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ANISUR RAHMAN
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Editors

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বাংলাদেশ জার্নাল অফ পলিটিক্যাল ইকনমি

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Editors' Note

The volume, in two parts, brings together the papers presented at the Eleventh Biennial Conference of the Bangladesh Economic Association (BEA) held in Dhaka on July 29-31, 1995. The volume has the distinction of having as its opening article the Conference Address given by Dr Frances Stewart, Director of the Queen Elizabeth House, Oxford. The Memorial Lectures which were delivered at the BEA Conference by seven distinguished economists are included in the volume. The two parts of volume together contains twenty-two full articles and abstracts of another twenty-two articles.

Professor *Abdul Bayes* of the Jahangirnagar University was actively involved in selecting the papers submitted to the conference and in making initial comments on them. His contribution is gratefully acknowledged. The editors also greatly benefitted from the editorial support received from Mr *Jahirul Islam* Research Associate of the Bangladesh Institute of Development Studies (BIDS).

Mr *Fariduddin Ahmed* and Mr *Belayet Hossain* of the BIDS deserve special thanks for their assistance in word-processing and proof-reading respectively. Mr *Shahjahan Hafiz Mukul* of the Multimedia Bangladesh has all the appreciation for efficiently handling the printing of the volume. The *DeskTop Computing Ltd* is commended for professionally handling the typesetting job.

Conference Address

Why We Need A Structured Market

Frances Stewart*

The 1980s saw a victory of the market over planning. The intellectual battle was initiated earlier—for developed countries by Von Hayek and then Milton Friedman, for developing countries by Little, Scott and Scitovsky in the early 1970s. At first, strong *laissez-faire* market views were regarded as an intellectual curiosity, but gradually they achieved dominance among governments of major industrialised countries, especially under Reagan and Thatcher, and in the World Bank in the Barber/Krueger/Stern era. (No change was recorded in the IMF, where such views had always held sway). The intellectual change was translated into policy change in developing countries during the 1980s as the industrialised countries, largely operating through the IMF and the World Bank, gained unprecedented (for the Post-Colonial era) power over decision-making, following the debt crunch and the subsequent prevalence of policy conditionality. A *laissez-faire* approach with an enhanced role for the market and a diminished role for the State lay at the heart of the policy conditionality of both Fund and Bank.

The overthrow of communism at the end of the 1980s was a further and perhaps decisive change in favour of the market; the flaws in communist societies discredited market alternatives, leaving no role model for poor societies seeking alternative paths of development.

Yet both intellectually and in practice, the unregulated market does not represent an optimum as many of the papers by Sidney Dell have shown.¹ It ignores externalities and is blind to poverty. The first is of particular concern as issues of the environment and technological change loom larger, while the second was revealed as a major fault-line by the growing poverty in many adjusting countries in the 1980s.

The aim of this paper is to examine the case for a **structured market**—that is a market which is deliberately regulated, or structured, to deal with issues of externalities and poverty, and hence does not have the essential defects just mentioned, which are associated with an unregulated market. A structured market does not replace market allocation of resources by detailed planning—which has often proved to be a clumsy and corrupt system of resource

Director, Queen Elizabeth House, University of Oxford, UK.

¹ See especially Dell's work on stabilisation and adjustment policies, including Dell 1982, 1985, 1987.

allocation, except in wartime (beside being politically unacceptable at this juncture).

The paper is organised as follows : the next section summarises some of the theoretical deficiencies of the market model. Section II reviews practical defects in four categories—meeting social needs in general and during adjustment, securing appropriate technology and promoting economic growth. (Environmental issues, which perhaps provide the most overwhelming reason for intervention in the market, are not dealt with in this paper). Section III further defines the concept of a structured market and provides some examples where the approach has been used effectively. Section IV discusses some problems with the approach and comes to some conclusions.

I. THEORETICAL DEFICIENCIES OF THE MARKET MODEL

The theoretical deficiencies of the market model are well known, but nonetheless need repeating, since it is often implied that there is a **welfare-theoretic** case which underlies the case for a *laissez-faire* market approach.² These theoretical deficiencies are such that the case for the market cannot be justified by appeal to welfare theory. Major deficiencies include : income distribution considerations; the existence of indivisibilities and economies of scale; externalities and imperfections in knowledge/information; public goods, technology change and learning economies; the theory of the second best; and assumptions about organisation and motivation (Some of these categories overlap).

I A. Income Distribution: It is well known that a market-produced Pareto optimum is consistent with any income distribution. Rewards to factors occur in proportion to their marginal product. Thus if one group owns an asset which is abundant—e.g., labour—marginal product will be low (even zero in certain circumstances) and the market equilibrium will be consistent with very low or even zero incomes for this group. This is illustrated in Diagram One. This indeed is what has happened to labour in conditions of labour surplus, when real wages have been depressed to very low levels, even at times of rising average product (e.g., rural wages in the Philippines in the 1970s, where nearly half the population were classified as below a subsistence poverty line). Moreover, if people are incapacitated and have no economic asset, the market

²It might be noted, in passing, that were this correct the Colonial economic model, which was for the most part a *laissez-faire* approach, should have promoted economic growth far more effectively than the interventionist post-colonial regimes; yet growth accelerated, reaching hitherto unprecedented heights, in many post-Colonial societies in the 1950s and 1960s.

rewards them accordingly. The market takes no account of **needs** in its distribution of rewards.

Consequently, a market equilibrium may be quite consistent with famine or chronic poverty. In principle, this may be offset by a redistributing government (through lump-sum taxes and payments, so as not to affect the essential margins). But in practice, substantial redistribution of primary incomes is rare, partly for political reasons (people who have gained in the market offer powerful resistance to heavy taxation); partly for administrative reasons, which always rule out the lump-sum approach and limit major transfers in most poor countries; and partly because heavy marginal taxation is resisted on the grounds of incentives.

I B. Indivisibilities and Economies of Scale : These are very significant in modern industrial economies. Until around the 1980s there was a steady increase in technical economies of scale, and in concentration ratios in most industrial economies, but the micro-electronics revolution seems to have halted the inexorable giantism, but has not, in most cases, reversed it dramatically. The consequence of the existence of economies of scale is to alter the shape of the production function in a "perverse" direction, so that a corner solution emerges, in which marginal equalities cannot be realised or there are multiple equilibria (see Diagram Two below). Both destroy the essential foundations of the welfare-theoretic case for market solutions. For developing countries, the existence of important economies of scale has especial significance : first, it means that oligopoly or monopoly will emerge rather than competitive structures in these firms, and makes it difficult for new firms to compete, being handicapped by high costs, associated with size. Government support may become essential for entry into industries subject to large economies of scale.

I C. Externalities : Pigou defined externalities as occurring where "one person.. in the course of rendering some service for which payment is made... incidentally also renders other services/disservices to other persons of such a sort that payment cannot be exacted" (Pigou 1938, p. 183). Later Viner, Meade and then Scitovsky distinguished real (or technological) externalities from pecuniary, the former being actual physical effects (e.g., factory smoke polluting laundries), and the latter consisting of a change in market prices and/or availability of goods or services. It has become common, in the era of the ascendancy of the market, to argue that real externalities are empirically insignificant (e.g., Little and Mirrlees) and pecuniary externalities don't count as they are simply a market adjustment (Newbery). Moreover, following Coase, it has been suggested that the market itself will deal with real externalities, and if

it does not this is because property rights are ill defined, so that the solution is to create property rights (e.g., by privatising the commons).

These views, which downplay the significance of externalities, are mistaken for three reasons. First, they focus on static externalities, which may well be of somewhat minor significance. It is dynamic externalities which are of especial significance in developing countries, consisting of the transmission of technological change and learning between firms (a real externality) and the development of markets (a pecuniary externality) and the resultant emergence of specialist firms and services (a combination of real and pecuniary externalities). Examples such as the development of agro-industry in the Punjab or Silicon valley in the US illustrate these dynamic externalities.³ In the words of Rosenberg, writing of nineteenth century industrial development: "Inventions hardly ever happen in isolation...the growing productivity of industrial economies is the complex outcome of large numbers of interlocking technologies, the individual components of which are of very limited consequences in themselves... (Rosenberg 1982, p. 56-5). Secondly, the potential for market solutions to such externalities is very low where large numbers of factors are involved, which is true both in the area of technology change and the environment. Thirdly, most "property rights" solutions have distributional implications (often inegalitarian).

The cumulative and combined effect of economies of scale, economies of learning, externalities and the emergence of markets is the development of a process of cumulative causation (or its reverse, stagnation) which may require government intervention to get started.

I D. Information Asymmetries: The externalities associated with technology change and technology transfer can be regarded as one case of informational asymmetry which justifies government intervention. Another is in the realm of capital markets, where unknown characteristics of borrowers and future developments mean that a pure market solution to credit allocation can lead to a worse situation than one characterised by intervention, and may also discriminate particularly against the poor, who lack collateral to guarantee against risk (see Akerlof; Stiglitz; Stiglitz and Weiss).

I E. The Theory of Second Best : This theory simply states that from a welfare theoretic perspective, if one marginal rule of a Pareto optimum has been violated then it may not be best to meet the other marginal conditions.

³See Stewart and Ghani, 1990, for further analysis and empirical evidence.

The appropriate optimising rule will then depend on the particular circumstances of developing country, the welfare case for meeting the other marginal conditions by a *laissez-faire* market no longer exist.

While these five market deficiencies apply to any market, they are particularly serious for poor countries : first, because failures of income distribution and to produce social goods may lead to abysmal poverty and even death, as people are nearer the margin and have few resources to fall back on; secondly, because small markets imply that economies of scale are more important in developing economies; thirdly, technological backwardness means that learning economies and technology transfer are especially important. Moreover, developing countries have special features which make the market less efficient as a resource allocator. There is a widespread absence of institutions which are essential for the effective working of the market and to control abuses—e.g. deficient legal systems; poorly working financial markets; weak social, transport and technological infrastructure. Secondly, the motivational assumption of the market-profit maximising in private firms-applies to only a small minority of decision makers. The role of the family, parastatals, multinational companies, all with different motivation and responding differently to market signals, is proportionately much greater than that of the profit-maximising firm presumed by welfare theory. Thirdly, structural bottlenecks are much greater, so that markets are “segmented” and respond weakly in many countries (this is partly due to deficient infrastructure, partly to historic heritage in which a small “modern” sector coexists with a sea of informal sector/traditional sector agents).

The unregulated market, therefore, is not justified by welfare theory; the case for it must rest on pragmatic grounds—that in practice it works best. The next section considers some market failures in developing countries from a more pragmatic perspective.

II. PRACTICAL DEFICIENCIES OF THE UNREGULATED MARKET

This section will consider four categories of practical failure of the unregulated market : the failure systematically to meet social needs; the special failure to meet social needs during stabilisation and adjustment; the failure to promote appropriate technology; and issues related to growth and learning. In each case, the failures do not suggest the market should be replaced by the state, but rather that the unregulated market can produce undesirable results and needs to be structured (or complemented) by state activity.

II A Social Needs :

Two types of income are essential if people are to rise out of poverty—primary incomes, arising from their participation in the economic system; and social income, arising from transfers by the state and the provision of public goods in priority services (e.g., health and education). The unstructured market can fail to generate enough of both types of income leading to destitution.

Failure to generate adequate primary incomes, or entitlement failure in Sen's terminology, can be acute or chronic. Famine arises when there is an acute entitlement failure. This usually occurs when there is a sudden disturbance due to drought and/or war. Millions of deaths can result, as for example in Bengal in the 1940s, and more recently in Ethiopia in the early and late 1980s, in the Sudan and in Mozambique. Most of the deaths associated with civil war are indirect, caused by failures of supply and/or incomes. The unregulated market does not prevent and may, through speculation, accentuate this trauma.⁴ The problem with the unregulated market is that price/income relationships can change rapidly and radically depriving households of adequate access to food. This is not to argue that a state controlled system rules out such developments. Tens of millions died in the Chinese famine of 1959-61, associated with bureaucratic rather than market failures. But regulated markets can prevent dramatic entitlement failures during war, as e.g. in Britain during the Second World War (when nutrition standards actually rose), in Iran and in Nicaragua.⁵ Chronic poverty leading to high levels of malnutrition is a more common consequence of the unregulated market. This may occur even when incomes per capita are growing. Primary incomes of the poor can be inadequate to meet household food needs because of very low wages. For example, in the Philippines during the 1970s, real wages fell even though average output per head was rising; more than half the population fell below a poverty line, while over 40% of children were registered as malnourished. The unregulated market leads to low wages in a labour surplus situation, with marginal product of unskilled workers low or zero, and the poor lack of human or physical assets—the situation in the Philippines at this time. Traditional (and socialist) payments arrangements help avoid this chronic destitution by sharing output according to needs rather than marginal productivity.⁶ State action can help ameliorate the situation by food subsidies/ rations, pensions, minimum wage legislation etc. The provision of social income is the responsibility of the state, not the market. The market cannot meet the needs for health, education or clean water

⁴ See Stewart 1993 for a more detailed analysis of countries at war.

⁵ Dreze and Gazdar 1991; Utting 1987; Stewart 1993.

⁶ See examples of alternative payments arrangements in Stewart (ed.) 1983.

adequately because of the large externalities associated with these services, indivisibilities and very low primary incomes among the poor. Grossly inadequate provision of social goods occurs in many market economies, perhaps because of the lesser role given to the state. For example, in Kenya only 28% of the population have access to safe water; in Bolivia 34% of the population have access to sanitation and in Pakistan 22%; in Liberia only 34% of the population have access to health services.⁷

The net effect of failures with respect to primary and social income is poor human indicators with infant mortality rates of ten times those of industrialised countries is for example, Malawi and Sierra Leone; maternal mortality rates more than twenty times industrialised country rates in large numbers of countries including Nigeria, Bolivia, Cote D'Ivoire and Pakistan. Malnutrition rates among children of over 40% are observed in Nigeria, Zambia, Pakistan and Bangladesh among other countries.

Failures on primary and social income, however, are not an unavoidable consequence of the market: countries can regulate their markets so that the poor participate in economic activity (and/or receive supplementary income) and have access to social goods. For example, in Costa Rica over 80% of the population have access to safe water and sanitation and health services; the literacy rate is 93; malnutrition 8% (Stunting); the infant mortality rate is the same as that of developed countries. In both Maharashtra State in India and in Botswana extreme entitlement loss due to drought is prevented by employment schemes. In Egypt universal and generous food subsidies maintain nutrition standards among the poor. Tamil Nadu has introduced a pension scheme for those on very low incomes.

II B. Adjustment and Poverty :

During the 1980s, the strong adjustment efforts in Latin America and Africa especially, led by the International Financial Institutions, were deflationary (especially initially) and pro-market. The deflation was accompanied by falling per capita incomes in many countries and falling levels of per capita consumption; there were cutbacks in real expenditure per capita on the social sectors in the majority of the countries in these regions. The adjustment efforts had a broadly adverse effect on the distribution of income in Latin America, where real wages were significantly reduced and formal sector employment growth slowed or reversed, with little compensation from new employment

⁷ Data from UNDP 1993 for most recent year.

opportunities; the rural situation also often deteriorated. Poverty level rose, especially in the urban areas.⁸ In sub-Saharan Africa, rural trade improved which may have helped the rural poor, but the position of the urban poor worsened severely. Average real per capita incomes fell by 15% over the decade.⁹ In both areas, there were cutbacks in education and health services.

While the unregulated market provided no "safety net" for those who were hurt by the adjustment process, some countries succeeded in protecting the poor during adjustment by expansionary macro-policies and active pro-poor policies. In Colombia and Indonesia, growth was positive throughout the decade and income distribution improved. In Zimbabwe, there was a switch in economic (rural credit) and social (health and education) resources towards the deprived black population. In Bolivia, the Emergency Social Fund helped to protect some of those who became unemployed, while in Chile massive employment schemes gave minimal incomes to up to 13% of the population.

II C. Appropriate Technology :

In many countries, there is a strong case for more resources going to small scale and labour intensive activities, which are frequently more efficient as well as being more employment creating.¹⁰ Yet inappropriate technologies tend to dominate even where efficient appropriate alternatives are available. This was the case, for example, in the spinning and weaving sector in textiles in Thailand, and in rice-milling in the Philippines.¹¹ The reasons for the inappropriate choices are partly government action and partly deficiencies of the market. Government regulations, including wage legislation, credit market, tariff and purchasing policy frequently push technology choice in an inappropriate direction.¹²

Market defects also play a role, especially in the allocation of credit and foreign exchange. The credit market is highly risky; small scale activities lacking collateral are unable to secure access to the formal sector. Most studies show that less than 1% of their credit needs come from the formal sector. Small scale activities have to have recourse to the informal sector where they pay interest

⁸ For a summary of evidence on the situation in Latin America see Stewart 1992.

⁹ Evidence is summarised in Basu and Stewart 1993.

¹⁰ Summary of evidence is contained in Stewart (ed.) 1987; and Stewart, Thomas and de Wilde (eds.) 1990.

¹¹ Santikarn 1990 for evidence on Thailand; Ranis and Stewart in Stewart (ed.) 1987 for evidence on rice-milling.

¹² For evidence see Stewart, Thomas and de Wilde 1990, *passim*.

rates which can be ten or more times as high.¹³ Female-owned enterprises have particular difficulties. When the foreign exchange market is unregulated (as for example with the credit auction in Zambia), the small-activities were unable to compete with the large firms (often foreign or government-owned), and received almost no foreign exchange.¹⁴

While state allocation of resources has a poor record in directing resources towards the small-scale sector (as in Tanzania and Zimbabwe, for example)¹⁵, the unregulated market fares no better. Active policies are needed to ensure an adequate proportion of resources goes to this sector.

II D. Externalities and Economic Growth

The importance of dynamic externalities, especially in the development of industries new to a country, is well supported by empirical evidence.¹⁶ Rosenberg has documented the important linkages between firms and industries in nineteenth century Britain, as the development of one technology was imitated by others, and the development of a new product stimulated other new products, leading to a cumulative process of development, with each change stimulating and being stimulated by others a very far cry from the equilibrium models of text book economics. Three examples illustrate the importance of externalities in dynamic development in contemporary situations. In the Punjab, new technologies in agriculture rapidly spread through a process of government and informal dissemination, supported by government research and irrigation investment. This resulted in rapidly rising levels of output and agricultural incomes which created markets for non-agricultural consumer and producer goods in a process of cumulative causation.¹⁷

In California, the semi-conductor industry developed with the support of large government purchases, which made it worthwhile making the massive investments needed. Information transmission between firms clustered in the valley, backward and forward linkages through purchases of inputs and outputs, led to a cumulative process of technology change, increasing scale, falling costs and prices, enlarging markets and further development of technology. In California, as in the development of this industry in Japan and

¹³ See review of evidence in Liedholm et al. 1987.

¹⁴ See Ncube et al. 1987.

¹⁵ See James in Stewart (ed.) 1983; Wangwe and Bagachwa and Ndelela in Stewart, Thomas and de Wilde (eds.) 1990.

¹⁶ See Stewart and Ghani 1991 for a classification of types of externality and a review of some empirical evidence.

¹⁷ Details of this and the subsequent example are provided in Stewart and Ghani.

South Korea, government support was essential to 'kick-start' the process, which then became self-perpetuating as a result of the transmission of technological information formally and informally.

In the industrial districts of Italy, Mexico and Brazil small scale firms have clustered together geographically, to produce textiles and shoes. In each case, government support, in the form of technology and marketing institutes and physical infrastructure permitted a dynamic market process in which firms benefitted from their proximity to other firms, acquiring new technologies and marketing information through sales and purchases, personnel movement and informal contacts.¹⁸

These three examples are all illustrative of a dynamic process of market development, where externalities are important and where the state has played a supportive role. In each case, the existence of externalities of a dynamic kind mainly arising from technology change, associated with economies of scale in generating technological innovations and in the case of semiconductors in economies of scale in production, led to the need to combine state and market action. The state alone would have been unlikely to succeed in a context where technology change, often of a minor kind, played such an important role; but the unregulated market, unsupported by state action, would probably have led to a low level equilibrium because of the large role played by externalities.

The areas briefly reviewed in this section all come to similar conclusion: the unregulated market can show serious deficiencies with respect to social needs, technology choice, externalities and growth. Yet in each area, a regulated market can avoid these deficiencies.

III. A STRUCTURED MARKET

A structured market is a market which operates within a structure imposed by the government. Within this structure the market operates freely. The objective of structuring the market is to avoid some of the market failures pointed to in the previous discussion, while retaining the market as the main mechanism for allocating resources.¹⁹ A structured market is preferable both to an unregulated market with its many social and economic defects and to state

¹⁸ See Rabelotti on Italy and Mexico; Schmidt on Italy and Brazil.

¹⁹ The defects of state allocation of resources have often been stated (and almost as often exaggerated). See e. g., Hayek, Bauer, Lal, Krueger. As noted earlier, state control were not effective in promoting appropriate technology or small scale enterprises. State dominated societies have also been notoriously poor at realising environmental goals. But their record on social goals is much better.

allocation of resources, which also can lead to severe problems, including inefficiency (static and dynamic) and corruption. The aim of structuring the market is to promote the achievement of objectives which are poorly served by the unregulated market: in particular, economic growth, social justice (and especially the elimination of poverty) and environmental 'sustainability'. This paper focuses on the first two.

We should note that the idea of a 'structured market' is similar to Amsden's 'augmented market' and Wade's 'governing the market', although their interpretations are confined to the objective of promoting economic growth, while the 'structured market' goes beyond this to include social and environmental objectives. In principle, it could also encompass other objectives—e.g., the advancement of particular groups or regions within society.

Structuring the market involves three elements: first, defining the goals; secondly, deriving targets from these goals; and thirdly, identification of instruments to achieve the targets.

The *goals* may be defined at a very general level as above with the objectives of promoting economic growth and social justice. But more concrete specification of goals is needed to make these general objectives operational. The process of defining more concrete goals is a complex one which should be made at a political level, backed up by knowledge of sequencing and causality based on theory and other countries' experiences. In most countries such a goal defining process does take place and there exists a set of concrete goals, albeit often implicit. Chart A presents a list of potential concrete goals with respect to two of the major objectives. These goals have been defined in rather general terms, specifying the desired direction of change rather than a particular rate of change. This vagueness is deliberate; it reflects the reality of goal-setting in most societies, while it is time-consuming, somewhat arbitrary and often not very useful to try and arrive at more finely specified goals, with rates of change defined.

Targets concern instrumental variables needed to realise the concrete goals—e.g., credit allocation to the export sector which may be required if the goal of export growth acceleration is to be realised. The targets need to be specific: e.g. A% of total credit to go to small scale enterprises; B% of foreign exchange to be reserved for the social sectors; C% of public expenditure to be devoted to

social infrastructure; D% of children to be immunised; E% of births to be attended by professionals. Targets are an essential part of structuring the market because they point to needed action and permit monitoring. Without specific targets, it is easy for institutions (including governments) to claim and believe that appropriate action is being taken without any real changes occurring. Targets do not indicate the optimum resource allocation (which is generally not known), but move resources in a desired direction. For example, what proportion of total resources should ideally go to the small scale sector and low-income groups is not known, and perhaps not knowable. But it is easy to conclude that less than 1% (the actual allocation) is too low, and to develop a workable target-e.g. 2% in the first year, rising to 5% after five years would be in the right direction.

CHART A ILLUSTRATION OF CONCRETE GOALS

Promoting Economic Growth

Export growth-accelerated

Manufactured export growth
accelerated

Manufactured output, growth up

Skill creation, up

R. A D. level, up

Promoting Social Justice

Infant mortality rate, improve-
ment accelerated

Maternal mortality rate down

Literacy, up

Enrolment ratios, up

Nutrition improved

Poverty rate, down

Instruments for achieving the targets include the targets themselves (the announcement of which can help in their realisation) plus a variety of institutions and incentives, depending on the particular target. For example, for credit allocation to export industries, relevant institutions include commercial and public sector banks, special export financing institutions; relevant incentives include incentives to the institutions to fulfil the targets (e.g., by differential taxation or interest payments, or government favours of various kinds), and incentives to the exporters (e.g., via exchange rates, tax rebates, interest rates..). For lending to the small-scale sector, new institutions (on the

lines of the Grameen Bank) may be needed to fulfil the targets. For health targets, instruments include government expenditure on infrastructure, new institutions, training; incentives include incentives to medical personnel and perhaps to their clients.

Three Examples Illustrate the Operation of a Structured Market :

1. *UNICEF's Approach to Child Health.* First, the general objective was defined—to improve child health. From this more concrete goals were derived—including reduced child mortality, improved nutrition etc. Then targets were defined nationally and internationally—in terms of immunisation rates, breastfeeding rates etc. Finally, instruments were identified to achieve these targets, including government health services, NGOs, the international community. The process was highly effective—see Table 1.

2. *Recycling Materials.* Here the general objective is to contribute to the environmental sustainability of development. The more concrete goals are to reduce the use of new materials. The targets have been specified nationally (and are being transformed into international targets) in terms of recycling a target percentage of particular materials. Germany, which has achieved most in this respect, has an overall recycling target of 60% for 1995 and has achieved a recycling rate of 66% for paper, 55% glass, 48% tin and 20% plastics. The recycling targets are supported by tax rebates on recycled materials and have led to the development of new technologies, which make recycling economic but which would not have been developed in the absence of recycling requirements.

Table 1

Progress In Child Health 1981-1990

Country Groups	% immun. against DPT		% immun. against polio		% immun. against measles		Under 5 mort. ^a	
	80	90/1	80	90/1	80	90/1	80	91
V. high IMR	14	47	8	46	23	46	228	197
High IMR	42	80	42	80	33	76	132	116
Mid. IMR	52	87	51	92	46	89	40	36
Low IMR	85	89	90	88	70	78	15	11

^a Per 1,000 live births.

Source: UNICEF, *The State of the World's Children*, 1991 and 1993.

3. *The Malaysian New Economic Policy.* In Malaysia in 1970, the majority population (the Malays or Bumaputera) were economically the most disadvantaged section of the population with average household income of 40% of Chinese income. A New Economic Policy (NEP) was introduced designed to improve the economic position of the Malays. Targets were defined: 95% of new lands were to be settled on Malays; at least 30% of the equity of all public companies were to be owned by Malays; educational quotas in public institutions were laid down, in line with population shares; credit policies favoured Malays, with credit allocations and more favourable interest rates.

The policy was a success from many perspectives. The employment share of Malays in manufacturing rose 26% to 41% 1967 to 1987, the share of professional and technical employment rose from 47% to 56%; the share of ownership in public companies rose from 4.3% in 1971 to 19.4% (1988), University enrolment share rose from 12% (1969) to 61.8% (1988). AS Table 2 shows, the income gap between Malays and other groups was almost eliminated.

Table 2
Income Differentials in Malaysia

	Household Income 1970	Household Income 1987	Annual Growth 1970-87%	Share of Pop. 1980 %
Malay	835	2,246	6.0	59
Chinese	2,075	3,715	3.5	32
Indian	2,078	2,640	1.4	9

Source : World Bank data

The success of the structured market in Malaysia in meeting its own objectives (narrowing gaps between Malays and others) was achieved without undermining growth or equity objectives. Indeed, Malaysia's growth rate over the period was one of the fastest in the world (6.3% p.a. 1960-89), while there was a marked improvement in income distribution, with the share of income of the bottom 40% from 11% (1970) to 14% (1987) and the share of the top 10% falling from 41% to 35% over the same period. Social objectives were also realised. By

1991, absolute poverty had been reduced to just 5.8% of the population. Only 2.2% of the population lacked access to health services and 4% to safe water, and the adult literacy rate was 98%. The infant mortality rate had fallen to 15—the industrialised countries' rate in 1991 from 73 in 1960.²⁰

In these three cases, the process of structuring the market proposed earlier was followed almost precisely, through a combination of general progress and of the effectiveness of instruments; evaluation permits revision of goals and targets. It is noteworthy that one of the examples involves (mainly) the public sector (viz. child health,) one (mainly) the private sector (recycling), and one a combination of private and public sector (Malaysia), with the private sector having the dominant role. The first case might be more accurately described as 'structuring the state', but it may be helpful to use a single term to describe a common process, especially since there are elements of the market in the first case (for drugs, transport and private doctors), while there are elements of the state in both the other examples.

The need to impose a structure arises as strongly within the public sector as the private sector. The public sector does not 'naturally' achieve desirable goals—often incentives, institutions and politics move public resources and action away from promoting overall objectives.²¹ A structure can help prevent this happening. Similarly, as already argued, the private sector often fails to achieve desired social and economic goals, and structures need to be imposed to promote them. There is a similarity between the process of structuring the market proposed here and the type of organizational structure and mechanisms adopted in many large organizations (private, NGO and public): 'mission statements' (overall objectives) are followed by specific goals, targets and instruments in much the same way as suggested here and for much the same reasons—namely that the results of hundreds, thousands or millions of individual actions may not lead to the achievement of the overall goals of the institution unless a structure is imposed.

The Structured Market : Some Specific Examples

The three cases described above are comprehensive examples of a structured market. Other cases exemplify specific aspects of a structured market approach. Some will be briefly described here to show the type of policy that is

²⁰ Data on Malaysia from World Bank and UNDP, 1993.

²¹ See e.g., James 1985 for an analysis of how 'bureaucratic' motives can lead to the adoption of inappropriate technology. See also Enos 1982.

being recommended and that such policies are already being adopted often with a successful outcome.

Industrial Policies in South Korea and Taiwan

These have been excellently described and analyzed by Amsden (Korea) and Wade (Taiwan). Both contain many elements of a 'structured market.'

In Korea's successful industrialization during the 1960s, '70s and '80s, the role of the State was critical. It intervened 'with subsidies deliberately to distort relative prices in order to stimulate economic activity'.²² It developed export targets and used five types of instrument to achieve its industrial objectives (banking, with differential interest rates and credit allocation, limiting entrants, price controls, controls on capital flight and taxation and subsidies). Public sector enterprises started new enterprises (e.g., in steel).²³

In Taiwan, there was a similar strong role for the state which undertook investment itself, guaranteed demand, provided low cost credit in new industries. The state established technology networking and public research institutions taking the lead role in major sectors, including petroleum, petrochemicals, steel, basic metals, heavy machinery, transport equipment and fertiliser. Banks were state owned and allocated credit in accordance with state guidelines.²⁴

Both these examples contain many elements of a 'structured market', in this case with the overriding objective being economic growth. More specific goals were the development of heavy industry and the development and acceleration of exports in these sectors. Explicit targets were developed in the case of Korea in Taiwan they appear to have been more implicit. Institutions and incentives were developed or created to achieve these targets, with notable success in—each case. Similar policies were adopted by Japan in its success industrialization drive.²⁵

Policies to Allocate Credit to Specific Groups

In Kenya formal sector institutions have been required to allocate at least 17% of credit to the agricultural sector; in Thailand 11%.²⁶ In each case, this involved a substantial increase compared with unregulated allocations, but the

²² Amsden 1989, p. 8.

²³ See also World Bank 1992, 1993.

²⁴ Wade; World Bank 1992, 1993.

²⁵ According to Hester, 1993, the Japanese economic miracle was achieved by neo-mercantile policies, targeting of selected industries, backed by cartels, subsidies, incentives to export and barriers to import.

²⁶ Siamwalla et al. 1990.

shares involved were still very low compared with the proportion of GDP accounted for by the agricultural sector.

A number of countries have required credit institutions to allocate a certain proportion of the total credit to small-scale enterprises. For example, in India, 1% of formal sector credit has to go to the small-scale sector, an important factor behind the successful development of the Self-Employed Women's Association (SEWA); in Indonesia, commercial and state banks are required to extend 20% of their loan portfolio to small enterprise, while state owned corporations must allocate 5% of their profits to support small-scale enterprises or village cooperatives.²⁷ In Zimbabwe, the Agricultural Finance Corporation directed credit towards small farmers, one factor responsible for a large expansion of their share of the market, and the commercial banks are required to lend at least 5% of their total lending to small enterprises.

Restructuring The Public Sector

As argued earlier, public sector allocations are often the result of bureaucratic and political pressures; yet these allocations can make a huge difference to economic and social goals. The proportion of GDP devoted to priority expenditures of social development varies across countries from 0.4% (Pakistan) to 16.9% (Zimbabwe) (Table 3). These differences are due to differences in the public expenditure ratio (public expenditure as a proportion of GNP), the social allocation ratio (the proportion of public expenditure going to the social sectors) and the priority ratio (the proportion of social expenditures going to

Table 3
Variations In Government Expenditure On Social Priorities

HER		Human expend. ratio % (HER) ^a	Public expend. ratio	Social alloc. ratio	Prior. ratio ^b
HIGH	Zimbabwe	16.9	52	65	50
	Malaysia	5.6	32	29	60
LOW	Philippine	0.9	38	20	13
	Pakistan	0.4	12	12	25

^a Ratio of expenditure on priorities in the social sectors to GNP.

^b Proportion of social sector expenditure going to basic health and education.

Source: UNDP 1991.

²⁷ *Financial Times*, 22/11/89; 2/2/90.

priorities, such as basic health and education). Each of these ratios exhibits large differences across countries, indicating the potential for achieving more by restructuring public expenditure. For example, the public expenditure ratio varies from 51% (Botswana) to 10% (Uganda); the social allocation ratio from 12% (Pakistan) to 52% (Costa Rica) and the priority ratio from 13% (Sierra Leone) to 60% (Malaysia)²⁸. Similar data could be produced to indicate variations in the allocation of government expenditure to economic infrastructure, and within that to infrastructure likely to support the small-scale sector. Reallocation of expenditures towards priorities is, of course, not easy since it confronts the very bureaucratic and political obstacles that led to an undesirable allocation in the first place. However, by defining targets and identifying instruments (e.g., through the decentralization of government expenditure which usually supports a higher allocation to priorities²⁹), progress is possible. For example, in the 1980s, both Indonesia and Zimbabwe greatly improved their priority ratios.

V. SOME PROBLEMS WITH THE APPROACH

Three possible difficulties with the proposal to promote structured markets are immediately apparent. First, difficulties related to setting targets; secondly, a possible conflict with efficiency; and thirdly, opposition from political or bureaucratic interests.

Target Setting. In most cases targets will be somewhat arbitrary as it is generally not possible to know what the correct targets would be. But as argued earlier, it is much easier to identify the correct direction of change and feasible progress in a given time span, and thus set up intermediate targets. For example, if the agricultural sector, accounts for one third of GDP and 60% of exports, 75% of the workforce, but only 5% of the investment and 2% of the agricultural credit, then doubling the credit proportion would seem an acceptable target without knowing what the ultimately 'right' proportion should be. Similarly, gross disproportions in shares of education/credit/assets etc. by race, region or income give strong indications of desirable directions of change. Guidance for target setting can also be gleaned from successful performance of other countries at similar or later stages of development, and from serious shortfalls in performance compared with other similar countries (e. g., if the

²⁸ Data from UNDP 1991.

²⁹ See UNDP 1993 and Ranis and Stewart 1992.

maternal mortality rate is double that of countries with similar per capita income and the share of health expenditure much lower this provides strong guidance for target setting).

Target setting has to be done in a particular context. But if the approach were widely accepted, then careful empirical work on cross-country performance in different areas would be needed to help in target setting.

Conflicts with Efficiency? There is a strong presumption among neo-classical economists that any intervention in the market is bound to reduce efficiency since the market allocates resources according to marginal product and comparative advantage. But as noted above this is incorrect theoretically given the existence of externalities, especially in a dynamic setting. Consequently, theoretically a structured market can improve upon the allocations of an unregulated market. The normal neo-classical response to this is to argue that government imperfections are so great that they are likely to worsen the situation compared, even, with an imperfect market.³⁰ The only way of adjudicating on this is by looking at the facts. None of the examples of structured markets discussed earlier have been associated with apparent loss of efficiency; Malaysia, Korea and Taiwan—the economies which have adopted the most systematic and comprehensive structured markets—have been the most successful economies in the world in terms of economic growth, and have also been very effective in meeting social objectives. The other examples of structuring the market on a lesser scale have also been associated with efficient outcomes—e.g., small scale agriculture in Zimbabwe; small scale industry in Indonesia; SEWA in India.

Although not proven, this review suggests that a structured market can improve efficiency in contrast both to the cases where the state replaces the market and where the market is unregulated. Moreover, where social, as against economic, objectives are overriding, a loss in efficiency could be justified if social goals are achieved.

Political Economy and the Power of Bureaucracies. As with all reformism, the structured market is likely to face important political and bureaucratic opposition, particularly if it threatens existing interests. There is likely to be least objection to policies designed to accelerate economic growth and realise externalities because these need not threaten existing interests. Most objections will come to policies designed to achieve social goals, which often involve redirection of resources. The most successful examples of structuring the

³⁰ See e.g. Lal.

market to serve social goals come from societies where the politically powerful are also the economically deprived (Zimbabwe and Malaysia). Elsewhere, modest improvements can be attained, but radical change (e.g., in the share of credit going to the small-scale) are unlikely to be obtained.

Political and bureaucratic interests make it essential to develop well defined targets, rules, incentives and institutions which are more difficult to subvert than vaguer goals. Success—in economic and social terms tends to generate political support, so that the early stages are most difficult from this perspective.

CONCLUSIONS

Over the 1980s, state intervention of any kind beyond provision of minimal public goods was discredited, partly as a result of a political and ideological shift in a few countries and partly as a result of the apparent failure of state dominated economies. Open and market oriented economies were pointed to as models of success. In this shift the serious deficiencies of the market in economic and social terms were ignored, as was the fact that the 'success' stories involved a strong element of government regulation. This paper has argued that what is needed is a Structured market where the state provides a structure for the market to guide it towards the achievement of economic and social goals. In this way, some of the virtues of the market can be enjoyed without some of its defects, and similarly heavy handed state planning may be avoided. Empirical examples show that the idea of a structured market is not an intellectual chimera, but a reality which has effectively promoted the achievement of societal economic and social objectives. Finally, I would claim that the structured market is a formal expression of much that Sidney Dell devoted his life to promoting.

REFERENCES

- Akerlof : The Market for Lemons' *American Economic Review*.
- Amsden, A.: 1989 *Asia's Next Giant*, (Oxford: OUP).
- Bauer, P. T. 1971: *Dissent on Development*.
- Coase, R.H. 1960: "The Problem of Social Cost", *Journal of Law and Economics*, 3,1-44
- Dell, S. 1985 : "Conceptions and Misconceptions of Adjustmet' in *Essays on Economic Progress in Hohour of I.G. Patel*, (Oxport OUP).
- Dell, S. 1987: *The International Monetary System and Its Reform* (Amsterdam: North Holland).
- Dell, S. 1982: 'Stabilisation: The Political Economy of Overkill', *World Development*.
- Dreze, J. and H. Gazdar 1991: 'Hunger and Poverty in Iraq, 1991', *World Development*, 20, 7, pp. 921-946.

- Enos 1982 : 'Market Structure, Industrial Organisation and Technology: Concepts and Methodology and Evidence' World Employment Programme Research Working Papers (WEP 2-22/WP 93) (Geneva: ILO).
- Friedman, M. 1962 : *Capitalism and Freedom*, (Chicago: University of Chicago Press)
- Scitovsky, T., 1954, "Two Concepts of External Economies", *Journal of Political Economy*, April.
- Hayek, F.: *The Road to Serfdom*.
- Hester, W.R., 1993 : *Japanese Industrial Targeting* (London: Macmillan)
- James, J. 1987 : "The Choice of Technology in Public Enterprise: A Comparative Study of Manufacturing Industry in Kenya and Tanzania" in Stewart (ed).
- Krueger, A.O. 1978 : *Foreign Trade Regimes and Economic Development: Liberalisation Attempts and Consequences*, (Cambridge, Mass: Ballinger).
- Lal, D. 1983 : *The Poverty of Development Economics*, London : Institute of Economic Affairs.
- Liedholm, C. and D. Mead 1987 : "Small Scale Industries in Developing Countries: Empirical Evidence and Policy Implications", MSU International Development paper, Department of Agricultural Economics, Michigan State University.
- Little, I.M.D., T. Scitovsky and M. F. Scott 1970 : *Industry and Trade in Some Developing Countries*, London: Oxford University Press.
- Little, I.M.D. and J. A. Mirrlees 1974 : *Project Appraisal and Planning for the Developing Countries*, London: Heinemann.
- Little, I.M.D. and J.A. Mirrlees 1969 : *Manual of Industrial Project Analysis in Developing Countries*, (Paris: OECD).
- Little, I.M.D. 1983 : *Economic Development: Theory, Policy and International Relations*.
- Meade, J.E. 1952: "External Economies and Diseconomies in a Competitive Situation", *Economic Journal*, 62, 54-67.
- Ncube, P.D. 1987 : "The International Monetary Fund and the Zambian Economy", in K. J. Havenik (ed) *The IMF and the World Bank in Africa*, Uppsala: Scandinavian Institute of African Studies.
- Ndela, D.B. 1988 : "Macro-Policies for Appropriate Technology in Zimbabwean industry", in Stewart et. al. (eds.) 1987.
- Newbery, D.M.G. 1980 : "Externalities: The Theory of Environmental policy" 106-149 in G.A. Hughes and G.M. Heal (eds). *Public Policy and the Tax System*
- Pigou, A.C. 1938 : *Economics of Welfare* (London: Macmillan)
- Rabellotti, R. 1992: 'Industrial Districts in Mexico: The Case of the Footwear Industry in Guadalajara and Leon', mimeo (Sussex: Institute of Development Studies).
- Ranis G. and F. Stewart 1992 : 'Government Decentralisation and Participation', background paper prepared for the UNDP *Human Development Report 1993* (Oxford: processed).
- Rosenberg, N. 1982 : *Inside the Black Box : Technology and Economics*, (Cambridge: Cambridge University Press),

- Santikarn, M. 1988 : "Macro-Policies for Appropriate Technology: Case Studies in Thailand", in Stewart *et al.* (eds.) 1987.
- Schmitz, H. 1993 : "Industrial Districts in Europe: Policy lessons for Developing Countries?", Institute of Development Studies Discussion Paper 324 (Sussex: IDS).
- Schmitz, H., 1993 : 'Small Shoe Makers and Fordist Giants: Tale of a Supercluster', Institute of Development Studies Discussion Paper 331 (Sussex: IDS).
- Siamwalla, A. *et al.* 1990 : 'The Thai rural Credit System: Public Subsidies, Private Information and Segmented Markets', *The World Bank Economic Review*, 4,3, 271-296.
- Stewart, F., H. Thomas & T. de Wilde, 1990 : *The Other Policy*, (London: ITDG Pubs)
- Stewart, F., (ed.), 1983 : *Work, Income and Inequality, Payments Systmes in the Third World* (Macmillan: London).
- Stewart, F. (ed.), 1987 : *Macro-Policies for Appropriate Technology* (Boulder, Colorado: Westview).
- Stewart, F. 1992 : 'Protecting the Poor During Adjustment in Latin America and the Caribbean in the 1980s. How Adequate was the World Bank's Respose?' Centro Luca D' Agliano and Queen Elizabeth House Development Studies Working Papers 44 (Oxford and Turin).
- Stiglitz, J.E. and Weiss 1981: "Credit Rationing in Markets with Imperfect Information", *American Economic Review*.
- Stiglitz, J.E., 1989 : 'Markets, Market Failures and Development', *American Economic Review, Paperes and Proceedings*, 78, 2, 197-203.
- UNDP, *Human Development Report 1993* (New York: United Naions).
- UNDP, *Human Development Report 1991* (New York: United Naions).
- Utting, P. 1987 : 'Domestic Supply and Food Shortates' in R. Spalding (ed.) *The Political Economy of Revolutionary Nicaragua*, (London: Allen and Unwin).
- Viner, J. 1931 : "Cost Curves and Supply Curves", *Zeitschrift fur Nationalokonomie*, 3, 23-46, reprinted in American Economic Association, 1953, *Readings in Price Theory* (London: Allen and Unwin)
- Wade, R. 1990 : *Governing the Market*, (Princeton: Princeton University Press).
- Wangwe, S.M. and M.D Bagachwa, 1988, "Impact of Economic Policies on Technological Choice and Development in Tanzania", in Stewart *et al.* (eds.) 1987.—31.
- World Bank 1992. Operations and Evaluation Department, (OED), *World Bank Support for Industrialisation in Korea, India and Indonesia*. (Washington DC: World Bank)
- World Bank, 1993 : *The East Asian Miracle : Economic Growth and Public Policy*. (Washington DC: World Bank).

Professor M. N. Huda Memorial Lecture

Nation Building in Bangladesh: Putting People First

Quazi Kholiquzzaman Ahmad*

I

Dr. M. N. Huda was an economist, a teacher, a planner, an administrator, a policy maker, and a politician—all rolled in to one. But above all he was a warm-hearted and compassionate human being. Dr. Huda played a prominent role in furthering the cause of nation building in Bangladesh directly from his ministerial and vice-presidential positions; but also, indirectly, perhaps more durably, by instilling in his students a sense of mission. Speaking personally, I was fortunate enough to be one of his students, I am, therefore, particularly thankful to the organizers of this conference of Bangladesh Economic Association (BEA) for inviting me to deliver the Dr. M. N. Huda Memorial Lecture this year. I pray for the salvation of his departed soul.

On this occasion I have chosen *Nation Building in Bangladesh—Putting People First* as the topic of my discourse. Had he been alive today the issues that I have dealt with here would surely have been of interest to him.

II

Putting People First is the title of the 1992 book by Governor Bill Clinton and Senator Al-Gore, then respectively American presidential and vice presidential candidates, that set out their agenda and vision for changing America. The agenda was a detailed one. It covered most of the important domestic and foreign policy issues facing America, and the authors declared it as '...our plan to put people first and fight for what Americans deserve: good jobs, world class education, quality health care, and safe streets and neighbourhoods. It is a plan to unite Americans behind the hope we all share—that we can create better future for our children'. They were modest enough to add that they did not have all the answers and that no American would agree with every detail of their plan or every aspect of their vision. But the important thing is that as they aspired to the top public offices of their country they detailed out their plan and vision for all-friends, adversaries, and people at large—to see, review, react, and then to decide whether to vote for or against them. Obviously, once elected, they have been having to contend with the dynamics inherent in political processes, opposition of those at the wrong end of the economic and social

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reforms proposed or undertaken, and newly emerging national and international situations. But the administration, as it came in, had an agenda of wide ranging proposals and intents known to the public to base their policies, programmes and actions on. At the same time, in those proposals and intents, the people had a basic reference schedule to judge the administration's performance against.

However, it is not my intention here to dwell on American economics and politics. I have made the above reference as it would help bring into focus two crucial issues in the context of Bangladesh one relates to the process and the other to the goal and strategy of development.

III

First the Process : The Clinton-Gore agenda constituted an elaborate basis for dialogues between the aspiring political leaders and the American people on issues that matter to the latter. Such dialogues are indeed a quite essential aspect of a functioning democracy. But in Bangladesh, politics, as it is practised by various political parties, has as the basic ingredients, demagoguery instead of dialogue and muscle power instead of power of ideas. A detailed platform covering issues that matter to the people is never available from any party. This is not a statement lightly made. Twice since Liberation I invited political parties to present their economic policies and plans at seminars in 1978 on behalf of Bangladesh Economic Association (BEA) and in 1988 on behalf of Bangladesh Unnayan Parishad (BUP).

In 1978, all major political parties were invited but only six participated. One reason why several parties did not accept our invitation was that we had requested written presentations. Moreover, it turned out that out of those that participated, only one party which was led by General M.A.G. Osmany submitted a working paper. Speakers representing two other parties came with notes of speak to and the representativeness or the others made entirely oral presentations. Each presentation was followed by a fairly lengthy session of questions for the participants. It clearly emerged that none of the parties had a good grasp of the nature, breadth and depth of the problems faced by the nation, much less a vision and a plan to address them.

In 1988 also, all major parties were invited but 11 participated including Bangladesh Awami League. The ruling Jatiya Party and Bangladesh Nationalist Party (BNP) did not respond to our invitation. This time written presentations were made by most. Yet in the case of only a few an attempt was made to outline the position of the party on a range of issues, but even in those cases,

political rather than economic aspects were given more attention although the latter constituted theme of the seminars. The seminars were held over two weeks and 5-6 hours were available for each party. Each presentation was followed by comments and questions from the participants. Unfortunately, this time round too it transpired that the parties were unprepared in many respects, and of ter superficial in their ideas and plans for addressing various economic issues facing the nation.

Two points may be made here in passing. The BUP had no seminar room in 1988; and when we tried to rent a seminar hall stating the purpose of holding seminars with political parties, all possible public sector institutions approached regretted. The same was the out come in the private sector until finally *Bishwa Shahtya Kendra* made its seminar hall available. Barring some spend the press ignored these proceedings. Obviously, a fear syndrome prevailed in the country at the time.

Currently also no detailed programme or vision for dealing with various problems facing the country is available to the nation form any party. The BNP, which was the ruling party in 1978 but in the opposition in 1988, did not participate on either occasion. In 1978, the party in fact accepted the invitation but later regretted. In 1988 as noted earlier, it did not respond to our invitation. Now as, the party in power, it obviously owns the policies and programmes being pursued. But having come to power without working out as far as I know, its economic vision and plan in detail, its only choice was to adopt most of the policies that were being implemented with donor influence and support. In particular, mention may be made of the stabilization and structural adjustment programme (the reform programme) that was initiated in 1986. If anything, the programme has been pursued with more vigour than before. Also, the party, as I see it, has not since faced up to the prevailing realities in the country. The reform programme being implemented is the same globally standardized package, which is being pursued by developing countries all around the world at the instance of donors led by the World Bank and the IMF. This package is also known as the Washington consensus.

However, Prime Minister Khaleda Zia showed a sensitivity to a series predicament posed by the reform programme in the context of poverty alleviation in the country while delivering her World Food Day Statement in FAO Headquarters in Rome on 16 October 1992. She said, and I quote: "This is an age of privatization, liberalization and deregulation. Most developing countries have been persuaded to believe that these policies will ensure them a better future. Bilateral

donors and multilateral investment agencies encourage this line of thought and action. In pursuing such policies, however, developing countries are often required to introduce structural adjustments in economic management. Sometimes such measures, together with consequent budgetary plans have eroded essential food distribution programmes for vulnerable groups. In many developing countries, public support in social areas *sufucting* the daily lives of the poor is still. Such support often takes the form of state activities, which are required to be stopped to the purpose of promoting the market economy. Indeed, no country, no government, can accept life sentences in the form of hunger and malnutrition for its people. If government inaction were to lead to premature graves for many, the shortened lives would be an obscene scandal."

But it turned out to be an empty pronouncement, without any follow-up action in national policy making. If, indeed BNP, had a plan and developed a vision anchored on the prevailing circumstances and realities in the country, it should have been able at least to introduce appropriate nuances and modifications, reflecting the prevailing realities in the reform programme instead of finding itself in a straitjacket. I shall briefly review aspects of the impact and implications of the reform programme on the economy and society of Bangladesh later.

The Bangladesh Awami League has also declared that it accepts market economy as its basic economic policy plank, but I have not seen any document detailing out how will that be implemented in addressing the fundamental economic problems of persisting mass poverty and lack of growth facing the nation and also the peculiar problems faced by particular sectors. In the sectoral context, one would, for example, like to know whether Awami League supports the major restructuring programme in the jute sector that is now being implemented with World Bank (IDA) support. In the absence of such documentation, one may assume that this party also has committed itself to the reform programme as designed and modified for time to time by the World Bank. The IMF and other donors, (I shall have more to say on the jute sector restructuring programme later).

Now the Goal and Strategy, Putting People First was at the heart of the strategies outlined in the Clinton-Gore agenda. Thus, they proposed to put America back to work, reward work, support lifetime learning, provide affordable quality healthcare, and reform governance appropriately. In Bangladesh, people at large have always remained marginalized. Political leaders are often heard pronouncing that people are the source of all power. But while in opposition seeking power, they tend to get the people to support them either by appealing to

their emotions and sensibilities or by using money and muscle power or both; and while in power, they largely ignore the very same people. And to those who captured power using military might and ruled the country for long years, people did not matter anyway. Thus in this country the mass of the people have endured a succession of governments, elected and military, but there has been little improvement in their plight. We talked of poverty alleviation in the 1970s and in the 1980s. We are still talking about it. But in reality, if anything, the number of the poor has been increasing. Only on the basis of calorie in take, 60 million or more are below the poverty line today. If other basic needs such as clothing, shelter, education, medicare and sanitation were taken into account the number would be much larger. The adult illiteracy rate is 65 per cent. Moreover, of the 35 per cent considered literate, a significant proportion can perhaps only sign their names but would be functionally illiterate. A large majority of the people are deprived of a minimum of healthcare and infant mortality rate is still about 100 per thousand live births. About a third of the labour force (on the basis of available labour time) is unemployed, while most of those employed suffer low productivity and poor incomes.

Under the circumstances, there can be no difference of opinion about poverty alleviation being the primary goal of national development in Bangladesh. There can also be no disagreement that economic growth is a necessary condition for poverty alleviation. But not any type of growth would meaningfully improve the conditions of the poor. It has to be equitably distributed; and that calls for putting people at the core of national economic strategy. It is now well known that the investment-based GNP-focused approach discriminates against the poor and promotes concentration of wealth. Hence, to put people first, conditions must be created for the unemployed to find productive employment and the employed to improve their productivity. This approach will simultaneously raise the GNP and alleviate poverty. The core concept of this approach, as it relates to the mass of people of Bangladesh, are identified as basic education, basic training, basic health care, and organization. The first three improve the capability of the people while the last mentioned, which includes technology, credit, marketing assistance and other required services, has to do with their access to resources and facilities.

Neither capability improvement nor access to resource alone can bring about sustained progress. Simultaneous attention to both, as appropriate, is vital. Obviously, those who have a full level of education will need training, healthcare and organization, and those who have useful levels of both education and training will need healthcare and organization. But, since the large majority of the people of this country, particularly those in rural and urban informal

sectors, lack even basic healthcare, the whole package of basic education, basic training, basic healthcare and organization is relevant for them. Upgrading will be required in respect of all the elements as the economy moves forward.

IV

Let me now turn to the paradigm in Bangladesh. I pick up two dominant processes in the country's economic management to comment on: the reform programmes and micro credit.

The Reform Programme is expected to stabilize the economy, accelerate the economic growth rate significantly, bring sustained expansion of exports, attract large inflows of foreign investment, stimulate private sector and so on, ushering in an era of national prosperity. I shall first briefly comment on the results achieved so far in Bangladesh as a consequence of the implementation of the reforms; and then cite a few examples from around the world, which are regarded as success stories, by way of envisioning our prospects in the light of their experiences.

It is well known that Bangladesh has done very well on the stabilization front, reducing overall fiscal deficit and current account deficit respectively to 5.9 per cent and 1.6 per cent of GDP and inflation rate to 1.8 per cent by 1994. The gross foreign exchange reserved increased steadily reaching a level of about 2.8 billion dollars by mid-1994, equivalent to about eight months' imports. But these successes of the reform programme can be meaningful only if economic growth can be significantly accelerated and poverty adequately reduced as a result. On these two crucial variables, the rate of achievement has remained as sluggish as ever. In fact, the economic growth rate has averaged only 4.1 per cent during 1991-94, which is somewhat lower than the average achievement during 1973-80 (4.9%) and that during 1981-90 (4.8%). Also, the 4.6 per cent achieved in 1993-94 and the expected 5 per cent in 1994-95 are substantially lower than the rates achieved in certain specific past years such as 1989-90 (6.6%) and 1980-81 (10.2%). The reasons: investment has not picked up and productivity in most sectors has remained low. As a proportion of GDP, gross domestic investment was 14.2 per cent in 1993-94, which is, in fact, somewhat lower than the average ratio achieved during 1980-84 (14.4%). The public sector investment has in fact remained stagnant (6.3% in 1993-94 compared to the annual average of 6.2% during the 1980s), while the private sector investment in 1993-94 at 7.9 per cent of GDP is somewhat better than the average ratio during the second half of the 1980s but lower than that achieved during 1980-84 (8.1%). The much expected and sought after foreign

real investment has remained limited. Portfolio investments through stock exchange may be of little significance in relation to raising real investment and can cause havoc in the economy as is now well known thanks to Mexico's peso crash in December 1994 brought about by that country's open market excesses. Bangladesh's outstanding external debt was US\$16,325 million or US\$142 per capita (56% of per capita income) as of March 1995.

Poverty, as noted earlier, has remained entrenched and, in fact, afflicts more people now than ever before.

While reviewing the implications of the reform programme, an important sectoral programme to consider is the jute sector restructuring programme. This programme was undertaken with IDA assistance with the objective of reducing the jute goods production capacity from 25,800 to 18,711 looms and to privatize or close down most of the BJMC Mills. The proposed downsizing of the capacity was determined on the assumption that there was a demand for about 450 tons of Bangladeshi jute goods annually, about 90 per cent of which in the export market. There are two serious problems in this demand prognosis. First the benchmark used for determining the target related to a time (1990-91) of depressed world import demand for jute goods; and second, prospects of rising demand as a result of increasing awareness about adverse environmental impacts of synthetic and possible expansion of jute goods use in such markets as Latin America and Africa were not given due weightage. Available evidence suggests that, over the past few years there has been an upward trend in world import demand for jute goods, which is likely to continue sacking in particular.

The jute sector accounted for most of the foreign exchange earnings of this country until a decade ago. It can still be a solid source of foreign exchange earnings, although export of garments now account for over half the export earnings. While in the case of garments there is big gap between the gross and the net foreign exchange earnings, the import content is very limited in the case of jute goods. Moreover, since Bangladesh accounts for over half the world exports of jute goods, a supply constraint in this country may encourage further switching to synthetics although there is a serious environmental problem associated with the latter. As a result, Bangladesh's prospects will be further eroded. Hence, a review of the restructuring programme is urgently called for to reassess the world import demand for jute goods and the prospects of Bangladesh in that context. The country must have the flexibility to take advantage of emerging opportunities in this sector and must not be put in a straitjacket as it apparently has been by the restructuring programme. However, all ne-

nessary steps must be taken to improve the efficiency of the jute mills— be they in the public or in the private sector.

As will be argued later, there may be situations where public intervention may strengthen the national economic performance and indeed in large the prospects of the economy. The jute manufacturing industry may be one such case in Bangladesh. The privatized jute mills are not performing as well as it was assumed that they would. Quite a few private jute mills are now closed due to financial crisis and other reasons. The recent shortfall in the private sector production of jute goods has been met by increased production in the public sector. It is certainly in order to undertake a serious review of the relative performance of the public and the private sector jute mills, and design, on that basis, appropriate policies in relation to the relative roles of the two sectors in the jute manufacturing activity in the country, keeping national interests in sharp focus rather than adhering dogmatically to a philosophy of privatization.

Now, in citing the proposed examples, let me first consider the 'economic miracle' achieved by east and southeast Asian countries, which include Taiwan, South Korea, Singapore, Hong Kong, Malaysia, Thailand and Indonesia. The principal factors behind economic successes achieved by these countries are identified as rapidly growing private investments and a rapid improvement in human capability. Although the private sector and the market have played crucial roles in achieving the miracle, there have been strong government interventions, applied systematically and through multiple channels, in the economic agendas of all these countries. The purpose has been to foster development in general and in some cases, the development of selected industries. South Korea, for example, pursued a policy of import control and promotion of selected industries as it built its economy. It started opening up only in 1980, and that too selectively; by that time it had acquired sufficient economic strength to face international competition successfully in many respects. Clearly, the momentum was generated and carried forward in those countries by the combined force of government interventions and private initiatives.

The second example can be drawn from Africa. The sub-Saharan countries have been pursuing structural adjustment under IMF and World Bank supervision and support over the past 10 or 15 years. But, the region that is home to most of the world's poorest countries has continued its downward slide. Indeed, myriad internal factors including bad governance, civil wars, and poor harvests have contributed to this African plight. But, the reform programme centered on free market dictates has, instead of alleviating, actually compounded their

adversities by causing a neglect of agriculture, employment generation, and productivity improvement through skill enhancement. Moreover the debt burden has been eating away most of whatever foreign exchange and savings these countries have been generating. Also, in each of these countries, the withdrawal of the State, under reform conditionally, from economic and social functions has created an utter vacuum, which has remained unfilled and perhaps cannot ever be adequately filled by private sectors.

Ghana is one of the African countries that is regarded as the 'star pupil' in implementing the reform programme. But according to the World Bank, no miracle can be expected there; and the prognosis is that the average Ghanaian will not rise above the poverty line for another 50 years even if Ghana can manage to keep going achieving a per capita economic growth rate of about 2 per cent a year.

The question is: Is there any other way to revitalize these African economies? Obviously the path charted by the reform programme leaves them in the doldrums and virtually without hope for an improved future in decades to come. Perhaps, the answer lies in putting people first and reworking the national economic agenda on that basis. It seems that for these countries, the approach reworked would emphasize productive employment creation, human capability improvement through education, skill training and healthcare, and access of the producers to appropriate technology, credit and other needed services. Agriculture and rural and urban informal sectors may be focused on, to start with. Due emphasis will also need to be given to such other productive activities which have the potential of sustained growth, particularly in the export sector. In this scenario, both the governmental and the private sector should have crucial roles to play—in tandem and not in contradiction. Of course, only a people-centred democratic governance structure can carry such a process forward; and the hopeful sign is that most African countries are now, as elsewhere, going through a process of democratization. By assisting and facilitating the establishment of true democracy and putting in place and carrying forward a people first strategy, the international community and donors can perhaps best help the African countries.

Let me take the third and last example from Latin America, Chile initiated its market liberalization programme in the 1970s and has been vigorously implementing the reform programme (reducing tariff, floating currency, privatizing profitable firms, promotion exports, and so on) ever since. Its domestic saving rate has reached a high level of 25.6 per cent, close to that of the east Asian

tigers. The country has also significantly accelerated its economic growth and has maintained nearly 6 per cent annual growth rate for a decade now. But, what has been happening of poverty? On this, let me quote here from a report published in Newsweek of 24 July 1995. "The downside of 20 years of rough-and-tumble market economics in that 4 million out of a population of 13.5 million (29.6%) now live in poverty, and Chile's gap between rich and poor is greater than in several other Latin American countries. Even in Santiago, the affluence is thinly spread. A 20 minute side trip into any one of the city's poblaciones, or working-class neighbourhoods, reveals dusty gravel roads and two-room wood and adobe homes in which families of as many as 12 people are crowded. For roughly 20 per cent of Chileans, there are private medical clinics and expensive private schools. For the real, including the hapless middle class, it's two-hour lineups at the neighbourhood clinic and a two-month delay if you need an operation at an old public hospital, where patients are likely to be wheeled through the open air to get to the operation room

Perhaps the main lesson of Chile's long capitalist experiment is that no matter the model, free market reforms are hardly a panacea."

The above examples yield several far reaching insights regarding the implications that a country like Bangladesh may be subjected to as a consequence of pursuing the reform programme. It is now being suggested that although the reform programme so far failed to bring about an acceleration in economic growth, more reforms will certainly do so. This conclusion does not necessarily follow as can be gauged from the African experience. Just as in Africa, agriculture, run non-farm and urban informal sectors, employment generation, and skill enhancement remain neglected in Bangladesh. The reform programme has failed to raise investment domestic foreign private and there is no reason to believe that this will happen as a result of more reform. The Latin American example clearly suggests that economic growth even if it can be accelerated to about 6 per cent and maintained for a decade or so, there may not be much of an impact on poverty. Hence, the economic agenda must have an appropriate poverty alleviation strategy up front. The core concepts of people-first strategy, enumerated earlier, contain the seeds of change in this context. The east and southeast Asian experience strongly suggests that the government must play an appropriate role towards strengthening the national economy, while the private sector must be allowed and facilitated to play its proper role responsibly in a free atmosphere. The pace and pattern of economic liberalization should be determined on the basis of socio-economic dynamics and the prevailing realities.

It is often suggested that other countries should follow the east and southeast

Asian example; but the World Bank advises that in following this example there must be no government interventions in the economy because that is unique south and southeast Asian phenomenon not transferable to other countries. But why is it that one part of the package is good and the other detrimental for others. Indeed, one may turn around and argue that the private sector and the market are also unique east and southeast Asian phenomena and cannot work elsewhere. But this cannot be true. Similarly government interventions as a part of the strategy cannot be rejected off-hand Surely, there must roles for both. Otherwise, how could the U.K. USA, West Germany and other developed countries use government interventions successfully in the processes of their growth and prosperity. Of course, the public private relative roles that would be appropriate for a particular country can be designed only on the basis of the realities and dynamics prevailing in that country's economy and society.

I am not arguing that government must follow an interventionist policy. What I am saying is that wherever necessary the government should play its role by making appropriate, effective interventions with a view to strengthening the national economy. A dogmatic restriction on the government's economic role is undesirable and can be damaging. As a matter of fact, in the context of the reform programme, the government needs to play a stronger role than before in order to prepare what is called the level playing field and ensure that all players, strong and weak, make their contributions and secure benefits in an equitable manner. Otherwise, there is bound to be chaos because even if the playing field is level all players are not. And, with the governments failing to ensure that equity, the adjusting countries generally face increasing economic and social inequality, which, if unabated, may bring the whole edifice of reform-based order crashing down.

I labour this point to issue a warning to those in Bangladesh who are now heard to argue that the government is irrelevant and all international agencies must avoid the government and work only with the private sector and the NGOs. This line of thinking is at best extremely naive and at worst a recipe for societal disintegration. In this context, I may mention the case of Somalia where there is no government now, and in the absence of this institution which is much maligned in the reform euphoria, there are no other institutions or agencies-national or international, GO or NGO-able to function in that country. In fact, chaos rules supreme and the future of the people hangs in the balance.

Of course, government must be democratic with appropriate devolution to local levels and a truly decentralized administrative structure. There must be

accountability, transparency and efficiency in its functioning; and the rule of law must prevail. What is, therefore, needed in Bangladesh is reform of the structure and functioning of the government along these lines. But, the government must retain and perform the pivotal role in the economy and society that only a nationally representative institution can and should.

Indeed, in putting people first, representative governance at all levels of society local to national is an essential prerequisite. By participating actively in governance, people will have scope, opportunity and responsibility to help shape their own destiny as well as that of the nation.

In this context, it is extremely unfortunate that the country should continue to remain in the grip of political gridlock and uncertainty. The fledgling democracy should have been nurtured by all political parties. Instead a situation has been created in which there is a serious threat to the process. It must be realized by all political parties that another autocratic rule will put the clock back by years and years. In particular, I believe, it is the historic responsibility of Prime Minister and BNP Chairperson, Khaleda Zia and Opposition Leader and Awami League President Sheikh Hasina to seriously rethink their positions. They owe it to themselves and the nation at large to create conditions for the democratic process first to be preserved and then to flourish.

As indicated earlier let me now make a few comments on micro credit. Micro credit has emerged as a leading poverty alleviation and development strategy in Bangladesh. Major micro credit schemes are now being implemented in the country by both government agencies and nongovernmental organizations, some of which are very high profile and internationally prominent.

But fundamental questions as to both the process and the possible ultimate outcome are now being asked some of which I wish to raise here. I believe time has come to face up to the reality behind myths and facades. The intention is not to undermine any good deed but to question the euphoric expectations and adulations.

Some of these schemes seek to provide such inputs as education, training, and technology along with credit. But the dominant concept is one of minimalist intervention with credit only. It is claimed that small amounts of money. Tk. 2,000 or Tk. 4,000 are all that is needed to enable the poor to shake off poverty and move on to a course of subtended progress. Nothing can be further from the truth. Small may be 'beautiful' as a starter. But 'small' may in fact be 'ugly' if it perpetuates itself. Micro credit in Bangladesh is often in this category. That is, micro creditors have remained micro creditors over 10 or 20 years since they first came under micro credit schemes.

A 'credit alone' approach has obviously led to a fast expansion of micro credit in the country. This fast expansion has been a major reason for the wide recognition that micro credit in Bangladesh has gained and for the continued and increasing support of the donors that it has attracted. The agencies implementing micro credit schemes and the donors have come to work together on the basis of a mutuality of interest. Hence, to beat the drum for both the parties, real and presumed benefits of micro credit and its fast expansion have been widely publicized internationally. The publicity also has kept attraction increasing donor support for such credit. For the donors, there has been something to show for the money spent quickly and in terms of large numbers of the poor assisted. And of the implementors, there have been fame and fortune and prizes of recognition. These are laudable achievements. But this fame-fortune-prize syndrome has brought about a strong tendency on their part to expand micro credit as fast as possible, often in competition with one another. Hence, even in those cases where such inputs and education, training and technology were part of the schemes, the integrated approach has become overshadowed by the concern for expanding credit as fast as possible. With quantity (more credit, more clients) thus becoming the dominant credo, quality has been sacrificed.

Indeed, the key element in a strategy for sustained poverty alleviation and growth is productivity increase. Unless productivity increases, the low level poverty trap will be a perpetual phenomenon. And education, health, training and technology are key factors in productivity improvement. Credit is surely one as well. But micro credit alone is a recipe for perpetuating a low level trap. In fact, micro credit alone strategy can create large numbers of debtors without an option get out of the debt trap. It is not upliftment but further misfortune that may be in the offing for him over a longer term.

Let me now briefly look at the procedure of distribution of credit and collection of repayments. The major thrusts of the micro credit schemes, as they are implemented, have clearly been to distribute as much credit as possible to as many people as possible and ensure repayment on time. Repayment starts one week after a credit is given. The repayment rates are generally shown to be close to hundred per cent. Since the repayment record is the trump card behind the prominence of and enthusiasm about micro credit, no stone is left unturned in ensure a perfect record. In fact not only pressure but also coercion is known to be applied in the process of collection of instalments. Indeed, a micro credit of Tk. 2,000 or Tk. 4,000 may not always be adequate to generate enough

income's for the creditors to keep their repayment schedules. Petty trade and quick yielding productive activities generate incomes initially. But, market safaration soon occurs and consequently, income generation is adversely affected. Also, a continuation of such rudimentary economic activities cannot be of much avail even for poverty alleviation, much less for sustained development. On the other hand, longer gestation economic activities create repayment difficulties, and are not usually supported. In case they fail to pay instalments and have, therefore, to suffer unpalatable consequences, creditors are also known to put away part of the small loans they take to meet repayment needs in the initial weeks, and that obviously limits even further the limited scope of income generation that micro credits might provide. Sometimes, group members and functionaries responsible for collection of repayments extend helping hands, on the sly, to creditors in difficulties in order to safeguard their own interest for group members, to retain creditworthiness, and for officials, to protect their jobs. This obviously is not in the spirit of things. Again, since a minimum economic level is necessary for the creditors to be able to use to some economic purpose the small amounts of money that they borrow, the poorest of the poor have remained excluded from these credit schemes.

