development expenditures. This is equally true with respect to contribution of agriculture to GDP and allocation of credit for enhanching agricultural production. Share of agricultural credit to total bank credit was only 10% in 1980-81 which reached to a maximum of 15% in 1983-84 and then gradually declined. In 1987-88, share of agriculrural credit to the total bank credit was less than 5% (Table-1).

Table-1: Share of Agricultural Credit to Total Bank Credit since 1980-81 to 1988-89

(Tk. in Crore)

Year	Total Bank Credit Disbursed	Total Agril. Credit Disbursed	% of Agril. Credit to Total Bank Credit
1980-81	3599.56	352.28	9.78
1981-82	4473.66	423.84	9.40
1982-83	5209.97	676.41	12.90
1983-84	6673.73	1007.12	15.00
1984-85	8984.80	1149.84	13.55
1985-86	10763.40	631.72	5.87
1986-87	11723.70	667.28	5.69
1987-88	13838.00	656.31	4.74

Source : Annual Reports, Bangladesh Bank.

Again, simply from monetary figures it seems that supply of agricultural

credit has increased to a large extent. However, the supply of credit in real terms is not so much as it appears simply from monetary figures. For example, since liberation, maximum institutional credit was supplied in 1984-85 (Tk. 1149.84 crore) and the amount was about 38 times higher compared to that of 1973-74. But in real terms (at 1972-73 price), the increase was only 10 times (Table-2). Again, supply of agricultural credit in real terms during two period from 1985-86 to 1987-88 was less than that supplied in 1977-78 (Table-2). Therefore, on the one hand, share of agricultural credit which is already low has further declined in recent years and on the other hand, amount of agricultural credit in real terms has also been decreased.

Table-2: Disbursement of Agricultural Credit in Real Terms (1972-73 const. price)

(Tk. in Crore)

Year	Agril. Credit Disbursement in Monetary Term[1]	Index Number (Base Yr. 1973-74)	Disbursement in Real Term
1973-74	30.70	100	21.77
1974-75	37.70	123	15.71
1975-76	46.10	150	25.21
1976-77	86.40	281	48.84
1977-78	156.90	511	107.59
1978-79	170.73	556	65.41
1979-80	268.39	874	137.85
1980-81	252.28	822	168.19
1981-82	412.81	1345	178.13
1982-83	670.76	2185	212.26
1983-84	1007.12	3281	208.33
1984-85	1149.84	3745	222.84
1985-86	564.62	1839	86.61
1986-87	667.28	2174	88.54
1987-88	656.31	2138	77.21
1988-89	807.62	2631	n.c

n.c.: not calculated due to lack of information on national deflecting factor for the year 1988-89.

1. Source: Bangladesh Bank Annual Reports.

SHARE OF CROP LOAN TO TOTAL AGRICULTURAL CREDIT

Since agricultural credit is disbursed for a variety of purposes which are directly or indirectly related to agriculture, increased supply of agricultural credit does not necessarily mean that general farmers would be more benefited. Besides credit for crop, irrigation and draft animals, agricultural credit is provided for tea, potato storage, agro-industries, marketing of agricultural crops, processing of agricultural products, fisheries, acquaculture, poultry, goatery, duckery, etc. Among these items, the farmers who are involved in crop production are directly benefited from loans for crop, irrigation equipments and draft animals. Among other items agricultural credit for tea, agro-industries, etc. are important. It helps mostly the better-off people who are indirectly related with agriculture.

Share of agricultural credit directly related with crop production (i.e. credit for crop, irrigation equipment and draft animals) in relation to total agricultural credit varied between 43% t0 51% during the period of 1980-81 to 1987-88, except the three consequensive years beginning from 1982-83. In recent years, roughly about 50 of total agricultural credit was distributed for direct crop production and the rest was diverted to agricultural related activities. Again, among loans directly related with crop production, credit for crop in short-term while credit for irrigation equipments and draft animals is medium/long-term (Term-loan). The term-loan needs land security which most of the small or marginal farmers can not provide. Therefore, most of them do not have access to term-loan. The small and marginal farmers (upto 2.5 acres) who represent 70% of farm households have access to mostly crop loan for which they have to compete with medium and large farmers. During the period from 1980-81 to 1987-88, except the years 1982-83 and 1983-84, the share of crop loan in total agricultural credit varied between 31 to 45%. Share of crop loan to total agriculral credit was maximum (52%) in 1982-83.

The findings indicate that share of crop loan to total agricultural credit is less than half of the total agricultural credit disbursed. Again, the small and marginal farmers, who are supposed to get large share of crop loan, have probability of receiving only a fraction of it. The structure of agricultural credit is such that those few who are indirectly related with agriculture are more benefited than millions of farmers who are directly related with agriculture. Further, among farmers, compared to large and medium farmers, small farmers are likly to get less share of agricultural credit. Through field survey it was found (Table-3) that small farmers who represent majority of farm households received 35% of total agricultural

credit while the medium (2. 51 to 5.0 acres) and large (5.1 acres and above) farmers received 65% of total agricultural credit. Again on the average large and medimum farmers received more credit than small farmers. For example, amount of credit received by a large farmer was more than double than that of a small farmer (Table-3). This is because of the fact that agricultural credit is not disbursed on assessing needs of the farmers, rather the farmers who are better off and who can provide more land security, have more chance of getting more agricultural credit.

Table-3: Share of Agricultural Credit by Farm Size Groups

Farm size Groups	Number of Farmers	Percentage of Total	Av. Amount of Loan Received (Tk.)	% of Total Loan Received
Small	156	49	3339	35
Medium	86	27	4376	25
Large	78	24	7631	40
All	320	100	4664	100

Source: Field Survey (1987), Supply of Agricultural Credit Research Project.

SHARE OF AGRICULTURAL CREDIT UTILIZED FOR CROP PRODUCTION

Since most of the farmers live at below poverty level and farmers usually receive credit untimely, proper utilization of credit particularly by the small farmers can not be expected. The field survey showed (Table-4) that only about 60% of total agricultural credit received by the farmers was utilized for the purposes it was disbursed. Out of the rest (40%), 12% was diverted to other agricultural related activities (i.e. land purchase, land development, payment for getting back mortgaged out land, making irrigation channel, etc.) and 28% was diverted to household consumption and non-farm activities. The proportion of agricultural credit diverted to consumption and non-farm activities was found to be the highest for small farmers (about 36%). The overall findings indicate that the farmers receive only a small portion of agricultural credit and again a considerable proportion of it is diverted for the purposes other than crop production. Therefore, it is not surprising to see why the contribution of agricultural credit to crop production is negligible as was found by the researchers as mentioned earlier.

Table-4: Uitization of Credit by Farm Size

(In percentage)

Farm size Groups	Purposewise Utilization of credit	Diversion of Credit for		Total
		Investment in Agriculture Related Activities	Non-farm and Household Consumption Expenditure	
Small	47.35	16.90	35.75	100
Medium	58.94	17.15	23.91	100
Large	70.55	5.73	23.72	100
All	59.53	12.51	27.96	100

AGRICULTURAL CREDIT POLICY IN BROADER PERSPECTIVE

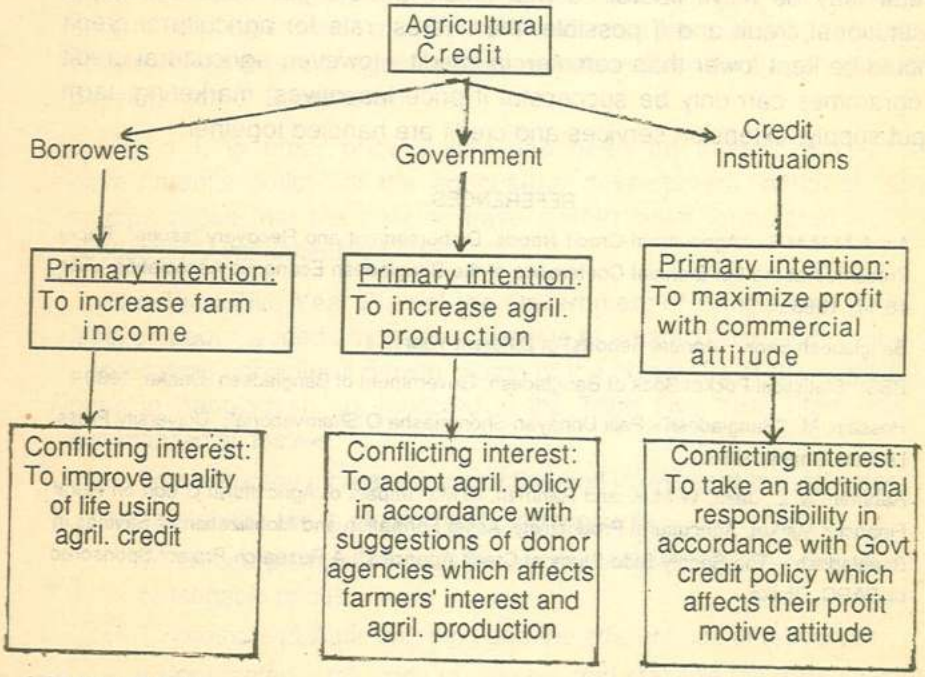
There parties: Government, credit institutions and farmers are involved in institutional credit operation. Since their interests are not mutually exclusive, agricultural credit operation in Bangladesh is not running at a satisfactory level. As a result, farmers, particularly the small farmers have received little benefit from disbursement of agricultural credit. Fig. I shows that primary interest of the farmers is to maximize agricultural production through receiving agricultural credit. But, at the same time most of them have intention to divert the credit for consumption and other purposes in order to improve quality of life.

For Government, the primary interest is to increase agricultural production through distribution of institutional credit to the farmers. However, the government agricultural policy in accordance with suggestion of donor agencies affects farmers' interest. For example, farmers' intention to increase net farm income are frustrated by government policies of withdrawal of subsidy from fertilizer, irrigation, etc. and at the same time the policy of keeping foodgrain prices low in order to satisfy politically powerful urban classes.

For credit institutions, the primary interest is to maximize profit with commercial attitude. Since investment in agriculture is a risky business in Bangladesh, the credit institutions are not interested to be involved in agricultural credit operation. Therefore, no private bank participates in agricultural credit operation. The nationalised commercial banks and other institutions like BKB, BRDB and BSBL simply take responsibility of disbursing agricultural credit in accordance with government policies.

Further, since agricultural credit disbursed by the credit institutions (particularly the NCBs) is not financed from their own fund, they are not much concerned with its proper utilization and recovery. Again, the credit institutions, particularly the NCBs are not much concerned about distributing the credit to the farmers who are mostly poor, rather, to keep the number of loanees manageable they want to distribute credit to few persons. Therefore, the objectives of largely benefiting the small farmers through credit distribution and to increase agricultural production are not achieved. Unless the intentions of the farmers, government and credit institutions are made mutually consistent, difficulties and inefficiencies will arise.

Fig. 1. Agricultural Credit Operation and Conflicting Interest of the Farmers, Government and Credit Institutions.



CONCLUSIONS

In order to enhance agricultural production and to help millions of farmers engaged in agriculture, share of agricultural credit to total bank credit should be increased. Secondly share of agricultural credit directly related with agricultural production should also be increased. Further,

special attention should be given to small farmers in disbursing as well as recovering agricultural credit. Since small farmers need credit both for agricultural production as well as for their survival particularly at critical pre-harvest periods (i.e. before harvesting of Boro and Aman), provision for consumption credit may save them from indebtedness by borrowing credit from non-institutional sources. Normally, interest rate of credit received before harvesting which is payable after harvesting of Boro or Aman paddy is 100%. In terms of paddy the money lenders provide one maund of paddy before harvesting and received two maunds of paddy after harvesting.

Further, credit institutions should not treat agricultural credit as per commercial credit. Since agriculture in Bangladesh suffers from a variety of instability (i.e. natural hazards, price instablity, etc.) liberal and flexible (depending on extent of instability) credit policy is needed to benefit the farmers of Bangladesh. For example, terms and conditions of agricultural credit may be more liberal so that small farmers get more access to institutional credit and if possible, the interest rate for agricultural credit should be kept lower than commercial credit. However, agricultural credit programmes can only be successful if price incentives, marketing, farm input supply, extension services and credit are handled together.

REFERENCES

1. Ali, A.M.M.M.S.: "Agricultural Credit Needs, Disbursement and Recovery Issues". Paper Presented at the 8th Biennial Conference of the Bangladesh Economic Association July 15-17, 1988.
2. Bangladesh Bank: "Annual Reports" of Different Years.
3. BBS: "Statistical Pocket Book of Bangladesh, Government of Bangladesh, Dhaka, 1989.
4. Hossain, M.: "Bangladesh's Palli Unnayan Shommasha O Shamvabona", University Press Limited, Dhaka, 1986.
5. Rahman, M.L., Jaim, W.M.H. and Rahman, M.M.: "Impact of Agricultural Credit on Rural Financial Market, Agricultural Productivity, Asset Formation and Mobilization of Savings in Bangladesh – The Supply Side Study of Credit Agencies", A Research Project Sponsored by BARC, Dhaka.

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PRICE STABILIZATION AND AGRICULTURAL PRODUCTION : THE CASE OF BANGLADESH

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1. INTRODUCTION

Bangladesh is predominantly an agricultural economy. Agriculture, including livestock, fisheries and forestly, contributed nearly half of the Gross Domestic Product (GDP) in 1987-88. [1]. At the present stage of Bangladesh's development, the overall performance of the economy is inextricalby linked to the performance of the agricultural sector. Prices of agricultural products strongly influence the performance of the agricultural sector. Thus, an effective and rational price policy plays an important role in accelerating the rate of agricultural growth as well as the overall economic development of Bangladesh.

For a long time, price policy has been an integral part of the government's policy for the agricultural development, although some studies argue that the policies have neither been formulated well nor successfully implemented [7, 8].

The Third Five Year Plan of the Government of Bangladesh gave, at least on paper, added emphasis to the role of an articulated price policy for encouraging agricultural growth. Some of the objectives of the agricultural price in Bangladesh, as reflected in the Third Five Year Plan, can be summarized as follows:

- To encourage increased production and investment in food crops.
- To stabilize the market of food crop products.
- To ensure a smooth flow of the supply of foodgrains to consumers at reasonable prices.
- To promote multiple cropping and the efficient use of resources.
- To guarantee a fair price to growers and stabilize the wide seasonal fluctuations in crop prices.
- To provide a reasonable farm income to growers by supporting the prices set by the government.

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Market price stabilization has thus remained an important objectives of agricultural price policy in Bangladesh. Timmer showed that a properly managed agricultural price stabilization programme has considerable potential to accelerate economic growth [16].

Bangladesh has adopted an agricultural technology-led growth strategy as her development strategy. The country is now on the road to technological progress in agriculture. At this stage, downward fluctuations in the agricultural price level are likely to be more numerous. It is, therefore, very important to analyse the effects of price stabilization as well as of the existing price stabilization policies of the government on agricultural production.

This report has been organized into 4 sections. The first section is introduction. Section II is devoted to analyzing the fluctuations of agricultural prices in Bangladesh. Section III idiscusses the role of price stablilization in agricultural production. Section IV evaluates the performance of various price stabilizing programmes in increasing agricultural production.

II. FLUCTUATION IN AGRICULTURAL PRICES

The starting point of any exercise in price stabilization is to probe into the nature and extent of price fluctuation. Temporal fluctuations in prices can be grouped into two types: inter-year and intra-year. The inter year variations are generally referred to as annual instability and the intra year variations are called seasonal instability. This section examines the fluctuations in the annual and seasonal or monthly prices of agricultural commodities.

Fluctuations in Annual Prices

Annual fluctuations in prices can be measured in a variety of ways. A commonly used measure, often referred to as "the measure of nominal fluctuation", is the percentage change in the price for any given year relative to the price for the preceeding year. Such a measures, however, fails to differentiate between the trend and the random elements of fluctuations. The trend component can be separated from the random element by a number of procedures, such as by fitting a trend equation, (linear, semi-log or log linear) or by detrending using a moving average technique. In this paper, yearly price fluctuations around the trend were estimated by detrending the price data using a 3 year moving average technique (Table 1). Table 1 shows that the year to year price fluctuations were highest in the case of jute, followed by those of potato. Deviations

from the moving average, indicates that the fluctuations in jute prices were more than 10 per cent, plus or minus, in 8 years out of 10 during the period 1976/77 to 1985/86. During the 1970's and 80's domestic jute prices fluctuated substantially, primarily because of fluctuations in the world price of jute [2, 18]. Among cereals, prices fluctuations were least for wheat during the period 1976/77 to 1985/86, when the deviations in the actual price from the moving average was not more than 10 per cent in any year. This may be because almost 77% of the wheat consumption (Dey 1988) comes from the public sector and public sector prices (ration prices) are fixed by the government.

Fluctuations in Monthly Prices

Fluctuations in monthly prices are examined by estimating the seasonality index. The seasonality index was calculated by following Pindyck and Rubinfeld [12], as a ratio between the actual monthly price corresponding to the central 12 months moving average expressed in percentage. The indices were adjusted in such a way that the 12 monthly indices of a given year added to 1200 (for details see appendix 1). The seasonality index for coarse rice, wheat and jute were reported in Table 2. The panel at the bottom shows the percentage points that separate the highest and the lowest ratios. These are percentage seasonal spreads. Table 2 reveals that there is a strong seasonality in the growers price of agricultural commodities, although the seasonality in rice prices is decreasing over the years.

Table-1: Fluctuation in Annual Prices of Agricultual Commodities in Bangladesh, 1976/77 to 1985/86.

	Deviation of Actual Prices from Moving Average Price (%)						
Year	Aman	Aus	Boro	Wheat	Potato	Sugarcane	Jute
1976/77	4.94	22.22	3.89	-8.58	27.34	-0.23	13.44
1977/78	-1.42	-6.21	18.85	-1.16	5.96	6.06	-15.07
1978/79	6.91	-2.04	-15.44	9.80	-12.08	-1.27	-6.66
1979/80	-7.90	6.33	1.74	-4.75	7.24	-0.52	21.55
1980/81	5.52	0.04	6.63	4.75	-10.00	0.08	-5.02
1981/82	-2.84	8.34	-2.10	-2.46	5.03	-23.08	17.08
1982/83	5.12	-7.12	4.43	-5.58	46.80	0.81	-10.95
1983/84	0.86	11.32	-8.17	-6.61	-23.85	4.10	39.18
1984/85	-9.50	-14.07	6.03	-3.39	15.06	4.27	-35.30
1985/86	14.23	11.73	2.88	2.01	1.74	-6.00	19.29

Source: Bangladesh Bureau of Statistics.

Table-2 : Seasonality in Agricultural Prices in Bangladesh, 1979/80– 1985/87

Months	COARSE RICE: Ratio between the actual monthly price and the corresponding central moving average			WHEAT: Ratio between the actual monthly price and the corresponding central moving average			JUTE: Ratio between the actual monthly price and the corresponding central moving average	
	1979/81	1982/84	1985/87	1979/81	1982/84	1985/87	1982/84	1985/87
July	104.41	94.53	98.9	113.02	95.63	97.49	78.49	68.68
August	101.28	92.71	97.0	106.90	98.45	100.74	98.11	83.14
September	102.49	100.99	100.70	107.31	108.44	107.25	104.09	83.87
October	98.98	104.63	102.20	105.30	107.43	111.76	102.23	80.64
November	95.42	97.16	100.50	98.69	98.05	109.66	107.28	88.05
December	90.88	93.82	97.70	93.58	100.17	103.85	105.60	97.37
January	94.61	99.48	97.20	96.99	108.54	104.55	110.67	112.10
February	97.34	103.92	98.3	102.00	106.22	100.34	110.13	113.50
March	101.18	107.56	104.70	92.48	96.74	90.93	108.79	123.46
April	106.93	109.98	108.10	90.77	93.01	91.33	107.21	117.64
May	102.79	98.57	98.9	93.88	94.82	91.33	87.50	108.51
June	103.70	96.65	95.7	99.09	92.50	90.63	79.90	123.57
Highest	106.93	109.98	108.1	113.02	108.44	111.76	110.67	123.57
Lowest	90.88	92.71	97.0	90.77	92.50	90.63	78.49	68.69
Diff.	16.05	17.27	11.1	22.25	15.94	21.13	32.18	54.89

Source: Basic data are from the Bangladesh Bureau of Statistics.

III. THE ROLE OF PRICE STABILIZATION IN AGRICULTURAL PRODUCTION

Some economists have raised the question as to whether government should intervene in the market to stabilize price. There is a slogan in the economic literature to 'get the prices right'. Newbury and Stiglitz showed that welfare gains from price stabilization are empirically not important relative to the costs which the government must incur in order to stabilize prices [11]. However, economists like C.P. Timmer and Kanbur have rightly pointed out that Newbury, Stiglitz and their group have not considered (i) the farmer as an investor, and (ii) the macroeconomic ramifications of price instability [16, 9]. It is also unrealistic to assume in a country like Bangladeah that consumers can save enough in times of low prices to pay for higher prices, which many traditional welfare economists assume to conclude that commodity price stabilization schemes are economically wasteful [3].

Price stabilization in Bangladesh is desirable for various reasons. For producers, price instability leads to unpredictable variability in real incomes. This variability may lead to production decisions which are later considered mistakes. Uncertainty about future prices inevitably retards specialization and the commercialization of farming as well as investments in agriculture, hence slowing the growth in agricultural output. Consumers are also severely affected by price instability, notably by the impact of price surges. Low income consumers are very vulnerable to food price instability. Agricultural price instability also has serious macro-economic consequences on balance of payments problems and on sub-optimal productive domestic investments [5].

The following paragraphs of this section mainly discuss the role of price stabilization in agricultural production.

Price Stabilization and Area Expansion

Risk plays an important role in deciding the area under a particular crop. Empirical evidence shows that price risks for jute have a significant negative effect on the jute acreage in Bangladesh [13]. Although there is no robust empirical evidence in Bangladesh on the role of price risks in other crop acreages, evidence from other Asian countries suggests that price risks also affect the acreage of many other crops. Recent reduections in the acreage of potatoes may be another case of the above-mentioned phenomenon. During the last 10 years, deviations in yearly potato prices from the moving average were more than 10 per cent (plus or minus) in 8 of the years. This price instability may have contributed to reducing the acreage of potato.

Price Instability and HYV Adoption

There is a growing body of literature emphasizing the role of risk in the diffusion of modern technology in peasant agriculture. Shahabuddin shows that both output and price risk have significant negative impacts on the adoption of high yielding varieties of aus and boro rice [15]. Price stabilization can thus reduce the risk, and increase agricultural production through the rapid adoption of modern agricultural technology.

Price Instability and Investment

At the farm level, price instability leads to lower investments than are optimal for production for the market, relative to the production of subsistence crops [16]. Shahabuddin also supports the above finding, and shows that farmers invest lower amounts of inputs than the allocatively efficient amount (at the level where added cost equals added benefits) in jute cultivation [15].

Timmer also argues that price instability leads to lower investments than are optimal in productivity enhancing soil amendments, and irrigation and drainage facilities [16]. Rashid reveals that very little of the 8 million hectares of cultivated land is being used at its optimum level [14]. Stabilization of agricultural prices may increase agricultural production through increasing investments in the agricultural sector.

IV. AGRICULTURAL PRICE STABILIZATION PROGRAMMES

The agricultural price stabilization programmes of the Government of Bangladesh include: Procurement of agricultural commodities, public food distribution, import-export management, and public stock management. This section evaluates the role of these programmes in increasing agricultural production.

Public Procurement Programmes

At present, government sets the procurement price of paddy (rice), wheat, sugarcane, tobacco, and cotton. Before 1980-81 the governemnt also used to set statutory minimum prices for Jute. However, among these commodities, the government puts special emphasis on the procurement of rice (paddy) and wheat because they are the major foodgrains for Bangladesh.

An effective programme can reduce price instability, (mainly seasonal instability), by preventing harvest prices from falling below certain level. In an effective procurement programme, harvest prices should be more than or equal to the procurement price set by the public authority. Table 3 shows the procurement and harvest prices of rice, wheat and sugarcane. The table reveal that, in most cases, the procurement programme was not successful in preventing harvest prices from falling below procurement prices.