V

In concluding let me point out that, in the developed market economies, each generation has done substantially better than the preceding one over the past 100 or 150 years as farm workers and domestic servants became industrial workers and achieved higher productivities facilitated by training and technology. Both blue-collar and industrial workers are now increasingly yielding place to 'knowledge workers', (computer, informatics and other high-tech work) in these countries. In Bangladesh, agriculture still accounts for about 70 per cent of the work force and to work as domestic servants is the only means of livelihood for large numbers of dispossessed people men women and children. Industrial workers account for a very small proportion of the labour force.

People first strategy would be the only way to move the Bangladesh economy and society forward because unless the whole society can be mobilized effectively and purposefully, there seems little hope for a better future. In this context, the following dos and don'ts constitute the basic framework.

Don'ts: stop marginalizing the people at large as the on-going reform process in doing don't keep the poor tied to rudimentary economic pursuits as the on-going dominant micro credit approach is doing: and stop damaging the prospects of democracy as the present political stand-off is doing.

Dos : put people first in all development strategies, focusing on employment generation, raise capability of the workers through education, training and health as appropriate and simultaneously, improve productive capacity and efficiency by giving due emphasis on technology, credit, market assistance and other services; reform the on-going reform programme in that context; and safeguard and nurture the democratic process and create conditions for it to flourish.

References

- Q. K. Ahmad: Anatomy of Economic Liberalization Efforts and Results in Bangladesh, presented at the national conference on Economic Liberalization in South Asia organized by Australian South Asia Research Centre. The Australia National University, Canberra, Australia, 20 November—2 December 1994.
- Bill Clinton and Al-gore: *Putting People First: How We Can All Change America* Times Books (a Division of Random House. Inc.) New York and Toronto, 1992.
- Peter E. Drucker: "The Age of Social Transformation", *The Independent* (a Dhaka daily), 23-30 June 1995.
- International Herald Tribune* Hong Kong, 21 June 1994.
- Wali Jamal, 'Changing Poverty and Employment Pattern Under Crisis in Africa', ILO, Geneva, July 1994 (unpublished).
- Ministry of Finance, Government of Bangladesh, *Bangladesh Economic Review*, Dhaka, June 1995.
- Newsweek*, The International Newsmagazine, 24 July 1995.
- Montgomery, D. Bhattacharya and D. Hulme: 'Credit for the Poor in Bangladesh: The BRAC Rural Development Programme and the Government Thana Resource Development Programme', Working Paper No. 12, Institute for Development Policy and Management, University of Manchester/Department of Economics, University of Reading, UK 1995.
- Society for International Development (SID) and Inter Press Service (IPS): *Development Hotline*, Volume 4, No. 18, October 1993.

Professor Mazharul Huq Memorial Lecture

The Teaching of Economics in South Asia

Wahiduddin Mahmud *

INTRODUCTION

South Asia has a strong tradition in education and research in economics. The teaching of economics in the universities at the post-graduate (Master of Arts) level dates back to the second and third decades of this century; since then, some of the economics departments have grown into well-known centres of scholarship and instruction. The economic profession plays a visible role and is generally held in high esteem in the countries in South Asia. The region can boast of a strong community of economists who have not only raised and discussed issues concerning their own economies, but also contributed increasingly to mainstream economics, as is evident from the contents of reputed professional journals. In fact, the strong and upward trend in the growth of the economic profession in South Asia would seem to be in ironic contrast to the poor economic performance of the region.

Yet the teaching of economics in South Asia is beset with many serious problems. Some of these problems are common to higher education in general, such as the lack of funds, the brain drain, and the rapid increase in enrolment undermining overall standards. However, there are problems arising from the nature of the discipline itself. With an evolving body of thought and the increasing technical elaboration of the subject, teaching economics with any semblance of breadth and width has become an increasingly onerous task. Adapting the curriculum to the needs of the developing world is also a serious concern, particularly at a time when many branches of economics are undergoing major transformations and new sub-fields of specialization are emerging. Economics is essentially an empirical and policy-oriented discipline so that the limitations and potential of economic ideas are best learned by applying them to current reality. The question that is often asked, therefore, is how far the kind of economics taught in South Asia and in other developing countries is helpful in enabling students to better comprehend economic life and organization in their own societies.¹ In the present paper, we try to address some of these issues regarding the effectiveness of economics education by looking at the South Asian experience.

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¹ *See, for example, Robinson, J. (1965) and Chakravarty, S. (1986).*

THE INSTITUTIONAL SETTING

To begin with, one needs to have a perspective on the prevailing environment for higher education in general. The higher education system in South Asia, as in many developing countries, is characterized by the phenomenon of "credentialism", which ties entry into high-paying, white-collar jobs to university-level education—often with no reference to the quality or the content of such education (Mazumdar 1981).² This credentialist environment, combined with demographic pressures and cultural preferences, results in heavy social demand for publicly subsidized higher education. To accommodate that demand, the governments in the past chose the convenient option of encouraging a rapid expansion of higher education without, of course, raising tuition fees or earmarking the public funds necessary to safeguard academic quality. As a result, overall standards have declined. On the other hand, the over-production of graduates has led to a high incidence of graduate unemployment as well as to an artificial inflation of qualification requirements attached to jobs (thus making such qualifications even less relevant to the kinds of jobs for which they are sought).

The teaching of economics has of course not been immune to these adverse trends in higher education. Besides universities, economics courses are offered by a much larger number of affiliated colleges that prepare students for the degree-qualifying examinations conducted by the universities. The courses include two-to three-year bachelor's degree courses, with honours courses for those specializing in economics, and one to two-year master's degree courses.³ Besides, most universities have provision for awarding M.Phil and Ph.D. degrees, although only the better-known departments have strong higher-degree programmes in economics. With the proliferation of teaching departments offering economics courses, the gap between the best and the average has widened enormously, in terms of both standards of teaching and quality of output. Although there is hardly any evaluation of the effectiveness of economics education in South Asia, casual observation suggests that a great majority of economics graduates fail to acquire even what may be called "economic literacy"—that is, a minimum understanding of the basic concepts,

² This is similar to the so-called screening hypothesis, originally formulated by Kenneth Arrow in the context of developed countries, according to which university education is merely a filtering device having no effect on the productivity of graduates.

³ The duration of the degree programmes varies among the South Asian countries and sometimes also among the alternative streams of students within the same university.

principles and policy problems of economics. Very few in fact can command enough mastery of economic tools and concepts to be able to apply them to a variety of unfamiliar problems.⁴

One can cite a number of reasons for this poor state of affairs in respect of both what is taught and how it is taught. Many teaching departments, particularly in the colleges, suffer from an excessively high ratio of students to teachers and poor physical (including library) facilities. The teaching profession in South Asia does not attract enough number of people who are best motivated as well as equipped to handle an evolving body of thought. In the better university departments, demands on faculty for research, consultancy and other responsibilities are usually high, while the faculty strength is often eroded by the brain drain. Because of the credentialist education system, there is little incentive for students to develop skills beyond what are required for passing examinations. The kinds of textbooks used in university departments rarely originate in this region and therefore do not illustrate the application of economic ideas in the particular South Asian setting. Although there is a large volume of literature covering virtually all important aspects of the South Asian economies, it is rarely available in a form suitable for use as supplementary texts. South Asian scholars do not usually consider writing such textbooks a professionally rewarding occupation.

There is a strong desire among university economics departments to catch up with the standards of the best Western universities. This attitude is understandable and can be justified to some extent, given that Western Europe and North America remain the focal point of the profession. However, the catching-up syndrome often takes the form of introducing into courses a degree of theorizing and technical sophistication that may be fashionable in the profession but is well beyond the grasp of the average student. The curriculum is thus geared towards producing only a small group of well-trained graduates, often at the cost of sacrificing quality of training among the average. Most of the bright graduates set their hearts on obtaining a Ph.D. degree from one of the reputed Western universities (since a locally obtained Ph.D. is usually viewed as carrying less prestige); more often than not, they end up pursuing professional careers outside their home country.

The emphasis on mathematical (and seemingly difficult or sophisticated) analysis in economics courses has another effect, intended or otherwise, namely, the tendency to scare away students who feel less comfortable with mathematics but otherwise have aptitude for handling analytical problems of economics. This kind of indirect rationing of access to economics courses can hardly be justified, 'since facility with formal tools per se is not necessarily the

4 Such concerns are not of course unique to developing countries only; see, for example, Siegfried and others (1990).

best criterion for judging the potential of prospective economics graduates. In fact there is a growing realization in the profession that the process of formalization and mathematization of economics may have gone too far, particularly in terms of displaying technique for its own sake and pursuing results that are not even "theoretically useful" (Baumol 1991; Hahn 1991). It is these kinds of academic pursuits, in particular, that the poor developing countries can hardly afford.

On the other hand, it is conceivable that some of the economics departments in South Asia (and in other developing regions) could grow into centres of excellence by specializing in those subject-areas in which their comparative advantage lies, such as those related to the problems of developing countries. This would require, *inter alia*, a strengthening of the higher-degree programmes to such an extent as might induce the bright graduates and competent faculty to stay in their home countries.

RELEVANCE OF THE CURRICULUM

Let us now look at the type of economics syllabuses followed in the South Asian universities, particularly in respect of their relevance to the regional context. To begin with, there is generally an emphasis on courses in economic development and planning, which offer ample scope for drawing lessons from the South Asian experience. Besides, most economics departments try to introduce some degree of South Asian flavour into their curriculum by incorporating courses and topics devoted exclusively to the study of their economy's problems. However, the treatment of these topics often have only a tenuous relationship with what is taught in the principles and theory courses. There is also much country-specific descriptive and informational material whose analytical base is minimal. On the whole, the approach is of a rather fragmentary or piecemeal nature, so that the outcome leaves much to be desired.

The neoclassical perfectly competitive model of production and distribution, leading up to general equilibrium analysis, lies at the core of the present-day syllabus at both the undergraduate and graduate levels. Macroeconomics is relatively less emphasized in the core principles courses because of the ostensible orientation of textbook macroeconomics towards explaining the short-run stabilization problem of the developed capitalist economies. The use of such microeconomics texts as Varian (1992) or Kreps (1990) reflects the mathematical orientation of the courses. Because of the focus on the perfectly competitive general equilibrium model, relatively less attention is paid to topics that come under the rubric of theory of the firm. This is the branch of microeconomics that deals with production and costs, market structures and entrepreneurial behaviour by introducing complications that the general equilibrium cannot handle. The relative neglect of these topics is perhaps again

explained by the fact that much of the standard literature on the theory of the firm and the market relates to the functioning of the developed capitalist economies.

There now exists, however, a sizeable body of literature on the microeconomic analysis of production decision and market behaviour in the economic settings similar to that of South Asia. Many of these topics deal with the functioning of the agricultural sector in low-income countries, such as the microeconomic behaviour of the peasant household, the theory of share-tenancy, and the interlinking of rural factor markets. This literature has evolved conventionally as part of development economics, as is evident from the contents of Chenery and Srinivasan (1988) and the *Journal of Development Economics*. However, some of the theoretical constructs may be suitable for illustrating how microeconomic analysis can be applied to different institutional settings by incorporating, *inter alia*, transaction costs, informational imperfections, and risk and uncertainty. A part of this literature can in fact be seen as pushing itself into the contemporary frontiers of microeconomic research that are increasingly moving away from the full-information competitive equilibrium model. The treatment of the topics may vary in technical sophistication (so as to suit teaching at different levels) from the simple cobweb-type modelling of jute price fluctuations to the testing of the rational expectations hypothesis in the context of rice market behaviour during food scarcities (Ravallion 1985). The development of the new institutional economics pioneered by Douglas North has also arrived at a point where some of its ideas can be introduced even in an introductory microeconomics course.⁵ Growth economics often figures prominently among the offerings in advanced economic theory, which also include topics in mathematical programming, game-theoretical models and the theory of input-output analysis. The emphasis on formal growth theory perhaps originated from a perception that it might be of some relevance to the problems of economic development and planning. Such an emphasis proves to have been rather misplaced. The growth-theoretic models, important in their own right, have had little relevance to the solving of development policy problems (Stern 1991). This is also largely true of optimal growth theory, the main contribution of which lies in its facilitating an understanding of the logic of dynamic optimization rather than in its providing an applied tool for development planning.⁶ On the other hand, the inclusion of

5 This school of thought seeks to explain variations in the performance of economies in terms of their institutional characteristics, such as those giving rise to many forms of transaction costs.

6 In the Indian planning exercise of the 1960s, there were some experiments with multisectoral dynamic optimization models, but their usefulness for the purpose of generating actual development plans was doubtful; see Bhagwati and Chakravarty (1971).

input-output analysis has considerably enriched the present-day syllabus, again, not so much in its growth-theoretic as in its planning-oriented part.

Teaching macroeconomics in a coherent and meaningful way is a daunting task, given the perplexing diversity of current approaches to macroeconomic analysis and the fact that textbook macroeconomics is almost entirely focused on short-run stabilization in developed market economies. At the undergraduate level, macroeconomics is often introduced in bits and pieces, in the introductory theory courses as well as in the courses on money, banking and public finance. As a result, students do not get a clear view of the alternative approaches, nor can they appreciate any existing relevance of the underlying theoretical frameworks for developing countries. In fact, much of the insight to be gained from the basic Keynesian model in the context of a labour surplus underdeveloped economy comes from an understanding of how the model *per se* applies only obliquely to the problem of unemployment in such an economy. One can then proceed to show how the standard macroeconomic tools can be suitably modified to explain such phenomena as forced savings and the inflationary financing of investment, which figure so prominently in development policy discussions.⁷

Macroeconomics courses at the more advanced level can now focus on an emerging body of literature on theories and problems of macroeconomic stabilization in developing countries. That literature, much of which deals with open-economy macroeconomics, has largely grown out of the controversies surrounding the International Monetary Fund (IMF)-supported stabilization policies recommended for developing countries. The issues involved are gaining in importance in the context of South Asian countries as they now strive for major reforms in their macroeconomic management and external trade regime. However, a macroeconomics for developing countries is yet to be fully consolidated. As in mainstream macroeconomics itself, there are several approaches to the subject Keynesian (e.g., Eshag 1983), monetarist (e.g., Khan and Knight 1981) and structuralist (e.g., Taylor 1983). It is noteworthy that the "new classical" ideas based on rational expectations have not entered this field yet, except in rare instances (Corden 1987).

In the courses on international economics, the usual emphasis is on the so-called pure theory of trade with its diagrammatic exposition of the rule of static comparative advantage in the two-commodity case. As a result, students are left to their own devices to make sense of such contemporary topics as international trade negotiations, the debt crisis, and the role of multinationals. In general, there is a need for paying more attention in the syllabus to the trade-related issues of economic development, although a part of it is usually covered in development economics courses. The literature on trade's contribution to

7 *In keeping with the spirit of the times, one can even invoke rational expectations to explain the limits of the use of inflation for forced savings.*

development has been enriched in recent years with a diversity of theoretical constructs, applied models and empirical studies (see, for example, Srinivasan 1988). Of particular interest is the continuing policy debate on outward versus inward orientation in development strategy. This debate raises issues that would seem a far cry from the good old rule of static comparative advantage under perfect competition.

Nearly all economics departments require undergraduates to undergo some training in rudimentary algebra and calculus as well as in elementary statistics, usually stretching up to ordinary least squares regressions. However, econometrics is offered only as one of the optional course at the master's degree level. Training in statistics often concentrates on formal techniques only, thus shortchanging students in terms of their exposure to how these techniques are applied in the empirical work done by economists. Economists in developing countries have often to cope with severe data limitations. Prospective economics graduates should therefore learn how to deal creatively with imperfect data and to interpret the results of statistical procedure based on such data. In general, there is perhaps a need for putting more emphasis on applied econometrics, a training which can help to arm the student against shoddy reasoning in empirical analysis (Baumol 1991). One can, for example, make a legitimate case for introducing topics in applied demand analysis by compressing some of the mathematically oriented topics in the microeconomics curriculum (such as the duality approach to consumer demand theory).

The emphasis on the teaching of economic history varies among universities. Some university departments have strong faculty specialization in economic history; but in most others the teaching of the subject does not involve more than a course (sometimes a half-year one) offered at the undergraduate level. Very often, this course is one part economic history, another part area studies, and a third part study of comparative economic systems. As a result, usually not much is achieved in any direction. Economic history can prove useful in understanding long term changes in economic organization and institutions and can therefore be a good source a ideas for those interested in the problems of economic development. Thus there is a case to be made for more widespread use of historical materials in economics courses. The study of comparative economic system is, of course, useful in its own right. While this subject is sometimes touched upon generally in introductory lectures on economics, some departments also offer specialized courses on the economics of socialism, which deal with both Marxist economics as well as actual practice in socialist states. In view of the profound economic reforms now taking place in Eastern Europe, such courses obviously need to be redesigned.

The history of economic ideas is generally regarded as a specialized area of study appropriate for only a few students, who may opt for it at the master's degree level. The relative neglect of this field of study is often justified by the

argument that in any rapidly evolving "scientific" discipline, concentration on the current state of knowledge is all that is needed. This view is contested by those who believe, for valid reasons, that no new approach in economics fully supersedes the previous ones. Thus, an exclusive emphasis on modern neoclassical price theory can be quite inadequate for comprehending the structural heterogeneity (such as the coexistence of capitalist and pre-capitalist modes of production) that characterizes the South Asian and other developing economies. On the other hand, classical economics, with its strong institutional grounding and its focus on accumulation and distribution, can provide an appropriate approach to many important questions that concern those economies. Topics in classical economics, such as the classical rent theory and the labour theory of value, do sometimes get inserted into the syllabus, although in a rather isolated manner. What may be more useful is to structure teaching around certain relevant models of the economy as embedded in the writings of economists like Smith, Ricardo, Marx, Marshal, Schumpeter and Keynes. The textbook on introductory economics written by Robinson and Eatwell (1973) offers a notable example of how such an approach to teaching can be taken even at the first-year undergraduate level. Unfortunately, their work has not received as much attention as it perhaps deserves.

WHITHER DEVELOPMENT ECONOMICS ?

Development economics is one field of inquiry that is of special interest to South Asian students. Over the last decade or so, however, the state of this discipline has been the subject of major controversies and reappraisal (see, for example, Ranis and Fei 1988; and Lal 1984). The controversies have arisen from major shifts in the paradigms of economic development as well as from changes in the analytical approach to development problems. Those changes have also important implications regarding how to best organize the teaching of development economics (and, indeed, the entire economics curriculum).

One view is that development economics is not a true subdiscipline (in the sense that labour economics or international trade are); in fact it embraces all economic subdisciplines, distinguishing itself only by applying economic principles to the specific circumstances of developing countries. The view rests on the assumption that standard economic concepts and analyses can be used in the case of both industrialized and developing countries. Indeed, in recent years, neoclassical microeconomic analysis has been applied to the situation of developing countries to an extent that has led economists like I.M.D. Little (1982) to designate development economics as a legitimate branch of applied microeconomics. The policy advice coming from the international donor agencies regarding "getting prices right" is also of a strictly neoclassical nature.

On the macroeconomic side, the IMF-supported stabilization measures are based on a standard monetarist approach to open-economy macroeconomics.

There are compelling arguments, however, in support of a separate economics of development. In spite of increasing microeconomic concerns for allocative efficiency and macroeconomic concerns for short-run stabilization, development themes basically remain concerned about dynamic changes in the structure of the economy as a whole. Modern mainstream economics, with its short-run orientation and tenuous micro-macro links, has not provided an analytical framework able to capture adequately the stylized facts of development (see Arida and Taylor 1988).⁸ In retrospect, it would appear that formal growth theory has also in many ways missed the crucial issues for developing countries. As a result, the development theories of the vintage of 1950s and 1960s, which are rooted in classical themes, remain the mainstay of development economics (although they have been amended and elaborated in many ways). In spite of the neoclassical resurgence, contemporary development economics is characterized by competing paradigms rather than by any dominant orthodoxy. Each of the alternative approaches to development such as the neoclassical, the Marxist and the structuralist provides some valuable insights and seeks to explain some part of the stylized facts of development (Bardhan 1988).

The upshot of the above discussion, in terms of teaching and curriculum, is that development economics remains one of the most unstructured branches of academic economics. As the dominant themes in development have changed over time and new materials competed for attention, the contents of the standard texts, as well as the course structure, have changed rapidly. One way to lighten the burden of the development courses would be to shift some materials elsewhere, thereby making the other courses more development-oriented (as we have already suggested). Such a shift would also make the entire curriculum more integrated and more geared towards helping the student in his or her comprehension of the real-world functioning of the economy in the context of developing countries. Many of the topics currently being included in development courses truly belong under the heading of economics of developing countries rather than under that of economic development as such (see, for example, Basu 1984). Also involved here is the question of an appropriate sequencing of courses. To teach economics in a "relevant" way, some of the above mentioned topics need to be introduced at an early stage in a number of courses, including the principles courses. For example, for a

⁸ It is noteworthy that Baumol (1991) calls for a return to the *Wealth of Nations* as a leading focus for economics research.

contextual analysis of the basic Keynesian model, one needs to be able to differentiate between structural unemployment in developed capitalist countries and disguised unemployment in developing countries. The practical illustration of the notions of gross domestic product (GDP) and circular flow of income also presupposes some knowledge of the economic structure of developing countries as distinct from that of developed countries.

The above scheme of curriculum demands imaginative teaching and careful selection of reading materials (since the standard Western textbooks do not quite fit into this scheme). We have already mentioned the voluminous literature that exists on applied economic analysis in the context of South Asian countries. Materials drawn from that literature can be used to provide empirical tests of theory in the economic settings that are familiar to the student. Since much of the literature concerns development policy issues, its inclusion will make the course content more development-oriented as well as contextually more relevant to South Asia. However, this will require an arranging of the materials in a way suitable to their use as supplementary texts. In this respect, the survey of Indian economic analysis by Bhagwati and Chakravarty (1960) was a step in the right direction; unfortunately, however, there have not been many follow-up exercises of that nature.

Using empirical material and case-studies can be particularly useful in teaching development planning and policy analysis. Classroom teaching in this area is often alleged to be too remote from the experience of development practitioners. Case-studies from the South Asian countries can be used to introduce some realism and specificity into the discussion of the formal techniques of development policy analysis (such as input-output modelling, social cost-benefit analysis, and econometric forecasting). In the practical application of those techniques, one often needs to take account of missing data and to temper conclusion to reflect uncertain information and non-economic constraints. However, there is a danger for development economics courses of focusing too narrowly on certain planning tools and techniques (including computer-based policy simulations which are currently popular on many American campuses). Imparting a broad sense of perspective about development policy issues and their socio-economic context is a more rewarding, and also an intellectually more challenging, goal to strive for.

REFERENCES

- Arida, P. and L. Taylor (1988) : Long-run income distribution and growth. In *Handbooks of Development Economics*, Vol.I, H. Chenery and T.N. Srinivasan, eds. Amsterdam: North Holland.
- Bardhan, P. (1988) : Alternative approaches to development economics. In *Handbook of Development Economics*, Vol.I, H. Chenery and T.N. Srinivasan, eds. Amsterdam: North Holland.

- Basu, K. (1984) : *The Less Developed Economy*, Oxford: Blackwell.
- Baumol, W.J. (1991) : Toward a newer economics: the future lies ahead. *Economic Journal*, Vol. 101 (January).
- Bhagwati, J.N., and S. Chakravarty (1969) : Contributions to Indian economic analysis: a survey. *American Economic Review*, Vol. 59, supplement (September).
- Chakravarty, S. (1986) : The teaching of economics in India. *Economic and Political Weekly*, Vol. XXI, No.27 (July 5).
- Chenery, H. and T.N. Srinivasan, eds. (1988) : *Handbook of Development Economics*, Vol. I. Amsterdam: North Holland.
- Corden, W.M. (1987) : The relevance for developing countries of recent developments in macroeconomic theory. *The World Bank Research Observer*, Vol. 2, No. 2 (July).
- Eshag, E.(1983) : *Fiscal and Monetary Policies and Problems in Developing Countries*. Cambridge, UK: Cambridge University Press.
- Hahn, F. (1991) : The next hundred years. *Economic Journal*, vol. 101 (January).
- Khan, M.S. and M.D. Knight (1981) : Stabilization programs in developing countries: a formal framework. *IMF Staff Papers*, Vol..28 (March). Washington, D.C.: International Monetary Fund.
- Kreps, D.M. (1990) : *A Course in Microeconomic Theory*. Englewood Cliffs, N.J.: Prentice-Hall.
- Lal, D. (1984) : *The Poverty of Development Economics*. London: Hobart Paperbacks, No. 16.
- Little, I.M.D. (1982). *Economic Development: Theory, Policy and International Relations*. New York: Basic Books.
- Mazumdar, D. (1981) : *The Urban Labour Market and Income Distribution in Peninsular Malaysia*. New York: Oxford University Press.
- Ranis, G. and J.C.H. Fei (1988) : Development economics: what next? In *The State of Development Economics*, G. Ranis and T.P. Schultz, eds. Oxford: Basil Blackwell.
- Ravallion, M. (1985) : The performance of rice markets in Bangladesh during the 1974 famine. *Economic Journal*, vol. 95 (March).
- Robinson, J. (1965) : Teaching economics. In *Collected Economics, Papers*, Vol. 3, Oxford: Basil Blackwell.
- and J. Eatwell (1973): *An Introduction to Modern Economics*, Maidenhead, United Kingdom: McGraw-Hill.
- Siegfried, J.J. and others (1991) The economics major: can and should we do better than a B-? *American Economic Review*, Papers and Proceedings, Vol.81, No.2 (May)
- Srinivasan, T.N. (1988) : International trade and factor movements in development: theory, policy and experience. In *The State of Development Economics*, G. Ranis and T.P. Schultz, eds. Oxford: Basil Blackwell.
- Stern, Nicholas (1991) : The determinants of economic growth. *Economic Journal*, Vol. 101, No. 1, pp. 122-133.
- *Taylor, L. (1983) : *Structuralist Macroeconomics*. New York: Basic Books.
- Varian, H.R. (1984) : *Microeconomic Analysis*, 2nd ed. New York: W.W. Norton.

Professor Abu Mahmud Memorial Lecture

Plans and Markets in Socialism

Abu Abdullah*

A famous song by Rajanikanto begins: "Tumi aroop swaroop, swagoono nirguno, dayal bhayal Hari he/Ami ki ba bujhi ami ki ba jani, ami keno bhebe morihe". Freely translated: "whether you are formless or formed, with all qualities or none, merciful or merciless— what do I know or understand, why do I worry!" The adherence of many socialists to the ideals of socialism has (or perhaps used to have) a similar grand disregard for the precise nature of what it was they believed in and were working for. An "exploitation-free" society where production would be for use and not for profit, where there will be no poverty and no inequality, was about the extent of concrete detail one could expect. Abolition of private property and of markets were seen both as the principal means to attain these objectives and as worthy goals in their own right. Distribution of the total income of society would be according to work in the first phase of socialism and according to need in the second.

The above is undoubtedly a caricature. But the fact remains that the founding fathers of "scientific socialism", Marx and Engels, made a virtue of not specifying the nature of a socialist (or communist) economy and society. "We are not Utopians", they said, "we do not come to the worker with a readymade blueprint. The workers, once they have taken state power, will work out the organizational modalities"¹. But they thought, and Lenin agreed until he came up against the obdurate realities of organizing a post-revolutionary economy, that it would all be rather simple. The "associated producers" will decide what and how much and how to produce (without delegation?), and "The functions of control and accountancy, becoming ever more simple, will be performed by each in turn" (Lenin).

As communists came to power over large parts of the globe, they realized that these simple-minded bromides simply would not work, and perforce had to develop more realistic working "models" of socialism. At the same time, mainstream social scientists were drawn into the debate about the very practicability, not to speak of the desirability, of the socialist economy. Decolonization provided socialist ideology with new intellectual bases in the petty intellectuals of the "Third World". In some countries the anti-colonial

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¹ *This is not an exact quotation, and throughout this lecture I will make few attempts to cite chapter and verse.*

struggle was itself radicalized and captured by communists (China, Vietnam), while in others a nationalist managed to cobble together a bloc which incorporated some elements of the left-blocs that proved relatively stable in some countries (India), but fell apart, with or without external help, in other (Indonesia). These various outcomes were due to the internal alignment of class forces as well as external factors like the current Comintern line, the extent and efficacy of imperialist intervention etc. Wherever they came to power, communists initiated a more or less rapid process of transition to a socialist economy, which mostly meant nationalization of industry, banking and marketing of industrial and agricultural output, as well as egalitarian land reforms usually as a prelude to some form of collectivization.

In the countries where the national bourgeoisie retained power (with or without support from some elements of the left), development strategy tended to centre around import-substituting industrialization behind high trade barriers, but also incorporated a high degree of direct state intervention in the economy, including the presence of a nationalized industrial and banking sector, direct regulation of sectoral allocation of private investment, and public distribution of "essential" commodities, including agricultural inputs. Some of these countries subsequently (from the mid-'60s onwards) went on to adopt a more private-sector oriented, less protectionist, more export-based development strategy, which appears to have paid off in terms of high growth and rapid progress in poverty reduction.

In most of the countries that pursued a "mixed economy" strategy, an influential left critique dominated academic and popular discourse. National capitalism was indicted as a link in the chain of imperialist exploitation which enriched the few in metropolis and satellite at the expense of the increasingly impoverished masses. The Marxist and "Dependencista" critiques were supplemented by some early and influential contributions to development economics, e.g. Nurkse's theory of balanced growth, Leibenstein's theory of the "big push", and the Prebisch-Singer thesis, all of which seemed to imply, if they did not explicitly argue, the need for greater centralized planning and less reliance on the market.

The case for socialism in the developing countries was naturally built on somewhat different premises from the case for the advanced countries. In the latter, socialism seemed desirable (and/or, for some, inevitable) because capitalism, while progressive in its time, had become a fetter on the forces of production, and was in depression and perhaps terminal crisis. In the "periphery" it was felt either that the objective condition for autonomous capitalist development were simply not present, or that such development had unacceptably high costs in terms of the perpetuation of the abject poverty of the masses.

The desirability of socialism in the "Third World" was thus deduced from the imperatives of rapid alleviation of mass poverty — though it was usually realized that the alleviation might have to be delayed in the interests of high investment in the beginning. Consider Myrdal:

"There is no other road to economic development than a forceful rise on the part of the national income which is withheld from consumption and devoted to investment, and this implies a policy of the utmost austerity ... The frugality, which must be applied to the level of living of the masses of the people for the simple reason that they are the many ..." (*Development and Underdevelopment* p. 64.

Thus, at least in the earlier phase of thought, socialism would also depend primarily on "trickle-down", the difference being, presumably, that the "dictatorship of the proletariat" or the "worker-peasant alliance" would accept the austerity voluntarily and can be depended on to turn the trickle to a deluge at the appropriate moment.

While poverty, and the apparently spectacular success of some socialist countries (the Soviet Union, China), provided the motivation for socialism, and in particular for replacing the "anarchy of the market" with a planned economy, certain technical development in planning methodology appeared to hold out hopes of making such planning feasible. Input-output analysis would enable the planners to deduce the gross output vector that would be required to produce any given final demand vector, while linear programming went a step further and would permit the selection of optimum processes at optimum levels to maximize any objective function stipulated in terms of net output. In fact Soviet-type consistency planning, with its "trial balances" and downward and upward transmission and revision of targets, can be seen as an approximation to an iterative inversion of the Leontief matrix.

The initial pristine vision of a socialist economy had no role for competition among producers, or for a market. A Central Planning Board would set output targets (after consultation with factory management via sectoral and/or regional Boards) and arrange for delivery of the necessary inputs from other firms and sectors. It was recognized that for accounting purposes some "prices" would have to be used, but how these prices should be calculated was the subject a prolonged and inconclusive debate. In any case these prices would not serve an allocative function. Targets were set with primacy given to accumulation and armaments, with "basic needs" considerations a poor second. (This is not, of course, immanent in the logic of planning, except in so far as one of the main justifications for planning is that left to itself, the economy generates "too little" investment). The performance of factory management was judged by the extent of target fulfillment irrespective of efficiency or — heaven forbid — profitability. Yet surely surplus generation, with surplus defined in an economically meaningful way, should be a major goal of a socialist economy.

It should be evident that the data requirements for such comprehensive planning are formidable, and the time requirement for an acceptable, consistent plan to emerge through communication back and forth between the Planning Board, the sector head and factory management is also likely to be exorbitant. As Alec Nove describes it:

"In the USSR at this time there are 12 million identifiably different products ... there are close to 50,000 industrial establishments ... None of them can produce or distribute anything without the coordinated cooperation of the activities of numerous economic units which produce, transport, or distribute ..."

And he concludes that "the Soviet centralized planning mechanism finds itself overwhelmed by these tasks, and numerous unintended distortions and disproportions are the consequence of this" (Nove, *The Economics of Feasible Socialism*, pp.33-4).

Nove also points out that plans were usually under fulfilled, often by substantial margins, to the extent that some commentators have denied that the economy was really planned at all (*ibid.* pp. 79-81).

The saddest thing about these cumbersome attempts to control all economic activity is that they are mostly redundant. Central planners deliberately deprive themselves of a marvellous mechanism which efficiently conveys information about relative scarcities to producers and provides them with incentives to allocate resources in such a way that production is expanded or contracted in accordance with these scarcities. This is the competitive market. One need not believe in the "cloud-ouckoo land of perfect competition" (Joan Robinson) to appreciate the way in which reasonably competitive markets do succeed in harnessing private interests to social ends.

Socialists have tended to reject dependence on markets on a variety of grounds. Some are moral/ideological. The market economy is perceived to be a heartless economy, the basis for an alienated society where "relationships between people take on the appearance of relationships between things", where "man's own creations confront man with the force of objective laws external to himself" (Marx). I do not wish to enter into this aspect of the debate, except to say that I still feel safer depending for my supply of bread on the baker's self-interest rather than his social conscience, and to express an opinion that the answer to alienation lies not in trying to control the whole economy (which attempt is bound to spawn a bureaucracy much more alienating than the market) but in voluntary small group associations like the family, the community, the local Poetry Circle or Bridge Club etc. It must be conceded that socialist movements themselves have also been very important loci of de-alienation, but usually only as long as they remain out of power.

The more economic critiques of the market are well-taken if not carried too far, and are too well-known to require extended treatment here, but they can

'usually be addressed without jettisoning the market. These include considerations of income distribution (though I would like to note in passing that the pragmatic Chinese have now recognized "egalitarianism" as a counter-productive "left deviation"), economies of scale, externalities, and incomplete or missing markets. All these considerations do suggest a greater role for the state than the liberal minimalist state — but here, as Hayek has warned us, we should tread with caution, lest we end up sacrificing equally important values (e.g., liberty in the liberal sense).

This brings us to what is for many the fundamental critique of central planning — that it is, and cannot be other than, authorization, and can only work by curtailing individual freedom. Workers have no (or very little) say as to what kind of work they would prefer or in what place, consumers have no choice as to quantities and qualities of their consumption basket (except in so far as parallel markets flourish, which they usually do), and managers are deprived of all initiative and enterprise (except those needed to operate within the bureaucracy and in the parallel markets to obtain necessary inputs, and to devise ways to convince authorities that plan targets have been fulfilled). All governments, even the most democratic, possess a great degree of "relative autonomy", and have a natural tendency towards increasing their power. "Power corrupts", as Lord Acton said, "and absolute power corrupts absolutely". No citizen who values individual liberty would wish to see the state arrogate to itself the powers of sole employer, sole entrepreneur, sole investor, in addition its already formidable array of powers (e.g., monopoly of legitimate means of violence).

Comprehensive control planning, therefore, is an unattractive model, economically inefficient and politically dangerous. Socialists round the world have recognized this, and have tried to develop more efficient and humane versions of socialism that would make use of the virtues of the competitive market rather than try to replace it with a command economy. In practice, the Eastern European countries, notably Hungary, Poland and Yugoslavia, have a long history of experimenting with market reforms, with mixed success, and China after Mao can also be seen as a paradigm of market socialism. What remains unclear is whether the momentum of the reforms in these countries will in time bring about a complete transition to capitalism.

At the theoretical level, Oskar Lunge developed, in 1936-37, an ingenious model of market socialism in which the Central Planning Board would act as a substitute for the market, with enterprise management instructed to behave like profit-maximizing enterprises. Having once announced a set of prices at which all enterprises must account (and, for consumer goods, buy and sell), the Planning Board will receive, after an appropriate interval, information on the behaviour of inventories and deduce from this the state of excess demand or supply for various commodities at these initial prices. For the next round,

prices would be adjusted so as to eliminate (or at least reduce — full elimination would be no more possible, even after several iterations, then in a real market) these excess demands and supplies. The information requirement of planning are thus considerably curtailed, blunting the point of the attack on socialism mounted by Von Mises, Robbins and Hayek. Alee Nove, however, feels that even this comparatively limited task may be beyond the capacities of a Central Planning Board:

"There is a certain 'textbook naivety' about imagining the CPB responding to signals about surpluses and shortages of particular goods by modifying their prices, both because there are too many prices to handle and because ... few decisions can be based upon price information alone" (*The Economics of Feasible Socialism*, p. 120).

A problem mentioned by both Lange and Nove, but given, in my opinion (and that of most recent commentators), less importance than it merits, is that of incentives: the managers in this kind of market socialism have no particular incentive to act like profit-maximizers, and furthermore, even if there were punitive sanctions for failing to do so (or rewards for doing so), it would be quite impossible for a Central Planning Board to verify compliance without the kind of detailed micro-data required for comprehensive central planning.

After his hard-hitting and incisive critique of actually existing socialism as well as of some "models" available in the literature (specially central planning), Nove's own model of "feasible socialism" comes as a bit of an anti-climax. Large-scale industry, finance etc. would be state-owned, small private enterprises would be allowed ("smallness" to be contextually defined). Prices would be set primarily through competition on the market (with important exceptions noted below). Most disappointing is the off-hand treatment of the central problem of incentives and of the "soft budget constraint"?

"Co-operative and private activities must be expected to bear the costs of their own mistakes. At the other end of the scale, the centrally run state sector is plainly the responsibility of government which would determine the price policy to be followed (which could involve, for instance, large subsidies for deliberately loss-making public transport, or prices far in excess of costs for cigarettes). There is no reason whatever why the workers in these sectors should either gain or suffer from the condition of the profit-and-loss account". (Nove *op. cit.*, p. 209).

Once one accepts "deliberately loss-making enterprises" as acceptable for the public sector, discretionary pricing will become the order of the day and rational economic pricing will fly out of the window.

Bardhan and Roemer ("Market Socialism: A Case for Rejuvenation" *Journal of Economic Perspectives*, Summer 1992), recognize that "the key questions of any model of market socialism [is] how to motivate the managers of public firms to maximize profits" (p.105), and go on to argue, as indeed had Lange himself,

that this "agency problem" is also important for corporate capitalism with its apparent divorce between ownership and control. They suggest that under corporate capitalism the problem is solved by the "... disciplining of managers ... through the capital market and the managerial labour market": managers who perform poorly will see (as will shareholders) stock values decline, triggering moves to change management, or takeover bids. Bardhan and Roemer suggest that a managerial labour market could be replicated in a market socialist economy, but admit that the capital market does present a problem. They proceed to develop an elaborate model where state-controlled banks monitor as well as finance groups of industries whose shares are held by workers, firms in the group, and the bank itself. The system would operate as follows:

"The shares of a large firm can be sold to the main bank. At the first signs of significant attempts by other firms at unloading the shares of a particular firm ... the main bank will take measures to prod and discipline the management, renegotiate the debt contract if necessary ... With the banks substantial share holdings, it will even have the power to take over the management of the ailing firm temporarily ..." (p.108).

The authors acknowledge that their proposal simply shifts the agency problem from individual firms to banks:

"... who monitors the monitor? If the main bank depends substantially on the state for finance, the political aspect of the soft budget constraint again looms large, exposing the soft underbelly of socialist economies" (p. 111).

The authors, however, pin their hopes on the shareholding firms and the main bank to act as a "hard layer" between the state treasury and the firm, on "the reputational concerns of the main bank's managers", on international competition to provide objective criteria of performance, and on "... well-publicized pre-commitments before public sector projects are launched that they will be liquidated should their cumulative performance at pre-specified dates in the future not exceed certain threshold levels" (p. 113).

Could such a model work? According to Schleifer and Vishny (*Journal of Economic Perspectives*, Spring 1994), all such models founder on the false assumption that the state actually wants to adopt efficient policies. They consider three alternative models of the state —the dictatorial, the majoritarian democratic and the interest group democratic, and conclude that in no case will the state have an interest in pursuing efficient policies. They further conclude that while all governments are likely to do damage to the economy, this damage will be less in a capitalist economy simply because the state controls a smaller share of economic resources.

This view of the state as irredeemably malignant is perhaps somewhat extreme, and fails to explain why in some concrete cases (China after Mao, the NIC's), state action appears to have resulted in efficient growth.

So where do we stand, finally? One thing can be said with some confidence — comprehensive central planning as a model of a socialist economy has been consigned to the scrap-heap of history. The issue now is between some variety of market socialism and more-or-less full-blown capitalism, with naturally the classic array of state actions, including safety nets for the poor, approved of even by diehard liberals like Hayek.

One has to say that the jury is still out — and the jury here consists of both intellectuals and practitioners of governance.

One important aspect of the matter that we have not touched on is the vexed question of the relationship between socialism and freedom. Contrary to what Hayek, Friedman *et al.* argue, the introduction and sustenance of capitalism in poor countries has almost invariably been attended by particularly brutal authoritarian regimes. But then so has the installation of socialism in the majority of cases. One can say, it seems, that a planned economy is necessarily unfree, but not much more — certainly not that a market economy necessarily implies, or gives birth to, a free society.

If I am nevertheless asked to make at least a provisional commitment, I would express a preference for the dominance of markets and private property in the means of production. This is partly because I share the liberals' reluctance to increase the power states possess over individuals, but it is also because I do not believe that any system of market socialist incentives, however, ingenious, can elicit the level of commitment to efficiency that a capitalist economy can. Some of the evils attendant on a capitalist economy can be corrected by state action that does not transgress liberal limits (e.g., targeted poverty alleviation). Others we should probably learn to live with as representing the lesser evil.

অধ্যাপক এ এফ এ হোসেন স্মারক বক্তৃতা

সক্ষমতা ও উন্নয়ন

সম্প্রদায়িক সাহা *

অধ্যাপক এ এফ এ হোসেন ছিলেন এদেশে পরিকল্পনা ও উন্নয়ন ভাবনায় অন্যতম পথিকৃৎ। জাতীয় অর্থনৈতিক কর্মকাণ্ডে নীতি নির্ধারণেও তাঁর ভূমিকা ছিল অগ্রগণ্য। বিশেষ করে মানব কল্যাণ ও সমাজ উন্নয়নের প্রশ্নটি তাঁর চিন্তায় ও কর্মে প্রাধান্য পেয়েছে সব চেয়ে বেশি। আজ তাঁর স্মৃতির প্রতি শ্রদ্ধা জানাতে এই কথাটি মনে রেখে মানুষের সক্ষমতা (সন ১৯৮১, বাংলা ১৩৯৭) বাড়িয়ে সামাজিক পরিমাণ ও গুণগতভাবে তার সামূহিক অর্জন সমৃদ্ধ করে কিভাবে তার উন্নয়নের পথ রচনা করা যায়, তা বিবেচনা মূল ভূমিতে রেখে প্রাসঙ্গিক কিছু বলা যায় কিনা, দেখতে চেষ্টা করবো। সবকিছু বলা হয়ে যাবে, এমন দাবি করছি না। পূর্ণ বাস্তবতার স্বরূপ নির্ণয় আদৌ সম্ভব কি না, সে প্রশ্নের ভেতর না গিয়ে এখানে কেবল ধারণার ও মূল্যবোধের বিশেষ পরিমন্ডলে মানুষের হওয়া না হওয়ার প্রক্রিয়ায় ঘটনার ও সম্ভাবনার কিছু কিছু গতি প্রকৃতির তাৎপর্য বোঝার লক্ষ্যে তাদের ওপরই নজরটা সীমাবদ্ধ রাখব।

হিরাময় পাত্রের আড়ালে সমাজ-অর্থনীতির প্রকৃত চেহারার বিকাশমানতার আভাস যদি তাতে এতটুকুও মেলে, কল্যাণের রূপ ও তার আপেক্ষিকতা নিয়ে যদি তা কোন ভাবনা জাগায়, তাহলেই অধ্যাপক আতোয়ার হোসেনের চিন্তা ও কর্মের ঐতিহ্যকে অনুসরণের বিনীত প্রয়াস হিসেবে তা বিবেচনার প্রত্যাশী হতে পারবো।

মানুষকে উন্নয়নের লক্ষ্য হিসেবে ধরে কিভাবে তার সক্ষমতার বিস্তার ঘটান যায়, এ নিয়ে আজ অনেকে নতুন ভাবে ভাবতে শুরু করেছেন (খ্রিফিন ও নাইট ১৯৮৯)। এই মানুষ মোট সংখ্যা নয়, গড় নয়, কোন একক ব্যক্তিও নয়, তা প্রত্যেককে মিলিয়ে সমস্ত, সবকে নিয়ে মানুষের পুরো সামাজিক নিবেশন। অবশ্য এই নিবেশন এক একটি দেশের সীমানায় আবদ্ধ। সেই চৌহদ্দিতে প্রকৃতি পরিবেশ ও ইতিহাসের ধারায় প্রকাশমান আর্থ-সামাজিক প্রেক্ষাপট মানুষের আকাঙ্ক্ষায় ও উদ্যমে, এবং তাদের বাস্তব প্রতিবন্ধকতাতেও সাধারণত এক নিজ সত্তা ফুটিয়ে তোলে। সামাজিক নীতি প্রণয়নে আপন আপন অধিকার ও তা কার্যকর করার ঐতিহ্য শাসিত ধরন তার বৈশিষ্ট্যকে আরো চিনিয়ে দেয়। কোন বিশেষ সময়ে তাকে পূর্ব নির্ধারিত ধরে নিয়েই কেবল ভবিষ্যতের সম্ভাবনার কথা ভাবা চলে এবং তা তার বিভিন্নতা ও বহুমাত্রিকতার কথা মনে রেখেই।

তবে ভিন্ন ভিন্ন অবস্থা থেকে ভিন্ন ভিন্ন পথে শুরু করলেও সক্ষমতার আকাঙ্ক্ষায় একটা সর্বজনগ্রাহ্য অবয়ব প্রতিটি ক্ষেত্রে দিক নির্দেশনার সহায়ক হতে পারে। যদিও ধনী ও দরিদ্রের পার্থক্য বিষয়গত ভাবে তার গুরুত্বে তারতম্য আনে। আমরা এখানে দারিদ্র্য-নাঙ্কিত বৈষম্য-পীড়িত মানব সমাজের কথাই আগে ভাবব। কারণ, উন্নয়নের তাগিদ এমন অবস্থাতেই সব চেয়ে বেশি জরুরি হয়ে দেখা দেয়। সক্ষমতা অর্জন ওই উন্নয়নের আবশ্যিক উপায় ও অভীষ্ট দুই-ই। মানুষের আত্মস্থিত দ্বৈত প্রেরণার-কর্মেরও ফল লাভের সম্যক প্রতিফলন ঘটে তাতো দারিদ্র্য যেখানে সর্বশাসী, সেখানে মানুষের হওয়ার এবং করার, তার অর্জনের ও উপভোগের ক্ষেত্র থাকে খুবই সংকীর্ণ। কোন রকমে টিকে থাকার সংগ্রামে তার জীবনীশক্তির সবটাই যায় ক্ষয় হয়ে। এই অবস্থা থেকে মুক্তির ফলপ্রসূ উদ্যোগে থাকে সক্ষমতার পরিচয়। ওই মুক্তি স্বয়ং ঘটায় তার প্রাপ্তির ও প্রাপ্তি সম্ভাবনার বিস্তার-যা হাতে আসে, শুধু তাই নয়,

* অর্থনীতি বিভাগ, রাজশাহী বিশ্ববিদ্যালয়।

বিকল্প যা হাতে আসতে পারে, তাও। উদ্যোগ ও প্রাপ্তির মিথস্ক্রিয়ায় ঘটে হতে পারার ও করতে পারার ক্ষেত্রে সশ্রাসিত করার সামর্থ্যের পরিমাপ। একে অন্যকে তারা রূপায়িত করে, অথবা কখনো একই ভূমিকা বদলে অন্যতে রূপান্তরিত হয়। যেমন, খাদ্য, বস্ত্র, স্বাস্থ্য সেবা, শিক্ষা ইত্যাদির গুণ ও পরিমাণগত প্রয়োগিক প্রকাশ-তারা সক্ষমতার নিয়ামক, আবার সক্ষমতারই বাস্তব অবস্থার পরিচায়ক। দারিদ্র্যশাসিত সমাজে এই পরিচয় থাকে খুবই দীন। তা থেকে উত্তরণের ঐকান্তিক আকাঙ্ক্ষায় বাস্তব পটভূমিতে সক্ষম হবার অনুধ্যানের চলচ্ছবি আঁকে। একশ বছর আগে (বাংলা ১৩০১) রবীন্দ্রনাথ সমাজ মানুষের সর্বোদয়ের লক্ষ্যে তাঁর স্বপ্ন কল্পনাকে মূর্ত করেন এইভাবে, 'অথচই প্রাণ চাই আলো চাই চাই মুক্ত বায়ু/চাই বল, স্বাস্থ্য, আনন্দ উজ্জ্বল পরমায়ু/সাহস বিস্তৃত বক্ষপট।' এবং তার পশ্চাৎভূমিতে একেবারে চোখের ওপরে তিনি অনিঃশেষ' দেখেন, 'সম্মুখেতে কষ্টের সংসার। বড়ই দরিদ্র, শূন্য, বড় ক্ষুদ্র, বন্ধ, অন্ধকার। অর্থনীতির চিন্তা'বিদরা আজ সক্ষমতার সংজ্ঞায় যে ধারণাকে বাঁধতে চাইছেন, রবীন্দ্রনাথের গভীর অন্তর্দৃষ্টিতে অত আগে ধরা পড়ে তার পুরোটাই। সর্বব্যাপ্ত দারিদ্র্যের পটভূমিতে অন্ন ও স্বাস্থ্যের মত মৌল চাহিদাকে যেমন তিনি প্রাধান্য দিয়েছেন, তেমনি গুরুত্ব দিয়েছেন আনন্দ উজ্জ্বল পরমায়ুর, প্রার্থনা করেছেন প্রাণের, আলো আর মুক্ত বায়ুর, চেয়েছেন বল, আর সাহস বিস্তৃত বক্ষপট। এসবই দৈহিক ও মানসিক সেই সব বৃত্তির ও উপকরণের প্রতি দৃষ্টি আকর্ষণ করে, যারা জীবন যাপনের সমগ্র ক্রিয়াকর্মে ইতিবাচক রূপান্তর ঘটিয়ে তাকে ঋদ্ধ ও সশ্রাসিত করে। বহু বিচিত্র কর্মে আত্মনিয়োগের অধিকার অনেকখানি নিশ্চিত করে সমাজবদ্ধ মানুষের আনন্দ উজ্জ্বল পরমায়ু। সক্ষমতার প্রতিফলন ঘটে তাতে। আলো আর মুক্ত বায়ু ওই জীবন যাপনের ধারাবাহিকতায় কল্যাণকর পুষ্টি ও ঐশ্বর্যময় ব্যাপ্তি আনে। প্রকৃতি ও পরিবেশের সংগে জীবনের সায়ুজ্য স্থাপনের তাগিদ কেতাবি অর্থনীতির উন্নয়ন ভাবনায় অতি সাম্প্রতিক। রবীন্দ্রনাথের চিন্তা বৃত্তে অবশ্য তা ছিল জীবনের পরিপূর্ণতার অপরিহায উপাদান এই পরিপূর্ণ জীবনের প্রত্যাশা জাগিয়ে তোলা টুকুই কোন মানব সমাজের বেলায় শেষ কথা নয়, গণমানুষের সাধ্যসীমায় তার প্রাপ্তিযোগ্যতা নিশ্চিত করার বিষয়টিই চূড়ান্ত বিচারে প্রধান হয়ে দেখা দেয়। কিন্তু তা করার উপায় কি? এটা ভাবা খুবই স্বাভাবিক যে কারো কর্মদক্ষতা যদি বাড়ে, তবে তার যথোচিত প্রয়োগ ঘটিয়ে সে খুব সহজেই তার প্রার্থিত অবস্থানে পৌছাবার পথে প্রয়োজনীয় উপকরণ সমূহের ওপর অধিকার অর্জন করে তার সক্ষমতার ব্যবহার ও বিকাশ ঘটতে পারে। কর্মদক্ষতা বাড়ার জন্য প্রয়োজন উপযুক্ত শিক্ষা, আরো দরকার শারীরিক সুস্থতা। মানুষের চিন্তা করার ক্ষমতাকে তার সুবিন্যস্ত করে, তারা দিগন্তেরও তার সশ্রাসরণ ঘটায়। কি ভাল, কি মন্দ, এগুলো সম্পর্কে স্বাধীনতা সে তার নিজস্ব ধারণা গড়ে তুলতে থাকে। পাশাপাশি, আপাতদৃষ্টি এও মনে হয় যে, কর্মদক্ষতা বাড়লে মানুষের উপার্জন ক্ষমতাও বাড়ে। একটি দেশের জনসমুদয়ের উপার্জন ক্ষমতার প্রকাশ পরিলক্ষিত হয় জাতীয় উৎপাদনে। অতএব, মনে করা যেতে পারে, কোন দেশের জাতীয় উৎপাদন, ও সেই সঙ্গে মাথাপিছু আয়ের যত প্রবৃদ্ধি ঘটে, তার সব নাগরিকের সক্ষমতাও তত বৃদ্ধি পায়। উৎপাদনে প্রবৃদ্ধির ওপর তাই নজরটা কেন্দ্রীভূত হতে থাকে তারই তাগিদে গড়ে ওঠে দক্ষ শ্রম শক্তির চাহিদা, প্রয়োজন দেখা দেয় ওই শক্তির বিচক্ষণ ও সর্বাধিক ব্যবহারের। কোন কাজ কতটা দামি, তা স্থির হয় গোটা উৎপাদন ব্যবস্থায় কোথায় তার কদর, কারা তার উমেদার, কারাই বা তার ফলভোগী, এসবের ওপর। নৈর্ব্যক্তিক ভাবে ব্যাপারটার সুরাহা ঘটে বাজারের অব্যাহত কর্মপ্রবাহ। প্রত্যেকে নিজের নিজের পাওনা কি করে বাড়াবে, তারই পেছনে ছোটে। এই ছোট্ট প্রেরণা নিজের সক্ষমতার বিক্রয়ক্ষমতা বাড়তে ক্রমাগত ভাবে উৎসাহিত করে। যারা তা কিনতে চায়, তাদেরও অভীষ্ট তা উপযুক্তভাবে কাজে খাটিয়ে নিজ নিজ প্রাপ্তির ভান্ডার যথাসম্ভব বাড়িয়ে তোলার পূর্ণ প্রতিযোগিতায় কেনাবেচার ভারসাম্যে প্রত্যেকে পৌছায় তার সাধ্যসীমায় সর্বোচ্চ কাম্যবস্থায় নিজ নিজ ক্ষমতার উপযুক্ত ব্যবহার সব রকম সহায় সঞ্চলের সদ্ব্যবহারও নিশ্চিত করে।

যুক্তি শৃংখলের এই বিন্যাস অর্থনীতির শাস্ত্রীয় চর্চার মূল ভূখন্ডের প্রায় সবটাই আজ দখল করে নিয়েছে। শিক্ষা কর্মকুশলতা উৎপাদনশীলতা বাজার ব্যবস্থা, প্রত্যক্ষ যোগাযোগে তাদের সার্বিক শ্রীবৃদ্ধি, এই বক্তব্যকে প্রতিষ্ঠিত ধরে নিয়ে তত্ত্ববাগিশদের হাত ধরে নীতি প্রণেতারাও বিশ্বজুড়ে সব অর্থনৈতিক কর্মকাণ্ড এক ঠাঁচে ঢেলে ফেলার অকুণ্ঠ প্রতিযোগিতায় নেমেছেন। বিশ্বব্যাংক স্বয়ং, ও তার উদ্যোগে বিভিন্ন গবেষক তাঁদের অনুশীলনে এই প্রস্তাবের সমর্থনে বহুগত তথ্য যথেষ্ট তুলে ধরেছেন (বিশ্বব্যাংক ১৯৮৭, ১৯৯১; নাইট সর্বোট ১৯৯০; লকহীড ও অন্যান্য ১৯৯১)।

তবু কিছু প্রশ্ন থেকে যায়, যে যুক্তিসিদ্ধান্তের গাণিতিক প্রমাণ মাননের তুরীয়মার্গে অভ্রান্ত বলে স্বীকৃতি পায়, তার পশ্চৎভূমির প্রত্যয়রাশি কি বাস্তবের আনুগত্য ঠিক ঠিক মেনে চলে? প্রতিযোগিতামূলক বাজারের ধারণাগত বিশ্ব কি প্রত্যক্ষ ভূবনে অর্থনৈতিক কর্মকাণ্ডের রীতি নীতি ও হালচালের যথার্থ প্রতিফলন? অসম প্রতিযোগিতা কি বাজারের আচরণ ক্ষেত্রে প্রবলভাবে প্রভাবিত করে না? একচেটিয়া কারবারে ক্রমহ্রাসমান ব্যয়ের এখতিয়ার উপকরণ ব্যবহারের সীমা নির্ধারণ বাজারের কোন ব্যতিক্রমী ঘটনা নয়। উৎপাদক বা ভোক্তার অধিকারও নিজ নিজ বৃত্তে নিরংকুশ বা সম্পূর্ণ অন্যান্য নির্ভর নয়। তা ছাড়া আছে একই ব্যবস্থাপনায় একাধিক দ্রব্যসামগ্রী উৎপাদনে আলাদা আলাদা খরচের হিসাব মেলাবার দুরূহতা, আছে গণপণ্য উৎপাদন ও ব্যবহারের অভিঘাতে বাজারের স্বয়ংক্রিয় সূঠাম ও সুসামঞ্জস্য পরিচালন ব্যবস্থা বিশৃংখল হয়ে পড়ায় মৌলিক সমস্যা। ব্যক্তি ও সমাজ চেতনায় এবং আর্থসামাজিক ক্রিয়াকর্মের বিস্তৃত বিন্যাসে বাজার স্বয়ং কতটা অগ্রসর হয়, সে প্রশ্নও গুরুত্বের সঙ্গে বিবেচনা করতে হয়। উৎপাদনের সবটুকু যদি বাজারে না আসে, তবে মানুষের করণ ভবনের (সন ১৩৯৭ বাৎ) ক্ষেত্র হিসেবে তার ভূমিকা থেকে যায় আংশিক, এবং সেই সূত্রে অসম্পূর্ণ যোগাযোগে তার পরিণামফলে বিকৃতি ও বিচ্যুতি এড়ানো হয়ে পড়ে প্রায় অসম্ভব। সমাজের অন্তর্নিহিত বৈষম্যের প্রতিফলন ঘটে থাকে দ্রব্য, মুদ্রা ও মূলধন বাজারে। বাজারে অঙ্কি-সঙ্কি সবার জানা থাকে না, ঝুঁকি নেবার প্রবণতাও সবার একরকম নয়। ফলে খোলা বাজার আবশ্যিকভাবে পূর্ণ প্রতিযোগিতার নিশ্চয়তা দেয় না। প্রাসঙ্গিক তথ্য সমূহের অনর্গল বহমানতাও নিশ্চিত হয়না। তাদের ওপর যে যেমন ভাগ বসাতে পারে, সে তেমন বাড়তি সুযোগ সুবিধার হৃদিস পায় এবং এই লাভবানদের আনুপাতিক সংখ্যা থাকে খুব কমই। অতএব বাজার ব্যবস্থা সমাজ জীবনে যে গতিশীলতার সঞ্চার করে তা সর্বক্ষেত্রে সমান বেগে প্রবাহিত হয়ে সবার জন্যে একইভাবে কাজিত উপকার বয়ে আনবে, এমনটি অধিকাংশ ক্ষেত্রেই আশা করা যায় না। গণমানুষের সক্ষমতার উদ্বোধনে তার কার্যকারিতা প্রশ্নসংকুলই থেকে যায়।

বাজারের দ্রব্য সামগ্রীর দাম নির্ধারণে একদিকে থাকে ভোক্তার ভোগের আগ্রহ, অন্যদিকে বিক্রেতার উৎপাদনী ব্যয়। ভোগের আগ্রহের প্রতিফলন ঘটে কি দাম ভোক্তা দিতে চায় তাতে। উৎপাদনের উপকরণসমূহ উৎপাদক যে দামে কেনে তা স্থির করে দেয় তার উৎপাদনী ব্যয়। অবাধ প্রতিযোগিতার বাতাবরণে উপকরণসমূহের দাম বাজারই ঠিক করে। একইভাবে ভোক্তার ক্রয়মূল্যের সঙ্গে উৎপাদনকারির বিক্রয়মূল্যের সমতা বিধান বাজারে উভয়পক্ষের দরাদরির সংগত পরিণাম। আপাতদৃষ্টে বাইরের কারো কোন হস্তক্ষেপ ছাড়াই বাজার যে কোন বস্তুর দরাদরির নিষ্পত্তি ঘটায়। অতএব, তাতে কোন পক্ষপাতিত্বের অবকাশ নেই। ন্যায্য দামের পরিমন্ডলে প্রতিটি ব্যক্তি খোঁজে কোথায় সে পেতে পারে তার আয়ত্ত্বাধীন দ্রব্য সেবা বা উপকরণ সামগ্রীর সর্বোচ্চ মূল্য। প্রকারান্তরে সে তার সক্ষমতার যোগ্য মূল্য হাতে পায় এইভাবে। বাজারের হালচাল যদি অনুকূল মনে না হয়, তবে সে তার সক্ষমতার ঝুড়ি নতুনভাবে সাজাতে পারে, অর্থাৎ নিজের সামর্থ্যকে সে বাজারের গতিপ্রকৃতির সঙ্গে খাপ খাইয়ে নিতে পারে অথবা আপন সামর্থ্যে আনতে পারে বাজার-তড়িৎ পরিবর্তন।

বাজারের এমন নিরপেক্ষতা যদি দৃশ্যত বজায় থাকে, তাহলেও কিন্তু ওই বাজার নির্ধারিত দামের নৈতিক যৌক্তিকতা পুরোপুরি প্রতিষ্ঠিত হয় না। কোন বস্তুর প্রতি একজন ভোক্তার অগ্রহ শুধুই কি তার অনন্য নির্ভর পছন্দের বহিঃপ্রকাশ, না কি তার ওপর চাহিদার পারিপার্শ্বিক বাতাবরণও সমভাবে, অথবা এমন কি প্রভুর মত ক্রিয়াশীল? বাজারে ভোক্তার চাহিদা শুধু তার ভেতর থেকে আসে না, তা বাইরে থেকেও তৈরী হয়। মার্কস যাকে বলেছেন পণ্যমোহ, সমাজের বিশেষ অবস্থায় বাজারের ছলাকলা হতে পারে তা অধিকতর প্রভাবশালী ভোক্তার বা ভোক্তা জনগোষ্ঠীর আচরণ, অথবা উৎপাদকের ভোক্তাকে আকৃষ্ট করার প্রতিযোগিতামূলক বিজ্ঞাপনী মায়াজাল- ভোক্তার ওপর ছড়ায়। কর্মের অধিকার তার নিজের হাতে থাকলেও বাজারের পণ্যমোহ তার চেতনাকে অনেকখানি গ্রাস করে। কোন দ্রব্যের চাহিদা মূল্য তাই সবটাই তার মৌলিকগুণের অথবা ভোক্তার কাছে তার প্রকৃত গুরুত্বের পরিচায়ক নয়। একইভাবে শ্রমের বাজারেও সামাজিক মূল্যবোধ নিয়ন্ত্রিত মাপকাঠি প্রত্যাশিত দামের রূপরেখা রচনা করে। ওই সামাজিক মূল্যবোধ ইতিহাসের ধারায় সৃষ্ট। যদি বৈষম্য তাতে শিলীভূত আকার নেয়, যদি প্রভুত্ব ও আনুগত্যের কোন কর্মনির্ভর বিন্যাস সমাজে স্বীকৃত ব্যবস্থা হিসেবে পূর্বাপর অনুমোদিত থাকে, তবে বাজারও তাকে দাম নির্ধারণের গ্রহণযোগ্য ভিত্তি বলে গণ্য করে। তাই বাজারের ক্রিয়াকর্ম ঠিক ঠিক চলার পর এক বোতল কোকাকোলার দাম এক গ্রাস দুধের চেয়ে বেশি হতে পারে, ভিডিও ক্যাসেটর বিনোদন অনেক বেশি পছন্দের হতে পারে কলেজ বিশ্ববিদ্যালয়ের পাঠ্যবই-এর চেয়ে। অন্যদিকে নারী শ্রমের বাজারদর সবসময় থাকতে পারে অনুরূপ পুরুষ শ্রমের চেয়ে কম, যদিও উভয়ের কর্মকুশলতা ও উৎপাদন ক্ষমতায় তফাত করার কোন বাস্তব ভিত্তি খুঁজে পাওয়া মুশকিল। এমন অবস্থায় বাজার দামে সক্ষমতার পরিমাপ আমাদের পাকে পাকে বিভ্রান্তির ফাঁদে জড়ায়। যে যত সক্ষম তার তত উপার্জন একথা যেমন পুরো মানা যায় না, তেমনি সামগ্রী বেশি বেশি আয়ত্তে এলেই যে সক্ষমতা বাড়বে, এমন বক্তব্যও যথার্থ বলে মনে হয় না। বাজার দরে মুদ্রার অংকে জাতীয় আয়ের হিসেবও তাই জনগণের জীবন যাত্রার মান ও তাদের কল্যাণ স্তরের ধারণা কতটা দিতে পারে, সে নিয়ে সন্দেহ অনেকখানি অবিমোচ্যই থেকে যায়। সমাজে কোন বর্গের মানুষের আয় বেশী, কাদের আয় বাড়ছে, ভোগ্যপণ্য কাদের কথা মনে রেখে বেশি বেশি উৎপাদিত হচ্ছে এই আপেক্ষিক বিচার বিবেচনাগুলো সমাজ কল্যাণের বাস্তব অবস্থার সঠিক ধারণা গড়ে তোলায় খুবই প্রাসঙ্গিক। আয়বন্টনে যদি বৈষম্য প্রবল থাকে, আর সে বৈষম্য যদি বেড়েই চলে, তবে জাতীয় আয়ে উল্লেখযোগ্য প্রবৃদ্ধি ঘটলেও এবং সেই সঙ্গে সমাজের সম্পন্ন অংশের চাহিদা বৃদ্ধির কারণে ভোগ্যপণ্যের মোট চাহিদা উল্লেখযোগ্য হারে বাড়লেও অধিকাংশ মানুষের সক্ষমতা ও সেই সঙ্গে সার্বিক কল্যাণের স্তর নীচে নেমে যেতে পারে। পৃথিবীর বিভিন্ন প্রান্তে বাজার অর্থনীতির বিস্তারের ধারাবাহিক ফল রাশির দিকে তাকালেই তা ধরা পড়ে। একথা ঠিক, পণ্যমোহ রচনা করে উৎপাদনে বৈচিত্র্য এনে তাকে বহুদূর সম্প্রসারিত করা যায়। মানুষের কর্মক্ষেত্রে ও ফলে রূপান্তর ঘটা সম্ভব। কিছু সেই রূপান্তরই যে জনগণের সর্বতোমুখী কল্যাণের লক্ষ্যে আদর্শ রূপান্তর, এমন কথা নিশ্চিত করে বলা যায় না। বাজার একদিকে ভোগস্পৃহাকে, অন্যদিকে বস্তুর ওপর ব্যক্তির অধিকার প্রতিষ্ঠার উদ্যমকে নিরন্তর উৎসাহ জোগায়। মানবিক অস্তিত্বের আনন্দ উজ্জ্বল পরমাযুর স্বপ্নকে হয়ত তারাও লালন করে, কিন্তু চরিতার্থ করে, এমন দাবি বাস্তবের সমর্থন খুব বেশি পায় না। রক্তকরবীর রাজা কোন অলীক কল্পনা নয়। আঠারো শতকের দ্বিতীয়ার্ধে পাশ্চাত্য জগতে শিল্প বিপ্লব ও ফরাসী বিপ্লব, দুই যুগান্তরকারী ঘটনা। তাদের অভিঘাতে গোটা পৃথিবীর আর্থ-সামাজিক মানচিত্র বদলে যেতে থাকে। সেই প্রক্রিয়া আজও অব্যাহত। উৎপাদন ও বিনিময়ের বহুমুখিতা ও ব্যক্তি স্বতন্ত্রের উদ্বোধনে ব্যক্তি মালিকানা সম্পত্তির আইনগত সুরক্ষণ সমাজ অর্থনীতির সমস্ত কর্মকাণ্ড একরকম ঢেলে সাজাতে শুরু করে। রাজনৈতিক ক্ষমতার প্রয়োগ বিধিতেও আজ তা আমূল পরিবর্তন। এই প্রক্রিয়ারই প্রতিফলন ঘটে বাজারের

অগ্রাভিযানে। সমাজ-অর্থনীতির পাশা খেলায় দান ফেলে সবাই এইখানে। পাশার ছক সতত সম্প্রসারমান। তা ছেয়ে ফেলে একরকম পৃথিবীর সমস্তটাই। বাইরে থেকে যখন তার অনুপ্রবেশ ঘটে, যেমনটি হয় ঔপনিবেশিক তৎপরতায় অথবা অবাধ বাণিজ্যের আন্তর্জাতিক বিস্তারে, তখন তা অনেকখানেই সমাজ সংস্কৃতির তারসাম্যে তুমুল আলোড়ন জাগায়। এমন কি ভেতর থেকে উঠে এলেও যেমনটি উঠে আসে ইংল্যান্ড, ফ্রান্স ও তৎকালীন ইউরোপের অন্যান্য শিল্পোদ্যোগমুখী পরিবর্তনশীল ভূখণ্ডে, তা সমাজ-সংস্কৃতিতে নানা তোলপাড় ও গুঠানামার ভেতর দিয়ে নতুন বিন্যাস আনতে থাকে। বাজারের পাশা খেলায় নিয়ম কানুন বেঁধে দেয় যারা জেতে, তারাই। সবাই এক সঙ্গে একইভাবে তাতে অভ্যস্ত হয় না। খেলার প্রতিভাও সবার সমান থাকে না। ফলে কেউ জেতে, কেউ হারে। যারা হারে, সংখ্যায় তারা কম নয়, তাদের স্বৈরভক্ত দুঃখ-দারিদ্র্য শোষণ ও বঞ্চনাকে মাড়িয়েই মুক্ত বাজারের বিজয়রথ দিকে দিকে এগিয়ে চলে। অর্থনৈতিক প্রগতির এই কাল ইউরোপেও আনে, চার্লস ডিকেন্স-এর কথায়, সবচেয়ে সুসময়, আবার একই সঙ্গে সবচেয়ে দুঃসময়। সুসময় তাদের যারা নতুন অর্থনৈতিক সুযোগের সদ্ব্যবহার করে পার্থিব লাভের মই বেয়ে ওপরে গুঠার প্রতিযোগিতায় সবাইকে পেছনে ফেলে দ্রুত এগিয়ে যায়। আর অসংখ্য যারা পেছনে পড়ে থাকে, বাজারের দরাদরিতে যাদের দাম বাঁধা পড়ে জীবনের ন্যূনতম স্তরে, অথবা এমনকি যারা ছিটকে পড়ে তারও বাইরে, দুঃসময় কখনো কখনো অসহনীয় তীব্র, তাদের সবার। এ নিয়ে অভিযোগ করার বিধিসম্মত পথ কিছু খোলা থাকে না। কারণ খেলার নিয়মই ডারউইনের তত্ত্বের প্রতিধ্বনি করে টিকে থাকার সংগ্রামে প্রত্যেকে লড়ে শুধু নিজের নিজের ব্যক্তিগত সামর্থ্য নিয়ে। থেকে যাবে শুধু তারাই, যারা সবচেয়ে যোগ্য। এই অবস্থা সেই সময়ের যখন ইউরোপে সমৃদ্ধির স্বর্ণযুগ, যখন শিল্প বিপ্লব ও অবাধ বাণিজ্য অর্থনৈতিক সম্ভাবনার সব দরজা তার সামনে একেবারে ছুট করে খুলে দেয়। সেখানে বর্ধিষ্ণু দেশগুলোতে জাতীয় আয়, এবং মাথাপিছু আয়ও ক্রমাগত বেড়ে চলে। কিন্তু বৈষম্যের যাঁতাকলে পিষ্ট জনসংখ্যার এক ক্রমবর্ধমান অংশ পড়ে থাকে, এবং অনেকে স্বাভাবিক প্রক্রিয়ায় নিশ্চিহ্ন হতে থাকে, দারিদ্র্য সীমার নীচে। উনিশ শতকের প্রথম ভাগে মরণ ব্যাধি সব মহামারির আকার নিয়ে ইউরোপের এক প্রান্ত থেকে অন্য প্রান্তে বারবার ভয়াবহ ধ্বংসের তাণ্ডব ছড়িয়েছে। অসহায় নিঃস্বল মানুষ হেরে গিয়ে বাস্তবতা থেকে পালাতে চেয়ে মদের আখড়ায় মাতাল হয়ে সব কিছু ভোলার চেষ্টা করেছে। শিশু হত্যা, বৈষ্যবৃত্তি, আত্মহনন ও মানসিক বৈকল্য বিকট আকারে ফেটে পড়ে চোখের ওপর তুলে ধরে সমাজের ক্রমবর্ধমান গ্লানি ও যন্ত্রনাধীন বিপর্যয় (হব্‌সবম্, ১৯৬২)। বিশ শতকের গোড়াতেও যে ইংল্যান্ডে শ্রমিকদের জীবন যাপনে তেমন কোন উন্নতি ঘটেইনা, তার পরিচয় পাই ডি-এইচ. লরেন্সের একাধিক রচনায়।

শিল্প সভ্যতার বুনিয়াদ গড়ে তার উল্লেখযোগ্য বিস্তারের ওই যুগে উপনিবেশবাদ, নতুন ব্যবসায় বিধি ও আন্তর্জাতিক বাণিজ্য ব্যবস্থার তাত্ত্বিক ও প্রায়োগিক নির্মাণ পৃথিবীর অন্যান্য অঞ্চলে প্রচলিত উৎপাদন ব্যবস্থার ভারসাম্য নষ্ট করে তাতে যে পরিবর্তনের সূচনা করে তা তাদের অর্থনীতিতে বিপুল কর্মের কোন জোয়ার আনেনা, বা আসলে বঞ্চনারই আর এক রূপ উন্মোচিত করে তা তাতে আর এক মাত্রার সংযোজন ঘটায়। পৃথিবীর মোট জনসংখ্যার বৃহত্তর অংশের পূর্ণ বিকাশের পথ উন্মুক্ত না হয়ে বরং এভাবে তা অবরুদ্ধই থেকে যায় (হব্‌সবম্ ১৯৭৫), যদিও বিশ্ব উৎপাদনের পরিমাণ ক্রমাগত বাড়ে, আর, বিশ্ববিনিময় ব্যবস্থা এক অভূতপূর্ব স্তরে উন্নীত হয়। পৃথিবী জুড়ে অর্থনৈতিক কর্মকাণ্ডে নব নব উন্মেষ, উৎপাদনে বিপুল সমৃদ্ধি ও আগামী দিনের ধনৈশ্বৰ্যের আকাশচুম্বী সম্ভাবনা ঘটমান বাস্তবতায় জনসংখ্যার বৃহৎ অংশের মানবের জীবন যাপনের লজ্জা ও ব্যর্থতাকে আড়াল করতে পারে না। শেষ পরিণামে যোগ্য যারা তারাই হয়ত জয়ী হয়। কিন্তু সক্ষমতার চূড়ান্ত উদ্বোধনের লক্ষ্যে বাজার শাসিত মানব সমাজ দারিদ্র্য ও বঞ্চনায় নিঃশেষিত জনগণের বিপর্যয় ও বিনাশের ইতিহাস যুগ যুগ ধরে বহন

করে চলে। সমাজে সব স্তরের মানুষের স্বচ্ছন্দ জীবনের অধিকার যদি শেষ পর্যন্ত অর্জিতও হয়, তবে তার জন্যে বৈষম্যের মাশুল গুনে চলতে হয় দীর্ঘ দিন। অবাধ বাজার ব্যবস্থা চালু হলেই সঙ্গে সঙ্গে সব মানুষকে তা সক্ষম করে তোলে না। অপেক্ষা পূর্ব বরং বহু মানুষের সক্ষমতাকে হরণ করে। যারা লুপ্ত, নষ্ট বা বিপর্যস্ত, তাদের দুঃখ দুর্দশার দাম দিয়েই কিনতে হয় যারা টিকে থাকে, তাদের প্রাচুর্য ও ভোগের অধিকার।

বৈষয়িক উন্নতি উদার বাজার অর্থনীতির অবাধ বিস্তারের ওপর প্রবলভাবে নির্ভরশীল এই কথাটি আজ প্রায় সব দেশেই সমাজ অর্থনীতির চর্চার তাত্ত্বিক ও নীতি প্রণেতার কাছে স্বতঃসিদ্ধের মত গণ্য হলেও বাস্তব তথ্যের পুঙ্খানুপুঙ্খ বিশ্লেষণ, এবং তা সাম্প্রতিক বিশ্বের পটভূমিতেই, অনেক ক্ষেত্রে বিশ্বাসের অচঞ্চল ভূমিতে সন্দেহের ফাটল জাগিয়ে তোলা গরীব দেশগুলোর ভেতর থেকে দু-তিন দশকের উদ্যোগে অর্থনৈতিক উন্নয়ন সফল বলে যাদের নাম ইদানিং বারবার উচ্চারিত হচ্ছে, তাদের ভেতর উল্লেখযোগ্য, ল্যাটিন আমেরিকায় ব্রাজিল ও চিলি, আর এশিয়ায়, চমক দেবার মত, দক্ষিণ কোরিয়া এদের সাফল্যের মূল চালিকা শক্তি বলা হচ্ছে, বাজারকে তার নিজের মত অবাধে কাজ করতে দেওয়া, তার ইংগিত ঠিক ঠিক বুঝতে পারা ও তার নির্দেশ যথাযথ মেনে চলা (বিশ্ব ব্যাংক ১৯৯৪)। অর্থনীতিকে গতিশীল করে তাতে স্বয়ংক্রিয়ভাবে ইতিবাচক প্রবৃদ্ধি অর্জনের পরিস্থিতি গড়ে তোলা নিঃসন্দেহে একটা বড় কৃতিত্ব। কিন্তু তাকে স্বীকার করে নেবার পাশাপাশি তার জন্য সমাজকে কি দাম দিতে হয়, সেটাও দেখা জরুরী। ব্রাজিলে জনসংখ্যা পনেরো কোটির ওপর। তার ভেতর প্রায় এক কোটি ঠিকানাহীন, নামগোত্রহীন। আক্ষরিক অর্থে খোলা আকাশের নীচে তাদের রাস্তায় বসবাস। রাষ্ট্র সমাজ অর্থনীতির ক্ষমতা যাদের করায়ত্ত, তাদের কাছে এই ভাসমান জনগোষ্ঠীর জীবন একেবারে মূল্যহীন। নগর রক্ষক প্রহরীরা ইচ্ছামত তাদের গুলি করে মারতে পারে। তার কোন প্রতিকার নেই। বিপুল মুদ্রাস্ফীতি বছরের পর বছর আয় বন্টনে পরিবর্তনের নিয়ামক হিসেবে কাজ করেছে। তার মাধ্যমে প্রকৃত সম্পদ ক্রমাগত পুঞ্জীভূত হয়েছে বনিক গোষ্ঠীর হাতে, অল্প বিত্তের মানুষের নিঃস্বকরণ প্রক্রিয়া ত্বরান্বিত হয়েছে। পৃথিবীর যে দেশগুলোতে আয় বৈষম্য অত্যধিক, ব্রাজিল তাদের অন্যতম। (গিনি সহগ ০.৫৭; উচ্চতম শতকরা ২০ ভাগ জনসংখ্যার আয় নিম্নতম শতকরা ২০ ভাগ জনসংখ্যার আয়ের প্রায় ৩২ গুণ, ইউএনডিপি, ১৯৯৩)। এই অবস্থার পরিণামে বাজারের ঝলমলে চেহারা আর প্রবৃদ্ধির সন্তোষজনক হার কেবল এই ইংগিত দেয় যে এদেশে সেই উৎসাহ পেতে পারে, যা কেনার ক্ষমতা গ্রাহকদের আছে, অর্থাৎ বিত্তবানদের কথা মনে রেখেই পরিচালিত হতে পারে বাজারের উৎপাদন কর্ম। তাদের প্রান্তিক ভোগ প্রবণতা যদি হ্রাস পায়, তবে মুক্ত আন্তর্জাতিক বাণিজ্যের পথ ধরে খুঁজতে হবে বাইরের বাজার। লক্ষ্যনীয়, আন্তর্জাতিক বাজারে ব্রাজিলের ঋণগ্রস্ততা অত্যধিক (বিশ্বব্যাংক ১৯৯৪)। এই ঋণের বোঝাও উদ্যোক্তাদের অধিক লাভজনক উৎপাদনে মনোনিবেশে বাধ্য রাখবে। কারণ ঋণ পরিশোধের ক্ষমতা নিশ্চিত করতে হলে নিজেদের উদ্বৃত্ত আয়ের পরিমাণ ক্রমাগত বাড়ানো দরকার। উদ্যোগ অতি লাভজনক না হলে তার সম্ভাবনা হ্রাস পায়।

আয় বন্টনে বৈষম্য চিলিতেও প্রকট। (গিনি সহগ মান ০.৪৬, উচ্চতম শতকরা ২০ ভাগ জনসংখ্যার আয় নিম্নতম শতকরা ২০ ভাগ জনসংখ্যার আয়ের প্রায় ১৭ গুণ, ইউএনডিপি ১৯৯৩)। তা ছাড়া বাজার সংশোধনী সব রকম অমানবিক ব্যবস্থা শক্ত হাতে পরিচালিত হয় পিনোশেটের স্বাসরক্ষকর সময় শাসনে। ১৯৭৩ এর পর একটা গোটা প্রজন্মের স্বপ্ন কল্পনা সেখান থেকে নির্বাসিত, মানুষের নিজেই অতিক্রম করে সমাজ সংলগ্নতার আকাঙ্ক্ষা নিষ্ক্রিয় অথবা নিশ্চিহ্ন। বাজারের ওপর ভর করে জাতীয় আয়ে সন্তোষজনক প্রবৃদ্ধির ধারা যদি সেখানে ইদানিং লক্ষ্য করা যায় তবে তা দেশের সব মানুষের সক্ষমতা বাড়াতে থাকে, এমন কথা এই পরিস্থিতিতে মেনে নেওয়া কষ্টকর। ল্যাটিন আমেরিকায়

মেক্সিকোর কথাও এ প্রসঙ্গে উল্লেখ করা চলে। বাজার ব্যবস্থার কার্যকারিতার উদাহরণ হিসেবে এই দেশটির নামও কিছুদিন আগে পর্যন্ত জোরে সোরে উচ্চারিত হচ্ছিল। কিন্তু সেখানে মুদ্রাবাজারের অভূতপূর্ব সাম্প্রতিক সংকট গোটা অর্থনৈতিক ব্যবস্থা পরমুখাপেক্ষিতা ও অন্তর্নিহিত দুর্বলতা একেবারে চোখে আঙুল দিয়ে দেখিয়ে দেয়। তা ছাড়া আদিবাসী জনগণের চিয়াপাস আন্দোলনও খুব স্পষ্ট করে বোঝাতে চায় মুক্ত বাজার ব্যবস্থার নিজস্ব ধর্মই দুর্বলকে দুর্বলতর করে অর্থনীতির মূল কর্মকাণ্ডের ধারা থেকে তাদের বাইরে ঠেলে দিতে থাকে। শুধুমাত্র সেইটাই যদি গোটা সমাজ অর্থনীতির নিয়ামক হয়, তবে দুর্বল জনগোষ্ঠীর টিকে থাকার কোন সুযোগ আর অবশিষ্ট থাকে না। কোণঠাসা হতে হতে এক সময় চোখের আড়ালে অবলুপ্ত হওয়াই তাদের ভাগ্যলিপি হয়ে দাঁড়ায়। পাদ প্রদীপের আলোয় যাদের কর্মচাঞ্চল্য উদ্ভাসিত হতে থাকে, তারা ওই ভাগ্যহীন বঞ্চিতদের কেউ নয়। বাজারের দক্ষতা ব্যক্তির স্বার্থ-তাড়িত সাফল্যকেই কেবল স্বীকৃতি দেয়।

দক্ষিণ কোরিয়ার অর্থনৈতিক সাফল্য অবশ্যই উল্লেখ করার মত। ত্রিশ বছর আগে দেশটি ছিল খুবই গরীব। আজ, ১৯৬২ সালের তুলনায়, তার প্রকৃত জাতীয় আয় বেড়েছে প্রায় ত্রিশগুণ; মাথাপিছু আয় বেড়েছে পনের গুণেরও বেশি। গত দশ বছরে তার বার্ষিক গড় প্রবৃদ্ধি হার সাত শতাংশের ওপর। (বিশ্বব্যাংক ১৯৯৪)। অর্থনৈতিক অবকাঠামো। ফলে বাজারের সংকেত সমস্ত কর্মকাণ্ডে অতিক্রম ছড়ায়, দক্ষ জনশক্তি আর্থ-সামাজিক ক্রিয়াকর্মের প্রতিটি স্তরে তাতে যথোপযুক্ত সাড়া দেয়। আয় বন্টনে বৈষম্য দক্ষিণ কোরিয়াতেও আছে, তবে তত প্রকট নয়। (গিনি সহগ মান ০.৩৬, দক্ষিণ এশিয়ার দেশগুলোর কাছাকাছি বিশ্বব্যাংক, ১৯৯৩)। তার অর্থনীতির আধুনিকায়নে ও তাতে গতি সঞ্চারে সবচেয়ে গুরুত্বপূর্ণ ভূমিকা রপ্তানি বাণিজ্যের। এই রূপান্তর পর্বে তার বৃদ্ধি ঘটেছে বার্ষিক শতকরা প্রায় ২০ ভাগ হারে। বিদেশি বাজারে প্রতিযোগিতায় টেকার লক্ষ্যে উৎপাদনকে সে তুলে এনেছে আন্তর্জাতিক মানে। তার জন্যে সে গ্রহণ করেছে বিশ্ববাজারের সর্বোত্তম প্রযুক্তি, ব্যবহার করেছে তাকে পেশাদারি দক্ষতায়।

কিন্তু এই সাফল্য পেতে দক্ষিণ কোরিয়াকেও দাম দিতে হয়েছে প্রচুর। পঞ্চাশের দশকের গোড়ায় কোরিয়ার যুদ্ধ সমাজের পুরোনো ধাঁচ ভেঙে চূরে একাকার করে। তারপরেও উত্তর কোরিয়ার বিকল্প ব্যবস্থার আত্মসনের আশংকা প্রায় তিন দশক ধরে দেশের সব মানুষের চেতনায় এক যুদ্ধকালীন অস্থিরতা জিইয়ে রাখে। এই অস্থিরতা স্বাভাবিক নয়। তা মানব মনের সুস্থতা অনেক খানি হরণ করে। সেই সঙ্গে গোটা দেশে বজায় থাকে এক জবরদস্তির আবহাওয়া। সুশৃংখল নিয়মমাফিক কাজ পাবার তা উপযোগী, কিন্তু কাজের শেষে মনকে তা কতটা প্রফুল্ল রাখে বলা মুশকিল। অর্থনৈতিক সমৃদ্ধি অর্জনের আশায় যদি পরবৈরিতা ও বিঘ্নতাকে নিত্য সঙ্গী করতে হয়, তবে সে সমৃদ্ধির সার্বিক কল্যাণকারিতা নিয়ে প্রশ্ন থেকে যায়। পঞ্চাশ ও ষাটের দশকে দক্ষিণ কোরিয়ার রাষ্ট্রনীতির সঙ্গে অর্থনীতিও পরিচালিত হয়েছে পুরোপুরি আমেরিকান উপদেষ্টাদের নির্দেশে। যুদ্ধ বিধ্বস্ত এলোমেলো পরিস্থিতিতে প্রধানত সমাজতন্ত্র ঠেকাবার লক্ষ্যে ব্যাপক ভূমি সংস্কার নীতি সেখানে কার্যকর হয়। অর্থনীতিতে তার সুফল অবশ্যই মেলে। কিন্তু তা অর্জিত হয় কার্যত এক অগণতান্ত্রিক পরিবেশে। বাজার ব্যবস্থায় ব্যক্তিমালিকানার অলংঘনীয়তা সেখানে রক্ষিত হয় না। আসলে বাজারের উৎপাদন ও বন্টন কার্যক্রম পরিচালিত হতে থাকে এক অতি নিয়ন্ত্রিত রাষ্ট্রীয় ব্যবস্থায়। তারই অভিভাবকত্বে বেসরকারী উদ্যোগসমূহ কাঙ্ক্ষিত লক্ষ্যে অগ্রসর হয়, তাদের পারস্পরিক যোগাযোগের ও সম্পদের সুষ্ঠু ব্যবহারের উপযুক্ত পরিবেশ তৈরী হয় সরকারী নীতির পরিমন্ডলে। শুরুতে অবশ্য পেছনে থাকে বিপুল আমেরিকান অনুদান। প্রতিরক্ষার যাবতীয় দায়দায়িত্ব ও ব্যয় ভারের বৃহদংশ বহন করে তারাই। প্রতিরক্ষা প্রযুক্তির আমদানি ও ব্যবহারকে ঘিরে নতুন প্রযুক্তি আবশ্যিক ভিত্তি ভূমি রচিত হয়। অচিরেই তা অর্থনীতির সমস্ত ক্ষেত্রে বিস্তৃত হয়ে তার সামগ্রিক রূপান্তরে প্রত্যাশিত ইতিবাচক ভূমিকা রাখতে শুরু করে। জনশক্তির

প্রশিক্ষণ ও প্রয়োগিক জ্ঞানার্জন নীতি প্রণেতাদের পরিকল্পনা অনুযায়ী তার সঙ্গে সংগতি রেখে এগিয়ে চলে। প্রযুক্তির আমদানি ও ব্যবহারের মাঝখানে কাঠামোগত বিচ্ছিন্নতা এবং তার ফলে সম্পদের অপচয় বা অপব্যবহার খুব একটা ঘটেছে বলে জানা যায় না।

দক্ষিণ কোরিয়ায়, অতএব, বাজার ব্যবস্থা নিও ক্লাসিক্যাল চং-এ ব্যক্তিগত উদ্যোগে আপনা থেকে গড়ে ওঠেনি। তার পেছনে কাজ করেছে রাষ্ট্রীয় ব্যবস্থাপনায় কঠোর ভাবে পরিচালিত নীতি নির্দেশনা। সমকালীন আন্তর্জাতিক রাজনীতি ও তার কার্যকর ভূমিকা রাখে। দক্ষিণ কোরিয়াকে তাই বাজার অর্থনীতির নির্ভোজাল রূপকার হিসেবে গণ্য করা সমীচীন নয়। তার অনুসৃত নীতি কৌশল প্রয়োগ করে সব জায়গাতেই সুফল ফলবে এমন কথাও নিশ্চিত করে বলা যায় না। এক এক দেশের বস্তুগত অবস্থা এক এক রকম। সেটাও মনে রাখা দরকার। তা ছাড়া কল্যাণ চেতনা ও প্রেমবোধ সবার একই রকম, এটা মনে করারও কোন সংগত কারণ নেই। উল্লেখ করা অপ্রাসঙ্গিক নয়, যাটের দশকের গোড়ায় তৎকালীন পাকিস্তানও দক্ষিণ কোরিয়ার অনুরূপ রাষ্ট্রীয় নেতৃত্ব প্রতিষ্ঠা করে প্রায় সম জাতীয় পন্থা পদ্ধতি প্রয়োগের উদ্যোগ নেওয়া হয়েছিল। তার পরিণাম শুভ হয়নি।

অবাধ বাজার ব্যবস্থার বিকাশ একটা গরীব দেশের অবস্থা ওই বিকাশের প্রক্রিয়াতেই তার নিজস্ব নিয়মে পালটে দিতে থাকে, আর তার ফলে সব মানুষের সক্ষমতা ধাপে ধাপে বেড়ে সার্বিক উন্নয়ন নিশ্চিতভাবে ত্বরান্বিত করে, এই সহজ সরলাংকে আস্থা রাখা তাই কোন বুদ্ধিমানের কাজ নয়। তা ছাড়া জাতীয় আয়ের প্রবৃদ্ধির হার বাড়লেই আবশ্যিকভাবে সব মানুষের অবস্থা ফেরেনা, যদিও একটা গরীব দেশে ওই প্রবৃদ্ধি হার বাড়ানো খুবই দরকার। পাশাপাশি বহু বিচিত্র মহার্য পণ্যের ক্রয়ক্ষমতা বাড়লেই যে কোন মানুষের সক্ষমতা বাড়ে, একথাও সত্য নয়।

তাহলে দারিদ্র্যের অবলুপ্তি ঘটিয়ে গরীব জনগোষ্ঠীর সক্ষমতা বাড়ানোর লক্ষ্যে অন্য আর কিভাবে আমরা অগ্রসর হবার কথা চিন্তা করতে পারি? সুস্থ ও কর্মক্ষম হয়ে বেঁচে থাকা কোন মানুষের সক্ষমতা অর্জনের অন্যতম পূর্বশর্ত। কিন্তু শুধুই বেঁচে থাকা নয়, আরো চাই চারপাশের জীবন জগতের সঙ্গে কোন ব্যক্তির সংলগ্ন হতে পারা, এবং এই সংলগ্ন হবার পথে নিজের সৃষ্টিশীল উদ্যমকে কোন ফলপ্রসূ কর্মকাণ্ডে প্রবাহিত করে তাতে ইতিবাচক তাৎপর্য আনা, এর অর্থ, শুধু কর্মক্ষম হওয়া নয়, কাজে নিয়োজিত হতে পারাও, এবং সেই কাজের বিনিময়ে সামাজিক মানদণ্ডে স্বচ্ছন্দ জীবন যাপনের অব্যাহত সুযোগ পাওয়া। নৈর্ব্যক্তিকভাবে দেখতে গেলে একটি জনগোষ্ঠীর প্রত্যাশিত গড় আয়, স্বাস্থ্য সেবার সুযোগ সুবিধা, তাদের কর্মকুশলতা বাড়ানোর ব্যবস্থা, কর্মসংস্থানের সন্তবনা এবং জীবনে আনন্দময় বৈচিত্র্য আসার সুবন্দোবস্ত, এগুলো থেকেই তাদের সক্ষমতার পরিমাপযোগ্য মানের একটি মিশ্র ধারণা আমরা গড়ে তুলতে পারি। এই সক্ষমতা সমাজে সর্বস্তরের মানুষের, নারী এবং পুরুষ উভয়েরই। নিজ নিজ পছন্দমত জীবনের সন্তবনাকে পূর্ণ করে পরিপার্শ্বকে সমৃদ্ধ করার সক্ষমতার ওপর অধিকারে তার প্রতিফলন। উন্নয়নের বিচারে একটি দেশের মোট জনসংখ্যার ক্রয় ক্ষমতা কতটা বাড়ল বা পণ্য সমাহার কতটা বিচিত্র ও ব্যয়বহুল হলো, তা দিয়ে নয়, বরং তা শিক্ষা স্বাস্থ্য ও কর্মের অধিকারের সমাজের প্রতিটি অংশে, বিশেষ করে নিম্নবর্গের মানুষদের ভেতর, সক্ষমতার বিকাশ কেমন ও কতদূর ছড়াল, তাই দিয়ে। বাংলাদেশকে সামনে রেখে আমাদের আলোচনাকে এবার আমরা আরো সুনির্দিষ্ট খাতে প্রবাহিত করতে পারি।

একথা নতুন করে বলার অপেক্ষা রাখে না যে বাংলাদেশ পৃথিবীর সব চেয়ে গরীব দেশগুলোর একটি। এখানে মাথা পিছু আয় অতি কম, ১৯৯২-এর হিসেবে বছরে ২২০ ডলার বর্তমান জনসংখ্যা প্রায় বারো কোটি, তার ঘনত্ব প্রতি বর্গ কিলোমিটারে প্রায় ৮৭৫, পৃথিবীর সবচেয়ে ঘন বসতিপূর্ণ এলাকার একটি, কিন্তু জনসংখ্যার সক্ষমতার বিচারে অতি দুর্বল। এখানে সাক্ষরতার হার ১৯৯১ এর জনগণনার হিসেবে

মাত্র ২৪.৮ শতাংশ, পনের বছরের উর্ধ্বে সাক্ষর জনসংখ্যা শতকরা ৩৫ এর মত। জনসংখ্যার শতকরা প্রায় পঞ্চাশ ভাগের বসবাস দারিদ্র্য সীমার নীচে, শতকরা প্রায় ষাটটি গ্রামীণ পরিবার ভূমিহীন; আর পাঁচ বছরের কম বয়সী শতকরা প্রায় সাতবৃষ্টি জন শিশু অপুষ্টির শিকার। স্বাস্থ্য সেবা এদেশে এখনও নিতান্তই অপ্রতুল। প্রতি হাজার জনসংখ্যার জন্যে হাসপাতালে ভর্তির সুযোগ রয়েছে মাত্র ২২ জনের (১৯৯০-এর হিসাবে); যোগ্য চিকিৎসকের যত্ন ও পরামর্শ নেবার ক্ষমতা সাধারণ মানুষের কিছুই বাড়েনা, বরং তা ক্রমেই হ্রাস পাচ্ছে। অবশ্য জনসাধারণের স্বাস্থ্য সচেতনতা দিনে দিনে বাড়ছে। রোগ প্রতিষেধক অথবা রোগ নিরাময়ের কিছু সহজ ব্যবস্থা, যেমন উদরাময়ে গুরস্যালাইন, গলগন্ডরোধে লবণে আয়োডিন, পোলিওর প্রতিরোধে শিশুদের জন্য ইনজেকশন ইত্যাদি আগের চেয়ে অনেক বেশি এখন জনগণের আয়ত্তাধীন। তাদের প্রত্যাশিত গড় আয় বেড়ে দাঁড়িয়েছে পঞ্চাশ বছরের ওপর (বিশ্ব ব্যাংক; ১৯৯৪, ইউ, এন, ডি, পি, ১৯৯৩; বাংলাদেশ পরিসংখ্যান ব্যুরো ১৯৯৩)।

সমাজের সার্বিক অবস্থার ইংগিত দেয়, এমন আরো কিছু তথ্য তুলে ধরা যেতে পারে; যেমন, গ্রামীণ দরিদ্রের নিঃস্বকরণ প্রক্রিয়া তাদের অনেককে বাস্তবায়িত করে শহরের দিকে ঠেলে দিচ্ছে। ভাসমান মানুষের সংখ্যা বাড়ছে। বাড়ছে সন্ত্রাস। জনজীবনে শান্তি ও সুস্থিতি ভীষণভাবে নষ্ট হচ্ছে। সাধ আহ্লাদ আনন্দ নিয়ে সাধারণ মানুষের জীবন যাপনের যে আকাঙ্ক্ষা, তা যে শুধু অচরিতার্থ থাকছে, তাই নয়, বাড়তি অসহায়তা ও হতাশা তাদের জীবন যাত্রাকে বিষাদ ও বিবর্ণ করে তুলছে। এগুলো সবই সংখ্যায় পরিমাপযোগ্য নয়, তবে বাস্তবে অনুভবযোগ্য। জনগণের সক্ষমতার বিবেচনায় তা উপেক্ষণীয় নয়।

একথা খুবই সত্য যে গণমানুষের কর্মক্ষমতা বাড়িয়ে তাকে কাজে লাগাবার ফলপ্রসূ ব্যবস্থার নিরন্তর বিস্তার ঘটতে পারলে তাদের জীবন যাত্রার মান ক্রমাগত বাড়ান সম্ভব। কিন্তু তা বলা যত সহজ, করা তত নয়। নিঃস্ব, এবং নিঃস্ব প্রায় মানুষের বিষয় স্বত্ব প্রায় শূন্য। নিজের ক্রয় ও বিক্রয় ক্ষমতা কাজে লাগিয়ে আপন কর্মক্ষমতা বাড়াবার সুযোগ তার কতটুকু? বেকারত্ব যেখানে বেশি, কাজ যেখানে অপ্রতুল, সেখানে তার প্রান্তিক উৎপাদনশীলতার প্রকৃত মূল্যায়ন সম্ভব নয়। বাজার তাকে ছুঁড়ে ফেলে পরিমাপের বৃত্তের বাইরে। উৎপাদনের ক্ষেত্রে সম্প্রসারিত হলে কেবল তার কাজ পাবার সম্ভাবনা জাগে কিন্তু তা তাকে তার নিজের এবং তার সন্তান সন্ততির কর্মক্ষমতা বাড়াবার উপযুক্ত সহায় সঞ্চলের নিশ্চয়তা নাও দিতে পারে। পরিণামে একটা নীচু স্তরের জীবন যাত্রায় আটকে থাকার আশংকাই তার বেলায় প্রবল। সেই স্তর আরো নীচে নেমে তাকে অনিশ্চিত জীবনের পথেও ঠেলে দিতে পারে।

কাজের উৎপাদন ক্ষমতা বাড়াতে শিক্ষার ভূমিকা অবশ্যই গুরুত্বপূর্ণ। কিন্তু উৎপাদনের সঙ্গে সঠিক শিক্ষার যোগসূত্র খুঁজে পাওয়া মুশকিল। দুটোর খাপ খাওয়াতে না পারলে বাড়ি শুধু অপচয়। সমাজ বিকাশের ধারাতেও তা অনভিপ্রেত ঘূর্ণি সৃষ্টি করতে পারে, অথবা তাকে পরিচালিত করতে পারে অকল্যাণকর খাতে। কাজের ক্ষেত্রের যথোপযুক্ত প্রসার না ঘটলে লেখাপড়া জানা মানুষও আবেদন করে সেই সব পদে নিয়োগের জন্য, যেখানে ওই লেখাপড়া জানা কোন প্রয়োজনীয় দক্ষতা বাড়ায় না। যেমন, মাধ্যমিক পাশ ছেলেমেয়েরা আবেদন করে পিওন বা চাপরাশির কাজের, যদিও ওই কাজের জন্য অতি অল্প বিদ্যাশিক্ষাই যথেষ্ট। বেশি শিক্ষিতরা আবেদন করলে অল্প শিক্ষিতরা বাদ পড়ে যায়। আবার শিক্ষাগত যোগ্যতার ভিত্তিতে বেশি শিক্ষিত যারা তারা বেশি পারিশ্রমিকও দাবি করে। বাজারে শ্রমের দাম শুধু উৎপাদনশীলতা দিয়ে নয়, তার সামাজিক অবস্থান দিয়েও নির্ধারিত হয়। সাধারণত অধিকতর শিক্ষিতদের অবস্থান সমাজে তুলনায় ওপরের দিকে। তাদের প্রত্যক্ষ ও পরোক্ষ চাপে অপেক্ষাকৃত নীচের দিকের কাজের প্রকৃত পারিশ্রমিক বাড়ি, যদিও সেই কাজের প্রকৃত উৎপাদিকা শক্তির তেমন হেরফের হয় না। অন্য দিকে সমাজের একেবারে নীচের তলায় যারা বেশি পড়াশোনার সুযোগ পায়না, কিন্তু সাধারণভাবে ওই কাজের যোগ্য এবং মানসিক ভাবেও তার জন্যে প্রস্তুত ছিল, তারা উপর তলার

প্রার্থীদের সঙ্গে প্রতিযোগিতায় হেরে গিয়ে তাদের কাজের তুলনামূলকভাবে একটা নিশ্চিত ক্ষেত্র থেকেও বিতাড়িত হয়। সমাজে তারা আরো কোণঠাসা হয়ে পড়ে। অধিকতর শিক্ষিত প্রার্থীরা ওই কাজ হাতে পেলেও তাতে মন বসাতে পারে না। কারণ অবস্থার চাপে তারা ওই কাজে যোগ দিতে বাধ্য হলেও সামাজিক ও ব্যক্তিগতভাবে তাকে তারা অসম্মানজনক বলে মনে করে। শিক্ষার সঙ্গে কর্মদক্ষতার কোন যোগসূত্র রচিত হয় না। বিপরীতে সমাজের বিভিন্ন স্তরে বিচ্ছিন্নতাবোধ ও অসন্তোষ পাক খেতে থাকে (ভগবতী ১৯৭৩)। এই অবস্থা বাংলাদেশে অতি বাস্তব। কাজের অন্যান্য ক্ষেত্রেও এই ধরনের অসংগতি প্রবল।

বাংলাদেশের মত গরীব দেশে কারিগরি ও কর্মমুখী শিক্ষা দিয়ে শ্রমের যোগ্যতা অতি দ্রুত বাড়ানোর প্রয়োজন অনস্বীকার্য। কিন্তু এখানেও আছে কল্পিত প্রয়োজন ও বাস্তব চাহিদার সামঞ্জস্য ঘটানোর সমস্যা। কেউ বলবেন না, এদেশে বৃত্তিমুখী ও কারিগরি শিক্ষার যথেষ্ট প্রসার ঘটেছে। সুযোগ সৃষ্টি যে সন্তোষজনক এও মানা যায় না। তবু কার্যত যা ঘটে, তা হলো, বৃত্তিমূলক ও কারিগরি শিক্ষাদান প্রতিষ্ঠানগুলোর তুলনামূলক অব্যবস্থা ও সম্পদের বিপুল অপচয়। প্রতিষ্ঠানগুলোর সৃষ্ট সুযোগের শতকরা ৫০ ভাগও কাজে লাগান হয় না, ছাত্র ছাত্রীরা এসব জায়গায় আসতে তেমন আগ্রহ দেখায় না, আর সব চেয়ে বড় কথা, যারা পাশ করে শেষ পর্যন্ত বেরিয়ে যায়, তাদের অনেকেই অর্জিত যোগ্যতার ভিত্তিতে কোন কাজ পায় না। শ্রমের কর্ম কুশলতা বাড়িয়ে তাদের সক্ষমতা সৃষ্টির প্রয়াস যদি আন্তরিকও হয়, তবু বাস্তবের সঙ্গে তার সঠিক সামঞ্জস্য না থাকার উদ্যোগের সবটাই চূড়ান্ত হিসেবে বিফলে যায়। এই সব প্রতিষ্ঠান থেকে নীট সামাজিক প্রাপ্তির হার ঋণাত্মক (বিশ্ব ব্যাংক ১৯৯০)। বিদ্যাশিক্ষার অন্যান্য শাখার অবস্থা যে তুলনায় খুব বেশি ভাল, তা বলা যায় না (সাহা ১৯৯৪)।

কর্মকুশলতা বাড়ানোর উদ্যোগ নেবার সঙ্গে সঙ্গে দক্ষতা কাজে লাগানোর উপযুক্ত ক্ষেত্র সমাজ উৎপাদন ব্যবস্থায় গড়ে উঠছে কি না সেটা দেখা বিশেষ জরুরি। সার্বিক ভাবে উৎপাদন ব্যবস্থায় প্রযুক্তি ব্যবহারের গুণগত মান ও তার বিস্তার, উৎপাদন প্রক্রিয়ায় কৃৎসকৌশল রপ্ত করার প্রথা ইত্যাদির ওপর উন্নততর প্রশিক্ষণের সামাজিক চাহিদা অনেকখানি নির্ভর করে। বাংলাদেশের উৎপাদন ব্যবস্থায় প্রযুক্তি ব্যবহারের মান অতি নীচু। নতুন প্রাতিষ্ঠানিক বিদ্যার চাহিদা সেখানে তেমন তৈরী হয় না, এমন কি সাক্ষর হবার তাগিদও তেমন প্রবল নয়। দেশের শহর ও শহরতলির কলকারখানার অধিকাংশ কারিগরই অতি অল্প শিক্ষিত, এমন কি নিরক্ষর (হোসেন ১৯৯৩)। ক্ষুদ্র ও কুটির শিল্পের উদ্যোক্তাদের শিক্ষাদীক্ষা ও প্রায় একই রকম। এটা যে শুধু বাংলাদেশের বেলায় সত্য, তা নয়; গোটা উপমহাদেশেই এখনও এই ধরন লক্ষ্য করা যায় (কানিতকার ১৯৯৪)। ক্ষেত্র বিশেষে পরিমাণগত তারতম্য কিছু থাকতে পারে, এই যা গোটা উৎপাদন ব্যবস্থার ভেতর থেকে প্রযুক্তি রূপান্তরের তাগিদ যদি তেমন না আসে, জনগণের জীবন যাপন প্রণালীর সঙ্গে জ্ঞান-বিজ্ঞান চর্চার বা সুকুমার বৃত্তির আধুনিক অনুশীলনের কোন যোগ যদি না থাকে, তবে নতুন নতুন বিদ্যা শিক্ষা সমাজে-গণমানুষের সক্ষমতাকে আপন থেকে আশানুরূপ উন্নীত করে না। এই শতাব্দীর গোড়ায় রবীন্দ্রনাথ 'সব মূঢ় ম্লানমূক মুখে' ভাষা দেবার ও 'শান্ত স্তম্ভ ভগ্ন বৃকে' আশা জাগানোর লক্ষ্যে প্রতিষ্ঠা করেন শান্তি নিকেতন ও শ্রী নিকেতন। কিন্তু সমাজের ভেতরের ত্রিয়াকর্ম সম্পর্ক সম্বন্ধে পরিবর্তন আনার চেষ্টা না করে শুধুই মননে ও কর্মে পারদক্ষতার দ্বীপ নির্মাণ সার্বিক কোন সফল বয়ে আনে না, বিচ্ছিন্নভাবেও তা কোন সার্থকতায় পৌছায় না। শান্তিনিকেতন-শ্রী নিকেতন শিকড় বিচ্যুত মহৎ উদ্যোগের ব্যর্থ সমাপ্তির করুণ উদাহরণ হিসেবেই থেকে যায়।

গরীব জনগোষ্ঠীর ক্ষমতায়ন প্রক্রিয়া চালু না হলে নতুন নতুন উন্নত প্রযুক্তি আমদানি করে তার সর্বোত্তম ব্যবহার এবং সেই সূত্রে দারিদ্র্য দূরীকরণ ও সমাজ অর্থনীতির সার্বিক রূপান্তর নিশ্চিত করা যায় না। ওই ক্ষমতায়ন প্রক্রিয়া কেবল মাত্র দয়া-দাক্ষিণ্য ও সাহায্য দিয়ে সম্ভব নয়, প্রেম বিলিয়েও নয়। গরীবের

বিষয়বস্তুর বিস্তারের প্রাথমিক শর্ত হলো মর্যাদার সঙ্গে জীবন ধারণের, অর্থাৎ কর্মে নিযুক্তির মাধ্যমে নিজের নিজের পায়ে দাঁড়িয়ে আত্মনির্ভরতা অর্জনের পথ তাদের সামনে খুলে দেওয়া। তারই সঙ্গে প্রয়োজন তাদের কর্মক্ষমতা বাড়াবার জন্যে শিক্ষা ও স্বাস্থ্য সেবার যথোপযুক্ত ব্যবস্থা বিভিন্ন কর্মের সঙ্গে সংযোগ রেখে সামাজিক ভাবে গড়ে তোলা। সমাজের অভ্যন্তরীণ বৈষম্য যেখানে প্রকট, অবকাঠামো যেখানে দুর্বল, জ্ঞান ও তথ্যের সঞ্চলন অতি দৃষ্টিকটু ভাবে সীমিত, এবং গুরুত্বপূর্ণ আর্থসামাজিক প্রতিষ্ঠান সমূহ পরমুখাপেক্ষী বা ক্ষুদ্র ক্ষুদ্র কায়েমী স্বার্থ চক্রের দখলে, সেখানে বাজার ব্যবস্থায় গতি সঞ্চরণ করে ওই অতীষ্ট লক্ষ্যে পৌঁছান এক রকম অসম্ভব বলা চলে। বাজার এই পরিস্থিতিতে সমাজে বিভবিন্যাস ও আয় বন্টনের সঙ্গে সংগতি রেখে প্রযুক্তি ব্যবহার ও পণ্য উৎপাদনে উৎসাহ জোগাবে। শিক্ষা ও প্রযুক্তি উন্নয়নের নির্বাচিত ক্ষেত্র তাতে গড়ে উঠবে। তা সর্বত্রগামী হবে না।

আরো একটা কথা এই সঙ্গে ভাববার। নিও ক্ল্যাসিক্যাল তাত্ত্বিক কাঠামোর একই বাজার ব্যবস্থার অসংখ্য শাখা প্রশাখা বিশ্বজুড়ে ছড়িয়ে দিয়ে প্রত্যাশিত ফল তখনই আশা করা যেতে পারে, যখন ওই সম্প্রসারমান ক্ষেত্রের প্রতিটি বিন্দু একই রকম যোগ্যতা ও অধিকারে মণ্ডিত। তা নইলে দুর্বল বিন্দু সব অবলুপ্ত হতে থাকে। পরিণামে বিশ্ব বাজার কেবল সকলের ক্রীড়াক্ষেত্র হয়ে দাঁড়ায়। একটা নড়বড়ে অবস্থান থেকে বাংলাদেশের অধিকার বঞ্চিত জনসমষ্টির জন্যে এ হবে এক অসম লড়াই। দীর্ঘ দিন এতে টিকে থাকার সম্ভাবনা তাদের ক্ষীণ। লড়াই শুধু বাইরের অধিক শক্তিশালী পক্ষের সঙ্গেই নয়, ভেতরের ক্ষমতাবানদের সঙ্গেও। দক্ষিণ বাঙলায় উপকূলীয় অঞ্চল চিংড়িচাষ প্রকল্প এর একটি উদাহরণ। বাংলাদেশের রফতানি বাণিজ্যে চিংড়ির ভূমিকা ক্রমশঃ বাড়ছে। কিন্তু চিংড়ি ঘেরের নব্য ধনপতি মালিকদের দাপটে বহু পুরোনো মাছ চাষী আজ ভিটে মাটি ছাড়া। বৃহৎ পুঁজি ও উন্নত প্রযুক্তির সঙ্গে আত্মসন থেকে আত্মরক্ষার ক্ষমতা তাদের নেই। বিশ্ববাজারের অঙ্গীভূত হবার ফলে ওই এলাকা তার দুর্বল জনগোষ্ঠীকে আরো নিঃস্ব করে ফেলছে; যদিও বাংলাদেশের মোট রফতানি আয়ে পড়ছে তার আশাব্যঞ্জক অনুকূল প্রভাব।

নিও ক্ল্যাসিক্যাল রীতি মেনে বিশ্ববাজার ব্যবস্থা যখন এক মেয়াদিতীয়ম্ হয়ে উঠতে চায়, তখন তার প্রভাব পড়ে প্রতিটি ক্ষেত্রে তার সমাজ সভ্যতা ও সংস্কৃতির ওপর। এক বিশ্বখামের ধারণা অতি চমৎকার, কিন্তু তা হরণ করে বহু মানুষ, বহু উৎপাদন ব্যবস্থা, বহু মাত্রিক জীবন ভাবনার বৈচিত্র্য। এর পরিণাম কল্যাণকর নয়। বিশেষ করে যাদের ওপর তা বাইরে থেকে আরোপিত, তাদের বেলায়। ইতিহাসের ধারায় সমাজ সংস্কৃতি ও জীবন যাপনের ঐতিহ্যের নিজস্ব উৎস থেকে টেনে এনে বিশ্ব বাজারের সাধারণ ছকে তাদের ফেলে দিলে তাদের ব্যক্তিত্ব বিকাশের স্বাভাবিক পথ রুদ্ধ হবার সম্ভাবনাই বেশি। তাকে উন্নয়ন বলা চলে না।

উন্নয়নের অন্যতম শর্ত হলো তার কালানুক্রমিক ধারায় গণমানুষের জীবন সংলগ্নতা। গরীব দেশে তার প্রতিফলন ঘটে যৌথ জীবনে ক্রিয়া কর্মের বিকাশের পথে সক্ষমতার মিলিত উদ্ভাসনে। পৃথক পৃথক ভাবে ব্যক্তির উদ্যোগের ওপর সেখানে পুরোপুরি নির্ভর করা চলে না। প্রয়োজন হয় সামাজিক কর্মপ্রয়াসের। একটি আধুনিক রাষ্ট্রে সে দায়িত্ব নিতে পারে সরকার। গণপণ্যের সঠিক সরবরাহ বজায় রেখে ও সমষ্টি কল্যাণের লক্ষ্যে প্রাসঙ্গিক উপযোগ সৃষ্টি করে জনসাধারণের সার্বিক চেতনাকে উন্নীত ও সম্প্রসারিত করায় তার ভূমিকাই মুখ্য হয়ে উঠতে পারে। শিক্ষা ও স্বাস্থ্য সেবার উপযুক্ত ব্যবস্থা করে এই পর্যায়ে সাধারণ মানুষের জীবন যাপনে সে আনতে পারে অনেকখানি আত্মমর্যাদা ও নিরাপত্তাবোধ, এবং একই সঙ্গে পারস্পরিক সহমর্মিতা। ক্ষুধা, দারিদ্র্য ও অশিক্ষা থেকে মুক্তির জন্য এই ধরনের প্রয়াসে বিপুল উদ্বৃত্ত সম্পদের ব্যবহার অপরিহার্য নয়। ভারতে কেরালার মত স্বল্প বিত্তবান প্রদেশে এ সব দিক থেকে সাফল্যই পাই তার প্রমাণ। সেখানে মাথা পিছু আয় বাংলাদেশের মতই। অথচ মানুষের জীবনের সম্ভবনাকে সে

বিকশিত করতে পেরেছে অনেক বেশী। সাক্ষরতার হার সেখানে শতকরা ৯০ এর ওপর, মানুষের প্রত্যাশিত গড় আয় ৭০-এর কাছাকাছি। স্বাস্থ্য সেবার বিস্তার ও কার্যকারিতা কোন সমৃদ্ধ দেশের মানের কাছাকাছি। এছাড়াও অতি উল্লেখযোগ্য সেখানে সমাজে নারী পুরুষে বৈষম্যহীনতা। মেয়েদের গড় প্রত্যাশিত আয় কেরালায় পুরুষদের চেয়ে বেশি। জনসংখ্যায় নারী পুরুষ অনুপাতও নারীদেরই পক্ষে। এই পরিস্থিতির একটি অনিবার্য ইতিবাচক ফল পড়ে জনসংখ্যা বৃদ্ধির হারের ওপর। কেরালায় তা বার্ষিক শতকরা ১.৩ এর মত, সেখানে বাংলাদেশে তা ২.০ এর কাছাকাছি। কেরালার এই সাফল্যের পেছনে কাজ করছে গণশিক্ষা ও গণ স্বাস্থ্যের মত সমষ্টির জন্য কল্যাণমূলক কাজে প্রশাসনিক উদ্যোগের দীর্ঘকালীন ঐতিহ্য। (ড্রেজ ও সেন, ১৯৮৯)। বিপরীতে বাংলা অঞ্চলে উনিশ শতকী চিন্তা নায়কেরা তৎকালীন ইউরোপের অনুসরণে ব্যক্তি স্বাতন্ত্র্যের বিকাশের ওপর জোর দিয়েছেন সব চেয়ে বেশি। তাতে সমাজে কিছু অসাধারণ ব্যক্তিত্বের আবির্ভাব ঘটেছে ঠিকই, কিন্তু গণ মানুষের ক্ষমতায়ন অনায়ত্তই থেকে গেছে।

কেরালার সাফল্য অন্তত এই ইংগিতটুকু দেয় যে সঠিক সরকারী জনকল্যাণ নীতি ও সর্বস্তরে সদিক্ষা থাকলে বাংলাদেশও অনুরূপ বস্তুগত সম্পদের ভিত্তি থেকে জনগণে সক্ষমতার একটা গ্রহণযোগ্য স্তরে উঠে আসতে পারে। বস্তুর সমৃদ্ধির অভাব নিয়ে হীনমন্যতায় ভোগা নিরর্থক। কারণ বস্তুগত সমৃদ্ধি উন্নয়নের সমার্থক নয়। মাথাপিছু আয়ের হিসেবে রুয়াঞ্জ বাংলাদেশের চেয়ে ধনী (১৯৯০-তে ৩২০ ডলার); কিন্তু সে দেশ যে তুলনায় বেশি উন্নত, একথা বোধ হয় কেউই স্বীকার করবে না।

তবে একটি দেশে সরকার জনগণ থেকে সম্পূর্ণ আলাদা কোন উদ্দেশ্য সাধন কর্তৃত্ব নয়। তার উৎস থাকে সমাজের ভেতরেই। ওই সমাজ যদি হয় বৈষম্যদীর্ণ, তবে সরকারের আচরণেও তার প্রতিফলন অনিবার্য। সরকারের আচরণ সেখানে সমাজকে এবং সেই সূত্রে ব্যক্তিকেও খন্ডিত ও দুর্বল করতে পারে। তার ওপর নির্ভর করার ব্যাপারেও তা কোন সাধারণ সূত্র বলে ধরা যায় না।

আসলে প্রতিটি দেশেরই আছে একান্তভাবে তার নিজস্ব বাস্তবতা। ঐতিহ্য ও বর্তমান নিয়ে তার পুঙ্খানুপুঙ্খ বিচার বিশ্লেষণই চিনিয়ে দিতে পারে কোথায় তার সমষ্টির ও ব্যক্তির সম্পর্কের ভারসাম্য, কোথায় তার সরকারী উদ্যোগের কাম্য সীমা কোথায়ই বা তার অনুকূল মুক্ত বাজারের শক্তি সঞ্চয়। অনেকান্তবাদই এই পরিস্থিতিতে সঠিক সমাধান অন্বেষণের মানসভূমি রচনা করতে পারে। তার উপযুক্ত প্রয়োগেও থাকে সক্ষমতার নির্দেশনা। বাংলাদেশ তার উন্নয়নের লক্ষ্যে চলতি হাওয়ায় ভেসে না গিয়ে এই কথাটি মনে রেখে এগিয়ে যাবার কথা ভাবতে পারে। অন্য দেশের অভিজ্ঞতার শিক্ষা, ইতিবাচক ও নেতিবাচক, দুই-ই, নিজের পথ বেছে নিতে তার সহায়ক হতে পারে মাত্র।

নির্দেশ পঞ্জি

- Bangladesh Bureau of Statistics (BBS) (1993): *Statistical Yearbook of Bangladesh*, 1992, Dhaka.
- Bhagwati, J. (1973): "Education, Class Structure and Income Equality," *World Development*.
- Dreze, T & A. K. Sen (1989): *The Hunger and Public Action*, Oxford
- Hobsbawm, E. J. (1962): *The Age of Revolution, 1789-1848*. London, also reprinted, ABACUS, London, 1977.
- (1975), *The Age of Capital, 1848-1875*; London, also reprinted, ABACU, London, 1985.
- Hossain, Mosharaff (1993) *Sustainable Medium Term Development for Bangladesh*, Dhaka.
- Kanitkar, Ajit (1994): "Entrepreneurs and Micro-Enterprises in Rural India." *Economic and Political Weekly*; Bombay, February 26, 1994.
- Knight, J. B. & R.H. Sabot (1990): *Education, Productivity and Inequality : The East African Natural Experiment*, A World Bank Reserach Publication, Oxford.
- Lockheed, M. D. A. Verspoor and Associates (1991) : *Improving Primary Education in Developing Countries*; World Bank, Oxford University Press, Oxford.
- Saha, S. K. (1994): "Education in Skillbuilding in Bangladesh," Paper Presented at the Bangladesh Economic Association Conference, University of *Strachclyde*, Glasgow.
- Sen, A.K. (1989): "Development as Capability Expansion in Keith Griffin and John Knight (ed.), *Human Development and the International Development Strategy for the 1990s*, Macmillan, London.
- UNDP (1993), *Human Development Report, 1993 Geneva*
- World Bank (1987, 1993): *The World Development Reports, Washington*.
- (1990) : *Study on Technical and Vocational Education, Bangladesh*.
- (1994): *Trends in Developing Econimics, 1994, Washington*.
- অমর্ত্য সেন (বাং ১৩৯৭) *জীবন যাত্রা ও অর্থনীতি*, আনন্দ পাবলিসার্স, কলকাতা
- রবীন্দ্রনাথ ঠাকুর (১৩০২) : 'এবার ফিরাও মোরে', (১৩০১) চিত্রা; রবীন্দ্র রচনাবলী, ৪র্থ খন্ড, বিশ্বভারতী, কলকাতা, ১৯৫৭।

Professor Shamsul Islam Memorial Lecture

Conceptual Framework and Feasibility of Poverty Eradication Plan (1995-2002) in SAARC Countries : A Personal Note

Shaikh Maqsood Ali*

Introduction

The World Summit on Social Development, held in March, 1995 at Copenhagen, Denmark has shown that the issue of poverty (along with unemployment and social disintegration) has by now become a major concern not only for the developing countries but also for the whole world. However, this concern has also brought to the surface an interesting phenomenon: in developing countries poverty and unemployment may lead to social disintegration primarily through low level of income; in developed countries on the other hand, where both the incidence of poverty and unemployment are significantly low, high level of social disintegration can occur for reasons which are often not very clear. This is particularly disturbing for those societies which claim to be quite high in the scale of realization of the goals of a "civil society" (usually defined in terms of individual freedom, liberal democracy, market economy and rule of law). At Copenhagen, the causal relationship among the factors, poverty, unemployment and social disintegrating was not discussed but the need for transfer of resources from the well-to-do the poor within the country on one hand from the rich to the poor countries on the other, was stressed.

Keeping the question of social disintegration aside from poverty and unemployment for the time being (we shall come back to it later), we may ask what kind of concern the rich countries have for their own poor and how they differ in this area compared to the developed countries?

The rich countries often differ significantly among themselves in their approach to domestic poverty alleviation but we may still have some idea from the following example of the United States:¹

Who is poor ? That question seemingly simple, echoes mightily in America's politics and social policy.

* *Convenor, Task Force on Poverty Alleviation, Government of Bangladesh.*

¹ *Taking a better measure of poverty; Chicago Tribune, May 1995.*

By some estimates, the Census Bureau's 1992 poverty rate of 14.5 per cent of the population would have been 15 or 16 per cent under the recommended new criteria.

The government's definition of poverty determines eligibility leaves for 25 government programs, including food *stamps*, Head Start and Medicaid.

The current poverty threshold is \$ 15,141 for a family of four . Published annually by the Social Security Administration Since 1965, the poverty index measures cash income before taxes. The *formulae relies* on Agriculture Department estimates of the cost of a minimal diet and then triples them.

Obviously, the poverty threshold in the United States seems to be rather high compared to the standard of such measurement in the developing countries, even after making adequate allowances for differences in the cost of living and the purchasing powers of the currencies. But what is more important is that the US is a democracy and "many people consider it (reduction of poverty) a measure of President's performance in office and of an economy's performance in improving standards of living" .²

In most developing countries, the Head of the Government are usually under less pressure to alleviate poverty particularly in non-democracies. As such, they may not be thrown out of power only for their failure to alleviate poverty. Nevertheless, the potential threat for political instability arising out of the increased incidence of poverty and unemployment remains strong particularly in countries that claim to have some commitment towards democratic polity. Among the developing countries of the world, the countries of South Asia, by and large have demonstrated strong commitment to democracy and as such, these countries deserve special study on their problem of development with poverty alleviation. This has become particularly important as the political leaders of South Asia have been claiming, particularly in recent years, that they have developed a "regional approach to poverty alleviation" under which each country of the South Asian Association for Regional Cooperation (SAARC) has accepted the responsibility of eradicating poverty from their respective countries under a time bound frame (preferably by 2002 A. D).

This claim of the SAARC Head of State/ Government on regional cooperation for poverty alleviation was a major surprise or the world that showed deep concern for poverty alleviation at the Social Summit at Copenhagen.

This regional stand of the SAARC countries on the issue of poverty alleviation had developed mainly through two stages: its first stage culminated in the

² *Ibid.*

Dhaka Declaration on Poverty Eradication of April, 1993 in which the goal of eradication of the hardcore poverty within a time bound frame (1993-2002 A. D) was unanimously accepted as a priority objective for all SAARC countries. In its second stage (under Delhi Declaration of May, 1995), the progress made in this area in the following two years (1993-95) was reviewed and a decision was taken to declare "1995 as the SAARC Year For Poverty Eradication." This Delhi declaration came as the follow up of Dhaka declaration mainly to achieve three objectives: (1) to reaffirm the danger the SAARC countries have been facing from the existing poverty situation (about 440 million people out of about 1 billion are poor in this region; under the existing development process, this figure is likely to grow in the future and could become explosive by the turn of the present century); (ii) to sensitize all concerned that the Dhaka declaration for eradication of hardcore poverty by the year 2002 A. D. was not an empty slogan but a "feasible proposition" and therefore, the SAARC countries should together increase their cooperation in this field and (iii) to provide a "joint agenda of action" for the SAARC countries for this purpose. (A joint agenda of action was also drawn at the Delhi Meeting).

Even if it is accepted that the SAARC leaders have high commitment to poverty reduction, a number of questions may still be raised in above context like: what actually is this plan/action agenda for poverty alleviation: How it is going to be formulated at the national level and implemented in the field? What is going to be the relationship of this programme/plan with the structural adjustment reform programme of the government that is now being implemented vigorously in most SAARC countries? What is going to be the relationship of the poverty plan with the existing national plan?

To examine these questions in the context of the Dhaka and Delhi Declaration on Poverty Eradication, this paper is divided into five main parts; Part-I gives a brief description of the background that induced the SAARC leaders to commit themselves jointly to the goal poverty eradication by 2002 A. D. (as stipulated in the Dhaka Declaration); Part-II gives a brief description of how the SAARC countries have cooperate among themselves in the field of poverty eradication and how this cooperation has led to reaffirm Dhaka declaration of 1993 by the Delhi declaration of 1995. Part- III gives a brief description of the nature of cooperation among the SAARC countries and their donors on the SAARC formula for poverty eradication through a time bound framed; Part-IV gives the current action agenda for poverty eradication in Bangladesh with particular

reference to the current efforts of the Government to promote perspective national plan through district perspective plans and finally Part-V makes an effort to draw some conclusions on the learning process about the difficult tasks of poverty alleviation in the context of the SAARC countries with particular focus on the need for a "social contract" between the poor and the state.

PART I : THE DHAKA DECLARATION FOR POVERTY ALLEVIATION : ITS BACKGROUND AND MAIN FEATURES

In December, 1991, at the Sixth Summit at Colombo, Sri Lanka, the Heads of the State Government of SAARC Countries felt that in their enthusiasm to cooperate with each other, they had stretched their area of cooperation over too many subjects to handle effectively. The new approach suggested, therefore, was to identify a few "core areas" of cooperation and try to be more effective there. The three core areas that were eventually identified were regional trade, poverty alleviation and promotion of a South Asian development fund.

In the specific field of poverty alleviation, the Colombo Summit decided that a "Independent Commission for Poverty Alleviation in South Asia" would be constituted with two members from each SAARC country, to recommend immediate measures on the subject. The Commission was constituted by the then President of SAARC, President Ranasinghe Premadasa of Sri Lanka on 31 March 1991. It submitted its report in November 1992 (after only eight months). The Report was entitled as "Meeting the Challenge".

To prepare the Report, the Commission first met in Colombo, Sri Lanka (31 March to 3 April, 1992). As expected, the discussion started with the problem of "measurement of poverty". There were several experts to deal with the subject. The discussion continued without agreement over a long period. At one point, it was pointed out that, given the limited time in hand to prepare the report and given the fact that incidence of poverty in South Asia, was high (however measured) more attention should be paid on the factors that created poverty and accentuated it rather than on its accurate measurement and on how to find out the strategies to overcome this process and if possible, to actually reverse it.

This gave a new dimension to the discussion with focus on country specific experiences of poverty alleviation programmes which were presented and evaluated. It was then decided that a number of papers would be prepared on

both theories and practices of poverty alleviation. This job was distributed among the members of the Commission as follows:

1. Nature, Causes and Magnitude of Poverty: SAARC Secretariat.
2. Inadequacy of Past Development Response: Dr. Ponna Wignaraja (Sri Lanka).
3. Lessons from Success Cases: K. R. Venugopal (India); Shoab Khan (Pakistan); Fazle Hasan Abed (Bangladesh) and Shreekrishna Upadhyay (Nepal).
4. Towards New Strategic Options: Dr. Shaikh Maqsood Ali (Bangladesh).
5. Transitional policies and Mechanisms for Managing change at the Macro Level: K. R. Venugopal.
6. Operationalizing the Strategic Options at Micro Level: Fazle Hasan Abed and Dr. Ponna Wignaraja.

The next meeting was held at Delhi, India, during 27-29 May, 1992. A number of additional papers with new topics were also presented there like Entry point into poverty alleviation, by Anil Bodia (India) and Susil Srivardana (Sri Lanka) and Gender and Equity by Mrs. Vina Mazumdar (India). Who were invited to the meeting as guest advisers.

In my paper presented at Delhi on "Towards Strategic Options" I pointed out that three main alternative formats for poverty alleviation could be considered. The first was the Acceptance of the Structural Adjustment Reform Programme as both "the necessary and sufficient conditions" to achieve this objective (we know this remains, by and large, the position of the World Bank and the IMF). In this case poverty reduction comes via increases growth and increased growth comes from more efficient use of the market economy. In my second option, I pointed out that in developing countries, the market was "not friendly to the poor" and as such, resource allocation was heavily biased against them. To overcome this predicament, the poor need a "Separate Plan" with focus on (i) the explicit recognition of their efficiency in resource use as well in the generation of a dynamic capital accumulation process: (ii) "net flow of resources in their favour" (usually more resources are taken from the poor than are given to them); and (iii) the strategy of organizing the poor in their own interest cum function groups (social mobilization). My third option was a combination of the first two.

Initially, I had difficulties in selling my idea, experts pointed out a number of flaws in my presentation but soon the practitioners came to my rescue. They

pointed out that I could be significantly right for the poor needed not only their separate organizations but also adequate resource flow in their favour which the traditional top down planning process might not deliver. In particular, Dr. Ponna Wignaraja, the Vice Chairman of the Commission, told me on the last day of the meeting at Delhi that the idea of a "separate pro-poor plan" made sense to him.

The idea of a separate pro-poor plan was not my own. In Bangladesh, historical dynamics has been taking us towards it. To recapitulate, Akhtar Hamid Khan developed his Comilla Approach which was the first pioneering work in social mobilization on an expanded scale. Khan showed in the early 1960s, how the poor farmers could be organized and made dynamic in the field of agricultural production. In the late 1960s, he also showed how bottom up village and union plans could be formulated through a participatory approach. In the early 1960s, Government of Bangladesh promoted the concept of Gram Sarker (Village Government) and in the late 1980s, Dr. Muhammad Yunus, the Managing Director of Grameen Bank, started emphasizing that there could be no such programme as "education for all" or "health for all". To be meaningful these programmes have to be target specific like education and or/ health for say the lowest 10% or 20% of the poor at the first instance. The other higher percentiles could be covered gradually after meeting the requirements of the very poor first. As for me, I presented a paper on "Alimuddin Model" for development in the Special Conference of Economic Association in 1978 showing how people like Alimuddin (a poor day labourer) could develop the country if their creativity could be recognized, promoted and be allowed to come the main stream of development. In the next Conference of the Economic Association, I submitted a paper entitled as "man oriented development construct." At least one lady in the grass root dynamics of the Gram Sarker (Village Government) Movement³. In the early 1980s, I tried to bring some of the successful innovative experiments of Bangladesh led by different Bangladesi social workers to the notice of the larger audience through a number of articles.⁴ Simultaneously as a Training Director, I tried to build up an informal rural cadre for the Government out of the officers of the various cadre

³ Ali Shaikh Maqsood. *The Swanirvar (Self Reliant) Movement in the 1980s: Political Economy, Journal of Bangladesh Economic Association, Vol 4, Conference 1979, No 1.*

⁴ See for example, Ali, Shaikh Maqsood. *The Batasany-Durgapur Format for Rural Development in Bangladesh; in humanizing Development, Maruzen Asia, UN Center for Regional Development, Nagoya, Japan, 1985.*

services of Bangladesh. (In 1978, 500 of them out of 2,000 were taken to the President's house.⁵ They submitted a number specific proposals to the President for allowing them to work in the villagers for longer time with greater involvement). This was followed by another major study during 1979-80 on decentralization and people's participation that recommended a number of administrative reform measures (a number of these recommendations were accepted by the government).⁶ And finally, I tried to incorporate the idea that "the poor were efficient and as such, should have the right to resources" while formulating macro economic plan for Bangladesh for the period 1990-95. In 1992, therefore, I felt internally induced to put these ideas in my paper of "alternative strategic options for the SAARC countries". However, I was also conscious of my limitations partly because I had only limited experience and partly because I could see that the other members of the Commission had lot more expertise than me.

I realized that my failure was most serious in the field of training the government servants for service delivery to the poor. So long I was in the training institute. I tried to turn government servants into "change agents" for rural development through 'motivation' alone (there was hardly any scope to give the many material incentive for their extra works under government rules). I found it was not working well. It was more difficult when such endeavours threatened the existing position of the privileged and made them hostile to these government servants. Only the most dedicated could endure and survive. Their number, however, remained small.

While writing the paper on "Strategic Options" for poverty alleviation, I could not, therefore, help bringing the question of "danger to the catalytic agents of change". As a student of economics, I had learned that the neo-classical free market was "value neutral". Those who formulated the First Five Year Plan of Bangladesh (1973-78) appeared "value rich". Perhaps, to accommodate their concern for the poor they prescribed "democratic socialism" for the country. The Second Five Year Plan of Bangladesh (1980-85) tried to be more pragmatic by insisting on provision of basic needs for the poor with emphasis on both market and values. The Third Five Year Plan of Bangladesh (1985-90) brought the

⁵ Ali, Shaikh Maqsood. *The Own Village Development Programme in Bangladesh: An Experiment on Bottom-up Planning*, *Administrative Science Review*, National Institute of Public Administration, Vol XI, Mar-June, 1981, Dhaka.

⁶ Ali, Shaikh Maqsood, Das, K. M. and Rahman, S; *Decentralization and People's Participation in Bangladesh*, Institute of Public Administration, Dhaka, published by UNDP, Dhaka, 1983.

concept of integration of a social accounting matrix to give the plan a human resources development with focus on the relative efficiency of the poor and benefits of the lower 50% of the population. However, during the process of actual implementation of these five year plans, most of the time the face of the poor remained hidden.

While suggesting a "Separate Pro-Poor Plan" for the SAARC countries, against the background of this failure to give the benefit of development to the poor, I realized that I had mainly three options: first, I could go along with the neoclassical tradition of believing that the free market economy, if handled correctly, would lead to both growth and economics of welfare particularly in conjunction with liberal democracy. My second option was to become a socialist. I could not subscribe to the first option by that time I had read not only about Adam Smith's (that helps the poor)⁷. I could also not be a socialist any more when it was dismantling itself. My third option was to look at religions; if they were contributing positively or negatively to poverty alleviation. I found both positive and relative trends here; people were sometimes helping the poor and sometimes exploiting them in the name of religions. However, beneath this contradiction, I could also see an underlying unity in all religions worth mentioning on the question of "net transfer of resources from the rich to the poor". I included this concept in my paper of poverty alleviation. My Chairman Mr. Krishna Prasad Bhatari told me privately that if, on this point, I am abandoned by everybody, he would continue to give me his support.