Table-3: Harvest and Procurement Prices of Agricultural Commodities in Bangladesh

Aman Harvest Months	YEAR							
	1984/85		1985/86		1986/87		1987/88	
	Nov.	Dec.	Nov.	Dec.	Nov.	Dec	Nov.	Dec.
Procurement Price Tk/Mt.	4421	4421	4554	4554	4688	4688	5358	5358
Harvest Price Tk./Mt.	5010	4930	4688	4313	4849	4769	5144	5224
Ratio of Harvest price to procurement price	113	111	103	95	103	102	96	97
Boro								
Harvest months	May	June	May	June	May	June	May	June
Procurement Price (Tk/Mt)	4421	4421	4688	4688	5358	5358	5358	5358
Harvest Price (Tk/Mt)	3992	3938	4688	4447	5063	5063	4286	4520
Ratio of Harvest price to procurement price	90	90	100	95	94	94	80	82
Wheat								
Harvest months	Mar.	April	Mar.	April	Mar.	April	Mar.	April
Procurement price (Tk/Mt)	4340	4340	4688	4688	4956	5358	5358	5358
Harvest price (Tk/Mt)	4206	4099	4179	4286	5117	5144	5331	5037
Ratio of Harvest price to procurement price	97	94	89	91	103	96	99	94
Sugarcane								
Procurement price (Tk/Mt)	536		643		670		723	
Harvest price (Tk/Mt)	523		656		672		688	
Ratio of Harvest price to procurment price	98		102		100		95	

Source: BBS

Tyagi (1988) analyzed the harvest prices of rice and wheat prevaling in different rural markets between April 1984 and May 1985. Tyagi's results show that producers failed to realise the procurement prices fixed by the Government.

There are many reasons for the ineffectiveness of the procurement programme in maintaining procurement prices at the farm level such as (a) low volumes of procurement, (b) inadequate funds, procurement centres and storage space, (c) lack of space in the godowns due to heavy imports, and (d) collusion between officials and traders [10]. Although the procurement programme was initiated more than 30 years ago, domestic procurement has been a rather small percentage of domestic production except for the year 1980-81 (Table 4). It seems that the target of the procurement programme was quantity rather than price.

Although seasonal spreads of rice have fallen in recent years (Table 1), the question is, can we attribute this improvement or at least a part of it, to the procurement programme? Only a sophisticated modelling exercise, which to the best of our knowledge, remains to be performed, can provide a definite answer. Even without going into that, we can proudly show that the procurement programme has not been very successful in reducing the seasonality of rice prices. Table 5 shows that even in the years of substantial rice procurement, 1977/78, 1981/82, and 1987/88, growers' prices were lower than procurement prices. In 1980/81, a year of massive procurement in the history of Bangladesh and the then East Pakistan, growers' prices were only 76% of the procurement price.

In conclusion there are sufficient grouds for scepticism about the role of procurement policies in supporting growers' prices, reducing seasonal price fluctuations and, as a whole, in increasing agricultural production.

Table 4: Procurement of Agricultural Commodities as a percentage of Production, Bangladesh, 1976-1988.

	Percentage of Production Procured				
Year	Aus	Aman	Boro	All Rice	Wheat
1976-77	0.07	4.39	0.32	2.64	4.35
1977-78	0.05	6.75	1.65	4.15	3.23
1978-79	0.57	2.89	4.16	2.36	15.56
1970-80	0.00	2.40	2.03	1.76	17.57
1980-81	2.68	6.40	9.77	6.01	26.53
1981-82	0.60	1.65	4.78	2.07	3.45
1982-83	0.03	1.23	2.09	1.15	2.02
1983-84	0.34	1.06	1.51	0.98	6.81
1984-85	0.06	0.95	1.43	0.89	16.79
1985-86	0.00	1.63	2.16	1.42	13.83
1986-87	0.00	2.72	2.66	2.20	5.10
1987-88	0.00	3.11	5.05	4.54	5.32

Source: 1. Bangladesh Bureau of Statistics
2. Directorate of Food

The Public food Distribution Programme

Government of Bangladesh distributes rice, wheat, white sugar and edible oil among consumers through the public food distributions system (PFDS). A properly designed PFDS can reduce seasonal variations in agricultural prices, and the reduction in seasonal variations can, in turn, increase agricultural production.

A public PFDS can achieve the above objective by introducing a suitable variation the in flow of the ration commodity.

For example, a dampening effect on rising trends in prices during the lean months (the months immediately before harvest) can be created by distributing a larger volume of rations during that period. Similarly a sharp fall in prices during

the harvest season can be prevented by reducing the flow of rations during that period. The system is not as efficient as it could be. Although there appear to be some grounds for believing that public food distribution in general and open market sales in particular have been relatively successful in recent years in containing seasonal price fluctuations, governments still distribute huge quantity of foodgrain during the harvest months. Table 6 shows that during the aman, boro and wheat harvesting months (during November to December and April to June), the government distributes substantial quantity of foodgrain through the PFDS, thereby reducing the effectiveness of the PFDS in containing seasonal price fluctuations.

Table-5: Production Procurement and Growers to Procurement Price Ratio of Rice 1977/78 to 1987/88

Year	Production (mill. m. ton)	% Change over last year	Procurement			Ratio Growers prices to procurement price (%)	
			Amount (mill. in ton)	% of prod.	Change over Last yr	Aman season	Boro season
1977-78	12.97	10.30	0.55	4.15	77.4	89.28	90.47
1978-79	12.84	(-1.00)	0.29	236	(-47.3)	88.13	126.92
1979-80	12.73	(-0.90)	0.23	1.76	(-20.7)	97.27	80.92
1980-81	13.88	9.0	0.77	6.01	23.48	76.08	76.08
1981-82	13.63	(-1.8)	0.27	2.07	(-649.4)	100.00	104.03
1982-83	14.21	4.2	0.17	1.15	(-370.4)	99.26	103.70
1983-84	14.51	2.1	0.14	0.98	(-17.6)	99.30	113.54
1984-85	14.62	0.8	0.13	0.89	(-7.1)	112.42	90.10
1985-86	15.03	2.8	0.22	1.42	0.7	98.82	97.43
1986-87	15.50	3.1	0.14	2.20	(-36.4)	102.57	94.50
1987-88	15.30	(-1.3)	0.29	4.54	107.1	96.75	81.25

Source: 1) Directorate of Agricultural Marketing.
2) Bangladesh Bureau of Statistics.
3) Directorate of Food.

Note: 1. Aman harvest season was treated from November to December.
2. Boro harvest season was treated from May to June.

Table 6: Monthly Domestic Procurement and Off-take of Foodgrain in 1984/85 to 1987/88

(in '000 m. ton)

Month	1984-85		1985-86		1986-87		1987-88	
	Procure ment	Off take	Procure ment	Off take	Procure ment	Off take	Procure ment	Off take
July	6	223	39	84	6	92	34	166
August	0	258	19	93	1	109	3	219
September	0	292	8	125	0	151	0	295
October	0	286	9	165	0	239	0	292
November	3	262	1	133	1	196	2	242
December	11	236	36	115	10	120	23	217
January	12	252	55	148	9	197	20	204
February	20	222	38	155	3	220	50	233
March	61	196	17	159	1	246	10	249
April	122	153	83	161	20	243	60	187
may	54	122	23	53	42	117	60	121
June	55	77	30	65	90	135	50	140

Source: BBS. Monthly Statistical Bulletin, Various Issues

Import and Public Stock Management

Import-export policy and stock management are two widely used policy instruments for combating inter-year variations in agricultural prices and supply. In Bangladesh, the government uses these policies mainly for foodgrains. Foodgrain import and stock management are two important component of the foodgrain policy of the Government of Bangladesh, and their effects on prices and production have become a much-debated issue.

Table-7: Monthly Stocks and Import of Foodgrain in Bangladesh, 1984/85 to 1987/88

(in '00 m. ton)

Month	1985-86		1986-87		1987-88	
	Stocks	Imports	Stocks	Imports	Stocks	Imports
July	974	102	977	70	1042	462
August	1071	31	1005	89	942	106
September	983	8	945	323	806	199
October	976	104	1114	123	897	400
November	1119	22	938	194	994	509
December	946	73	934	0	1183	702
January	928	40	798	0	1145	151
February	859	21	621	76	1248	288
March	781	95	700	153	1063	87
April	730	197	549	256	1091	161
May	816	210	394	219	1665	122
June	892	136	419	379	1417	184

Source: BBS. Monthly Statistical Bulletin, various issues.

The Agriculture Sector Review Report and a recent Worl Bank Report conclude that imports and foodgrain stocks in recent years have been excessive [1, 17].

The ASR team argues that the optimal public stock for Bangladesh would be around 900.000 metric tons. But Table-7 shows that stocks exceed 900,000 metric tons in many months. This "excessive" stock also creates a problem for the procurement programme. Effective storage capacity in the country is only 1,400,000 metric tons. A stock of around 1,000,000 metric tons during the harvest season, as happened in recent years (Table 7), reduced the scope for procurement to uphold the announced procurements price. As a result farmgate prices may fail sharply, as happened in 1987-88 (Table 3) as well as in last aman harvest season. In addition, the government also imports substantial amounts of grain during the harvest season to make the case worse (Table 7).

CONCLUSION

In Bangladesh, there are substantial degrees of variation in the inter-year and intra-year prices of agricultural prices, and these fluctuations are hindering agricultural growth.

Existing price stabilization programmes have not been very successful in increasing agricultural production. To make stabilisation programmes more effective, the following policy actions may be useful: (1) changing from a quantity targeted to a price targeted approach in Procurement Programme, (2) Improving the planning of import and public distribution.

These two policy changes, together can make as major contribution to reducing price instability bringing benefits to both producers and consumers of agricultural commodities in Bangladesh.

REFERENCES

1. UNDP: Agricultural Sector Review, Main Report, Dhaka, 1989.
2. Ahmed, M. : Bangladesh Agriculture: Towards Self Sufficiency, Published with Support from Winrock International, Dhaka, 1988.
3. Ahmed, R. and A. Berard: Rice Price Fluctuation and an Approach to Price Stabilization in Bangladesh, Report 72, IFPRI, Washigton D.C., 1989.
4. Dey, M.M.: Modern Rice Technology and Rice Policy in Bangladesh, Unpublished Ph. D. Dissertation, Submitted to UPLB, Philippines, 1988.

5. FAO: Agricultural Price Policies: Issues and Proposals, Rome, 1987.
6. Planning Commission: The Third Five Year Plan, 1985-90, Ministry of Planning, Government of Bangladesh, Dhaka, 1985.
7. Kahlon A.S.: Integrated Structure of Wheat Production, Marketing and Price Policy, 1985.
8. Kahlon A.S.: A Study on Implementation of Agriculture Price Policy: Factors Responsible for Success and Failure in Bangladesh, Conducted for FAO, 1988.
9. Kanbur S.M. Ravi: How to Analyze Commodity Price Stabilization? A Review Article, Oxford Economic Papers, Vol. 36, 1989.
10. Maziruddin K.: Markets and Marketing Policies in Accelerating Agricultural Growth, ASR BGD 187/023, Dhaka, July, 1988.
11. Newbery D.M.G. and J.E. Stiglitz: The Theory of Commodity Price Stabilization: A Study in the Economics of Risk, The Clarendon Press, New York, 1981.
12. Pindyck R.S. and D.L. Rubinfeld: Economic Models and Econometric Forecasts, Second Edition, McGraw-Hill, Inc.,1981.
13. Rahman, S.H.: Evaluation of Jute Policies and Jute Pricing Model for Bangladesh, Research Monograph No. 3, BIDS, 1984.
14. Rashid, H.: Land Use in Bangladesh: Selected Topics, Working Paper for ASR, Dhaka, Bangladesh, 1988.
15. Shahabuddin K.: Peasant Behaviour Under Uncertainty, Dhaka, 1984.
16. Timmer C.P.: Food Price Stability and Welfare of the Poor, A Public Lecture Paper held at Bangladesh Agricultural Output, UNDP Sponsored ASR, Dhaka, 1989.
17. World Bank: Bangladesh: Recent Economic Developments and Short Term Prospects, Washigton D.C., 1989.
18. Zohir, S: Impact of Low Export Prices of Jute, at Farm Level in Bangladesh, ESCAP Country Report on the Impact of Low Agricultural Export Prices at Farm Level, Bangladesh Institute of Development Studies, Dhaka, 1989.

APPENDIX-I
ESTIMATION OF SEASONALITY INDEX

The procedure used in this study is based on Pindyck and Rubinfeld (1981). First, a 12-month moving average was completed:

$$P_t = 1/12\ (P_{t+6} + \ldots + P_t\ P_{t-1} + \ldots + P_{t-5}$$

Then we divided the original data by the moving average

$$Z_t = \frac{P_t}{P_t} X\ 100$$

The next step was to average the values of Z corresponding to the same month. In other words, suppose that Z_1 corresponds to January, Z_2 for February, etc., and that there were 48-month data. We thus computed-

$$Z_1 = 1/4(Z_1 + Z_{13} + Z_{25} + Z_{37})$$

$$Z_2 = 1/4\ (Z_2 + Z_{14} + Z_{26} + Z_{38})$$

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$$Z_{12} = 1/4(Z_{12} + Z_{24} + Z_{36} + Z_{48})$$

Finally, seasonal indices were computed by multiplying the averages $Z_1, Z_2, \ldots\ldots\ldots, Z_{12}$ by a factor that brought their sum to 1200 (For Example, if $Z_1, Z_2, \ldots\ldots\ldots\ldots Z_{12}$ added to 1170, we multiplied each one by 1200/1170, so that the indices added to 1200.

Bangladesh Journal of Political Economy Vol. 10 No. 3

বাংলাদেশের কৃষি ও পঞ্চবার্ষিক পরিকল্পনাসমূহ

মোঃ মাহফুজুর রহমান*

১. পটভূমি

দক্ষিণ পূর্ব এশিয়ার সবচেয়ে দরিদ্র অঞ্চলের একটি দেশের উন্নয়ন বৈষম্যজনিত কারণে আজ থেকে উনিশ বছর আগে আমরা মুক্তির প্রত্যয়ে বাংলাদেশের পত্তন করেছি। এ প্রসংঙ্গে আমরা যদি একটু পেছনে ফিরে তাকাই এবং অতীতের কথা মনে করি তাহলে বলতে হয় যে, রাজা–বাদশাদের আমলে অর্থনৈতিক উন্নয়ন বা কৃষি উন্নয়নের তেমন কোন কর্মসূচী ছিল না। আর এর জন্য তেমন কোন পরিকল্পনা কমিশনও ছিল না। বৃটিশ শাসনামলে এদেশের কৃষি উন্নয়ন তথা অর্থনৈতিক উন্নয়ন হোক তা শাষকগোষ্ঠী শোষনের স্বার্থেই চায়নি। দেশ বিভাগোত্তর সময় থেকে ১৯৭০ সাল পর্যন্ত তদানিন্তন পাকিস্তান সরকার কৃষি উন্নয়নের কথা বলেছে তবে তা অনেকাংশেই কাগজে কলমে সীমিত ছিল। কিন্তু উনিশ বছর আগে আমরা যে স্বাধীনতা পেয়েছি, সেই স্বাধীনতায় অর্থনৈতিক বিকাশ সাধন কতটুকু হয়েছে তার মূল্যায়ন হওয়া দরকার।

যুদ্ধ বিধ্বস্ত অর্থনৈতিক কাঠামোকে বিন্যাস, পুনর্বিন্যাস করে নিয়ে জাতি উন্নয়ন কার্যক্রম অব্যাহত রেখেছে। নানা প্রতিকূলতার মধ্য দিয়ে অতিক্রান্ত হয়েছে আমাদের স্বাধীনতার পরবর্তী উনিশটি বছর। একথা যেমনি সত্য তেমনি উক্ত সময়ে বৈদেশিক সাহায্য ও ঋণ বাবাদ প্রায় ২০ বিলিয়ন ডলার এসেছে। এই টাকা দিয়ে দেশের অর্থনীতির একটি শক্তিশালী অবকাঠামো গড়ে উঠতে পারতো, কিন্তু কার্যতঃ তা হয়নি যার জন্য এখনও আমাদের মাথাপিছু আয় রয়ে গেছে ১৬০ ডলার, যা নাকি দক্ষিণ–পূর্ব এশিয়ার এই দরিদ্র অঞ্চলেও সর্বনিম্ন।

একটা স্বাধীন দেশে অর্থনৈতিক উন্নয়ন সাধন করা জাতীয় দায়িত্ব এবং এর সংগে সম্পর্কিত হচ্ছে সেদেশের সরকার তথা রাজনীতিবিদ, পরিকল্পনাবিদ এবং অন্যান্য উন্নয়ন কর্মকর্তাগণ। সকলের কর্মপ্রচেষ্টা ও নিষ্ঠার মাধ্যমে প্রতিষ্ঠিত হবে একটি সুপরিকল্পিত, সুষম এবং বৈষম্যহীন অর্থনীতি। এই নিবন্ধে তৃতীয় পঞ্চবার্ষিক পরিকল্পনা কাল পর্যন্ত বাংলাদেশের অর্থনৈতিক উন্নয়ন তথা কৃষির উন্নয়ন ও প্রস্তাবিত চতুর্থ পঞ্চবার্ষিক পরিকল্পনার কতিপয় প্রধান দিকের প্রতি আলোকপাত করা হয়েছে। প্রথম অংশে এদেশের কৃষি ও অর্থনৈতিক উন্নয়নের একটি স্ন্যাপ শট (Snap shot) তুলে ধরা হয়েছে। দ্বিতীয় অংশে রয়েছে বিভিন্ন সরকার কর্তৃক গৃহীত তিনটি পাঁচশালা পরিকল্পনার একটি সংক্ষিপ্ত বিবরণী। তাছাড়া রয়েছে চতুর্থ পঞ্চবার্ষিক পরিকল্পনার বৈশিষ্ট্যসমূহ, বিশেষ করে সার্বিক উন্নয়নের লক্ষ্যমাত্রা।

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শেষাংশে উপস্থাপিত তথ্যের আলোকে অনুসরণীয় নীতি প্রণয়ন ও বাস্তবায়নে কতিপয় সুপারিশের প্রতি সরকার সংশ্লিষ্ট পরিকল্পনাবিদ ও সিদ্ধান্ত গ্রহণকারীদের দৃষ্টি আকর্ষণ করা হয়েছে।

২. *কৃষি ও অর্থনৈতিক উন্নয়ন*

১৯৪৭ সালে দেশ বিভাগোত্তর সময়ের পরিসংখ্যানে দেখা গেছে, এ দেশের অর্থনীতিতে কৃষির অবদান ছিল বেশী এবং শিল্প ছিল নগণ্য একটি খাত (Sector)। ১৯৪৯–৫০ সালে মোট জাতীয় উৎপাদনে উক্ত খাত দুটোর অবদান ছিল যথাক্রমে ৬৫.৪ এবং ৩.০০ শতাংশ [১]। ক্রমান্বয়ে কৃষির অবদান কমতে থাকে এবং ১৯৫৯–৬০ ও ১৯৭৯–৮০ সালে কৃষির অবদান ছিল যথাক্রমে ৬০.৪ এবং ৫০.৯ শতাংশ। অন্যদিকে শিল্প খাতের অবদান বেড়ে গিয়ে দাড়ায় ৬.৩ এবং ৭.৮ শতাংশে যথাক্রমে ১৯৫৯–৬০ এবং ১৯৭৯–৮০ সালে। শিল্প উন্নয়নকে গুরুত্ব দিতে গিয়ে কৃষিতে বিনিয়োগ কমেছে সরকারী ও ব্যক্তি পর্যায়েও। তাছাড়া প্রযুক্তির স্বল্পতা, উৎপাদন উপরকণের কমতি এবং সময়মত সরবরাহ না হওয়া এদেশের কৃষিকে পুঁজিহীনতায় রেখেছে।

বাংলাদেশের অর্থনীতি মূলতঃ কৃষি নির্ভর। যদিও ১৯৪৭ সালের পর অর্থনৈতিক উন্নয়নের জন্য শিল্পোন্নয়নকে বেছে নেয়া হয়েছিল। কৌশল হিসেবে বৈশিষ্ট্য ছিল আমদানীকে কমানোর উপর গুরুত্ব বেশী, রপ্তানীকে বাড়ানোর জন্য না [২]। এতে করে কৃষি উন্নযন পিছিয়ে গেছে, কেননা কৃষিতে অর্থের যোগান মারাত্মকভাবে ব্যহত হয়েছে। যদিও ষাট ও সত্তরের দশকের শিল্পোন্নয়ন বৈদেশিক সাহায্যপুষ্ট ছিল। কিন্ত একথা স্বীকার করতে হবে যে, কৌশলগত দিক থেকে কৃষি ও শিল্প সম্পৃক্ত উন্নয়ন গ্রহণ করাই হতো সঠিক সিদ্ধান্ত।

উন্নয়নের প্রাথমিক পর্য্যায়ে প্রায় সকল দেশই বিদেশ থেকে কিছু না কিছু সাহায্য গ্রহণ করে। উদাহরণস্বরূপ বলা যায় যে, মার্কিন যুক্তরাষ্ট্র উনবিংশ শতাব্দীতে ইংল্যান্ড ও অন্যান্য ইউরোপীয় দেশ থেকে মূলধন সংগ্রহ করেছে এবং বিংশ শতাব্দীতে চীন অল্প পরিমানে হলেও রাশিয়া থেকে সাহায্য লাভ করেছে।

পৃথিবীর দু'টি বা তিনটি দরিদ্র দেশের নাম করলেই বাংলাদেশের নাম করতে হয়। অনেক কিছুর জন্যই আমরা বিদেশের উপর নির্ভরশীর। বর্তমানে বাংলাদেশের বার্ষিক উন্নয়ন ব্যয়ের ৭৫ ভাগ থেকে ৮০ ভাগ বিদেশী সাহায্যের উপর নির্ভরশীল। পৌনে দুই শত কোটি ডলারেরও বেশী বৈদেশিক ঋণ হাতে পেয়েও চলতি বছর বৈদেশক লেনদেনে ঘাটতি দাড়াবে ২ কোটি ডলার। রাজস্ব আয় লক্ষ্য মাত্রার চেয়ে ১৫ শতাংশ কম হওয়ায় এবং আভ্যন্তরীণ সম্পদের অভাবে উন্নয়ন কর্মসূচীর শতকরা ১০০ ভাগ বিদেশী সাহায্য দিয়ে বাস্তবায়নের পদক্ষেপ নেয়া হচ্ছে।

উন্নয়নশীল বিশ্বে এমন দেশ কমই আছে যেখানে জনসংখ্যা ও খাদ্য–এ দুয়ের মধ্যে ভারসাম্য রক্ষা করার প্রশ্নটি বাংলাদেশের চেয়ে বেশী গুরুত্বপূর্ণ। বাংলাদেশে ৮.৯ মিলিয়ন

হেক্টর আবাদযোগ্য জমি থেকে প্রায় ১১০ মিলিয়ন মানুষকে খাওয়াতে হয়। গত ২৬ বৎসরে বাংলাদেশে জন সংখ্যা বৃদ্ধি পেয়ে প্রায় দ্বিগুণ হয়েছে এবং আগামী ২০০০ সাল নাগাদ এটি প্রায় ১৫০ মিলিয়ন জনসংখ্যার দেশে পরিণত হবে। দ্রুত জনসংখ্যা বৃদ্ধির ফলে মাথাপিছু জমির পরিমাণ হ্রাস পাচ্ছে এবং মাথাপিছু খাদ্যোৎপাদন বৃদ্ধির হার ঋণাত্মক পর্যায়ে নেমে গেছে। খাদ্যোৎপাদন ও চাহিদার বিরাট ব্যবধান মিটানোর জন্য আমদানীর সাহায্যে বা খাদ্য সাহায্য গ্রহণের মাধ্যমে পরিপূরণ হয়ে আসছে। আর তাই প্রয়োজনের চেয়ে মাথাপিছু কম খাদ্যবস্তু ও পুষ্টি ব্যাপক জনগোষ্টিকে দরিদ্র ও ক্ষুধার দিকে ঠেলে দিচ্ছে।