In my paper on strategic options that submitted at Delhi meeting, I tried to highlight particularly the difficulty of going for a separate pro-poor plan with net flow of resources in their favour, in the existing social conditions of SAARC countries. At the same time given this situation, I failed to understand how the poor would be able to get more resources from the macro planners even if such transfer (or resources) could be validated on ground of neo-classical efficiency in resource utilization. I could see that the relative efficiency of the poor in condition under the existing socio-economic political situation.

An alternative solution to the above situation was to have a high sense of "compassion" for the poor from the non-poor. This could be expected particularly from the well-to-do in all religions. At Delhi, we had an unexpected opportunity to get some inputs on this subject.

⁷ We would take up this matter for further discussion later.

While paying our respect to the Indian Prime Minister Mr. Narashima Rao, we pointed out to him that the South Asian culture as a whole embodied a high sense of compassion for the poor and so in that context we wanted to know if we could expect a high sense of compassion for the poor also from the political leaders like him. He gave us a written reply:⁸

Calling upon the Commissioners to give leadership in SAARC countries some new and fresh solutions to the problems of poverty, the Prime Minister said that SAARC countries can then choose from such solutions depending upon their applicability to individual countries. He stressed the importance of mobilization as a strategy to bring the poor into the main stream. Pointing out that we were dealing with human beings and not with abstract concepts. The Prime Minister stressed the importance of Compassion to which one of the commissioners had referred in the context of the culture of the SAARC nations.

The Delhi Meeting was enriched with the inputs from various field experiences: there was the holistic approach (the Comilla approach, Grameen Bank experiences and a number of NGO formats pioneered by BRAC) from Bangladesh. Investment in a Support Mechanism (the Aga Khan Rural Support Programme) and work without Contractors and Bondage (the Orangi Pilot Project) from Pakistan; Agricultural Bank as an Umbrella Organization from Nepal; Self-Confidence and Self-Respect among the poor women from India (the Self-Employed Women's Association and the Working Women Forum) and Health as an entry point to Community Development (the Janasaviya programme) from Sri Lanka. These and a number of other such projects/programmes came under sharp scrutiny and their relative strengths and weaknesses were identified. The evaluations came with a common finding: the poor were assets, not liabilities. With very little help they could graduate into self-reliance and contribute creatively to national economic growth and social development. Besides, the members of the Commissions like Abed, Shoaib, Venugopal, Upadhyay and a number of other practitioners contributed substantially to this area of action agenda.

As a result of these discussions, the idea of a pro-poor perspective was accepted in the Delhi meeting for further examination with focus on (i) fundamental South Asian Values; (ii) growth, human development and equity: on trade off; (iii) a new accumulation process: the poor can contribute to growth; (iv) transfer of resources to the poor; (v) dual role of the State; (vi)

⁸ *Progress Report on the Second Meeting of the Independent South Asian Commission on Poverty Alleviation, New Delhi 27-29 May, 1992; ISACPA Secretariat, Colombo, June, 1992; P 9.*

sensitive new institutions; (vii) regional and global cooperation on new terms and (viii) towards the strategic options: (a) moving simultaneously on two fronts and (b) a Separate Poverty Plan with Poor as the Subjects and Social Mobilization as the Process. Other topics selected for next meeting were (i) the Nature and Magnitude of Endemic Poverty; (2) Transitional Policies and Mechanism for Poverty Alleviation; (3) An Agenda for Immediate Action and (4) Poverty Watch; Independent Monitoring of Implementation of the Strategic Options and Management of Change.

The next meeting was organized at Dhaka during 9-13 July, 1992. At Dhaka the members of the Commission got fresh inputs from a number of successful experiments on poverty alleviation projects/ programmes particularly of the Grameen Bank, BRAC, Comilla Academy etc. This was reinforced by Bangladesh Prime Minister's Commitment for Food Security (Dal- Bhaat) for the poor.

At Dhaka further inputs came in the area of the role of religions in poverty alleviation. It was pointed out by one of the members of the Commission that the role of religion in the context of poverty alleviation could be understood best in (i) terms of the relationship of man with God and (ii) relationship of man with fellow man. He further pointed out that in Western countries the relationship of man with God may be weak but the relationship between man and man is strong. In contrast in South Asia a man pays more attention on his relationship with God than with his fellow men. The implication of this observation was obvious: the poor cannot rely on the good will of the non-poor alone to change their fate; they have to also organize themselves to get justice. This however, did not mean that religion was downgraded because admittedly most of us were aware that :⁹

The insights of great faiths offer a different path—helping us to live more simply so that others may simply live. They suggest that economic life and religious values can be brought back together, by:

- * Reclaiming Wealth
- * Restoring Nature
- * Rethinking Money
- * Renewing Work
- * Reintegrating Values

However, till such time that the above values could be integrated in economics, the concept of a Pro-Poor Plan with focus on "empowerment of the poor"

⁹ Ed Mayo, *Real Wealth, New Economics Foundation*, Wentworth Street, London.

through their own organization needed to be accepted as one of the important options for poverty alleviation. At the Dhaka meeting a broad consensus was reached on this point.

The next meeting was organized in Islamabad, Pakistan (1-5 September, 1992). There it became more evident that despite some unanimity, the members of the Commission were divided into three main groups. One group consisting mainly of the practitioners held that key to poverty alleviation was to be found not in the theoretical refinement but in the actual implementation strategies of such programmes. Experts like Shoaib Sultan Khan of Pakistan (who organized the Aga Khan Rural Support Programme in northern Pakistan with considerable success) had been pleading again and again to be action oriented: to help the people to organize themselves to make their own decisions at the grass roots and start a dynamic capital accumulation (savings and investment) process. He would also warn that such a process could not be started and sustained by a government servant (he himself could get into it only after he left the government job). The process needed NGO activists supported by government servant who would create the enabling conditions. (The AKSP was a company. It got its fund initially mainly from donors and later from the government). Other practitioners in development in the Commission like Fazle Hasan Abed from Bangladesh and Upadhyay from Nepal supported the basic contention of Shoaib with further elaborations of their grass roots experiences. Shoaib pointed out that shortage of investable fund might not be a problem for the poor. Given an adequate organization support they could raise their own savings rather fast but they would often experience difficulty in finding feasible investment opportunities because of their poor technical knowledge. It was in this area that they needed more help.

In the area of efficient management Abed could contribute substantially. He has been running a number of successful investment projects of the poor with substantial efficiency. Naturally his contribution in this difficult area was substantial. Upadhyay brought the concept of "social capital" from his practical experience in Nepal of converting unemployed labour into productive force with very little loan from the Bank.

The combined teaching of these experts was simple and straight forward: analyze the successful and in native cases of poverty alleviation in different countries and evolve strategies through this learning process.

The third group of the Commissioners maintained that structural adjustment reform must not be down played. Marginal tinkering with the problem of

poverty would not take the SAARC countries to the desired goal. They must learn how to use the market for efficient resource allocation and employment generation. This group was led by Dr. Hashem of India with Madhukar S. J.B. Rana of Nepal. The question, however, not to abandoned (structural adjustment reform) for the other (poverty alleviation strategy with social mobilization but to reconcile the two.

Dr. Ponna Wignaraja, the member from Sri Lanka and the Vice-Chairman and the coordinator of the Commissions, played a critical role in reconciling the various views, consolidating and expanding them. He was a scholar in the area of human resources development with substantial knowledge of the social mobilization process for poverty alleviation. From time to time he would encourage me and also give me inputs to expand my ideas on strategic options. His particular concern with my paper was only that I should not mix up the "technical" aspect of poverty alleviation with the abstract concept of "values".

At Islamabad I tried to put the question of "Values" in different form, mainly in terms of the "right of the poor". My position was simple: even in democracy the poor cannot fight for a "net flow of resources in their being the" near majority of the population" because they are not organized. Therefore, the question of "compassion" for the poor particularly at the highest level of decision making becomes important. Without this sense of compassion how do we expect commitment from the Heads of the State/ government to the goal of poverty alleviation? If this compassion based commitment is not available, then the question of the right of the poor on the resource has to be faced with focus on the availability of strategic options for organizing the poor to fight for this right. During our visit to the President of Pakistan this question of resource availability for poverty alleviation came on the surface. He (Mr. Ghulam Ishaq Khan) politely informed us that his religion (Islam) recognizes the "right of the poor on the property of the rich."

At Islamabad we also came to some consensus that for poverty alleviation, social mobilization and structural adjustment reform programme with focus on employment generation had to be pursued simultaneously. The role of the civil service in this context was analysed. It was observed that in a country like India where the break through in agricultural production had come mainly through the efforts of large farmers concentrated in a few states (Punjab, Haryana and Western U. P.) an elaborate and efficient food distribution system had to be there. It could be observed that in the context of Bangladesh, agricultural

revolution has been more evenly spread with substantial contribution of the poor and the marginal farmers, in it. Dr. Hashem of India, therefore, considered the small and marginal farmers in Bangladesh not only as efficient farmers but also as a "Institution". He warned that this institution needs immediate attention to be supported and strengthened and not destroyed. The efficiency of the small enterprises with focus on garment industry and the contribution of the semiskilled and unskilled labour working abroad, in earning foreign exchange for the country, was also highlighted.

An efficient public food distribution system was also required by other SAARC countries particularly for Bangladesh that had to face natural calamities in one form or other almost every year. Also the SAARC countries needed investment not only in physical infra-structure but also in human resources development. If private investment was shy in these areas, was there any alternative for the government not to play a pro-active role?

There was obvious danger on expanding the role of the government in the name of poverty alleviation but the existing market was far from friendly to the poor. More important in the initial phase of structural adjustment reform, the burden of adjustment usually fall disproportionately on the poor. It was in the context that K. R. Venugopal, the member from India made his excellent contribution; through his papers on "public distribution system" and on various other aspects of human resources development.

The problems of countries like Bhutan and Maldives were some what different than other SAARC countries. Bhutan was a mountainous kingdom with small population who are difficult to reach and Maldives was a combination of a few islands with enough supply of fish but with more scattered population. The representatives of these two countries, Dasho Sangay Nagedup and Dr. Jigme Singye from Bhutan and Abdul Satter Moosa Didi and Hassan Sobir from Maldives) could intervene in the various controversies over the poverty alleviation question from their position of relative distance, neutrality and different kinds of expertise. In particular, they brought the special problems of dispersed population in economic development.

The final meeting of the Commission was held in Colombo, Sri Lanka (26 October-1 November, 1992). Its aim was to reconcile all the divergent views and produce a final report. To recapitulate, on the question of structural adjustment reform, one opinion was that it was to be the main vehicle for poverty alleviation because there could not be poverty alleviation without adequate growth. The other view preferred a more interventionist approach in

favour of the poor. The compromise solution that was reached at the second meeting at Sri Lanka was that structural adjustment reform would remain a necessary condition for growth but there had to be a time bound pro-poor-plan for its sufficient condition. Eventually this compromise formula came to be known as "walking on two legs": the two legs being structural adjustment reform to activate the productive sectors (of agriculture and industry) and the pro-poor plan to add extra growth through a process of social mobilization. This process of "walking on two legs" was to be reinforced by (i) labour intensive technology in the economy and (ii) a value system based on "sharing and caring" that was found to be ingrained in South Asian culture in spite of all the religious differences and misuse of religions by vested interests.

In preparing the final draft the Commission was fortunate to get the help of a number of experts/ researchers and made particular mention of Mr. Susil Srivardana, Dr. Tariq Banuri, Dr. Atiur Rahman, Dr. Veona Mazumdar and Dr. Rohini Nayyar.

The Report prepared by the Commission entitled: "Meeting the Challenge" was submitted on 20th of Nov. 1992 to the then President of Sri Lanka who was also the then President of SAARC. Its main recommendations were accepted by the SAARC Heads of State/Government in April, 1993 at their Seventh Summit Meeting at Dhaka and came to be known as "the Dhaka Declaration".¹⁰

The main elements of Dhaka Declaration are:

1. Each SAARC Country should realize the danger of its current poverty situation and assess what might happen to it by 2002 A. D. However measured, the poverty situation is already explosive in South Asia.
2. It would be possible to eradicate poverty in each SAARC Country within the above time frame provided the strategy for poverty eradication is based on social mobilization. Evaluations of a number of poverty alleviation programmes in the SAARC countries have collectively found that the poor are bankable—if properly organized they can come from the periphery to the main stream of planning and contribute creatively to high growth.
3. In order to eradicate poverty in SAARC countries by 2002 A.D. these countries have to work on two fronts: the first front being a market and export-oriented structural reform programme: the second, a social

¹⁰ See *Seventh SAARC Summit, Dhaka Declaration: Published by SAARC Secretariat; 1993.*

mobilization programme that would bring the poor into the main stream of development.

4. The first step towards appropriate planning design would be: (1) explicit recognition of the efficiency of the poor; (ii) recognition of their basic rights to food, education, health, shelter, employment, development resources and information, (iii) integration of market and export oriented structural adjustment reform programmes with social mobilization agenda and (iv) creation of a sensitive support system by the Government in favour of this programme that would ensure a net transfer of resources from the society to the poor.

At the time of Dhaka declaration, most of the SAARC countries were busy in implementing structural adjustment reform programme. Naturally the question arose (i) how far the poverty alleviation thrust could be accommodated in the current development programme of the government and (ii) what would be the donors attitude to this accommodation?

As far as the first question was concerned, it could be said that the recommendation were immediately relevant to all SAARC countries because:

1. When a country becomes increasingly dependent on foreign assistance—yet its growth rate remains low —whatever growth takes place does not adequately benefit the poor and exacerbates social restlessness. In this scenario, there has to be a realization that something is seriously wrong scenario, there has to be a realization that something is seriously wrong with that process of planning and development in the country.
2. One suggestion to overcome this situation is further structural reform. It however, has its limitations—short term stabilization frequently hurts the poor proportionately more than the better-off groups in society (because it mainly depends on expenditure control in order to balance the budget). Long term trickle down process is usually not effective primarily because not enough domestic resources are available to raise the level of investment at sufficiently high levels (9-10%) for other programmes (such as social mobilization the number of poor may increase.
3. There is a direct correlation between increased incidence of poverty and social disturbance. Some countries have learned lessons from such disturbances. Others have not.
4. When growth rate remains low in a country over a prolonged period, it usually makes people more dependent both on the Government and on foreign assistance. Simultaneously, it increases the helplessness of the poor; disrupts the productive structure and lowers productivity of labour.

5. the poor are efficient and, therefore, if more resources are given to them the objectives of accelerated growth and poverty alleviation can reinforce each other.
6. The above process can conveniently start by organizing the poor at the grass roots and giving them appropriate inputs and institutional support. A number of innovative experiments in different parts in the region show that when such efforts are made, a new accumulation process usually follows leading to higher domestic savings, higher investment and higher self-employment which often reinforce each other.
7. The above process is consistent with the current ideas of structural adjustment reform because it is essentially based on private initiative, competitive efficiency, risk taking and outward orientation (labour intensive exports) of the economy. In fact, it follows from observations above, that if structural adjustment really emphasizes resource reallocation in favour of efficient sectors and efficient groups, then its choice of resource allocation has to be in favour of the poor who are efficient users of scarce resources particularly capital.
8. The above process is also consistent with the democratic aspiration of the people and the Constitutional obligation of the government of most SAARC countries to provide basic needs particularly to the poor. If adequate resources are given to the poor, they would meet their basic needs mostly through generation of income and employment. If they are deprived of the resources they need, the government have to meet their basic needs through safety nets. The efficient poor do not usually need safety nets except under special circumstances (like natural calamity). The Dhaka Declaration stipulated that the SAARC countries should cooperate with each other in the above endeavour and also that the national pro-poor plan should be harmonized with the open economy structural adjustment strategies. A brief description of the development that followed in the area of cooperation among the SAARC countries in the field of poverty eradication may be seen below.

PART-II : COOPERATION AMONG THE SAARC COUNTRIES ON POVERTY ERADICATION: FROM DHAKA TO DELHI DECLARATION

The nature of cooperation among the SAARC countries in the area of implementation of Dhaka declaration may be understood in terms of the three main steps: (1) cooperation among the SAARC countries in building a three tier system of consultation among them or increased resource flow in favour of the poor: (2) evaluate efforts of their own pro-poor projects/programmes that led to

the confirmation of the Dhaka declaration at the Delhi Summit and its further expansion through Delhi declaration and (3) organizing joint agenda to explain the SAARC approach to poverty eradication to the donor countries so that the SAARC countries could walk more effectively on "the two legs".

Step 1 : Cooperation among SAARC Countries for Increasing Resource Flow in Favour of the Poor During (1993-94).

The cooperation among the SAARC countries on the task of poverty alleviation started with organizing a follow up Meeting of SAARC Finance/ Planning Ministers at Dhaka during July, 1994. The main topics of discussion in that meeting were (a) whether adequate investable fund would be available for formulating national pro-poor plan and (b) how the country experience of poverty eradication could be exchanged for a creative process in the SAARC region. The suggestions made were (1) the social secretaries of each SAARC countries would identify their the proposal for increasing their scales and put their demand for resources to their respective Finance secretaries. The Finance/Planning Secretaries of the SAARC countries would meet once a year to exchange their experience on implementation of the pro- poor planning which would be followed up by similar annual meeting of the Finance / Planning Ministers of the SAARC Countries. The first meeting of the social secretaries of the SAARC countries is likely to be held in next September, 1995 hopefully to be followed by a second meeting of the SAARC Finance/ Planning secretaries and a Second meeting of the Finance/ planning Ministers the current year.

Step. 2 : Reaffirming the Commitment for Poverty Eradication Through Delhi Declaration in (May 1995).

The Dhaka declaration provided that the SAARC countries would have to report the progress it had made in the field of poverty eradication under a time bound programme to the chairperson of SAARC in every SAARC Summit. During the Finance/ Planning Ministers Meeting at Dhaka in 1993, the experiences of the different SAARC countries in the area were exchanged. During the eight SAARC Summit Meeting at New Delhi, another opportunity came to have a fresh look on the progress made so far and for deciding actions for the future. Between the 1993 (year of Dhaka Declaration) and Delhi Summit (1995) three governments in SAARC countries (Pakistan, Sri Lanka and Nepal) had changed. Naturally there could be doubts about the supports that would be available from the new government in these countries on the programmes that their previous government had made on poverty eradication.

But the eighth SAARC Summit finally came out not only with re-affirmation of the Dhaka Declaration but also on its consolidation and expansion with a joint agenda for section.

The Main Features of the Delhi Declaration are:

1. The year 1995 would be declared as the SAARC Year of Poverty Eradication. The main aim of this programme would be (a) sensitize all concerned with that SAARC countries are trying to do about poverty eradication and get support from them and (b) initiate more systematic planning efforts both individually and on the basis of a joint agenda for action. For this purpose a joint agenda of action for poverty eradication has been prepared.
2. The rights of the poor on resources and information have been explicitly recognized along with their rights to basic needs and information.
3. Special emphasis has been given to make market friendly to the poor particularly in the initial phase of structural adjustment reform process when there is greater danger for the poor to get hurt.

By 1995, there had been substantial agreement between the SAARC countries and the donors on the value of participation and social mobilization. So Delhi Declaration appeared to have been favourably received. How this convergence of interest between the SAARC countries and their donors occurred, is explained next.

PART-III : HARMONIZATION OF POVERTY ERADICATION PLAN WITH STRUCTURAL ADJUSTMENT REFORM PROGRAMME.

During the period 1993-'95, efforts were made to "not only to prepare an action agenda for implementation of the Dhaka declaration but also to "harmonize" the poverty eradication approach of SAARC with Structural Adjustment Reform Programme with focus on the cooperation of donor. This was done in three stages: first, a preliminary Workshop was held at the BRAC Training Center at Rajendrapur, Dhaka which was inaugurated by the Prime Minister of Bangladesh. In this Workshop a number of experts were invited from the SAARC Countries in addition to the members of the SAARC Poverty Alleviation Commission. This Workshop was followed by a joint SAARC- World Bank Workshop during 12-15 October, 1993 in Annapolis, Maryland, USA. In March 1995, there was the Social Summit at Copenhagen which was independently organized and as we seen, in which not only poverty and unemployment but also social disintegration not only in the developing countries but also in the

developed country were issues of great concern. The Summit at Copenhagen was followed during 12-15 March, 1995 by a Round Table Conference at Bonn between representative of SAARC countries and the German Foundation for International Development . This development is described next:

For the Rajendrapur Meeting the, former Members of the Poverty Commissions had to prepare different topics for discussion. I was asked to prepare a paper entitled Refining the Conceptual Frame Work of the Pro-Poor Plan. Its revised revision was presented at the SAARC-WB Workshop at Annapolis.

In my paper on " Refining the conceptual frame work pro-poor planning", I gave the following main reasons why a complementary front of social mobilization was needed in the SAARC countries to the existing efforts of poverty alleviation through structural adjustment reform: first,

- * Structural adjustment alone would not be able to operate in the large informal sector and integrate it with the formal sector given the existing institutional constraints.
- * The low domestic saving ratio would not be able support a higher inflow of external finance and as such the investment and growth rates would remain at low levels.
- * Economic policies without countervailing organized power form the poor would continue to favour the relatively rent seeking class compared to the risk taking class.

Second, attention needed to be focussed not only on the measurement of poverty but also on the causal factors of poverty. According to the WB- IMF- UNDP studies, the main cause of poverty still remains the failure of the market. Therefore, the UNDP had suggested the ordering of the action programmes with efficiency first followed by equity and then freedom. However, if poverty is accepted as largely man made then the question of justice and equity becomes important. The UNDP report (1992, p. 44-45) itself pointed out that :

1. Only a quarter of aid goes to 10 countries that together have about three quarters of the worlds poorest people. Indeed, the richest 40% of the developing world population receive more than twice as much aid as the poorest 40%; and
2. More interestingly, countries that spend a lot on the military (more than 4% of the GNP) are rewarded with roughly twice as much aid per capita as countries that spend modestly- between 2% and 4% of GNP.

On the question of inequity the UNDP Report observes:

A progressive system of ODA would mean having richer countries contribute a greater proportion of their income than industrial countries

that are less well off. But the practice of ODA fails far short of the ideal. (UNDP Report 1992, p.45).

At the Workshop of the experts of SAARC countries and the WB at Annapolis, Maryland, USA in October, 1993 the ideas of the two groups were exchanged for three days. The Report¹¹ of this Workshop published by the WB showed that (i) there are substantial areas of consensus between the WB and the SAARC views on poverty alleviation (like the poor have a particular type of efficiency and participatory development process can give some extra growth); (ii) there are areas where further research would be needed (like how efficient the poor are? and (iii) by and large, harmonization of the SAARC views with the Structural Adjustment Reform Programme was possible. Most important, the WB expressed its willingness to help the efforts of poverty alleviation of SAARC countries provided the areas could be effectively identified.

In preparing this Report, the most important inputs came from the various successful poverty alleviation projects/ programmes that were presented and evaluated in the Workshop. Khalid Shams from Bangladesh presented the experience of Grameen Bank while Kamal Sidduqui presented his analysis of the political support for social mobilization from Bangladesh. Other practitioner like Soaib Sultan Khan from Pakistan and Venugopal from India also enriched the Workshop with their experiences.

As mentioned earlier, after this workshop at Annapolis, the Finance and Planning Ministers of the SAARC countries met at Dhaka (during July 1994) to develop a mechanism through more fund could be reallocated in favour of the pro-poor action plan. However, the question of resource transfer in favour of the poor soon became more of a world than a regional issue.

Step-2: Social Summit on Poverty Alleviation at Copenhagen, Denmark

The question of resource transfer was raised by the leaders of the developing countries in the Social Summit held at Copenhagen during March 1995. Although not much progress could be made there on the issue of resource transfer from the developed to the developing countries but rationale of such transfer both internationally and within the country (from rich to the poor) got greater publicity. In addition (as pointed out earlier), the Social Summit brought a new contradiction of development particularly in the developed countries. It was found that in the developed countries where the incidence of poverty and unemployment were low, the incidence of social disintegration was high.

¹¹ Report of the SAARC-World Bank Workshop at Annapolis, Maryland, USA; October 13-15, 1993.

Naturally, a new warning came from the Summit to the developing countries: they have to reduce poverty and unemployment in such a way that it would decrease (not increase social tensions).

Step-3 : The Follow up Action for Restructuring Foreign Assistance at Bonn for Poverty Alleviation in South Asia

Immediately after the Social Summit at Copenhagen, a Round Table¹² was organized by German Foundation for International Development at Bonn, Germany for follow up action with focus on:

1. how to promote participation by the poor in the development process;
2. how to enhance the commitment of government and non-government organizations and development institutions in both recipient and donor countries with regard to poverty reduction and participatory development, and
3. how to improve cooperation with German Government regarding poverty reduction in south Asia.

The Round Table recognized (a) the need for involving all important sectors development (private sector, academics, research institutions, financial institutions, parliamentarians, trade unions, ect.) at the national level in the task of poverty alleviation and (b) the important role the government has to play particularly in (1) setting up institutional mechanism for poverty alleviation; (ii) setting up monitoring system; (iii) exchange of information; (iv) enacting legislation ; (v) reforming banking system; (iv) creating micro finance fund; (vii) establishing food security; (viii) designing education; (ix) promoting local government; (x) promoting infra-structure development; (reorienting macro-economic policies; (xi) introducing new technology; (xii) new land policy; (xiii) managing disaster rehabilitation programme; (xiv) supporting independent research; (xv) assuring rights of the people to organize; (xvi) promoting awareness of success stories.

The Round Table particularly emphasis the need to make the development structure "people worthy".

On their turn the donors agencies/ countries should:

"give high priority to poverty eradication measures directly targeted at the poor, i. e., celebrating projects in terms of actual numbers of people to be reached during a certain time-frame, and to assign higher priorities to projects directed at the chronic poor".

¹² Advance Report of Results and Recommendation: International Round Table on Poverty Alleviation in South Asia, Bonn, Germany; 13-15 March, 1995; organized by German Foundation for International Development.

The Report of the Round Table at Bonn emphasizes that both the national government and the donors have to play a protective role in the field of poverty alleviation in South Asia.

So far good but the question that arises here what progress has been made in the different countries in achieving the goal of eradication of hard core poverty by the year 2002 A. D.? Let us see at least what has been happening in Bangladesh.

PART-IV : THE FOLLOW UP OF POVERTY ERADICATION PROGRAMME IN BANGLADESH

On the government side the following claims are being made in the field of eradication of poverty:

1. Macro-economic indication show that Bangladesh has succeeded substantially in its stabilization programme but there are problems in moving towards a higher growth path (of around 7% per annum).
2. Within the above constraints, the allocation to social sectors (education, health, social welfare etc. that is connected with human resources development) has increased substantially from about 12 to 20% of the Annual Development Programme.
3. A number of relatively more successful projects/ programmes of the various Ministries/ agencies have been identified for further post-evaluation (where applicable) with a view to selecting them for wider replication;
4. The NG. Bureau has assumed greater responsibility to coordinate the activities of the NGOs, the Government and the donors in the field of poverty alleviation.
5. *The Palli Karma Shahayak Foundation (PKSF)* has expanded its field of operation to give government funds to NGOs for poverty alleviation with transparency and accountability.
6. The Grameen Bank vastly expanded its credit operation . By the end of May 1994, Grameen Bank has crossed the billion dollar mark in cumulative loan disbursement among its members. It took Grameen 17 years to cross the first billion dollar mark. But the second billion dollar is likely to be disbursed in the following two years 1994 and 1995. The Government has been helping this expansion of the Grameen Bank programme. A number of NGOs are also expanding their scale independently to cover larger population under their programme.

7. A number of NGOs (like BRAC) have been working in selected areas (like non-formal primary education, primary health and family planning, etc.) with the government on experimental basis. The area of cooperation between the NGOs and the government may increase further in future after proper evaluation of the current programmes.
8. The declaration of *Dal Bhaat* (food and nutrition) with focus on the poor is an important step towards alleviation of hard core poverty.
9. The planning strategy in Bangladesh is undergoing change. The new strategy emphasize participatory perspective planning at each district of Bangladesh that would eventually provide necessary inputs for preliminary stage but it has begun.
10. The question of formulating a "separate pro-poor plan" was discussed but reorienting the existing development endeavour as "pro-poor" was considered as a better option for Bangladesh. As such the government has been taking steps to make both the revenue and the capital budget more pro-poor.
11. The roles of the central government, the local level institutions, the NGOs, the donors and the private sector are expected to be reoriented accordingly.

It may be said that all the above measures impressive but what is exactly the achievement in the field particularly in terms of the actual graduation of the target groups above the poverty line and the sustainability of these efforts?

It is interesting at this point to note that Systematic efforts to develop adequate indicators to measure the impact of development on the poor with particular focus.

প্রফেসর রকিবুদ্দিন আহমদ স্মারক বক্তৃতা
বাংলাদেশে পাটের অর্থনীতি

মু.আ. সান্তার মন্ডল*

১। প্রাক্কথন

আধুনিক বিশ্বে সর্বপ্রথম পাটের আগমন ঘটে ১৭৯৫ সালে কোলকাতা বোটানিকাল গার্ডেনের তদানীন্তন কিউরেটর স্যার উইলিয়াম রক্সবার্গের হাতে। এরপর পৃথিবীতে প্রথম পাটকল স্থাপিত হয় ১৮৩৩ সালে ডাভিতে। এ উপমহাদেশে প্রথম পাটকল স্থাপন করা হয় কোলকাতায় ১৮৫৫ সালে। এরপর ১৮৮২ সাল নাগাদ ফ্রান্স, যুক্তরাষ্ট্র, অস্ট্রেলিয়া, বেলজিয়াম ও জাপানেও পাটকল স্থাপিত হয়ে যায়। তখন থেকেই এদেশে পাটের আবাদ শুরু হয় ব্যাপকভাবে। পাট চাষী, বণিক, মিল মালিক সবার কাছে নগদ অর্থকরী ফসল হিসাবে হয়ে ওঠে 'স্বর্ণসূত্র' সে সময় প্রায় ৭৬ শতাংশ বৈদেশিক মুদ্রা অর্জিত হতো এই স্বর্ণসূত্র রপ্তানি করে। এরপর যখনই পাটের বাজারে মন্দা দেখা দিয়েছে বা পাট চাষীর মুনাফা কমে যাওয়ার অবস্থা হয়েছে তখনই সরকার তৎপর হয়েছে, বসিয়েছে পাটে ওপর তদন্ত কমিটি ও কমিশন, প্রণীত হয়েছে বহু মূল্যবান রিপোর্ট। এমনি একটি সুবিখ্যাত কমিশন, পাকিস্তান জুট ইনকোয়ারি কমিশন-এর সুযোগ্য সদস্য-সচিব ছিলেন ডঃ রকিবুদ্দিন আহমদ ১৯৫৯ থেকে ১৯৬১ পর্যন্ত। ১৯৬০ সালে অত্যন্ত সাফল্যের সংগে এই কমিশনের রিপোর্ট প্রণয়ন করেই তিনি তাঁর পেশাগত দায়িত্ব শেষ করেননি। তিনি ১৮৫৫ থেকে ১৯৫৫-এ একশত বছরে পাটের অর্থনৈতিক ইতিহাসের ওপর একটি থিসিস লিখে ঢাকা বিশ্ববিদ্যালয় থেকে পি এইচ ডি ডিগ্রী লাভ করেন। এর সঙ্গে ১৯৫৫ থেকে ১৯৬৬ এ সময়ের জন্য তাঁর আরও কিছু সম্পূর্ণক গবেষণা কাজকে সন্নিবেশিত করে তিনি ১৯৬৬ সালে দি প্রোগ্রেস অব দি জুট ইন্ডাস্ট্রি এন্ড ট্রেড (১৮৫৫-১৯৬৬) শীর্ষক একখানি অতি মূল্যবান গ্রন্থ প্রকাশ করেন। এ গ্রন্থে তিনি পাটের ইতিহাস, পাট ব্যবসা ও শিল্পনীতি, পাটের বিপণন সমস্যা, কৃত্রিম তন্তুর প্রতিযোগিতা ইত্যাদি নিয়ে বিশদভাবে তথ্য-নির্ভর আলোচনা করেছেন। এই মহান অর্থনৈতিক ইতিহাসবেত্তা, ডঃ রকিবুদ্দিন আহমদ-এর অসামান্য অবদান কৃতজ্ঞ চিন্তে স্মরণ করে তাঁরই প্রিয় বিষয় পাটের উপর আমার এ বক্তৃতা উপস্থাপন করছি। আর আমাকে এ স্মারক বক্তৃতা দেবার সদয় আমন্ত্রণ জানানোর জন্য বাংলাদেশ অর্থনীতি সমিতিকে জানাচ্ছি আন্তরিক ধন্যবাদ।

২। বাংলাদেশের কৃষিতে পাটের স্থান

মূলতঃ বিশ্ববাজারে পাটের চাহিদা পড়ে যাওয়ায় এদেশের কৃষিতে পাট এখন একটি অবহেলিত ফসল। হবেই বা না কেন? ১৯৫৯ সালে ১ ট্রাক পাট বিক্রি করে ১টি ট্রাক কেনা যেত, ১৯৮২ সালে ৪ ট্রাক পাট বিক্রি করে ১টি ট্রাক কিনতে হয়েছে, আর ১৯৯৩ সালে ১টি ট্রাক কিনতে বিক্রি করতে হয়েছে ৪০ ট্রাক পাট। তাই হয়তঃ অনেকে বলে থাকেন, পাটের কথা ভুলে যাও, এটা এখন ক্ষয়িষ্ণু মৃতপ্রায় শিল্প। পাট নিয়ে এখন আর তেমনটি কেউ লেখেন না। সত্তুরের দিকে পাট নিয়ে বেশ কিছু গবেষণা ও রিপোর্ট হয়ে থাকলেও অর্থনীতিবিদরা এখন আর পাটের ওপর কোন গবেষণা প্রকল্প হাতে নেন না বা পাট সম্পর্কিত কোন একাডেমিক থিসিসও সচরাচর চোখে পড়েনা। জাতীয় অর্থনীতিতে পাটের ক্রমহ্রাসমান অবদানের জন্য আক্ষেপ করা চলে, কিন্তু বাংলাদেশের কৃষিজ ফসলের বহুমাত্রিক সম্মিলন ও ফসল পরিক্রমার কথা মনে রাখলে পাটকে অনায়াসে ভুলে যাওয়া সম্ভব নয়, সমীচিনও নয় একাধিক করণে।

* অধ্যাপক, কৃষি অর্থনীতি বিভাগ, বাংলাদেশ কৃষি বিশ্ববিদ্যালয়, ময়মনসিংহ।

প্রথমতঃ ভারত বিভাগ পরবর্তী সময়ে ১৯৪৭/৪৮ থেকে ১৯৬১/৬২ সাল পর্যন্ত প্রতি বছর গড়ে প্রায় ১৮ লক্ষ একর জমিতে পাটের আবাদ হতো, যা ছিল তখনকার মোট আবাদী জমির প্রায় ১৩ শতাংশ। এটা সত্তর ও আশির দশকে কমেতে কমেতে ১৯৯২/৯৩ সালে এসে দাঁড়িয়েছে ১২.৪ লক্ষ একরে, যা মোট আবাদী জমির মাত্র ৬ শতাংশ। ১৯৮২/৮৩ সনে যেখানে পাটের মোট উৎপাদন ছিল ১০.২ লক্ষ টন, এক দশক পরে ১৯৯২/৯৩ সনে তা হ্রাস পেয়েছে ৮.৯ লক্ষ টনে, যা সমগ্র পৃথিবীর পাট উৎপাদনের প্রায় ২৮ শতাংশ। বিশ্বের মোট পাট উৎপাদনে বাংলাদেশের অবস্থান ভারতের পরেই (৪০ শতাংশ), এর পরে রয়েছে চীন (২০ শতাংশ), থাইল্যান্ড (৫ শতাংশ), নেপাল (০.৫ শতাংশ) এবং অবশিষ্ট দেশসমূহ (৬ শতাংশ)।

বাংলাদেশের চমৎকার জলবায়ু বর্ষা-বন্যা বিধৌত পলিমাটি সমৃদ্ধ উর্বর মাটি, নিম্ন মজুরিতে শ্রমের প্রাপ্যতা এবং সর্বোপরি পাট উৎপাদনের প্রযুক্তিগত কলাকৌশলের সাথে কৃষকদের নিবিড় সখ্যতা যে আর্থিক ও সাংস্কৃতিক পরিমন্ডল সৃষ্টি করে রেখেছে তাতে বাংলাদেশ অবশ্যই এখনকার মতই বিশ্ব বাজারে পাটের সর্ববৃহৎ যোগানদার হিসাবে সুবিধাজনকভাবেই টিকে থাকতে পারে।

দ্বিতীয়তঃ উন্নত সিন্থেটিক সামগ্রী ব্যবহার এবং বিশাল পরিমাণ দ্রব্যসামগ্রী একসঙ্গে পরিবহণ, সংরক্ষণ ও বাজারজাতকরণের প্রযুক্তি (বান্ধ-হ্যাভলিং) প্রসার লাভ করার ফলে পাটের আমদানি চাহিদা ১৯৭৩ সাল থেকে বার্ষিক ১.৩ শতাংশ হারে হ্রাস পাচ্ছে। তা সত্ত্বেও, বাংলাদেশ ১৯৯২/৯৩ সালে প্রায় ২ লক্ষ ৮২ হাজার টন কাঁচা পাট ও ৪ লক্ষ ৯২ হাজার টন পাটজাত দ্রব্য রপ্তানির করেছে, যা বিশ্বের মোট পাট ও পাটজাত দ্রব্য রপ্তানি যথাক্রমে শতকরা ৮১ ও ৫৩ ভাগ ছিল। বিশ্ব ব্যাংকের হিসাব অনুযায়ী ১৯৭৩ সাল থেকে বাংলাদেশ প্রতি বছর গড়ে ০.৮ শতাংশ হারে পাটজাত দ্রব্যের রপ্তানি বৃদ্ধি করে যাচ্ছে, যার কারণ হচ্ছে অভ্যন্তরীণ চাহিদা বৃদ্ধিজনিত কারণে ভারতের পাট রপ্তানির পরিমাণ উল্লেখযোগ্য হারে কমে যাওয়া। তবে এটাও স্বীকার করতে হবে যে, সাম্প্রতিক বছরগুলোতে পাট শিল্পে সংস্কার কর্মসূচীর সাথে সাথে এ শিল্পের সাথে জড়িত বণিক ব্যবস্থাপক শ্রেণীও পাটের আন্তর্জাতিক বাজারের গলি ঘুপচি ও ব্যবসার আধুনিক কায়দা কানুন সম্পর্কে বেশ রপ্ত হয়ে উঠেছে। যা পাট রপ্তানি বৃদ্ধির জন্য অবশ্যই অবদান রাখছে।

তৃতীয়তঃ অতীতের তুলনায় পাটের আপেক্ষিক গুরুত্ব অনেকটা কমে গেলেও বাংলাদেশের মোট রপ্তানি আয়ের প্রায় এক-তৃতীয়াংশ ও মোট জাতীয় উৎপাদনের ১২ শতাংশ আসে পাট থেকে এবং এ খাতে সৃষ্টি হয় মোট কর্ম সংস্থানের শতকরা ১০ ভাগ। সর্বোপরি, পাট উৎপাদনের যাবতীয় কর্মকান্ড, পাটের বাজারজাতকরণ, পাটকল ও কুটির শিল্প এবং পাট ব্যবসার সাথে জড়িত রয়েছে প্রায় ২.৫ কোটি লোক। এছাড়াও, প্রায় ৩০ লক্ষ ছোট বড় কৃষক পরিবারের কাছে পাট হচ্ছে প্রধান নগদ অর্থকরী ফসল।

চতুর্থতঃ পাট চাষের এপ্রোনমিও বিশেষভাবে প্রণিধানযোগ্য। পাট গাছের পাতা এবং পরিত্যক্ত গোড়া ও শিকড়গুলো পচে মাটিতে পর্যাপ্ত জৈব সারের যোগান দেয়, যা ইদানিংকালে একাধিক্রমে সেচকৃত ধান চাষের ফলে একেবারে নিম্ন পর্যায়ে নেমে এসে জমির স্বাভাবিক উর্বরতাকে মারাত্মকভাবে হ্রাস করে ফেলেছে। মাটির উর্বরতা রক্ষার জন্য কৃষকদের ফসল চক্র অনুসরণ করতে হয় এবং সেজন্যেই ধান ও অন্যান্য ফসলের সঙ্গে পালক্রমে পাটের আবাদ এক উত্তম ব্যবস্থা হিসাবে বিবেচিত হয়ে থাকে। পাট চাষের আরেকটি সুবিধা হলো বান বন্যার সময় ধানের তুলনায় পাটে ক্ষয়ক্ষতি হয় কম, পরিপক্বতার একটু আগে কাটলেও পাট গাছ থেকে আঁশ ও খড়ি অন্ততঃ কিছুটা পাওয়া যায়। পাটখড়ি পাট চাষের পক্ষে একটি বড় যুক্তি; এক মণ পাটের সঙ্গে ২ মন পাটখড়ি পাওয়া যায়। গ্রামাঞ্চলে পাটখড়ি প্রধান জ্বালানী হিসাবে ব্যবহৃত হওয়া ছাড়াও ঘরের বেড়া, মাচা এবং চালের ছাউনি দেয়ার কাজেও ব্যাপকভাবে ব্যবহৃত হয়। আর পাট শাক যে প্রচুর ভিটামিনযুক্ত উত্তম খাবার-এটা তো শংকর সারজালের

মনোমুগ্ধকর বিটিভি বিজ্ঞাপন চিত্রে অহরহই দেখানো হয়।

উপরি-উক্ত বিবেচনাসমূহকে সামনে রাখলে বাংলাদেশের অর্থনীতিতে পাটের গুরুত্ব কখনও নিঃশেষ হবার নয়। কাজেই পাটকে ভুলে না গিয়ে এর বহুবিধ গুণাবলী ও সম্ভাবনাকে আমাদের সক্রিয় আলোচনা, বিবেচনা ও গবেষণার বিষয়বস্তু করা একান্ত প্রয়োজন।

৩। পাট চাষের লাভ-ক্ষতি

কৃষকদের কাছে এখন পাট চাষ কি লাভজনক? এ প্রশ্নের সরাসরি উত্তর অবশ্যই হ্যাঁ। তবে উত্তরটি একটু তলিয়ে দেখতে হবে।

প্রথমতঃ পাটের ফলনের কথা ধরা যাক। সেই পঞ্চাশের দশক থেকে পাটের একর প্রতি ফলন ১৭-১৮ মণের বেশি হয়নি, যদিও সাম্প্রতিক বছরগুলোতে পাটের গড়পড়তা ফলন কিঞ্চিৎ বৃদ্ধি পেয়েছে বলে প্রতীয়মান হয়। পরিসংখ্যান ব্যুরোর তথ্য অনুযায়ী ১৯৯২/৯৩ সালে পাটের গড় ফলন হয়েছে একর প্রতি ১৯.৩ মণ। এ বৃদ্ধির জন্য সম্ভবতঃ সাদা পাটের স্থলে অধিক ফলনশীল তোষা পাটের চাষ, উন্নত বীজ ও রাসায়নিক সারের ব্যবহার এবং নিবিড় পাট চাষ ও পরিচর্যা পদ্ধতি প্রয়োগ-এ সবের বেশ অবদান রয়েছে।

দ্বিতীয়তঃ মার্চ পর্যায়ের গবেষণার একটি তুলনামূলক বিশ্লেষণে দেখা যায় যে পাটের আয়-ব্যয়ের অনুপাত ধণাত্মক এবং ১ এর বেশি, যদিও তা কালান্তরে প্রত্যাশিত কারণেই ওঠা নামা করে। যেমন, ১৯৫৯ সালে পাটের আয়-ব্যয় অনুপাত ছিল, ১.২৮, ১৯৭৭-এ ১.৩৭ এবং ১৯৯৪ সালে তা দাঁড়িয়েছে ১.২১। উল্লেখ্য যে, পাটের এ লাভ কষার সময় পরিবার কর্তৃক সরবরাহকৃত মানব শ্রম, পশু শ্রম ও গোবর সারের খরচও বাজার দামে হিসাব করা হয়েছে।

তৃতীয়তঃ পাটের লাভ-ক্ষতির হিসাব কেবল পাটকে দিয়ে মেলালেই চলে না, একে দেখতে হয় পাটের বিকল্প ফসলের সাথে আপেক্ষিক লাভ-ক্ষতির নিরিখে। যেমন, ১৯৭৭ সালে এগ্রো-ইকনোমিক রিসার্চ কর্তৃক নিরূপিত পাট ও ধানের দাম অনুপাত অনুযায়ী যেখানে পাট উৎপাদনে ১ টাকা বিনিয়োগ করে পাওয়া গেছে মোট ৩৭ পয়সা, সেখানে পাটের প্রতিযোগী ফসল আউশ ধান উৎপাদনে ১ টাকা বিনিয়োগ করে পাওয়া যেত ১.৫৮ টাকা। এ অবস্থায়, তুলনামূলকভাবে আউশ ধান উৎপাদনে বেশী লাভ হয় বলে কৃষক অবশ্যই ধান উৎপাদনে আরও উন্নত উপকরণ ও প্রযুক্তি ব্যবহার করতে চাইবে। অবস্থাটি আরও বদলে গেছে সেচকৃত উফশী বোরো ধানের বেলায়। পাট থেকে প্রাপ্ত লাভের পরিমাণ তুলনামূলকভাবে উফশী বোরো ধানের চেয়ে কম হয় বিধায় এর সঙ্গে প্রতিযোগিতায় পাট হেরে যাচ্ছে এবং ক্রমান্বয়ে পাটের জায়গা দখল করে নিচ্ছে বোরো ধান।

চতুর্থতঃ পাটের অভ্যন্তরীণ বাজার দাম বর্ধিষ্ণু উৎপাদন খরচের তুলনায় না বাড়ালেও, পাটখড়ির অর্থনৈতিক দিকটি খুব গুরুত্বপূর্ণ হয়ে উঠেছে। মার্চ পর্যায়ের গবেষণা থেকেই দেখা যায় যে ১৯৭৭ সালের তুলনায় ১৯৯৪ সালে পাটের দাম বেড়েছে শতকরা ৩৪৫ ভাগ, কিন্তু একই সময়ে পাটখড়ির দাম বেড়েছে শতকরা ৫৬০ ভাগ। এই ক্রমবর্ধিষ্ণু পাটখড়ির দাম, যা মোট পাট ও পাটখড়ির দামের ১৫-২০ শতাংশ, কৃষকগণ পাট চাষের লাভ-ক্ষতির হিসাবের সময় অতীতের চেয়ে বেশী করে বিবেচনায় নিচ্ছে। পঞ্চমতঃ পাট চাষের লাভ-ক্ষতির সাথে কোন্ বছর পাটের জমির পরিমাণ কত-তারও একটি চমৎকার সম্পর্ক রয়েছে। আসলে, কৃষকরা কোন বছর কতটুকু পাটের আবাদ করবে তা আগের বছরে পাটের সাথে প্রতিযোগী ফসলের আপেক্ষিক দামের ভিত্তিতে নির্ধারণ করে থাকে, যা অর্থনীতির পরিভাষায় কবওয়েব তত্ত্ব দিয়ে ব্যাখ্যা করা হয়। মুজেরী তার আন্তঃদেশীয় গবেষণায় বাংলাদেশ, ভারত ও থাইল্যান্ড-এ তিন দেশের বেলাতেই পাটের জমির পরিমাণ নির্ধারণের ক্ষেত্রে কৃষকদের এ ঝোঁকটির সন্ধান পেয়েছেন। অর্থাৎ কোন বছর পাটের দাম কোন কারণে হঠাৎ বেড়ে গেলে, পরের বছর পাটের

জমি বেড়ে যায় এবং সেই সঙ্গে দামও যায় পড়ে। যার ফলে, তার পরের বছর পাটের আবাদ হ্রাস পেয়ে বাজারে যোগান কমে যায়, আর দাম যায় বেড়ে। প্রসংগতঃ ১৯৮৪ সালের বন্যায় পাটের খুব ক্ষতি হয়েছে—এ অনুমানের ওপর নির্ভর করে ১৯৮৪/৮৫ সালে পাট রপ্তানি বন্ধ ও পাটকলগুলো বেশি বেশি কাঁচা পাট কিনতে থাকলে ঐ বছর পাটের দাম ১৯৮৩/৮৪ সালের তুলনায় প্রায় দ্বিগুণ বেড়ে যায়। এর ফলে ১৯৮৫ সালে পাটের জমি বেড়ে দাঁড়ায় ২৬ লক্ষ ১৪ হাজার একরে, যা পূর্ববর্তী বছরের চেয়ে প্রায় ৫৬ শতাংশ বেশি ছিল এবং ঐ বছর পাটের দামও আগের বছরের তুলনায় অর্ধেক নেমে আসে। এই ভাবে, এ বছর বেশ ভাল তো পরের বছর মন্দ এমনই চক্রাবর্ত নিয়মে কৃষকরা পাট চাষ অব্যাহত রাখছে, যদিও আগেই বলা হয়েছে যে পাটের আবাদ গত এক দশকে বেশ হ্রাস পেয়েছে।

ষষ্ঠতঃ পাট চাষের লাভ কি তার গাণিতিক হিসাবের পাশাপাশি ঘর গৃহস্থালি কাজে পাট ও পাটখড়ির দরকার, ফসল চক্রের অনুসরণে কোন বছর পাট করলে পরের বছর সেই জমিতে অন্যান্য ফসল ভাল হয়, ইত্যাদি সুফলগুলোকেও পাট চাষীরা সক্রিয় বিবেচনায় নিয়ে থাকে, যা আগেই বর্ণনা করা হয়েছে।

৪। পাটের আন্তর্জাতিক বাজার

এবার আসা যাক পাটের দামের ওঠানামা ও পাটচাষীর লাভক্ষতির সাথে আন্তর্জাতিক বাজারে পাটের দামের ওঠানামা যে ওতপ্রোতভাবে জড়িত—সে প্রসংগে। পাটের দাম কত হবে তা আবার নির্ভর করে বহুবিধ বিষয়ের ওপর। উদাহরণস্বরূপ, প্রধান প্রধান পাট উৎপাদনকারী দেশগুলোতে পাট উৎপাদনের পরিমাণ কত, প্রধান প্রধান আমদানিকারক দেশে পাটের মজুত কত, বিশ্ব বাজারে যেসব পণ্যের পরিবহন কাজে পাটের বস্তা/থলে ব্যবহৃত হয় সে সবেব বেচাকেনায় বাড়তি কমতি হলো কিনা, শক্তিশালী মুদ্রাগুলোর বিনিময় হারের উত্থান পতন কতটা হলো, তার সাথে সিনথেটিকের তৈরি বস্তা/থলের প্রাপ্যতা ও দামের পরিবর্তন কি পরিমাণ হলো, ইত্যাদি বিষয়ের ওপর পাটের দাম নির্ভরশীল।

তাই বিশ্ব বাজারে পাটের দাম কমলেই, বাংলাদেশের বাজারেও তার ডেউ লাগতে দেবী হয় না। অধ্যাপক আবদুল্লাহ ফারুক বলেছেন, কোন পক্ষের নষ্টামী ছাড়াই ডাবিতে শতকরা ২০ ভাগ মূল্য হ্রাস হলে শরিষাবাড়ীতে (উদাহরণস্বরূপ) মূল্য হ্রাস হবে শতকরা ৩৩ ভাগ, কারণ রপ্তানিকারকদেরকে জাহাজ, রেল শ্রেডিং অফিস, গুদাম ইত্যাদি বাবদ নির্দিষ্ট খরচ ঠিকই বহন করতে হয় বিধায় চূড়ান্ত হিসাবে কৃষকই কম দাম পায়। তবে প্রশ্ন থাকে যে ডাবিতে পাটের দাম যতখানি কমে যায়, তার পুরোটাই কেন পাট উৎপাদকের ঘাড়ে এসে পড়ে, আর পাট ব্যবসায়ীরা পুরো লাভটাই বা কেমন করে ঠিকই থাকে? অধ্যাপক ফারুকের মতে এটা যেন কোন পক্ষের 'নষ্টামী' নয়। কিন্তু বি.জে.এম.সি. ও বি.জে.সি. সহ অন্যান্য পাট সংস্থা ও পাট কোম্পানীগুলোর এজেন্টরা যখন ফরিদপুরের কানাইপুর বা কিশোরগঞ্জের নান্দাইল বাজারে (উদাহরণস্বরূপ) গিয়ে এটা ভেজা পাট, ওটা নিম্নমানের, আজ তহবিল শেষ, গুদামে জায়গা নেই, ইত্যাদি ফন্দি ফিকিরে কৃষকদের পাট ফিরিয়ে দেয় বা পানির দামে কিনে নেয়, অথবা ফড়িয়াদের কাছ থেকে পাট কিনে নিয়ে বি.জে.সি যখন টাকাটা দিচ্ছি দিব করে মাসের পর মাস ঘোরাতে থাকে, তখন এটাকে নষ্টামী না বলতে চাইলেও ঠগবাজি তো বলা যায়। এদের কারসাজিতে পাট তোলায় মৌসুমেই (জুলাই থেকে সেপ্টেম্বর মাস, যখন ৭০-৮০ ভাগ পাট বিক্রি হয়) ছোট ছোট পাট চাষীরা, যাদেরকে ধার দেনা শোধ করা বা আশু পারিবারিক প্রয়োজন মেটাবার জন্য যখন তখন পাট বেচতেই হয়, তাদের হয় সর্বনাশ। পাট চাষীদের এহেন দুর্দশার জন্য দায়ী কি ডাবি না আমাদের জুট মার্চেন্টগণ বা জুট কর্পোরেশন?

৫। পাট শিল্পের সংকট

বাংলাদেশে বর্তমানে ৬৪ টি পাটকল আছে, যার মধ্যে ৩১টি রাষ্ট্রায়ত্ত্ব সংস্থা বি.জে. এম. সি'র পরিচালনাধীন এবং এগুলো সম্মিলিতভাবে শতকরা প্রায় ৬০ ভাগ পাটজাত দ্রব্য সামগ্রী, যেমন চট, পাটের বস্তা/থলে, কার্পেট বেকিং ইত্যাদি উৎপাদন, বিপণন ও রপ্তানি করে থাকে। বাকী ৩৩টি প্রাইভেট পাটকল মালিকানার ৪৩ শতাংশ মালিকানা রয়েছে সরকারের হাতে। বি.জে.সি. একটি বৃহৎ সরকারী ব্যবসায়ী সংস্থা হিসাবে কাঁচা পাট কিনে ও রপ্তানি করে থাকে।

বিশ্ব ব্যাংকের ১৯৯২ সালের রিপোর্ট অনুযায়ী সরকারী ও বেসরকারী পাটকল নির্বিশেষে তাদের পণ্য বিক্রয় আয়ের প্রায় ২০-২৭ শতাংশ লোকসান দিয়ে যাচ্ছে। একমাত্র বি.জে.এম. সি-র ১৯৯১ সালের লোকসানের পরিমাণ ছিল ২৪০ কোটি টাকা এবং বি.জে. এম. সি-র লোকসান নাকি দেশের সকল শিল্প প্রতিষ্ঠানের মোট লোকসানের শতকরা ৮০ ভাগ। বি.জে.সি-র লোকসানের পরিমাণ হচ্ছে প্রতি বছর ১৫০ কোটি টাকা। রিপোর্টে আরও বলা হয়েছে, প্রাইভেট পাট কলগুলোর অবস্থা ও পরিচালনা সরকারী খাতের পাটকলগুলো থেকে তেমন ভিন্নতর কিছু নয়। পাট শিল্পের এই যে লোকসান, এর নিরূপণ পদ্ধতি প্রশ্নাতীত নয়। এম. এম. আকাশ এর মতে আমাদের স্থানীয় মুদ্রার অতিমূল্যায়িত সরকারী হারের কারণে পাটকলগুলোর আয় যথেষ্ট অবমূল্যায়িত হয়েছে।

বিশ্ব ব্যাংকের রিপোর্টে পাটকলগুলোর নিম্ন উৎপাদনশীলতা ও লোকসানের জন্য যে কারণগুলো উল্লেখিত হয়েছে তার অনেকগুলোই বিশেষভাবে প্রণিধানযোগ্য। উদারণস্বরূপ কয়েকটি ধরা যাক।

প্রথমতঃ বলা হয়েছে যে সরকারী পাটকলগুলো কাঁচাপাটের ক্রয়মূল্য অন্ততঃ শতকরা ১০ ভাগ বেশী করে দেখায় বলে ইউনিট খরচ বেড়ে যায় এবং বেসরকারী পাটকলগুলোর মধ্যে নাকি এ প্রবণতা আরও বেশী। এটি খুবই আশঙ্কার বিষয়, কারণ কাঁচা পাট ক্রয়ের জন্যই কারখানার ইউনিট খরচের প্রায় এক-তৃতীয়াংশ ব্যয় হয়ে যায়।

দ্বিতীয়তঃ শ্রমিকদের মজুরি কারখানার আর্থিক অবস্থা বা শ্রমিকের উৎপাদিতার ভিত্তিতে না করে সামাজিক ও রাজনৈতিক দৃষ্টিকোণ থেকে নির্ধারণ করা হয় এবং সরকার নির্ধারিত মজুরি প্রদানে প্রাইভেট পাটকলগুলোকেও বাধ্য হতে হয়।

তৃতীয়তঃ সরকারী পাটকলগুলোতে শ্রমিক/তঁাত অনুপাত ভারতীয় পাটকলগুলোর তুলনায় প্রায় ৪৫ শতাংশ বেশী বিধায় এখানে শ্রমিকের উৎপাদিতা অনেক কম। অবশ্য একথাও মানতে হবে যে ভারতের তুলনায় বাংলাদেশের পাটকলগুলোতে ব্যবহৃত যন্ত্রপাতি বেশ পুরানো বিধায় এখানে শ্রমিক/তঁাত অনুপাত কিছুটা বেশী হওয়া স্বাভাবিক। প্রসংগতঃ উল্লেখ করা যেতে পারে যে, ১৯৭৩ সালে খলিকুজ্জামান আহমদ তাঁর গবেষণায় পাটশিল্পের হেসিয়ান ও স্যাকিং উৎপাদন ক্ষমতার ৩৮-৫১ শতাংশ অব্যবহৃত ছিল বলে দেখিয়েছিলেন। এত বছর পরেও সে অবস্থার খুব একটা উন্নতি হয়েছে বলে দেখা যাচ্ছে না। সবচেয়ে গুরুত্বপূর্ণ ব্যাপার হচ্ছে প্রাইভেট পাটকলগুলোকেও চাপের মুখে সরকারী মিলগুলোতে প্রচলিত নিয়মনীতি মাফিক পদসৃষ্টি বা নিযুক্তি দান করে যেতে হয়, যার ফলে সরকারী বা বেসরকারী সব পাটকলেই প্রয়োজনতিরিক্ত জনবল ও তাঁত সংখ্যা বিদ্যমান। উপরোল্লিখিত সংকট ছাড়াও শ্রমিক অসন্তোষ, ধর্মঘট, বিদ্যুৎ বিভ্রাট, পুরানো তাঁত, অদক্ষ ব্যবস্থাপনা, শ্রমিকদের দক্ষতাবৃদ্ধির জন্য প্রশিক্ষণের অভাব, ইত্যাদি সমস্যাগুলো তো লেগেই আছে।

৬। উপসংহার – ভবিষ্যতের দিকে

বাংলাদেশের কৃষিতে পাট এখনও এক গুরুত্বপূর্ণ ফসল, যার বিরাট প্রভাব রয়েছে এদেশের শিল্পে, বাণিজ্যে, সামগ্রিক অর্থনীতি ও রাজনীতিতে। ভবিষ্যতে পাট অর্থনীতিকে চাঙ্গা করে তোলার জন্য আমাদেরকে পাটের প্রতিযোগী দেশগুলোর সাথে পাল্লা দিয়ে এগুতে হবে।

প্রথমতঃ পাটের ফলন বৃদ্ধি ও উৎপাদন খরচ কমানোর লক্ষ্যে প্রযুক্তিগত উন্নয়নের প্রয়াস নেয়া প্রয়োজন। এ ক্ষেত্রে বাংলাদেশ পাট গবেষণা প্রতিষ্ঠান উদ্ভাবিত উন্নত জাতের পাট, কেনাফ ও মেসতার বীজ, পরিমিত বীজ সার ভিত্তিক নিবিড় পাট চাষ প্রযুক্তি ইত্যাদির ব্যাপক প্রচার ও প্রসারের ব্যবস্থা নেয়া দরকার। অনেক এলাকায় পাট পচানোর জন্য পর্যাপ্ত পানির অভাব পাট উৎপাদনের একটি বড় অন্তরায় হয়ে দেখা দিচ্ছে। এক্ষেত্রেও বি.জে.আর.আই. উদ্ভাবিত রিবন-রেটিং পদ্ধতি ব্যবহার করে পাট গাছ থেকে ছিলানো কাঁচা আঁশ ভালভাবে পচানো যায়। চীনের পানি ঘাটতির অঞ্চলগুলোতে অনেক কৃষকের পাট একসঙ্গে পচানোর জন্য কমিউনিটি নেটিং পুকুরের ব্যবস্থা আছে। আমাদের দেশেও এ ব্যবস্থার কথা চিন্তা করা যায়।

দ্বিতীয়তঃ পাটের বহুবিধ ব্যবহার বাড়ানো ও তার দ্বারা অভ্যন্তরীণ চাহিদা বৃদ্ধির প্রচেষ্টাকেও জোরদার করা প্রয়োজন। যেমন, আমাদের রাস্তাঘাট, ইমারত ও বাঁধ নির্মাণ কাজে স্টেবিলাইজার হিসাবে জিওজুট/জিও টেক্সটাইল ব্যবহার করা যায়। পাটের তৈরি নভোটেব্ল কবল তো দেখতে সুন্দর, দামেও কম। আমাদের সরকারী হাসপাতাল, সরকারী প্রতিষ্ঠান, প্রতিরক্ষা বাহিনী-এ সবের জন্য সরকার নিজেই নভোটেব্ল কবল কিনতে পারে। পাটের কার্পেটের ডিজাইন ও মানোন্নয়ন করে এর অভ্যন্তরীণ ও আন্তর্জাতিক চাহিদা আরও বৃদ্ধি করা সম্ভব কাঁচাপাট থেকে কাগজ উৎপাদনের লক্ষ্যে মত্ত তৈরির যে উদ্যোগ ইতোমধ্যেই নেয়া হয়েছে তাকে লাভজনকভাবে এগিয়ে নেয়া উচিত। পাট থেকে কাগজ উৎপাদনের ব্যাপারে চীন ও মালয়েশিয়া অগ্রহ দেখাচ্ছে- এটা খুব আশার কথা।

আরেকটি বড় কাজ আমরা করতে পারি। দৈনন্দিন বাজারে কেনাকাটা করতে পলিথিন ব্যাগের পরিবর্তে পাটের তৈরী ব্যাগ ব্যবহার করার অভ্যাসটাকে ফিরিয়ে আনতে পারি। বাংলাদেশের প্রায় দুই কোটি পরিবার যদি বাজার করার জন্য বছরে গড়ে পাঁচটি করে পাটের ব্যাগ ব্যবহার করে, তাহলে এগুলো তৈরি করতেই মোট ৫০ হাজার টন পাট লাগবে। তাতে করে দেশে মোট যে পাট উৎপাদন হয় তার প্রায় ১৯ শতাংশই এ কাজে লেগে যেতে পারে। এ সঙ্গে খুচরা দোকানপাটে যে ব্যাপকভাবে পলিথিন ব্যাগ ব্যবহারের সংস্কৃতি চালু হয়ে গেছে, তার জন্য নিয়ন্ত্রণ প্রতিষ্ঠার ব্যাপারটিকেও গুরুত্ব সহকারে বিবেচনা করা উচিত।

তৃতীয়তঃ পাট ব্যবসা ও পাট শিল্প নীতির সংস্কার ত্বরান্বিত করা প্রয়োজন। 'ট্রেড সিক্রেট' এর মানে অনেক সময় পাটনীতি সময়মত বা আদৌ ঘোষিত হয় না, যার ফলে পাটের দাম নির্ধারণ, পাট কেনাবেচা, গ্রেডিং পরিবহন, ইত্যাদি কাজের গতি কমে যায় ও কারচুপি করার ও সুযোগ সৃষ্টি হয়। বিপুল সংখ্যক পাট চাষীরা হচ্ছে পাট-শিল্পের সর্ববৃহৎ বেসরকারী খাত। এদের জন্য যেমন সুষ্ঠু পাটনীতির দরকার, তেমনি এদের অবগতি ও সিদ্ধান্ত গ্রহণের জন্য পাটের বাজারের সম্ভাব্য গতি-প্রকৃতি সম্পর্কে নতুন নতুন তথ্য সংগ্রহ ও প্রচার করা দরকার।

চতুর্থতঃ সরকারী ও বেসরকারী পাটকলগুলো অনেক সময় মুক্ত বাজার প্রতিযোগিতার সুবাদে পাটজাত পণ্য বিক্রির কন্ট্রোল লাভের জন্য একে অপরের সঙ্গে অসুস্থ প্রতিযোগিতায় লিপ্ত হয় এবং পাটের দাম কখনো অস্বাভাবিকভাবে বৃদ্ধি করে, আবার কখনো হ্রাস করে। এতে জাতীয় অর্থনীতির দারুণ ক্ষতি হয়, ফায়দা লুটে নেয় বিদেশী ক্রেতারা। এ জন্য সরকারী ও বেসরকারী খাতের মাঝে সহযোগিতা বৃদ্ধির প্রয়োজন। এ লক্ষ্যে, সরকারী বেসরকারী পাট সংস্থা ও পাট মন্ত্রণালয়ের প্রতিনিধি সম্বলিত একটি 'জাতীয় পাটজাত দ্রব্য বিক্রয় সংস্থা' গঠনের জন্য হামফ্রেস সুপারিশ বিবেচনা করা যেতে পারে। এ ধরনের একটি সমন্বিত জাতীয় সংস্থা পাটজাত দ্রব্যের নতুন নতুন বাজার খুঁজে বের করবে এবং নতুন গ্রাহকদের প্রয়োজন ও চাহিদা অনুযায়ী পাটজাত দ্রব্যের উৎপাদন কৌশলগুলোও ঠিক করবে।

পঞ্চমতঃ পাটকলগুলোর পুঞ্জীভূত সমস্যাকলোর সমাধানের লক্ষ্যে একদিকে যেমন মিল কর্তৃপক্ষ কর্তৃক জরাজীর্ণ তাঁতের আধুনিকায়ন, বিদ্যুৎ সরবরাহ নিশ্চিতকরণ, শ্রমিক ও কর্মকর্তাদের দক্ষতা বৃদ্ধির আশু ব্যবস্থা নেয়া প্রয়োজন, তেমনিভাবে প্রয়োজন রাজনৈতিক স্থিতিশীলতা ও ঐকমত্যের ভিত্তিতে শ্রমিক অসন্তোষ নিরসনের যুক্তিসংগত ও কার্যকর পন্থার উদ্ভাবন।

ষষ্ঠতঃ আভ্যন্তরীণ ও বিশ্ববাজারে পাট এক নিরন্তর প্রতিযোগিতা ও চ্যালেঞ্জের মুখোমুখি। এ প্রেক্ষিতে পাট সম্পর্কিত যথাযথ নীতিমালা প্রণয়নের জন্য চাই পাট সম্পর্কিত প্রযুক্তিগত ও আর্থনৈতিক গবেষণা ও মননশীল চর্চা। কেবল দাতা সংস্থাগুলো পাটের ওপর রিপোর্টের পর রিপোর্ট প্রণয়ন করবে আর আমরা কেবল তার ওপর আলোচনা সমালোচনা করবো এটি না করে নিজেদেরও পাট গবেষণার ওপর দৃষ্টি দেয়া প্রয়োজন।

সর্বোপরি, সমগ্র বিশ্বে সিন্থেটিকের তৈরি পণ্যের ব্যবহার পরিবেশ দূষণকে প্রকট করে তুলছে। এর বিপরীতে পাটজাত দ্রব্যের যে বহুগুণাবলী সমৃদ্ধ মাধুর্য রয়েছে, তা সৃজনশীল বিজ্ঞাপন প্রচারাভিযানের মাধ্যমে বহির্বিশ্বে তুলে ধরা দরকার।

পরিশেষে, ডঃ রকিবুদ্দিন আহমদের কথা দিয়েই শেষ করছি :

”Jute has played its part well. It can stand the future only if it can do better. The versatility of the fibre and the vitality and resourcefulness of the industry are positively in its favour. And it is with mature experience and quiet confidence that the world jute industry is going to enter the new era.”

পাট অবশ্যই নতুন যুগে প্রবেশ করেছে। আমরাও আমাদের মনন ও মেধা দিয়ে নতুন যুগের অংশীদার হবো এই হোক আজকের পূণ্য বাসনা।

গ্রন্থপঞ্জী

- Agro-Economic Research : Economics of Jute Cultivation in Bangladesh, Report No. 1-55/75, Ministry of Agriculture And Forests, Dhaka, 1977.
- Ahmad, Q. K. : A Note on Capacity Utilization of Jute Manufacturing Industry in Bangladesh. *The Bangladesh Economic Review*, Vol. I, No. 1, 1973.
- Ahmed, Rakibuddin : The Progress of the Jute Industry and Trade (1955-1966), Pakistan Central Jute Committee, Dhaka, 1966.
- আকাশ, এম. এম. : বাংলাদেশের পাট অর্থনীতি-সংস্কার কিন্তু কোন পথে? দৈনিক সংবাদ, ৫, ১২, ১৯, ও ২৬ শে অক্টোবর ১৯৯৩।
- Bangladesh Agri-Consultants : Evaluation of Intensive Jute Cultivation Scheme. Final Report on Survey 11, 1979.
- Bangladesh Bureau of Statistics : *Statistical Pocket Book of Bangladesh*, 1994. Ministry of Planning, Government of the People's Republic of Bangladesh, 1994.
- Bangladesh Jute Research Institute: Bangladesh Jute Research Institute—A Retrospect of Development and Achievement, Dhaka, 1991.
- Chaudhury, S D. and Ali, Md. Ashraf : Report on Survey of Cost of Production of Jute in East Pakistan-1958 & 1959. Pakistan Central Jute Committee, Dhaka, 1962.
- ফারুক, আবদুল্লাহ : বাংলাদেশে পাটের রাজনৈতিক অর্থনীতি। ডঃ রকিবুদ্দিন আহমদ স্মারক বক্তৃতা। বাংলাদেশ জার্নাল অব পলিটিক্যাল ইকনোমি, ভল্যুম ৯, নম্বর ১, ১৯৮৮।
- Government of Pakistan : Report of the Jute Enquiry Commission, Karachi, 1960.
- Humphrey, C. E : Privatization in Bangladesh : Economic Transition in a Poor Country. UPL, Dhaka, 1992.
- International Jute Organization : Annual Report of the International Jute Organization-1993/94.
- Mujeri, M. K. : The Determinants of Average under Jute in Bangladesh, India and Thailand : 1950-1975, *The Bangladesh Journal of Agricultural Economics*, Vol. 4, No. 1, 1981.
- World Bank : Bangladesh Restructuring Options for the Jute Manufacturing Industry, 1992.

প্রফেসর আখলাকুর রহমান স্মারক বক্তৃতা

বাংলাদেশের পানি সম্পদ ব্যবস্থাপনা স্ট্র্যাটেজী : একটি নিরীক্ষা

খন্দকার মুস্তাহিদুর রহমান*

ভূমিকা

বাংলাদেশের মানুষ আবহমান কাল থেকে বন্যা, খরা, অতিবৃষ্টি ও জলোচ্ছ্বাসের মত প্রাকৃতিক দুর্যোগ মোকাবিলা করে এসেছে ও তাঁদের জীবনধারাকে এর সাথে সমন্বিত করেছে। স্বাভাবিক বন্যার সাথে ঘর-বাড়ীর ভিটি উঁচু করে ও কৃষি ব্যবস্থাকে সমন্বিত করে এদেশের মানুষ জীবন ও জীবিকাকে টিকিয়ে এসেছে। কিন্তু, জনসংখ্যা বৃদ্ধি, অবকাঠামো নির্মাণ এবং শিল্প ও নগরায়নের প্রসার সহ ক্রমবর্ধমান অন্যান্য অর্থনৈতিক উন্নয়নের সাথে সাথে বন্যা জনিত ক্ষয়ক্ষতির পরিমাণও প্রভূত বৃদ্ধি পেয়েছে। প্রতি কয়েক বছর অন্তর অন্তর বন্যা জীবন নাশ সহ কৃষি ও অবকাঠামোতে ব্যাপক ধ্বংস ডেকে আনে। ১৯৮৭ ও ১৯৮৮ সালের বন্যায় প্রায় ১৫০০ ব্যক্তি প্রাণ হারিয়েছে এবং কৃষি, অবকাঠামো, শিল্প, স্কুল-কলেজ ও ঘরবাড়ীতে ক্ষতির পরিমাণ দাঁড়িয়েছে প্রায় ২ বিলিয়ন ডলারে। এই বন্যার কারণে দেশের অর্থনীতিতে ব্যাপক ক্ষতি হয় এবং জিডিপির সম্ভাব্য প্রবৃদ্ধি প্রায় ৪%-এ নেমে যায়।

বাংলাদেশের প্লাবন ভূমির পানি সম্পর্কিত প্রক্রিয়া সমূহের জটিল ও স্বকীয় ধারার কারণে প্রাকৃতিক পানি ব্যবস্থার যে কোন অংশের উপর কোন হস্তক্ষেপ অন্য দিকে একসূটার্নালিটির জন্ম দেয় ফলে কৌশল বা স্ট্র্যাটেজী গত বিবেচনার জন্য পানির বিদ্যমান ব্যবস্থার একটি সুশৃঙ্খল মূল্যায়ন বাধ্যতামূলক। হাইড্রোলজি, জিওলজি, পানির স্বল্পতা, সম্পত্তির অধিকার, কৃষি ব্যবস্থা, চরে বসবাসকারী জনগণ, মৎস্য সম্পদ, জলাভূমি, প্রাণবৈচিত্র্য, ইত্যাদি সহ প্লাবনভূমির সকল প্রাকৃতিক ও সামাজিক পরিবেশের উপর সকল সম্ভাব্য হস্তক্ষেপের প্রস্তাবকে মূল্যায়ন করা বাঞ্ছনীয়।

এই প্রবন্ধের মূল উদ্দেশ্য হচ্ছে দেশের একটি টেকসই স্বল্প, মধ্যম ও দীর্ঘমেয়াদী পানি সম্পদ ব্যবস্থাপনা পদ্ধতি উদ্ভাবনের জন্য কিছু কৌশলগত স্ট্র্যাটেজিগত দিক-নির্দেশনা প্রণয়ন। এই স্ট্র্যাটেজির মূলত পাঁচটি দিকঃ ১) বন্যা ব্যবস্থাপনা ও পানির সামগ্রিক ব্যবহারকে সমন্বিত করে একটি জাতীয় পানি নীতি এবং একটি জাতীয় পানি সম্পদ ব্যবস্থাপনা পরিকল্পনা প্রণয়ন ; (২) সকল সেक्टरের ব্যবহারোপযোগী একটি পানি ব্যবস্থাপনা পদ্ধতি উদ্ভাবন, (৩) জনগণের অংশ গ্রহণ, পানি ব্যবহারকারির সহায়তা ও ধারণযোগ্য পরিবেশ উন্নয়নকে সমন্বিত করণ; (৪) একটি দক্ষ ব্যবস্থাপনার জন্য প্রাতিষ্ঠানিক অবকাঠামো নির্মাণ ; এবং এই দক্ষ পানি সম্পদ ব্যবস্থাপনার উদ্দেশ্যকে বাস্তবায়নের জন্য একটি সুপরিচালিত অগ্রাধিকার প্রকল্পসমূহ প্রণয়ন।

এই প্রবন্ধটি ফ্লাড একশন প্ল্যানের (ফ্যাপ) (১৯৯০-৯৪) ব্যাপক উপাত্ত ও তার পূর্ববর্তী জাতীয় পানি পরিকল্পনা (ন্যাশনাল ওয়াটার প্ল্যান) প্রথম ও দ্বিতীয় উপাত্ত সমূহের উপর নির্ভর করে তৈরি করা হয়েছে। প্রবন্ধটিকে উপস্থাপনার সুবিধার্থে চারটি অংশে ভাগ করা হয়েছে। প্রথম অংশে জাতীয় পানি পরিকল্পনার প্রথম ও দ্বিতীয় পর্ব এবং ফ্লাড একশন প্ল্যানের ২৬টি সমীক্ষার বিকাশের প্রক্রিয়া সহ

* অধ্যাপক, অর্থনীতি বিভাগ

জাহাঙ্গীরনগর বিশ্ববিদ্যালয়।

বাংলাদেশের পানি সম্পদ পরিকল্পনার একটি ঐতিহাসিক পটভূমি বর্ণনা করা হয়েছে। দ্বিতীয় অংশে বাংলাদেশের পানি সম্পদ ব্যবস্থাপনায় মূল বিচার্য বিষয় সমূহ (যথা জনগণের অংশ গ্রহণ, সামাজিক ও পরিবেশগত মূল্যায়ন) আলোচনা করা হয়েছে এবং সেই সাথে পানি সম্পদ পরিকল্পনার মূল বাছাইযোগ্য দিক (অপশন) গুলো আলোচিত হয়েছে। তৃতীয় অংশে পানি ব্যবস্থাপনার স্বল্প মেয়াদী ও দীর্ঘমেয়াদী কৌশল বা স্ট্রাটেজী সমূহ বিধৃত হয়েছে এবং চতুর্থ অংশে পানি সম্পদ উন্নয়ন ও দীর্ঘ মেয়াদী পানি সম্পদ ব্যবস্থাপনা উন্নয়নের লক্ষ্যে কিছু অগ্রাধিকার সম্বলিত প্রকল্পের আলোচনা করা হয়েছে।

২। ঐতিহাসিক পটভূমি

বাংলাদেশে পানি পরিকল্পনা নতুন নয়। মুঘল আমলের ঢাকার দোলাই খাল সহ অসংখ্য পানি নিষ্কাশনের জন্য খাল এর সাক্ষ্য বহন করে। উপকূলীয় বেড়ীবাঁধও এর অন্তর্ভুক্ত। ফ্রাগ মিশনের সুপারিশের ভিত্তিতে বর্তমান পানি উন্নয়ন বোর্ড-এর পূর্বসূরী ১৯৬৪ সালে ৫৮ টি বড় বন্যা নিয়ন্ত্রণ, পানি নিষ্কাশন/সেচ প্রকল্প নিয়ে একটি মাস্টার প্ল্যান প্রণয়ন করে। তারই ভিত্তিতে ষাটের দশকের মাঝামাঝি থেকে আশির দশকের শেষ পর্যন্ত প্রকল্পগুলো বাস্তবায়ন করা হয়। শুধুমাত্র বর্ধিত কৃষি উৎপাদনের ভিত্তিতেই প্রকল্পগুলোর ন্যায্যতা যাচাই করা হয়, কিন্তু এই সকল প্রকল্প বাস্তবায়নের ফলে মৎস্য সম্পদ, বন সম্পদ, লবণাক্ততা, শিল্প, শহর ও গ্রামাঞ্চলে, বাসস্থানে পানি সরবরাহ প্রাণ-বৈচিত্র্য ও সর্বোপরি পরিবেশের ভারসাম্যের উপর এর সম্ভাব্য প্রভাব মূল্যায়ন করা হয়নি। এ ছাড়া বড় প্রকল্পের জন্যে পরিচালন ও রক্ষণাবেক্ষণের ব্যয়-বরাদ্দ অপ্রতুল থাকায় এবং রক্ষণাবেক্ষণ কঠিন হওয়ায় প্রকল্পগুলো অচিরেই বিরূপ প্রতিক্রিয়ার জন্ম দেয়।

১৯৭২ সালে বিশ্ব ব্যাংক প্রণীত ল্যান্ড এন্ড ওয়াটার সেক্টর স্টাডি অপেক্ষাকৃত ক্ষুদ্র প্রকল্প বিশেষতঃ ক্ষুদ্র সেচ প্রকল্প সুপারিশ করে। সত্তর ও আশির দশকে প্রাথমিক ভাবে বি. এ. ডি. সি র মাধ্যমে ও পুরে ব্যক্তি মালিকানায় ক্ষুদ্র সেচের ব্যাপক প্রসার ঘটে। কিন্তু, আশির দশকের শুরুতে একটি দীর্ঘমেয়াদী পানি সম্পদ উন্নয়ন পরিকল্পনার প্রয়োজনীয়তা অনুভূত হওয়ায় সেচ, পানি উন্নয়ন ও বন্যা নিয়ন্ত্রণ মন্ত্রণালয়ে মাস্টার প্ল্যান অর্গানাইজেশন প্রতিষ্ঠিত হয়। এম. পি. ও. ১৯৮৬ তে জাতীয় পানি পরিকল্পনা প্রথম পর্ব প্রণয়ন করে এবং ১৯৯১ সালে দ্বিতীয় পর্বের কাজ শেষ করে। এম. পি. ও. পানি সম্পদ ব্যবস্থাপনার জন্যে বেশ কিছু পরিকল্পনা মডেল ও এনালাইটিক্যাল টুল সহ বিপুল তথ্য সন্নিবেশিত করে এবং অনেক স্ট্রাটেজী ও কর্মসূচী প্রণয়ন করে যা সরকার কর্তৃক গৃহীত হয়।

এম. পি. ও. র এ সকল সাফল্য সত্ত্বেও একটি সমন্বিত জাতীয় পরিকল্পনা প্রণয়নের ক্ষেত্রে বেশ কিছু ঘাটতি থেকে যায়। প্রথমতঃ এই পরিকল্পনার সময়কাল ছিল ২০১০ সাল, যা কোন বড় আকারের কর্মসূচীর প্রস্তাব ও প্রয়োজনীয়তা মূল্যায়নে ছিল পর্যাপ্ত। দ্বিতীয়তঃ এই পরিকল্পনা, বেশ কিছু বড় প্রকল্পের মূল্যায়ন ও এই খাতে সমন্বিতকরণ করতে ব্যর্থ হয়। তৃতীয়তঃ অন্যান্য খাতের পানি ব্যবহারের প্রয়োজনীয়তা অপরিবেশিতভাবে মূল্যায়ন করা হয় এবং পানি ব্যবহারের চাহিদাকে সমন্বিত না করে সীমা হিসেবে ধরে নিয়ে পরিকল্পনা তৈরী করা হয় যা সামগ্রিক পানির চাহিদার সাথে সঙ্গতিপূর্ণ ছিল না। চতুর্থতঃ আন্তর্জাতিক নদী সমূহের উপর কোন চুক্তির অভাবে এই পরিকল্পনা ভবিষ্যতে পানি সরবরাহের কিছু ভাঙ্গা ভাঙ্গা দৃশ্য প্রকল্প উপস্থাপন করে। আন্তর্জাতিক পানি সঙ্কীর্ণ ও বন্যা নিয়ন্ত্রণ সংক্রান্ত এম. পি. ও. ছাড়া অন্যান্য পরিকল্পনার অনুশীলন গুলোও একই দোষে দুষ্ট।

ফ্লাড একশন প্ল্যান : ১৯৮৭ ও ১৯৮৮ সালের ভয়াবহ বন্যার পর সরকারের প্রণীত রিপোর্ট সহ বন্যা সম্পর্কে বেশ কিছু সমীক্ষা করা হয়েছে। ইউ. এন. ডি. পি. ফ্রান্স, জাপান ও আমেরিকা যুক্তরাষ্ট্রের এই সকল সমীক্ষায় প্রতীয়মান হয় যে বন্যা নিয়ন্ত্রণের বিকল্প সমূহের উপর সিদ্ধান্ত নেয়ার জন্য প্রযুক্তিগত, আর্থ-সামাজিক ও পরিবেশ সম্পর্কিত উপাদান সমূহের যে সকল গুরুত্বপূর্ণ তথ্য জানা প্রয়োজন, তার প্রকট অভাব রয়েছে। ফলে বাংলাদেশ সরকারের অনুরোধে বিশ্ব ব্যাংক আন্তর্জাতিক দাতা সমূহের

আর্থিক আনুকূল্যে ২৬টি সমীক্ষা ও পরীক্ষামূলক কর্মসূচীসহ ফ্লাড একশন প্ল্যান তৈরী করে। ফ্যাপ পরিচালনা ও পরীক্ষা করার জন্যে সরকার ফ্লাড প্ল্যান কো-অর্ডিনেশন অর্গানাইজেশন নামে একটি প্রতিষ্ঠানও গড়ে তোলে। ১৯৯৪ সালে সকল ফ্যাপের কর্মকাণ্ডের উপর এই প্রতিষ্ঠান একটি রিপোর্ট প্রণয়ন করেছে যা দেশে বিদেশে বিস্তৃত ভাবে পর্যালোচিত হয়েছে। ফ্যাপের আওতাভুক্ত বেশ কিছু সমীক্ষা ও পরীক্ষামূলক প্রকল্পের কাজ শেষ হতে এখনও বাকী আছে। এর মধ্যে কমপার্টমেন্টলাইজেন পাইলট প্রজেক্ট (ফ্যাপ-২০), ব্যাংক প্রটেকশন (ফ্যাপ-২১) নদী শাসন ও সক্রিয় প্লাবনভূমি ব্যবস্থাপনা (ফ্যাপ-২২), জি. আই. এস. (ফ্যাপ-১৯) এবং নদীর উপাত্ত সংগ্রহ (ফ্যাপ-১৪)। বেশ কিছু অতিরিক্ত সমীক্ষাও শুরু হবে। এর মধ্যে চট্টগ্রাম সমুদ্র উপকূল, মেঘনা নদী মোহনা সমীক্ষা, দ্বিতীয় পর্বের পরিচালনা ও সংরক্ষণ সমীক্ষা, বৃহৎ নদী সমূহের আকৃতি ও গঠনের প্রভাব মূল্যায়ন সমীক্ষা, পরীক্ষামূলক মৎস্য সম্পদ সমীক্ষা, বন্যার পূর্বাভাস, পরিবেশ ও জনগণের অংশ গ্রহণমূলক পরিকল্পনা এবং বন্যা প্রতিরোধক্ষম ব্যবস্থা-সম্পর্কিত সমীক্ষার কাজ হাতে নেয়া হয়েছে। এই সকল সমীক্ষার সুফল সমাপ্তির পর যে উপাত্ত সংগৃহীত হবে সেগুলো ভবিষ্যতে প্রণীতব্য পানি সম্পদ উন্নয়নে গুরুত্বপূর্ণ ভূমিকা রাখবে।

ফ্যাপের গুরুত্বপূর্ণ অর্জন সমূহ হচ্ছে

- ১। প্রকল্প মূল্যায়ন, অংশ গ্রহণ মূলক পরিকল্পনা, পরিবেশের উপর প্রভাব মূল্যায়নের নীতি-নির্দেশাবলী প্রণয়ন ও তাদের ব্যবহার খাতে সকল ফ্যাপ প্রকল্প অর্থনৈতিক, সামাজিক ও পরিবেশগত ভাবে সিদ্ধ হয়।
- ২। ফ্যাপ আঞ্চলিক পরিকল্পনার সমীক্ষা সমাপ্ত করেছে, যাতে বেশ কিছু সম্ভাব্য বিনিয়োগ যোগ্য প্রকল্প চিহ্নিত হয়েছে এবং সে সাথে প্রয়োজনীয় উপাত্তের একটি ডাটা ব্যাংক স্থাপন করেছে।
- ৩। ফ্যাপ পরিবেশ বিষয়ক সমীক্ষা সমাপ্ত করেছে এবং সর্বপ্রথম বন্যা নিয়ন্ত্রণ ও পানি নিকাশন প্রকল্প সমূহের মালটি-ডিসিপ্লিনারী মূল্যায়ন করে পানি সম্পদ উন্নয়নের জন্য সামাজিক অর্থনৈতিক ও পরিবেশগত প্রভাব সমূহের আরো অধিক উপলব্ধি সৃষ্টি করেছে।
- ৪। নদীভাঙ্গন রোধ ও প্লাবনভূমি ব্যবস্থাপনার ক্ষেত্রে সৃজনশীল পন্থার উদ্ভাবন ও নদীর উচ্চ প্রবাহ ও পলি বাহন সংক্রান্ত নতুন তথ্য সংযোজন।
- ৫। প্রকল্পের সূচ্য পরিচালনা ও সংরক্ষণের ক্ষেত্রে প্রধান বাধা সমূহ চিহ্নিত করণ।
- ৬। বন্যার পূর্বাভাস ও সতর্কীকরণের ক্ষেত্রে অধিক ক্ষমতা অর্জন ও দুর্যোগ ব্যবস্থাপনার ক্ষেত্রে জি. আই. এস. এর ব্যবহার নিশ্চিত করণ।
- ৭। উন্নত মানচিত্র প্রণয়ন।

ফ্যাপের সফলতার সাথে এর অপূর্ণতাগুলো মূল্যায়ন প্রয়োজন

- ১। আঞ্চলিক পরিকল্পনাসমূহ সামগ্রিক পানি সম্পদ পরিকল্পনার সাথে সমন্বিত হয়নি।
- ২। ফ্যাপের সহায়ক সমীক্ষাগুলো শেষ হবার পূর্বেই আঞ্চলিক পরিকল্পনা গুলো করায় অনেক গুরুত্বপূর্ণ তথ্যাদি সন্নিবেশিত হয়নি।
- ৩। আঞ্চলিক পরিকল্পনা গুলোতে স্ট্রাকচারাল ও নন-স্ট্রাকচারাল ব্যবস্থাসমূহ পূর্ণভাবে সমন্বিত হয়নি।
- ৪। মৎস্য, পরিবেশ ও অংশ গ্রহণমূলক পরিকল্পনা বিষয়ক সমীক্ষাগুলো দেরী করে শুরু হওয়াতে ফ্যাপ সমীক্ষা পূর্ণভাবে সমন্বিত হয়নি।
- ৫। কোন কোন সহায়ক সমীক্ষা ও পরীক্ষামূলক প্রকল্পের কাজ এখনও সমাপ্ত হয়নি। এ ছাড়া প্রাতিষ্ঠানিক উন্নয়নের জন্যে সমীক্ষার ফলাফল দেরীতে পাওয়ায় তা কার্যকর করা যায়নি।

৬। আন্ত-মন্ত্রণালয় সমন্বয়ের অভাব ছিল।

৭। এখনই একটি ভয়াবহ বন্যা হলে কি করা হবে তার পরিকল্পনা এখনও তৈরী করা হয়নি।

৩. বাংলাদেশের পানি সম্পদঃ উন্নয়ন ও ব্যবস্থাপনার বিচার্য বিষয় ও বাছাইযোগ্য দিক

বিচার্য বিষয়ঃ

একটি বহুমাত্রিক জাতীয় পানি সম্পদ ব্যবস্থাপনার পরিকল্পনা অবশ্যই জাতীয় পানির নীতির লক্ষ্য ও উদ্দেশ্য দ্বারা পরিচালিত হওয়া বাঞ্ছনীয়, যা বাংলাদেশে অনুপস্থিত। পানি ব্যবস্থাপনা বন্যা ছাড়াও আরও বহুকিছু বিষয়ের বিবেচনা থাকতে হবে। পানির প্রাপ্যতাকে অবশ্যই আন্তর্জাতিক নদীর প্রবাহ এবং ভূ-গর্ভস্থ পানির পরিমাণ এবং সেচ, মৎস্য নৌ-পরিবহন, সুপেয় পানি, নগরায়ন, লবণাক্ততা ও সর্বোপরি পরিবেশের ভারসাম্য রক্ষা করতে পানির চাহিদার সঙ্গে বিচার করতে হবে। খরা ও পানির মানও পরিকল্পনার অংশ বিশেষ হতে হবে। এ গুলো বিবেচনায় এনে সামষ্টিক পানি পরিকল্পনার মূল বিচার্য-বিষয় হবে :

১। পানি ব্যবস্থাপনা জাতীয় লক্ষ্য ও উদ্দেশ্য নিরূপণঃ ভারত ও থাইল্যান্ড সহ এশিয়ার বহুদেশেই নদী নীতি বর্তমান যা বাংলাদেশে এখনও গৃহীত হয়নি। চীন, ফিলিপাইন এবং ইন্দোনেশিয়ায় পানি নীতি সমূহকে তাদের আইনি-বন্ধনে আবদ্ধ করেছে। জাতীয় পানি পরিকল্পনায় অন্যান্য খাত সমূহের প্রয়োজন মিটিয়ে কৃষি উৎপাদন বৃদ্ধির লক্ষ্যে সেচ সুবিধা প্রসারের বিষয় বিধৃত হয়েছে। ফলে ভবিষ্যত জাতীয় পানি পরিকল্পনার জন্য লক্ষ্য ও উদ্দেশ্য প্রণয়ন জরুরী হয়ে পড়েছে।

২। পানি ব্যবস্থাপনা ও উন্নয়নে বিচার্য বিষয়ঃ

ক) গঙ্গা, ব্রহ্মপুত্র ও মেঘনার নিম্ন অববাহিকায় অবস্থিত দেশ হিসাবে বাংলাদেশ সমগ্র অববাহিকার মাত্র ৮ ভাগ জুড়ে আছে। বর্ষায় যেমন বন্যার প্রকোপ বৃদ্ধি পায় তেমনি অক্টোবর-মে মাসে পানির তীব্র অভাবও দেখা দেয়। ফলে শুষ্ক মওসুমে লবণাক্ততা বৃদ্ধি পায়। এই সকল নদীর উজান পানির ব্যবহার বৃদ্ধি পেলে নিম্ন অববাহিকায় বনভূমি ক্ষয়, ভূমি ক্ষয় এবং লবণাক্ততা বৃদ্ধি পায়। আগামী দশকে ফারাক্কার কারণে সমস্যা আরও বৃদ্ধি পাবে এবং ফারাক্কার মত ব্রহ্মপুত্র ও মেঘনার উজানে পানি প্রবাহ রোধ করলে বাংলাদেশে আরও ব্যাপক ক্ষতিকর প্রভাব পড়বে। এই সকল বাস্তবতার কারণে দক্ষ আভ্যন্তরীণ পানি ব্যবস্থাপনা ও উন্নয়ন, দুর্ভোগ মোকাবিলা উপকূলীয় অঞ্চলে জলোচ্ছ্বাস ইত্যাদি বাংলাদেশের অস্তিত্ব রক্ষায় গুরুত্বপূর্ণ ভূমিকা পালন করবে।

বন্যা জনিত ক্ষয়ক্ষতিঃ জুলাই-আগষ্ট মাসে গঙ্গা, ব্রহ্মপুত্র মেঘনার পানি বৃদ্ধির কারণে প্রতিবছর গড়ে প্রায় ২২ শতাংশ ভূমি প্রাণিত হয়। উত্তর পূর্বাঞ্চলে অতিবৃষ্টির কারণে পাহাড়ী ঢলে ব্যাপক শস্যহানি ঘটায়। গঙ্গা ও ব্রহ্মপুত্রের উচ্চ প্রবাহ একই সঙ্গে সিলেটে ১৯৮৮ সালের বন্যার সৃষ্টি করেছিল যাতে বাংলাদেশের প্রায় ৬০% ভূমি প্রাণিত হয়ে ব্যাপক ক্ষয়ক্ষতি হয়েছিল। এরূপ বন্যা হয়ত প্রতি ১০০ বৎসরে একবার হয় কিন্তু ১৯৮৭ সালের বন্যার উদ্ভব ঘটে প্রায় প্রতি ১০ বৎসর অন্তর। বন্যা প্রতিরোধের জন্য যে বিনিয়োগ প্রয়োজন তা' কি ধরনের বন্যা প্রতিরোধ করা হবে তার উপর নির্ভর করে। বন্যা যত বড় হবে প্রতিরোধের আয়োজনে তার খরচও তত বেশী হবে। তাই ফ্লাড ফ্রিকোয়েন্সীর উপর বিনিয়োগের পরিমাণ নির্ভর করে। বিভিন্ন বন্যার জন্য প্রয়োজনীয় অবকাঠামো নির্মাণের খরচ কম বেশী হবে। কোন ক্ষেত্রে প্রতিরোধের মাত্রা কিরূপ হবে তার জন্যে একটি নীতিমালা প্রণয়ন প্রয়োজন। যেকোন বড় শহর রক্ষায় প্রতিরোধের মাত্রা বেশী হবে, তেমনি একটি গ্রামের জন্যে প্রতিরোধের মাত্রা কম হবে। এবং সেই সাথে বন্যা প্রতিরোধের নন-স্ট্রাকচারাল উপায়কে সমন্বিত করতে হবে।

খরাঃ খরা বাংলাদেশের উত্তর পশ্চিমাঞ্চলের একটি বড় সমস্যা যা, বনভূমি ও মৎস্য সম্পদকে ব্যাপকভাবে ক্ষতি করে। সে জন্যে জাতীয় পানি পরিকল্পনায় ভূমির উপরস্থ পানি ও ভূ-গর্ভস্থ পানির ব্যবহার সমন্বিত করতে হবে।

নদীভাঙ্গন ও নদী বাহিত পলিঃ নদী ভাঙ্গন সম্ভবতঃ ভূমিহীন সৃষ্টির একটি অন্যতম প্রধান কারণ। প্রায় ৪৩ লক্ষ মানুষ সক্রিয় প্লাবন ভূমিতে বাস করে তারমধ্যে প্রায় ২২ লক্ষ মানুষ চরাঞ্চলে বাস করে। ভাঙ্গনের কারণে ১৯৮১-৯৩ সালের মধ্যে প্রায় ৭,২৮,০০০ মানুষ বিতাড়িত হয়েছে। এবং প্রায় ৪,৫০,০০০ মানুষ চরাঞ্চল ও সক্রিয় প্লাবন ভূমি থেকে অভিগমন করেছে। আবার সূক্ষ্ম পলি জমির উর্বরা শক্তি বৃদ্ধি করে। সুতরাং জাতীয় পানি ব্যবস্থাপনা পরিকল্পনায় এ বিষয়ে গুরুত্ব দেয়া বাঞ্ছনীয়।

পরিচালনা ও সংরক্ষণ : বন্যা নিয়ন্ত্রণ ও পানি নিষ্কাশন প্রকল্প সমূহের পরিচালনা ও সংরক্ষণ প্রকৃতই সমস্যা বহুল। অনেক ক্ষেত্রেই ত্রুটিপূর্ণ ডিজাইন সহ প্রকল্পের পরিচালনায় জনগণকে সংশ্লিষ্ট করা হয়নি। এ ছাড়া একাজে অপ্রতুল ও অনিয়মিত অর্থ বরাদ্দ প্রকল্প সংরক্ষণে বাধা হিসেবে দাঁড়ায়।

৩। সামাজিক ও পরিবেশ গত বিচার্য বিষয়ঃ

সর্বস্তরে দারিদ্র্য-দূরীকরণ ও সামাজিক ও পরিবেশগত বিবেচনা গুলোকে সমন্বিত করে অর্থনৈতিক পরিকল্পনা প্রণয়ন করা প্রয়োজন। সুতরাং জাতীয় পানি সম্পদ ব্যবস্থাপনা স্ট্র্যাটেজীর জন্য দারিদ্র্য ও পরিবেশের উপর যে কোন পানি উন্নয়ন পরিকল্পনার সম্ভাব্য প্রভাব মূল্যায়ন মূল বিচার্য বিষয় হওয়া উচিত।

দারিদ্র্যের উপর প্রভাবঃ পানি উন্নয়ন প্রকল্পের মূল উদ্দেশ্য হবে উৎপাদন বৃদ্ধির মাধ্যমে অর্থনৈতিক উন্নয়ন। মূল লাভবানকারীগণ হচ্ছে তারাই যারা সম্পদের মালিক। পানি উন্নয়ন প্রকল্পের মাধ্যমে গ্রামীণ ও শহুরে দরিদ্র জনগণ (১) স্বল্প সময়ের জন্যে কর্ম সংস্থান বৃদ্ধি, শ্রমের চাহিদা বৃদ্ধির কারণে উচ্চ শ্রমহার, (২) ব্যাকওয়ার্ড ও ফরওয়ার্ড লিঙ্কেজ এর মাধ্যমে মধ্যম ও দীর্ঘমেয়াদী কর্ম সংস্থান বৃদ্ধি কিন্তু, প্রকল্পের কারণে মৎস্যের চারণ ভূমি কমে যাওয়ায় মাঝি ও মৎস্যজীবীদের জীবিকা হ্রাস, ক্যাপচার ফিসারীর পরিবর্তনের ফলে দরিদ্র জন সাধারণের প্রোটিনের অভাব, সর্বসাধারণের সম্পত্তিতে ব্যক্তি মালিকানা স্বত্ব প্রতিষ্ঠিত হওয়ায় ঐ সম্পত্তিতে সাধারণের অধিকার খর্ব, ইত্যাদি মিশ্র প্রভাবের সৃষ্টি হয়। এছাড়া, কৃষিতে ধনতন্ত্রের বিকাশের ফলে এবং ক্ষুদ্র সেচের প্রসারের মাধ্যমে পানির ব্যক্তি মালিকানা সৃষ্টির মাধ্যমে বাজার অর্থনীতির সুফলের সাথে অনিয়ন্ত্রিত বাজার সৃষ্টির জন্যে আয়ের বৈষম্য বৃদ্ধি ও দারিদ্র্য দূরীকরণে বাধা হয়ে দাঁড়াতে পারে। এই বিষয় গুলো অবশ্যই পানি সম্পদ পরিকল্পনায় বিবেচনায় আনা প্রয়োজন।

জনগণের অংশ গ্রহণ : পানি সম্পদ পরিকল্পনায় প্রকল্পের আওতাধীন জন সাধারণের অংশ গ্রহণ নিশ্চিত করলে ফলাফল অনেক বেশী শুভ হতে পারে। প্রকল্প বাস্তবায়নে সকল বিষয়ে স্থানীয় জনগণের অংশ গ্রহণ প্রকল্পের সাফল্য নিশ্চিত করে।

চরের অধিবাসিবৃন্দ : চরের অধিবাসিগণ দরিদ্র জনগণের একটি বড় অংশ এবং যে কোন দুর্ভোগে সবচেয়ে নাজুক জনগোষ্ঠী। সরকারী সাহায্য ও সাধারণ ভাবে তাদের নিকট পৌছাতে পারে না।

ভূমির অধিগ্রহণ ও পুনর্বাসন বিষয় : বর্তমান ভূমির অধিগ্রহণ পদ্ধতি অদক্ষ, আমলাতান্ত্রিক, কালক্ষেপনকারী যা প্রকল্প বাস্তবায়নে দেরী হবার প্রধান কারণ। জমি অধিগ্রহণ প্রক্রিয়ায় জমির মালিক ঠিকমত ক্ষতিপূরণ পান না। এবং যাও আদায় করা যায় তা সম্ভব হয় দুর্নীতি, ঘুষ ও জালিয়াতির স্বীকার হয়ে।

পরিবেশগত বিষয়ের বিচার্য সমূহ :

বাংলাদেশ ১২ কোটি মানুষের দেশ। এর শতকরা ৭৫% ভাগ মানুষ গ্রামে বাস করে। জনসংখ্যা বৃদ্ধির বর্তমান হার অব্যাহত থাকলে আগামী ২০১০ সালে প্রায় ১৬ কোটি মানুষ এদেশে বাস করবে। এ ছাড়া দ্রুত নগরায়নের ফলে জনসংখ্যার একটি কাঠামোগত পরিবর্তন ও সাধিত হবে। তাই বন্যা প্রতিরোধ, বন্যা ব্যবস্থাপনা ও বন্যা নিরোধ প্রকল্পের পরিকল্পনা এমন হবে যাতে ভূমি ও পানি সম্পদের পূর্ণ ব্যবহার নিশ্চিত করা যায়। আবার মৎস্য সম্পদ এর উপর এ সকল প্রকল্পের বেশ বিরূপ প্রতিক্রিয়া হতে পারে

এবং কৃষিতে রাসায়নিক কীট নাশক ব্যবহারে মানুষ, প্রাণীকূল ও মৎস্য সম্পদের উপর প্রতিক্রিয়া হতে পারে।

মৎস্য সম্পদঃ প্লাবন ভূমিতে শিকারকৃত মাছ বাংলাদেশের একটি অনন্য সম্পদ আর তা আপামর জনসাধারণের সম্পদ হওয়ায় প্রোটিনের ৮০% ভাগ সরবরাহ করে। কিন্তু বাঁধ জাতীয় নির্মাণ মাছের গতি বিধিকে বাধা দেয় এবং প্রজননে বিরূপ প্রভাব ফেলে বলে উৎপাদন হ্রাস পায়। বিভিন্ন সমীক্ষায় দেখা গেছে যে বাঁধ নির্মাণের কারণে বিভিন্ন প্রকল্পের আওতাধীন এলাকায় মাছের উৎপাদন ক্রমাগত কমে গেছে। শুধু তাই নয় মাছ সম্পর্কে আমাদের জ্ঞানের সীমা এতই অপ্রতুল যে এ সম্পর্কে বিস্তারিত তথ্যাদি না জানা পর্যন্ত নতুন বন্যা নিয়ন্ত্রণ প্রকল্প নির্মাণে অত্যন্ত সাবধান হওয়া প্রয়োজন।

৪। প্রতিষ্ঠান সৃষ্টিতে বিচার্য বিষয় :

পানি সম্পদ উন্নয়ন ও ব্যবস্থাপনার জন্য প্রাতিষ্ঠানিক ব্যবস্থা সৃষ্টি গৃহীত নীতিমালার উদ্দেশ্য ও মার্গ পর্যায়ে কাজের মধ্যে প্রয়োজনীয় একটি সংযোগ। প্রাতিষ্ঠানিক কাঠামো নির্মাণ আইন স্থায়ী সৃষ্টি হয় এবং এতে প্রয়োজনীয় নিয়ম-কানুন গুলো সন্নিবেশিত থাকে। অপূর্ণতা ও ঘাটতি সাধারণতঃ এই নিয়ম-কানুন গুলোর অসঙ্গতি থেকে উদ্ভব ঘটে। এই ঘাটতিগুলো বিভিন্নভাবে সৃষ্টি হতে পারে, যেমন, বিভিন্ন এজেন্সির মধ্যে সংযোগের অভাব, প্রয়োজনীয় প্রশিক্ষণের অভাব ও কাজের উৎসাহের অভাব এবং কোন নির্দিষ্ট কাজ সমাপনের জন্য প্রয়োজনীয় আইনের অভাব, ইত্যাদি। প্রাতিষ্ঠানিক পরিবর্তন ধীরে ধীরে পরিবর্তন করা যায় কিন্তু তা অবশ্যই সম্পদ খাতের অনুকূলে করা বাঞ্ছনীয়। সরকারী অংশ গ্রহণের তিনটি প্রাথমিক বা মৌলিক ক্ষেত্র হচ্ছে : আইন প্রণয়ন, নিয়ন্ত্রণের জন্য সংবিধি এবং পরিচালনা।

পানি সম্পর্কিত আইনের দুটি মৌলিক কাজ হচ্ছেঃ

ক) সরকারের উপর ভূমি ও পানি সম্পদের কিছু মৌলিক ক্ষমতা অর্পন ও দেশের স্বার্থের সাথে ব্যক্তি স্বার্থের সংঘাত না ঘটে।

খ) মৌলিক প্রশাসনিক কাঠামোও প্রয়োজনীয় প্রতিষ্ঠান সৃষ্টি যার মাধ্যমে পানি সম্পদের উন্নয়নের জন্য ব্যবস্থা নেয়া যায়।

সরকারী নিয়ন্ত্রণের ক্ষেত্র হচ্ছে সৃষ্টি আইনের প্রয়োগ, চুক্তি, নিয়ম ও সংবিধি পালন। সাধারণভাবে এ গুলো পানি ও ভূমি ব্যবহার আইন, পানির মান সংরক্ষণ, পরিবেশ দূষণ, ইত্যাদি। কিন্তু ফ্যাপ সমীক্ষাগুলো এ সকল বিষয়ে গবেষণা করেনি। যেমন, ভূমি অধিগ্রহণ ও পুনর্বাসন আইন, নানা কারণে এবং সম্পদের সক্ষম বস্তুনের জন্য পরিবর্তন করা দরকার। দুর্যোগ ব্যবস্থাপনার জন্য কোন বন্ধন নেই। সরকারের পরিচালনার ক্ষেত্রগুলো হচ্ছে : উপাত্ত সংগ্রহ, পরিকল্পনা, ডিজাইন, নির্মাণ ও পরিচালনা ও সংরক্ষণ। অন্যান্য দেশের মত বাংলাদেশের ও আন্তঃখাত সমন্বয়ের সুযোগ সীমিত এবং শুধু সরকার পরিচালনা ক্ষেত্রেই প্রাধান্য দিয়ে থাকি। এ কারণে স্থানীয় প্রশাসন, বেসরকারী প্রতিষ্ঠান ও সুবিধা ভোগীদের মধ্যে দায়িত্ব বন্টনের জন্য সমন্বয় ও প্রশাসন বিকেন্দ্রীকরণের প্রয়োজনীয়তা রয়েছে।

পানি সম্পদ ব্যবস্থাপনার জন্য নানা ধরনের প্রয়োজনীয় প্রতিষ্ঠান সৃষ্টি করা প্রয়োজন। বিস্তারিত বিবরণের মধ্যে না গিয়েও এ কথা বলা যায় যে, পানি ব্যবস্থাপনায় নিম্ন লিখিত প্রতিষ্ঠান সৃষ্টির গুরুত্ব অপরিসীম।

১. পরিকল্পনার জন্য প্রতিষ্ঠান। (২) ডিজাইন ও নির্মাণ প্রতিষ্ঠান।

৩. পরিচালনা ও সংরক্ষণের জন্য প্রতিষ্ঠান। (৪) দুর্যোগ ব্যবস্থাপনার জন্য প্রতিষ্ঠান।

৫. বন্যার পূর্বাভাস ও সতর্কীকরণের জন্য প্রতিষ্ঠান।

৬. জনগণের অংশ গ্রহণ সৃষ্টি ও নিশ্চিত করতে প্রতিষ্ঠান।

এ ছাড়া যে কোন পরিকল্পনা সংক্রান্ত কাজের জবাব দিহিতা আবশ্যিক।

বাছাই বিকল্প :

পানির চাহিদা ও সরবরাহ সমতার জন্য বাংলাদেশকে মধ্যম ও দীর্ঘমেয়াদী অর্থনৈতিক ব্যবস্থাপনা এবং কৌশলগত নীতি নির্ধারণ করতে হবে। ভবিষ্যতের জন্য মধ্যম ও দীর্ঘমেয়াদী পানি সম্পদ উন্নয়ন ও ব্যবস্থাপনার পরিকল্পনা গ্রহণ করতে হবে। অদূর ভবিষ্যতে কৃষি খাতের পক্ষে উদ্বৃত্ত শ্রম গ্রহণ করতে অক্ষম হবে এবং ভবিষ্যতে একর প্রতি উৎপাদন বৃদ্ধিই হবে কৃষি খাতে উৎপাদন বৃদ্ধির মূল কৌশল। ফলন বৃদ্ধির জন্য কৃষি খাতকে আরো নিবিড় উৎপাদনে যুক্ত হতে হবে। ভবিষ্যতে কৃষি খাজনা সহ পরিবেশ রক্ষার জন্য পানির ব্যবহার ও নানা সমস্যা ছাড়া অবকাঠামো ও বাসস্থানের ব্যবস্থা করা হবে একটি দুরূহ কাজ। তাই বাংলাদেশের জন্য সামগ্রিক ভাবে পানি সম্পদ ব্যবস্থাপনা উন্নয়নের তিনটি বাছাই যোগ্য ব্যবস্থা বর্তমানঃ

১। ন্যূনতম সরকারী হস্তক্ষেপ : এই অপশনের মধ্যে সরকার শুধুমাত্র বন্যার পুনর্বাসন ও দুর্যোগ ব্যবস্থাপনায় সংযুক্ত থাকবে, কিন্তু পানি খাতে প্রকল্প সমূহ বেসরকারী খাতে ছেড়ে দিবে (যেমন ক্ষুদ্র সেচ)। মূল ধারণাটি হচ্ছে বাজারের পূর্ণ ব্যবহার করা। এই প্রক্রিয়ায় গত দশকে ক্ষুদ্র সেচের প্রসার সম্ভব হয়েছে। কিন্তু বাজার ব্যবস্থায় কিছু ক্ষতিকর প্রক্রিয়ার সৃষ্টি হয়েছে। সেচ যন্ত্রের মালিকরা একটি নতুন সম্পদের ব্যবহারের মালিক হওয়া আয়ের বৈষম্য সৃষ্টিসহ গ্রামাঞ্চলে ক্ষমতার বৈষম্য সৃষ্টি হয়েছে।

২। বাছাইকৃত হস্তক্ষেপ : (১) এ ছাড়া ঘনবসতিপূর্ণ শহর এলাকা এবং প্রয়োজনীয় অবকাঠামোকে বন্যা ও নদী ভাঙন ও ক্ষয় থেকে রক্ষা করে সেখানে পানি সরবরাহ নিশ্চিত করা এবং নাজুক গ্রামাঞ্চলে ফ্লাড প্রফিৎ এর ব্যবস্থা করে বন্যা ও ভাঙনের হাত থেকে রক্ষা করতঃ সেখানে কৃষি ও মৎস্য উৎপাদন বৃদ্ধির ব্যবস্থা করা।

৩। বৃহৎ আকারের হস্তক্ষেপ : উপরের প্রথম ও দ্বিতীয় অপশনসহ বড় ধরনের বিনিয়োগ যথা বাঁধ ও বহুমুখী ব্যারেজ নির্মাণ, নদীর গতি প্রকৃতি নিয়ন্ত্রণে নদীশাষণ ব্যবস্থা, ইত্যাদি নেয়া যাতে করে বড় নদীর বন্যা ও ক্ষয় রোধ করা যায়।

প্রথম ও দ্বিতীয় অপশন অবশ্যই স্বল্প ও মধ্য মেয়াদে কার্যকর করা যায় যদি প্রয়োজনীয় প্রাতিষ্ঠানিক সংস্কার করা সম্ভব হয়, কিন্তু দীর্ঘ মেয়াদী পরিকল্পনায় বড় আকারের বাঁধ বা ব্যারেজ নির্মাণের জন্য বিপুল অর্থ বিনিয়োগ করার পূর্বে তা অর্থনৈতিক ভাবে লাভজনক কিনা, পরিবেশ গত দিক থেকে সুখম কিনা এবং সামাজিক ভাবে গ্রহণযোগ্য কিনা তা বিবেচনায় আনতে হবে।

সামাজিক ও পরিবেশগত বাছাই বিকল্পঃ

সকল পানি প্রকল্প দরিদ্র জনসাধারণের কল্যাণে আসা উচিত।

সকল প্রকল্পের সামাজিক ও পরিবেশগত প্রভাব মূল্যায়ন করা বাঞ্ছনীয়। আরেকটি অপশন হচ্ছে যে কোন প্রতিরোধ কর্মসূচী পূর্ণ খরচ প্রকল্পের বিনিয়োগ বিশ্লেষণে অন্তর্ভুক্ত হওয়া।

জনগণের অংশ গ্রহণের অপশন গুলো হচ্ছেঃ

- দরিদ্র জন সাধারণের সুবিধা সর্বোচ্চকরণ, বিশেষতঃ দরিদ্র নারীদের যাতে করে প্রকল্প কাজে অংশ গ্রহণ করতে পারে এবং মাছ চাষ, বাঁধের উপর সামাজিক বনায়ন এবং রক্ষণাবেক্ষণ কাজে নারীদের অংশ গ্রহণ নিশ্চিত করা যায়।
- বিভিন্ন শ্রেণীর জনগণের মধ্যে ন্যূনতম সংঘাত (যথা উঁচু ভূমি ও নিচু ভূমির কৃষকগণের মধ্যে বাঁধের এবং বাইরের জনগণের মধ্যে চাষী ও মৎস্যজীবীদের মধ্যে) এবং বাঁধ কেটে ফেলার সম্ভাবনা কমানো।
- জনগণের সাধারণ সামাজিক মালিকানাভুক্ত সম্পদের উপর যাতে ন্যূনতম বিরূপ প্রতিক্রিয়া হয় তার ব্যবস্থা করা যাতে এই সব সামাজিক সম্পদের সুষ্ঠু সংরক্ষণ নিশ্চিত করা যায়।
- পুনর্বাসিত মানুষের সংখ্যা ন্যূনতম করণ।

- চর রক্ষার ব্যবস্থা গ্রহণ সহ নদী তীর সংরক্ষণ ও চরের বাসিন্দাদের সুবিধা বৃদ্ধি করণ।
ধারণযোগ্য পরিবেশ সংরক্ষণের জন্য পরিবেশগত প্রভাব মূল্যায়নকে আরো উন্নীত করণ এবং
গবেষণা পরিচালনা প্রয়োগিক নীতিমালা ও পদ্ধতিকে উন্নীত করা প্রয়োজন।

এই প্রবন্ধে স্থান সংকুলানের জন্য আমরা অন্যান্য প্রাতিষ্ঠানিক অবস্থান সমূহের আলোচনায় যাব না।

পানি সম্পদ ও বন্যা ব্যবস্থাপনা কৌশলঃ

এর আগে পরিচ্ছেদে উপস্থাপিত বিষয়াদি থেকে এই খাতে কার্যকর ব্যবস্থাপনা কৌশল নির্ধারণের প্রয়োজনীয় কিছু সূত্র পাওয়া যেতে পারে। বাংলাদেশের দীর্ঘমেয়াদী লক্ষ্য ও নীতি সমূহের যথোচিত বাস্তবায়নে আরো প্রয়োজন সঠিক ও সুস্পষ্ট কৌশলগত দূরদর্শিতা। এই দূরদর্শিতার মূল উপলব্ধি একথা হতে হবে যে পানি হচ্ছে এক একক সম্পদ, ভূউপরিমিত ও ভূগর্ভস্থ-পানি অবশ্যই অন্তঃসংযুক্ত প্রণালীর দুটো অংশ-যাদের ব্যবস্থাপনায় সুপরিবর্তিত ও সমন্বিত পরিকল্পনা অত্যাৱশ্যক। এছাড়া, পানি হচ্ছে একটি অর্থনৈতিক সম্পদ, এবং নবায়নযোগ্য মিঠা পানি প্রতিটি ক্ষেত্রেই নিত্য সীমিত। পানি ব্যবস্থাপনা সংক্রান্ত পরিকল্পনায় একারণে পানি ব্যবহারকারীদের পারস্পরিক ঘনিষ্ঠ সহযোগিতা একান্তই আবশ্যিক। এবং এক্ষেত্রে সকল স্তরের সংশ্লিষ্ট সকলের সম্পৃক্ততার ভিত্তিতেই লক্ষ্য ও অগ্রাধিকার সমূহ নির্ধারণ করতে হবে।

দীর্ঘ মেয়াদী কৌশল সমূহ :

ক) দীর্ঘ মেয়াদী পরিকল্পনা চিন্তা : পানি সম্পদ ব্যবস্থাপনা ও পরিকল্পনার প্রত্যেকটি স্বতন্ত্র ক্ষেত্রে প্রথম সাধারণ একটি পঞ্চাশ বছর মেয়াদকালের ভিত্তিতে স্বতন্ত্র মেয়াদকাল ও ক্রাইটেরিয়া ইত্যাদির পূর্ণাঙ্গভাবে প্রণয়ন একটি প্রধান স্ট্রাটেজী। প্রকল্পের সামাজিক মূল্য এবং অন্যান্য প্রাসঙ্গিক ব্যয়ের পূর্ণাঙ্গ বিবেচনা থাকতে হবে এবং প্রকল্প বাস্তবায়নের মান উন্নয়ন ও গতি ত্বরান্বিত করতে হবে। সময়ের চাহিদা পূরণ করতে সক্ষম এবং বিকেন্দ্রীকরণ, বেসরকারিকরণ, দায়ভোগী ও অদায়ভোগী সংশ্লিষ্ট সকলের অংশ গ্রহণ, ব্যয়,-পুনর্ভরণ টিকে থাকার সামর্থ্য, ও জনসাধারণের কাছে গ্রহণযোগ্যতা ইত্যাদি বিষয়ের সাথে সামঞ্জস্যপূর্ণ নীতিমালা গ্রহণ করতে হবে।

খ) সমন্বিত পানি ও ভূমি ব্যবহার পরিকল্পনা গ্রহণ : পানি ও ভূমি ব্যবস্থাপনার কার্যকর কৌশলের বিবেচ্য হচ্ছে :

- ১। পুরোপুরি সুরক্ষিত, আংশিক সুরক্ষিত এবং অরক্ষিত এলাকা, কম্পার্টমেন্টালাইজেশন, পানি নিকাশন, সেচব্যবস্থা, ভূমি-ব্যবহার, শস্যচক্র, পরিবেশ, ভূমিক্ষয়/পলি পড়ে ভরাট হওয়া রোধ, মৎস্যচাষ নাব্যতা ও লবণাক্ততা ব্যবস্থাপনা, এবং পানি সরবরাহের ব্যবস্থা,
 - ২। প্লাবন ভূমিকে বিভিন্ন অঞ্চল শ্রেণীতে বিভাজন যাতে প্রয়োজনীয় প্রকৌশলগত ব্যবস্থা গ্রহণ এবং বসতস্থান অর্থনৈতিক কর্মকাণ্ড এবং পরিবেশগত সম্পদের যথার্থ সংরক্ষণ সম্ভব হয়,
 - ৩। খরা ও জলোচ্ছ্বাসের বিরুদ্ধে প্রয়োজনীয় প্রতিরক্ষা ব্যবস্থা গ্রহণ,
 - ৪। পানির অবাধ নিকাশনের সুবিধা রেখে সমন্বিত ভাবে গ্রামীণ সড়ক, মহাসড়ক, রেলপথ ও বাঁধ ইত্যাদির পরিকল্পনা ও নির্মাণ।
- গ) আন্তঃখাত ভারসাম্য অর্জন : আন্তঃখাত ভারসাম্য অর্জন এবং শস্য বহুমুখীকরণে পানি সরবরাহের পাশাপাশি শিল্প ও গার্হস্থ্য খাতে পানির সরবরাহ নিশ্চিত করতে বহুমুখী প্রকল্প ও কর্মসূচী গ্রহণ।

পরিবেশের ক্ষতিকে ন্যূনতম রেখে শস্য উৎপাদন, মৎস্যচাষ, নাব্যতক শহর-এলাকার পানি নিষ্কাশন ও ভূউপরিষহ পানি সম্পদের নবায়নের প্রয়োজন যাতে সম্পন্ন করা যায় সে দিকে দৃষ্টি রেখে ব্যাপক পানি ব্যবস্থাপনা পরিকল্পনার পর্যায়ক্রমিক বাস্তবায়ন আবশ্যিক।

ঘ) আন্ত-দেশীয় পানি প্রবাহের ব্যবস্থাপনাঃ আন্ত-দেশীয় নদী সমূহের পানি প্রবাহ শুকনো মৌসুমে বৃদ্ধি করতে এবং ভরা মৌসুমে সহনীয় মাত্রায় রাখতে আন্তর্জাতিক সহযোগিতা কামনা করা। একই সাথে প্রধান নদী সমূহের ব্যবস্থাপনায় অন্যবিধ বিকল্প সমূহেরও পরীক্ষা অব্যাহত রাখা প্রয়োজন।

ঙ) অববাহিকা ভিত্তিক উন্নয়নঃ বিভিন্ন নদীর অববাহিকায় পানির সুব্যবস্থার জন্য ভূউপরিষহ ও ভূগর্ভস্থ পানির সমন্বিত উন্নয়ন সাধন করতে হবে।

চ) পানি ব্যবস্থাপনার কাঠামোগত ও অ-কাঠামোগত ব্যবস্থার মধ্যে সমন্বয় সাধনঃ বন্যার ক্ষয়ক্ষতি হ্রাসে কাঠামোগত ব্যবস্থাদির (যেমন বাঁধ) পাশাপাশি অ-কাঠামোগত ব্যবস্থাদি (যেমন প্লাবনভূমির বিভিন্ন অঞ্চল শ্রেণীতে বিভাজন, বন্যা নিরোধ ব্যবস্থা ইত্যাদি) গ্রহণ বাঞ্ছনীয়।

পরিবেশ গত অগ্রাধিকার নিরূপণঃ

ইআইপি নীতিমালার আলোকে পানি উন্নয়ন কর্মসূচীর সাথে পরিবেশগত অগ্রাধিকার সমূহের (যেমন আকস্মিক বন্যা ও সাইক্লোন জনিত ক্ষয়ক্ষতি থেকে জান-মাল রক্ষা, ভূমিক্ষয় রহিত, বাধ্যতামূলক পুনর্বাসন ইত্যাদির হ্রাস) সার্বিক সমন্বয় সাধন আবশ্যিক। তারই সাথে সংশ্লিষ্ট প্রতিষ্ঠান সমূহে আনুষ্ঠানিক ও অনানুষ্ঠানিক পরিবেশ শিক্ষা প্রবর্তন করতে হবে।

ক) প্রাতিষ্ঠানিক কৌশল সমূহঃ আগামী ১০-২০ বছরে এমন এক কৌশলগত প্রাতিষ্ঠানিক কাঠামো উদ্ভাবন করতে হবে যা সর্বোচ্চ দক্ষতার সাথে এ খাতের উদ্দেশ্য ও লক্ষ্য সমূহের (যেমন পরিবেশ ও সামাজিক লক্ষ্যসমূহের সাথে উৎপাদন ও বিতরণ লক্ষ্য সমূহের সামঞ্জস্যকরণ, পরিমাপ ও মানের সমন্বয় সাধন ইত্যাদি) অর্জন নিশ্চিত করবে। এ কৌশল সমূহের মধ্যে থাকবেঃ

- বাজারের ব্যর্থতা সরকারী হস্তক্ষেপকে প্রয়োজনীয় করে তুলে এ ধারণাকে স্বীকার করে পানির চাহিদা ও সরবরাহ ব্যবস্থাপনায় সরকারের ভূমিকা নির্ধারণ;
- পরিবেশগত নাজুক ভারসাম্য রক্ষায় আন্তর্জাতিক মতৈক্যের সাযুজ্যে যাতে সরকারী ও বেসরকারী উভয় খাতই পানি ও ভূমির যথোচিত ব্যবহারে বাধ্য থাকে সে মর্মে আইনানুগ/নিয়ন্ত্রণমূলক ব্যবস্থাদি গ্রহণ এবং সর্বতোভাবে অনুসরণ।
- সরকারী পানি সম্পদ খাতের প্রতিষ্ঠান সমূহের কাজ ও কাঠামোকে যৌক্তিকরণ যার ফলে জনস্বার্থ (যেমন অবকাঠামো) সৃষ্টি ও সংরক্ষিত হয়।
- পানি সম্পদ ব্যবস্থাপনায় বেসরকারী খাতে অবাধ অংশ গ্রহণের অনুকূল পরিবেশ ও প্রতিষ্ঠানের নিশ্চিতকরণ।
- যথাযথ প্রাতিষ্ঠানের পদ্ধতির মাধ্যমে স্থানীয় সরকারের বিভিন্ন পর্যায়ে (যেমন থানা, জেলা ইত্যাদি) পানি ব্যবস্থাপনায় জনগণের অংশ গ্রহণ বৃদ্ধিকরণ।
- দায়িত্ব ভাগাভাগি ও আন্ত-প্রতিষ্ঠান সমন্বয়ের মাধ্যমে সরকারী খাতে বিভিন্ন প্রতিষ্ঠানের মধ্যে সহযোগিতার উন্নয়ন সাধন।
- যথাযথ মনিটরিং, মূল্যায়ন এবং স্বচ্ছ পুরস্কার ও শাস্তিমূলক ব্যবস্থার মাধ্যমে বিভিন্ন সরকারী সংস্থা ও প্রতিষ্ঠানের দক্ষতা ও জবাবদিহিতা বর্ধিত করণ।

স্বল্প মেয়াদী কৌশল (১৯৯৫-২০৫৫)

যেহেতু পানি সম্পদের সৃষ্টি ব্যবহার নিশ্চিত করতে সক্ষম এমন উপযুক্ত ব্যবস্থাপনা কর্মসূচী সম্পর্কে তথ্য এখনো কিছু ঘাটতি রয়ে গেছে। প্রাসঙ্গিক তথ্য ও জ্ঞান সমূহের সমন্বয় সাধন এবং বন্যা ও অন্যান্য পানি সম্পদ সমস্যার আশু সমাধান করতে অগ্রাধিকার ভিত্তিক ব্যবস্থাদি গ্রহণের স্বার্থেই একটি স্বল্প মেয়াদী কৌশল উদ্ভব করা হয়েছে। এ কৌশলের মূল বিষয় সমূহ হচ্ছে :

ক. জাতীয় পানি পরিকল্পনা ও ফ্যাপ এর তথ্য উপার্জন অতীতের এফ. সি. ডি. প্রকল্প সমূহের অভিজ্ঞতা ভূউপরিস্থ পানির উন্নয়ন এবং শহরেও বিভিন্ন খাতের পানির চাহিদার ভিত্তিতে একটি দীর্ঘ মেয়াদী জাতীয় পানি সম্পদ ব্যবস্থাপনা কৌশল ও নতুন একটি জাতীয় পানি ব্যবস্থাপনা পরিকল্পনা প্রণয়ন।

খ. দ্রুপযুক্ত বিধি প্রণয়ন রীতিমালা প্রবর্তন, এবং সংস্থা, বিশেষজ্ঞ, প্রয়োজনীয় প্রশিক্ষণ ও অন্যান্য অবকাঠামোগত উন্নয়নের মাধ্যমে ভবিষ্যৎ কর্মসূচী গ্রহণে প্রাতিষ্ঠানিক সামর্থ বৃদ্ধি।

গ. কৃষি বিপ্লব, নৌ, নাগরিক ও গার্হস্থ্য পানি ব্যবহারকে যথোচিত রাখতে অর্থনৈতিক, সামাজিক ও পরিবেশগত ও নর্ম নিরূপণ।

ঘ. পানি সম্পদ ব্যবস্থাপনা অবকাঠামো ও স্থাপনাসমূহের ও রক্ষণাবেক্ষণ সম্পর্কে প্ল্যান তৈরী এবং এসব স্থাপনা ও অবকাঠামোর পরিকল্পনা, বাস্তবায়ন, পরিচালনা এবং রক্ষণাবেক্ষণার্থে সুবিধাভোগীদের বর্ধিত অংশ গ্রহণের লক্ষ্যে উপযুক্ত প্রাতিষ্ঠানিক কাঠামো সৃষ্টি।

ঙ. সম্ভব স্বল্প সময়ে লক্ষ্যমাত্রা অর্জনের স্বার্থে অসমাপ্ত প্রকল্প সমূহের দ্রুত সমাপ্তিকরণ।

চ. সুনির্দিষ্ট ও স্বীকৃত জরুরী প্রকল্প ও কর্মসূচীর (যেমন বন্যার পূর্বাভাস, দুর্ঘোণ ব্যবস্থাপনা, তথ্য সরবরাহ, নদীশাসন, খানার পানি নিষ্কাশন, শহরের বাণিজ্যিক, শিল্প ও সরকারী উপযোগ-কেন্দ্রসমূহের) বাস্তবায়ন। সে সাথে সামাজিক মূল্যের যথাযথ বিশ্লেষণ এবং প্রাসঙ্গিক অন্যান্য ব্যয় ভারের সঠিক বিবেচনা থাকতে হবে।

৪। উন্নয়ন কর্মসূচী

৩ নং পরিচ্ছেদে বলা হয়েছে, আগামী পাঁচ বছরের কর্মসূচীর মুখ্য তিনটি বিষয় হবে,

(ক) একটি সমন্বিত জাতীয় পানি ব্যবস্থাপনা প্ল্যান প্রণয়ন, (খ) প্রতিষ্ঠানের উন্নয়ন, এবং (গ) পরিবেশগত বিবেচনায় গ্রহণযোগ্য এবং সংশ্লিষ্টদের কাছেও গ্রহণযোগ্য উচ্চ অগ্রাধিকারমূলক নির্বাচিত প্রকল্পের বাস্তবায়ন।

পরিকল্পনা : এ পরিকল্পনার অন্তর্ভুক্ত হচ্ছে ফ্যাপ-এর বিশিষ্ট সমীক্ষা ও পাইলট প্রকল্প সমূহ এবং ফ্যাপ কর্তৃক প্রণীত পরিকল্পনা ট্রাইটেরিয়ার চূড়ান্তকরণ, এবং ফ্যাপ ও জাতীয় পানি পরিকল্পনার প্রাপ্ত ফলাফলের সমন্বয়ে 'জাতীয় পানি ব্যবস্থাপনা' পরিকল্পনা প্রণয়ন, যা থেকে ২০০০ সালের মধ্যে একটি কৌশল ও ভবিষ্যতের জন্য বাস্তবায়ন কর্মসূচী পাওয়া যাবে।

প্রাতিষ্ঠানিক উন্নয়ন : এ উন্নয়নের অংশ হিসাবে একটি নতুন জাতীয় পানি সম্পদ পরিকল্পনা সংস্থা গঠনের উদ্দেশ্য এম. ডি. সি. ও. এবং ওয়াই. এ. আর. পি. ও. একীভূত হবে, এবং বাংলাদেশ পানি উন্নয়ন বোর্ড সংশ্লিষ্ট অন্যান্য সরকারী প্রতিষ্ঠানকে শক্তিশালী করা হবে।

বাস্তবায়ন : নদীর তীর রক্ষা, ঘূর্ণিঝড় ব্যবস্থাপনা, শহর এলাকার সুরক্ষা ও বন্যা নিরোধ তৎপরতা সহ বিভিন্ন উচ্চ সাধিকারমূলক প্রকল্পের বাস্তবায়ন এই কর্মসূচীর মধ্যে থাকবে। পানি ব্যবস্থাপনা উন্নয়ন কেবল চলমান প্রকল্প ও ফ্যাপ পাইলট প্রকল্প ও সমীক্ষার উপর নির্ভরশীল নয় এমন অন্যান্য উচ্চ অগ্রাধিকার যুক্ত প্রকল্প সমূহের পুনর্বাসন ও উন্নয়নের মধ্যে সীমিত থাকবে। প্রস্তাবিত বিনিয়োগ কর্মসূচীর মূলনীতি ৩ নং ছকে দেখানো হয়েছে।

এই পাঁচ বছরের পরে নতুন জাতীয় পানি ব্যবস্থাপনা পরিকল্পনার নিরীখে পানি সম্পদ খাতে উন্নয়নে এক ধারাবাহিক ও বিবর্তনশীল কাঠামো কাজ করতে থাকবে। অর্থনৈতিক অবস্থার পরিবর্তন ও প্রযুক্তির বিকাশের সাথে সংগতি রেখে কর্মসূচী ও প্রকল্পে প্রয়োজনীয় পরিবর্তন পরিবর্তন আসবে।

প্রথম পাঁচ বছরে গৃহীত নির্দিষ্ট প্রকল্প সমূহের (শহর এলাকার সুরক্ষা, বিভিন্ন সংকটাপন্ন স্থানে নদীভাঙ্গন রোধ, ঘূর্ণিঝড় প্রতিরোধ ব্যবস্থা) পরে কর্মসূচী সার্বিক পানি ও বন্যা ব্যবস্থাপনা, নিষ্কাশন ও পরিশোধন ইত্যাদিতে মোড় নিতে পারে। এসবের উন্নয়ন ক্রাইটেরিয়া ২০০০ সাল নাগাদ নির্ধারিত হয়ে যাবে। এ সময়কালে পাইলট প্রকল্পসমূহ থেকে প্রয়োজনীয় অনেক তথ্যই পাওয়া যাবে, এবং নতুন প্রকল্প প্রণয়নে এসব তথ্য তখন অন্তর্ভুক্ত হবে। বন্যা নিরোধ তৎপরতা অন্যান্য অবকাঠামোগত ব্যবস্থার সাথে সাথে আরো বিবাদ হতে পারে। বেসরকারী খাতও সম্ভবত: এক্ষেত্রে অধিক মাত্রায় গুরুত্বপূর্ণ ভূমিকা পালন করবে। মাঝারি শহরসমূহের সুরক্ষা এবং অগ্রাধিকারমূলক নদী সম্পর্কিত কাজ অব্যাহত থাকবে।

ভিত্তিকতায় নীতিগত ও আইনগত বিশ্লেষণ

১৯৯৯

এই পত্রিকাটিতে বিভিন্ন বিষয়ে লেখকগণের মতামত প্রকাশ করা হয়েছে। এগুলোর মধ্যে কিছু আইনগত দৃষ্টিকোণ থেকে বিশ্লেষণ করা হয়েছে।

Articles

লেখকগণের মতামত প্রকাশ করা হয়েছে। এগুলোর মধ্যে কিছু আইনগত দৃষ্টিকোণ থেকে বিশ্লেষণ করা হয়েছে।

মুক্তিযুদ্ধের আকাঙ্ক্ষা ও আত্মনির্ভরতার প্রশ্ন

আতিউর রহমান*

“আজ সমাজের মনটা সমাজের মধ্যে নাই। আমাদের সমস্ত মনোযোগ বাহিরের দিকে গিয়াছে। কোনো নদী যে গ্রামের পাশ দিয়ে বারবার বহিয়া আসিয়াছে, সে যদি একদিন সে গ্রামকে ছাড়িয়া অন্যত্র তাহার স্রোতের পথ লইয়া যায়, তবে সে গ্রামের জল নষ্ট হয়, ফল নষ্ট হয়, স্বাস্থ্য নষ্ট হয়, বাণিজ্য নষ্ট হয়, তাহার বাগান জঙ্গল হইয়া পড়ে, তাহার পূর্বসমৃদ্ধির ভগ্নাবশেষ আপন দীর্ঘ ভিত্তির ফাটলে বট-অশ্বখ প্রশ্রয় দিয়া পেচক-বাদুড়ের বিহারস্থল হইয়া উঠে”।

রবীন্দ্রনাথ ঠাকুর, ‘স্বদেশী সমাজ’, আত্মশক্তি, রর, দ্বিতীয় খণ্ড, বি,ভা, (১৩৯৩), পৃঃ ৬২৬।

“..... এ যুদ্ধ গণযুদ্ধ... এ যুদ্ধ বাংলাদেশের দুঃখী মানুষের যুদ্ধ। খেটে খাওয়া সাধারণ কৃষক, শ্রমিক, মধ্যবিত্ত, ছাত্র-জনতা, তাদের সাহস, তাঁদের দেশপ্রেম, তাঁদের বিশ্বাস, স্বাধীন বাংলাদেশের চিন্তায় তাঁদের নিমগ্নপ্রাণ, তাঁদের আত্মহুতি, তাঁদের ত্যাগ ও তিতিক্ষায় জন্ম নিল এই নতুন স্বাধীন বাংলাদেশ। সাড়ে সাত কোটি মানুষের সম্মিলিত প্রচেষ্টায় ফলপ্রসূ হয়ে উঠুক আমাদের স্বাধীনতার সম্পদ। বাংলাদেশের নিরন্ন দুঃখী মানুষের জন্য রচিত হোক এক নতুন পৃথিবী, যেখানে মানুষ মানুষকে শোষণ করবেনা। আমাদের প্রতিজ্ঞা হোক ক্ষুধা, রোগ, বেকারত্ব আর অজ্ঞতার অভিশাপ থেকে মুক্তি। যারা আজ রক্ত দিয়ে উর্বর করছে বাংলাদেশের মাটি, যেখানে উৎকর্ষিত হচ্ছে স্বাধীন বাংলাদেশের নতুন মানুষ, তাঁদের রক্ত আর ঘামে ভেজা মাটি থেকে গড়ে উঠুক নতুন গণতান্ত্রিক সমাজব্যবস্থা...”