উৎপাদনের প্রধান ক্ষেত্র কৃষি এবং কৃষিতে সর্বাধিক গুরুত্বারোপ করা হয়েছে খাদ্যোৎপাদনে। খাদ্যোৎপাদনের মধ্যে সর্বাধিক গুরুত্ব দেয়া হয়েছে চাল ও গম উৎপাদনে। শস্য উৎপাদনকে যেভাবে গুরুত্বারোপ করা হয়েছে শাকসব্জি, গরু–ছাগল, হাঁস–মুরগী, মাছ উৎপাদনে সেভাবে গুরুত্ব দেয়া হয়নি। যার ফলে আমিষ বা পুষ্টির উৎপাদনে সাংঘাতিকভাবে ঘাট্তি লক্ষ্যনীয়। কৃষি উৎপাদনে শস্য এবং অন্যান্য প্রয়োজনীয় দ্রব্যাদির (যেমনঃ ডাল, সরিষা, পেঁয়াজ, রসুন, আদা, হলুদ, ইত্যাদি) পরিকল্পিত ও সুষম উৎপাদন ব্যবস্থা না থাকায় বিশাল অংকের আমদানী ব্যয় হচ্ছে। এই আমদানীর জন্য যে ব্যয় হয় তা রপ্তানী আয়ে কুলোয় না। তাই প্রয়োজনীয় আমদানীর জন্য সাহায্য এবং ঋণের দ্বারস্থ হতে হয়।

৩. *অর্থনৈতিক উন্নয়ন ও বিভিন্ন পরিকল্পনাসমূহ*

একটি দেশের অর্থনৈতিক উন্নয়নের মূল লক্ষ্য হবে সাধারণ মানুষ। তৃতীয় বিশ্বে দারিদ্র নিরসনই সামাজিক উন্নয়ন প্রক্রিয়ার মূল সমস্যা। দারিদ্রের অনেকটাই মানুষ ও তার সমাজের সৃষ্টি। এসব দেশে উৎপাদনের উপকরণ ও সম্পদ আহরণের জন্য যে সামাজিক কাঠামো পরিবর্তনের কেবলমাত্র যে অর্থ বিনিয়োগের প্রশ্ন জড়িত তা নয়, এ প্রক্রিয়ায় রাজনৈতিক কর্মকান্ডও দায়ী। অর্থনৈতিক উন্নয়ন সাধন করা জাতীয় দায়িত্ব। তাই জাতির জন্য দরকার একটি সামগ্রিক অর্থনৈতিক পরিকল্পনা। ইতিমধ্যে বিভিন্ন সরকারের আমলে গৃহীত হয়েছে দুটি পাঁচশালা পরিকল্পনা, একটি দ্বি–বার্ষিক পরিকল্পনা এবং অন্যটি তৃতীয় পঞ্চবার্ষিক পরিকল্পনা, যার সময়সীমা প্রায় শেষ হতে যাচ্ছে।

স্বাধীনতার অব্যবহিত পর পুনর্গঠিত ও পুনর্বাসন কর্মসূচী সম্পূর্ণ হওয়ার সাথে সাথে প্রথম পাঁচশালা (১৯৭৩–৭৮) পরিকল্পনা হাতে নেয়া হয়। ১৯৭৩–৭৪ সনের বার্ষিক উন্নয়ন পরিকল্পনাটিও উক্ত পাঁচশালা পরিকল্পনার অন্তর্ভুক্ত করা হয়। শোষণহীন সমাজ ব্যবস্থা প্রতিষ্ঠা, বড় ও মাঝারি ধরণের শিল্প জাতীয়করণ কর্মসূচী এই পরিকল্পনাটিকে আদর্শগত দিক থেকে সাধারণভাবে দৃষ্ট উন্নয়ন পরিকল্পনাগুলো থেকে কিছুটা স্বাতন্ত্র দান করেছে। গোড়াতে এই পরিকল্পনার জন্য যে রাজনৈতিক সমর্থন ছিল তা ধীরে ধীরে হ্রাস পায় এবং চিরাচরিত পথ ধরেই অগ্রসর হতে থাকে। আন্তর্জাতিক সম্পর্ক, বিশ্বব্যাপী মুদ্রাস্ফীতি, ১৯৭৪ সালের বন্যার ফলে সৃষ্ট দুর্ভিক্ষ এই পরিকল্পনার অগ্রযাত্রাকে ব্যাহত করে। উক্ত পাঁচশালা পরিকল্পনার লক্ষ্য এবং উদ্দেশ্যসমূহের মধ্যে কৃষি ও শিল্পখাতে উৎপাদনের পরিমাণ

১৯৭৩–৭৪ সালের মধ্যে শতকরা ৫.৫ হারে বৃদ্ধি করে ১৯৬৯–৭০ সনের পর্য্যায়ে নিয়ে আসা, জনসংখ্যা প্রবৃদ্ধির হার ৩.০ শতাংশ থেকে ২.৮ শতাংশে নিয়ে আসা, ৪১ লক্ষ নতুন কর্মসংস্থানের ব্যবস্থা সহ মাথাপিছু আয় বার্ষিক শতকরা ২.৫ হারে বৃদ্ধি করা। শিল্পে পুঁজি বিনিয়োগের অনেক সুযোগ–সুবিধে থাকা সত্বেও শিল্পে আশানুরূপ উন্নয়ন ঘটেনি। কৃষি উৎপাদনে বার্ষিক গড়ে ৪.৬ শতাংশ বৃদ্ধির লক্ষ্য মাত্রার স্থলে বাস্তবে অর্জিত হয় ৩.৭ শতাংশ। প্রথম পাঁচশালা পরিকল্পনা বিভিন্ন আর্থ–সামাজিক অসুবিধার জন্য উহার ঈপ্সিত লক্ষ্য অর্জনে সক্ষম হয়নি।

প্রথম পঞ্চবার্ষিক পরিকল্পনা সমাপ্তির পর একটি পাঁচশালা পরিকল্পনার বদলে একটি অন্তবর্তীকালিন দ্বি–বার্ষিক পরিকল্পনা (১৯৭৮–৮০) পরীক্ষামূলকভাবে হাতে নেয়া হয়। প্রথম পাঁচশালা পরিকল্পনার ন্যায় দ্বি–বার্ষিক পরিকল্পনাতেও অনেক উচ্চভিলাষী উদ্দেশ্য ও লক্ষ্য ছিল যার ফলে ইহা তেমন কোন সুফল বয়ে আনতে পারেনি। বার্ষিক প্রবৃদ্ধির হার শতকরা ৫.৬ হারে লক্ষ্যমাত্রা থাকলেও বাস্তবে প্রথম বছরে অর্জিত হয় ৪.০ শতাংশ হারে। দ্বিতীয় বছরে অর্জিত হয় মাত্র ৩.৫ শতাংশ হারে।

দ্বি–বার্ষিক পরিকল্পনার অভিজ্ঞতার পরিপ্রেক্ষিতে দ্বিতীয় পঞ্চবার্ষিক পরিকল্পনা প্রণয়ন করা হয়। আভ্যন্তরীন সম্পদ বৃদ্ধির হার আশানুরূপ না হওয়ায় এবং বৈদেশিক সাহায্যের পরিমাণ হ্রাস পাওয়ায় মূল পরিকল্পনার আর্থিক ব্যয় বরাদ্দ শতকরা ৩৩ ভাগ কমিয়ে সংশোধিত দ্বিতীয় পঞ্চবার্ষিক পরিকল্পনা চূড়ান্ত করা হয়।

প্রথম পঞ্চবার্ষিক পরিকল্পনার উদ্দেশ্য এবং লক্ষ্যসমূহের মতই দ্বিতীয় পঞ্চবার্ষিক পরিকল্পনার উদ্দেশ্য এবং লক্ষ্য স্থীর করা হয়, তবে নতুন যেসব বিষয়গুলোর উপর গুরুত্বারোপ করা হয় তা হলো গ্রামীণ জীবনযাত্রা মানোন্নয়নের জন্য স্থানীয় সংস্থাসমূহের মাধ্যমে উন্নয়ন কার্যক্রমে জনগণের অংশগ্রহণ নিশ্চিতকরণ, নিরক্ষরতা দূরীকরণ, স্বল্পতম সময়ে খাদ্যোৎপাদন বৃদ্ধি করার লক্ষ্যে সেচ ব্যবস্থার উপর বিশেষভাবে গুরুত্বারোপ করা। দ্বিতীয় পঞ্চবার্ষিক পরিকল্পনায় যদিও আমাদের সমাজের বিভিন্ন সমস্যাদি অত্যন্ত সুন্দর ও সঠিকভাবে চিহ্নিত করা হয় এবং সমাধানের জন্য সুদৃঢ় প্রসারী পদক্ষেপের প্রয়োজনীয়তার কথা বলা হয় তবুও উচ্চ লক্ষ্যমাত্রা ও উচ্চাকাঙ্খা সম্বলিত এই পরিকল্পনার লক্ষ্যমাত্রা অর্জিত হয়নি।

১৯৮৫ সনের জুলাই মাস থেকে তৃতীয় পঞ্চবার্ষিক পরিকল্পনার (১৯৮৫–১৯৯০) কার্যকাল শুরু হয়। সাধারণভাবে, উক্ত পরিকল্পনার লক্ষ্য ছিল দারিদ্র মোচন, মৌলিক চাহিদা পূরণের জন্য প্রয়োজনীয় দ্রব্য সামগ্রীর সরবরাহ বৃদ্ধি, উৎপাদনশীল খাতে কর্মসংস্থানের সুযোগ সৃষ্টি এবং মানব সম্পদের উন্নয়ন। জনসংখ্যা নিয়ন্ত্রণ, মানব সম্পদ উন্নয়ন এবং প্রযুক্তিগত উন্নয়নের মাধ্যমে জমি ও শ্রমিকের উৎপাদনশীলতা বাড়ানোর উপর গুরুত্বারোপ করা হয়। তৃতীয় পঞ্চবার্ষিক পরিকল্পনাটিও পূর্বেকার তিন তিনটি উন্নয়ন পরিকল্পনার ন্যায় একই ধাচে গড়া। গতানুগতিকতার গন্ডী অতিক্রম করতে না পারার জন্য অনেকেই তৃতীয় পঞ্চবার্ষিক

পরিকল্পনাটিকে অতীতের মতই বৈদেশিক সাহায্যনির্ভর আমলাতান্ত্রিক এবং জোড়াতালি দেওয়া দায়সাড়া গোছের একটি দলিল বলে মনে করেন। দারিদ্র বিমোচনসহ বেকরাত্ব, পুষ্টিহীনতা, নিরক্ষতা দূরীকরণই ছিল অতীতের সব পরিকল্পনার মূল উদ্দেশ্য। কিন্তু বাস্তবে এসব সমস্যার সমাধান হয়নি বরং বছরের পর বছর দারিদ্র সীমার নীচের জনগোষ্ঠীর সংখ্যা বৃদ্ধি পাচ্ছে। অতীতে উন্নয়ন পরিকল্পনাসমূহের ব্যর্থতার প্রেক্ষাপটে তৃতীয় পঞ্চবার্ষিক পরিকল্পনার লক্ষ্য ও উদ্দেশসমূহ পুরোপুরি অর্জিত হয়নি, তা নিম্নে একটি উদাহরণ থেকেই বুঝা যায়। পরিকল্পনার লক্ষ্যমাত্রা অর্জন এবং বিরাজমান উদ্ভূত অবস্থাকে মোকাবেলার জন্য গৃহীত হয় এডিপি এবং রাজস্ব বাজেট। ১৯৮৫–৯০ পর্যন্ত তৃতীয় পাঁচশালা পরিকল্পনার মেয়াদকালে বার্ষিক উন্নয়ন কর্মসূচীতে চব্বিশ ভাগ সম্পদ অভ্যন্তরীন রাজস্ব থেকে সংস্থানের কথা থাকলেও বাস্তবে এর পরিমাণ ছিল আট শতাংশ। বৈদেশিক নির্ভরতা ৭৬ শতাংশের স্থলে ৯১ শতাংশে দাড়িয়েছে গত পাঁচ বছরে। আর তাই আগামী ১৯৯০–৯১ অর্থ বছরের মোট বাজেটের শতকরা ৯১ ভাগ বৈদেশিক সাহায্য নির্ভর উন্নয়ন কর্মসূচী প্রনয়নের সুপারিশ নিয়ে সাহায্যদাতার কনসোর্টিয়ামে দ্বারস্থ হয়েছে বাংলাদেশ।

৪। কৃষি ও চতুর্থ পঞ্চবার্ষিক পরিকল্পনা

আর মাত্র এক পক্ষকাল পরেই ১লা জুলাই ১৯৯০ থেকে চতুর্থ পঞ্চবার্ষিক পরিকল্পনা (১৯৯০–৯৫) আরম্ভ হবে। চতুর্থ পঞ্চবার্ষিক পরিকল্পনার বিশেষ বৈশিষ্ট্যসমূহ নিম্নরূপ হবে বলে সিদ্ধান্ত নেয়া হয়েছেঃ

(১) চতুর্থ পঞ্চবার্ষিক পরিকল্পনা (১৯৯০–৯৫) একটি বিশ বৎসর দীর্ঘমেয়াদী প্রেক্ষিত পরিকল্পনা (১৯৯০–২০১০) অংশ হিসেবে পরিগণিত হবে।

(২) প্রেক্ষিত পরিকল্পনার প্রধান লক্ষ্য হিসেবে (ক) জাতীয় আয় বৃদ্ধি ও (খ) ক্রমবর্ধমান আত্মনির্ভরতাকে বেছে নেয়া হয়েছে এবং (গ) এই দুটো লক্ষ্য বাস্তবায়নের জন্য দ্রুত মানব সম্পদ উন্নয়ন ও কর্ম সংস্থান বৃদ্ধি কার্যক্রমকে লক্ষ্য এবং কলাকৌশল উভয়ভাবেই চিহ্নিত করা হয়েছে।

(৩) উপরোক্ত দিক নির্দেশনার পরিপ্রেক্ষিতে জাতীয় আয় বৃদ্ধি, কর্মসংস্থান বৃদ্ধির মাধ্যমে দারিদ্র দূরীকরণ ও ক্রমবর্ধমান আত্মনির্ভরতাকে চতুর্থ পঞ্চবার্ষিক পরিকল্পনার প্রধান লক্ষ্য হিসেবে চিহ্নিত করা হয়েছে। প্রেক্ষিত পরিকল্পনার কাঠামোর মধ্যে এসব লক্ষ্য অর্জনের জন্য চতুর্থ পঞ্চবার্ষিক পরিকল্পনার একটি অন্যতম লক্ষ্য হিসেবে "খাতভিত্তিক" (কৃষি, শিল্প প্রভৃতি) প্রকল্প প্রণয়ন পদ্ধতির সাথে "সামাজিক গোষ্ঠী" ভিত্তিক পরিকল্পনা ও প্রকল্প প্রণয়ন পদ্ধতি গ্রহণ করা হবে। এতে বলা হয়েছে যে, প্রচলিত খাতভিত্তিক পরিকল্পনায় দেশের জনগণ বিভিন্নখাতে বিছিন্নভাবে ছড়িয়ে থাকে। সাধারণত সেখানে তাদেরকে গোষ্ঠীগতভাবে চিহ্নিত করা যায় না। গোষ্ঠীভিত্তিক পরিকল্পনায় দরিদ্র জনসাধরণকে সামাজিক গোষ্ঠী হিসেবে চিহ্নিত করা হয় ও তাদেরকে পরিকল্পনার পরিধি থেকে পরিকল্পনার কেন্দ্রবিন্দুতে আনার চেষ্টা করা হয়। খাতা ভিত্তিক পরিকল্পনার সাথে

গোষ্ঠীভিত্তিক পরিকল্পনা সম্পৃক্ত করলে দারিদ্র বিমোচন ও একই সংগে দ্রুত অর্থনৈতিক প্রবৃদ্ধি অর্জনের সম্ভাবনা বেশী থাকে।

উপরোক্ত উদ্দেশ্যকে সামনে রেখে বাংলাদেশের জনগণকে দশটি আর্থ–সামাজিক গোষ্ঠীতে ভাগ করা হয়েছে। এই গোষ্ঠীগুলো হচ্ছেঃ (১) ভূমিহীন কৃষি শ্রমিক, (২) ক্ষুদ্র কৃষক (০.০–১.৫ একর জমি), (৩) মধ্যম কৃষক–মালিক প্রজা (১.৫–৫.০ একর), (৪) মধ্যম কৃষক–মালিক কৃষক (১.৫–৫.০ একর), (৫) বৃহৎ কৃষক (৫.০–১০.০ একর), (৬) অত্যন্ত বৃহৎ কৃষক (১০ একরের উপর), (৭) গ্রামীণ ইনফরমাল (অকৃষি কাজে নিয়োজিত পরিবার যাদের অধিকাংশ গরীব), (৮) গ্রামীণ ফরমাল (অকৃষি কাজে নিয়োজিত পরিবার যাদের অধিকাংশ ধনী), (৯) শহুরে ইনফরমাল (অকৃষি কাজে নিয়োজিত পরিবার যাদের অধিকাংশ গরীব), (১০) শহুরে ফরমাল (অকৃষি কাজে নিয়োজিত পরিবার যাদের অধিকাংশ ধনী)।

পরিকল্পনার খসড়া প্রস্তাবে দরিদ্র ও পশ্চাৎপদ গোষ্ঠীগুলোর উন্নয়ন সাহায্যের উপর গুরুত্বারোপ করা হয়েছে। তাই গোষ্ঠীভিত্তিক পরিকল্পনা বাস্তবায়নের জন্য সমষ্টিগত পরিকল্পনার (Macro Planning) সঙ্গে বিকেন্দ্রীকৃত অংশগ্রহণমূলক ব্যাষ্টিক পরিকল্পনাকে সম্পৃক্ত করার প্রয়োজনীয়তার উপর জোর দেয়া হয়েছে। এজন্য উপযুক্ত প্রাতিষ্ঠানিক কাঠামোর মাধ্যমে দরিদ্র ও পশ্চাৎপদ জনগোষ্ঠী যাতে নিজেরাই উন্নয়নের জন্য প্রকল্প তৈরী করতে পারে তার ইঙ্গিত দেয়া হয়েছে।

চতুর্থ পঞ্চবার্ষিক পরিকল্পনার প্রধান প্রধান খাত ও বরাদ্দের পরিমাণ হচ্ছে কৃষি, পানি, বন, মৎস্য, পশুপালন, ও পল্লী উন্নয়নখাতে ১৭,৭৫৩ কোটি টাকা, শিল্প খাতে ৮,৫৪০ কোটি টাকা, বিদ্যুৎ খাতে ৮,৩৮০ কোটি টাকা, স্বাস্থ্য খাতে ১,২৪৮ কোটি টাকা, যোগাযোগ খাতে ৭,৭৪০ কোটি টাকা এবং শিক্ষা ও ধর্মখাতে ৩,২৮৯ কোটি টাকা ব্যয় প্রস্তাব করা হয়েছে।

জানা গেছে যে, কৃষি ও শিল্পের আন্তঃ খাতে অর্থ যোগানে সামঞ্জস্য ও প্রবৃদ্ধির পারস্পারিক নির্ভরশীলতাকে চতুর্থ পঞ্চবার্ষিক পরিকল্পনার সাফল্যের অন্যতম পূর্বশর্ত হিসেবে মনে করা হয়েছে। তাছাড়া কৃষি ও শিল্পের উন্নয়ন সম্পূরক করতে হলে ভৌত অবকাঠামো উন্নয়ন (যেমনঃ যাতায়াত ব্যবস্থা , সেচ, জলনিষ্কাশন ও বিদ্যুৎ প্রভৃতি খাতে এদের চাহিদা ও যোগানের মধ্যে ভারসাম্য বজায় থাকে) এবং সংগে সংগে সামাজিক অবকাঠামোরও (যেমনঃ শিক্ষা, স্বাস্থ্য, প্রযুক্তি, ইত্যাদি) যে উন্নতি দরকার তা বিবেচনা করা হয়েছে এই পরিকল্পনায়।

চতুর্থ পঞ্চবার্ষিক পরিকল্পনায় পুঁজি, শ্রম ও অবশিষ্ট (Residual) দক্ষতা অন্যূন্ন শতকরা ২৫ ভাগ বাড়ানোর প্রস্তাব করা হয়েছে। অবশিষ্ট উপাদানের যে মূল উপকরণগুলোর কথা বলা হয়েছে তা হলো প্রযুক্তিগত উন্নয়ন, লাগসই ও উন্নত প্রযুক্তি ব্যবহার, মানব সম্পদ উন্নয়ন, প্রশাসনিক ও ব্যবস্থাপনায় দক্ষতা, আন্তঃখাত লিংকেজ এফেক্ট, আভ্যন্তরিক ও বহিঃস্থ ব্যয়

সাশ্রয়, বৈদেশিক বাজারের প্রসার ইত্যাদি। বিভিন্ন খাতের পারস্পরিক সম্পর্কের ভিত্তিতে ব্যয় সাশ্রয়, বৈদেশিক বাজারের প্রসার ইত্যাদি। বিভিন্ন খাতের পারস্পারিক সম্পর্কের ভিত্তিতে খাতওয়ারী প্রবৃদ্ধির হার প্রাথমিক প্রাক্কলন সারণী ৩–এ দেখানো হয়েছে।

পরিকল্পনা কমিশনে ১৯৮১–৮২ সালের উপাত্তের ভিত্তিতে একটি নতুন উপাদান উৎপাদন ছক (Input-Output Table) প্রস্তুত করা হয়েছে এবং তা ১৯৮৬–৮৭ বছরের মূল্যমানে উন্নীত করা হয়েছে। এছাড়া দেশে কি ধরণের কর্মসংস্থান হবে সে সম্পর্কে আরও তথ্য পাওয়ার জন্য এই ছককে দক্ষ, অদক্ষ ও অল্প দক্ষ শ্রমিকের বিভাজন দিয়ে সম্প্রসারণ করা হয়েছে। আন্তঃখাত সম্পৃক্ততা ও ভারসাম্য নিরূপনের জন্য বিভিন্ন মন্ত্রণালয় এই উপাদান উৎপাদন ছক ব্যবহার করতে পারে। অধিকন্ত চতুর্থ পরিকল্পনার বিভিন্ন খাতের বিনিয়োগ বরাদ্ধ বিশেষ করে অনগ্রসর গোষ্ঠীসমূহকে কতটা উপকার করবে এবং সম্পদ ব্যবহার কতটা দক্ষ হবে তা দেখার জন্য পরিকল্পনা কমিশনে "প্রায়োগিক জেনারেল ইকুইলিব্রিয়াম মডেল" ব্যবহার করা হবে। পরিকল্পনা প্রণয়নে সঠিক ও প্রয়োজনীয় তথ্য ও উপাত্তের জন্য বাংলাদেশ পরিসংখ্যান ব্যুরোর কার্যক্রমকে পরিবর্ধিত করার প্রস্তাব করা হয়েছে। চতুর্থ পঞ্চবার্ষিক পরিকল্পনার দিক–নির্দেশনায় বর্ণিত সব কার্যক্রম এই পরিকল্পনাকালেই পরিপূর্ণভাবে কার্যকরী করা যাবে না। অনেক ক্ষেত্রেই এসব কর্মসূচী চতুর্থ পঞ্চবার্ষিক পরিকল্পনার সময়ে শুরু করে পরবর্তী পরিকল্পনাকালে জোরদার করতে হবে।

দেশের তিন তিনটি পঞ্চবার্ষিক পরিকল্পনা গতায়ু হয়েছে। কিন্তু কোন পরিকল্পনাতেই লক্ষ্যমাত্রা অর্জিত হয় নাই (সারণী ১)। এসব পরিকল্পনাসমূহের দিকে এক নজরে তাকালে দেখা যায় সরকারী খাতে বরাদ্দের শতকরা হার ক্রমাগতভাবে কমেছে, কিন্তু বেসরকারী খাতে বরাদ্দের শতকরা হার আশানুরূপ বৃদ্ধি পায়নি। অপরদিকে কৃষি খাতে বরাদ্দের শতকরা হার প্রথম পঞ্চবার্ষিক পরিকল্পনার চেয়ে দ্বিতীয় পঞ্চবার্ষিক পরিকল্পনায় শতকরা ১১ ভাগ বৃদ্ধি পেলেও দ্বিতীয় পঞ্চবার্ষিক পরিকল্পনার চেয়ে তৃতীয় ও চতুর্থ পঞ্চবার্ষিক পরিকল্পনায় যথাক্রমে শতকরা ৫.৩১ ভাগ এবং শতকরা ৭.৮৮ ভাগ হ্রাস পেয়েছে। যেহেতু তিন তিনটি পঞ্চবার্ষিক পরিকল্পনার সাফল্যের বাস্তবতা অত্যন্ত রুঢ় সেক্ষেত্রে চতুর্থ পঞ্চবার্ষিক পরিকল্পনা একটি প্রেক্ষিত পরিকল্পনা হিসেবে এর ব্যাপারে জাতীয় পরিকল্পনা বিশেষজ্ঞগণের বাস্তব ও দূরদৃষ্টিসম্পন্ন হওয়া বাঞ্ছনীয় ছিল। এখনো এই প্রেক্ষিত পরিকল্পনার পূর্ণ রূপরেখা খসড়া হিসেবেও সাধারণ্যে প্রকাশ করা হয়নি। তাই এই পরিকল্পনায় সমস্ত অনাগত সমস্যাদি সমাধানসহ বর্তমান গুরুত্বপূর্ণ সমস্যাগুলোর সমাধানের জন্য সঠিক দিক নির্দেশনা কতটুকু থাকবে তা এই মুহূর্তে বলা যাচ্ছে না।

৫.উপসংহার

বিশ্ব ব্যাংক আন্তর্জাতিক মুদ্রা তহবিল, জাতিসংঘের অন্যান্য শাখাসমূহ এবং বিভিন্ন দাতাদেশগুলো বাংলাদেশ সম্পর্কে উদ্বিগ্ন। বিশ্ব ব্যাংকের গত জুলাই '৮৯–এর রিপোর্ট অনুযায়ী দায়দেনার সর্বশেষ হিসেবে দেখা যায় বাংলাদেশ একত্রিশ হাজার তিনশত পঞ্চাশ কোটি

টাকার বৈদেশিক ঋণের বোঝা মাথায় নিয়ে ঘুরছে। বহিঃসম্পদ মন্ত্রণালয়ের এক সাম্প্রতিক পরিসংখ্যান থেকে জানা যায় যে, বিগত ১৬ই ডিসেম্বর ১৯৭১ থেকে ১৯৮৯ সনের নভেম্বর পর্যন্ত এই ১৭ বছরে ২৫ হাজার ৩শ ৪২ মিলিয়ন ডলার বৈদেশিক সাহায্যের আশ্বাস পায়। আর ঐ আলোচ্য সময়ে বাস্তব অর্থ সাহায্য লাভ হয় ১৯ হাজার ৫শ ৯২ মিলিয়ন মার্কিন ডলার, বাংলাদেশী মুদ্রার পরিমাণ ৬৬ হাজার ৬শ' কোটি টাকা। ৬৬ হাজার ৬শ' কোটি টাকা বৈদেশিক সাহায্য পাওয়ার পরও জিডিপি ও সঞ্চয়ের অনুপাত শতকরা মাত্র ১.১০ ভাগ, বিনিয়োগে জিডিপি'র অনুপাত শতকরা ১৫.৯০ ভাগ থেকে হ্রাস পেয়ে শতকরা ১১.২০ ভাগে দাড়িয়েছে, জিডিপি–তে কর–রাজস্বের অবদান সেই শতকরা ৯.৩০ ভাগে অপরিবর্তিত রয়েছে। গার্মেন্টস্ ও জনশক্তি রপ্তানি আয় বৃদ্ধি সত্বেও জিডিপিতে রপ্তানীর অবদান শতকরা ৬.১৩ ভাগ থেকে শতকরা ৬.০৯ ভাগে হ্রাস এবং কাঠামোগত পরিবর্তনে নীতিহীনতা আমাদের অর্থনীতিকে সর্বাধিক দুর্বলতায় চিহ্নিত করেছে। পাশাপাশি জানামতে, নির্মাণখাতে ১৯৮৩ সাল থেকে ১৯৮৬ সাল পর্যন্ত ব্যয় ২ হাজার ৩ শত ৫০ কোটি টাকা, সার্ভিস ও ইউটিলিটি খাতে হাজার হাজার কোটি টাকা ব্যয় হয়েছে, যেটাকে অর্থনীতিবিদগণ এবং দাতাসংস্থাসমূহ সম্পূর্ণ অনুৎপাদনশীল খাত বলে অভিহিত করছেন। অপরদিকে ১৯৭৬ থেকে ১৯৮৯ পর্যন্ত এই ১৩ বছরে জনসংখ্যা ৮ কোটি থেকে বেড়ে ১১ কোটিতে দাড়িয়েছে। অর্থাৎ এই সময়ে জনসংখ্যা বৃদ্ধির পরিমাণ ছিল ৩ কোটি বা শতকরা ৩৭ ভাগ। পক্ষান্তরে খাদ্যোৎপাদন বৃদ্ধি পায় মাত্র ৩৮ লাখ টন, শিল্প বিকাশ শুণ্যের কোটায় এবং নতুন প্রযুক্তি বিয়োগের খাতায় অর্থাৎ অর্থনীতিতে নেগেটিভ প্রবণতা পরিস্কারভাবে লক্ষ্যনীয়। ঠিক যে মুহূর্তে কনসোর্টিয়াম এবং জাপানী ও পশ্চিমা সাহায্য হ্রাস আমাদেরকে এক ঘনঘোর অন্ধকারে নিমজ্জিত করছে, এমনি এক সময়ে আমাদের সিদ্ধান্ত নিতে হবে দেশ ও জাতি ঋণের বদৌলতে বাঁচবে না কি শ্রমের ভিত্তিতে বাঁচবে। পাশাপাশি জাতীয় জীবনে চারিত্রিক উৎকর্ষতা সাধনেরও উদ্যোগ নিতে হবে এবং আমরা সেই সাহায্যের প্রত্যাশী যা আমাদেরকে আর সাহায্য ভিক্ষায় বাধ্য করবে না।

সমস্যার আঁতুড় গৃহে এদেশের জন্ম দিনে দিনে এসব সমস্যা বিরাটাকার বিভিন্নমুখী এবং নিয়ন্ত্রণের বাইরে চলে যাওয়ার উপক্রম হয়েছে। কেউ বলছেন ব্যাষ্টিক অর্থনৈতিক খাতের আশ্চর্যজনক অবনতি, কেউ বলছেন "Weak Coordination Among Key Economic Agencies"-এর কথা। আবার কেউ বলছেন "Inappropriate Economic Policies and Lack of Progress on Key-reforms"এর কথা। কেউ আবার "Weakening of Budgetary and External Payment Situation" এর ক্ষেত্রে গলদ ধরছেন। ক্ষমতাসীন দলের নেতৃবর্গ বলছেন দেশে কোন সমস্যাই নেই, যা কতিপয় অর্থনীতিবিদ পুরোদমে সমর্থন করে যাচ্ছেন। আমরা বলতে চাই, অর্থনৈতিক উন্নয়নে জগাখিচুরী পরীক্ষা–নিরীক্ষার অবসান হওয়া দরকার। উপরে উপস্থাপিত আলোচনার আলোকে, চতুর্থ পাঁচশালা পরিকল্পনাকে প্রেক্ষিত পরিকল্পনা হিসেবে আগামী ২০ বছরকে চূড়ান্ত সময় ধরে জাতিকে স্বনির্ভরতার পথে এগিয়ে নিতে কতিপয় সুপারিশমূলক

পরিকল্পনাবিদ অর্থনীতিবিদ, এবং নীতি–নির্ধারকদের বিবেচনার জন্য উল্লেখ করা হলো।

(১) সামগ্রিক অর্থনীতিতে কৃষি ও শিল্পের সঠিক গুরুত্ব বিশ্লেষণ ও পরিমাপ করে চূড়ান্ত পরিকল্পনা প্রণয়ন করতে হবে।

(২) অতীত অগ্রগতি ও পশ্চাৎপদতার কারণ পর্যালোচনা, লক্ষ্যসমূহ অর্জনে বিভিন্ন প্রতিবন্ধকতা চিহ্নিতকরণ, খাতওয়ারী উদ্দেশ্যসমূহ ও আন্তঃ খাতওয়ারী উদ্দেশ্যসমূহের ক্ষেত্রে পারস্পারিক সামঞ্জস্য নিশ্চিত করতে হবে (যেমন–ধান ও গমের উৎপাদন বৃদ্ধির সাথে সাথে রবিশস্য এবং অন্যান্য প্রাণীজ খাদ্যোৎপাদন বৃদ্ধির সুষম পরিকল্পনা করতে হবে)।

(৩) বিশেষ প্রয়োজন ব্যতীত অনুৎপাদনশীল খাতে ব্যয় বন্ধ করতে হবে।

(৪) পরিবার পরিকল্পনা এবং জনসংখ্যা নিয়ন্ত্রণ কার্যক্রম গত সাত বছরের ন্যায় শুধুমাত্র কাগজে কলমে এবং মুখরোচক বক্তব্যে সীমাবদ্ধ না রেখে এর উপর বিশেষ গুরুত্বারোপ করতে হবে।

(৫) খাদ্যোৎপাদন বৃদ্ধির লক্ষ্যে যথোপযুক্ত সেচ ব্যবস্থাপনার পশাপাশি খাল খনন, নদী পুনঃ খনন কর্মসূচী পুনরায় চালূ করতে হবে।

(৬) এই পরিকল্পনায় অন্যান্য অনগ্রসর গোষ্ঠীর সাথে যুবসমাজকে উন্নয়ন কর্মসূচীতে অন্তর্ভূক্ত এবং সম্পৃক্ত করতে হবে।

(৭) সঞ্চয় ও পুঁজি গঠনের মাধ্যমে আভ্যন্তরীন সম্পদ বৃদ্ধির সঠিক দিক নির্দেশনা থাকতেহবে।

(৮) সরকারী গগনচুম্বী রাজস্ব ব্যয় হ্রাসের মাধ্যমে বেসরকারী খাতে সঞ্চয় বৃদ্ধিতে উৎসাহ দানের ব্যবস্থা থাকতে হবে।

(৯) স্থানীয় পর্যায়ে জনগণকে উন্নয়ন পরিকল্পনার সাথে সম্পৃক্ত করার জন্য গ্রামকেই প্রাতিষ্ঠানিক অবকাঠামোর মূল কেন্দ্রবিন্দু হিসাবে গড়ে তোলতে হবে।

(১০) যেহেতু ইহা একটি ২০ বৎসরের দীর্ঘ মেয়াদী প্রেক্ষিত পরিকল্পনার অংশ তাই বছর, দু'বছর এবং পাঁচ বছরান্তে অর্জিত লক্ষ্যমাত্রার উপর মূল্যায়ন ও পর্যালোচনাপূর্বক পরবর্তী পদক্ষেপ গ্রহণের ব্যবস্থা থাকতে হবে।

সারণী–১ঃ এক নজরে বাংলাদেশের পঞ্চবার্ষিক পরিকল্পনাসমূহ।

(কোটি টাকায়)

পরিকল্পনাসমূহ	খাতওয়ারী বরাদ্দ			উৎস			কৃষিখাতে বরাদ্ধ	কৃষিতে বরাদ্ধের শতকরা হার	প্রবৃদ্ধির হার (প্রকল্পিত)	প্রবৃদ্ধির হার (অর্জিত)
	সরকারী খাত	বেসরকারী কাত	মোট	অভ্যন্তরীন	বৈদেশিক	মোট				
প্রথম পঞ্চবার্ষিক	৩,৯৫২	৫০৩	৪,৪৫৫	২,৬৯৮	১,৭৫৭	৪,৪৫৫	১,০৪১	২৪ঃ০০	৫.৫০	৪.০০
পরিকল্পনা (১৯৭৩–৭৮)	(৮৮.৭০)	(১১.৩০)	(১০০.০০)	(৬০.০০)	(৪০.০০)	(১০০.০০)				
দ্বিতীয় পঞ্চবার্ষিক	১১,১০০	৬,১০০	১৭,২০০	৪,৯০৪	৬,১৯৬	১১,১০০	৬,০৫৯	৩৫.০০	৫.৪০	৩.৮০
পরিকল্পনা (১৯৮০–৮৫)	(৬৪.৫০)	(৩৫.৫০)	১০০.০০	(৪৪.০০)	(৫৬.০০)	(১০০.০০)				
তৃতীয় পঞ্চবার্ষিক	২৫,০০	১৩,৬০০	৩৮,৬০০	১৭,৫৭২	২১,০২৮	৩৮,৬০০	১১,৪৬০	২৯.৬৯	৫.৪০x	—
পরিকল্পনা (১৯৮৫–৯০)	(৬৪.৮০)	(৩৫.২০)	১০০.০০)	(৪৫.৫০)	(৫৪.৫০)	(১০০.০০)				
চতুর্থ পঞ্চবার্ষিক	৪০,৭৩০	২৬,৫০০	৬৭,২৩০	—	—	—	১৮,২৩৩	২৭.১২	৫.০০	—
(১৯৯০–১৯৯৫)	(৬০.৫৮)	(৩৯.৪২)	(১০০.০০)							
(প্রস্তাবিত)										

বন্ধনীকৃত সংখ্যাগুলো শতকরা হার নির্দেশক।

x ১৯৮৫–৮৬ – ৪.০১
৮৬–৮৭ – ৪.৪১
৮৭–৮৮ –২.৫৮
গড় ৩.৬৬

সুতরাং লক্ষ্যমাত্রা শতকরা ৫.৪ ভাগ প্রবৃদ্ধি অর্জিত হওয়ার সম্ভাবনা কম।

উৎসঃ পরিকল্পনা কমিশন, বাংলাদেশ সরকার, ১৯৮৯।

সারণী–২ঃ চতুর্থ পঞ্চবার্ষিক পরিকল্পনার (১৯৯০–৯৫) খাতওয়ারী বরাদ্দ (১৯৮৯–৯০ সালের মূল্যে)।

কোটি টাকা

খাতসমূহ	খাতওয়ারী বরাদ্দ			মোট বরাদ্দের শতকরা হার (٪)	
	সরকারী খাত	বেসরকারী খাত	মোট	চতুর্থ পঞ্চবার্ষিক পরিকল্পনা	তৃতীয় পঞ্চবার্ষিক পরিকল্পনা
১। কৃষি, পানি সম্পদ, পল্লী উন্নয়ন ও প্রতিষ্ঠান	১১,০২১	৭,২১২	১৮,২৩৩	২৭.১২	২৯.৬৯
২। শিল্প	৪,১৮০	৪,৩৬০	৮,৫৪০	১২.৭১	১৫.০০
৩। বিদ্যুৎ, তৈল, গ্যাস ও প্রাকৃতিক সম্পদ	৮,৩৫০	–	৮,৩৫০	১২.৪২	১৬.০০
৪। পরিবহন ও যোগাযোগ	৬,৮১০	৩,১৮০	৯,৯৯০	১৪.৮৬	১১.৭২
৫। ভৌত পরিকল্পনা, পানিসরবরাহ ও গৃহায়ন	১,২৪১	৬,২১৪	৭,৪৫৫	১১.০৯	১০.৮৮
৬। শিক্ষা ও ধর্ম	২,৪০১	৮৮৮	৩,২৮৯	৪.৮৯	৩.৫৫
৭। স্বাস্থ্য, জনসংখ্যা নিয়ন্ত্রণ ও পরিকল্পনা	২,৭৭৭	২৮৯	৩,০৬৬	৪.৫৬	৩.৯৯
৮। অন্যান্য	৩,৯৫০	৪,৩৫৭	৮,৩০৭	১২.৩৬	৯.১৭
মোট	৪০,৭৩০	২৬,৫০০	৬৭,২৩০	১০০.০০	১০০.০০

উৎসঃ পরিকল্পনা কমিশন, বাংলাদেশ সরকার, ১৯৮৯।

সারণী–৩ঃ চতুর্থ পঞ্চবার্ষিক পরিকল্পনায় খাতওয়ারী প্রবৃদ্ধির হার (প্রাক্কলিত)

খাতসমূহ	পরিকল্পনাকালে প্রবৃদ্ধির শতকরা বার্ষিক গড় হার
১। কৃষি, পানি সম্পদ এবং পল্লী উন্নয়ন ও প্রতিষ্ঠান	৩.৬০
২। শিল্প	৯.১০
৩। বিদ্যুৎ, তৈল, গ্যাস ও প্রাকৃতিক সম্পদ	১১.০০
৪। পরিবহন ও যোগাযোগ	৫.৩১
৫। ভৌত পরিকল্পনা, পানি সরবরাহ ও গৃহায়ন	৬.১০
৬। অন্যান্য	৪.৫৪
মোট	৫.০০

উৎসঃ পরিকল্পনা কমিশন, বাংলাদেশ সরকার, ১৯৮৯।

গ্রন্থপঞ্জী

১। Alamgir, M. and Berlage, M.: Bangladesh National Income and Expenditure: 1950/60-1969/70, The Bangladesh Institute of Development Studies, Dhaka, 1974.

২। Ahmed, S.: Foreign Capital Inflow and Economic Growth: A Case Study of Bangladesh, Ph. D. Dissertation, Submitted in the Department of Economics, Monash University, 1983.

৩। Navin, Jr. Khalil: The Agricultural Sector in Bangladesh, A Data Base, USAID, Dhaka, June 1988.

৪। Planning Commission: Mid-Term Review of the Third Five Year Plan ,1985-90, Ministry of Planning, Government of Bangladesh, Dhaka, 1989.

৫। পরিকল্পনা কমিশনঃ প্রথম পঞ্চবার্ষিক পরিকল্পনা, বাংলাদেশ সরকার, ঢাকা, ১৯৭৩

৬। পরিকল্পনা কমিশনঃ দ্বিতীয় পঞ্চবার্ষিক পরিকল্পনা, বাংলাদেশ সরকার, ঢাকা, ১৯৮০

৭। পরিকল্পনা কমিশনঃ তৃতীয় পঞ্চবার্ষিক পরিকল্পনা, বাংলাদেশ সরকার, ঢাকা, ১৯৮৫

Bangladesh Journal of Political Economy Vol. 10 No. 3

A CRITIQUE OF THE BASIC NEEDS APPROACH TO ECONOMIC DEVELOPMENT

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INTRODUCTION

All production function models (or strategies) of economic development are distinguished by various emphases on different factor of production (land, labour, capital and entrepreneurship) and by various types of production function assumed[1]. Nonetheless, they all suffer from the common deficiency of looking upon the rate out put (GNP) growth as an indicator of economic development and upon distribution of income as an outcome of factor employment and factor substitution possibilities[2]. Growth of out put becomes a poor indicator of economic development because it may very well be associated with unemployment of labour and unequal distribution of income. The unemployment of labour may be associated with growth of out put owing to a number of factors such as

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1. The various types of production function that appear in next books on economic development are those of the classical and the neo-classical production functions the Cobb-Douglas production function, the constant elasticity of substution production function, the Harrod-Domar type of production function etc. The classical production function is characterized by absence of factor substitution and the neo-classical one by the presence of factor substitution. Viewed from this angle all production functions are either of the classical type or of the neo-classical type. Production function studies of developing countries are those of Maddison, Bruton, Robinson, Hagen and Hawrylyshyn, Correa, Gathon, and Lampman. Brief surveys of different production functions are [1,2].
2. The best known models of factor employment and factor substitution possibilies are those of the classical and the neo-classical economists. The assumption of factor substitution impossibility led the classical economists to the pessimistic conclusion of secular stagnation in capitalist societies; the same assumption confronted Harrod and Domar with the problem of knife-edge (unstable) equilibrium in capitalist economies. The neo-classical economists who conceed factor substitution possibilities reached radically different, albeit overtly optimistic, conclusion relating to a steady state of economic growth and stable equilibrium only at the full-employment level. The assumption of rigidities and inelasticities of the production function enabled the Keynesians to arrive at the conclusion of underemployment equilibrium and secular stagnation in mature capitalist economies. The same assumption help modern development economists explain the phenomenon of stagflation in developing countries of the Third World. [3,4,5,6].

structural disequilibrium in the factor market leading to substitution of capital for labour [7,8], low productivity of labour relative to the productivity of capital, technological constraints on the substitation of labour for capital [9], scarcity of capital necessary to absorb the unemployed labour (complementary relationship between capital and labour), and choice of in appropriate techniques of production [10,11] and so on. Moreover, mass poverty can co-exist with a high degree of income inequality as well as with income equality. Still further, reductions in absolute poverty can be consistent with increases in income inequality.

RATIONALE OF BASIC NEEDS APPROACH

The inadequacies of the production function approach have given rise to formulation of an alternative development strategy concerned directly within eradication of absolute poverty through making enough provision for satisfaction of some basic human needs. Recent discussion on needs-oriented strategy considers six areas of basic human needs: nutrition, basic education, health, sanitation, water supply, housing and related infrastucture [12,13,14,15,16,17,18,19]. The problem of selecting and appropriate index for any one of these basic needs can be solved by technical experts in that area. The following can serve as an illustration of the core indicators of progresss in each area of the basic needs[3].

Health: Life expectancy at birth.

Education: (i) Literacy rate;

(ii) Percentage of primary school enrolment of children between the ages of say 5-12.

Food : (i) Calorie supply per head;

(ii) Calorie supply as percentage of calorie requirement.

Water supply : (i) Infant mortality per thousand births;

(ii) Percentage of population having access to potable water.

Sanitation : (i) Infant mortality per thousand births;

(ii) Percentage of population having access to sanitation facilities.

3. The following discussion on the rationale of basic needs approach and on strong points of this approach is based on Hicks and Streeten [12,13, 5,].

Housing: No core indicator can be suggested for this area of basic needs, since room area is rather loosely correlated to life expectancy.

Infant mortality can be taken as a good indicator of availability of sanitation and clean water because of susceptibility of infants to water-borne diseases. Moreover, data an infant mortality are generally more readily available than data on access to clean water. While the literacy rate is a good general indicator of the progress in education, the percentage of the relevant age-group of children, say between 5 and 12 enrolled in primary schools as a satisfactory indicator of a country effort towords this direction. The availability of inputs for water supply and sanitation facilities can also be considered for measurement of progress in these areas. The problem of setting core index for the housing sector arises from the fact while room area per person seems to be the only plausible indicator of crowding, it is hardly accepted at a satisfactory measure of room qualities and rather loosely correlated to the expectancy of life at birth. Data for this core indicator are sure to be scarce and unreliable. The intake of calorie per adult person is usually taken as the core indicator for the food sector, but the source of calorie is also important for health production.

The next step towards developing the basic needs approach is to combine the core indicators into a "composite" basic needs index. The progress towards this direction has been very much due to practical difficulty of working out an acceptable system of weights for the suggested basic needs. "Despite considerable research on composite indices, no one has come close to developing a rational weight system. It is difficult even to suggest direction for further research" [12]. One way of sidetracking this problem is to restrict the range of the indicators to only one or two which are highly correlated with the six basic needs. The very fact that most of the basic needs are essentially inputs rather than ultimate goals enhances the prospect of such reduction of the indices. Particularly, nutrition, clean water and sanitation facilities are definitely inputs for the health status of the population in a country. The same treatment also holds true of the housing and education sectors, although to a much more limited extent. Thus all the six basic needs can ultimately be reduced to inputs for a health "production function." A high degree of association among the various core indices can be traced to their impact on health. It is argued therefore that "some

measure of health such as life expectancy at birth would be a good single measure of basic needs" [12]. Life expectancy is thus treated as a "composite" weighted index of progress in meeting the physiological basic needs. The index has the merit of "capturing the impact on individuals not only of the non-market factors but also of income net of taxes, transfer payments and social services without raising all the difficulties of income per head measures....."

STRONG POINTS OF THE BASIC NEEDS APPROACH

The income approach gives emphasis on measures for raising the incomes of the poor so that they can acquire access to basic needs. However, the basic need approach considers the income to be partial or incomplete on several grounds.