(.... মুক্তিযুদ্ধকালীন বাংলাদেশ সরকারের প্রধানমন্ত্রী তাজউদ্দীন আহমদের ১১ই এপ্রিল, ৭১ তারিখে প্রচারিত বেতার ভাষণ থেকে। দেখুন বাংলাদেশের স্বাধীনতায়ুদ্ধ দলিলপত্র : তৃতীয় খণ্ড, পৃঃ ১৫)

১। ভূমিকা

জাতি হিসেবে বাঙালীর সবচেয়ে বড় অহঙ্কার একান্তর। হাজার বছরের শ্রেষ্ঠ অর্জন। একান্তরেই আমরা এক হয়েছিলাম বড়ো দুঃখে, ভীষণ আনন্দে, বিপুল আশায় সে সময় একত্রে দুঃখ পাবার কারণে আমাদের জাতীয় বন্ধন হতে পেরেছিল সুদৃঢ়। একান্তরে আমরা সুদীর্ঘ অতীতের প্রয়াস, পূর্বপুরুষদের সংগ্রাম, তাদের কীর্তি ও মহত্বের স্মৃতিসম্পদ পুঁজি করে পরস্পর সম্মত হয়েছিলাম সুখে দুঃখে একত্রে বাস করবার। ‘ক্ষুধা, রোগ, বেকারত্ব ও অজ্ঞানতার অভিশাপ’ থেকে মুক্তি পাবার এক স্বপ্নে বিভোর ছিলাম সেই সময়ে। রক্ত ও ঘামে ভেজা মাটিতে যে নতুন গণতান্ত্রিক সমাজব্যবস্থা গড়ে তোলার স্বপ্ন আমরা সেদিন দেখেছিলাম তার মূলে ছিল বাংলাদেশের নতুন মানুষ। ঐ মানুষদের সম্মিলিত প্রয়াসেই গড়ে ওঠার কথা ছিল সজাবনাময় বাংলাদেশের। আজ যদিও বিপুল প্রাণশক্তির প্রতীক সেই লড়াকু জাতির জুড়ি মেলা ভার, তা সত্ত্বেও অল্প সময়ের জন্যে হলেও জেগে ওঠা সেই ‘সজিব সত্তা’ নিশ্চয় একবারে নিঃশেষ হবার নয়। বর্তমানেও থাকবার কথা, অতীতে একসাথে কাজ করার মতো নিবিড় আকাঙ্ক্ষার রেশ। কেননা আমরা এতো কষ্ট সহ্য করে যে দেশটিকে স্বাধীন করলাম এবং যাকে আমাদের পরের প্রজন্মের হাতে তুলে দিতে চাই, নিশ্চয়ই তাকে আমরা ভালোবাসি। আগের মানুষ, আজকের মানুষ আর পরের মানুষ আসলে একই মানুষ। স্বাধীনতার স্বপ্নে বাঁধা সেই মানুষ আর এই মানুষ একই মানুষ। আর প্রজন্ম থেকে প্রজন্মে প্রবহমান এই স্বপ্নই আসলে একটি জাতি গঠনের মূলমন্ত্র। রেনেসার ভাবনায় সিক্ত হয়ে তাই রবীন্দ্রনাথ লিখেছেন :

* সিনিয়র রিসার্চ ফেলো, বিআইডিএস।

“অতীতে সকলে মিলিয়া ত্যাগ-দুঃখ স্বীকার এবং পুনর্ব্যবস্থা সেই জন্য সকলে মিলিয়া প্রস্তুত থাকিবার ভাব হইতে জনসাধারণকে যে একটি একীভূত নিবিড় অভিব্যক্তি দান করে তাহাই নেশন। ইহার পশ্চাতে একটি অতীত আছে বটে, কিন্তু তাহার প্রত্যক্ষগম্য লক্ষণটি বর্তমানে পাওয়া যায়। তাহা আর কিছু নহে সাধারণ সম্মতি, সকলে মিলিয়া একত্রে জীবন বহন করিবার সুস্পষ্ট পরিব্যক্তি ইচ্ছা।” (রবীন্দ্রনাথ ঠাকুর, ‘নেশন কী’, আত্মশক্তি, রর, দ্বিতীয় খন্ড, বি, ভা, (১৩৯২), পৃঃ ৬২১)।

স্বাধীন বাংলাদেশের শুরুতে সম্মিলিত সে ইচ্ছাটি ছিল। আত্মনির্ভরতার। আত্মমর্যাদার। ত্রাণ-বিরোধিতার। স্ব-কর্মে নিয়োজিত থেকে নিরাপদে বেঁচে থাকবার। রোগ, শোক থেকে মুক্ত হয়ে সম্মানজনকভাবে বেঁচে থাকবার। কিন্তু অস্বীকার করার উপায় নেই যে, সে স্বপ্ন থেকে আমরা এখন অনেক দূরে। হাল আমাদের বৈশ্বিকরণ প্রক্রিয়া শুরুর বহু আগে থেকেই আমরা সরে আসতে শুরু করেছিলাম “অতীতের গৌরবময় স্মৃতি ও সেই স্মৃতির অনুরূপ ভবিষ্যতের আদর্শ” (রর, ঐ, ২য় খন্ড, পৃঃ ৬২১) থেকে। মূল থেকে বিচ্ছিন্ন হবার সে প্রক্রিয়া ইদানিং আরো প্রবল হয়েছে। এখন আরো সবল হচ্ছে।

ইচ্ছে বা আকাঙ্ক্ষা নিঃসন্দেহে পরিবর্তনশীল। জাতির ক্ষেত্রেও হয়তো তা প্রযোজ্য। কিন্তু এমন কিছু মহৎ ইচ্ছে আছে যা দীর্ঘদিন সজীব থাকবার অধিকার রাখে। নানা বিরোধ সত্ত্বেও, যে কোনো উপলক্ষে অনেক মানুষের চিত্ত এক হবার জন্যে উন্মুখ হয়ে থাকে। জনসম্প্রদায়ের মধ্যে এক হবার এমন শক্তি রয়েছে যা বহুত্ব নদীর মতো। সময়, সুযোগ ও সংগঠন পেলে সেই শক্তির আবির্ভাব হতেই হবে। বিচিত্রের মিল ঘটতেই হবে। সম্ভাবনার বিকাশ হতেই হবে।

এমন একটি ইতিবাচক পরিপ্রেক্ষিত মনে রেখেই আলোচ্য প্রবন্ধে আমরা নীচের দিকগুলোর ওপর নজর দিতে চাই :

- ক. মুক্তিযুদ্ধের মানুষ ও আকাঙ্ক্ষা;
- খ. যুদ্ধোত্তর বাংলাদেশের মানুষের গর্বিত যাত্রা ;
- গ. পরনির্ভরতার গ্লানি ও সমকালীন বাস্তবতা;
- ঘ. প্রচলিত উন্নয়ন প্রচেষ্টার সীমাবদ্ধতা;
- ঙ. আত্মনির্ভরতার উপায় ;
- চ. উপসংহার

২। মুক্তিযুদ্ধের মানুষ ও আকাঙ্ক্ষা

সকল অর্থেই বাংলাদেশের মুক্তিযুদ্ধ ছিল একটি জনযুদ্ধ। ‘খেটে খাওয়া সাধারণ কৃষক, শ্রমিক, মধ্যবিত্ত, ছাত্র-জনতা’ (তা.আ.) সবাই একাত্মে যুদ্ধে নেমেছিলেন মৌলিক কিছু আকাঙ্ক্ষা বুকে নিয়ে। অত্যাধিকার ভিত্তিতে সাজালে সেসব আকাঙ্ক্ষার মধ্যে ছিল :

১. মাতৃভূমির স্বাধীনতা
২. শোষণ-মুক্ত সমাজ প্রতিষ্ঠা
৩. স্বার্থান্বেষী মহলের আধিপত্য খর্ব করা
৪. আত্মমর্যাদা নিয়ে বেঁচে থাকা
৫. এক সমৃদ্ধিশালী দেশ গঠন।

যেসব মুক্তিযোদ্ধার কাছ থেকে এই সব আকাঙ্ক্ষার কথা আমরা জানতে পেরেছি তারা ছিলেন বয়সে তরুণ (৬০% ছাত্র) শতকরা ৮৫ ভাগ মুক্তিযোদ্ধাই এসেছিলেন কৃষক পরিবার থেকে। এছাড়া ব্যবসা ও চাকরি করতেন এমন পিতার সন্তানেরাও যুদ্ধে গিয়েছিলেন। মুক্তিযোদ্ধাদের শতকরা ১২.৫ ভাগ ছিলেন নিজেরাও চাকুরে, ১২% কৃষক এবং ৮% ব্যবসায়ী। শ্রেণীগতভাবে মধ্যবিত্তের সন্তানেরাই বেশি হারে মুক্তিযুদ্ধে গিয়েছিলেন। কিন্তু নিম্নবিত্তের প্রবল সমর্থন ও সহযোগিতা তাদের সঙ্গে ছিল। শিক্ষার দিক

থেকে ৬৫% এর মতো মুক্তিযোদ্ধা মাধ্যমিক ও তার চেয়েও ওপরের স্তরের শিক্ষায় শিক্ষিত ছিলেন। তবে এই শিক্ষিত তরুণদের মুক্তিযুদ্ধের ক্ষেত্র তৈরী হচ্ছিল দীর্ঘদিন থেকে। ভাষা আন্দোলন, শিক্ষা আন্দোলন, ৬-দফা, ১১-দফা তথা ঊনসত্তরের গণ-অভ্যুত্থানের মধ্য দিয়ে বাঙালীর যে জাতীয় মুক্তির আকাঙ্ক্ষা গড়ে ওঠে তাতে কৃষক বঞ্চনা ও শ্রমিক নিপীড়নের ভূমিকা ছিল তাৎপর্যপূর্ণ। ঊনসত্তর ও সত্তর সালের পত্র-পত্রিকা যেটে আমরা শ্রমিক ও কৃষকদের নানা ধরনের শোষণ ও বঞ্চনার হৃদয় পেয়েছি (দেখুন, রহমান ও অন্যান্য, ঐ)। এর পেছনে ছিল অর্থনৈতিক বৈষম্য ও অগণতান্ত্রিক রাষ্ট্রের চাপ। সৌভাগ্য আমাদের, মূলতঃ কৃষক শ্রেণী থেকে আগত এক ঝাঁক নিবেদিত প্রাণ সংগঠক সাধারণ মানুষের আর্থ-সামাজিক মুক্তির আকাঙ্ক্ষা সমূহকে মূলধারার রাজনীতির সঙ্গে সম্পৃক্ত করতে সক্ষম হয়েছিলেন। সেই নেতৃত্ব ও সাধারণ মানুষের ত্যাগ-তীতিষ্কার উপযুক্ত সম্মিলনের ফসল এই বাংলাদেশ। রক্তাক্ত মুক্তিযুদ্ধের শেষে সাধারণ মানুষের এসব আকাঙ্ক্ষা পূরণের জন্যে চাপ আসাটা খুবই স্বাভাবিক। দীর্ঘদিনের বঞ্চনা মানুষকে খানিকটা অসহিষ্ণু করেছিল বৈকি। কিন্তু মুক্তিযুদ্ধের নেতৃত্ব দিয়েছিলেন যে রাজনীতিকরা তাঁরা ছিলেন বিচক্ষণ ও দক্ষ। বিশেষ করে বঙ্গবন্ধুর সুযোগ্য সহযোগী প্রধানমন্ত্রী তাজউদ্দীন আহমদ যুদ্ধের সময়েও প্রস্তুতি নিচ্ছিলেন আত্মনির্ভর বাংলাদেশ গড়বার। প্রবাসেই ধীমান বুদ্ধিজীবী ও দক্ষ সরকারী কর্মকর্তাদের সম্মিলন ঘটিয়েছিলেন তিনি পরিকল্পনা কোর্সে। প্রশাসনিক কাঠামো, অন্তর্ভুক্তিকালীন আর্থিক বিধিমালা ও বাজেট বিবরণীও তৈরী করতে সক্ষম হয়েছিলেন তিনি যুদ্ধের মাঠে থেকেও। মুক্তবাংলাদেশের অবকাঠামো পুনর্নির্মাণ, মুক্তিযোদ্ধাদের দেশগঠনে কাজে লাগানো এবং বিদেশী সাহায্য পরিহারের দৃঢ় অঙ্গীকার ব্যক্ত করেছিলেন তিনি প্রবাসী সরকারের পক্ষ থেকে (দেখুন, স্বাধীনতা যুদ্ধ দলিল পত্রঃ তৃতীয় খন্ড)।

৩। যুদ্ধোত্তর বাংলাদেশের মানুষের গর্বিত যাত্রা

যুদ্ধকালীন সময়ে প্রবাসী সরকার যেসব প্রতিশ্রুতি দেশবাসীকে দিয়েছিলেন তা দ্রুত রূপায়ণের উদ্যোগ নিয়েছিলেন স্বাধীন বাংলাদেশের সরকার। ঐ সব প্রতিশ্রুতির স্থায়ী প্রতিফলন ঘটে বাহান্তরের সংবিধানে এবং তিরাস্তরের প্রথম পঞ্চবার্ষিক পরিকল্পনায়। তবে জনচাহিদার তুলনায় সেদিনের রাষ্ট্রের রূপায়ণ ক্ষমতা ছিল সীমিত। তাছাড়া খুব দ্রুতই বাংলাদেশের অভিজ্ঞ শাসক শ্রেণী সাধারণ মানুষের আকাঙ্ক্ষা থেকে দূরে সরে আসতে শুরু করেন সমাজের প্রচলিত স্বার্থ-বৃন্দের কারণে। তদুপরি সে সময়ে ছিল বাইরের চাপ। অভিজ্ঞদের মধ্যে চলছিল ক্ষমতার দ্বন্দ্ব। ছিল যুদ্ধে হেরে যাওয়া প্রতিক্রিয়াশীলদের ষড়যন্ত্র। সবমিলে খুব দ্রুতই উবে যেতে থাকে আত্মনির্ভর বাংলাদেশের স্বপ্ন। বিদেশী সাহায্যের পুরোনো লাগাম আবার পড়িয়ে দেয়া হয় যুদ্ধে জেতা একটি জাতির মুখে। ক্রমেই আমরা পিছু হটতে শুরু করি মুক্তিযুদ্ধের মৌল আকাঙ্ক্ষা থেকে। কৃষ্ণতার যে ডাক, স্বাবলম্বনের যে ডাক, সীমিত সম্পদ ভাগ করে নেবার যে আহবান শোনা গিয়েছিল একান্তরের দিনগুলোতে স্বাধীন দেশে সেসব ডাক আর তেমনভাবে শোনা যায় না। অতি অল্প সময়ের মধ্যে প্রথাসিন্ধু প্রশাসন কজা করে ফেলে সনাতনী কায়দায় দেশ পরিচালনার প্রক্রিয়াকে। 'অপহৃত' হয়ে যায় একান্তরের বাংলাদেশ (দেখুন, আনিসুর রহমান, ১৯৯৩)। আশাহত হতে থাকেন মুক্তিযোদ্ধারা ও তাদের নেতৃত্ব।

উপরের মহলে এসব টানাপোড়েন সত্ত্বেও মাঠে কিন্তু মানুষ নিজের গরজেই আত্মনির্ভরতার সংগ্রামে নেমে পড়েছিলেন। ভিক্ষে করে সম্পদ আহরণের পথকে কি করে পরিহার করে আত্ম-সম্পদ ও আত্মসম্মানের ওপর বেশি করে নির্ভরশীল হওয়া যায় তার জন্যে দেশের মানুষ স্বৈচ্ছাপ্রণোদিত হয়ে কাজে নেমে পড়েছিলেন। শত সীমাবদ্ধতা সত্ত্বেও আমরা সেদিন এগুচ্ছিলাম। ভেঙ্গে পড়া অবকাঠামো মেরামত করে আবার উঠে দাঁড়ানোর চেষ্টা করছিলাম সকলেই।

^১ ১৯৯১ সালে ১৫১জন মুক্তিযোদ্ধার কাছ থেকে পাওয়া তথ্যের ভিত্তিতে সাজানো হয়েছে এ সব আকাঙ্ক্ষার ক্রম-অগ্রাধিকার চিত্র (দেখুন, রহমান ও অন্যান্য, ১৯৯৫, পৃঃ ১০১)।

একটি স্বাধীন দেশের মানুষ যদি নিজের খাবার নিজেরা উৎপাদন না করতে পারেন তাহলে দাতাদের কাছে সে দেশের নেতৃত্বকে সর্বক্ষণ নতজানু হয়ে থাকতে হয়। যুদ্ধোত্তর বাংলাদেশের সাধারণ মানুষ কিন্তু একথাটি বুঝতে পেরেছিলেন। তাই খাদ্য উৎপাদন বাড়ানোর লক্ষ্যে স্বৈচ্ছাশ্রমে কৃষিকর্মে দল বেঁধে প্রথমেই নেমে পড়লেন ছাত্ররা। তাদের দেখাদেখি কৃষকরাও। রংপুরের কুঁজিপুকুর গ্রামের মানুষদের আত্মনির্ভরতার প্রচেষ্টা, একজন কৃষি কর্মকর্তা মমতাজ উদ্দিনের সংগ্রাম, মিঠেপুকুর থানার বাতাসুন দুর্গাপুর গ্রামের নুর মোহাম্মদ মন্ডলের উদ্যোগ, রাজশাহী জেলার গুরুদাসপুর থানার 'গণমিলন' প্রচেষ্টা নিঃসন্দেহে মুক্তিযুদ্ধের মৌল আকাঙ্ক্ষা রূপায়ণের দিকে একেএকটি গর্বিত পদক্ষেপ (দেখুন, আনিসুর রহমান, ঐ)। কুঁজিপুকুর গ্রামের আত্মনির্ভরতার প্রচেষ্টা বিষয়ে আনিসুর রহমান লিখেছেন :

স্বাধীনতার পর বাংলাদেশে স্বাবলম্বী গ্রাম উন্নয়নের প্রচেষ্টার মধ্যে রংপুরের স্বনির্ভর আন্দোলনের চেতনা অদ্বিতীয় ছিল। ১৯৭৩ সালের মে মাসে সহইদপুরের কাছে কুঁজিপুকুর গ্রামে এই আন্দোলন শুরু হয়। এই ঘটনার কথা শুনে জুলাই মাসে সে গ্রাম দেখতে যাই। ১২৭টি পরিবারের ছোট্ট গ্রামের অধিবাসীরা আমাকে তাঁদের ছবির মতো ঝকঝক পরিষ্কার গ্রাম ঘুরিয়ে দেখাতে দেখাতে বলেন, “আমরা চাই যে, আপনাদের মতো লোক আমাদের কাজ দেখতে আসবেন। আপনাদের পায়ের ধূলো, আর্শীবাদ, উপদেশ, পরামর্শ দেবেন। কিন্তু আমরা কোন টাকা-পয়সা সাহায্য চাই না।” আমি আশ্চর্য হয়ে জিজ্ঞেস করি তাঁরা এ-রকম চেতনা কোথেকে পেলেন। তাঁরা জবাব দেন, “আমরা মিটিং করে এ-ব্যাপারে আলোচনা করেছি। আমরা জানি যে, গ্রামপ্রধান দেশে গ্রামবাসীরা বাইরে থেকে সাহায্য চাইলে সরকারকে দেশের বাইরে থেকে ভিক্ষে করে আমাদের সাহায্য এনে দিতে হবে। আমরা চাই না যে, আমাদের প্রিয় নেতা আমাদের জন্যে কারো কাছে ভিক্ষার হাত পাতেন।”

গ্রামবাসীদের এই অভিনব চেতনায় উদ্বুদ্ধ করতে অনন্য অবদান রেখেছিলেন রংপুরের তৎকালীন জেলা কৃষি অফিসার মুক্তিযোদ্ধা মমতাজউদ্দীন খান। সবাই তাঁকে মমতাজ ভাই বলতেন। তাঁর নেতৃত্বে জেলা কৃষি অফিস একটি স্বনির্ভর কর্মসূচী প্রণয়ন করেন; যার নীতিমালা ছিল :

- * আমরা নিজেদের পায়ে দাঁড়াবো, কারও সাহায্যের প্রত্যাশা করবো না।
- * আমরা নিজেদের সম্পদ কাজে লাগাবো, পরমুখাপেক্ষী হয়ে থাকবো না।
- * আমরা আমাদের গ্রামের কাউকেই নিরক্ষর রাখবো না।
- * আমরা আমাদের গ্রামের সকলকেই কাজে লাগাবো ও কাজ করতে বাধ্য করবো।
- * আমাদের গ্রামকে আমরা নিজেরাই পরিষ্কার রাখবো ও সুন্দর করে গড়ে তুলবো।
- * আমরা ব্যক্তিস্বার্থের উর্ধে গ্রামের স্বার্থকে স্থান দেবো।
- * আজ থেকে আমরা একে অন্যের জন্যে নিজেকে উৎসর্গ করলাম।

কুঁজিপুকুর গ্রাম এই নীতিমালায় প্রথম দীক্ষা গ্রহণ করে গ্রামবাসীদের একটি মিটিং-এ মমতাজউদ্দীন খানের আহ্বানে সাড়া দিয়ে। লক্ষ্যণীয় এই যে, গ্রামের ধনী-দরিদ্র নির্বিশেষে সবাই এই চেতনায় সাড়া দেন, এবং আত্মনির্ভর গ্রাম উন্নয়ন প্রচেষ্টায় নেতৃত্ব দিতে এগিয়ে আসেন গ্রামের অন্যতম ধনী কৃষক রহিমউদ্দীন সরকার। বাইরে থেকে সমস্ত রকম দান-সাহায্য বর্জনের শপথ নিয়ে এই উদ্যোগে কৃষির উৎপাদন বৃদ্ধি, সকলের জন্যে কর্মসংস্থান, বয়স্ক শিক্ষার ব্যবস্থা, স্বাস্থ্যরক্ষা ও পারস্পরিক বিবাদ-বিচারের গ্রাম-সালিসের মাধ্যমে মীমাংসা-এই ধরনের বিভিন্ন কর্মসূচী নেওয়া হয়।

উদ্যোগটি ক্রমে অন্যান্য গ্রামে ছড়াতে থাকে। প্রতি গ্রামে উদ্যোগ শুরু হয় মমতাজ ভাইয়ের উপস্থিতিতে একটি গ্রামসভায় তাঁর কাছে স্বনির্ভরতার উপরোক্ত নীতিমালার শপথ নিয়ে। একবার মমতাজ ভাইয়ের সঙ্গে এরকম একটি গ্রাম দেখে জীপে করে ফিরে আসছিলাম, তখন দূর থেকে একটি গ্রামের অধিবাসীরা জীপ থামাতে বলে দৌঁড়াতে দৌঁড়াতে এসে মমতাজ ভাইকে বলেন, “আমাদের গ্রামে আপনি আসবেন না? আমরাও আপনার কাছে স্বনির্ভরতার শপথ নিয়ে আন্দোলনে যোগ দিতে চাই।”

দেড় বছরে ষাটটির মতো গ্রামে এই আন্দোলন ছড়িয়ে পড়েছিলো বলে খবর পেয়েছিলাম। আন্দোলনভুক্ত প্রতিটি গ্রামে গ্রাম-উন্নয়নের সার্বিক পরিচালনার দায়িত্বে একটি গ্রাম-স্বনির্ভর কমিটি গঠন করা হয় যাতে সকলের প্রত্যক্ষ ভোটে ধনী কৃষক একজন, মধ্যমকৃষক দুইজন, ক্ষুদ্র কৃষক দুই জন, ভূমিহীন দুইজন এবং দুইজন মহিলা গ্রাম সভায় নির্বাচিত হন। এছাড়া বিভিন্ন কাজ সূচরুপে সম্পন্ন করবার জন্যে ভোটে আরও তিনটি কমিটি গঠন করা হয়।”

“একটি অসাধারণ চেতনা : রংপুরের স্বনির্ভর আন্দোলনঃ অন্য ইতিহাস”, সংবাদ, ফেব্রুয়ারী, ১৯৯২। এসব অভিজ্ঞতার আলোকেই সেদিনের সংগঠকরা দেশের আত্মনির্ভরতা অর্জনের জন্যে কৃষির উন্নয়নের মাধ্যমে প্রতিটি গ্রামকে স্বনির্ভর করার স্বপ্ন দেখেছিলেন। কিন্তু রাজনীতির ডামাডোলে, স্বার্থের লড়াইতে সাধারণ মানুষের এসব প্রচেষ্টা একদিন হারিয়ে যায়। অফুরন্ত প্রাণশক্তির ক্ষুরণ ঘটতে পারতো যে গ্রামবাংলা থেকে, তাকেই হেরে যেতে হলো মূলতঃ স্বার্থান্বেষী মহলের আধিপত্যের কারণে।

৪। পরনির্ভরতার গুণি ও সমকালীন বাস্তবতা

আত্মনির্ভরতার স্বপ্ন নিয়ে জন্ম নিয়েছিল যে দেশ, মাত্র দু'যুগ পরেই সে দেশটি পুরোপুরি নির্ভরশীল হয়ে পড়েছে বিদেশী সাহায্য ও ভাবনার ওপর। সত্তরের দশকের শুরুতেই শুরু হয় এ অধঃপতন। পরে সে পতনের গতি আরো বেগবান হয়। মোট দেশজ উৎপাদনের শতকরা প্রায় আট ভাগ বিদেশী সাহায্যের ওপর নির্ভরশীল বাংলাদেশের উন্নয়ন বাজেটের সিংহভাগ অর্থায়নের উৎস বিদেশী সাহায্য। যদিও দাবী করা হয় যে উন্নয়ন বাজেটের প্রায় চল্লিশ ভাগ এখন আসছে নিজস্ব সম্পদ থেকে, বিশেষজ্ঞরা দাবী করছেন যে এ হার ৩১% এর বেশি নয় (চৌধুরী ১৯৯৫)। এখনও মোট উন্নয়ন বাজেট জিডিপি এর এক দশমাংশের মতো (সত্তরের দশকে ছিল ৯%)। তাই উন্নয়ন বাজেটের আকার যদি না বেড়ে থাকে তাহলে আনুপাতিক হারে নিজস্ব সম্পদ বেড়ে যাবার হিসেব স্বনির্ভরতার প্রশ্নে শুধুই 'ধুম্রজাল' সৃষ্টি করে। যে অর্থনৈতিক সমীক্ষা (১৯৯৫) সরকার হালে প্রকাশ করেছে তাতে দেখা যায় গত অর্থ বছরে বৈদেশিক দেনার অংক তার আগের অর্থ বছরের চেয়ে শতকরা ২১ ভাগ বেড়ে গেছে। মোট জাতীয় আয়ের অর্ধেকেরও বেশী পরিমাণ বিদেশী। এই দেনার সুদ দিতেই রপ্তানি আয়ের এক-তৃতীয়াংশ খরচ হয়ে যায়।

বিপুল অংকের এই বিদেশী ঋণ পেয়েও আমাদের 'দারিদ্র্য' অবস্থার মোটেই উন্নতি করতে পারিনি (দেখুন, রহমান ১৯৯৫)। বরং 'দারিদ্র্য' এখনও বাংলাদেশের উন্নয়ন প্রচেষ্টার সামনে বিরাট এক জগদ্দল পাথরের মতো চ্যালেঞ্জ হিসেবে ঠাঁয় দাঁড়িয়ে আছে। অধ্যাপক রেহমান সোবহান ও সৈয়দ হাশেমীর (বিআইডিএস ১৯৮৯) এক গবেষণায় ধরা পড়েছে যে বিদেশী সাহায্যের সুবিধেভোগীরা হচ্ছেন ইনডেনটর, কন্ট্রাকটর, কনসালটেন্ট, আমরা ও ব্যবসায়ীরা। মোট সাহায্যের তিন-চতুর্থাংশই চলে গেছে বিদেশেই। দেশেও যা এসেছে তার সামাজিক প্রাসঙ্গিকতা নিয়ে জোর গলায় প্রশ্ন তোলা যায়। সকল অর্থনৈতিক ও সামাজিক খাতে সংস্কার কর্মসূচী চালু করা হচ্ছে। কথিত লক্ষ্য, দক্ষ খাতে সম্পদ প্রবাহ। লক্ষ্য যদি তাই হয়, তাহলে বাংলাদেশের বেশির ভাগ সম্পদ কেন দরিদ্র জনগোষ্ঠীর দিকে প্রবাহিত হচ্ছেনা? তারাই যে সবচেয়ে দক্ষ জনগোষ্ঠী এ বিষয়ে কেউই দ্বিমত পোষণ করেন না। গত কয়েক বছরের বাজেট বিশ্লেষণ করে দেখা গেছে যে বাংলাদেশের রাজস্ব ও উন্নয়ন উভয় বাজেট মিলে মাত্র এক-তৃতীয়াংশের মতো অর্থ প্রবাহিত করা হচ্ছে এ সব খাতে, যেগুলো দারিদ্র্য বিমোচনে প্রত্যক্ষ ও পরোক্ষভাবে প্রভাব বিস্তার করতে পারে। অবশ্যি, এ সব খাতের দক্ষতা ও সমতা বিষয়ক ভূমিকা নিয়ে প্রশ্ন অনেক। তাই প্রচলিত উন্নয়ন প্রচেষ্টার ব্যর্থতার আলোকে যে সব সিদ্ধান্ত টানা যায় সেগুলো হচ্ছে : ক. প্রবৃদ্ধি ও দারিদ্র্য বিমোচন যে সম্পূরক একথা এখনও কার্যকরি ভাবে স্বীকার করেন না দাতাও নীতিনির্ধারকরা ;

খ. ধনীদের ওপর গুরুত্ব কমিয়ে বরং দক্ষ যারা সেই সুবিধে বঞ্চিতদের ওপর দেয়া উচিত। গরিবদের হাতে পুঁজি ও সংগঠন দুইই দিতে পারলে প্রবৃদ্ধির পালে হাওয়া লাগতো।

গ. প্রবৃদ্ধির গুণগত মান উন্নত করে তাকে অংশীদারিত্বের প্রক্রিয়া হিসেবে দাঁড় করানো দরকার। বিদেশী সাহায্যের সামাজিক মূল্য অকল্পনীয়। দেশের সকল স্তরের মানুষই বিদেশ নির্ভর হয়ে পড়েছে। সাধারণ মানুষ আশা করে বসে থাকেন প্রকল্প আসবে। তাই নিজেরা সম্পদ সমাবেশ করেন না। বিদেশী সাহায্য নির্ভর প্রকল্প চালু করে মন্ত্রী, এমপিরা বাহবা নিতে চান। অর্থমন্ত্রী সদলবলে প্যারিস যান ফিবছর বিদেশী সাহায্য আনতে। পত্রপত্রিকা, টেলিভিশনেও বিদেশী সাহায্য প্রাপ্তিকে সরকারের বড়ো সাফল্য হিসেবে দেখানো হয়। বিদেশী সাহায্য বেশি করে আনতে না পারলে বিরোধী দলও সমালোচনা করেন সরকারকে। তাই বিদেশী সাহায্য এখন আমাদের সকলের মজ্জাগত একটি বিষয়। প্রত্যক্ষ বা পরোক্ষভাবে হলেও আমরা সকলেই এই পরনির্ভরতার সূতোয় বাঁধা পড়ে গিয়েছি। অর্থনৈতিক দিক ছাড়াও, ক্রমবর্ধমান এই বিদেশ নির্ভরতা আমাদের করোটির ভেতর ঢুকে গেছে। আমরা আজ আর নিজেদের মতো চিন্তাও করতে পারছি না। গ্যাট-উত্তর বিশ্বে, বাংলাদেশের অর্থমন্ত্রীর বাজেট তাই সর্বশ্রাসী বৈশ্বিকরণ প্রক্রিয়ার ফসল হিসেবে স্বীকৃতি পেয়ে যাচ্ছে। আজকাল কোমলমতি শিশুদেরও 'শিক্ষার বিনিময়ে খাদ্য' দেবার নাম করে দুর্নীতি ও ত্রাণের সঙ্গে পরিচিত করে তুলছি আমরা। ভবিষ্যত প্রজন্মের জন্য এমন কোনো ভালো উদাহরণ তৈরী করছি না যা দেখে তারা অনুমান করতে পারবে এদেশে একটি মুক্তিযুদ্ধ হয়েছিল। সেই যুদ্ধের একটি মৌল চেতনা ছিল আত্মমর্যাদাশীল একটি জাতি গঠনের। সেই যুদ্ধের মূল নায়ক ছিলেন এ দেশের কৃষক সন্তানেরা।

৫। প্রচলিত উন্নয়ন প্রচেষ্টার সীমাবদ্ধতা

যুদ্ধোত্তর বাংলাদেশ নানা কারণেই তার ইচ্ছা মতো একটি স্বাধীন উন্নয়ন নীতি কাঠামো অনুসরণ করতে পারেনি। উচ্চ আকাঙ্ক্ষা একটি সদ্য স্বাধীন জাতির জন্যে উদ্ভাবনী, প্রণোদনামূলক উন্নয়নের সংগ্রামের প্রয়োজন ছিল সেদিন সবচেয়ে জরুরী। কিন্তু তার সমাবেশ ঘটাতে আমরা ব্যর্থ হয়েছি। শুধু তাই নয়, বাইরে থেকে ধার করা এমন সব উন্নয়ন মডেল/কর্মসূচী রূপায়নের চেষ্টা এখনও করে যাচ্ছি। যার পরিণতি হিসেবে কিছুতেই সাধারণের কল্যাণ নিশ্চিত করা যাচ্ছে না।

চালু উন্নয়ন মডেলের মূল কথাই হচ্ছে পুরো অর্থনীতির প্রবৃদ্ধি ঘটলে তার সুফল গরিবদের কাছে চুইয়ে পড়বেই। জাতীয় আয়ের প্রবৃদ্ধিকে (মাথাপিছু জাতীয় আয়ের প্রবৃদ্ধি নয়) উন্নয়নের সমার্থ মনে করা হতে থাকে পঞ্চাশ ও ষাটের দশকে। তখনও আয়ের সুমম বন্টন কিংবা দারিদ্র্য বিমোচনের কথা কেউ বলতে শুরু করেননি। এর পর এলো বিদেশী পুঁজি নির্ভর এক উন্নয়ন প্রচেষ্টা যার মূল কথাই হলো বিদেশী প্রযুক্তির আমদানির মাধ্যমে দারিদ্র্যের অচলায়তন ভাঙ্গা যাবে। সকল উন্নয়নশীল দেশের জন্যে একই উন্নয়ন বটিকা খাওয়ানোর এই প্রচেষ্টা শেষ পর্যন্ত কাজে আসেনি (দেখুন IFAD, 1993)। এরপর এলো 'আমদানি প্রতিস্থাপন' শিল্পায়ন, যার পরিণতিও খুব শুভ হয়নি। সম্পদ গরিবমুখীন করার চাপ প্রবল হতে থাকে। ইতোমধ্যে দক্ষিণ-পূর্ব এশিয়ার অর্থনৈতিক সাফল্যের রেশ ধরে ব্যক্তিখাতের প্রাধান্য দেবার উদ্যোগ নেয়া হল। কাঠামোগত সমন্বয় কর্মসূচী চালু করা হয়েছে। অর্থনৈতিক নীতি সংস্কার চলছে দ্রুত লয়ে। নীতি সংস্কারের আমি বিরোধী নই। কিন্তু এই নীতির উৎস কোথায়? সাধারণ মানুষের প্রয়োজন ও মনোভাবের প্রতিফলন ঘটানোর কোনো উপায় আছে কি এই নীতি প্রণয়নের প্রক্রিয়ায়? এমন কি স্বদেশী সমাজের বুদ্ধিজীবী ও কর্মকর্তাদের চিন্তা চেতনার প্রতিফলনের উপায় কি আছে সমকালীন উন্নয়ন প্রচেষ্টার মধ্যে?

নতুন এই উন্নয়ন প্রচেষ্টাকে স্বপ্ন মেয়াদী নয়, দীর্ঘমেয়াদী সংস্কৃতি ও পরিবেশের সহায়ক এক প্রক্রিয়া হিসেবে দাঁড় করানোর উদ্যোগ আমরা এখনও লক্ষ্য করছি না। শুধুমাত্র বস্তুগত উৎপাদন বৃদ্ধির বিষয়টিই

এখনও উন্নয়ন কর্ণধারদের মূল বিবেচ্য। মানুষের জীবন ও প্রকৃতির সঙ্গে তার সম্পর্কের সংযোগ ঘটেনি চলতি উন্নয়ন ভাবনায়। উন্নয়নের নৈতিক দিকসমূহ এখনও সেই ভাবনার কেন্দ্রে স্থান করে নিতে পারেনি। সংস্কৃতির ধনায়ন, এখনও আমাদের উন্নয়ন ভাবনার মূলস্রোতে সম্পৃক্ত করে উঠতে পারিনি। (এ প্রশ্নে সুন্দর তাত্ত্বিক আলোচনার জন্যে দেখুন বৃণ্ডয়ার্ক, ১৯৯৩)।

৬। আত্মনির্ভরতার উপায়

আত্মনির্ভরতার প্রধান উপায় জাতি হিসেবে নিজেদের মানুষদের সৃজনশীলতা ও সক্ষমতার ওপর ভরসা রাখা। তার মানে এই নয় যে বিদেশী সব কিছু থেকে বিচ্ছিন্ন করে ফেলতে হবে সবাইকে। আত্মনির্ভর জাতি একটি শক্ত গাছের মতো। এর শিকড় থাকবে মাটিতে। কিন্তু ডালপালা ঠিকই শ্বাস নেবে মুক্ত বাতাস থেকে। বন্ধ পরিবেশে গাছের শেকড় শক্ত হবেনা। আবার নরম মাটিতে গাছ বেশিদিন দাঁড়িয়েও থাকতে পারবে না। সেজন্যে ঘরে-বাইরের শক্তির সংশ্লেষণের মাধ্যমে এমন এক ইতিবাচক পরিবেশ তৈরী করা উচিত যার ফলে মানুষ কখনও একা অনুভব করেনা। একা মানুষ ছাড়া ছাড়া। মানুষ ভীষণ দুর্বল। তাই দুঃখের দিনে যেমন আমরা এক হয়ে অসাধ্য সাধন করেছিলাম, সুখের দিনেও আমাদের এক থাকতে হবে। আমাদের মধ্যে যে ফাঁক দিন দিনই বাড়ছে তা কমিয়ে আনার প্রচেষ্টাই আসলে উন্নয়ন। টাকফোর্স প্রতিবেদনে (১৯৯১) আত্মনির্ভরতা অর্জনের জন্যে আমরা অর্থনৈতিক, রাজনৈতিক ও আদর্শিক কিছু কৌশলের কথা বলেছিলাম। কথাগুলো আজও একই রকম সত্য।

অর্থনৈতিক কৌশল

- * উন্নয়ন নীতি প্রণয়নে দেশের মানুষের মতামতই প্রাধান্য পাবে।
- * উন্নয়ন বাজেটে নেয়া প্রকল্পসমূহ জনমত যাচাই ও মূল্যায়ন ছাড়া অন্তর্ভুক্ত হতে পারবেনা।
- * উন্নয়ন প্রকল্প দেশী কাঁচামাল নির্ভর হতে হবে।
- * কৃষির উৎপাদন ও ক্ষুদে শিল্পের ওপর গুরুত্ব বেশি করে দিতে হবে।
- * বিদেশী কনসালটেন্ট নিয়োগের স্বচ্ছ নীতিমালা থাকতে হবে। দেশী বিশেষজ্ঞকে আগে কাজে লাগাতে হবে। দেশের সেই সব বিশেষজ্ঞ প্রাধান্য পাবেন যারা এদেশের মাটি ও মানুষের সঙ্গে এক হয়ে কাজ করতে আগ্রহী।
- * সামরিক খরচ উল্লেখযোগ্য হারে কমাতে হবে।
- * সামাজিক খাতে বাজেট বরাদ্দ বাড়াতে হবে।
- * শক্তিশালী স্থানীয় সরকারের মাধ্যমে স্থানীয় পর্যায়ে উন্নয়ন নিশ্চিত করতে হবে।
- * নতুন কোনো 'প্ল্যান্ট' স্থাপনের আগে পুরোনো 'প্ল্যান্টের' ক্ষমতা পূর্ণমাত্রায় ব্যবহার করতে হবে। প্রয়োজনে দুই/তিন শিফট চালু করতে হবে।
- * স্থানীয় সম্পদ সমাবেশের সকল পথ খুলে দিতে হবে।
- * সুবিধে বঞ্চিত জনগোষ্ঠী দক্ষ। তাই সম্পদ তাদের দিকে প্রবাহিত করার জন্যে প্রয়োজনে আলাদা পরিকল্পনা/ বাজেট প্রণয়ন করতে হবে।
- * 'ত্রাণ' কার্যক্রম কমিয়ে মানুষকে কাজের মধ্যে টেনে আনতে হবে।

রাজনৈতিক

- * সরকারের সকল সিদ্ধান্তের ওপর গণনিয়ন্ত্রণ আরোপ করতে হবে।
- * জবাবদিহিতা নিশ্চিত করার জন্যে যে কোনো প্রকল্প গ্রহণের আগে জনমত যাচাই করতে হবে।
- * সকল কর্মসূচীর বাজেট ও রূপায়নের পদক্ষেপসমূহ সকলের দৃষ্টি গ্রাহ্য করতে হবে।
- * স্থানীয় পর্যায়ে বিকেন্দ্রায়ণ ও গণতন্ত্রায়ণ নিশ্চিত করতে হবে। স্থানীয় সরকারেও নির্বাচন ঘন ঘন করতে হবে। স্থানীয় সরকার সংগঠনকে সাথে নিয়ে কাজ করবে।

আদর্শিক

আত্মনির্ভরতা আসলে মনের ব্যাপার। তাই ছোটবেলা থেকেই এরপ্রতি সমর্থন বাড়াতে হবে। সে জন্যে ব্যবস্থাকে ঢেলে সাজাতে হবে।

- * সার্বজনীন সাক্ষরতা নিশ্চিত করতে হবে।
- * প্রাথমিক শিক্ষার ওপর সরকারী বরাদ্দ বাড়াতে হবে।
- * মেয়েদের শিক্ষার ওপর আরো জোর দিতে হবে। প্রকৃত ইতিহাস ও জাতীয় বীরদের জীবন ও অর্জনের কথা বস্তুনিষ্ঠভাবে গণমাধ্যমে উপস্থাপন করতে হবে।
- * কমপিউটার ভিত্তিক আধুনিক শিক্ষার প্রসার ঘটাতে হবে।
- * শিক্ষাসূচীর খোলনলচে বদলাতে হবে। এ দেশের ঐতিহ্য, অর্জন, বিজয়গাঁথা, মুক্তিযুদ্ধকে শিক্ষাসূচীতে স্থান করে নিতে হবে।

গণমাধ্যম আত্মনির্ভরতার পক্ষে কাজ করবে। দেশের সফল উদ্যোগ, আমাদের প্রকৃত ইতিহাস, প্রকৃত বীর, মহৎ অর্জন গণমাধ্যমে নিরপেক্ষ ও বস্তুনিষ্ঠভাবে প্রতিফলিত হতে হবে।

৭। উপসংহার

আত্মনির্ভরতার যে কৌশলসমূহের কথা বললাম সেগুলো একা একা অর্জন করা মুশকিল। এ জন্যে জাতীয় ঐকমত্য অপরিহার্য। আমরা দিন দিন যেভাবে ছাড়া ছাড়া হয়ে যাচ্ছি, 'দুঃখের দিনে এক হবার কথা' যেভাবে ভুলতে বসেছি, জাতীয় বীরদের যেমন অবজ্ঞা করতে শিখছি, যেভাবে বিদেশী গণমাধ্যমে আসক্ত হয়ে পড়ছি, তাতে সত্যি আমার ভয় হয় আত্মনির্ভরতার যে স্বপ্নের কথা এতোক্ষণ ধরে বললাম তা শুধু স্বপ্নই থেকে যায় কিনা। কিন্তু আমাদের মতো দেশের ওপর যে আত্মশাসন আছে, শিক্ষা ও সংস্কৃতিতে যে পাগলা হাওয়ার দাপাদাপি শুরু হয়েছে, গ্যাট-উত্তর বিশ্বে আমাদের অর্থনৈতিক সীমান্ত যেভাবে উদ্যম হতে যাচ্ছে, সে সবার পরিপ্রেক্ষিতে যদি আমরা আত্মনির্ভরতার প্রশ্নে এখনই সচেতন না হই, একদিন সত্যি পস্তাতে হবে। সে কারণেই মানুষের মনের দৈন্য দূর করা খুবই জরুরী। জাতির আশা করবার ক্ষমতা বাড়াতে হবে। সাধারণের কল্যাণে আসবে এমন সব কর্মের যোগ ঘটিয়ে সকলের মনে 'ভরসা'র ক্ষেত্র তৈরী করা চাই। আর এ কাজটি বাইরে থেকে কেউ এসে করে দিতে পারবেন না। মানুষ নিজেই অন্যের সঙ্গে তার বিচ্ছিন্নতা ঘুচিয়ে সে ভাবনার পরিবেশ তৈরী করতে পারেন। "মনের যে দৈন্যে মানুষ আপনাকে অন্যের সঙ্গে বিচ্ছিন্ন করে সেই দৈন্যেই সে সকল দিকেই মরতে বসে, তখন বাইরের দিক থেকে কেউ তাকে বাঁচাতে পারে না।" (রর, চতুর্দর্শ খন্ড, পৃঃ ৩২০)।

গ্রন্থপঞ্জি

- Buarque, Christovam (1993): *The End of Economics?* Zed Books, London.
- Chowdhury, Omar Haider (1995): 'Fiscal Sector' in *Independent Review of Bangladesh's Development*, CPD, Dhaka.
- IFAD (1992): *The State of World Rural Poverty*, Rome.
- Task Force Report (1991): 'The Self-Reliance' in *Policies for Development*. Vol. I, UPL.
- Rahman, Anisur, (1993): *The Lost Moment*, UPL.
- Rahman, Atiur, et al. (1995): *Socio-Economic Perspective of the War of Liberation*, BIDS. Dhaka.
- রহমান, আতিউর (১৯৯৫) : গরিবের বাজেট ভাবনা, প্রশিকা আয়োজিত সেমিনার প্রবন্ধ, ২৯ জুন।
- Sobhan, R and Hashemi, S(1990): 'Beneficiaries of Foreign Aid' in Sobhan (ed). *From Aid Dependence to Self-Reliance*, UPL, Dhaka.

Structural Adjustment and Growth : Case of Bangladesh

Salahuddin Ahmad *

There has been a lot of discussion in the literature¹ about Structural Adjustment Programmes in the Developing Countries. A lot of pain of adjustment has been felt. UNICEF has initiated discussions about human face to such Adjustment Programmes.

The literature, however, becomes confusing because of their nature of presentation. Lot of *ad hoc* hypothesizing is made.² Things become complicated in view of the fact that parallel to the SAP, policies are being undertaken which owe their origin to the so called Growth models. It would be useful, if the conceptual framework behind both these types of policies is clarified which, in turn would allow us to decipher the relationship between these two types of policies. Section I of the paper presents the conceptual framework of the Demand Management Model and the Growth Model. Section II presents the Bangladesh experience with these policies.

I. THE CONCEPTUAL AND POLICY FRAMEWORK

The Demand Management Model

The Macro economic equilibrium is represented by the following single equation around which macro models are normally built

$$Y = C + I + G - T + X - M$$

Where Y, C, I, G, T, X, M have their usual connotations.

As is well-known in its original exposition, consumption was the stable variable, because of the resilience of the behavioral parameter, the Marginal Propensity to Consume. Private Investment, during 1930s, were not forthcoming as the perceptions about the profitability (Marginal Efficiency of Capital) of such investment was pretty low. As such Public spending was the panacea to meet the deficiency of Aggregate Demand.³

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¹ See for example, Fischer (1986), Khan (1987), Taylor (1988), JDE (1988), Rahman (1992), and Bhuleshkar and Mithani (1993).

² This is particularly because of the fact that the whole Structural Adjustment Programme, as we shall see later, has been built in an *ad hoc* manner and in bits and pieces.

³ There exists various refinements of such a powerful single equation.

It should be noted that in the original presentation, it was a closed economy model. After the second world war, the International Monetary Fund was set up. Its mandate was to finance the short term temporary Balance of Payment deficit and assist countries with persistent fundamental disequilibrium. The model came under extensive use by the IMF in the implementation of its mandate. Several stabilization programmes were designed⁴ to cut absorption (C+I+G-T) so as to reduce the Balance of Deficit as excessive absorption was identified as the root cause of so called long run Balance of Payment Equilibrium.⁵ The severe contractionary impact of such programmes were lasting and lead to political upheaval in the many "stabilizing" countries. In 1970s and '80s the Oil Shock, consequent severest recession in the post second world war era and the Debt Crisis cried out for policy reforms in the developing countries. The whole issue was the developing countries should stop mismanaging their resources and bring their houses to order and 'pay back their debts'. Here also the single equation was used in the following form:

$$Y = C + I + /- \text{FISCAL DEFICIT} + /- \text{TRADE DEFICIT}$$

Where Fiscal Deficit = G-T and Trade Deficit = X-M

Here, cutting of absorption was not talked about. Stopping of mismanagement of the economy was talked about. Again, here the principal user of this demand management model was not the IMF, but the World Bank. The World Bank (International Bank for Reconstruction and Development), whose TOR was Economic Development, now started talking about managing the economies. The mismanagement was measured by the size of the Fiscal Deficit and the Trade Deficit. Reduction of the size of both the deficit became the chief objectives of the SAP.⁶ The Baker Plan, the original exposition of the present day SAP, talked about constraining the Current Account Deficit to 7.5% of GDP. The possible consequences were not explored. The conceptualization was poor. Relationship between the conditionalities and the long term growth potential of the developing economies were not worked out. Distributional consequences of SAP were ignored,⁷ which subsequently led to demand for

⁴ See Cline and Weintraub (1981).

⁵ As a medium term policy exchange rate adjustment (devaluation) was also proposed to increase export which in case of inelastic exports of the developing countries was not very effective.

⁶ Regardless of the fact whether the economy was in recessionary or inflationary condition.

⁷ The author, along with his team mates, did run the Applied General Equilibrium Model at Bangladesh Planning Commission to simulate the impact of the conditions of SAP when Baker plan was proposed in the mid eighties. It was found that SAP would have a severe impact on the poor.

human face to SAP. In fact, as observed by the present author while advising the Planning Commission during 1984 - 1991, the SAP has developed in bits and pieces in various policy papers in a very ad-hoc manner.

Later versions added Privatization, Trade Liberalization and Financial Sector Reform to the policy gamut. It was claimed that these would improve the efficiency in the economy. As such we now have a model which would help the developing countries to manage their economies and at the same improve efficiency in such economies. It was claimed that this will, in turn, improve the growth performance of the economy.

TRADITION OF GROWTH MODEL

Parallel to the policy actions deriving from SAP paradigm, the developing countries still continue to pursue policies and programmes which have their origin in the so called Growth Models.

In their original exposition, the modern models of Economic Growth in the 1940s and 1950s, Capital Accumulation was the only ultimate source of growth. The Harrod-Domar model, incorporating such world view, read as follows:

$$\Delta Y = k \cdot I$$

Here the Change in output is related to physical capital investment with a fixed incremental output capital ratio (k).

This simple model which was quite powerful (like the previous demand management model) held its sway in the 1940s and '50s. The passage of the theory of growth out of this early stage at the hands of Solow, Kendrick, Denison, Abramovitz and so on whose work brought to the forefront the importance of Human Resource Development, Technological Progress, Economies of Scale and Allocation of Resources from less productive to more productive sectors etc. as major (the so called "Residual") factors in economic growth. While physical investment were the object of the medium term plans of the developing countries the "Residual" factors were in long term in nature and became the objective of the so called Perspective Plans⁸.

DO THESE TRADITIONS OVERLAP

The possible places where there could be possible overlap between SAP policies and Growth are given in the table below.

⁸ Whose most numerous applications can be found in Africa.

SAP POLICIES	CONSEQUENCES	IMPACT ON GROWTH
Reduction of Government Current Expenditure	1. Overall contractionary effect 2. Reduction of Private Investment as Govt. purchases extensively in the commodity market. 3. As it is very difficult to cut Current Expenditure whose main component is Wages and Salaries, a politically sensitive item, Governments are prone to cut public investment rather than its current spending. ⁹	Negative Negative Negative
Improvement of Tax Collection	1. If new taxes are imposed and rates are raised then disincentive effect Negative	Negative
	2. If tax administration is improved and tax rates are reduced so that better collection reflects buoyancy effect. Positive	Positive
3. Increasing the rate of growth of exports through exchange rate depreciation	As the exports from the developing countries mostly respond to non price factors such as market development, quality improvement etc. the SAP policy is not likely to have the desired impact on exports. ¹⁰	?
	In fact depreciation of nominal exchange rate is likely to have inflationary impact defeating a major aim of SAP ¹¹	?

(Contd.)

⁹ See WB (90a)¹⁰ Shilpi (1990)¹¹ It is also stated that the exportable surplus would increase because of demand management policy (a contractionary policy smelling of IMF "stabilization" policy). It should be noted that improvement of exportable surplus does not automatically mean increase in export without appropriate marketing efforts.

Table (Contd.)

Reduction in growth in imports to improve the trade balance	Reduction in the availability of imported inputs for growth of production	Negative
Privatization	Denationalization of public enterprises and encouragement of growth of private enterprise is likely to have positive impact on efficiency. But private sector cannot operate unless the Government creates infrastructure both physical and social including law and order, human resource development. Being public goods, private sector is not likely to provide them.	Conditionally positive
Trade Liberalization	In the long run it is supposed to improve the efficiency of the industrial enterprises by allowing the competition from superior products from abroad both in terms of quality and price. However, there is no firm empirical evidence.	? May be Positive
Financial Sector Reform	This will improve the efficiency of performance of the sector which in turn will affect growth positively.	Positive

* It needs to be noted here that increase in exports by itself may not contribute significantly to growth. Columbia University economist Dani Rodrik states in his recent study¹² that the main factor behind the rapid and sustained growth of South Korea and Taiwan was not the export expansion strategy both economies followed, but government policies that promoted an investment boom.

As far as the impact of growth initiating policies are concerned it should be noted further that in a fast growing economy the twin deficit may appear with growing economy needing imported inputs and in a liberalizing economy where tariffs are being pulled down, G , being function of Y , may grow faster than T . Productivity enhancing policies reduces cost of production and helps improve the real exchange rate and assists in promoting exports.

¹² Rodrik (1995).

POLICY REFORMS IN BANGLADESH

The Structural Adjustment

Bangladesh undertook the Structural Adjustment Programme beginning 1986/87. While the programme got off to a good start, the floods of 1987/88 and 1988/89 affected the programme adversely with current expenditure/GDP ratio rising to 7.9 and 9.4 with corresponding Revenue-GDP ratio being 8.6 and 9.3 respectively.¹³ Review of the performance for its first six years show that there has been a rise in Fiscal surplus. Some other indicators are interesting to watch.

Averages of the following ratios have been lower (Table A1) for the first half of 1980s (pre SAP period) as compared to the SAP period (1986/87-1991/92): Government Consumption/GDP, Expenditure on Defence/GDP, Transfer Payment/GDP.

What is of particular note that Government Gross Capital Formation/GDP ratio fell during the period having an adverse impact on growth. However, rate of inflation did fall during the period, measured both by CPI and GDP deflator (Table A2).

In the external sector (Table A3) the Current Account Deficit/GDP ratio has been contained as Export/GDP ratio grew consistently with growth impetus coming from Garments exports which grew mainly from non price factors. Imports have been compressed relative to GDP growth so that average Import/GDP ratio for the pre SAP period has been higher than for the later period constraining growth somewhat.

The Balance of payment performance was such the ability of the country to finance imports for longer period was enhanced as Foreign Reserve to GDP ratio increased from 3.1 in 1985/86 to 6.9 in 1991/92 (Table A4).

LONG TERM GROWTH

As far as long term growth prospect is concerned we see the shares of both private investment and public investment in GDP have fallen (Table A5) during the SAP period with public investment falling slightly more than the private investment. Marginal Physical Product of Capital fell from 0.806 in 1987/88 to 0.506 in 1990/91 (Table A6). As far as productivity of labour is concerned it continues to be low and has fallen in late 1980s in many sectors (Table A7). The human resource development, necessary for improvement of productivity

¹³ Please see the Appendix Table A1 on Macroeconomic indicators.

of labour, remains dismally low (Table A8). A very small share of GDP, as compared with similarly placed economies, continues to be spent on the HRD sectors (Education and Health). Literacy rate continues to be low. Enrollment ratios at all levels continue to be high. High absolute poverty continues to take its toll in the form of high dropout particularly at the primary level. In spite of the SAP Bangladesh seems to be caught up in a trap.

As far as resources for development is concerned, both the Average and Marginal Propensity to Save have risen during the SAP period (Table A9). Long Term Capital Inflow/GDP ratio has fallen during the period from 4.1 in 1986/87 to 2.9 in 1990/91 (Table A4). In net, there is likely to be growing shortage of resource, at the current growth rate of demand for resources.

The actual growth rates of the economy for the first three years of the SAP was not good (Table A11). The performance during 1987/88 and 1988/89 was particularly bad due to the floods. The growth performance, after the present Government took over, was good mainly because of good weather.

Indications for Policy and Institutional Reform

Given the interaction between the macro management and growth policies, there needs to be more integration between these two types of policy making process. Thus Ministry of Finance who does the macro management and Ministry of Planning who does the growth and development planning should co-ordinate their activities more closely.

III. CONCLUSION

From the above, it does seem the SAP has been able to achieve its limited objective of reducing the twin objective but because of the overlap it has a growth constraining effects on the economy. As such there is a need to integrate the macro management and growth planning more closely.

APPENDIX

Table A1

Macroeconomic Indicators

All Figures in Percentage

Year	Revenue Receipt	Revenue Expend. /GDP	Expend. on Defence /GDP	Govt. Consumption/GDP	Transf. Payment /GDP	Govt. Gross Capital Formation/ GDP
1981/82	9.7	6.5	1.0	3.4	2.6	6.0
1982/83	10.0	6.4	0.8	3.7	1.8	6.0
1983/84	6.9	5.9	1.3	4.0	1.6	5.3
1984/85	8.6	6.2	1.2	4.0	1.9	5.1
1985/86	8.7	7.4	1.3	4.2	3.0	5.2
1986/87	8.6	7.4	1.2	4.6	2.2	5.8
1987/88	8.6	7.9	1.4	4.9	2.6	5.0
1988/89	9.4	1.5	5.4	3.5	5.0	5.0
1989/90	8.8	1.5	5.3	3.4	5.1	5.1
1990/91	9.8	8.7	1.3	4.6	3.7	4.4
1991/92	10.5	8.8	1.4	5.0	3.5	4.3

Table A2

Macroeconomic Indicators

Year	BB Cr. to Govt. /GDP	Rate of Inflation*	Changes in GDP Deflator
1981/82	1.0	16.29	12.58
1982/83	0.8	16.93	4.90
1983/84	0.6	9.67	16.62
1984/85	1.1	10.94	14.70
1985/86	0.7	9.95	10.00
1986/87	0.4	10.35	10.91
1987/88	0.6	11.40	7.38
1988/89	3.5	8.00	7.63
1989/90	5.5	9.30	4.96
1990/91	5.2	8.91	9.46
1991/92	-	5.09	4.32
1992/93	-	1.33	2.34

BB Cr. = Bangladesh Bank Credit.

* = Monthly Average.

Table A3
External Sector

Year	Export/ GDP	Import/ GDP	Trade Balance/ GDP	Transfer from Abr./GDP	Current Account Bal./GDP	Exchang Rate
1981/82	4.7	14.6	-9.9	2.9	-7.3	20.065
1982/83	6.3	15.7	-9.5	4.9	-2.8	23.795
1983/84	5.8	14.5	-8.8	3.9	-2.4	24.944
1984/85	6.3	16.4	-10.1	2.5	-4.0	25.963
1985/86	5.9	13.5	-7.6	3.4	-3.3	29.886
1986/87	6.3	12.7	-6.5	3.6	-2.6	30.629
1987/88	6.9	15.3	-8.5	4.2	-1.7	31.242
1988/89	6.5	14.4	-7.9	4.1	-3.6	32.142
1989/90	7.0	15.4	-8.4	3.6	-3.6	32.921
1990/91	7.2	13.4	-6.2	3.6	-0.64	35.721
1991/92	8.2	14.7	-6.5	4.1	-0.90	38.145

Table A4
External Sector

Year	Long Term Cap.Infl. /GDP	Short Term Cap.Infl./GDP	Foreign Exchange Reserve/GDP
1981/82	4.0	1.6	1.0
1982/83	5.0	-1.2	3.0
1983/84	3.5	0.5	3.9
1984/85	3.0	-0.2	2.7
1985/86	4.5	0.4	3.1
1986/87	4.1	-0.4	4.1
1987/88	3.2	-0.7	4.5
1988/89	4.2	0.5	4.5
1989/90	3.7	-0.8	2.5
1990/91	2.9	-0.5	3.8
1991/92	0.2	-0.3	6.9

Table A5
Investment Share In GDP

All figures are in percentages

Year	Share of Total Investment in GDP	Share of Private Investment in GDP	Share of Public Investment in GDP
1981/82	15.02	8.87	6.15
1982/83	13.59	7.34	6.25
1983/84	12.22	6.75	5.47
1984/85	12.47	7.17	5.30
1985/86	12.99	6.27	6.72
1986/87	12.54	6.20	6.34
1987/88	12.03	6.41	5.62
1988/89	12.91	6.50	6.41
1989/90	12.80	6.41	6.39
1990/91	11.50	5.82	5.68

Table A6
Productivity Of Capital

Year	Marginal Productivity of Total Capital
1981/82	-
1982/83	0.594
1983/84	1.438
1984/85	1.289
1985/86	0.860
1986/87	1.080
1987/88	0.806
1988/89	0.733
1989/90	0.826
1990/91	1.009
1991/92	0.656
1992/93	0.506

Table A7
Productivity Indices Of Industrial Labour At Constant Prices
 (Base 1976/77 = 100)

Year	Jute	Cotton	Paper	Steel	Cement	Fert.	P.Pro
1980/81	91	106	117	119	64	124	134
1981/82	88	111	136	100	75	124	125
1982/83	90	126	97	41	71	143	73
1983/84	87	133	106	94	63	182	78
1984/85	84	125	126	106	58	218	83
1985/86	85	116	159	96	69	288	55
1986/87	93	128	174	99	74	246	60
1987/88	107	113	96	87	102	114	99
1988/89	107	102	84	91	115	114	113
1989/90	92	98	95	76	115	76	87

Table A8
Human Development

Human Development Indicator	Period	
Life expectancy at birth(years)	1992	52.2
Population with access to health services	1985-91	60%
Population with access to sanitation	1988-91	32%
Adult literacy Rate	1992	37%
Enrollment ratio at all level (% age 6-23)	1990	32%
Primary enrollment ratio (net)	1990	69
Primary enrollment ratio (gross)	1990	77
Secondary enrollment ratio (net)	1990	17
Secondary enrollment ratio(gross)	1990	19
Tertiary enrollment ratio (gross)	1990	3.4
Mean years of schooling	1992	2.0
Pupil-teacher ratio (Primary)	1990	63
Pupil-teacher ratio (Secondary)	1990	27

Table A8 (Cont.)

Human Development Indicator	Period	
Secondary technical enrollment (as % of total secondary)	1990	0.7
Tertiary natural and applied science enrollment (as % of tertiary)	1990	27
Annual growth of earning per employee	1980-90	0.6%
Public expenditure on education (% of GNP)	1990	2.0
Public expenditure on education (% of Total Public Expenditure)	1990	10.3
People in absolute poverty (Total)	1992	93.2
People in absolute poverty (Rural)	1992	84.3
Malnourished children under five (000)	1992	11480
Children dying before age of five (000)	1992	659
Scientists and technicians (per 1000 people)	1989-91	0.5
Public expenditure on health as % of GDP	1990	1.4 %

Source : Compiled from Human Development Report (1994).

Table A9
Savings Pattern

Year	Average Propensity to Save	Marginal Propensity to Save
1981/82	0.077	
1982/83	0.108	0.461
1983/84	0.098	0.054
1984/85	0.087	0.029
1985/86	0.094	0.154
1986/87	0.104	0.167
1987/88	0.103	0.093
1988/89	0.094	0.004
1989/90	0.092	0.075
1990/91	0.108	0.238
1991/92	0.130	0.369
1992/93	0.141	0.140

Table A10
Consumption Pattern

Year	Average Propensity to Consume (Private + Public)	Marginal Propensity to Consume (Private + Public)	Marginal Propensity to Consume (Private)	Marginal Propensity to Consume (Public)
1981/82	0.996	-		
1982/83	0.997	1.006	.967	0.039
1983/84	0.989	0.952	0.836	0.116
1984/85	0.977	0.916	0.828	0.088
1985/86	0.970	0.912	.744	0.168
1986/87	0.968	0.956	0.927	0.029
1987/88	0.974	1.030	0.885	0.145
1988/89	0.974	0.966	0.295	0.671
1989/90	0.973	0.966	0.802	0.164
1990/91	0.959	0.852	0.733	0.119
1991/92	0.941	0.744	0.602	0.142
1992/93	0.928	0.724	0.581	0.144

Table A11
Growth Of The Economy

Year	GDP Growth (Const.M.P.)	Agric. Growth	Indust. Growth	Constr. Growth	Power etc. Growth	Transp. Comm. Growth
1981/82	0.81	0.91	1.58	5.59	18.40	0.14
1982/83	3.61	4.62	-1.61	1.13	53.04	7.73
1983/84	4.23	1.60	3.65	20.11	7.06	2.18
1984/85	3.72	0.94	3.26	12.22	8.45	2.60
1985/86	4.42	3.44	1.84	1.81	12.55	5.60
1986/87	4.51	1.62	7.40	6.64	22.13	4.13
1987/88	2.89	0.77	0.63	12.28	16.35	16.35
1988/89	0.52	2.07	4.79	28.88	0.80	28.80
1989/90	6.63	10.01	7.25	3.24	15.33	15.33
1990/91	3.40	1.60	2.37	4.50	20.55	20.55
1991/92	4.23	2.19	7.33	4.45	17.48	17.48
1992/93	4.46	2.87	7.97	4.99	13.71	13.71

REFERENCES

- Balassa 1989 : B. Balassa, "A Conceptual Framework for Adjustment Policies" PPR Working Paper, *Development Economics*, World Bank.
- BB : Bangladesh Bank, *Economic Trends*, Various issues.
- BBS : Bangladesh Bureau of Statistics, *Statistical Year Book*, various issues.
- Bhuleshkar and Mithani 1993 : A.V. Bhuleshkar and D.M. Mithani; *Indian Economy in Transition, Structural Reforms*, Anmol Publications, New Delhi.
- Chand 1989: S.K. Chand, "Towards a Growth Oriented Model of Financial Programming", *World Development*, Vol 17, No 4.
- Cline and Weintraub 1981 : W.R. Cline and S. Weintraub (eds), *Economic Stabilization in Developing Countries*, Brookings Institution, Washington D.C.
- Fischer 1986 : S. Fischer, "Issues in Medium Term Macroeconomic Adjustment" *The World Bank Research Observer*, Vol 1, No. 2.
- JDE 1988 : *Journal of Development Economics*, Special Issue on Macroeconomic Adjustment and Growth, Vol. 29, No. 3.
- Khan 1987 : M.S. Khan, " Macro Economic Adjustment in Developing Countries: A Policy Perspective," *The World Bank Research Observer*, Vol. 12, No.1.
- Rahman 1992 : Sultan Hafeez Rahman, "Structural Adjustment and Macroeconomic Performance in Bangladesh in the 1980s", *The Bangladesh Development Studies*, Vol XX, June-September.
- Rodrik 1995 : Dani Rodrik, "Getting Interventions Right: How South Korea and Taiwan Grew Rich", Working Paper Series, National Bureau of Economic Research.
- Shilpi 1990 : F.J. Shilpi, 'Estimating Income Price Elasticities of Imports and Exports of Bangladesh' BIDS Research Report No. 122.
- Streeten 1988 : Paul P. Streeten, "Stabilization and Adjustment", *Labour and Society* 13 No. 1, January.
- Taylor 1988 : L. Taylor, *Varieties of Stabilization Experience*, Clarendon Press, Oxford.
- Todaro 1993 : M.P. Todaro, *Economic Development in the Third World*, 4th Edition, Orient Longman.
- UNDP 1994 : United Nations Development Programme, *Human Development Report*, Oxford University Press.
- WB 1990a : World Bank, " Bangladesh: Managing the Adjustment Process - An Appraisal", Report No. 8344-BD, March 16.
- WB 1990b: World Bank " Bangladesh: Review of the Policy Reforms in the 1980s", Report No. 8874-BD, June 29.
- WB 1991 : World Bank' " Bangladesh : Managing Public Resources for Higher Growth", Report No. 9397-BD, April 19.
- Zaman 1988 : A. Zaman, "Comments on Alternative Growth And Adjustment Strategies of Newly Industrializing Countries in Southeast" in P. Streeten (ed) *Beyond Adjustment: The Asian Experience*, IMF, February.

Test of Structural Change : A Case Study of Bangladesh

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1. INTRODUCTION

Governments in Bangladesh have been pursuing market oriented policies known as structural adjustment programs (SAP) since 1980. The SAP reforms date back to mid-seventies when the energy shock of early seventies and the global rise in debt service obligations created persistent deficits in the balance of payments and fiscal accounts of the developing countries. The developed countries blamed the ill-designed development policies of third world countries for these structural problems. The idea of SAP was initially developed by the Bretton Woods Institutions (BWI)— the World Bank (WB), and the International Monetary Fund (IMF) as measures to correct problems of balance of payments and fiscal deficits. The SAP reforms in Bangladesh were expected to bring macroeconomic stabilization, an enhanced growth rate and above all better economic conditions for all segments of the population by creating an environment of increased competition and efficiency in the economy. As means of achieving these goals, the following policies were prescribed: (i) A tight monetary policy, (ii) A tight fiscal policy, (iii) Withdrawal of food and input subsidies, (iv) Liberalization of trade restrictions (v) Privatization of public enterprises (vi) Introduction of flexible exchange rate, and (vii) Use of market forces in allocating resources among different products and services. The donor countries and institutions used implementation of SAP reforms as prerequisite for aid disbursements. Bangladesh was to receive \$ 800 million from IMF in 1980 for short term financing under the Extended Fund Facility (EFF) program. However, the disbursements under EFF were suspended after an initial disbursement of \$ 200 million as Bangladesh failed, according to IMF, to adhere to the predetermined conditions. Being hard pressed with the problems of poor domestic resource mobilization and a low rate of growth of exports, Bangladesh turned to IMF for SAP loans during the periods 1986/87 through 1988/89, and 1990/91 through 1992/93 under IMF's Enhanced Structural Adjustment Facility (ESAF) program. The terms and conditions of the

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SAP loans were laid down in Policy Framework Paper (PFP) mutually agreed upon by the IMF and the government of Bangladesh.