First, some basic needs such as education, health, water and sanitation can be satisfied more effectively through public services made available to the poor at subsidized prices. Although provision of public services at reasonable prices can be regarded as common of all poverty oriented approaches, the basic needs approach requires the Government to make sure that these services reach the target groups of people.

Second, consumers both rich and poor sometimes to fail to optimize nutrition and health owing to lack of knowledge about nutritional values of different items of food. As a result, they often spend their incremental incomes on food items of lower nutritional values. This is particularly true of the poor who frequently divert their incremental incomes away from more nutritious wheat to less nutritious rice or from more nutritious coarse to less nutritious refined grains.

Third, the manner in which additional incomes are earned may affect nutrition adversely. For example, female employment may roduce breast feeding and hence the nutrition of the concerned babies. More profitable cash crops may replace cheaper but more nutritions ones and may thus undermine nutrition and health. Replacement of maize by tobacco is a case in point.

Fourth, malnutrition may persist within households and between households in many countries. Dependent persons (house-wives, children, aged persons) sometimes receive smaller proportion of nutrition than working members in many households; and women in many societies

have to shoulder the heaviest work load, whereas they receive the least amount of nutrition.

Fifth, a substantial percentage of the destitutes (sick, disabled, aged or orphans) who may or may not be members of households in a country can get their basic needs only through transfer payments or through public services. Income or productivity approach to employment generation and poverty alleviation can hardly reach the destitutes. Even affluent societies find it difficult to implement programmes for alleviation of poverty among the disadvantaged or handicapped groups of their population.

Sixth, although the production function aproaches have given a great deal of attention to the growth of income and the choice of techniques, they have generally neglected the income redistribution and particularly the supply of basic needs to the disadvantaged and handicapped groups of people in a society. The excellence of the basic need approach lies in the fact that it "seeks to choose appropriate final products and produce them by appropriate techniques, thereby giving rise to more jobs and a more even income distribution which in turn generates the demand for these products" [12]. A ruthless application of the price mechanism in economics infested with rigidities and inelasticities of the production and trade structures accentuates inequality in income distribution and encourages production and import of luxury goods even at the cost of basic needs.

Lastly, the income approach generally over empasizes material needs and underestimates the importance of non-material needs of a society. This point becomes particularly relevant when non-satisfaction of non-material needs (such as participation) increases the difficulty or obtaining the basic needs much more than getting access to income.

WEAK POINTS OF THE BASIC NEEDS APPROACH

The basic needs approach has been developed as a critique as well as an alternative to the income or productivity approach to economic development. It is quite clear, however, that the presentation of the approach in term of a simple health "production function" in which life expectancy at birth is considered to be the end product of the six basic needs of human life made available to the various classes of people in a society can be subjected to some serious questions.

First, it is rather an over simplification to regard life expectancy as the end

product of the six highly correlated physiological needs alone. There are other basic needs like fuel, energy, clothing, etc, and social needs such as fresh air, play grounds, recreation centres, public parks and gardens, ecology and environment free from industrial pollution which have bearing upon life expectancy at birth and which have claims to be included into the health production function. It would be unrealistic to treat these factors as exogeneous variables in view of the fact that population growth and economic development have profound impact upon the qualities of these factors[4]. High rates of population growth can lead to deterioration of ecological and environmental qualities and thereby adversely affect the supply of nutrition, health, housing and sanitation, which can cut down the expectancy of life at birth. The issue of population growth, ecological and environmental deterioration and short supplies of basic needs is particularly important in the context of Bangladesh where excessive pressure of population on land has seriously undermined the ecological and environmental balance and the supplies of basic needs.

Second, the basic needs approach can at best be treated as a supplement to the income approach expressed in terms of output production and income distribution. The former is too narrow an approach to overall development planning aiming at alleviation of absolute and relative poverty through transformation of the imput and output structures of an underdeveloped economy. There are four or five major macro-economic (not to speak of the micro-economic) variables of a poverty-oriented development planning, namely (a) deceleration of population growth, (b) acceleration of GNP growth, (c) adequate supplies of basic needs, (d) redistribution of income and assets with a view to giving to poor access to the basket of basic needs and (e) creation of employment opportunities for the unemployed and the destitutes[5]. The basic needs approach has the merit of pointing to the deficiencies of the income approach; but it does not contain all the ingredients needed to eradicate absolute and relative poverty.

Third, the health production expressed in terms of life expectancy at birth as the end product of the six basic inputs in as much aggregative as

4. One of the best studies on this aspect is [20] See also [21].
5. A brief discussion on the macro-economic elements of a poverty oriented development planning can be found in [22,5, 23].

the GNP production itself. Unless the socio-political order of a country is strongly poised to an equitable distribution of the basic needs, the measurement of economic development in trerms of the core indices of progress in all the sectors of the basic needs should threfore be much more meanigful than the single "composite" index of life expectancy at birth. This deficiency of the basic needs approach can, however, be mitigated by taking the life expectancies of the different classes of people in a country and allocating more resources to the satisfaction of basic needs of the classes of people with lower expectations of life at birth.

Fourth, the basic needs approach to economic development and planning can hardly be a substitute for the production function approach, unless we classify the basic needs into (a) private needs and (b) social needs. Private needs can further be classificed into (i) consumption needs and (ii) production needs[6]. The basic private and social needs more or less directly related to expectancy of life at birth are: nutrition, fuel, clean water, clothing, housing, health, sanitation and education. There are, however, categories of social needs that are indirectly related to life expectancy, in-as-much as they affect the production and distribution of the basic needs directly related to the health production function. These are: economic and social infrastructure capable of creating external economies for the production and consumption units of an economy; ecological and environmental qualities insulated against pollution and hazards like floods, draughts, soil erosion, soil salinity, water salinity, exhaustion of soil fertility, and so on; democratic social and political order representing all classes of people and free from mass exploitation by vested interest groups; and a bureaucratic order more or less free from socialized or institutionalized corruption and from pressure groups within and outside the Government and the bureaucracy.

Fifth, it should follow from the fore-going discussion that the basic needs approach has been addressed primarily to meeting the private and

6. Best known critiques of the basic needs approach are those of T.N. Srinivasan Sydney Dell [25]. Dell argues that there are difficulties of concept of measurement, and of implementation on way to using basic needs as an operational tool for planning. Three issues raised by him are: (1) a trade-off between higher rates of growth and basic needs; (2) the rate at which any particular level of basic consumption should be approached over time; and (3) whether the basic needs strategy implies a pattern of labour-intensive rural development instead of large-scale industrial growth. The views expressed here are strictly those of the writer of this paper.

social consumption needs of the absolutely poor. But unless the poor can be provided with some basic inputs for production such as access to natural resources (land, water, raw materials, etc.), energy resources for production and consumption purposes, intermediary products (Like yarn, dyes, starch, etc. for the handloom industry), material capital (like tools, implements, seeds, manures, fertlizers, insecticides, etc.) human capital (like entrepreneurship and labour skills), financial capital (consumption and production credit) and policy package inputs (like input subsidies, price support, crop insurance, etc.) the basic needs approach would simply boil down more to management of consumption needs than to the management of production needs of the poor. It can be argued, therefore, that unless the entire production and consumption structures of an econony can be geared through the political process towards giving the poor an adequate access to all the basic needs mentioned above, the basic needs approach is sure to be as much partial and incomplete as the production function approach itself.

Lastly, it should be pointed out that the basic needs approach is as much a sectoral approach to development planning as the production function approach. The various sectors of the basic needs represent the demand side of the consumption units which must be suitably matched by the supply side represented by the production units. The basic needs approach does not provide us with a readily applicable framework of development planning, rather it needs to be fitted into the framework of the production function approach to development planning. A poverty-oriented development planning must accordingly incorporate all the major elements of the income approach and the basic needs approach to development planning. It goes almost without saving that such a comprehensive planning has not yet been contemplated in Bangladesh[7].

7. The post-independence period of Bangladesh provided the most opportune time to formulate and implement a basic needs approach to development planning . This is becasuse the Awami League Regime was committed to socialism and democracy, and the bureaucracy could also be kept largely free from institutional corruption owing to the high spirit of nationalism and patriotism that prevailed in this period. But the commitment of the Regime to democracy and socialism was more apparent rather than real. Deviations from the principles of the state policy, lack of adequate support to the philosophy of the first five year plan and mismanagement of the economy were some of the factors responsible for rapid erosion of social values and evaporation of patriotism on increasingly large scales. Emergence of dictatorial regimes in the subsequent periods reduced the planning commission to the status of a co-ordinator of the sectoral plans and projects of the various Ministries of the Government, and to a Secretatiate to the National Economic Council under the Chairmanship of the President, who actully moulded the philosophy of development planning in order to make the development plans acceptable to donor countries.

CONCLUDING REMARKS

The six basic inputs need for the health production function are neither exhaustive nor sufficient to eradicate absolute and relative poverty. So long as the power structure in a country remains strongly entrenched to exploitation of the general mass of population for the material benefit of the vested interest groups, life expectancy at birth as an indicator of socio-economic progress may simply become a test-tube baby brought out of the laboratory of the statisticians at the command of the power structure. As a result, any translation of the composite index of the six basic needs into the single index of life expectancy will not only be misleading but also a furtile exercise in planning for total transformation of a society leading to elimination of poverty and class exploitation. Participation of the general mass of people in the political process, planning process and in the project inplementation process is an essential pre-requisite for any approach to development planning designed for poverty alliviation. Such participation can be envisaged only within the framework of democratic social order and democratic governments representing the hopes and aspirations of the general people and bureaucratic order free from socialized and institutionalized corruptions and also from pressure groups within and outside the government. The bureaucratic order must also be capable of delivering the goods and services expected of the order. Viewed from this angle, poverty alleviation should become an end product of a comprehensive planning incorporating all the elements of the basic needs approach and all the elements of total transformation of a society. The Planning Commission of Bangladesh has neither the autonomy nor politically determined imperatives to formulate and implement development strategies adequately or avowedly poverty-oriented. The socio-political order and the bureaucratic commitment are strongly entrenched to a dualistic society consisting of a large majority of poor people and a small minority of elite upper class.

REFERENCES

1. Nadiri M : "International Studies of Factor Inputs and Total Productivity : A Brief Survey" in International Association for Research in Income and wealth, Ronneby, Sweden, 1971.
2. Thirlwall A.P.: Growth and Development, Third Edition, Macmillan, 1983.
3. Baer W. and Kerstenetezsky (eds): Inflation and Growth in Latin America, 1964.
4. Campos Roverto de Oliviera: "Economic Development and Inflation with Special Reference to Latin America" in OECD Development Plans and Programmes, Paris, 1964.

5. Meir G.N.: Leading Issues in Economic Development, Fourth Edition, Oxford University Press, 1984.
6. Cline W.R. et al: World Inflation and the Developing Countries, 1981.
7. Stewart F: Technology and Uderdevelopment, Macmillan,1978.
8. Turnham: The Employment Problem in Less Developed Countries, 1981.
9. Boon G.K.: Economic Choice of Human and Physical Factors in Production, North Holland, 1964.
10. Blaug M.: Education and Employment Problem in Developing Countries, 1976.
11. Sen A.K. : Employment, Technology and Development, 1975.
12. Hicks Norman and Paul Streeten: Indicators of Development: The Search for a Basic Needs Yardstick, World Development, Vol.7, 1979.
13. Streenten Paul et.al: First Things First, Oxford University Press, 1981.
14. ILO: The Basic Needs Approach to Development, 1977.
15. Streeten Paul and Shahid J. Burki: "Basic Needs: Some Issues" in World Development, 1978.
16. Streeten Paul: "Basic Needs: Promises and Promises" in Journal of Policy Modeling, January, 1979.
17. Hicks Norman: "Growth vs. Basic Needs: Is There a Trade off?" in World Development, November/ December, 1979.
18. Stewart Frances: "Country Experience in Providing for Basic Needs:" in Finance and Development, December, 1979.
19. Burki Shahid J. and Haq Mahbub-ul: "Meeting Basic Needs: An Overview" in World Development, February, 1981.
20. World Commission Report on Environment and Development: Our Common Future, Oxford University Press,1987.
21. Ehrlich Paul R.: The Population Bomb, Balantine Book, New York, 1968.
22. Chenery H. B. : "Poverty and Progress—Choice for the Developing World in Finance and Development, June,1980.
23. Chenery H. B. et. al: Redistribution with Growth, Oxford University Press, 1974.
24. Srinivasan T.N.: Development, Poverty and Basic Human Needs: Some Issues, Food Research Institute Studies, 1977.
25. Dell Sydney: Basic Needs or Comprehensive Development, CEPAL Review, 1978.

Bangladesh Journal of Political Economy Vol. 10 No. 3

বাংলাদেশ প্রেক্ষিতঃ খাদ্যে মৌলিক চাহিদা পূরণ

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খাদ্য, বস্ত্র, বাসস্থান, শিক্ষা ও স্বাস্থ্য এ ক'টি বহুল প্রচারিত মৌলিক চাহিদার মধ্যে খাদ্যের স্থান সবার উপরে। এরূপ চাহিদার মূল বৈশিষ্ট্য হলো অর্থনৈতিক বিষয়াদির সাথে এর (এবং এদের) জিরো–সম্পর্ক। অর্থাৎ, ভোক্তার অর্থনৈতিক অবস্থা যা–ই হোক না কেন, তার জৈবিক বিষয়াদির দারা প্রভাবান্বিত খাদ্য চাহিদা একটি নির্দিষ্ট স্তরে থেকেই যায়। বাংলাদেশে খাদ্যে মৌলিক চাহিদার ধরণ ও ধারা পর্যালোচনা করে এসব পূরণের বিভিন্ন পন্থার উপযুক্ততা দেখানোই বর্তমান প্রবন্ধের মূল বিচার্য।

খাদ্যে মৌলিক চাহিদার ধরণ ও ধারা

বাংলাদেশ একটি খাদ্য ঘাটতির দেশ। প্রতি বছরেই প্রায় ১৫ থেকে ২৫ লাখ টন খাদ্য ঘাটতি হয় চাল ও গমের মানে এবং তা পূরনের জন্য নির্ভর করতে হয় বিদেশী সাহায্য বা আমদানির উপর। এতে দেশের জনগণ বেঁচে থাকে বা থাকছে বটে কিন্তু মোট জনগোষ্ঠীর এক বিরাট অংশ এই মৌলিক চাহিদা পূরনে ব্যর্থ হয়ে ভূগছে নানা রকম অপুষ্টিজনিত রোগে। তবে দেশের কত লোক কি পরিমান অপুষ্টিতে ভুগে এবং এদের সংখ্যা সময়ের পরিসরে বাড়ছে না হ্রাস পাচ্ছে তা সঠিকভাবে নির্ণয় করা কঠিন। বিভিন্ন বিশেষজ্ঞের কাছ থেকে প্রাপ্ত তথ্যাদির মধ্যেও লক্ষ্য করা যায় অসামঞ্জস্যতা এবং গরমিল। প্রাপ্ত তথ্যে দেখা যায় একজন বাংলাদেশীর প্রতিদিন গড়ে সর্বনিম্ন যে পরিমান খাদ্যের দরকার হয় তা, বিশেষজ্ঞ ভেদে, ১৮০০ থেকে ২৪০০ ক্যালরীর মধ্যে উঠানামা করে এবং যারা এই পরিমান ক্যালরী পেতে অসমর্থ তাদের সংখ্যাও (আবার বিশেষজ্ঞ ভেদে) ৫০% থেকে ৭০% এর মধ্যে উঠানামা করে। এই শতকরা হার সময়ের পরিসরে বাড়ছে কি কমছে সে সম্পর্কেও প্রাপ্ত তথ্য বৈপরীত্য দোষে দুষ্ট। বাংলাদেশ সরকার কর্তৃক বিভিন্ন সময়ে পরিচালিত "থানা ব্যয় জরিপ" এ দেখা যায়, দেশে গড় ক্যালরী গ্রহনের পরিমান বেড়ে যাচ্ছে। কিন্তু বিভিন্ন পুষ্টি সমীক্ষায় দেখা যায় তার উল্টো ছবি, অর্থাৎ দেশে মাথা পিছু দৈনিক ক্যালরী গ্রহনের পরিমান হ্রাস পাচ্ছে [২,৩]। এই ধরনের গোলমেলে তথ্যের মধ্যে না গিয়েও একথা সুস্পষ্টভাবে বলা যায় যে বাংলাদেশের মোট জনগোষ্ঠীর এক বিরাট অংশ খাদ্যে মৌলিক চাহিদা মেটাতে অক্ষম। উদাহরণ স্বরূপ বিশ্ব ব্যাংকের এক প্রতিবেদনের তথ্য [১] ব্যবহার করে বাংলাদেশের কোন শ্রেণীর কত মানুষ কত পরিমান ক্যালরী বর্তমানে গ্রহন করছে তার একটি হিসাব সারণী–১ এ সন্নিবেশিত হোল।

উক্ত সারণী থেকে দেখা যায় যে, দেশের মোট জনসংখ্যার (১৯৯০ সালে ১১৪.২ মি) ৬২% ফাও কর্তৃক স্থিরকৃত সর্বনিম্ন ক্যালরীর (২০২০) ৯৫% ও পূরণ করতে পারে না। এদের মধ্যে

* অধ্যাপক, অর্থনীতি বিভাগ, রাজশাহী বিশ্ববিদ্যালয়।

গ্রাম বাংলায় রয়েছে ৬৪ মি (৫৬٪) এবং শহরে ৬·৯ মি (৬٪), সর্বমোট ৭০.৯ মি (৬২٪)। এখান থেকে আরও কয়েকটি গুরুত্বপূর্ণ তথ্য উল্লেখ করা যায়, যা পরবর্তীতে খাদ্যে মৌলিক চাহিদা পূরনের জন্য উপযোগী পন্থাদি পর্যালোচনা করতে সহায়ক হবে।

প্রথমতঃ সার্বিকভাবে যারা এই মৌলিক চাহিদা পূরনে অসমর্থ তাদের সবার চাহিদার ধরন এক নয়। এদের মধ্যে (৭০.৯মি) এক শ্রেণীর লোক রয়েছে যাদের খাদ্য চাহিদার একাংশ পূরণ হয় নিজস্ব উৎপাদন থেকে এবং বাকী অংশের জন্য তাদেরকে নির্ভর করতে হয় বাজারের উপর। ক্ষুদে কৃষক ও মাঝারি কৃষক (প্রধানতঃ ভাগচাষী) এই শ্রেণীর অন্তর্ভুক্ত (৩৮٪)। অন্য শ্রেণীতে রয়েছে ভূমিহীন কৃষি শ্রমিক, গ্রামীন ইনফরমাল অকৃষক (অর্থাৎ, তাঁতী, কামার, কুমার, জেলে, প্রভৃতি) এবং শহরে ইনফরমাল (যারা মূলতঃ ছিন্নমূল)। এদের সংখ্যা মোট অসমর্থ পরিবারের ৬২٪। এদের খাদ্যের জন্য নির্ভর করতে হয় সম্পূর্ণভাবে বাজারের উপর।

এই পর্যালোচনা থেকে এরূপ একটি অনুমান রূপ পায় যে, খাদ্যে মৌলিক চাহিদা পূরনের জন্য খাদ্য উৎপাদন বৃদ্ধির সাথে সাথে খাদ্য বন্টন ব্যবস্থা উন্নয়নেরও প্রয়োজন হবে। পরবর্তী সেকশনে আলোচনার বিষয়বস্তু এটিকে ঘিরেই।

খাদ্যে মৌলিক চাহিদা পূরণে সম্ভাব্য পন্থাদির পর্যালোচনা

খাদ্য উৎপাদন বৃদ্ধিঃ খাদ্যে মৌলিক চাহিদা পূরণের নিমিত্তে যে সব পন্থা অবলম্বন করা হয় তার মধ্যে সবচেয়ে নিশ্চিত পন্থা আভ্যন্তরীন খাদ্য উৎপাদন বৃদ্ধি। কিন্তু বাংলাদেশের প্রেক্ষাপটে বিষয়টি একটু গভীরভাবে তলিয়ে দেখলে দেখা যায় যে এখানে খাদ্য উৎপাদন বৃদ্ধি বলতে মূলতঃ বুঝানো হচ্ছে ধান (ও গম) উৎপাদন বৃদ্ধি। আবার ধান উৎপাদন মানেই ইরি ধানের আবাদ। অর্থাৎ, বাংলাদেশে ইরি ধানের আবাদ বাড়িয়ে খাদ্যে মৌলিক চাহিদা। পূরণের প্রচেষ্টা। এরূপ কৌশলের বেশ ক'টি ত্রুটি পরিলক্ষিত হয়। দেশের চতুর্থ পঞ্চ বার্ষিক পরিকল্পনাও এই দোষ থেকে মুক্ত নয়।

প্রথমতঃ পূর্বেই লক্ষ্য করা গেছে যে, যারা খাদ্যে মৌলিক চাহিদা পূরনে অসমর্থ তাদের ৬২٪ই অকৃষক অর্থাৎ তাদের খাদ্যের জন্য নির্ভর করতে হয় বাজারের উপরে। অতএব ইরি ধানের আবাদ বৃদ্ধি করে দেশের খাদ্যের যোগান বাড়ানো যায় কিন্তু এটা আলোচিত জনগোষ্ঠীর সরাসরি উপকারে না'ও আসতে পারে।

দ্বিতীয়তঃ এরূপ কৌশলের সবচেয়ে বড় ত্রুটি হলো এই ইরি ধানের উৎপাদন বৃদ্ধির নামে অন্যান্য ফসল/কৃষিজাত দ্রব্যের উপর ক্রমাগত অবহেলা। এক হিসাবে দেখা যায়, ১৯৭৯–৮৮ সময়কালে কৃষি খাতে যত টাকা খরচ করা হয়েছে তার ৮৭٪ চলে গেছে শস্য উৎপাদন এবং এর আনুসাংগিক কাজের জন্য। এর জন্য একদিকে যেমন ক্ষতিগ্রস্ত হচ্ছে ডাল ও তৈলবীজ জাতীয় ফসলের উৎপাদন এবং অন্য দিকে মার খাচ্ছে গবাদি পশু, হাঁস মুরগী ও মাছের চাষ। পরিকল্পনা কমিশনের হিসাব অনুযায়ী (উদাহরণতঃ) ১৯৭৬–৭৭ থেকে ১৯৮৫–৮৬ সময়কালে ডালের জমি ও উৎপাদন হ্রাস পেয়েছে যথাক্রমে ২৩٪ ও ২১٪ [৪]। "ডাল–ভাতের"

বাংগালীকে আজ ডাল হারিয়ে বেঁচে থাকার জন্য নির্ভর করতে হচ্ছে একমাত্র কার্বোহাইড্রেট যোগানকারী চালের উপর; যা মৌলিক চাহিদা পূরণের ক্ষেত্রে ধাঁধার উদ্রেক করে।

পশু, হাঁস মুরগী এবং মাছের খাত উন্নয়নে অবহেলা মৌলিক চাহিদা পূরণের আরও একটি বড় অন্তরায়। প্রাপ্ত তথ্যে দেখা যায় ১৯৭৯ থেকে ১৯৮৮ সালের মধ্যে যে পরিমান অর্থ বার্ষিক উন্নয়ন কর্মসূচীর আওতায় কৃষিখাতে খরচ করা হয়েছে তাতে পশু ও হাঁস মুরগীর অংশ ছিল ৫% এর কম। মাছের খাতে ব্যয়িত অর্থের পরিমান ছিল এর চাহিতেও কম। একথা ভূলে গেলে চলবে না যে আমরা যে ধরনের লোকের মৌলিক চাহিদা পূরণের কথা ভাবছি, তারা প্রায় সবাই ভূমিহীন এবং গরীব। মাঠ সমীক্ষা থেকে জানা যায় যে, এই পশু ও হাঁস মুরগী পালন এবং মাছ চাষের ক্ষেত্রে ধনী-গরীবের ব্যবধান খুবই কম। বরং এই ধরনের কাজের মাধ্যমেই আলোচিত শ্রেণীর জনগোষ্ঠীর আর্থ-সামাজিক অবস্থার উন্নয়ন করা সম্ভব। আরও একটি গুরুত্বপূর্ণ বিষয় হলো দেশের জনসংখ্যার অর্ধেক মহিলাদের অর্থনৈতিক কাজে নিয়োজিত করার এটি খুবই উপযুক্ত পন্থা।

সম্পদপূনঃবন্টনঃ

সম্পদ পূনঃবন্টন আরও একটি গুরুত্বপূর্ণ পন্থা যার মাধ্যমে খাদ্যে মৌলিক চাহিদা পূরণ করা যায়। যারা গ্রাম বাংলায় বাস করে তাদের জন্য সবচেয়ে বড় সম্পদ জমি। প্রাপ্ত তথ্যে দেখা যায় বাংলাদেশের সীমিত আবাদি জমি বন্টন ব্যবস্থায় রয়েছে আকাশ চুম্বি বৈষম্য। ১৯৮৩-৮৪ সালে কৃষি শুমারী অনুসারে যেখানে নিম্ন সীমার ৭০% কৃষক মোট জমির ২৯% চাষ করে, সেখানে উর্ধ্বসীমার ৫% কৃষক মোট জমির ২৬% চাষ করে। এতদসত্বেও জনসংখ্যা বৃদ্ধি, রাস্তা-ঘাট নির্মাণ, বাড়ী-ঘর নির্মান এবং আরও অন্যান্য কারনে মাথা পিছু আবাদি জমির পরিমান ক্রমাগত ভাবে হ্রাস পাবার প্রেক্ষিতে (বর্তমানে প্রায় ২০ ডিসিমাল) জমি পূনঃবন্টনের মাধ্যমে মৌলিক চাহিদা পূরণের প্রচেষ্টা অনেকেই অসার মনে করছেন। এর জন্য অন্ততঃ ৩টি কারণ দেখানো যায় এক, গত ৪ দশকে যে ক'বার ভূমি সংস্কার করা হয়েছে তার কোনটিতেও পরিবার পিছু জমির নির্ধারিত উর্দ্ধসীমা কার্যকর করা সম্ভব হয়নি। বলা বাহুল্য, এই উপ-মহাদেশের প্রায় সকল দেশের ভূমি সংস্কারের অভিজ্ঞতাও তথৈবচ [৬]। দুই, ১৯৮৩-৮৪ সালের কৃষি শুমারী থেকে দেখা যায় যে, যাদের পরিবার পিছু জমির পরিমান ২৫ বিঘার বেশী তাদের বাড়তি জমির পরিমান মাত্র ৬১২ হাজার একর, যা মোট জমির মাত্র ২.৭%। যে দেশে ভূমিহীনদের সংখ্যা প্রায় ৬০%, সেদেশে এই সামান্য পরিমান জমি পুনঃবন্টন করে কতজন লোকের মৌলিক চাহিদা পূরণ করা যাবে তা ভাববার বিষয়। তিন, উৎপাদন বৃদ্ধির লক্ষ্যে ক্ষুদে কৃষকেরা যে সব সময়ই বেশী পারদর্শিতার পরিচয় দেয় তারও কোন নজির নেই। এরূপ পটভূমিতে কৃষি উৎপাদন বৃদ্ধির লক্ষ্যে জমির পূর্ণ ব্যবহার নিশ্চিত করাই হবে বুদ্ধিমানের কাজ। পতিত জমিতে কর বসানো এবং কৃষি আয়-কর আদায়ের প্রচেষ্টা জমি পুনঃবন্টনের বিকল্প ব্যবস্থা হিসাবে গন্য করা যায় [৫]।

অ-জমি সম্পদের মধ্যে মূলধনই প্রধান। গ্রামীন ব্যাংক ও বি, আর, ডি, বি জাতীয়

সংস্থাগুলো ঋণকে সম্পদ হিসেবে গন্য করছে। এরূপ সম্পদের সুষ্ঠু ব্যবস্থাপনার মাধ্যমে গরীব ও দুঃস্থদের যে আর্থ-সামাজিক অবস্থার উন্নতি সাধন করা যায় গ্রামীন ব্যাংক তার প্রমান দিচ্ছে। গ্রামীন ব্যাংকের ধাঁচে ঋণ-বন্টন, ব্যবহার এবং আদায়ের পদ্ধতি সম্প্রসারনের সুপারিশ করা যায়। তবে ঋণ দিয়ে উদ্যোক্তাদের সাথে সরাসরি অংশগ্রহনের মাধ্যমে অর্থনৈতিক কর্মকান্ড পরিচালনা করতে পারলে উন্নয়নের গতি আরও ত্বরান্বিত হবে তাতে সন্দেহ নেই।

অকৃষিখাতে কর্মসংস্থান সৃষ্টিঃ দরিদ্র জনগণের মৌলিক চহিদা পূরণের এটিও একটি বহুল প্রচারিত পন্থা। কাজের বিনিময়ে খাদ্য কর্মসূচী চালু করা হয়েছে এই উদ্দেশ্যকে সামনে রেখেই। কিন্তু প্রাপ্ত অভিজ্ঞতা থেকে দেখা যাচ্ছে, এই কর্মসূচীর মাধ্যমে কর্মসংস্থান সৃষ্টি হয়েছে কিন্তু তা প্রয়োজনের তুলনায় একেবারেই নগন্য (মোট প্রাপ্য শ্রম সময়ের শতকরা ১ ভাগের মত) এবং এর মাধ্যমে যে সমস্ত কর্মকান্ড পরিচালনা করা হচ্ছে (যেমন রাস্তা ঘাট নির্মান, পুকুর-ডোবা খনন, ইত্যাদি) তা দেশের সার্বিক অর্থনৈতিক কর্মকান্ডের সাথে কার্যকর ভাবে সম্পৃক্ত না হবার কারনে এর টিকে থাকার যোগ্যতা নিয়ে প্রশ্ন উঠেছে। বলা বাহুল্য, এর মাধ্যমে গ্রামে গঞ্জে যে ভাবে রাস্তা তৈরী করা হয়েছে তা অর্থনৈতিক কর্মকান্ডের হাতিয়ার না হয়ে জনগণের দুঃখ দুর্দশার কারন হয়ে দাঁড়াচ্ছে, বন্যার প্রকোপ বাড়ছে এবং নৌপরিবহনে বাধার সৃষ্টি করছে।

অকৃষি খাতে নতুন করে কর্মসংস্থান সৃষ্টির চেষ্টা করার চাইতে যে সব কাজ এখনও গ্রাম বাংলায় কিংবা শহরে রয়েছে সে গুলোই টিকিয়ে রাখা এবং জোরদার করাই অনেকেই শ্রেয় মনে করছেন। এক্ষেত্রে তাঁত শিল্পের কথা উল্লেখ করা যায়। গ্রাম বাংলায় যারা অকৃষিখাতে নিয়োজিত তাদের প্রতি ৫ জনের মধ্যে ১ জন তাঁতী। বিভিন্ন সমীক্ষা থেকে জানা যায় যে, আজকাল এই শিল্পের সাথে নিয়োজিত কারিগরদের দক্ষতা ও নিপুনতা এতদূর এগিয়েছে যে, তাদেরকে যদি শুধু সময়মত, পরিমান মত এবং উপযুক্ত দামে প্রয়োজনীয় উপকারনাদি (যেমন সুতা এবং রং) সরবরাহ করা হয় তবে তারা বিভিন্ন রকমারী কাপড় তৈরী করে শুধু দেশের সার্বিক চাহিদা পূরনেই সক্ষম হবে না বরং বিদেশের জন্য রফতানীযোগ্য কাপড়ও যোগান দিতে পারবে। অথচ মূলতঃ সরকারের অদক্ষতার ও অবহেলার কারনেই চোরা পথে বিদেশী কাপড় এসে স্থানীয় বাজারকে পঙ্গু করে দিচ্ছে ফলে শিল্পটি মার খেয়ে লক্ষ লক্ষ কর্মীদের বেকার করে দিচ্ছে। সরকার আর কতদিন দুর্নীতি দমনের কথা আওড়িয়ে বাস্তবে একে সমর্থন দিয়ে যাবেন?

সরকারী খাদ্য বিতরণঃ বাংলাদেশের জনগণের মৌলিক চাহিদা পূরনের সহায়তাদানের জন্য যে ক'টি সরাসরি পদ্ধতি রয়েছে তার মধ্যে সরকারী খাদ্য বিতরণ পদ্ধতির স্থান সবার উপরে। এই পদ্ধতির মাধ্যমে প্রায় ২ মিলেট খাদ্য শস্য (চাল ও গম) বিভিন্ন চ্যানেলে বিতরণ করা হয়। প্রাথমিক ভাবে এই কর্মসূচী জনগণের প্রশংসা অর্জন করতে সমর্থ হলেও ইদানীং এর ভূমিকা নিয়ে প্রশ্ন তোলা হচ্ছে।

প্রথমতঃ এই রেশন যাদের উদ্দেশ্যে দেবার কথা তারা কি সত্যিকার অর্থে পায়? চৌধুরীর (১৯৮৮) এক গবেষণা রিপোর্ট থেকে জানা যায় যে বাংলাদেশের যেখানে ৮৫% ভাগ লোক বাস করে সেখানে মোট বিতরণকৃত চাল-গমের দেয়া হয় মাত্র ১৩% (এম, আর কার্ড পদ্ধতি) এবং যেখানে বাস করে মাত্র ১৫% লোক সেখানে দেয়া হয় ১০% (এস, আর কার্ড পদ্ধতি)। তিনি আরও দেখান যে, দৈবচয়িত পন্থায় বাছাইকৃত ৫৯৯টি পরিবারের মধ্যে মাত্র ৩৫টি পরিবারের রেশন কার্ড ছিল এবং তারা গড়ে ১ বছরে রেশন পেয়েছিল মাত্র ৭.১ কেজি।

দ্বিতীয়তঃ এই কর্মসূচীর আওতায় ভর্তুকীকৃত চাল-গম দেয়া হতো। দুঃখের বিষয় সরকারী ব্যয় সংকোচনের নামে এই ভর্তুকীর পরিমান ক্রমাগত হ্রাস করা হচ্ছে। প্রাপ্ত তথ্যে দেখা যায়, যেখানে ১৯৮০-৮১ সালে এই ভর্তুকীর পরিমান ছিল ১০৯০ মিঃ টাকা তা ১৯৮৬-৮৭ সালে হ্রাস পেয়ে দাঁড়ায় মাত্র ৪৭০ মিঃ টাকায়। ফলে রেশনের চাল-গমের দাম বাড়তে বাড়তে বাজারের সমমূল্যে পৌঁছেছে। সারণী-২ এ প্রদত্ত তথ্যে দেখা যায়, এল, ই, (বড় বড় প্রতিষ্ঠান ও এফ, এম, (ফ্লোর মিল) এর মাধ্যমে যে চাল বিতরণ করা হয় তার দাম বাড়তে বাড়তে ১৯৮৬-৮৭ সালে দাঁড়ায় ১ টাকার মাল ১ টাকা ৮ পয়সায়। অর্থাৎ বাজার মূল্যের চেয়েও বেশী। প্রশ্ন উঠছে এই বাঁচানো টাকা যায় কোথায়? উপজেলা পদ্ধতি চালু হবার পরে যে বাড়তি টাকা খরচ করা হচ্ছে তা গ্রামীন জনগণের মৌলিক চাহিদা পূরনে কতখানি সহায়ক হচ্ছে তা যে-কোন সচেতন ব্যক্তির জানা থাকার কথা।

এখানে আর একটি বিষয় বিশেষভাবে উল্লেখযোগ্য। পাঠকগণ উক্ত সারণীতে দেখতে পারেন যদিও অন্যান্য চ্যানেলের মাধ্যমে বিতরণকৃত চাল-গমের দাম বাড়ানো হচ্ছে এবং হয়েছে। কিন্তু ই, পি (Essential Priority Group) অর্থাৎ সেনাবাহিনী ও আধা সামরিক বাহিনী চ্যানেল) তে যে চাল-গম দেয়া হচ্ছে তার ভর্তুকী অপরিবর্তনীয় রয়ে যাচ্ছে। সেখানে ১ টাকার মাল বিক্রি করা হচ্ছে মাত্র ২০ পয়সায়। এরূপ তথ্য থেকে যদি কেউ "সোনার বাংলা"কে "সোনার বাংলায়" রূপান্তরের অভিযোগ তোলেন তবে তাঁকে ঠেকাবেন কেমন করে?[১]

সমাপ্তিমন্তব্যঃ

বাংলাদেশের যে বিপুল জনগোষ্ঠী খাদ্যে মৌলিক চহিদা পূরনে অসমর্থ তা লক্ষ্য করে এবং এচাহিদা পূরণের নিমিত্তে যে-সব পন্থা অবলম্বন করা হয়, তা পর্যালোচনা করে এরূপ একটি মন্তব্য টানা যায়। এই সমস্যা সমাধানের জন্য যা দরকার তা হলো সংশ্লিষ্ট ব্যক্তিবর্গের জ্ঞান, দক্ষতা, উদ্যম ও উন্নত নৈতিক চরিত্র। যাঁরা এ ব্যাপারে সাহায্য করতে পারেন এবং আগ্রহী (যেমন বাংলাদেশ সরকার) তাঁদেরকে সততা ও দৃঢ়তার সাথে এই সমস্যা সমাধানের জন্য প্রতিজ্ঞাবদ্ধ হতে হবে। এবং সম্পাদিত কার্যাদি এই লক্ষ্য অর্জনে কতখানি সফল হয়েছে সেই মাপ কাঠিতে মূল্যায়ন করতে হবে। দ্বিতীয়তঃ যাদের মৌলিক চাহিদা পূরণ করতে হয় তাদেরকে সচেতন করে তুলে সংশ্লিষ্ট কর্মকান্ডে তাদের কার্যকর অংশগ্রহন নিশ্চিত করতে হবে।

১. মন্তব্যটি লেখকের নিজস্ব নয়।

গ্রন্থপঞ্জী

১. World Bank: Bangladesh: Food and Nutrition Sector Review, Washington, D. C., 1985.

২. Hossain, Mahabub: "Food Security, Agriculture and the Economy: the Net 25 Years" in Food Strategies in Bangladesh: Medium and Long Term Prespectives, Planning Commission, Dhaka, 1988.

৩. Ahmad, Raisuddin: "Long term Food Problems of Bangladesh: Options and Policy Direction" in Food Strategies in Bangladesh: Medium and Long Term Perspectives, Planning Commission, Dhaka, 1988.

৪. Planning Commission: The Fourth Five Year Plan 1990-95, Government of Bangladesh, Dhaka, 1990.

৫. হামিদ মু, আঃ পল্লী উন্নয়ন বাংলাদেশে, মুহাম্মদ ব্রাদার্স, ঢাকা, ১৯৮৮

৬. Islam, R. and E. Lee: "Strategies for Alleviating Poverty in Rural Asia in Strategies for Alleviating Poverty in Rural Asia, Edited by R. Islam, BIDS (Dhaka) and IRTEP (Bangkok), 1985.

সারণী–১ঃ বর্তমানে বাংলাদেশে যারা খাদ্যে মৌলিক চহিদা পূরনে ব্যর্থ তাদের শ্রেণীভিত্তিক সংখ্যার হিসাব (জুন ১৯৯০)

খানার শ্রেণী	মাথাপিছু প্রত্যহ ক্যালরী গ্রহন	প্রয়োজনীয় ক্যালরীর তুলনায় (২০২০) কত অংশ	মোট জনসংখ্যা মিলিয়ন (১৯৯০জুন)	মোট জনসংখ্যার শতকরা হার	যারা ৯৫% ক্যালরী পূরনে ব্যর্থ তাদের শতকরা হার
১	২	৩	৪	৫	৬
১) ভূমিহীন কৃষি শ্রমিক	১৫১৯	৭৮	২৪.০	২১	৩৪
২) ক্ষুদে কৃষক	১৬৩৮	৮১	১৩.৭	১২	১৯
৩) মাঝারি কৃষক (প্রধানতঃ ভাগচাষী)	১৭৬৪	৮৭	১৩.৭	১২	১৯
৪) মাঝারি কৃষক (প্রধানতঃ মালিক চাষী)	১৯৫৬	৯৭	১৪.৮	১৩	–
৫) বড় কৃষক	২১৫০	১০৬	১১.৪	১০	–
৬) খুব বড় কৃষক	২০৮৭	১০৩	৪.৬	৪	–
৭) গ্রামীন অকৃষক (ইন ফরমাল)	১৪৮২	৭৩	১২.৬	১১	১৮
৮) গ্রামীন অকৃষক (ফরমাল)	২১১৮	১০৫	৮.০	৭	–
৯) শহরের ইনফরমাল	১৭০৮	৮৫	৬.৯	৬	১০
১০) শহরের ফরমাল	২০৮০	১০৩	৪.৬	৪	–
মোট/গড়	১৭৮২	৮৮	১১৪.২	১০০	১০০
প্রয়োজনীয় ক্যালরীর পরিমান (ফাও)	২০২০	–	–	–	–

উৎসঃ স্তম্ভঃ ২, ৩ ও ৫ঃ বিশ্ব ব্যাংক ১৯৮৫। ২ নং স্তম্ভের তথ্য ১৯৭৬–৭৭ সালের মানে তৈরী। স্তম্ভঃ স্তম্ভ ঃ ৪ঃ পরিকল্পনা কমিশন ১৯৯০ (৫ নং স্তম্ভের তথ্য ব্যবহার করে নিজের হিসাব) * যারাপ্রয়োজনীয় ক্যালরীর অন্ততঃ ৯৫% পূরনে ব্যর্থ। মোট সংখ্যাঃ ৭০.৯ মিলিয়ন (৬২%)।

সারনী–২ ঃ সরকারী খাদ্য বিতরণ পদ্ধতিতে ভর্তুকীর হার

(শতকরা হিসাব)

	১৯৮০-৮১	১৯৮২-৮৩	১৯৮৪-৮৫	১৯৮৬-৮৭
১। চাউল				
এস, আর, এম আর, ওপি	৫১.৬	৩৪.২	১০.৩	৩.৫
এল, এফ, এম,	৩২.৬	২৫.১	−০.১	−৭.৯
ইপি	৮০.৫	৮১.৪	৭৯.৩	৮০.৬
২। গম				
এস, আর, এম আর, ওপি	২৯.২	২৮.৫	২৭.৩	১৯.৪
এল ই, এফ এম	১৭.৫	২৪.৫	২১.৩	১০.২
ই পি	৬৯.৫	৭৫.৪	৭৮.১	৭৯.৮
বাজেটে ভর্তুকীর পরিমান (মি টাকা)	১০৯০	১৯৩০	২৪৪০	৪৭০
বর্তমান ব্যয়ে ভর্তুকীর অংশ	৮.৪	৮.৪	৭.১	১.১

মূল উৎস ঃ World Bank 1985.
(R. Ahmed থেকে সংগ্রহীত)

দ্রষ্টব্যঃ এস আর= বিধিবদ্ধ রেশনীং, এম আর= সংশোধিত রেশনীং, ওপি= খোলা বাজারে বিক্রি, এল ই= বৃহৎ শিল্প প্রতিষ্ঠানের জন্য, এফ এম= ফ্লোর মিল এবং ই পি = সেনা ও আধা সামরিক বাহিনী।

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DEVELOPMENT IMPERATIVES AND THE BASIC NEEDS APPROACH FOR BANGLADESH

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DEVELOPMENT IMPERATIVES

There has been growing realisation among the contemporary development thinkers that the attempts at socio-economic transformation in most of the poorer regions have not been credited with desired success. A near exclusive emphasis on growth variables has not produced expected results. Most of the third world countries were initially motivated by a simplistic belief in the efficiency of capital accumulation as a means to generate by itself a process of growth and all round upliftement . A continuous increase in investment through the mobilisation of resources from both internal and external sources-mainly from external sources in the form of aid was thought to be the key factor for sustaining an expansion in the volume of employment and output. which in their turn were to raise the level of living in all sections of the society. An increasing index of per capita GNP to be obtained via ever increasing investment and growth of output was thus considered to be the most meaningful indicator of development.

The third world development scenario, as it has unfolded itself over the last four decades has, however, belied most of our hopes in the logic of the dynamics of investment and in self sustaining growth. Even if there was growth, it did not necessarily imply all round development. Benefits from growth were largely usurped by a small section of the population having access to power and opportunities while the vast majority continued to languish in poverty as before, in many cases they became even worse off The World Bank record in the early 1970s revealed that in a typical developing country, for which data were available the upper 20 per cent of the population received in the proximity of 55 per cent of national income, while the lowest 20 per cent got hardly 5 per cent. The pattern remains more or less the same even today. The allocation of public services and

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investment funds, largely guided by the economic interests of investment agents, may be policy makers from within and / or donors from outside, has contributed to a great extent to the strengthening, rather, than weakening of the trend. An increase in per capita GNP, therefore, does not necessarily indicate an increase in people's well -being. It may even hide the disturbing facts of the gradual deterioration in the living condition of the vast majority of the population.

This again has its debilitating effect on the process of growth itself. Increasing inequality does not allow the creation of enough purchasing power for the new producible commodities in an economy. This sets a limit to an expansion of domestic market demand which in its turn may dampen the climate for investment. Immiserising growth ultimately defeats the purpose for which growth is warranted. It may even reduce the potentialites for growth. Export oriented investments are quite often prescribed as a way out from stagnation. These may become a necessity where the economy suffers from chronic balance of payments difficulties which may further be accentuated by investments characterised by high foreign exchange components. But the basic question of development remains unresolved.The society gets divided from within. Dualism prevails. It can not be immediately eradicated by the laws of the market. The export sector thrives on external demand. No serious effort, therefore, needs be made for the the development of domestic market. Lack of purchasing power in the hands of the people inside the country is thus no direct threat to the growth of exports.

But an overwhelming reliance on exports for growth in a third world country is more frequently observed to give rise to dependency syndromes. The buyers dictate the terms of trade that to a great extent offset the benefits of exchange. In order that such exports remain cost effective it becomes imperative that the domestic factor inputs are pid rather cheaply. This goes further to increase poverty and inequality at home. They are thought to be the legitimate costs to be borne for continuing on a path of export led growth. These costs tend to accumulate with serious socio-economic consequences. Instead of transfusing income and employment in the main activities the national economy the growth sector gets increasingly isolated from within ultimately ending up as an appendix to the growth poles in the world market outside.

All these tendencies are becoming more and more prominent in many of the third world economies. The development thinkers as a result are being

forced to think a new. They have started emphasising the issues which had been previously either ignored or given insufficient attention. Seers for example, very emphatically asserts, 'the question to ask about a country's development are therefore: what has been happening to poverty? What has been happening to unepmployment? What has been happening to inequality? ..... If one or two of these central problems have been growing worse, especially if all three have, it would be strange to call that result "develpment" even if per capita income doubled [13]. Ahluwalia and Chenary sought to work out a new measure of development by way of modifying the concept of the rate of growth [2]. They defined the aggregate rate of growth as a weighted average of the growth rates of income of the members of different income groups in the society. The weight is made proportional to the number of members in each group, the weight for each group becomes the same and equal to 1/5. An index of the rate of growth of social welfare is then worked out as $G = (g_1+g_2+g_3+g_4+g_3)$, Where g_1 is the rate of growth of income for the its group of the population. where there is glaring inequality in the pattern of change in income for different sections of the society, this measure will obviously deflate the conventional measure of growth rate and will more likely provide a more realistic picture of actual development. The policy imperatives, however, dictate to focus the attention on the growth rate and its inherent peculiarities with longterm prospects for the poorest 40 per cent of the population. They are to be identified as the principal target group with the object of reducing inequality by way of raising the share of their income and strengthenig their infra-structural base in the economy.

One can immediately see that this calls for a different perspective for planning and development. Redistribution of assets and income and poverty amelioration get precedence over technological transformation and efficiency in production. The emphasis is put on meeting the basic needs of the poorer section of the population. This implies concerted time bound programmes for increased production of their basic needs items to the limit of their requirements and also for raising their economic capabilities for availing of the basic items they need. The creation of capabilities demands generation of gainful employments in production activities. In an agrarian economy, this is also linked up with a more egalitarian redistribution of landholdings. Untapped human resources need be fully utilised. Labour intensive activities should, therefore, get priority. But labour intensity alone is not sufficient there should also be concerted efforts at human-resource development so that labour power in production gains in capability. These

constitute basic needs as means for meeting the endo of consumption. But endo and means are not always mutually exclusive. Together they constitute a demand for a qualitative as well as quantitative transformation in the socio -economic condition of that large section of the population who are generally left outside the stream of accumulation and growth.