Implementation of SAP policies has so far yielded mixed results. Recently a number of papers dealing with theoretical and empirical implications of SAP reforms are available. Most economists, however, hold the view that SAP affects the low income groups and the wage earners of an economy adversely a narrow segment of the population, usually the richer section, gains at the cost of marginalisation of the poorer sections. Some economists are even concerned about the contraction effect of SAP (Singh: 1993). Other writers investigated the consequences of carrying out the SAP policies in different countries. Sobhan (1992), for example, showed that adoption of SAP policies in different categories of countries could not achieve the pre-determined goals of an accelerated growth rate and improved economic conditions for all. On the contrary, indiscriminate use of market oriented reforms intensified the immiserisation of a vast majority of the population in most of the countries where SAP policies were pursued. SAP did very little in alleviating mass poverty of the third world countries.

A few writers endeavoured to discern the consequences of SAP policy adoption in Bangladesh. Sobhan (1993) made a significant contribution in this field by evoking the catalytic questions of theoretical and empirical feasibility of SAP policies in Bangladesh. He analyzed time series data to show that the results of experimenting with SAP policies in Bangladesh are at best mixed, with most of the objectives not being fulfilled. Rahman and Ali (1993) discussed in detail the impacts of structural adjustment policies on vulnerable groups of Bangladesh. Other writers like Ghafur (1993), and Ahmed (1993) addressed the questions of applicability of SAP for Bangladesh from economic theory and historical perspectives.

The current paper analyses the impacts of SAP policies on different macroeconomic variables in Bangladesh with the help of econometric techniques. Our intention is to evaluate and compare macroeconomic performance of Bangladesh during two regimes after independence. The two regimes are non-SAP Regime (1973-1982) and SAP regime (1982-1992).

The paper organized as follows. The next section reviews the findings from Sobhan (1993) as it bears upon the current paper. We discuss the methodology of analysis used in this paper in the third section. The fourth section analyses the estimation results. The fifth section gives the results to tests of structural change. The final section presents the findings of this paper

2. BANGLADESH AND SAP: A REVIEW

This section recapitulates the results of implementing SAP policies in Bangladesh from Sobhan (1993) with a view to keeping the readers up to date on the issue. The government of Bangladesh claims that it was able to reduce deficits in the balance of payments account and the fiscal account by following market oriented policies. According to Sobhan (1993), a reduction in fiscal deficit could be made largely due to a change in accounting procedure, a decline in the level of development expenditure, and a deterioration in aid utilization. Sobhan (1993) also argued that the sluggish demand for imports and low level of development activity contributed to a reduction in external deficit. Looking at the year to year growth figures, Sobhan (1993) came to the conclusion that the growth rates during the decade of reforms had been lower than those of seventies. The agricultural sector experienced a low and unstable growth during the eighties. In the industrial sector, only a few subsectors did well during the SAP period. The average growth rate in industrial sector was 2.5 which is well below the rates obtained in seventies. Both investment and savings as percentages of GDP kept declining during the period of SAP reforms. The structural adjustment policies made positive contributions in boosting export volume of Bangladesh without developing at the same time backward linkages in the economy. The government of Bangladesh succeeded in keeping the rate of inflation well below 5% during the reform years. A very dismal situation, however, prevailed in case of the private borrowers from the nationalized commercial banks (NCB) and different financial institutions (DIF). Most of the borrowers defaulted in repaying the loans with recovery rate falling much below 10%. A major portion of the advanced loans are yet to be recovered, but nobody knows how. The escalating overdues led to a suspension of lending by the WB, AB and other international financial institution. As means of increasing efficiency in industrial sector, the government of Bangladesh denationalized a large number of public enterprises. Surveys show that privatization at a large scale failed to inject a spirit of efficiency in the economy and almost 50% of the denationalized public enterprises have been closed. Indiscriminate lending of public money to a class of immature entrepreneurs and a lack of monitoring the utilization of advanced loans on the part of NCBs and DFIs led to this impasse in public borrowing. As measures of trade liberalization, the government of Bangladesh curtailed the list of restricted items to a great extent and also reduced the rates of duty on a

number of importable items. These measures of trade liberalization coupled with illegal smuggling of commodities into Bangladesh put our local entrepreneurs in a situation of uneven competition. Consequently, the number of sick industries kept increasing. It is true that Sobhan (1993) analyses data as they stand without applying the data into any rigorous statistical techniques. This paper attempts to supplement Sobhan's (1993) findings on a few of his macroeconomic variables by using an econometric technique known as test of structural change. Moreover, unlike Sobhan, we put more emphasis on per capita variables than on aggregate variables to capture the impact of growing population in Bangladesh.

3. METHODOLOGY

In the present paper we make a number of tests of structural change with the help of econometric methods. Popularly known as Chow Test, a test of structural change involves test for changes in the parameters of a regression model between two or more periods of time. It examines whether all the parameters or a subset of the parameters have undergone a change between the stipulated periods. For this purpose, the study period is divided into two or three subperiods. The regression model is estimated for the whole study period and all the subperiods. The sum of squares of the estimated residuals (SSE) from the complete regression is called restricted sum of squares of the residuals (SSE_r). The total of all sums of squares from different subperiods regressions is regarded as the unrestricted sum of squares (SSE_u). The restricted regression forces the restrictions of no changes in the parameters in the estimation process. The unrestricted regression on the contrary allows the parameters involved in the test to vary in different subperiods. In Econometrics it is a well known fact that the sum of squared residuals decreases and increases with the addition of new explanatory variables in the regression model. The Chow test of structural change capitalizes on the fact that the sum of squared residuals decreases substantially if the parameters of a regression model really changes between the subperiods. In other words, the difference between the sum of restricted residuals and the sum of unrestricted residuals ($SSE_r - SSE_u$) will be statistically significant when adjusted for units of measurement and degrees of freedom. Specifically, the test statistic follows an F distribution as shown below :

intention was to test for structural changes in the growth rates of different macroeconomic variables using the F test in (2). We made use of semi-logarithmic model for estimating the growth rates.

$$\ln Y_t = B_1 + B_2 * T + V_t \quad \dots \dots \dots (3)$$

where Y_t = Macroeconomic variable T = Time V_t = Error
 B_2 , which is here the slope of 'time' variable, signifies the parametric growth rate of the variable Y_t . We estimated growth rates of two types of variables, viz., income variables and consumption variables. The income variables include aggregate as well as per capita measures of national income. The consumption variables are per capita consumption at constant prices and per capita availability of some selected consumption items. In addition, there are some other national income related variables such as share of agriculture in GDP, export as percentage of GDP, etc. The following list gives a description of the variables used in this paper.

Sl. No.	Name of the Variable	Unit of Measurement	Symbol
01	GDP at constant market prices	Crore Taka	GDCM
02	GDP at constant factor cost	Crore Taka	GDCF
03	GNP at constant factor cost	Crore Taka	GNCF
04	NNP at constant factor cost	Crore Taka	NNCF
05	Per capita GDP at constant factor cost	Taka	PGDCF
06	Per capita GNP at constant factor cost	Taka	PGDCF
07	Per capita NNP at constant factor cost	Taka	PNNCF
08	Net income from abroad	Crore Taka	NFI
09	Foreign exchange reserves	Crore Taka	FER
10	Wholesale price indices		PWI
11	Share of agriculture in GDP		SHAGR
12	Share of industry in GDP		SHIND
13	Disbursement of foreign Aid	US Million Doll.	FAD
14	Investments as percentage of GDP		SHINV
15	Savings as percentage of GDP		SHSAV

16	Export as Percentage of GDP		SHEX
17	Imports as Percentage of GDP		SHIM
18	Per Capita Consumption at Constant Prices	Taka	PCCP
19	Per Capita Availability of Food Grains	Kg	PCFO
20	Per Capita Availability of Pulses	Kg	PCPU
21	Per Capita Availability of Sugar	Kg	PCSU
22	Per Capita Availability of Meat	Kg	PCME
23	Per Capita Availability of Milk and Milk Products	Kg	PCMI
24	Per Capita Availability of Eggs		PCEG
25	Per Capita Availability of Cement	Kg	PCCE
26	Per Capita Availability of Cloth	Yard	PCCL
27	Per Capita Availability of Paper	Kg	PCPA
28	Per Capital Availability of Electric Energy	Kwh	PCEL

The national income variables were chosen in order to determine the growth pattern of the economy. The consumption variables were expected to measure any improvement in the standard of living of the population that might have occurred during the different regimes. We used all measures of national income at constant prices to eliminate the nominal effect of price increases from our analysis. We estimated growth rates of aggregate as well as per capita measures of national income. Per capita variables are expected to reflect the real growth pattern of the economy by taking into consideration the phenomenon of rapidly increasing population in Bangladesh. To measure changes in the standard of living of the population, we estimated growth rates of per capita consumption at constant prices and per capita availability of a number of selected items of consumption. We selected one or two items from each category of consumption goods. Specifically, our objectives are: (1) to find the growth rates of the selected macroeconomic variables during the study period and each of the first two subperiods; and (2) to examine whether structural change really took place during the SAP period on the basis of tests of structural change.

4. INTERPRETATION OF THE RESULTS

We interpret the results of the current study systematically in this section. We start with the mean and standard deviation values of the variables in Table 1.

A. Interpretation of Mean and S.D. Values

Table 1 shows mean and standard deviation values of the selected variables pertaining to study period and two subperiods. Comparing Non-SAP and SAP regimes, we find that most of the variables registered a rise in mean values in SAP regime. However, mean values of three variables, viz., foreign exchange reserves (FER), share of agriculture in GDP (SHAGR), and share of industry in GDP (SHIND) declined in the SAP regime. Mean share of agriculture fell from almost 52% in first subperiod to 41% in second subperiod. All the aggregate and per capita measures of national income showed increased mean values during the SAP period. We note abrupt increases in mean values of net foreign income (NFI), wholesale price indices (PIW) and disbursement of foreign aid to Bangladesh during the SAP period. Mean net foreign income increased to 1447.8 crore taka in the second subperiod from 370.12 crore taka in the first subperiod. Similarly, mean disbursement of foreign aid to Bangladesh during the SAP period stood at 1523.8 million US dollars compared to 917 million US dollars during the Non-SAP period. Domestic resource mobilization rates are very much discouraging with mean shares of domestic savings in GDP figurings approximately 2% in the first subperiod and 3% in the second subperiod. Looking at consumption variables, we notice a moderate increase in mean per capita consumption at constant prices (PCCP) from 347.75 taka in the Non-SAP period to 470.33 taka in the SAP period. Mean values of per capita availability of food grains (PCFO), milk and milk products (PCMI) and paper (PCPA) decreased whereas mean values of per capita availability of other consumption items increased during the SAP period. Figures in Table 1 reveal the increased dependence of Bangladesh on external resources during the SAP regime. Yet this bulk amount of foreign aid failed to develop the two important sectors of Bangladesh economy viz., agriculture sector and industry sector. The figures in Table 1 are also indicative of the unfavourable effects of market reforms on the distribution of income. Mean per capita consumption increased whereas mean per capita availability of a few essential food items decreased during the SAP period. Mean values of the variables provide a few glimpses of real economic scenario in the country. Further insights into the nature of effects of SAP policies can be attained with the help of regression results.

B. Interpretation of Regression Results

[i] Interpretation of Regression Results of Consumption Model

We estimated a large number of regression models that provided necessary statistics for tests of structural change. In this section, we interpret the regression results obtained in the present study. We start with OLS estimation results of consumption function in Table 2. Table 2 shows almost perfect fit of the estimated consumption model to data. This is evident from the high values of R^2 and adjusted R^2 in Table 2. We estimated seven versions of the consumption model with different assumptions about the parameters of the model. All versions of the consumption model exhibit good fit, though not all the estimated coefficients are significantly different from zero. Considering the significance levels of the individual coefficients, we note that the second model with two intercept dummy variables for two subperiods, viz., subperiods [4] and subperiod [2], yield good results. The sixth model with two slope dummy variables for the lagged consumption variable performs better than any other model. Estimated results of five other models are not satisfactory giving very low values for estimated slope coefficients of the income variable and the lagged consumption variable. Only in model [iii] and model [vi], the estimated marginal propensity to consume (MPC) of income turns out to be statistically significant. The coefficient of lagged consumption is significantly different from zero only in the sixth model. The intercept dummy variables in model [ii] yield statistically significant estimated coefficients. We relied on an approximate 't' statistic suggested by Durbin for detecting the presence of first order autocorrelation of the errors. Durbin Watson 'd' statistic is not appropriate in the presence of the lagged dependent variable as one of the regressors. Moreover, Durbin 'h' statistics could not be computed here because in each case the variance of the estimated coefficient of the lagged dependent variable becomes greater than 1. In most cases, the estimated coefficients of the lagged consumption variable are negative refuting the predictions of the permanent income hypothesis. The GLS estimation results of the consumption models in Table 3 are not very much impressive and in some cases are worse than the OLS results. Considering all things, we conclude that the sixth model with two slope dummy variables yield the best estimation results.

[ii] Interpretation of Regression Results of Semi-logarithmic Models

We estimated a semi-logarithmic model for each of the selected twenty eight macroeconomic variables. It served two purposes. First, the estimated

slope coefficient of a semi-logarithmic model shows the parametric growth rate of the associated dependent variable. Second, a test of structural change on the parameters of a semi-logarithmic model between two or more subperiods turns out to be the test of structural change on the growth rates. In this section, we interpret the regression results of the semi-logarithmic models which were estimated using data for the whole study period. We estimate each model twice, first by the OLS method and second, by the GLS method. The GLS estimation results are intended to correct for autocorrelation problem if detected in OLS estimation results. The OLS estimation results are presented in Table 4. Most of the macroeconomic variables in Table 4 reveal excellent estimation results. The estimated semi-logarithmic models with R^2 and adjusted R^2 values as high as .99 show very good fit to data. In most cases, the estimated coefficients of the time variable are statistically significant at 5% or 1% level of significance. The Durbin-Watson 'd' statistics do not detect the presence of autocorrelated errors in most cases. Most of the income variables in Table 4 with the exception of share of agriculture in GDP (SHAGR) show positive growth rates during the survey period. Low values of R^2 and adjusted R^2 are recorded for share of industry in GDP (SHIND), investment as percentage of GDP (SHINV), domestic savings as percentage of GDP (SHSAV), and imports as percentage of GDP (SHIM). The coefficient of the 'time' variable is not statistically significant only in the model for share of industry (SHIND). We detected the presence of first order autocorrelation of errors in four cases, viz., net foreign income (NFI), share of agriculture in GDP (SHAGR), investment as percentage of GDP (SHINV), and imports as percentage of GDP (SHIM). The GLS estimation results of semi-logarithmic models given in Table 5 remove the autocorrelation problem in four models, but goodness of fit in the models for SHIND and SHSAV cannot be improved. The coefficient of the time variable still remains non-significant. It is evident from the last two tables that the share of agriculture declined and that of industry remained stagnant during the study period.

We now analyze the results of consumption variables. Results are now worse than those of income variables. Most of the consumption variables are characterized by low values of R^2 and adjusted R^2 . Only in six cases, the estimated coefficients of the 'time' variable are statistically significant. Presence of autocorrelated errors are found in six cases. Table 4 shows positive growth rates for per capita consumption at constant prices (PCCP), per capita

availability of eggs (PCEG), cements (PCCE), new cloth (PCCL), and electricity (PCEL). Per capita availability of milk and milk products (PCMI) declined whereas per capita availability of other consumption items remained stagnant during the period. The GLS estimation results in Table 5 yield the same results about the consumption variables.

We now interpret the estimation results of two subperiods. The OLS estimation results of first subperiod are given in Table 6. The Durbin Watson 'd' statistics do not show the presence of autocorrelation problem in any model of income variables. Table 6 shows positive growth rates for 14 variables. In almost all cases, R^2 and adjusted R^2 values are high and the estimated slope coefficients are statistically significant. Share of agriculture (SHAGR) experienced a negative growth rate during the first subperiod. The number of stagnant income variables now stands at 4 and these are foreign exchange reserves (FER), share of industry (SHIND), domestic savings as percentage of GDP (SHSAV), and exports as percentage of GDP (SHEX). With GLS estimation results in Table 7, for the same variables during the same period, the number of stagnant income variables is reduced to 2. The results for the variables foreign exchange reserves (FER) and domestic savings as percentage of GDP (SHSAV) do not improve at all. The variables share of agriculture (SHAGR) and exports as percentage of GDP (SHEX) now show positive growth rates.

OLS estimation results of consumption variables for the first subperiod are also listed in Table 6. Per capita availability of foodgrains (PCFO), pulses (PCPU) and sugar (PCSU) declined while that of eggs (PCEG) and electricity (PCEL) increased during the first subperiod. All other per capita consumption variables stagnated during this period. Five models have however autocorrelation problems. To get rid of the autocorrelation problems, we estimated the same models by the GLS method. The GLS estimation results in Table 7 show positive growth rates for per capita consumption at constant prices (PCCP), per capita availability of eggs (PCEG), cement (PCCE), and electricity (PCEL) and a negative growth rates for per capita pulses (PCPU). All other per capita consumption items did not show any growth pattern.

We now interpret the OLS estimation results for the second subperiod in Table 8. The estimated models for wholesale prices (PIW), share of agriculture (SHAGR) and percentage of domestic saving (SHSAV) have autocorrelation problems. The income variables which did not reveal any growth pattern are net foreign income (NFI), share of industry (SHIND) percentage of investment

(SHINV) and percentage of imports (SHIM). Share of Agriculture (SHAGR) experienced a negative growth rate. All other income variables attained positive growth. Once again, the values of R^2 and adjusted R^2 are high and the estimated slope coefficients are statistically significant. The GLS estimation results in Table 9 succeeded in removing the autocorrelation problems in four models. Conclusions about growth patterns of the income variables, however, do not change. Table 8 also provides OLS estimation results of consumption variables for the second subperiod. All consumption variables with the exception of per capita availability of cement (PCCE) are free from the problem of autocorrelation. Per capita consumption at constant prices (PCCP), per capita availability of pulses (PCPU), cement (PCCE), cloth (PCCL), and electricity (PCEL) show positive growth rates whereas per capita availability of milk and milk products (PCMI) show a negative growth rate. All other per capita consumption variables remained more or less constant. These consumption patterns do not change with GLS estimation results in Table 9.

C. Interpretation of Growth Rates

It was earlier mentioned that the estimated slope coefficient of a semi-logarithmic function signifies the growth rate of the dependent variable. We multiplied the estimated slope coefficients by 100 to express the growth rates in percentages and then placed the growth rates of different variables obtained for the whole study period and two subperiods side by side in Table 10. We estimated the growth rates of a particular variable in three periods using the same estimation method in order to make the comparison meaningful. We always preferred the OLS estimation method to the GLS estimation method as long as the D.W. statistic did not indicate the presence of autocorrelated errors in OLS results. In cases of autocorrelated errors, we used the GLS estimation method. First, we consider the income variables. Comparing subperiod 1 and subperiod 2, we find that in 11 cases subperiod 1 has higher growth rates than subperiod 2. In 5 cases only subperiod 2 has higher growth rates than subperiod 1. In one case, the growth rates in two subperiods are not significantly different from zero.

The growth rates of per capita GDP at constant factor cost (PGDCF) and wholesale price indices (PIW) increased slightly whereas those of foreign exchange reserves (FER) and percentage of domestic saving (SHSAV) made big jumps in the SAP period. The situation is different in case of consumption

variables. The growth rates of four per capita variables increased and three variables decreased in second subperiod. In four cases, the estimated growth rate in two subperiods are not significantly different from zero.

Looking at table 10, we find that 14 variables experienced lower growth rates and 9 variables higher growth rates in the SAP period than in the Non-SAP period. Five variables did not grow during the two subperiods. Comparative figures on growth rates cast serious doubts about the efficacy of structural adjustment policies in Bangladesh. In most cases, we note that the growth rates fell during the SAP period.

5. TESTS OF STRUCTURAL CHANGE

We now bring all the provisions results together and make tests of structural change between two subperiods. In some cases, we extend the test to three subperiods, 3, 4 and 2. The results of the tests of structural change on the parameters of the consumption model under different assumptions about the parameters are given in Table 11. First, we test for complete structural change between the Non-SAP period and the SAP period by allowing all the parameters of the consumption model to vary between the subperiods. The F statistic obtained in this case leads to the acceptance of the null hypothesis of no structural change. The second test of structural change in Table 11 involves three subperiods and tests for changes in the intercept of the regression model in three subperiods assuming that the coefficients of the income variable and the lagged consumption variable remained unchanged. In this case also, we accept the null hypothesis of no structural change. Table 11 shows the results of seven such tests of structural change with different assumptions about parameters of the model. Only in two cases of three subperiods comparisons, the alternative hypothesis of structural change is accepted. All four cases of two subperiods' comparisons between the Non-SAP period and the SAP period lead to acceptance of the null hypothesis of no structural change. Evidence suggests that no structural change on the parameters of the consumption model took place in the SAP period.

Now, we consider Table 12 which shows the results of tests of structural change on the parameters of semi-logarithmic model fitted to each of the 28 variables. Again, we make two way comparisons. First, we compare the Non-SAP period and the SAP period. Second, we compare among three subperiods, viz, subperiod 3, subperiod 4 and subperiod 2. In two subperiods' comparisons, we detect the presence of structural change in 13 cases and absence of structural changes in 15 cases. In three subperiods comparisons, structural change is found to have occurred in 18 cases. Only in 10 cases, the

null hypothesis of no structural change is accepted.

The results of tests of structural change in Table 11 and Table 12 lead to a general conclusion. Implementation of structural adjustment policies in Bangladesh did not bring the desired structural change in the economy. It is not unlikely that in three subperiods' comparisons, the presence of structural change is detected. For example, subperiod 3 (1974-1976) and subperiod 2 (1981-1991) lying quite apart make room for substantial differences in different macro aspects of the economy to emerge. This is specially true when we compare between a war-torn economy and a postwar stable economy when the ravages of the liberation war were wiped out.

6. CONCLUSION

Some general observations can be made from the previous results. Among the income variables, share of agriculture in GDP (SHAGR) fell during the survey period. Share of industry in GDP (SHIND), domestic savings as percentage of GDP (SHSAV), and investment as percentage of GDP (SHINV) did not reveal any growth pattern experiencing continual fluctuations. All other income variables grew during the survey period.

Among the consumption variables, per capita consumption at constant prices (PCCP), per capita availability of eggs (PCEG), cement (PCCE), new cloth (PCCL) and electricity (PCEL) increased and per capita availability of milk and milk products (PCMI) decreased. Per capita availability of foodgrains (PCFO), pulses (PCPU), sugar (PCSU), meat (PCME), and paper (PCPA) either decreased or remained stagnant. We also note that all the aggregate measures of national income grew at 4% or less than 4% during our survey period. Per capita measures of national income grew at less than 2% per annum. Though per capita consumption at constant prices increased, per capita availability of the most of the consumption items either decreased or remained stagnant.

The findings of this paper suggest that implementation of SAP policies in Bangladesh could not achieve its goals. The results are at best mixed with the evidence going against SAP in most cases. This is evident from the interpretation of growth rates and the results of tests of structural change. The parameters of the consumption model did not show any significant change in the SAP period. Most of the selected macroeconomic variables attained lower growth rates in SAP period in comparison with Non-SAP period. Adoption of SAP policies in Bangladesh seems to have benefitted a small segment of the population. The standard of living of the vast majority of the people did not improve at all.

Table 1

Mean and Standard Deviation Values of the Variables

Variables	Study Period		Subperiod 1		Subperiod 2	
	MEAN	S.D.	MEAN	S.D.	MEAN	S.D.
GDCM	38627	8397.4	31400	3915.8	45132	5387.1
GDCF	36550	7718.5	29868	3428.3	42564	4884.6
GNCF	37488	8308.3	30243	3732.0	44008	5093.7
NNCF	34839	7663.3	28141	3375.1	40867	4700.0
PGDCF	3843.4	361.43	3551.6	191.58	4105.9	258.72
PGNCF	3935.8	414.02	3592.1	222.31	4245.0	273.02
PNNCF	3658.5	373.85	3346.1	193.31	3939.7	246.64
NFI	937.31	636.37	370.12	332.66	1447.8	316.75
FER	1432.6	1522.6	371.06	141.29	2387.9	1574.2
PIW	741.95	344.23	436.56	97.583	1016.8	226.54
SHAGR	46.029	6.7754	51.789	3.1852	40.846	4.4463
SHIND	9.9653	.86540	10.011	1.2869	9.9240	.14744
FAD	1236.4	394.08	917.00	288.85	1523.8	206.49
SHINV	11.483	2.6784	10.379	3.6270	12.477	.5809
SHSAV	2.2508	1.6452	1.6672	1.6710	2.7761	1.5113
SHEX	6.4759	1.7409	5.0993	1.1578	7.7149	1.1267
SHIM	15.706	3.2049	13.806	3.7064	17.416	1.2138
PCCP	411.32	106.49	345.75	125.57	470.33	22.234
PCFO	182.64	58.957	200.94	84.194	166.16	3.7295
PCPU	3.4105	1.6296	3.1889	1.4920	3.6100	1.7997
PCSU	2.1526	.65944	2.0967	.74465	2.2030	.60901
PCME	3.3953	.97547	2.9656	1.1434	3.7820	.62464
PCMI	11.716	3.0555	13.667	3.1121	9.9600	1.6788
PCEG	12.105	1.6632	11.000	1.5811	13.100	.99443
PCCE	13.152	4.6733	8.9667	2.6810	16.919	2.0017
PCCL	7.6105	1.8604	6.2111	.78969	8.8700	1.6269
PCPA	.43579	.12518	.44444	.17833	.42800	.054119
PCEL	26.562	13.926	14.708	3.7163	37.230	10.422

Table 2
 OLS Estimation Results of Consumption Model

Variables	Model I	Model II	Model III	Model IV	Model V	Model VI	Model VII
INTE	1460.8	-	-	5890a	2146.5	5219a	2169.7
t VAL	11.245			(2.99)	(1.09)	(4.37)	(1.21)
IND1	-	-1744	-	-	-	-	-
t VAL		(-.88)					
IND2	-	3190b	-	-	-	-	-
t VAL		(2.37)					
IND3	-	6859b	4578.8	-	-	-	-
t VAL		(2.51)	(1.70)				
IND4	-	-	1566.9	-	-	-	-
t VAL			(1.35)				
C _t	.38	.80b	.44	.07	.33	.58a	.34
t VAL	(1.65)	(2.87)	(1.91)	(.31)	(1.28)	(3.88)	(1.41)
Y _{t-1}	.58	-.07	.44	-.22	.58	-11.39a	.55
t VAL	(2.03)	(-.19)	(1.47)	(-.63)	(1.95)	(-3.48)	(1.85)
SLD1	-	-	-	.73a	-	-	-
t VAL				(3.12)			
SLD2	-	-	-	.86a	.04	-	-
t VAL				(3.15)	(.44)		
SLD3	-	-	-	-	-	1.49a	-
t VAL						(5.42)	
SLD4	-	-	-	-	-	1.64a	.06
t VAL						(5.49)	(.53)
R ²	.99	.99	.99	.99	.99	.99	.99
ADJ R ²	.98	.99	.99	.99	.98	.99	.98
DW	2.58	2.74	2.61	2.18	2.57	1.74	2.56
t	-3.68a	-4.47a	-4.48a	-1.04	-3.98a	.891	-3.98a

Note : a indicates significant at 1% level of significance.

b indicates significant at 5% level of significance.

Table 3
GLS Estimation Results of Consumption Model

Variables	Model I	Model II	Model III	Model IV	Model V	Model VI	Model VII
IINTE t VAL	1748b (2.87)	- -	- -	4273a (3.50)	2241.9 (2.02)	4145a (5.52)	2144.9 (2.12)
IND1 t VAL	-	-1049.9 (-.97)	-	-	-	-	-
IND2 t VAL	-	2837a (4.82)	-	-	-	-	-
IND3 t VAL	-	5320a (4.02)	3501b (2.39)	-	-	-	-
IND4 t VAL	-	-	1809a (3.03)	-	-	-	-
C_t t VAL	-.04 (-.25)	.40b (2.25)b	.02 (.12)	-.13 (.93)	-.07 (-.46)	.25 (2.15)a	-.06 (-.38)
Y_{t-1} t VAL	1.11 (6.00)a	.48 (1.95)	1.01a (5.07)	.56b (2.10)	1.12a (5.89)	-.41 (1.25)	1.10a (5.70)
SLD1 t VAL	-	-	-	.40b (2.62)	-	-	-
SLD2 t VAL	-	-	-	.49b (2.69)	.03 (.54)	-	-
SLD3 t VAL	-	-	-	-	-	1.00a (4.93)	-
SLD4 t VAL	-	-	-	-	-	1.11a (4.99)	.03 (.50)
R^2	.99	.99	.99	.99	.99	.99	.99
ADJ R^2	.99	.99	.99	.99	.99	.99	.99
DW	2.23	2.19	2.34	2.24	2.30	1.77	2.28
t	-.56	-2.61b	-1.40	-2.08	-.95	-	-

Note : a indicates significant at 1% level of significance.
b indicates significant at 5% level of significance.

Table 4
 OLS Estimation Results of Semi-Logarithmic Models

Variables	Intercept	Slope	t VL SL Coef	R ²	ADR ²	DW
GDCM	10.11	.039133	42.2a	.99	.99	1.26c
GDCF	10.07	.037884	59.89a	.99	.99	1.42b
GNCF	10.07	.039952	58.30a	.99	.99	1.36c
NNCF	10.00	.039593	67.79a	.99	.99	1.54d
PGDCF	8.07	.016373	21.79a	.97	.96	1.17c
PGNCF	8.70	.18489	25.64a	.98	.97	1.45d
PNNCF	8.07	.017972	28.96a	.98	.98	1.49d
NFI	4.36	.1867	8.58a	.81	.80	.37
FER	14.81	.1778	10.32a	.86	.85	1.61d
PIW	5.56	.085645	30.41a	.98	.98	1.28c
SHAGR	4.11	-.25911	16.55a	.94	.94	.98
SHIND	2.26	.0035373	.83	.04	-.02	1.25c
FAD	6.40	.05975	7.90a	.97	.77	1.56d
SHINV	2.07	.031021	3.26a	.38	.35	.56
SHSAV	-.29	.078577	2.42b	.26	.21	1.14c
SHEX	1.31	.047216	6.91a	.74	.72	2.25d
SHIM	2.43	.027904	3.94a	.48	.45	.81
PCCP	5.33	.054661	2.69b	.30	.26	2.22d
PCFO	5.39	-.019441	2.08	.20	.16	.64
PCPU	.96	.014726	.76	.03	-.02	.61
PCSU	.68	.0033211	.24183	.003	-.06	.87
PCME	1.03	.013420	1.078	.064	.009	.68
PCMI	2.77	-.030451	-4.30a	.52	.49	2.05d
PEG	2.27	0.19932	5.30a	.62	.60	.94
PCCE	1.79	.064511	7.06a	.75	.73	2.62c
PCCL	1.62	.035015	5.87a	.67	.65	1.08
PCPA	-.83	-.0029319	-.27	.004	-.05	1.80d
PCEL	2.11	.094604	26.638a	.98	.98	2.39d

Note : a indicates significant at $\alpha = .01$
 b indicates significant at $\alpha = .05$
 c indicates not significant at $\alpha = .01$
 d indicates not significant at $\alpha = .05$

Table 5
GLS Estimation Results of Semi-Logarithmic Models

Variabes	Inter- cept	Slope	t Val SI Coef	R ²	ADJ R ²	DW
GDCM	10.11	.039394	33.89a	.99	.99	1.83d
GDCF	10.07	.037989	52.08	.99	.99	1.78d
GNCF	10.07	.040082	48.88a	.99	.99	1.89d
NNCF	10.00	.039651	61.18a	.99	.99	1.84d
PGDCF	8.07	.016758	16.27a	.97	.97	2.10d
PGNCF	8.07	.018667	21.54a	.98	.98	2.01d
PNNCF	8.00	.018116	24.79a	.98	.98	1.96d
NFI	4.26	.18206	4.42a	.94	.93	1.57d
FER	4.78	.17977	9.63a	.86	.86	1.77d
PIW	5.56	.085044	22.58a	.98	.98	1.87d
SHAGR	4.10	-.025458	-10.76a	.96	.95	1.87d
SHIND	2.26	.0036012	.84	.04	-.02	1.27c
FAD	6.40	.059953	7.41a	.79	.78	1.68d
SHINV	1.92	.035944	3.31a	.70	.68	1.30c
SHSAV	-.46	.093045	2.05	.38	.34	1.66d
SHEX	1.31	.047177	7.71a	.74	.73	2.07d
SHIM	2.41	.027060	2.35b	.65	.63	1.75d
PCCP	5.32	.055580	3.04a	.31	.27	1.95d
PCFO	5.53	-.028129	-1.85	.52	.49	1.28c
PCPU	.117	.0053763	.16	.47	.44	1.91d
PCSU	.83	-.0070857	-.34	.28	.24	1.58d
PCME	1.22	-.00022153	-.01	.45	.42	1.52d
PCMI	2.77	-.030372	-4.53	.52	.50	1.96d
PCEG	2.25	.020061	3.55a	.72	.70	1.69d
PCCE	1.81	.063776	10.63a	.80	.79	1.68d
PCCL	1.65	.032841	3.95a	.73	.71	1.73d
PCPA	-.83	-.0033337	-.30	.01	-.05	1.87d
PCEL	2.10	.094881	31.54a	.98	.98	2.06d

Note : a indicates significant at $\alpha = .01$
 b indicates significant at $\alpha = .05$
 c indicates not significant at $\alpha = .01$
 d indicates not significant at $\alpha = .05$

Table 6
 OLS Estimation Results of Subperiod 1

Variables	Intercept	Slope	t VL SL Coef	R ²	ADJ R ²	DW
GDCM	10.07	.045776	13.43a	.96	.96	1.90d
GDCF	10.05	.042141	18.53a	.98	.98	1.97d
GNCF	10.04	.045276	20.89a	.98	.98	2.40d
NNCF	9.98	.04395	24.42a	.99	.99	2.69c
PGDCF	8.06	.018906	7.79a	.90	.88	1.95d
PGNCF	8.05	.022004	9.50a	.93	.92	2.35d
PNNCF	7.99	.02067	10.97a	.95	.94	2.62d
NFI	3.23	.37306	10.54a	.94	.93	1.54d
FER	5.21	.10024	1.52	.25	.14	1.36d
PIW	5.60	.076104	7.68a	.89	.88	1.98d
SHAGR	4.07	-.01981	-9.65a	.93	.92	2.75c
SHIND	2.09	.3488	2.17	.40	.32	1.77d
FAD	6.16	.10209	3.49b	.64	.58	2.14d
SHINV	1.54	.12395	5.56a	.82	.79	1.72d
SHSAV	-.14	.076137	.62	.05	-.08	1.51d
SHEX	1.21	.064351	2.10	.39	.30	2.35d
SHIM	2.09	.084685	4.75a	.76	.73	2.16d
PCCP	4.76	.15585	1.78	.31	.21	2.77c
PCFO	5.78	-.09034	-2.66b	.50	.43	.98
PCPU	1.79	-.11753	-3.87a	.68	.64	1.49d
PCSU	1.16	-.07821	-2.45b	.46	.39	.77
PCME	1.32	-.04849	-1.09	.14	.02	.94
PCMI	2.66	-.01119	-.40	.02	-.12	2.24d
PCEG	2.11	.04734	7.14a	.88	.86	1.61
PCCE	1.75	.06554	1.69	.29	.19	3.20
PCCL	1.88	-.00984	-.58	.05	-.09	2.24d
PCPA	-.611	-.04317	-.95	.11	-.01	1.96d
PCEL	2.14	.087061	12.41a	.96	.95	1.76d

Note : a indicates significant at $\alpha = .01$
 b indicates significant at $\alpha = .05$
 c indicates not significant at $\alpha = .01$
 d indicates not significant at $\alpha = .05$

Table 7
Gls Estimation Results of Subperiod

Variables	Inter-cept	Slope	t Val SL Coef	R ²	ADJ R ²	DW
GDCM	10.07	.045857	14.47a	.96	.96	1.72d
GDCF	10.05	.042208	21.62a	.98	.98	1.63d
GNCF	10.04	.045611	32.45a	.99	.99	1.68d
NNCF	9.98	.044118	41.95a	.99	.99	1.94d
PGDCF	8.06	.018998	9.34a	.90	.89	1.59d
PGNCF	8.05	.022374	15.04a	.94	.94	1.65d
PNNCF	7.99	.020840	19.09a	.96	.96	1.89d
NFI	3.25	.37075	10.19a	.94	.93	1.58d
FER	5.23	.099107	1.54	.25	.14	1.29c
PIW	5.60	.075794	7.88a	.89	.88	1.92d
SHAGR	4.07	.019940	18.20a	.96	.95	1.72d
SHIND	2.11	.031474	2.38b	.46	.38	1.31c
FAD	6.17	.10082	3.78a	.64	.59	2.04d
SHINV	1.54	.12390	5.14a	.82	.79	1.80d
SHSAV	-.14	.079816	.69	.06	-.08	1.46d
SHEX	1.19	.067809	2.60b	.42	.33	2.08d
SHIM	2.08	.084655	5.22a	.77	.73	1.97d
PCCP	4.58	.18252	3.22b	.49	.42	1.94d
PCFO	5.85	-.09410	-2.14	.60	.55	1.42d
PCPU	1.80	-.11774	-3.44b	.69	.65	1.73d
PCSU	1.22	-.6958	-1.44	.61	.56	.93
PCME	1.35	-.04081	-.67	.32	.22	1.34d
PCMI	2.66	-.01155	-.45	.04	-.10	2.08d
PCEG	2.10	.048119	6.64a	.88	.86	1.74d
PCCE	1.84	.054899	3.07b	.68	.63	2.33d
PCCL	1.88	-.00969	-.62	.06	-.07	2.12d
PCPA	-.61	-.04319	-.96	.11	-.01	1.92d
PCEL	2.14	.086817	15.28a	.96	.95	1.71d

Note : a indicates significant at $\alpha = .01$
 b indicates significant at $\alpha = .05$
 c indicates not significant at $\alpha = .01$
 d indicates not significant at $\alpha = .05$

Table 8
 OLS Estimation Results of Subperiod 2

Variables	Intercept	Slope	t VAL SL Coef	R ²	ADJ R ²	DW
GDCM	10.11	.038702	45.32a	.99	.99	2.09d
GDCF	10.07	.037846	44.96a	.99	.99	2.39d
GNCF	10.10	.038011	43.37a	.99	.99	2.21d
NNCF	10.03	.037789	43.08a	.99	.99	2.36d
PGDCF	8.00	.020521	21.12a	.98	.98	2.28d
PGNCF	8.03	.020709	14.90a	.97	.96	1.48d
PNNCF	7.96	.020183	15.47a	.97	.96	1.41d
NFI	6.55	.045484	2.01	.34	.25	1.23c
FER	4.95	.17218	5.66a	.80	.78	1.86d
PIW	5.72	.076464	14.21a	.96	.96	.86
SHAGR	4.19	-.031078	-6.03a	.82	.80	.94
SHIND	2.31	-.0010656	-.63	.05	-.07	1.92d
FAD	6.72	.038533	4.46a	.71	.68	1.21c
SHINV	2.65	-.0081126	-1.77	.28	.19	2.52d
SHSAV	-2.57	.21810	3.86a	.65	.61	.83
SHEX	1.38	.041932	5.50a	.79	.77	2.21d
SHIM	3.03	-.011452	-1.68	.26	.17	1.70d
PCCP	5.96	.012387	3.59a	.62	.57	1.62d
PCFO	5.09	.0015735	.61	.04	-.08	2.43d
PCPU	-1.07	.14414	4.15a	.68	.64	1.85d
PCSU	-.05	.051049	1.46	.21	.11	1.51d
PCME	1.79	-.030134	-1.99	.33	.25	1.40d
PCMI	2.82	-.034226	-2.45b	.43	.36	1.83d
PCEG	2.50	.0047210	.52	.03	-.09	1.55d
PCCE	2.35	.030364	3.16b	.56	.50	.84
PCCL	1.24	.059837	6.86a	.86	.84	1.52d
PCPA	-.91	.0031849	.22	.01	-.12	1.81d
PCEL	2.20	.088929	7.47a	.88	.86	2.58d

Note : a indicates significant at $\alpha = .01$
 b indicates significant at $\alpha = .05$
 c indicates not significant at $\alpha = .01$
 d indicates not significant at $\alpha = .05$

Table 9
Gls Estimation Results of Subperiod 2

Variables	Initer- cept	Slope	t VAL SL Coef	R ²	ADJ R ²	DW
GDCM	10.11	.03868	47.63a	.99	.99	2.00d
GDCF	10.07	.03780	52.48a	.99	.99	2.12d
GNCF	10.10	.03803	50.91a	.99	.99	1.93d
NNCF	10.03	.03779	53.34a	.99	.99	2.02d
PGDCF	8.00	.02059	25.07a	.98	.98	1.75d
PGNCF	-8.03	.02062	13.66a	.97	.96	1.72d
PNNCF	7.97	.02010	13.94a	.97	.97	1.66d
NFI	6.62	.04211	1.58	.39	.31	1.44d
FER	4.97	.17073	5.83a	.80	.78	1.85d
PIW	5.68	.07787	10.89a	.97	.97	1.29c
SHAGR	4.20	-.0316	-4.57	.86	.84	1.63d
SHIND	2.31	-.0012	-.79	.07	-.04	1.74d
FAD	6.82	.03211	2.75b	.75	.71	1.48d
SHINV	2.63	-.00726	-2.18	.40	.32	1.91d
SHSAV	-3.56	.27445	3.42a	.75	.72	1.39d
SHEX	1.39	.04149	6.80a	.81	.78	1.77d
SHIM	3.04	.0116	-1.67	.26	.17	1.75d
PCCP	5.97	.01214	3.12b	.63	.58	1.80d
PCFO	5.09	.00160	.73	.09	-.02	1.99d
PCPU	-1.07	.14394	4.13a	.68	.64	1.86d
PCSU	.06	.04394	1.08	.24	.15	1.74d
PCME	1.73	-.0268	-1.49	.38	.30	1.69d
PCMI	2.74	-.02943	-2.54b	.46	.39	1.51d
PCEG	2.52	.0033094	.33	.06	-.06	1.71d
PCCE	2.33	.030960	2.33b	.69	.65	1.82b
PCCL	1.24	.059592	6.33a	.86	.84	1.61d
PCPA	-.90	.0029484	.23	.03	-.10	1.73d
PCEL	2.19	.089906	9.73a	.89	.87	2.18d

Note : a indicates significant at $\alpha = .01$
 b indicates significant at $\alpha = .05$
 c indicates not significant at $\alpha = .01$
 d indicates not significant at $\alpha = .05$

Table 10
Comparative Growth Rates

Variables	Method	Study Period	Subperiod 1	Subperiod 2
GDCM	OLS	3.91a	4.58a	3.87a
GDCF	OLS	3.79a	4.21a	3.79a
GNCF	OLS	4.00a	4.53a	3.80a
NNCF	OLS	3.96a	4.40a	3.78a
PGDCF	OLS	1.64a	1.89a	2.05a
PGNCF	OLS	1.85a	2.20a	2.07a
PNNCF	OLS	1.80a	2.07a	2.02a
NFI	GLS	18.21a	37.08a	4.21
FER	OLS	17.78a	10.02a	17.22a
PIW	GLS	8.50a	7.58a	7.79a
SHAGR	GLS	2.55a	-1.99a	-3.16
SHIND	OLS	0.35	3.49	-0.10
FAD	OLS	5.98a	10.21b	3.85a
SHINV	GLS	3.59a	12.39a	-.73
SHSAV	OLS	7.86b	7.61	21.81a
SHEX	OLS	4.72a	6.44	4.19a
SHIM	GLS	2.71a	8.47a	-1.16
PCCP	OLS	5.47b	15.59	1.24a
PCFO	GLS	-2.81	-9.41	0.16
PCPU	GLS	.54	-11.77b	14.39a
PCSU	GLS	-0.71	-6.96	4.39
PCME	GLS	-0.02	-4.08	-2.68
PCMI	OLS	-3.05	-1.12	-3.42b
PCEG	GLS	2.01a	4.81a	0.33
PCCE	GLS	6.38a	5.49b	3.10b
PCCL	GLS	3.28a	-0.97	5.96a
PCPA	OLS	-0.29	-4.32	0.32
PCEL	OLS	9.46a	8.71a	8.89a

Note : a indicates significant at $\alpha = .01$

b indicates significant at $\alpha = .05$

Table 11
**Results of Tests of Structural Change of the
 Parameters of the Consumption Model**

Sub Periods	Assumption About Intercept	Assumption About Slope of Income	Assumption About Slope of Lag Consumption	F Value	Decision About Structural Change
1 & 2	Different	Different	Different	.997	no
3,4 & 2	Different	Same	Same	2.92	no
1 & 2	Different	Same	Same	1.63	no
3,4 & 2	Same	Different	Same	5.02b	yes
1 & 2	Same	Different	Same	.20	no
3,4 & 2	Same	Same	Different	15.1a	yes
1 & 2	Same	Same	Different	28	no

Note: a indicates significant at $\alpha = .01$

b indicates significant at $\alpha = .05$

Table 12
**Results of Structural Change on the Parameters
 of Semi-Logarithmic Models**

Variables	F Value for Subperiods 2, 3 & 4	F Value for Subperiods 1 & 2
GDCM	6.6599a	4.1562b
GDCF	4.3255b	3.5120
GNCF	4.5850b	6.2627b
NNCF	4.1109b	5.7681b
PGDCF	5.6856a	5.7538b
PGNCF	2.5100	3.2140
PNNCF	2.3944	3.2071
NFI	19.9722a	32.420a
FER	4.4930b	1.3004
PIW	2.4981	2.0581
SHAGR	.8049a	1.7252
SHIND	8.9163a	4.4646b
FAD	3.3518b	2.6847

SHINV	14.4670a	22.129a
SHSAV	3.9512b	1.7133
SHEX	1.1453	.35989
SHIM	7.2394a	14.656a
PCCP	1.1589	1.8070
PCFO	30.3586a	5.3968b
PCPU	9.5513a	15.545a
PCSU	3.0659	3.5660
PCME	10.9938a	3.8763b
PCMI	.9344	.40878
PCEG	3.4261b	6.6605a
PCCE	.5570	1.2288
PCCL	5.0165b	7.5096a
PCPA	3.3092b	.80603
PCEL	.4354	.52916

Note : a indicates significant at $\alpha = .01$
b indicates significant at $\alpha = .05$

REFERENCES

- Ghafur, A. (1993): উনুজ উৎপাদনে দক্ষতা ও সামষ্টিক অর্থনৈতিক নীতি : শ্রেষ্ঠিত বাংলাদেশ দশম দ্বিবার্ষিক সম্মেলন, বাংলাদেশ অর্থনীতি সমিতি, ঢাকা।
- Ahmed, M. (1993): জাতীয়তাবাদের অর্থনীতি দশম দ্বিবার্ষিক সম্মেলন, বাংলাদেশ অর্থনীতি সমিতি, ঢাকা।
- Johnston, J. (1984): *Econometric Methods*, McGraw-Hill Book Co, Singapore.
- Kennedy, P. (1985): *A Guide to Econometrics*, Second Edition, Basil Blackwell Ltd. Oxford, UK
- Rahman, S.H. (1992): 'Structural Adjustment and Macroeconomic Performance in Bangladesh in the 1980s', *The Bangladesh Development Studies*, Vol. XX, Nos. 2 &3.
- Rahman, A. and Ali Z. (1993): 'Social Consequences of Structural Adjustment Political in Bangladesh, A Study with Special Emphasis on Vulnerable Groups' 10th Biennial Conference, Bangladesh Economic Association, Dhaka.
- Singh, A.K. (1993): 'Social Consequences of New Economic Policies: With Particular

- Reference to Levels of Living of Working Class Population', *Economic and Political Weekly*, Vol. XXVIII, No. 7.
- Sobhan, R. (1993): 'From Theology of Empericism: Reappraising Bangladesh's Experience with Economic Reforms' 10th Biennial Conference, Bangladesh Economic Association, Dhaka.
- Sobhan, R. (1992): 'An Industrial Strategy for Industrial Policy: Redirecting the 'Industrial Development of Bangladesh in the 1990s', *The Bangladesh Development Studies*, March-June 1992.
- Sobhan, R. (1992) : 'Re-thinking the Market Reform Paradigm', *Economic and Political Weekly*, Vol. XXVII, No. 30.
- Sobhan, R. 1991: Democracy and Development: Lessons for Bangladesh: Inaugural Address to the Bangladesh Economic Association, Dhaka
- Sobhan, R. (ed) (1991): *Debt Default to the-Development Finance Institutions: The Crisis of State Sponsored Entrepreneurship in Bangladesh*, University Press, Dhaka
- Sobhan, R. (1984) : *The Crisis of External Dependence: The Political Economy of Bangladesh*, Zed Press, London.

Institutions, Macroeconomic Stability and Economic Development

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I. INTRODUCTION

The Bangladesh economy is in transition. Over the past two decades, it has undergone some structural change in output and the labour force in response to sustained economic growth of about four per cent per annum. The major indicators of social, cultural and political development suggest that economic structural change has been associated with some social and political development. It is possible that some aspects of social and political development were induced by economic growth and transformation. However the extent of social development has been limited. In fact the country is yet to make a substantial economic progress to have an identifiable impact on social, cultural and political condition of the people. There is also a time lag for economic growth to have an impact on social development. Therefore, a sustained high rate of economic growth remains the prime condition for any future development strategy for Bangladesh.

The 1970s were a difficult period for Bangladesh, both politically and economically. Facing such macroeconomic problems as inflation, trade deficits, and low economic growth, the Bangladesh economy has been under structural adjustment programmes since the early 1980s. The main aims of structural adjustment have been to lower inflation and reduce current account deficits. These problems have subsided since the early 1990s. For instance, over the past three years the inflation rate has come down to a level of about three per cent per annum and the current account in the balance of payments has remained roughly balanced. The latter has been achieved despite the liberalization of imports and the partial removal of controls over capital flows. Over the past few years, Bangladesh has also accumulated considerable foreign exchange reserves. Although a high level of foreign exchange reserves does not necessarily represent a healthy economy, it has eased the foreign exchange constraint on economic growth. In the past a large volume of food imports often dwindled foreign exchange reserves. As the country is gradually becoming self sufficient in food production, it will be able to import more intermediate and capital goods, if the economy starts growing faster, without facing any foreign exchange constraint.

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All are not, however, well. The economic record card includes some undesirable statistics. The first of all is the high incidence of poverty, although it has declined during the past decade or so. Along with this problem, there is a high rate of actual or hidden unemployment. Those who are employed, their wage rates/earnings are low. The dismal picture of the country in a global context is reflected in its human development index value of 0.19 compared with 0.65 of Sri Lanka, 0.87 of South Korea, and 0.98 of Japan (UNDP, 1992). Moreover the prospect of rapid social development is not bright because the fundamentals of long term economic growth are weak. For instance, the literacy rate is roughly around 30 per cent. The labour force is unskilled, undisciplined and inefficient. And, as a by product of sociopolitical instability, there is chronic industrial unrest. The rates of saving and investment are low and most investments are highly inefficient. The government efforts for domestic resource mobilisation are limited and the country remains heavily dependent on foreign aid and loans for development finance. Above all, the economy is vulnerable to both demand and supply shocks.

Therefore, even after more than two decades since independence, Bangladesh remains what Faaland and Parkinson (1976) calls the test case of economic development. And, despite some positive signs, the future of the country is uncertain. The genesis of this uncertainty is more sociopolitical than economic. The country is socially and politically polarised and volatile. To say the least, the economic future of the country is linked to its sociopolitical stability. Unless such a stability is ensured, it may once again miss an opportunity for sustained economic growth and development at a time when all other South and South East Asian countries are rapidly developing.

II. THE STATE, GOVERNANCE, AND CIVIL SOCIETY

Bangladesh lacks a strong and effective government. Although most economic commentators are positive about the present macroeconomic stability following economic reforms and see the prospect of a take off (Percy 1992), they emphasise the need for a strong government to maintain political stability and to design and implement a long term development strategy. To allow the popular participation of the people in economic and state affairs, the ideal form of government will have to be sufficiently democratic to empower the people and create a plural civil society. On matters of economic affairs the government must have well defined roles. Such roles have been succinctly identified by Khan and Hossain (1989, pp. 3 4):

In a modern state the role of the government is a critical determinant of both the rate and the quality of economic growth... The success of a government in promoting economic growth depends on its ability to carry out certain basic functions effectively. It should be able to guarantee stability in the sense of generating confidence among the

leading economic agents the entrepreneurs, ... that the system is viable and durable. It should be able to create a broad coalition of the actual and potential entrepreneurs, one that transcends narrow parochial boundaries and is based on a consensus about the goals of economic policy. It should define the rules of the game that are consistent with these goals the system of incentives, and the functioning of the institutions that constitute the systematic infrastructure enforce these rules with sufficient neutrality and effectiveness. Neutrality in this context does not mean neutrality with respect to different social classes and groups. It merely means the avoidance of overtly arbitrary deviation from the rules to favor some sub group(s) of the coalition of the leading economic agents. The latter should be made to perceive clearly that adherence to the rules of the game is both necessary and the sufficient condition of continuation of the enjoyment of the product of their effort and industry. Economic growth under any system depends on the successful fulfillment of the above role by the government. Thus entrepreneurs will not commit their assets to productive investment unless they consider the system to be stable. Nor will they engage in productive enterprise if the rules of the game make it more profitable to engage in activities other than production.

Therefore, for sustained economic growth the country needs a stable, but not authoritarian, government. Unfortunately, all the political regimes in Bangladesh since independence have failed to promote social and political stability. In fact there were no concerted efforts from the political parties in government and the opposition to bring any political stability in the country. As a result, politicians, business entrepreneurs and civil society have remained isolated and polarised and their economic and political stakes in the good governance of the country have not converged.

Political scientists argue for the development of political institutions for political stability. However, political institutions cannot be created overnight¹ and without the empowerment of the common people. In Bangladesh, political institutions did not have a chance to develop over the past four decades. The common people have remained outside the purview of the State in terms of their entitlements and obligations (and therefore they do not have a high stake in the preservation of democratic institutions), although they have been

¹ As Rizvi (1994, p. 8) writes: ... democratic institutions cannot be created simply by legislation. Institutions evolve over a period of time and involves a slow process of learning, building up of customs and tradition acceptable to all parties, and the evolution of a political culture with ingrained respect for the rule of law, the majority verdict, respect for the opinion of the minority and an adherence to the constitution.

manipulated and used by politicians to achieve their immediate political goals.² The violent process through which Bangladesh gained independence weakened the rudimentary political institutions that it inherited. It also created a volatile sociopolitical environment which was not conducive to the development of political institutions. The early democratic ideals of the Mujib government were later proved to be a politically costly rhetoric when a one party political system was introduced to monopolise political power for both political repression and the continuation of State patronage of the intermediate class the power base of the Awami League. The failure of the Mujib government to nurture and develop democratic institutions cleared the path for a military intervention.

Since the first military intervention in 1975, the Bangladesh politics has been dominated by the people's struggle to resist the authoritarian or quasi-authoritarian rule and mobilize to overthrow the military regime under Ershad. The success came in 1990 when the Ershad regime was overthrown by a popular mass uprising. The democracy was restored in 1991 when a relatively fair parliamentary election brought the Bangladesh Nationalist Party to power under Begum Khaleda Zia. To most observers, it was a political breakthrough and the beginning of a stable political system. In reality, it was not so. Old habits die hard. The elected government began to behave in the same way as its predecessors had done. Far from a strong, effective and clean government, what the people got was an indecisive, inefficient and complacent government. It has failed to capitalise the goodwill of the people for a comprehensive economic change in the country. Importantly, it has failed to capitalise the changing political mood of the people for a stable, reform oriented government. The political tactics of the opposition parties have also been contrary to what one should expect in a democratic system. In fact they have been behaving as they are in a rush to overthrow a colonial ruler. As a result, under the facade of democracy, the old style confrontational, interest group politics has prevailed. Rizvi (1994, pp. 10-11) is critical of the way the opposition parties in South Asian countries in general, and Bangladesh and Pakistan in particular, try to remove duly elected governments:

Political misdemeanour, opportunism and lack of responsible behaviour is not confined to the parties in power alone. The parties in the opposition have also seldom shown any concern for the democratic process. The most obvious evidence of the lack of democratic commitment of the political parties is their reluctance to accept (and

²Rizvi (1994, p. 4) emphasises the class character of politicians in South Asian countries to identify their economic and political interests. He writes: Despite the transition to democracy the class composition of the leadership has remained very much the same ... Although the new leaders have come to power through popular mobilization and the electoral process, the leadership is essentially drawn from a narrow group of ruling elites and their interests and outlook are not substantially different from those whom they have replaced.

respect) popular verdict when it goes against them. Rejecting the results of an election which has been rigged is understandable. However both in Pakistan and Bangladesh the opposition has shown scant respect for popular verdict or constitutional propriety even it was recognized that the electoral process was largely fair. Both Nawaz Sharif and Bhutto turn refused to allow their opponents to run the full term of office which their popular mandate had entitled them by forcing mid term elections. Likewise Sheikh Hasina has been agitating for mid term election even though the BNP has a clear popular mandate. The opposition groups also appear to have misunderstood the nature of democratic politics in another crucial respect. While it was perfectly legitimate to put pressure including to resort to non cooperation, civil disobedience, non payment of taxes and other forms of direct actions such as street agitation to oust a colonial ruler or overthrow a unelected usurper regime, the same tactics cannot be permissible against democratically elected government. The opposition has to be conducted within the framework of the constitution: popular mobilization against government policies; criticizing the government in parliament and forcing votes of no confidence; mobilizing opinion against the government through propaganda and education of the masses.

In essence, what Rizvi emphasises is that, like any other groups in the society, politicians must behave and be responsible for their action both inside and outside the parliament. It is not their political interests but obligations to a young nation that must come first and prevail. But the reality is different.

In a democratic system the people are the final arbitrator of power and entitled to judge the competence and suitability of politicians to hold public offices. Such a question arises because in an underdeveloped democratic system, the bad people drive the good people out of politics. Put bluntly, politics is too important to be left only in the hands of self serving, power and money hungry politicians of questionable competence and integrity. There must be a change in destructive and patronising political culture. Such a change should come not in the people but in the political system itself to make it genuinely democratic and competitive. To develop a genuine democratic system, all monopolistic and here ditary political practices are to be replaced by well defined, competitive political rules where organizational stability and political discipline and responsibility get priority over speculative practices of politicians in distributive politics. The degree of political maturity in a democracy is reflected in the way the political leadership of a party is elected. The political culture in Bangladesh is such that it remains in the patrimonial political mode where the leadership (or ruler) comes from the royal or quasi royal household. That the same kind of hereditary political leadership is (was) present in neighbouring countries, such as India, Pakistan, Nepal and Sri Lanka merely reflects the fragile nature of

democratic institutions in South Asian countries. The people have the right to be cynical about the hereditary culture of politics. They are also entitled to ask whether their political leaders (in government and the opposition) are competent, experienced, and responsible enough to run a country of more than 110 million struggling people. Above all, there must be an end of the chaotic practices of politics. The common people simply cannot afford the luxury of politicians' politicking for the sake of politics. But the bottom line is, like any other groups in the society, politicians as a group work for their own interests, not for the interests of the people.³ The only difference is, they deceive the people by pretending to be the saviour of the nation. Only the fools believe them all the time and the common people trust them some of the time. Those who do not believe or trust them, conveniently ignore them.

III. THE STRATEGY OF ECONOMIC DEVELOPMENT

Economic growth does not start in a vacuum, and there is no miracle in it. Neither a top down nor a bottom up strategy of development can ensure economic growth unless it has the answers to two fundamental questions. First, what are the factors which contribute to economic growth? Second, what are the institutional arrangements which would ensure an efficient, productive utilization of the factors of production?

Porter (1990) finds that the trajectory of development of a country can be summarised as factor driven, investment driven, and innovation driven. It fits the development experience of East Asian newly industrializing economies. Chowdhury and Islam (1993) find that these economies have achieved factor and investment-driven development. Despite the popular perception of a miracle, what they find is that the development of these economies originated from their national competitive advantages in basic factors of production disciplined, hard working, educated workforce, and rapid capital accumulation.⁴ In essence, East Asian development started from the floor of the sweatshop. After achieving their initial development, they are now adapting internal

³Rizvi (1994, p. 6) describes the political character of politicians in a country like Bangladesh; ... unabashed struggle [of the so called democratic leaders] for power has seriously eroded popular confidence in democratic institutions. To some of these leaders politics is a relentless pursuit of power and election is merely a means to capture power; but when power is denied [by the people] the same leaders have shown no hesitation in working against democratic processes. In other words they are prepared to respect popular verdict only when it is delivered in their favour. This shows a contempt for the fundamental concept of democracy ...

⁴For example, Krugman (1994, p. 13) writes, Many, perhaps most, writers on the global economy now take it for granted that the success of these [East Asian] economies demonstrates that the world's economic centre of gravity will inevitably shift to the Asian Nations of the Western Pacific. However, this conclusion is called into question by the simple observation that the remarkable record of East Asian growth has been matched by input growth so rapid that Asian economic growth, incredibly cases to be a mystery ... If there is a secret to Asian growth, it is simply deferred gratification, the willingness to sacrifice current satisfaction for future gain.

institutions for the next phase of development (i.e., the innovation driven development).

What was the role of the State in economic development in these countries? It remains an area of intense debate. Most development economists in the 1950s and 1960s argued for a dominant role of the State in initiating and sustaining early economic development. Such a view has lost some of its force since the early 1970s because of disappointing development experience in most developing countries. However the phenomenal growth performance of East Asian countries during the 1970s and 1980s has brought the role of the State in economic development in the forefront. It has become almost an article of faith that the strong State in East Asian countries has played a role in economic development. However the State was not the engine of growth in the way it is often claimed.⁵ One feature of the State in East Asia is that it is insulated from the disruptive influence of rent seeking groups, which allows policymakers to pursue coherent economic policies. Chowdhury and Islam (1993) find that the strong State in East Asia facilitated the factor driven and investment driven phases of development. The hallmark of factor driven and investment driven phases of development is the application of mass production, which entails the adoption of standardized technology to produce standardised products. The basis ingredients of this production paradigm are hard working, disciplined, relatively skilled workers, and easily available standardised technology. Therefore the experience of East Asian economies confirms that the traditional factors of production skilled labour force, capital, and standardized technology can play a key role in economic development during factor driven and investment driven stages of development. It fits well with the oft quoted view that the East Asian development model is essentially an export driven model of industrialization based on the principle of comparative advantage. In fact Balassa (1977) finds that the export driven growth experience of East Asian countries can be explained by what he calls 'a stages approach to comparative advantage'. It suggests that a country's comparative advantage evolves in stages initially a developing country has a comparative advantage in labour intensive activities. But, as it develops, its comparative advantage moves towards capital intensive industries. At the mature stage of development, the country's comparative advantage moves towards skill intensive industries.

⁵After a thorough review of the relevant literature, Chowdhury and Islam (1993, p. 56) have drawn following conclusions: ... while the State in East Asia may not have played the role of an 'engine of growth', it has certainly played the role of a handmaiden of growth'. Policymakers in such countries fulfilled an important developmental function by carrying out necessary policy reforms which created and maintained an environment conducive to rapid economic growth. They have also fulfilled an important task by making necessary investments in essential infrastructure. In case where policymakers moved to the much more ambitious and risky realm of industry specific interventions, the limits to their potency became evident. This is the fundamental lesson to be learnt from the political economy of East Asian economic development.

What are the lessons that Bangladesh can learn from the development experience of East Asian countries? First, there is no easy route to economic development. It must start from the basics. That is, the fundamentals of economic development hard working, disciplined, and skilled labour force, high rates of saving and investment, and standardized technology must be right. It is more imperative for Bangladesh because, except human resources, the country does not possess easily exploitable natural resources. It is neither a blessing nor a curse, but it could be either of them whichever way the people want it to be. The development experiences of countries with different resource base suggest that exploitable non human natural resources is neither a necessary nor a sufficient condition for economic development. In fact there is an inverse relationship between a country's endowment of non human natural resources and industrialization. Arndt (1987) argues that the countries which have abundant natural resources suffer from what he calls 'the temptation of lotus eating' (i.e., they think that they do not have to work hard at doing well economically). It implies that a country like Bangladesh must make the most of its human resources for economic development. Therefore the key part of a government's development strategy will have to utilise the lack of non human resources to its advantage in the way East Asian countries have done. But it is not automatic and does not come easily. As Chowdhury and Islam (1993, p. 100) remark, 'while policy makers in the East Asian NIEs [newly industrializing economies] could utilise the lack of natural resources to their advantage, many developing countries curse their fate for the lack of it. At the same time, many natural resource rich developing countries have made a mess of it'.

IV. INSTITUTIONAL ARRANGEMENTS AND MACROECONOMIC STABILITY⁶

Monetary and financial stability is a key requirement for economic growth. A disciplined and well designed monetary policy is the cornerstone of monetary stability. The conduct of monetary policy in a country like Bangladesh requires institutional reforms. First, instead of multiple objectives, monetary policy should be assigned the sole role of price stability. This single objective monetary policy has the advantage of being easy to monitor. The monetary authority can be made accountable and it cannot hide its failures behind other objectives. This simple rule has an added advantage of being credible. In contrast, when monetary policy is given the role of achieving multiple objectives, such as the control of inflation control and the reduction of unemployment, it creates dynamic inconsistency and credibility problem because the private sector knows that at some stage in the future the government must create surprise inflation to lower unemployment. The second simple rule is the removal of discretionary power of the government to vary

⁶This section draws some materials from Hossain and Chowdhury (forthcoming).

money supply. One way to do so is to follow a simple money supply growth rule tied to the natural growth of the economy. For example, if the long run growth rate of the economy is $g_y\%$ and the income elasticity of the demand for money is unity, then money supply should not grow at a rate of greater than $g_y\%$ to facilitate the extra transaction needs created by additional output. If the money supply grows at the same rate as the growth rate of real output and if the velocity of money is constant, then from the quantity theory it follows that the inflation rate will be zero. However the $g_y\%$ or a constant money supply growth rule implies that the monetary authority has control over the monetary base and it can choose an inflation rate.

What institutional arrangements will ensure the implementation of these simple rules for enhancement of monetary policy credibility and monetary stability? To begin with if the government resorts to deficit budget financed through borrowing from the central bank, the monetary authority will lose control over the monetary base and hence it cannot credibly apply the simple money supply growth rule. The experience of high performing East Asian countries has shown that if the central bank is made independent of other parts of the government and granted a mandate for maintaining price stability, then a government can strengthen its commitment to price stability. Thus, central bank independence can provide a necessary institutional limit on unsustainable monetary creation that results from persistent budget deficits. However, it must be emphasised that central bank independence by itself cannot ensure monetary policy credibility, which depends ultimately on the credibility of the government policy as a whole. If the budgetary process is not reformed, eventually the central bank will have to cave in.

Thus, given the imperfect constraints of the political system in Bangladesh on its inefficient government, constitutional safeguards may well be necessary on fiscal, debt and money creation capacities. At the extreme it may involve having a legislation, making all unfunded government spending programmes constitutionally illegal. This arrangement is referred to as 'fiscal constitution'. In fact, such a fiscal constitution, exists in Indonesia, Thailand, and Taiwan. Therefore fiscal constitution and central bank independence must go hand in hand. The twin institutions of fiscal constitution and Central Bank independence lay the foundations of good governance. Of course, such institutional arrangements may lead to inflexibility. However the growth dividend of macroeconomic stability can far outweigh the costs of inflexibility.

The openness of an economy can serve as a further institutional constraint on macroeconomic mismanagement and financial instability. To begin with, policy mistakes cannot continue for long or go far in an open economy. The reaction of financial market will be swift to enforce fiscal and monetary discipline. Large and persistent budget deficits can fuel the expectations of accelerating inflation and create balance of payments and exchange rate crises leading to an eventual sharp devaluation of domestic currency. The fear of large depreciation

of currency may cause massive capital flights exacerbating the exchange rate crises.

V. CONCLUDING REMARKS

Capital (physical and human) and technology remain the main determinants of economic growth in a country like Bangladesh. However, capital accumulation is not enough, the productivity of capital is crucial. The productivity of capital depends on many factors, including economic environment and institutions through which capital is allocated and utilized. A developed financial system is a key for an efficient utilisation of capital. The productivity of capital is also found high in market based open economies.

In so far as development strategy is concerned, an export oriented industrialization is superior to import substituting industrialization for both economic and pragmatic reasons. However, a mere increase in exports may not raise economic growth; there is a need for creation of disciplined and competitive economic environment which efficiently utilises resources for production of goods and services for consumption and exports.

The government can play a key role in economic development not by participating in business activities where the private sector has an advantage but by creating competitive markets and other social and political institutions which facilitate the workings of the economy.