Altogether there are four categories of basic needs, as identified in the recommendations of the ILO [8]. They are, (1) the minimum requirements of family for personal consumption food, shelter, clothing, (2) access to essential services, such as safe drinking water; sanitation, transport, health and education; (3) availability of an adequately-remunerated job for each person able and willing to work; and (4) the satisfaction of needs of a more qualitative nature: a healthy, human and satisfying environment, and a popular participation in the making of decisions that affect the lives and livelihood of the people and individual freedoms. In a poor economy with a very large percentage of population living below the line of absolute poverty, meeting the basic needs of the first category deservs the highest priority. But production alone of the those relevant essential items does not necessarily reach them to the target group of population. People belonging to the poorer section of the society ought to be given an entitlement to productive assets and work, so that they acquire capability to buy those items they need [14]. This makes the fulfilment of the third categoery basic needs as much essential as that of the first. The second category items, particularly health and education become necessary to enhance the level of consciousness as also to improve the skill and efficiency of the working population. While massive accumulation of human capital and rapid human resource intensive growth are emphasised [1], the second category items assume critical importance for moving on to a path of all round development. The fourth category items call for radical changes in the institutional and structural set up of a basically anti-people system of society wherever it exists. The concentration of power in the hands of a clique of vested interests does not allow the mass of human energy to be released in the realm of unfethered productive activities for a continuous increase in social well-being. In many underdeveloped countries this remains the single stumbling block to meeting of basic needs of the under-privileged in the society. A vibrant meaningful democracy is not only a political but also a basic economic necessity.

It is to be emphasised that basic needs approach to development is not antithetical to growth, rather it aims at providing growth with a new direction that is likely to sustain the process wider and longer. Initial diversion of

resources in quick yielding labour intensive consummer goods sector may appear to have, on first sight, very very limited growth potentialities. This may seem so, as consumption in the low income category with high marginal propensity to consume will be encouraged, and consequently, savings discouraged. But an increase in domestic demand following from an increase in mass purchasing power leads to an expansion of domestic market which encourages investments. The use of labour intensive technology for investments in basic needs sector tends to absorb and improve the available resource of human capital and generate additional imome among the vast mass of the population. This is expected to induce savings for further ivestments to meet the demands of an expanding market. One may hope for graduated improvements in technology, sustained structural change and long term growth unimpaired by demand and foreign exchange constraints that are so very common in a conventional strategy [7].

But if we do not consider growth as a legitimate yardstick for development, then we have to work out more acceptable indicators. The basic needs approach provides an alternative set. While basic needs are defined in terms of food, shelter,clothing, health, education, sanitation and employment there should be corresponding quantitative yardsticks to measure the performance of the economy in those respects. It has now become a common practice among the development thinkers promoting basic needs approach to measure the performans in food sector in terms of calorie intake per head or calorie supply as a percentage of requirements in the aggregate and also in the specific group of population. A comprehsive food balance chart is also prepared and the data on cereal, protein, vegetable and oil intake are calculated on per capita basis. The performance in the field of education is measured in terms of the rate of literacy and facilities created for primary education; that in health sector is indicated by life expectancy at birth and also by the numbers of trained physicians, nurses and hospital beds in relation to the number of population; for clothing, it is suggested that we compare the availability per head with a standard measure of minimum requirement per person, keeping in view the age, sex and climatic considerations, and for sanitaition we look into the figures of rates of infant mortality and per cent of population with access to potable water. Employment as measurable in terms of conventional methods, unemloyment and underemployment figures need be looked into as also the indices of real wage rates for different kinds of employments, There is no easy way out for an approptiate

measurement of housing. We can look for the data on the size of floor space per person. But this is not adequate, nor is it easily available.

We want to use some of these indicators to assess the development situation of Bangladesh. There is, however, little dispute as to the rank and status of this economy. The World Bank Development Report, places Bangladesh in the group of the least developed economies [15]. Per capita income shows little momentum for growth for over two decades, and the infrastructural facilities are scanty. This has been so inspite of the fact that there has been continuous aid financed growth oriented investments (12-15 per cent of GDP) in this economy.The outstanding foreign debt for Bangladesh today goes beyond 16 billion dollars. But that has not yet been able to generate a process of self sustaining growth. The domestic saving continues to however around 2.5 per cent of the GNP and the economy remains chronically dependent. Rowtow's simplistic optimism in the efficacy of market mechanism and abiding faith in the one-one correspondence between investment and growth culminating in development falls flat in the face of increasing dependence of the economy of Bangladesh. It is now widely admitted that the conventional policy for aid and development pursued in Bangladesh has failed [6].

Lack of desired growth, however, does not prevent the outcome of increasing inequalities. Innercased money income is mostly channelised into few hands, while the condition of others tends to deteriorate. The Gini coefficient of income distribution approximates 0.40 (worked out on the basis of SYB data, 1990), that of the distribution of landownership, 0.68 (based on SYB data, 1984-85). There has been a continuous decline in the index of real wages of agricultural workers [9]. Taking 1973-74 figure as 100, real wage index for agricultural workers goes down to 77.62 in 1984-85. (based on SYB data). Inequality without growth causeseven greater hardship for the vast majority of the population. It is in this context that basic needs indicators assume added significance. They will provide us with an account of the magnitude of shortfalls/if any, in the supply of basic needs, that need be filled in, and also of the type of investments that they will warrant. We will then have a better understanding of the problems of real overall development, and also a deeper insight into the questions of what kind of distribution system for goods and services we should evolve and what items of goods we should produce and distribute to the benefit of the underprivileged in the society.

The basic needs development strategy discussed above has been the

focus of scholastic attention for a pretty long time. Several books have been written on the subject [4,12] and innumerable journal articles [11,3,5] examined its various aspects. Of these works, the more useful are those which try to apply this approach to assess the basic needs situation of a country and suggest measures to fulfill these needs. This paper is of the latter type. Our objective is to specify a list of basic needs for the economy of Bangladesh, provide estimates of their demand and supply and examine the required increase.

COMPUTATION OF BASIC NEEDS

The rational for the basic needs approach to economic development has been discussed above. We now move on to the computation of basic needs in Bangladesh.

A modern list of basic needs includes food, clothing, education health and housing. The list could be expanded to include transport and commication, and environment. Of these, we shall only consider food, clothing, education and health. The choice is motivated by the fact that it will enable us to obtain information more easily and evaluate the role of public investment more concretely. Besides in an economy which is chronically poverty stricken, basic needs items can be essentially limited to those bare necessities which are needed for the surviaval of population. Hence, exclusion of housing, done here on account of data constraint, will not significantly affect our analysis.

METHODOLOGY

Michael Hopkins says, "For planning it is ....necessary to know the target levels of each of these indicatior (of basic needs) in order for satisfaction of these needs to be assessed" [5]. We proceed along this like. We first provide a quantitative estimate of a basic need, then consider its availability and derive an estimate of the resulting rquired increase.

In setting basic need targets of an item, we sometime define it on the basis of some rational requirement (as in the case of food, clothing and education) or with respect to a reference point (as in the case of health). Having done this, we compare them with the availability of these items from which follow the required increase. It is a simple but useful approach as was pointed out by Hopkins above.

POPULATION DATA

A set of present and projected population data with certain age

distribution, which will be used for our estimation, is given below.

Year	Total Population(m)	Population in 5-9 year age group
1981	87.12	12.88
1987	106.00	15.90
1990	114.00	17.10
1995	128.90	19.46
2000	144.80	21.86

Source: Statistical Yearbook of Bangladesh.

EDUCATION

The basic need for education is defined here to be universal primary education. In order to estimate the demand for primary education, we first consider the data for population in the age group 5 to 9 years. This is below:

year	Total Population	Population in the 5-9 years age group	Total Primary School Enrolment	Required Increase
1987	106 m	15.90m	11.26 m	41.20

Source: World Tables [15].

We see above that for the year 1987, 15.90 million children were eligible to go to primary school. In that year, 11.26 million students were enrolled in the primary schools of Bangladesh. Assuming that the primary schools were working to full capacity we find a required increasee of 41.20% to meet basic need in terms of universal primary education.

Given the present state and physical facilities of most primary schools in Bangladesh, it can be soouldly assumed that each of these can, on an average, accumodate 250 students or 5 classes of 50 students. The actual average is 256, and hence the assumption of full capacity use appears reasonable. The derivedrequired increase of 42.20% above should appear as an understimate if we consider another important aspect of primary education in our country. At present, there are 4 teachers per primary school. It is simply impossible to take a care of 5 classes with 4 teachers, especially during the first four periods when all students are studying. If this discrepancy is to be removed-and it should be -then additional increase is allocation will be called for.

CLOTHING

Determination of basic clothing need is done by defining the yearly needs for men, women and children separately and then obtaining an average for the whole population. The estimates are obtained per capita

terms. Below the needs of men, women and children (1-14 years age group) are specified:

Men

4 Lungis	4 x 2.5	=	10.00yards
4 shirts	4. x1.75	=	7.00 yards
Vests etc.		=	6.00
Warm cloths		=	4.00
Linen, quilts etc.		=	1.50
	Total	=	28.50 yards.

Women

4 saris	4x5.5	=	22.00
4. blouses		=	.4.00
2 petticoats and other		=	6.00
Warm clothes		=	4.00
Linen, quilts etc.		=	1.50
	Total	=	37.50 yards

Children (* 1-14 years; 44.27% of Population)

4 shirts/frocks	4 x 1.5	=	6.00
4 pants		=	4.00
4 vests		=	4.00
Warm clothes		=	3.00
Linen, quilts etc.		=	1.00
	Total	=	18.00 yards

The average requirement for men and women is 33.00 yards or 30.00 meters. The weighted average for the two groups, given that population in the age group 1-14 years is 44.27% and the rest is 55.73% is 23.97 meters.

In 1987, per capita availability of cloth was only 9.90 meters. This implies a required increase of 142.12.

I should be stressed here that basic clothing needs have been conservatively defined here. The richer section use far more cloth than this and the poorer section is left with much less.

HEALTH

In determining basic needs requirement for health, we use three standard key indicatiors. These are: population per physician, population

per nurse and population per hospital bed. We set a very moderate target-that of reaching the subcontinental standard. We take the figures for pakistan and India and compute their weighted average and then compare them with the relevant data for Bangladesh. This is done below.

	Pakistan	India	Average	Bangladesh	Reqired Increase (%)
Popn/Phys (000)	2.9	3.7	3.6	5.9	63.9
Popn/Nurse (000)	10.5	4.7	5.4	15.5	187.0
Popn/ Hosp. bed(000)	1.7	1.3	1.4	3.6	157.1
				Average	136.0

The figures depict a pathetic picture of how backward we are even by the subcontinental standard (Which is itself not satisfactory) in the provision of basic health needs. The estimate show a required increase of 136% to bring it at per with the subcontinental standard.

Our decision to have the subcontinental standard as the reference point may be questioned. Setting any target higher than this will only generate required increase greater than the ones we obtained. Hence, the basic needs figures obtained here should be regarded as underestimates.

FOOD

Basic food demand per capita can be visualised in several ways. Since, food has several components, it is necessary to use composite indices to arrive at an estimate. Two such widely used indictors are supply or calories and proteins. We use these to determine the target basic needs. Three such targets are referred to. These are given below.

CALORIES AVAILBLAE PER DAY

Bangladesh	Absolute Requirement	Subcontinental Average	World Bank Low Income.	Required Increase (%)
1804	2122	–	–	17.62
1804	–	2171	–	20.03
1804	–	–	2327	30.00

Protein: Grams Per Day		
Bangladesh	Subcontinent	Required Increase
36	55	158%

It is clear from the above data that protein dificiency is acute in Bangladesh and any food policy should book into this aspect.

In terms of calories available per day per capita, even if we take the minimum requirement of 2122 calories per day, the required increase is 17.62%. The increase will be much greater is we take the subcontinental average (217 calories) and the World Bank low income reference (2327).

REQUIRED INCREASE: SUMMARY

We now present below a summary of reuired increase (as of 1987) in the four categories of basic needs which we analysed above.

Education	–	41.205%
Clothing	–	142.12%
Health	–	136.00%
Food	–	17.62%

ENTITLEMENT

The estimates given above only show the quantitative magnitudes of required increase in basic needs supply to meet the requirement given some moderately set targets. This does not mean that even if the supply increases come about these will reach those for whom these are intended. The issue has been discussed above in this paper and we stress here that increased basic needs supply must be backed up by appropriate employment, income and other relevant policies.

MEETING BASIC NEEDS BY THE YEAR 2000

We now present below the estimates of required growth rate of basic needs to reach the targets mentioned above given a population growth rate of 2.4%. Since our estimates mostly refer to the year 1987, we carry analysis 13 years forward to the year 2000.

Item	Current Gap(%)	Total Population Growth	Incremental Gap Due to Population Growth.	Total Grouth Required (2) + (4)	Yearly Required Growth Rate
(1)	(2)	(3)	(4)	(5)	(6)
Education	41.20	36.11	51.02	92.22	5.15
Clothing	142.12	36.11	87.16	229.28	9.60
Health	136.00	36.11	85.22	221.22	9.39
Food	17.62	36.11	42.48	60.10	3.69

BASIC NEEDS IN THE FOURTH FIVE YEAR PLAN

Alleviation of poverty is one of the three objectives of the Fourth Five Year Plan (FFYP) (page I,9). This is also one of the objectives of the 20 year perspective plan (1990-2010) of which the Fourth Plan is visnalised as a

part. Allevition of poverty should include provision of basic needs as an explicit policy. We shall now see to what extent this has been done in the FFYP.

The FFYP deals with the four items of basic needs we discussed above in chapters 5 (Food), 6 (Industry), 9 (Education) and 11 (Education). Our first reading of the plan, the draft of which has become available only recently, does not show any concious and explit recognition of Basic needs as a policy objective shortfalls and targets are not explicitly set nor strategies to wipe out these shortfalls explicitly stated.

There are, of course, some proposed measures in the plan which through a rise in income and employment may case the situation, but whether these will imporve the pathetic basic needs situation does not appear to be the prime concern of our planners.

CONCLUSION

Our estimaties in this paper brings out the pathetic state of basic needs supply in our country.At the same time these also indicate that given national will, these needs can be fulfilled if unproductive expenses are systematically diverted to produce basic needs. But in the absence such a commitment, claims such as those of attaining health for all and universal education in the near future would appear utterly hollow.

REFERENCES

1. Adelman, I : Development Economics : A Reassesment of Goals, American Economic Review, May, 1975.
2. Ahluwalia, M.S. and Chenary, H : The Economic Framework in Chenary et.al, Redistribution with Gorwth, Oxford, 1974.
3. Emmerij, Louis : Alternative Development Strategies Based on the Experience of the World Employment Programme, International Journal of Development Planning Literature, Vol. 3, No.1, 1988.
4. Hopkins, M and VD. Hoeven : Basic Needs in Development Planning, Aldershot, Gower Press, 1983.
5. Hopkins, M. : Basic Needs Performance in the Past, Internaional Journal of Development Planning Literature, Vol.4, No.1, 1989.
6. Hossain, Mosharaff : The Assault that Failed : A Profile of Absolute Poverty in Six Villages of Bangladesh, United Nations Research Institute for Social Development, Geneva, 1987.
7. Hunt, D : Economic Theories of Development : An Analysis of Compeeting Paradigms, Harvester Wheat Sheaf, London, 1989.
8. International Labour Organisation : Recommendations, Geneva,1978.

9. Khan, A.R: Real Wages of Agricultural Workers in Bangladesh, in Khan and Lee, (ed), Poverty in Rural Asia, ILO, Bangkok, 1984.
10. Mcnamara, R. : Report to the Board of Governors, World Bank, 1973.
11. Sherman, R. : "Basic Needs and Distributional Weights in Optimal Taxation", International Journal of Development Planning Literature, Vol.3, No. 1,1988.
12. Stewart, F : Work, Income and Inequality: Payment Systems in the Third World, Macmillan, London, 1983.
13. Seers, D.: What are We Trying to Measure?, Journal of Development Studies, April, 1972.
14. Sen, A: Poverty and Famines : An Essay on Entitlement and Deprivation, Oxford, 1981.
15. World Bank : World Development Report, Oxford, 1990.

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BASIC NEEDS AND THE QUESTION OF DISTRIBUTION OF NATIONAL INCOME IN BANGLADESH

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THE NEED FOR BASIC NEEDS APPROACH IN DEVELOPMENT PLANNING

From the time of Adam Smith– the father of bourgeois political economics lots have been done to meet up unlimited human wants by making rational use of all available resources- human material and financial. But still the struggle is going on. The world now is divided into two concrete systems- the socialist and the capitalist. In the case of the socialist countries basic needs have been meet within the shortes possible time. This is mainly due to the nature and mode of production and distribution in these societies, where equality in all respects for the citizens has been set as the ultimate goal of socio-economic development. Whereas in the capitalist countries where everything is rule by the famous Darwinian principle "survival of the fittest", the picture is quite different. Still not a single (even a socalled developed) capitalist country could do away with a vice like unemployment, not to say about other problems like housing, health, education etc. Suffice it to say for the purpose that in London City only fourty thousand people are homeless (BBC News letter, 1989). At the same time one can not ignore the fact that their achievements in meeting basic needs are quite remarkable.

In the countries of the developing world, the situation is highly disgusting. Hunger, poverty, landlessness, illiteracy, malnutrition and so on, are the real features of these societies. As a result of their attempts to do away with these problems, these countries have become the test grounds for all sorts of development models both capitalist and socialist. Success stories are there, but a few. This is the result of the growth theory which dominated economic thoughts during the 50s and 60's of this century. According to this theory economic growth is vital and it will bring development of the society. But in practice growth took place without

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development. Then came the theory of distribution. The planners in these countries started giving more importance on distribution than growth. But it also failed to produce desired results. So they added with it the problem of basic needs as well. Although the basic needs approach as a slogan is already passe, the issue which underlay the coming of the same - the need to attack acute poverty directly-can hardly be dismissed as passe. It is gaining momentum with the passage of time.

As originally formulated at the 1976 Word Employment Conferece and subsequently used in ILO literature, the basic needs approach does represent a series of distinct claims or assumptions, which fall under three headings :

First, if poverty is seriously to be tackled, it is necessary for most of the developing countries, to change direction, to alter the emphasis of their planning strategies, partly because past approaches have proved inadequate or too indirect, and partly because rising oil prices and the international recession have created foreign exchange crises of such magnitude for many countries that emergency measures which sharpen priorities and sacrifice non-priorities be devised. Thus, even if basic needs is not new in the sense that it must incorporate programmes which have been suggested or set up already, the argument that attacking poverty per se should be the priority for all government is distinctive.

Secondly, the basic needs concept, as mostly used in the international agencies, has certainly carried the suggestion that the kind of attack on poverty it envisages is consistent with a variety of general political ideologies and can be achieved by regimes of differing political complexions. This is an important claim, and one which of course gives pouse to all who themselves believe that a particular political or economic philosophy holds out the most valid hope for development, whether it be belief in the free market, in a corporatist mixed economy or in centrally planned sociallism. To interpret basic needs thus is not to agree that it genuinely can mean many things to many people, but to argue that it is a specific and limited target which may be achievable by several routes. The question then is, how extensive is this leeway, this range of political tolerance which is consistent with strategies to meet basic needs. This can only begin to be answered by means of examining the kinds of mobilisation needed, the variety of ways in which these themselves can be achieved.

Thirdly, the basic needs slogan has undeniably often carried the suggestion that poverty can only be quickly and specifically attacked by

concentration on the points at which goods and services are delivered to the poor, that is, on consumption and on public services, on the delivery to the poor of the means to meet their needs. A third element - the right of the poor to participate in planning and decision- making has also been stressed. Together these three points emphasise the mechanisms of delivery and the process of acquisition, so that the impression is sometimes given that the process of production needs less scrutiny, and perhaps can continue along whatever path has been established. This is particularly true of industrial production, given that part of the 'break with the past' emphasis of the basic needs approach is that even the attempt to maximise formal sector employment is inadequate to tackle mass poverty. Since the majority of the poor will continue to be in the rural sector or in the informal urban sector, attention is almost by definition focused on efforts to raise productivity in agriculture and small scale industry and services, with formal industrial production pushed into the background. But of course, this cannot really apply. The pattern taken by industrialisation inevitably has implications for how and on what scale needs can be met. Whatever the scale of foreign trade and aid, the pattern of domestic industry will determine to some extent how many and what kind of goods are available to be bought by or delivered to the poor, and what inputs into agriculture are available to help raise its productivity. Its efficiency will determine how heavy will be the costs of subsidising the delivery of some goods to the poor, and its price structure- by fixing the terms of trade with agriculture - will do much to influence food availability and rural incomes. So a basic needs approach cannot be neutral as to prescriptions for industry; rather, it makes decisions about the size and pattern of investment dependent on the end goal of considering first the consumption needs of the poor.

Now, on the basis of the arguments in favour of a basic needs approach in development planning, let us briefly examine the records of basic needs fulfilment in Bangladesh.

FULFILMENT OF BASIC NEEDS IN BANGLADESH

The countries of the Third World exhibit a wide range of experience in meeting the basic needs of their people. For example, taking the list of countries covered in the 1979 World Bank Report, in 12 countries less than 20% of the adult population were literate in 1975, whilst in 16 of them 80% or more of the populations were literate. The situation in this regard is quite alarming in Bangladesh, where in 1986 more than 50% of the population were suffering from malnutrition (Table-1), nearly 20% of them badly. Informations presented in Table-1 show that although there were

improvements over the period 1973-86, still the situation cannot be termed as satisfactory. Similarly, housing situation is also far from satisfactory. Data presented in Tables - 2 and 3 show that only 13.8% of the population were living in dwelling units and less than 1% of the population were floating people who do not have any sort of living houses. Of the dwelling units more than 69% were 'kacha' houses. What is more important is that sharp contrasts were there between rural and urban areas. For instance, among the urban population only 14.1% were living in dwelling units, while the corresponding figure for rural area is 85.9%. Similarly, 69.3% of the urban houses were 'kacha', while the corresponding figure for rural area is 89.5%.

Table-1 : Distribution of the Population of Bangladesh according to the Level of Calorie Intake during 1973-1986

Years	Poor as Percentage of Total Population			
	I		II	
	Rural	Urban	Rural	Urban
1973-74	82.9	81.4	44.3	28.6
1981-82	73.8	66.0	52.2	30.7
1983-84	57.0	66.0	38.0	35.0
1985-86	51.0	56.0	22.0	19.0

Notes : (a) In the year 1973-74 calorie were calculated excluding few minor items;
b) Poverty line-I = Recommended intake 2122 cals/day/person;
c) Poverty line-II = "Hard Core" Poverty line for which recommended intake 1805 cals/day/person.

Source : Compiled by the author on the basis of data from [6, 7].

Table-2 : Distribution of Rural and Urban Population of Bangladesh by Types of Structure of Households in 1981

(%)

Types of Structure	Rural	Urban	Total
1. In dwelling units	85.9 (83.7)	14.1 (13.8)	100.0
2. In institutional units	37.5 (0.3)	62.5 (0.6)	100.0
3. In business or industrial units	20.0 (0.2)	80.0 (0.3)	100.0
4. Floating	50.0 (0.6)	50.0 (0.5)	100.0
Total	84.8	15.2	100.0

Note : Figures within brackets show national percentage

Source : Calculated by the author on the basis of data from [5,7].

Table-3 : Distribution of Rural and Urban Households of Bangladesh by Types of Dwelling Units in 1981

(%)

Types	Rural	Urban
1. Kacha	89.5 (74.6)	69.8 (8.8)
2. Paka	10.5 (11.6)	30.2 (5.0)
Total	100.0 (86.2)	100.0 (13.8)

Notes : a) Figures within brackets show national percentages;
b) 'Kacha' includes straw-bamboo and mud-made dewlling units;
c) 'Paka' includes C.I. sheet-, wood and brick-made units.

Source : Calculated by the author on the basis of data from [5, 7].

Table-4 : Basic Indicators of Health Facilities in Bangladesh in 1981

Indicators	Availability
1. Cloth*	6.5 metres per capita
2. Tube-well	1 per 192 persons
3. Doctor	1 per 8654 persons
4. Hospital	1 per 128.846 persons
5. Beds in Hospitals.	1. per 3, 661 persons

* Only new clothes are considered.

Source : Calculated by the author on the basis of data from [5. 7].

Table-5 : Sex-wise Rate of Literacy in Bangladesh in 1974 and 1981 Population Censuses

Census	Population all ages			Population 5 years & above		
Years	Both Sex	Male	Female	Both sex	Male	Female
1981	19.7	25.8	13.2	23.8	31.0	16.0
1974	20.2	27.6	12.2	24.3	32.9	14.8

Notes : a) Literacy rate for population all ages : Literacy rate for population all ages has been defined as ratio of literate persons of age 5 years and above to total population multiplied by 100.

b) Literacy rate for population 5 years and above : Literacy rate for population 5 years and above has been defined as number of literate persons of age 5 years and above per 100 persons of the same ages.

c) Definition of literacy :
The concept of literacy used in various censuses conducted in Bangladesh not been uniform. The 1961 Census defineds a person literate if he/she could read any language with understanding the 1974 Census defined literacy as the ability of both read and write in any language, while in 1981 Census a person was treated as literate if he/she could write a letter in any language.

Source : Compiled by the author on the basis of data from [3, 5].

The provision for health facilities is still very poor. For example, in 1981, only 1 tube-well was available for 192 persons, 1 doctor for 8,654, 1 hospital for 128,846 1 bed for 3,661 persons and per capita availability of cloth was 6, 5 metres only (Table-4). What is worth mentioning is the fact that although the situation is better in respect of the availability of tube-wells, pure drinking water is still a big problem for the majority of the population of this country. This can well be explained by mass illiteracy of our people. For instance, over the census period 1974-1981. the index of literacy nearly did not improve (table-5). Mass literacy is still a far cry for Bangladesh.

Why the situation did not change over time despite the socalled planned development efforts? In answering this question the problem of national income distribution should be considered which we shall do in the next part of this paper.

PROBLEMS OF DISTRIBUTION AND REDISTRIBUTION OF NATIONAL INCOME (NI)

The reproduction of social product and NI includes in it the following moments : Production, distribution, exchange and cosumption. Each of them reflects various aspects of economic life of the society which makes apparent their internal independence in relation to one another. Yet they should be examined in dialectical connection and interconditionality as parts of a single whole.

In the process of production people creates material wealth necessary for the allround satisfaction of their needs. Distribution fixes their shares in the social product. Through exchange every member of the society gets his/her necessary goods in quantity conditioned by distribution. Lastly, the products of labour pass on to the consumers being the objects for satisfying their requirements. Thus, production appears to be the starting and initial point. Consumption the final and distribution and exchange the intermediate stage in between production and consumption. The principal and determining moment of the process of reproduction is production which stipulates not only consumption but distribution and exchange as well.

Distributive relations are determined by economic and production relations established at different stages of development of human society depending on the degree of maturity of the productive forces. Since every stage of devlopment of human society is subjected to some economic

laws, distribution relations also are conditioned by economic relations of the given system of production and first of all, the basic economic laws.

The relations of distribution correspond to certain historically determined production relations. In the conditions of Bourgeois system of production based on private capitalist ownership of means of production, NI belongs to the capitalists and is distributed on the basis of the basic economic law of surplus value. Its (law of surplus value) operation leads to the fact that at the one pole of the capitalist society - the capitalists side more and more wealth and luxury are concentrated and at the other - the side of the working mass grow poverty and unemployment, absolute and relative impoverishment of the proletariat at a progressive rate takes place. The lions share of NI is appropriated by the rulling class in the form of profits, interests and rents. The working class gets the smaller part of NI in the form of wages and salaries. Share of the working mass in NI decreases with the development of capitalism. Therefore, under capitalism distribution of NI according to work is impossible. Here, distribution is accomplished according to strength and capital.

The distribution of NI under socialism is quite different. Since NI in such a society belongs to the working class, its distribution is subjected to the continuous rising of welfare of the people and extended reproduction. Engels pointed out that under Socialism distribution as far as it is clearly dictated by economic reasons, would be regulated by the interests of production and development of production will be stimulated, first of all, by such a method of distribution which helps all-round development of all the members of the society and keeps up and reveal their abilities [9; 206].

The function of distribution under socialism is conditioned by the objective economic laws - the basic economic laws, law of planned and proportional development of the national economy, and law of distribution according to labour. But under communism distribution of NI would take a different shape i, e, "from everybody according to ability and to everybody according to needs" So, the principle of distribution according to labour being the objective necessity under socialism - the first phase of communism, plays exceptionally an important role as in the economic development of the society, so in the bringing up of its members. It (distribution according to labour) acts as a powerful factor for socialist organization of labour which is very important for the development of production, raising the productivity of labour and the well-being of the working mass.

In the socialist society social ownership of the means of production not only permits but also makes it essential to distribute NI according to quantity and quality of labour. Underlining active influence of distribution on production, Lenin wrote : 'when we talk about distribution of foodstuffs, it is necessary to think about fair distribution only. One cannot but think that this distribution is the method, instrument and means for increasing production' [13; 359].

Experience of development of the socialist countries convincingly shows the advantage of system of distribution over that of capitalist. It has been reflected in the high rate of growth of these countries. Within a very short historical period, these countries achieved such successes in all spheres of life of the society for which the developed capitalist countries took several centuries. Moreover, these countries have solved some vital problems which the capitalist coutries would never be able to solve. In other words, development of capitalist countries is not all-embracing. For example, even the most developed capitalist countries could not solve the problem of unemployment, not to say about other problems and contradictions which constantly demoralize the life of the people of these countries. That is why there is a growing interest in the developing countries about the socialist system of distribution of NI in determining strategies for their socio-economic development.

In the conditions of the developing countries proper solution of the problem of distribution of NI is particularly very important. Distribution of NI in these countries takes place in a state of sharp class contradiction because of multi-structured character of their economy. Fair distribution of NI in these countries is a very actual task because only such a distribution can accelerate the process of economic growth there. Aims and priorities in these countries are different from that of the developed (capitalists and socialists). Over-coming of backwardness, acceleration of the rate of economic growth, fulfilment of the basic needs of the people - all these dictate wider participation of the state in social life of these countries. Therefore, its not merely by chance that incresed state intervention in the socio-economic process of the independent developing countries has become a law. At the present stage of development, most of these states play a very active role in the distribution and redistribution of NI despite their insignificant contributions in its production. Productive function of the state is very much characteristic for the countries of socialist orientation. Hence, role of the state in the distribution and redistribution of NI in these countries depends on the orientation of their development: the states of socialist

orientation take a more active role in this process than those of capitalist orientation.

In this connection, it is necessary to note that although at present in the conditions of capitalism state actively participates in the process of distribution and redistributions of NI, it can not render significant influence on the socalled process of fair distribution of NI among the classes of the society. It is obvious since without having control over the production of NI, the state can not direct its distribution and redistribution for achieving necessary goals even if it really desires that. So, distributive function of the state under capitalism takes a very limited characted and owing to the objective process of development of this society, serves the interests of the ruling class. Under socialism the situation is quite different. Here, the state having control over production, activety takes part in the process of distribution and redistribution of the produced NI. Distributive function here, is quite different from that under capitalism. Due to some objective causes (presence of commodity-money relations and their consequences, difference between physical and mental labour, between towns and villages etc.) , state under socialism strives for fairer distribution of NI among all the members of the society by consciously executing its function of distribution and redistribution. Therefore, its not by chance that with ever year passing the share of social consumption fund in the total consumption fund of the society is rising in the socialist countries.

In the conditions of the developing countries due to objective causes like backwardness, absenece of a big capitalist class, general disintegration of the economy and so on, the state is compelled to take an active part in the process of distribution and redistribution of NI for accelerating the process of over-coming general backwardness of the economy, its (NI) rational utilization for the development of the country and on that basis improve the level of life of the people. That is why irrespective of their orientation the income and expenditures of these states are rapidly rising with every year passing. At the same time, it is worth mentioning that in the countries of socialist orientation state expenditures are mainly utilized in productive purposes and in those of capitalist orientation quite the reverse in unproductive purposes.

Now, on the basis of the above discussion, let us examine the role of the state in the distribution and redistribution of NI in the conditions of Bangladesh.

First of all, it should be mentioned that official statistics in Bangladesh is

very imperfect and unreliable. It is based on western theories of the factrors of production according to which incomes are divided into the following categories: a) Incom from labour, b) from capital, c) from entrepreneurship and d) from property ownership. The most outstanding problem of NI statistis of this country is its distribution according to basic classes and social groups of people in the society. Due to the above-mentioned limitations and also as a result of the absence of necessary informations we shall make an attempt to determine rather conditionally the structure of the distribution of NI of our country. Here, it should also be noted that in the conditions of Bangladesh it is almost impossible to distinguish between primary and secondary incomes since NI includes incomes of both productive and unproductive sectors of the economy.

Incomes in the conditions of multi-structured economy of Bangladesh take the following forms:

1) Wages and salaries;
2) Income from capital (Profits);
3) Income from private property ownership (rents from land ownership, from houses and so on);
4) Income of the small producers of towns and villages;
5) Income of the state (from state enterpries, organisations and properties).

It is very difficult to determine the shares of the abovementioned incomes in the GDP of the, country due to absence of necessary information. For example, from the data about the share of people getting wages this way or that (28.67% in 1974) [4; 472] a conclusion can be drawn that the shares of wages in NI (GDP) remains below 30%. Share of profites in it can not yet be determined for want of data. Besides these, no data is available about the profits the foreign companies having their subsidiaries in our country. Consequently, no information is available as well about the withdrawl of profits by them from Bangladesh both by legal and illegal means. The obvious result of such a phenomenon is that NI (GDP) of our country decreases considerably which in turn curtails capital accumulation.

When we talk about the distribution of NI (GDP) in the conditions of Bangladesh, we sould take into account the fact that it takes place very unevenly due to certain objective reasons like the law of spontaneous development and others. For example, it the coefficient of Gini[1] in both

1. Gini coefficient-widely known statistical criterion of unevenness of income distribution having the range 0-1. Lower the value of the coefficient, more even is the income distribution.

rural and urban areas in 1968-1969 were 0.27 and 0.37 respectively then in 1973-74 it raised to 0.38 and 0.37 respectively [1; 14-15]. Tendency of raising Gini Coeffienct shows that in Bangladesh unequality in the distribution of NI (GDP) is increasing with the passage of time. That is why the participation of the state in the process of distribution and redistribution is so important. As mentioned earlier, in Bangladesh the state is included in this process. Incomes of the state consists of the incomes from state enterprises, organizations and properties. Share of these incomes in NI (GDP) is insignificant. Data presented in Table-6 shows that incomes from the above-mentioned sources during the period 1972-1979 accounted for less than 2% of NI (GDP). At the same time the index had been subjected to strong fluctuation. For example, state incomes continuously rose until 1977 after which it decreased. It may be explained by the fact that from 1977 the process of denationalization of state enterprises began.

So., it is evident that the distribution of NI(GDP) in Bangladesh is going on spontaneously and the state has a very limited role in it. The state's role is basically confined to its redistribution and utilization. The principle element of the ,mechanism of redistribution is the state budget. Statization of the increasing part of NI (GDP) raises the possibility of its rational utilization, creates conditions for accelerating the rate of accumulation and economic growth. Consequently, the more the state accumulates incomes, the wider is its redistributive functions, the stroger would be the influence of state expenditure on the economy. For certain reasons, it has special significance for Bangladesh where the major portion of NI (GDP) is used as already mentioned, in unproductive purposes. Firstly, a certain part (quite significant) ...of NI (GDP) is appropriated by the foreign companies and citizens, and taken out of the country. Secondly, in Bangladesh a very considerable portion of incomes is transformed into usurious and commercial capital utilized for purchasing immovable properties or spent on consumption purposes. There development needs of the country more persistently compel the state to interfere in the utilization of NI, its redistribution in accordance with its primary tasks. At the present stage of development of her economy, Bangldesh can strive for more rational and productive utilization of incomes by intensifying the redistributive functions of the state. Practical realization of this point of departure would bring about considerable correction in the coefficient of effective utilization of the distributive function of the state. Undoubtedly, it has progressive significance as a whole. By accumulating a part of the corporate and individual incomes in the budget through measures of compulsion, the

state after meeting the expenditures on administrative appratus and social needs, utilizes the remaining resources for investment purposes thereby increasing real accumulation.

The question arises: What is the real situation in Bangladesh? Indeed, for the period of incependence, despite considerable efforts of the government of Bangladesh current incomes of the budget in comparison to GDP grew rather slowly. Thus, for example, if in 1972-73 incomes of the state budget accounted for 5.0% of GDP, then in 1978-79-9.1% (Table-6). In determining the share of NI (GDP) redistributed through taxation one must take into account the fact that in Bangladesh the macro-economic index of NI (GDP) calculated according to western methodology includes in it the incomes of the unproductive sectors of the economy which in fact are the products of redistribution of incomes created in the sectors of material production. Besides these, in evaluating NI (GDP) in market prices indirect traxes are also taken into considertion. All these and also the inclusion of amortization in GDP to some extent understate the share of incomes actually redistributed through taxation measures.

Economically, the budget incomes are heterogeneous. Only a very insignifficant part of it consists of primary incomes profits of the state enterprises, rents and interests (in Table-6 they are grouped under the clause "non-tax income"). Relative share of revenue of the budget from this head is still insignificant (below 20% and highly fluctuated during the period under consideration (Table-6).

Table-6: Income Structure of the State Budget of Bangladesh during 1972–1979

%

Items	Year						
	1972–1973	1973–1974	1974–1975	1975–1976	1976–1977	1977–1978	1978–1979
Tax revenue	82.0	85.2	83.9	84.9	81.8	82.2	85.4
Non-tax revenue	18.0	14.8	16.1	15.1	18.2	17.8	14.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Share of budget revenue in GDP	5.0	5.1	5.1	9.1	8.9	8.4	9.1
Share of non-tax revenue in GDP.	0.9	0.8	0.8	1.4	1.6	1.5	1.3

Source: [12]

Table-7: Structure of Tax Revenue of the Government of Bangladesh during 1972-1979

Items	1972-1973	1973-1974	1974-1975	1975-1976	1976-1977	1977-1978	1978 1979
Direct	9.1	12.8	15.7	17.2	16.4	16.2	14.7
Indirect	79.7	79.2	67.2	78.8	80.2	80.9	28.5
Others	11.2	8.0	17.1	4.1	3.4	2.9	2.8

Source: [12]

The principal sources of budget revenues are various kinds of taxes. For example during the period under consideration more than 80% of the total budget revenue was provieded by this head. One thing which attracts attention is that the share of direct taxes in the total volume of tax revenue is very insignificant-below 20% (Table-6). What is more important is the fact that direct taxes are basically paid by the common people. Major portion of tax revenues come from indirect taxes which as a rule is ultimately paid by the general public. Such a situation to a considerable extent is determined by: (a) lower level of socio-economic development of the country; (b) Presence of the remnants of pre-capitalist relations in their perverted forms; (c) small per capita inceome: and (d) exceptionally high depencence on foreign trade.

Thus, judging from the informations presented in the Table-7, it can be concluded that the main source of budget revenues in Bangladesh is the general people. The rich and the corporate sector remain nearly untouched, not to say about the fact that under the present system of taxation, they evade payments of taxes by different methods. get unjustified subsidies and tax rebates. This in turn lead to the worsening of the already existing gap between the rich and the poor in the society which obviously contradicts the objective of fair distribution of NI (GDP) in favour of the poorest class of people of our country.

In this connection, it is necessary to exemine how the budget resources are spent. Redistributive function of the state is connected not only with the formation of income part of the budget but also with expenditure of the budget resources. Through budget the government partly redistributes incomes among various sections of population in accordance with its social policy.

Important channel of budgetary redistribution of incomes among various sections of population is retail price subsidy. But this factor has vital

importance in the countries of socialist orientation. In Bangladesh this type of budgetary expenditure had importance only until 1975 after which the government gradually curtailed price subsidy mainly under the pressure from International Bank for Reconstruction and Development (IBRD) and International Monetary Fund (IMF).

From the view point of reproduction of NI (GDP), it is very important on what purposes the budgetary expenditure of Bangladesh are made. Statistics of budgetary expenditure of Bangladesh permit us to examine them from one side from the view point of sectoral distribution and from the other division into capital and current expenditure. Thus, for example, structure of current and capital expenditure presented in Table-8 shows that the largest quota of current expenditure goes to the military and administrative sphere 34.9%. Among capital expenditures, the largest part goes to the economic sphere. It should be Noted here that the principal sources of financing this part (capital expenditures) of the budget is foreign aid. Only a small part of it is covered by the surpluses of the revenue budget (Table-8).

If the structure and dynamics of current expenditure are examined, then first of all attention is drawn by the military expenditure which rose very sharply after the military take-over in August 1975. For example, if military expenditure in 1972-73 accounted for only 9.5% of the total budget expenditure, then in 1978-79 its share nearly doubled 18.1% (Table-9). On the other hand, expenditure on such an important sector like education constantly decreased. Thus, its share had been reduced from 21.1% in 1972-73 to 14.3% in 1978–79. Expenditure on health was also reduced. It should be noted here that although expenditure on administration decreased, its share was still very sigfnificant in the structure of the total budget (current expenditure. All these show that quite a large part of the budget expenditure is spent on unproductive purpose and only a very insignificant portion is used for productive purposes.

It is evident from the above-mentioned facts that the development budget is nearly competely dependent on debts internal and external. Therefore, budget debts and subsidies have become a very important instrument of income redistribution. It is necessary to mention that the present conditions of Bangladesh this channel of redistribution serves as an important factor of enriching the growing national bourgeoisie. At the same time, state budget represents itself as the principle but not only instrument of redistribution of NI (GDP) by the state. Important role in it is

played by the price policy of the government, first of all, on commodities and services produced by the state enterprises. Through these prices, particularly on the services of transport and communications, energy and raw materials, redistrbution of incomes created in the state sector takes place in favour of the private producers, that is, secret subsidization of the later. Similar redistributive functions but in favour of the state itself is accomplished by the purchasing and markting agencies of the government, the basic function of which is to buy agricultural products mainly rice and jute from the farmers.

Table-8: Structure of Budget Expenditure of Bangladesh during 1977-1978

Sectors	Expenditure	
	Current	Development
1. Administrative and military	34.9	0.8
2. Social	20.5	17.9
3. Economic	13.2	79.7
4. Others	31.4	1.6
Total	100.0	100.0

Source: [12]

Table-9: Structure of Budget Expenditures (Current) of Bangladesh during 1972-1979

(%)

Sectors	Years						
	1972–1973	1973–1974	1974–1975	197–-1976	1976–1977	197–1978	197–-1979
1. Revenue Collection department	6.0	4.5	3.1	3.3	2.9	2.9	3.9
2. Civil Administration	34.0	34.6	24.5	23.2	26.6	21.5	23.7
3. Defence	9.5	13.2	13.4	19.1	22.3	19.2	18.1
4. Education	21.1	20.4	15.6	14.3	13.4	13.4	14.3
5. Health	5.6	4.8	3.4	4.7	4.1	4.7	5.1
6. Sciences	2.1	6.8	9.0	5.9	3.9	3.7	4.1
7. Interests	6.3	3.8	5.9	7.0	9.0	8.7	8.8
8. Others	15.4	11.9	24.2	22.3	17.8	25.9	22.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: [12].

Outstanding role in the process of redistribution of private incomes is played by the credit and financial institutions. Particulary important among these are socalled development banks, insurance companies and savings banks which accumulate the small savings of the people and invest them in the state and private sectors.

CONCLUSION

Therefore, experience of development planning and the distributions of national income in Bangladesh shows that there is a strong relationshjip between the distribution of national income and the fulfilment of basic needs of the people. Basic Needs approach as such can not help solving the problems of basic needs of our people. It can not be an end in itself. Its success depends on the nature of government and the socio-economic system of the country. For example, in China, adequate food, shelter, health care and other basic necessities were provided within a short time period with repid economic growth average growth between 1952 and 1978 of 6.2%. The important factor was a radical transformation in the institutions of production. The same is true of Cuba as well where the main component of success in meeting the basic needs of the people has been high public expenditure on education and health, whose benefits are widely spread. In the case of Cuba, basic needs are also partly met by full employment, subsidies and rationing for essential items and supply management. On the other hand, Brazil and Indonesia which have registered sustained economic growth failed to meet the basic needs of their people. This is mainly due to the nature of the distribution of the results of production (NI), and the design and coverage of public services. The incomes of the very poor may even have declined absolutely. Growth has been largely capital intensive and employment has lagged behind output, as population and labour supply have continued to increase repidly. Much production has been of luxury not basic goods. The poor have had inadequate purchasing power and food prices have been high. Private sector expenditure, which might have compensated, instead reinforced the uneven effects of the private sector. Total public expenditure was low in both the countries and tended to be concentrated on the middle classes as a result of urban and regional biases. For instance, in Brazil, health services were concentrated on large urban hospitals, serving the middle class, while in Indonesia, food subsidies were confined to the military and civil servants. The same thing can be said about Bangladesh as is evident from the pattern of distribution of her national income. In Bangladesh three five-year plans have already been implemented with very little impact on basic needs. The Fourth has already started functioning. Judging from the speach of Dr. SK. Maksud ali-a member of the Planning Commission-out lining the basic features of the plan at the President's Secretariate, it seems that the planners made an attempt to apply basic needs approach in working out the plan. The

success of this plan in meeting the basic needs of our people is yet to be seen, but one thing can be said at this stage that without changing present system of ownership and institution of our society, meeting basic would remain as a goal in the plan documents only. In the words of Marx it sounds like this: "the academics have interpreted the world; the point is to change it".

REFERENCES

1. Alamgir, M.: Bangladesh—A Case of Below Poverty Level Equilibrium Trap, 1978.
2. Bangladesh Bank: Annual Report, 1988-89 (in Bengali), 1989.
3. BBS: Census of Population, Government of Bangladesh, Dhaka, 1974.
4. BBS: Statistical Year book of Bangladesh, Government of Bangladesh, Dhaka, 1980.
5. BBS: Census of Population, Government of Bangladesh, Dhaka, 1981.
6. BBS: Bangladesh Household Expenditure Survey, Government of Bangladesh, Dhaka, 1986.
7. BBS: Statistical Year book of Bangladesh, Government of Bangladesh, Dhaka, 1989.
8. Bienefeld, M.A.: "Tanzanian Industry and Basic Needs: Short-and Long-Term Issues", in Basic Needs in Danger: A Basic Needs Oriented Strategy for Tanzania, ILO/JASPA, Addis Ababa, 1981.
9. Engels, F.: Anti-During, Complete Works in Russian, Vol 20.
10. ILO/JASPA: Basic Needs in an Economy under Pressure: Report of the Basic Needs Mission to Zambia, Technical Paper No. 3, Addis Ababa, 1980
11. ILO/SASPA: Firts Things First: Meeting the Basic Needs of the People of Nigeria, Addis Ababa, 1981.
12. Khan M.H. : National Income and Strategy of Socio-economic Development of Bangladesh-an Unpublished Ph. D. Dissertation Defended at the Leningrad Institute of Finance and Economics, USSR, 1985.
13. Lenin, V.I.: Speech at the 3rd All-Russian Food Conference held on 16th June 1921, Complete Works in Russian, vol. 44.
14. Mayer, Jean,: "Spatial Aspects of Basic Needs Strategy: The Distributions of Essential Services," International Labour Review, Vol. 118, No. 1, January-February, 1979.
15. Myrdal Gunnar: Asian Drama: an Inquiry into the Poverty of Nation, Vol. 1-3, Twentieth Century Fund, New York, 1968
16. Streeten, Paul with Shahid Javed Burki, Mahbub-ul-Haq, Norman Hicks and Frances Stewart: First Things First: Meeting Basic Human Needs in the Developing Countries, International Bank for Reconstruction and Development/The World Bank, Washington, 1981.

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