The Bangladesh economy has now stabilized. Time has come for the nation to make efforts for sustained economic growth so that it can have an impact on poverty and the wellbeing of common people. Precisely, at least a growth rate of 7-8 per cent per annum over a decade or so is needed to have a substantial impact on poverty. But it will not happen automatically. Some lessons have to be learnt from, say, East Asian countries. If one does not believe in a miracle, then there is little doubt that the factors which have raised economic growth in East Asian countries will do so in Bangladesh. East Asia has shown that it is possible to break the so called vicious circle of poverty within a relatively short period of time, provided that the fundamentals of economic development are right. And there is no harm in emulating the path of successful East Asian countries. In fact the World Bank (1993, p. 367) draws some lessons from East Asia for other developing countries:

While there is no recipe for success, there are some positive lessons: keep the macroeconomy stable; focus on early education; do not neglect agriculture; use banks to build a sound financial system; be open to foreign ideas and technology; and let relative prices reflect economic scarcities. And there are some negative ones: promoting specific industries or attempting to leap stages of technological development will generally fail; strongly negative real interest rates and large subsidies to borrowers debilitate the financial system; and

directing credit without adequate monitoring and selection of borrowers distorts allocation. Finally, ... a successful export push whether it results from an open economy and strong economic fundamentals, or from a combination of strong fundamentals and prudently chosen interventions, offers high economic gains.

To sum up: the Bangladeshi people in general, and policymakers and politicians in particular, most come to a realisation that the solving of deeply rooted socioeconomic problems is not so easy. Development means pains and sacrifices for one (or more) generations. Any deferment of such pains and sacrifice would require greater pains and sacrifice in the future. Empty sympathies from friends and foes do not solve economic problems and economic and political rhetoric merely raises the expectations of masses, but does not bring any durable economic benefits to the society.

REFERENCES

- Arndt, H. 1987 : "Industrial Policy in East Asia" *Industry and Development* 22, pp. 1-66.
- Balassa, B. 1978 : "Exports and Economic Growth", *Journal of Development Economics*, pp. 181-189.
- Chowdhury, A. and Islam, I. 1993 : *Newly Industrialising Economies of East Asia*, (London: Routledge).
- Faaland, J. and Parkinson, J.R. 1976 : *Bangladesh: The Test Case of Development*, (Boulder : The Westview Press).
- Hossain, A. : *Macroeconomic Issues and Policies: The Case of Bangladesh*, (New Delhi : The Sage Publications, in press).
- Hossain, A. and Chowdhury, A. : *Monetary and Financial Policies in Developing Countries : Growth and Stabilisation*, (London : Routledge, in press).
- Khan, A.R. and Hossain, M. 1989 : *The Strategy of Development in Bangladesh*, (London : The Macmillan).
- Krugman, P. 1994 : "Dispelling the Myth of an East Asian Miracle" *Australian Financial Review*, 15, November, p. 13.
- Percy, C.H. 1992 : "South Asia's Take-Off" *Foreign Affairs*, pp. 166-174.
- Porter, M. 1990 : *The Competitive Advantage of Nations*, (London : The Macmillan).
- Rizvi, G. 1990 : "Democracy, Governance and Civil Society in South Asia", Distinguished Lecture, 10th Annual General Meeting of the Pakistan Society of Development Economists, 2-5 April.
- United Nations Development Program, 1992 : *Human Development Report*, (New York : The Oxford University Press, 1992).
- World Bank 1993 : *The East Asian Miracle : Economic Growth and Public Policy*, (New York : The Oxford University Press).

The Unrecorded Economy of Bangladesh: Some Preliminary Estimates

— M. Asaduzzaman*

I. INTRODUCTION

The size and the growth of the unrecorded economy¹ of Bangladesh has always been a major issue of debate among researchers and policy makers. One reason has been that between 1972 and 1992, there has been a plethora of regulations and controls permeating almost every sphere of life. These controls almost certainly gave rise to the expansion of informal activities many of which were and are also illegal resulting in a income distribution which almost certainly has been more unequal than what the recorded income suggest. As a result from time to time there has been attempts at measuring the extent of economy (Reza 1989). With the whittling down of many of these controls, one expects that its size (at least the size relative to the formal economy) would go down. One may ask if this indeed has been the case. Secondly, it is a matter of common belief that many of the legal but informal activities are not captured in the government statistics. Particularly, as suggested by earlier research the size of such an informal sector may not be

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¹ *The term "unrecorded" is used to denote the part of the economy which for one reason or another eludes official recording for estimation of the gross domestic product of the economy. The lack of recording may arise due to various reasons. Probably the most popular idea is the existence of what is called the "black" economy arising due to illegal activities like tax evasion, black marketing (when there is a price control), illegal trade (smuggling, over- and under-invoicing, false declaration etc.) and economic activities of illegal aliens. There may also be legal activities like informal activities (petty trade, various informal services) and activities which are difficult to be recorded properly or are not marketed (homestead production part of which is consumed within the household). One usually finds other terms like "shadow" economy or "hidden economy". But it seems that the most appropriate term should be "unrecorded" economy as that is the common characteristics of them all. Note, however, that the list does not include home production like cooking, child rearing and other income-saving activities of household members (both women and men) which also generally go unrecorded or unrecognised.*

small. There are some concerns that the fast urbanisation that this country is experiencing may have increased the size far more than before. Also, there are some opinions which would argue that given the recent credit infusions into the rural economy for non-crop and non-farm rural activities, there may have been substantial increase in the value added in these sectors and that official statistics fail to show these up.² On the whole therefore the size of the unrecorded economy, both absolute and relative to the formal one, may be large. If true, this may have major policy implications in terms of over-all management of the economy.

The objective of this paper is a modest one which is to estimate in aggregate the size, both absolute and relative, of the unrecorded economy of Bangladesh and analyse some of the proximate causes giving rise to it. The emphasis shall be on its illegal part i.e., the black economy. The rest of this paper is divided into the following sections:

II. Methods of estimation

III. Estimation

IV. Concluding remarks

II. METHODS OF ESTIMATION

There are several ways in which one may attempt to estimate the size of the unrecorded economy.³ Briefly, one may use a monetary approach, a labour market approach, an accounting (for balancing aggregate expenditure and income) approach or some kind of a hybrid of these. Among these, the monetary approach seems to be the one most favoured and may be described as something of a topdown view. The present exercise would like to follow broadly this approach.

The basic idea behind the monetary approach is that as people earn an income from their economic activities, they hold that income in some form, currency or demand or time deposits. If the income arises from illegal activities, most likely it would be held in currency form rather than as deposits in the bank to avoid detection by public authorities. While such compulsions may not exist in case of informal but legal activities, in Bangladesh the people who are engaged in such

² One dramatic expression of such belief has been recently witnessed by the nation when Mr. Saifur Rahman, the Finance Minister, was told about the reported slow-down of the economy as found in a recent study (IRBD :1995). He not only openly guffawed at the idea but put forward the view that there has been substantial growth in the economy due to credit expansion in subsectors like livestock and fisheries which are revealed in the official statistics.

³ For a critical review of the various methods of estimation, see Thomas (1993). Also see the references quoted therein and Bhattacharya (1990).

informal but legal activities are very much unlikely to have bank deposits as such. But they certainly will be holding cash for various market transactions provided, of course, that the output of their activities is marketed which may be by and large, true in many cases. In any case, if one can decide upon the cash holding due to the unrecorded income under certain plausible assumptions one may then estimate the size of the income due to unrecorded activities and also the causes that may have contributed to it.

Among the monetary approaches, one may have a choice of several methods. One of the earliest is that by Feige (1979, 1981) which depend on a specific version of the quantity theory of money. Guttman (1977) devised a method which is quite easy to follow as this depends on monetary series, currency in circulation and demand deposits, published by probably all countries. Guttman's method, however, suffers from certain problems related to the use of a base period which unless chosen well may result in misleading conclusions. Tanzi's (1983) method, though criticised by some, appears to have withstood the test of time better. Bhattacharya (1990), for example, used a currency demand equation as did Tanzi although he omitted the tax variable as used by the latter. Saris and Brink (1993) report a Tanzi-like method used by Bagachwa and Naho to estimate the extent of the unrecorded economy of Tanzania by first estimating a demand for currency equation. In this study, we would first be using the Guttman method to estimate the overall size of the unrecorded economy. After that we shall try to estimate the same by fitting a currency demand function using a Tanzi-type method and analyse some of its proximate causes.

For an introduction to the Guttman method, one first postulates that the unrecorded income is held as currency and then decides upon a year when the size of the unrecorded economy has been nil or insignificant. Call this year the base year, Year 0. The cash to demand deposit ratio in Year 0 is estimated. Let us call it λ . Then in a given subsequent or previous year, t , the regular holding of cash, C_{tr} may be represented as λD where D denotes demand deposit. (In subsequent text the subscript "t" is omitted for less clutter).

The difference between actual cash holdings, C , and the regular cash holding, C_r , gives one the idea of the size of the "irregular" holding of cash. Assuming that the officially estimated national income divided by the "legal" transaction demand for money ($C_r + D$) can be taken as the velocity of money and denoting it as "V" and further assuming that the velocity of regular and irregular cash holdings will be the same, one gets the estimated size of Y_{ur} , the irregular economy, as $V \cdot (C - C_r)$.

For a Tanzi-type method, first postulate a currency demand equation as

$$C = f(X, Y, Z) \dots\dots (1)$$

where

X = a set of variables influencing recorded currency holding;

Y = income;

Z = a set of variables influencing unrecorded currency holding.

The currency equation may be estimated by including the Z variables in (1) and C_{r+ur} (i.e., total currency demand due to both recorded and unrecorded activities) estimated by imputing the values of the explanatory variables for a given time period. Next, one may estimate the "legal" currency holding, C_r , by omitting the Z variables in estimated equation (1). The difference between C_{r+ur} and C_r , C_{ur} , denotes the estimated size of cash holding due to unrecorded income in the economy. By multiplying estimated C_{ur} by the transactions velocity of money as before then gives one the estimated size of the unrecorded and illegal income in the economy. The transactions velocity is estimated by dividing income by the aggregate of regular currency in circulation and demand deposits.

One may criticise the above methods on various grounds (Thomas 1993). The Guttman method has been criticised for assuming the same velocity of regular and irregular cash holdings. But, possibly, there is nothing much one can do about it. Further, this may not be an implausible assumption in a country like Bangladesh where detection may not mean much legal hassles for the high and mighty while much of the informal sector though likely to be sizeable in aggregate and legal the activities therein are likely to be carried out by many persons of small means who would probably generally hold cash than putting the money in bank and use it like any other legal cash holder.

More serious is perhaps the idea of a base year without any appreciable size of the unrecorded economy. The choice of a base year may influence the ultimate results of the estimate. For our purpose, therefore, we have as explained later used the idea of the base year as the one when the size of the unrecorded economy has remained stable as evidenced by the C/D ratio.⁴

The Tanzi-type regression estimates have certain advantage over the Guttman-type results in that the changes in the cash holdings are not related only to the illegal activities but also perfectly legal ones. But it faces similar criticisms regarding the use of the velocity of money estimates. Also both Guttman and Tanzi-type analyses quite obviously depend on the quantity theory of money which one may object to. Furthermore, in equation (1), there is no inclusion of the unrecorded income which may be thought to be the principal actor determining C_{ur} .

⁴What it actually means is that the estimates are either scaled up or down in an additive fashion relative to the base year. If one can have extraneous information on the base year's holding of illegal cash or income, then adding these to the present estimates may give a more truthful picture.

Even if we set aside the objections to the use of the concepts borrowed from the quantity theory of money, both Tanzi formulation and that due to Bhattacharya suffer from a similar problem. In case of Tanzi-like equations as reported by Saris and Brink (1993), there is no mention of the unrecorded income. It only brings in other factors that may give rise to unrecorded cash holdings. The unstated assumption must then be that these explicitly stated factors determine the extent of the unrecorded economy and in a fashion whose influence on currency holding is additive to that due to the recorded income. This means that the two types of currency holdings are independent of each other. Both the assumptions are difficult to accept. Note particularly that the same household may engage in both types of activities and the two types of currency holding will very likely be influenced by each other and these will therefore be jointly determined. Although a micro level phenomenon may not be directly observed in macro level information, it is unlikely that the interdependence will vanish altogether in the latter case. In case of Bhattacharya, while one may appreciate his ingenuity in manipulating econometric properties of an estimation procedure to arrive at a synthetic method of estimation of the unrecorded economy, the problem of interdependent influence of the two types of income on currency holding remains.

We believe that one way of removing the problem is to conceptualise the issue of unrecorded income as that of an error in measurement of an explanatory variable, Y , total income. What we observe is Y_r in place of Y . Such problems may be amenable to the use of instrumental variables method of estimation. For the present, however, we would estimate the size of the unrecorded economy using only the Guttman and Tanzi-type methods. The rest remains a matter for the future.

III. ESTIMATION

3.1 Currency Holding

By the end of 1992/93, currency outside banks in the hands of the general public had been Taka 44.8 billion. Twenty years earlier, it had been only one-fifteenth as much (slightly more than Tk 3 billion). Roughly every sixth or seventh year the cash holding doubled while during the eighties it rose even faster. More interesting than the behaviour of nominal cash holding had been the relative holding of cash compared to other monetary aggregates. When the ratio of cash to GDP is examined, one finds that it had fallen from around 5% to about 2% over 1972/73 - 1974/75. Thereafter the ratio has changed little, if at all. On the other hand, the ratio of cash to demand deposits has shown wide year to year fluctuations (Fig. 1).

Between 1972/73 and 1974/75 it fell drastically from nearly 100% to 70%, between 1974/75 and 1983/84 fluctuated around 75% and fell in the subsequent two years somewhat before moving up again steadily to 95% or thereabout and remaining at that level since then. As Currency and demand

deposits together constitute M1, narrow money, the proportion of currency to M1 mirrors the image, the ratios however changing less sharply. The one ratio which has shown a steady downward trend had been the ratio of currency to M2 or broad money, the aggregate of currency, demand deposits and time deposits. It has fallen from nearly 30% in 1972/73 to about half as much at present. This has been made possible due to a fast growth, particularly in time deposits. The latter has grown from less than Taka 5 billion in 1972/73 to nearly Taka 225 billion in 1992/93. The growth had been truly phenomenal since the eighties. For example, between 1982/83 and 1983/84 the time deposit increased by 50% from Taka 32.6 billion to Taka 48.4 billion while between 1986/87 and 1992/93 it rose yearly by around Taka 20 billion or even by nearly Taka 25 billion. The per capita growth reveals a similar picture. In real terms, however, the growth had been much less sharp. Between 1974/75 and 1992/93, time deposits per capita increased from a mere Taka 400 or so to Taka 1500 or thereabout (all measured at 1984/85 prices).

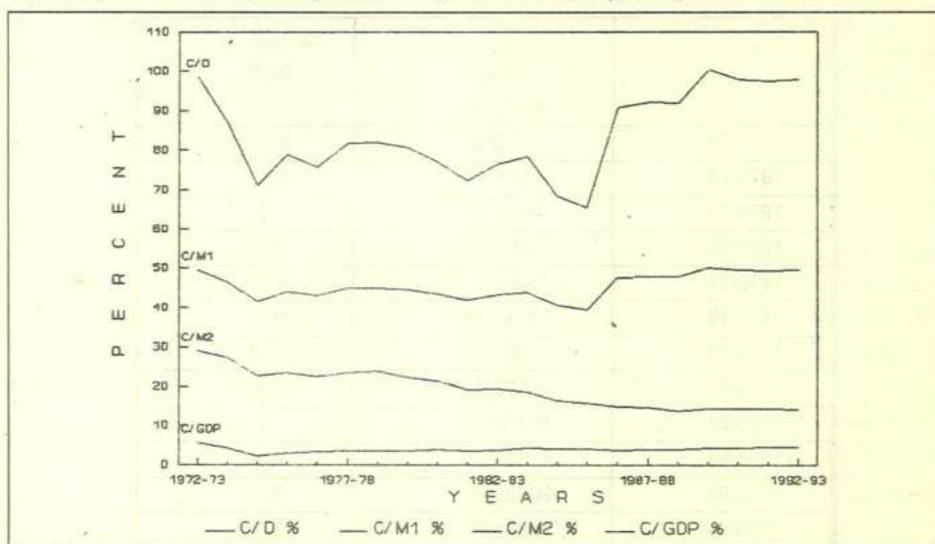


Figure 1
Ratio of Currency to Other Monetary Aggregates

3.2 Guttman-type Estimate

As explained earlier, a Guttman-type estimate depends crucially on the choice of a base year. It is popularly believed that in the early seventies, smuggling had been rife and black money held sway in the economy. So this period can not be used as the base. Ultimately, we decided to use year with the lowest historically observed currency to demand deposit ratio in the mid-eighties and rounded it to 0.65 as the estimate of λ . Note that its use does not mean that in 1985 or thereabout, the unrecorded economy did not exist. It very much did. Its use only means that the estimates, as explained earlier, are relative to the mid-1980s.

Table -1 shows the estimates of unrecorded income as reflected in currency holdings by the general public. At an absolute level, unrecorded income shows some slow growth upto the early eighties and fell since then upto the mid-eighties, there had been an explosive growth since then. At the relative level, however, there had been quite some fluctuation. But again here one finds that since 1985 the relative importance of the unrecorded economy has risen sharply and in 1992/93 stood at around 20% of the economy.

Are these acceptable estimates? Reza's (Reza 1989) earlier estimate which was a point estimate for the year 1985/86 shows a much greater extent of the illegal unrecorded economy and by implication a higher absolute and relative level of the total unrecorded economy. His estimate showed it to be Tk 166 billion or more than a third of the GDP. Almost one-half of this had been shown

Table - 1
Estimated Unrecorded Income and Its Proportion in Official GDP of Bangladesh

Year	Irreg. Income Mn.Taka	Per cent of GDP
1972/73	10138.2	20.3
1973/74	10076.64	13.3
1974/75	4667.70	3.7
1975/76	9246.53	8.4
1976/77	7505.52	6.5
1977/78	14640.35	10.1
1978/79	17823.58	10.2
1979/80	18673.84	9.5
1980/81	16770.66	7.2
1981/82	11337.36	4.4
1982/83	20522.03	7.0
1983/84	28828.02	8.1
1984/85	8695.78	2.1
1985/86	1232.66	0.3
1986/87	84277.03	15.6
1987/88	97768.21	16.4
1988/89	107653.7	16.3
1989/90	157860.2	21.4
1990/91	166028.7	20.0
1991/92	177830.5	19.6
1992/93	192683.9	19.9

Source : Author's own estimate

to be due to avoidance of excise tax by firms and factories. Unfortunately, his estimates were in many cases anecdotal and as stated by the author himself purely imaginary. Still, if we assume that Reza at least hit the mark halfway through and given the characteristics of our base year as explained earlier, we may add some 15% percentage points to our Guttman-type estimates. The size of the unrecorded (much of which is also probably illegal) then stands at around a third of the GDP in the early nineties.

In other countries like India, the officially commissioned *Aspects of the Black Economy* of India (the NIPFP or National Institute of Public Finance and Policy Report) estimated the extent of the black economy to be Indian rupees 316 to 368 billion or 18-21% of the GDP in the year 1983/84 (as reported in Pendse 1989, p. 37). The extent of tax-evaded income was of course lower being 4.2 to 8.6% of the economy. Other estimates vary widely from 10% to 40% of GDP for the year 1978/79. A more recent estimate by Chopra puts it at 12% for 1976/77. For other countries the estimates are higher. For Tanzania, Sarris and Brink (1993) citing a study by Bagachwa and Naho reports the size of the unrecorded economy to be 40-50% of the official GDP. For comparison note that Bhattacharya recently estimated the size of the unrecorded British economy to be around 8-9% of the recorded GNP. Our present estimates thus generally fall somewhere in the middle of the range of these estimates.

3.3 Tanzi-type Estimate

For a Tanzi-type estimate we need to define an estimable regression equation. We first define the dependent variable as the ratio of currency to broad money, C/M2. Our hypothesis is that the following variables need to enter such an equation as explanatory variables (with the hypothesised signs of the regression coefficients shown beside them):

Variable	Symbol	Expected Sign of Regression Coefficient
Nominal GDP	Y	+ ve
Rate of interest on deposit	R	- ve
Domestic credit as % of GDP	DC	+ ve
Currency overvaluation	OV	?
Import tax	IM	?
Income tax	IN	+ ve
Inflation	P	+ ve
Time	T	?

In place of nominal GDP one can also use the real GDP. As a higher level of GDP will mean a higher level of transaction, the demand for cash relative to M2 should rise in such a case.

The cost of holding cash is given by the rate of return on deposits. As the rate of interest rises so should the cost of holding cash and one should get a negative regression coefficient. Domestic credit increases however should increase liquidity and is expected to have a positive coefficient.

Currency overvaluation is used to reflect the openness of the economy and is measured as the difference between the secondary market rate of a US dollar and that obtained officially divided by the official rate. Quite obviously, the nearer the two rates each other, the lower is the extent of overvaluation. Overvaluation of taka may lead to two types of reactions among the general public. On one hand, foreign currencies are cheaper, so in an open economy, however, regulated it is, there will be an urge to exchange taka for dollars (or pound sterling, say). On the other hand the overvaluation allows one, particularly an importer of goods, to generate much higher profit than usual and may induce him to resort to all sort of apparent legal means to get illegal benefits out of that. What the ultimate result will be depends on the relative strength of the two urges.

We should mention here that the openness of the economy perhaps can be better measured in terms of the effective rates of protection. The higher the rate of protection, the higher would be the incentive to activities like smuggling and higher would be unrecorded income and consequently C/M2. Unfortunately, there is no such time series in existence. Only estimates for particular years are available.

An import tax rate can be used in place of the effective rate of protection. Unfortunately, arriving at a series of trade weighted import tax rate is very time consuming process and the construction of a long one at that since the seventies is almost impossible at this stage of present research. What we did therefore was to express the total collection of all import-related duties as a percentage of total value of imports and use that as the import rate. As constructed, this probably reflects collection efficiency rather than the openness of the economy. The expected sign while it may go either way can then be negative and then denote collection efficiency.

The income tax variable is measured as the maximum effective marginal rate of income tax (expressed as per cent of income) in a particular year. In keeping with experiences elsewhere, it is postulated that tax evasion and therefore illegal cash would be higher the higher is the marginal tax rate.

Inflation increases the transaction demand for cash while it falls as a store of value. On the whole, however, one may expect the former to predominate in a period of fast price rises. Thus expected price level may exert a positive influence on cash holdings relative to M2. We have measured expected price by the price level experienced during the last period. The GDP deflator (with 1984/85=100) has been used to reflect the price changes.

Finally, time has been introduced as a surrogate for all other factors which may influence cash holdings over time e.g., higher level of urbanization and consequent increase in the extent of informal activities and greater demand for cash or increase in bank branches which may increase the savings habit in the bank lowering the demand for cash. The expected sign obviously may go either way depending on the relative strength of all these factors.

In actual estimation, we had to restrict ourselves to a shorter time series since 1977/78 as for earlier years we have no way of constructing estimates for overvaluation for lack of requisite data. We tried both linear and log-linear formulations. The former usually performed better. While we tried various combination of variables, only the one that has been used for final estimation is shown here.⁵ The chosen equation showed autocorrelation of second order when ordinary least square was applied and was therefore reestimated using an autoregressive structure of the residual of second order. The final equation was the following:

$$C/M2 = 0.275 - 0.115 R - 0.0733 OV + 0.0011 IN - 0.0031 T; \quad R^2=0.981$$

(20.8) (15.2) (5.22) (5.90) (8.38) D-W=2.3

asymptotic t-values in parentheses.

Note that as expected, the rate of interest has a negative coefficient while the income tax variable has a positive coefficient. The overvaluation of currency variable, however, has a coefficient with a negative sign. Very possibly then, overvaluation results in relatively less holding of cash taka and more of dollar which is illegal in the present context. Time variable also has a negative coefficient.

To estimate unrecorded income from illegal activities one can either assume overvaluation to be a part of illegal or legal activities. If overvaluation leads to legal cash or deposit holdings, then we have estimate 1 while if it does not, then we have the second estimate. These are shown in Table -2.

These estimates are quite different from the earlier ones. A possible reason may be that while the Guttman-method does not distinguish between informal but legal and informal but illegal activities, the Tanzi-method tries to take only the latter into account. In any case, the pattern now seems to be rather different from that of the earlier estimates in that while the first one indicated a high level of unrecorded economy during the current years, the Tanzi-type estimates indicate just the opposite. Also the estimates in Table-2 show much less fluctuation than those in Table 1. Again note that we have not taken into account the avoidance of excise taxes which Reza thought to be important. If his earlier analysis is a pointer, some 15 percentage points may be added to

⁵ Other variables generally behaved in the postulated manner but were either shown to have insignificant coefficients or did not have desirable econometric properties. Anyone interested in these results may wish to contact the author.

our own estimates in Table 2.

On the whole therefore the estimated black income in Bangladesh may range from about slightly less than 20% to a third of GDP. Again considering the estimates for other countries these fall somewhere in the middle of the range.

Table 2
Estimates of Unrecorded Income (Tanzi -method)

Year	Unrecorded Income 1 (mn. taka)	Unrecorded Income 1 as % of GDP	Unrecorded Income 2 (mn. Taka)	Unrecorded Income 2 as % of GDP
1977/78	17303.52	11.9	9557.309	6.6
1978/79	19519.48	11.2	12108.81	6.9
1979/80	21277.69	10.8	11197.54	5.7
1980/81	26040.85	11.2	20642.55	8.9
1981/82	19582.21	7.6	18252.48	7.0
1982/83	29233.88	9.9	30095.99	10.2
1983/84	40521.04	11.4	34580.71	9.7
1984/85	31286.81	7.7	26988.49	6.6
1985/86	37608.14	8.1	29586.45	6.3
1986/87	43458.09	8.1	33609.06	6.2
1987/88	43038.12	7.2	35492.15	5.9
1988/89	68737.6	10.4	64424.91	9.8
1989/90	118590.2	16.1	96602.24	13.1
1990/91	102409.5	12.3	97667.87	11.7
1991/92	53917.36	5.9	59242.56	6.5
1992/93	26231.12	2.7	26231.12	2.7

Source : Author's estimate.

IV. CONCLUDING REMARKS

The present estimates may have come to many as somewhat of an anti-climax. And I am sure that I would be criticised for the use of the methods that I have and also for the implications of the results, particularly the lower values obtained for the first half of the eighties or the more recent years. I think, that the explanation for a lower proportion for the recent years is more clear cut as the economy has liberalised considerably, income tax rates have fallen and overvaluation has either vanished or at least become negligible.

REFERENCES

Bhattacharya, D. K.: "An Econometric Method of Estimating the 'Hidden Economy', 'United Kingdom (1960-1984) : Estimates and Tests" in *Economic Journal*, Vol. 100, September 1990.

Chopra, O.P.: *Tax Ethics, Unaccounted Income or Black Money : The Norm of the Day*, Inter-India Publications, New Delhi, 1985.

Feige, E. L.: "How Big is the Irregular Economy?" in *Challenge*, Vol. 12, 1979.

Feige, E.L.: "The UK's Unobserved Economy : A Preliminary Assessment" in *Economic Affairs*, Vol. 1, 1981.

Guttman, P. M., "The Subterranean Economy" in *Financial Analysts Journal*, 35, 1977.

Pendse, D. R.: *Black Money and Budgets*, Allied Publishers Private Limited; New Delhi, 1989.

Reza, S. A. L.: "The Black Economy of Bangladesh : Some Preliminary Observations" in *Savings and Development*, Vol. XIII, 1989.

Sarris, A. H. R. van den Brink: *Economic Policy and Household Welfare during Crisis and Adjustment in Tanzania*, New York University Press, New York and London, 1993.

Tanzi, V.: "The Underground Economy in the United States : Annual Estimates, 1930-80, *IMF Staff Papers*, Vol.30,1983.

Thomas, J. J.: *Informal Economic Activity*, LSE Handbooks in Economics, Harvester-Wheatsheaf, New York, 1993.

Technology Promotion, the State Role and Developing Countries*

M M Huq**

1. INTRODUCTION

Since the early 1970s there has been an upsurge of writing on technology promotion in developing countries and contributors to the topic include Pickett (1975), Rahim (1979, 1981), Teitel (1980), Westphal (1982), Stewart (1984), Pack and Westphal (1986), Dahlman, *et al.* (1987), Enos and Park (1987), Forsyth (1987), Lall (1987, 1992), Nelson (1987), Freeman (1989), Enos (1991), Huq *et al.* (1992 and 1993) and Cooper (1994). By the 1980s a consensus had emerged that the promotion of technology in developing countries is far from being a simple process and involves much more than comparison alternative techniques in order to identify the least-cost method of production. Concern merely with static profit maximization can fail to take account of dynamic considerations such as the costs and benefits of technology learning and the externalities generated. In other words, for technology promotion in developing countries there is need to give attention to dynamic elements in the processes of adoption and diffusion of technology.

Lall (1987) even goes as far as to say that failure to consider LDC innovation and generation of technology is the missing link in contemporary analysis in Third World industrialization. Such a claim goes against the common belief that as latecomers developing countries are fortunate in that they have a backlog of technologies to draw upon, thus making their development process that much easier (Gerschenkron 1962). The argument goes like this: the wheel is already invented and all that is required of the developing country investors is to choose from the technology shelf. The implication would seem to be that if developing countries allow the market to guide them to the correct choice of technology, given time, all will be well.

In this paper we would like to examine the above viewpoint in the light of some contemporary evidence of technology promotion in developing countries. Our selection of countries is based on the availability of information. Our selection of countries is based on the availability of information. Understanding of the

* The author is grateful to Roy Grieve for his valuable comments on an earlier draft of this paper.

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technological capability of a country demands detailed knowledge; unfortunately studies of this sort are few in number. Such information as is available is used in this paper.

No attempt is made in the paper to show the link between technology promotion and economic development. The only thing we would like to say in passing is that there is "very little disagreement about the importance of technical change for economic development and trade promotion. Virtually all economists, Neo-classical, Keynesian, Marxist, Schumpeterian or whatever, accept the point that productivity growth depends very heavily on the introduction and efficient diffusion of new improved processes and products in the economic system." (Freeman 1989, p. 85).

Another point which we would also like to mention in the beginning is that there is hardly any should contribute to the development of institutions for improving markets such as technology because of the externalities involved. Many neo-classical economists would also accept that markets for technology development may fail seriously enough to warrant some offsetting government intervention. There will, for example, occur market failure in technology development because knowledge leaks (Wade 1990, pp. 11-13). In areas like manpower training and R&D market failures will lead to underinvestment, thus necessitating government intervention either with direct production or subsidies.

In the next section (Section 2), we examine technology promotion in the context of the dynamic elements involved. Section 3 presents findings relating to technology promotion in three developing countries: South Korea, India and Bangladesh, taken from survey studies conducted, respectively, by Enos and Park (1988), Lall (1987) and Huq *et al.* (1990, 1992 and 1993). Section 4 takes up the argument for a state role in technology promotion in developing countries. Finally, in Section 5, some brief conclusions are drawn.

2. THE DYNAMIC ASPECTS OF TECHNOLOGY PROMOTION

Economists no longer treat technological phenomena as the product of what Rosenberg (1992 and 1994) has called "a black box". Various studies on technology transfer were carried out at the industry level mainly during the 1970s, with the object of identifying, from a wide spectrum of technologies, the technology most appropriate to cost-minimisation or profit-maximisation.²

2 For example, a number of industry studies were carried out at the David Livingstone Institute of Strathclyde University under the series on "Choice of Technique in Developing Countries", under the editorship of Eric Rahim. See, for example, Keddie and Cleghorn (1980) and Huq and Argaw (1981).

The evaluation method employed was essentially neoclassical in nature and these studies have been criticised in particular for failing to consider dynamic aspects of technology transfer. In other words, to achieve successful technology transfer, technology evaluation should go beyond the static framework of cost-minimization and in addition give attention to the following two issues: (UN, 1987) :

- (a) The assimilation and diffusion of new technologies in the host economy; and
- (b) The development of indigenous capacities for innovation.

Enos and Park (1987), Dahlman *et al.* (1987), Lall (1987 and 1992) and Huq *et al.* (1992 and 1993), among others, took that wider approach in examining technology promotion in developing countries. An important feature of the dynamic approach is that the development of technological capability is viewed as a process of learning.

Stage 1 Section/Purchase;

Stage 2 Absorption; and

Stage 3 Diffusion.

Without denying the importance of stage 1 in the process of technology transfer, which may be taken care of through the conventional cost-minimisation approach, stages 2 and 3 deserve careful consideration as it is there that dynamic elements neglected in the conventional approach are found.

Absorption may be viewed as the initial process of technology assimilation or 'digestion' by which users build up a thorough knowledge of the technology in question and develop capability in installing, maintaining, designing and manufacturing the equipment concerned.³

Diffusion denotes the final stage when the technology is adopted by others with the help of the original recipient.

Another way of evaluating the transfer process is to identify and list the capabilities which will be developed with the full transfer of technology. Dahlman *et al.* (1987) originally suggested three of such capabilities (production, investment and innovation) and, subsequently, Lall (1992) added a fourth one (linkages).

Production capability, as needed to operate productive facilities, is reflected in productive efficiency and in the ability to adept operations to changing market circumstances.

³ See Huq *et al.* (1992 and 1993) for some in depth evaluation of technology absorption in the context of fertilizer and machinery manufacturing in Bangladesh by viewing some relevant aspects such as designing, local manufacturing assembling installation and maintenance capabilities.

Investment capability, as is needed to establish new productive facilities and expand existing facilities, is reflected in project costs and in the ability to Tailor project designs to suit the circumstance of the investment.

Linkages capability is defined as the "skills needed to transmit information, skills and technology to, and receive them from, component or raw material suppliers, subcontractors, consultants, service firms, and technology institutions. Such linkages affect not only the productive efficiency of the enterprise (allowing it to specialise more fully) but also the diffusion of technology through the economy and the deepening of the industrial structure, both essential to industrial development." (Lall, p. 168).

While the above approaches greatly help us in introducing a number of the dynamic elements which could not be captured through the conventional method of cost-minimisation, there is, however, difficulty in quantifying the level of, say absorption and diffusion, or in measuring the various capabilities. Although there is general agreement as to the factors involved in the process, given the qualitative nature of many of the explanatory factors including government commitment, if the promotion of technological capability is used as a dependent variable it is not easy to quantify that variable either.⁴

However, once technology development is viewed as a dynamic process, with the externalities involved, it is apparent that it is no longer appropriate simply to apply the static criterion of profit maximisation.

3. EVIDENCE OF TECHNOLOGY PROMOTION FROM DEVELOPING COUNTRIES

Unfortunately not many detailed surveys of technological capability exist; in this section, we present findings that are available from three developing countries, from South Korea, India and (in some detail) from Bangladesh.

(a) Evidence from Bangladesh

In Bangladesh, Industrialization has been emphasised since the mid 1950s when, as the Eastern part of Pakistan, the region was involved in the development planning exercise carried out initially under the First Five-Year Plan (1955-60) and more rigorously under the Second (1960-65) and the Third Five-Year Plans (1965-70) of : Pakistan with the clear objective of making industry

⁴ See for example, Huq et al. (1993) who make an attempt to apply a regression model to determine the explanatory variables of technology promotion in the Bangladesh machinery manufacturing sector.

the leading sector of the economy. After Bangladesh's independence in 1971, the target of industrialization was eagerly adopted and it was almost taken for granted that industrialization was just around the corner for Bangladesh and that soon all would be fine (Robinson 1974). However, after two decades of independence and a number of development plans, each emphasising industrialisation, Bangladesh's record in this regard is, to say the least, poor. The share of manufacturing in GDP is still no more than about 10 per cent and, if the cottage and the small-scale sector is excluded, as little as 6 per cent.

Below we summarise the findings of a recent study on "Technology Transfer to Bangladesh" which was conducted at the Bangladesh Institute of Development Studies and in which the author was closely involved.⁵ Three industries were studied—leather, chemical fertilizer and machinery manufacturing.

Consider first the findings of the machinery manufacturing study (Huq *et al.* 1993). This is a reasonably comprehensive study of the Bangladesh capital goods sector; extensive information was directly collected from 101 sample plants from both public and private sectors (55 small, all private; 22 medium, all private; and 24 large—12 private and 12 publicly owned). In total nine sub-sectors, which include all the leading capital goods sector of Bangladesh, were covered.

- (a) Machine Tools
- (b) Cotton Textile Machinery
- (c) Jute Machinery
- (d) Leather Machinery
- (e) Plastics Machinery
- (f) Sugar Machinery
- (g) Electrical Machinery and Equipment
- (h) Diesel Engines and
- (i) Structural Engineering

Technological capability in each of the sub-sectors has been examined by viewing a number of relevant aspects, shown below.

Designing Capability. While a number of public sector units have obtained licences from reputable foreign companies, this is not generally the case in the private sector. Only in diesel engines and electrical machinery, have one or two private sector units obtained foreign licences; for the rest of the private sector units, copying is a standard practice. It was, however, found that firms have

⁵The study was carried out during 1988-91, when three industry sub-sectors were individually investigated. See Huq and Islam (1990), Huq and Islam (1992) and Huq, Islam (1993).

acquired the capability to produce simple machinery and equipment, according to orders received from customers. So far as sophisticated machinery and equipment are concerned, these can be manufactured only in the public sector plants such as Bangladesh Machine Tool Factory (BMTF), Chittagong Dry Dock, General Electric Manufacturing Company (GEMCO) and Khulna Shipyard. Unfortunately, some of these plants have been experiencing serious management and other constraints since their inception and at least two (BMTF and GEMCO) are almost at the point of closing down. Although production in the private engineering plants, which are mostly small and medium scale units, is based on copying some foreign items, the ingenuity of the skilled labour force needs to be recognised. For example, in the private machine tools sector we found that they were able to adapt the sizes of various machine tools simple lathes, drills, etc.—to meet customers' specifications. The same ingenuity was observed in a number of other sectors including sugar manufacturing machinery and structural engineering.

Local Manufacturing Capability. The local content of parts and components varies widely from product to product. In the case of private sector assembly of diesel engines all the required parts and components are obtained from abroad. On the other hand, Bangladesh Diesel Plant, which is in the public sector, has achieved a high level of integration in the manufacture of one-Cylinder engines (local content is 73 per cent), though in two-cylinder engines the local content is only 32 per cent. The case of machine tool manufacture in the private engineering plants, however, provides a positive example in that the local content is something like 85 per cent. However, as contracting out is not common in these plants, the batch size is small, thus adversely affecting both quality and cost of production.

Assembling, Installation and Maintenance Capability. High level technological capability is, however, observed in assembly, erection and maintenance, and this is found in both public and 100 per cent capability was observed in these specific areas. An earlier study by Huq and Islam (1992) on the manufacture of fertilizer in Bangladesh provides some further information on the maintenance (as well as operation) capability in this particular industry. Bangladeshi engineers were found to be able to maintain chemical fertilizer plants, which are undoubtedly of high complexity, without experiencing serious difficulties. The example of the Fenchuganj Fertilizer Factory, the first plant of its kind in the country, is perhaps worth citing. This plant which was supplied by Kobe Steel of Japan and started operation in 1962, had become outdated by the late 1980s and many critical parts were unavailable from outside the country, although the engineers were successfully maintaining the plant at a high level

of capacity utilisation, operating for 302 days per year on average during 1985-90, against 312 days as designed.

The above attainments, the achievement of which falls under 'technology absorption' (Enos and Park classification 1987), are undoubtedly fundamental to the process of developing technological capability. It is necessary however also to consider other key elements of the process competence in production, investment, innovation and linkage-of which mention was made above.

Production Capability. Bangladesh has found it relatively easy to achieve production capability in simple products and processes, e.g., in leather manufacturing. (Huq and Islam 1990). But as regards complex products or processes, e.g., precision machine tools or fertilizer manufacturing, there has been very limited success. However, simple production capability, i. e., ability to run the plants, is found to be highly satisfactory in chemical fertilizer manufacturing, while (contrary to the experience, e.g., of India and South Korea) it is not so for Bangladesh in precision machine tools and other sophisticated engineering products. Ease of import of the engineering items, helped by aid-finance and lack of appropriate tax and other relevant policies have been blamed for very low capacity utilisation in the engineering plants in question in Bangladesh. (Huq *et al.* 1992 and 1993).

Investment Capability. Heavy dependence on foreign aid has not helped Bangladesh in making progress in this particular aspect of technology promotion. Most often, foreign engineering and consultancy firms have been heavily involved in the supply of machinery and equipment, project design, and, at times, even construction and supervision, while local engineering and consultancy firms have remained almost neglected (Huq *et al.* 1992 and 1993). Very little attempt has also been made to minimise project costs in new or expansion units, and this appears to apply to most of the public and private sector plants which have often been financed with subsidised lines of credit.

Innovation Capability. Ability to improve technology or to develop new products or processes is found missing even in the leather manufacturing sector (Huq and Islam 1990), the industry which has the simplest of operations of the three industries surveyed. Many of the firms in this sector are been reluctant to move into high value-added products, and the government had to impose restrictions on the export of wet-blue leather to encourage further local processing of this item.

Linkages Capability. This is perhaps the weakest area in technology assimilation in Bangladesh, thus causing failure in the diffusion of imported technologies and frustrating the deepening of the industrial sector. The study on fertilizer manufacturing provided a clear instance of total failure in this regard. The

low or negligible involvement of the local engineering sector in the fertilizer plants of works of the large-scale fertilizer plants (i.e., of those built in recent years) could have been completed locally. (Huq and Islam, 1992).

Table 1 summaries the state of technology promotion in Bangladesh in a number of sub-sectors and, as may seen the country has failed to make any significant progress as viewed under technology "absorption" and "diffusion".

Table 1
**Technology Absorption And Diffusion in The
Bangladesh Machinery Manufacturing Sector**

	Absorption	Diffusion
1. Machine Tools production	Partial	Nil
2. Cotton Textile Machinery	Partial	Nil
3. Jute Textile Machinery	Partial	Nil
4. Leather Machinery	Neg.	
5. Plastic Machinery	Neg.	Nil
6. Sugar Machinery	Partial	Nil
7. Electrical Machinery and Equipment	Partial	Nil
8. Manufacture of Diesel Engines	Partial	Nil
9. Structural Engineering	Partial	Nil

Note : Neg. means negligible.

Source: Huq et al. (1993).

(b) Evidence from South Korea and India

(i) South Korea

South Korea, which is now being considered as *Asia's Next Giant* (Amsden 1989) has achieved this status through consistent rapid growth over the last thirty years or so. In the late 1950s, the per capita income of South Korea was only just double that of Bangladesh (Khan and Hossain 1989, p. 7), while in the early 1990s it is over 30 times greater (World Bank, 1994, pp. 162-63). Amsden strongly believes that the state economy in such a short period of time, while in the case of Bangladesh, according to Khan and Hossain (p.3), who also believe that in a modern state the role of the government is a critical determinant of both the rate and the quality of economic growth, there was lack of "a strong and effective government." We present below the findings of a recent study on technology promotion and the role of the government in this regard in South Korea.

In their study on South Korea, Enos and Park (1987) have concentrated on the transfer of technology form developed countries (the USA, Japan and West

Germany) to the Republic of Korea. It is a very extensive study, examining the various stages of the transfer, the sophisticated technology by Korean companies. The investigation involved detailed case studies in four selected industrial **sectors** : petrochemicals, iron and steel, heavy engineering goods, and textiles.

The two main stages of the transfer process, absorption and diffusion, were studied in particular detail. Table 2 summaries the level of absorption. It is apparent that "the Koreans have entered more in the stages of construction, start-up and operation and improvement than in the earlier stages of design, and in the later stage of research and development; and that there are not great difference in participation across industries" (pp. 243-44). However, confining the observation to more than one incorporation of a technology (as found in three industries: petrochemicals, artificial fibers, and iron and steel), "the general pattern is of increasing participation from earlier to later installation." Thus, if absorption is viewed in a dynamic sense, as an increase, from installation to installation in participation throughout the process of incorporating a technology, then "all three cases demonstrate an ability on the part of the Koreans to absorb foreign technology" (p. 244).

The achievement in terms of technology diffusion is, however, much more limited, largely due to the fact that in the sample chosen by the authors, "adoptions of imported technology have been limited characterised by single firms employing sophisticated technologies on a large scale" (p.224). The authors, however, do not find the limited degree of diffusion (technology adoption) very critical as, in their words, "This was the result of deliberate action on the part of the Korean government: had the Korean government chosen to encourage the construction of small scale plants there would have been more diffusion, but the government preferred, rightly in our estimation, to exploit the substantial economies inherent in large-scale operation" (p. 244). Further they note that there "has been the diffusion of the technology to institutions supplying resources to the adopting firm. The main supplying institution is the industry manufacturing capital goods in Korea. Encouraged by the government's policy of stimulation local production of capital goods, firms adopting foreign technology did communicate their needs and commissioned the purchase of capital goods, usually those of a simple nature but occasionally those of considerable complexity" (p.245).

Table- 2
Absorption of Foreign Technology by Korean Engineers (according to the stage of the process in corporation)

Case	Stage in the Process of Incorporating the Technology						
	Planning and Negotiation	Process Design	Equipment Design	Construction	Start-up and Operation	Improvement	RR
<u>Petrochemicals</u>							
Ulsan plan							
(1945-85)	s	o	o	s	s	x	o
Yeoolicon plan							
(1975-85)	s	s	s	s	s	x	s
<u>Synthetic fibres</u>							
Nylon line 1							
(1960-85)	s	o	o	s	s	s	o
Nylon line 5							
(1970-85)	s	s	s	s	s	s	s
Guini plant							
Nylon line 3							
(1983-85)	x	x	o	x	s	x	x
<u>Diesel engines</u>	s	o	o	s	s	x	o
<u>Iron steel</u>							
1st stage (65-85)	s	o	o	s	s	s	o
2nd stage (74-85)	s	o	o	s	s	x	o
3rd stage (75-85)	s	o	o	s	s	x	s
4th stage (79-85)	x	x	x	x	s	x	s

Key : O = No Koreans participating; s=Some Participation; x=All Koreans.

Source : J.L. Enos & W. H. Park (1988), p. 243.

The conclusions reached by the authors are very revealing, especially as to the role of government in the absorption of technology. Enos and Park strongly believe that the Korean government has played a key role in the acquisition of modern techniques: "the government assuring itself that the contracts negotiated with foreign suppliers contained clauses relating to the acquisition of patents, designs and know-how; to the training, both abroad and on the site, of Korean engineers and managers; to the speedy replacements of expatriates; and to access to improvements in the products and processes. The over-maned also made certain that the terms in the contracts were fulfilled" (p. 229). Being convinced that success in the absorption of foreign technology was critically dependent upon the precise terms obtained by the Korean government in its negotiations with the foreign suppliers, Enos and Park concluded that "a major determinant of the ability of a developing country to absorb an imported technology is the preferences of its government, as reflected in the terms that it imposes upon foreign suppliers" (p. 248).

(ii) India

In terms of per capita income India is also a poor country like Bangladesh both low-income economies (see the World Bank, 1994, p. 162) and both sharing the same colonial government only 50 years ago. However, India has transformed her structure of the economy, the share of manufacturing in GDP being as high as 17 per cent in 1992 (World Bank, p. 166). India has also achieved great success in raising her gross domestic savings and investment which stood at 22 and 23 per cent, respectively, of the GDP in 1992 (corresponding figures of the USA are 15% and 16%). Thus viewed, India has certainly come out of the Nurksian "vicious circle of poverty" at least in the sense of low income leading to low savings. Below we present findings of a recent study with respect to technology promotion in India and the role played by the Indian government in this regard.

Lall's study (1987) on India is an in-depth investigation, dealing with the acquisition of technological capability by large firms in three established manufacturing sectors cement, iron and steel, and textiles and also by some firms of special interest. (He took a sample of 19 large firms—14 manufacturing firms and 5 consultancies). The author (Lall 1987, p. 38) terms the three chosen sectors 'basic industries' with well established technologies which exist in all newly industrialised countries. For India, these are all 'mature' industries which have been long established in the country: textiles (in its modern factory form) for over 150 years, cement and (integrated) iron and steel for about 70 years (Lall

1994). In each of these sectors are examined the three main agents of technology promotion: manufacturers of the final product, manufacturers of capital goods used in that sector, and the consultants who provided process engineering and related services.

As expected, there are "negative as well as positive aspects of technological development in India" as summarised below (Lall pp. 227-28):

The achievements of technological effort by the leading firms in Indian manufacturing are impressive. Their technological capabilities extend over a broad range of the relevant aspects of technological activity, and for each of these aspects, they reveal considerable depth of learning. Over much of this range of industries, Indian can identify, design, engineer and manufacture the bulk of capital goods for a new project. It can select and implement new foreign technologies, adapt them to local materials and market needs, and improve upon them over time. It can develop and introduce some new products and processes. It can set up supplier networks, with all the technology-transfer, quality control and logistical efforts this entails. It can also transfer technology to customers and manufactures in similar activities, in the form of licensing, turnkey plants, joint ventures of technical assistance. This set of diverse and deep capabilities places India among the leaders of the NICs which have exported their technologies in international markets.

The failures are also impressive. Evidently, substantial resources were invested in an enormous S & T infrastructure with very little benefit to the quality or quantity of technology in use in organised industry. Even among the better manufacturing enterprises (the focus of this study) there are failures of several sorts. A lot of technology in use in organised industry. Even among the better manufacturing enterprises (the focus of this study) there are failures of several sorts. A lot of technological effort went into coping with problems generated by the import-substitution regime. Some of this effort was undoubtedly valuable, it brought new local materials into use and provided a base of process engineering know how which could be deployed under any trade regime. Some, however, was wasteful, and could prove to be unnecessary and worthless in a more outward-oriented regime. At the same time, the regime created disincentives to effort to constantly upgrade technologies in line with international standards. Worse still, it often detracted from engineering and managerial efforts to implement even existing knowledge with the level of efficiency which other NICs achieved: a continuing waste of

resources for the country. Artificial constraints held back growth and growth created by the government's policies held back both the pace of learning and its deployment; and the anti-export bias and infra-structural constraints held back the exploitation of technological capability for foreign markets.

It is apparent that the Indian government, though remaining generally active in promoting technological capability, was not as supportive as was the South Korean government. According to Lall (1987, p. 239), "while Indian capabilities were stimulated by policy, they were also contained by it, guided in particular directions and inhibited from being fully expiated in efficient direction. Indian technological learning was not fully stretched: it was, on the contrary, stunted and deformed, reaching an artificial limit long before it need have done." Thus, in the final analysis, it does appear that "an overwhelming portion of the blame for failures of technologies effort in India was economic : and can be traced directly or indirectly to economic policies pursued by the government. Some of its achievements have also resulted from these policies. It is likely, however, that these achievements would have been more weighty and socially beneficial had a different set of policies permitted the same talents to be deployed to different ends" (Lall, p. 228).

It is true that there were failures, but such instances of failures are perhaps unavoidable. As Lall (1987, p. 240) admits, "Even technologically advanced countries often go wrong in their technology policies (look at the UK or France), though they all feel that some interventions are needed to face the competitive challenges thrown up by the current technological revolution."

4. SUPPORTIVE ROLE OF THE STATE

The above evidence from developing countries, though it covers only three selected countries, has been (we hope) extensive enough to see that the question of technology promotion is far from simple. Given the imperfections in the identification/purchase stages, the availability of technologies in the developed countries does not give any guarantee to the late-comers that, by depending on market forces, they will even be able to select the cost-minimising alternative, far less achieve technology absorption and diffusion—two important stages of technology promotion where market failure is serious enough to warrant some offsetting government intervention, as mentioned in the beginning. Thus, one can see why Amsden (1989, p. 13) criticises Gerschenkron for taking a simple view that backward countries are fortunate that they have a backlog of technologies to draw upon. According to Amsden, "Gerschenkron failed to give

equal weight to the proposition that the more backward the country, the harsher the justice meted out by market forces.”

In order to achieve and maintain competitiveness a country needs a general technological capability, as perceived by Frederich List (1841) over a century and a half ago in the context of Germany. As Freeman (1989, p. 97) has put it; “it is the national system of innovation which is decisive, not the particular range of products. Universities, research institutions, technological infrastructure, industrial training systems, information systems, design centers and other scientific and technical institutions provide the essential foundation which alone make possible the adaptation to structural change in the economy associated with changes in techno-economic paradigm” Indeed, it is the capability to use new technologies which is of paramount importance, not the availability of these technologies in the world.

Of the three countries cited, it is apparent that South Korea has consistently provided a supportive state role in technology development. Such a role, according to Enos and Park, has proved essential and they conclude that “There is no stage in the process of incorporating an imported technology that a conscientious and patriotic government should neglect” (Enos and Park, p. 257).

In the case of India, the state’s contribution was a mixture of promotion and obstruction. The promotion of technological capability in India, as Lall (1987, p. 239) says, has been “stimulated by (government) policy”. However, there were obstructions resulting from “economic policies pursued by the government” which is some way limited the achievements (Lall, p. 228).

In the case of Bangladesh, the state role has been of an obstructionist rather than a supportive nature (Khan and Hossain 1989 and Huq 1993).⁶ The obstructionist role has obviously not helped, e.g., as regards the development of the Bangladesh capital goods sector as found by Huq *et al.* (1993, p. 126) : “There is a serious contradiction in government policy towards the development of machinery manufacturing in Bangladesh. Huge installed capacity, built systematically over a period of 20 years, in various public sector engineering

⁶ According to Khan and Hossain (p5) “In Bangladesh successive regimes have been preoccupied with setting up arrangements for their own survival. They were not strong enough to impose a coalition among the often contending economic forces the actual and potential entrepreneurs—and subject them to a set of rules of the game whose continuity would gradually come to be accepted.

plants.....remains very much under-utilised as the products which could be manufactured in most of these plants are being imported liberally...The private sector units also experience lack of domestic demand, mainly because of import preference by the customers. Tax anomalies have contributed to a great extent in making imported machinery and equipment (complete units) cheaper than locally made comparable items."

Thus the nature of state intervention is of paramount importance. It is not enough to say that "Developing countries cannot leave it to market forces" they must act positively to create a right, supportive environment: "they must create the supply of technical manpower to assimilate technological development, and they must set the right environment for their industries to develop the requisite capabilities.... specific policies have to be implemented on the extent of projection, domestic competition, imports of technology, in house R & D, the nature and amount of foreign investment, the S & T infrastructure, and all other things that influence learning and production efficiency" (Lall 1987, pp. 240-41).

The learning process in technology acquisition perhaps needs to be emphasised. Even if government intervention succeeds, through subsidies, etc. in making manufacturing activity profitable, there is no guarantee that the capitalists will, or can, invest in manufacturing. A number of other conditions including the availability of technical personnel need to be satisfied. The following observation by Amsden in the case of South Korea is pertinent : "Once the entrepreneurs recognised that government subsidies could make manufacturing activity profitable, and that Korean engineers could build ships that floated and steel that bore weight, they increasingly turned their attention away from speculating toward accumulating capital" (Amsden 1989, p. 23).

It is perhaps in order to mention that the recent emphasis on liberalisation has done no good to technology promotion in developing countries. Fortunately, the argument has not diverted the attention of committed countries such as India and South Korea which, fortunately, because of their reasonable (or in the case of South Korea, highly respectable) level of domestic savings could withstand the pressure from outside including that from the World Bank and the IMF. But low-income countries such as Bangladesh, which have remained heavily dependent on foreign aid for their survival, have found it difficult to withstand the pressure and, in the process, had to abandon any serious state attempt at technology promotion. In the case of Bangladesh, the lack of a supportive state role has proved disastrous, to say the least, as on the one hand, the huge

installed capacity in the capital goods sector remains idle or highly under utilized and, on the other, as mentioned earlier, machinery and equipment which could be produced in many of these plants are being imported liberally, following partly the drive of the country towards liberalisation and partly the high dependence of the country on foreign aid for its development (Huq 1994). There is also reason to believe that the emphasis on liberalisation has not helped either the cause of technology promotion in the medium—and high income developing countries where there is no great tradition of a supportive state role. The failure to understand the mechanics of technology promotion should, therefore, provide an important explanation for low industrialisation and underdevelopment in developing countries.

5. CONCLUDING REMARKS

Let us Now Draw Some Brief Conclusions.

The fact that there are already technologies which the developing countries can draw upon is not enough to ensure technology absorption and diffusion. For a successful technology transfer to take place (i.e., for the promotion of technological capability), the developing country concerned is required to go beyond the initial stage of importing technology from abroad. More and more emphasis is required to be put on the ability to assimilate, use, adapt, change, or create technology.

Given the externalities in technology promotion, the question of state support is no longer a 'yes' or 'no' issue. Rather, it is a definit 'yes' for supportive government. Government involvement is reflected in various ways— tariff policy, technology transfer negotiations, aid negotiations, management of public sector projects, credit policy towards private sector, export policy, R& D support, manpower development, etc. and the government commitment in technology promotion needs to be reflected in all these. The findings from the three industry studies from Bangladesh (Huq, *et al.* 1990, 1992 and 1993) provide evidence of the lack of progress in technology promotion largely because of the absence of government commitment, while in the case of South Korea (as found by Enos and Park, 1987) the government has played a beneficial role, and it is perhaps worth repeating the conclusion reached by these authors: "There is no stage in the process of incorporating an imported technology that a conscientious and patriotic government should neglect" (p. 257).

In conclusion, for technology promotion the support of the state needs to be unwavering as in the case of South Korea. State commitment combined with

policy constraints is likely to yield only partial success, as evidenced in the case of India. An obstructionists policy regime as found in the case of Bangladesh will lack state commitment and failure in technology promotion may be expected to result.

BIBLIOGRAPHY

- Amsden, A 1989 : *Asia's Next Giant: South Korea and Late Industrialisation*, Oxford University Press, New York.
- Dahlman, C. J, Ross-Larson, B. and Westphal, L E 1987 : "Managing Technological Development: Lessons from the Newly Industrialising Countries" , *World Development*, (Vol. 15, No 6).
- Cooper, C 1994 : "Science and Technology Policy" *Science, Technology and Development*, (forthcoming, Vol. 12, Nos 2/3).
- Enos, J L and Park, W.H (1987): *The Adoption and Difusion of Imported Technology: The Case of Korea*, Croom Helm, London.
- Forsyth, D J C 1987 : *Technology and Development: A Manual for Policy Assessment*, ILO, Geneva (Mimeo).
- Freeman, C 1989 : "New Technology and Cateching Up" in C Cooper and R Kaplinsky, *Technology and Development in the Third Industrial Revolution*, Frank Cass, London.
- Gerschenkron, A 1962 : *Economic Backwardness in Historical Perspective*, Harvard University Press, Cambridge, Mass.
- Huq, M M and Islam, K M N 1990 : *Choice of Technology: Leather Manufacturing in Bangladesh*. University Press Ltd, Dhaka.
- Huq, M M and Islam, K M N 1992 : *Fertilizer Manufacturing in Bangladesh*, University Press Ltd, Dhaka.
- Huq, M M and Islam, K M N and Islam, N 1993 : *Machinery Manufacturing in Bangladesh*, University Press Ltd. Dhaka.
- Huq, M M 1993 : Industrialisation in Bangladesh : Government Role in Promoting Exprot-Led Growth", Paper presented at the national workshop on "Export led Growth and Industrialisation" held 13 January 1994 at BIDS, Dhaka.
- Huq, M M 1994 : "Technology Transfer to Bangladesh: Aid Dependence and Failures in Technology Acquisition", *Science, Technology and Development* (forthcoming, Vol. 12, Nos 2/3).
- Khan, A R and Hossain M 1989 : *The Strategy of Development in Bangladesh*, Macmillan, London.
- Lall, S 1987 : *Learning to Industrialise : The Acquisition of Technological Capability by India*, Macmillan, London.
- Lall, S 1992 : "Technological Capabilities and Industrialisation", *World Development*, (Vol. 20, No. 2).
- List, F 1841 : *The National System of Political Economy* (English translation, 1904), Longmans, London.

- Nelson, R R 1987 : "Innovation and Economic Developments : Theoretical Retrospect and Prospect" in J Katz (ed), *Technology Generation in Latin American Manufacturing Industries*, Macmillan, London.
- Pack, H and Westphal, L E 1986: "Industrial Strategy and Technological Change: Theory Versus Reality", *Journal of Development Economics*, (Vol. 22, No. 1).
- Rahim, E 1979 : "Editorial Introduction" in J. Keddie and W Cleghorn, *Brewing in Developing Countries*, Scottish Academic Press, Edinburgh.
- Rahim, E 1979 : "Editorial Introduction" in MM Haq and H Aragaw, *Choice of Technique in Leather Manufacture*, Scottish Academic Press, Edinburgh.
- Robinson, E A G and Griffin, K (1974)(eds): *The Economic Development of Bangladesh with a Socialist Framework*, Macmillan, London.
- Rosenburg, N 1982 : *Inside the Black Box: Technology and Economics*, Cambridge University Press, Cambridge.
- Rosenburg, N 1994 : *Exploring the Black Box: Technology, Economics and History*, Cambridge University Press, Combridge.
- Stewart, F 1984 : "Facilitating Indigenous Technical Change in Third World Countries" in M Fransman and K King (eds), *Technological Capability in the Third World*, Macmillan, London.
- Teitel S 1984 : " Technology Creation in Sei-industrial Economies", *Journal of Development Economics*, Vol. 16, No. 1 (1934), pp. 39-61.
- United Nations (1987) : *Transnational Corporations and Technology Transfer: Effects and Policy Issues*, Centre on Transnational Corporations, New York.
- Wade, R 1990 : *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialisation*, Princeton University Press, Princeton.
- Westphal, L 1982 : "Fostering Technological Mastery by Means of Selective Infant-Industry Protection" in M Syrquin and S Teitel (eds), *Trade, Stability, Technology, and Equity in Latin America*, Academic Press, New York.
- World Bank 1994 : *World Development Report 1994*, Oxford University Press for the World Bank.

Problems and Prospects of Urban Employment Generation Through Small-scale Enterprises*

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I. INTRODUCTION

Urban centres of a densely populated developing country like Bangladesh experience substantial in-migration and population growth; and unplanned growth of cities in these circumstances is inevitable. The attraction of cities as destinations of migrants derives, principally, from the prospects of employment and income in the urban economy. If the rate of employment generation in the cities' formal manufacturing and trading sectors can not cope with the flow of immigration, the obvious consequence is an expanding size of informal economic activities, open unemployment as well as widespread underemployment and an exacerbation of poverty in sprawling squatter settlements. The cities of Bangladesh have already been afflicted with symptoms of the latter scenario, which calls for urgently finding ways and means of creating more productive jobs in various sectors of the cities and their suburbs and peripheries.

The present study seeks to address the issue of generating productive employment through small-scale enterprises. These enterprises, at present, account for more than two-thirds of employment in the formal manufacturing sector of Bangladesh. Various studies have shown that these enterprises use capital and labour quite efficiently, though most of them are using mostly labour intensive techniques of production. But they receive a disproportionately low share of institutional support including credit. This relative deprivation and neglect have been acting as a major constraint in the way of achieving efficiency and dynamism in these enterprises. It is believed that with the help of proper policy guidance and assistance, the small-scale enterprises can be used for augmenting the generation of formal productive employment much more effectively and in the socially desirable directions. With this theme in mind, this study purports to (i) provide an economic profile of the small-scale

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enterprises to highlight the potential of employment generation in these activities, (ii) to highlight the problems faced by these enterprises, and (iii) to suggest policy measures for their redress.

The study is based on empirical data collected from a total of 94 small-scale enterprises. These enterprises are randomly chosen from 14 categories of activities in Chittagong Statistical Metropolitan Area. These categories are selected on the basis of their demonstrated dynamism in the recent past. The frequency distribution of the selected activities in the sample is given in Table 1. The defining characteristic of a sample enterprise was the upper limit of Tk 10 million as the current capital of the enterprises. A structured questionnaire is used to collect the necessary information. The owner of the enterprise or his designated representative has been interviewed by the field assistant. The fieldwork was conducted during the months of December 1994 and January 1995.

II. AN ECONOMIC PROFILE OF THE SAMPLE ENTERPRISES

a. The small-scale enterprise of the sample have been selected on the basis of an upper limit of Tk 10 million as their current capital, but for a majority of them (57.45 per cent) the size of current capital do not exceed Tk 500,000. The agro-based enterprises are relatively larger in size with an average of Tk 1.68 million as current capital compared to Tk 1.25 million for the total sample (Table II).

b. The sample average of the yearly sales stands at Tk 1.93 million. It is noteworthy that the sales figures are consistently larger than the current capital figures reported by the firms. This may imply that the small-scale firms are using their small current capital quite efficiently because of the relatively labour intensive production techniques followed by them.

c. About 50 per cent of the firms are relatively young—established within the last five years (Table III). Only about 10 per cent of the firms are operating for more than 20 years. The above trend speaks of a relative boom in the growth of small enterprises during the recent years, which should have important policy implications.

d. Individual ownership overwhelmingly dominates the ownership pattern of both agro-based and manufacturing enterprises. Only the service enterprises have 48.39 per cent of the ownership type as partnerships. Individual or family ownership and partnership together take care of about 96 per cent of the firms included in the sample (Table IV).

e. The above ownership pattern is reflected in the distribution of the sources of initial financing of the firms. Own and family sources account for 84.36 per cent of the initial investments. It is notable that non-institutional credit was used to finance 13.20 per cent of initial investments as against a paltry 2.5 per cent through institutional credit support (Table V).

f. 43 per cent of the respondents reported that need for utilising the earned skill as the prime factor for choosing the particular investment undertaken by them. This reflects the fact that there is a pool of earned skill ready to be utilised in the small-scale enterprises with the help of credit support and proper policy assistance.

g. On an average, a small-scale enterprise of our sample employs 15.78 persons (Table VI). The average employment generated per firm is 18.75 persons, 15.96 persons and 12.19 persons for agro-based, manufacturing and service enterprises respectively. But the service enterprises employ an additional 9.81 persons per firm on casual basis. They also employ 3.94 female employees on average, which is higher than the sample average of only 1.41. More than half of the firms employ up to 10 persons and about 83 per cent of the firms employ 20 persons or less (Table VII). The size of firms in terms of employment grows less than proportionately than the growth of size reflected through current capital. Firms in the smallest size class employ 6.39 persons on average as against 11.67 persons by the next bigger size class and 13.25 persons by the third size class (Table VIII). This is understandable, because, the relatively well-off firms are expected to adopt more capital-intensive techniques.

In terms of growth in employment according to the duration of their operation, agro-based firms perform much better than the other two categories (Table IX). Employment in agro-based firms grew by 120.88 per cent on average since inception which is significantly higher than the average growth of 89.81 per cent for the sample. This indicates that the agro-based firms possess better dynamism regarding generation of employment, which should place this group as a prime candidate for institutional support.

h. The entrepreneurs in our sample spend only about 16 per cent of their yearly sales on total wage bill (Table X). The average wage bill of the agro-based firms is a paltry 8.89 per cent, whereas wages take 30.50 per cent of the sales in the service enterprises. About 44 per cent of the sales earnings are spent on raw materials, and less than 3 per cent on machinery. These cost components indirectly suggest the gross margins of the different categories of enterprises. It can be safely guessed from the figures of table X that the agro-based firms give relatively larger gross margins to the entrepreneurs, compared to the other two categories of firms.

i. An investment of Tk 79,230 on average can generate a job in our sample enterprise (Table XI). Firms with smaller current capital can generate jobs with very little investment. An investment of Tk 10,340 can generate a job in the smaller size class of firms having upto Tk 100,000 as current capital, whereas Tk 132,460 is needed per job in the firms with current capital above Tk 2 million. These smallest firms are using their capital very efficiently, which is reflected in the sales-capital ratio of 5.12, as against 1.24 for the largest size

class of firms. However, the sales-labour ratios suggest that among these small-scale enterprises, the relatively larger-sized firms with current capital above Tk 1 million are the most successful in generating the larger sales figure of About Tk 165,000 per labour, compared to only Tk 52,950 by the smallest size class of firms. These figures indicate that average productivity of labour may be higher in the larger-sized firms of our sample.

III. A PROFILE OF PROBLEMS

III.1 Problems Regarding Credit

Shortage of finance is one of the major obstacles in the way of achieving efficiency and dynamism in small-scale enterprises. For instance, the average proportion of under-utilisation of plant capacity for the respondent firms stood at a high figure of 31.32 per cent, and financial problem (lack of working capital) ranks first among the reasons for such high rate of under-utilisation (Table XII). Because of their small size, many of them are unable to plough back enough of their earnings to expand.

Provision of institutional credit support at reasonable rates of interest could significantly improve the performance of these enterprises. But market penetration by the country's institutional lending agencies in this sector is very low. Overwhelming majority of enterprises in this sector operate outside the banking system owing to:

- i) the stringent terms and conditions which intending loanees are required to satisfy;
- ii) the patience-exhausting and dilatory loan application formalities and documentation procedures;
- iii) the conventional practice of financing against tangible security; and
- iv) the bankers' preference for handling big rather than small loans.

It may be noted here that the average time taken in processing loan application for the 13 credit recipient firms of our sample was 5.54 months, compared with the Bangladesh Bank directive of a maximum of 3 months. The maximum time reported was 15 months. In addition to the above problems, loans are sometimes made by the lending agencies on the basis of political influence and patronage, rather than on the credibility to persons taking the initiative and the viability of the project. Because of the political affiliation of these loanees bank officials often find it difficult to enforce financial discipline on them. The same factor also contributes to the poor loan recovery and high rate of business collapse among these firms, ultimately undermining the very viability of the banks' lending operation. Credit experience of the firms in our sample lends support to the existence of these problems.

Some 43.62 per cent of the firms in our sample reported to have ever tried for institutional credit. But only 13.83 per cent of them managed to get at least one bank loan (Table XIII). One-third of the firms who were unsuccessful in getting

a bank loan cited their inability or unwillingness to bribe the bank officials are reasons for the rejection of their loan applications. Inability to provide adequate collateral and difficulties in satisfying the stringent requirements regarding credit procedures of the lending agencies were reported as reasons for not obtaining credit by 28.57 per cent, and 14.28 per cent of the respondents, respectively (Table XIV).

The successful loan applicants were also asked to mention the bank stated reasons for turning down their loan applications. Lack of collateral ranked first (57.14 per cent) among the cited reasons followed by failure to satisfy proper credit formalities and procedures of the banks (14.28 per cent) (Table XV).

III.2 Problems Regarding Labour

Our findings from the survey repudiate the widely-held belief that labour unrest is a major obstacle to the growth of productive enterprises in the country. None of the firm interviewed reported to have experienced loss of work day due to labour strike. However, hartals and blockades organized mostly by political parties and students' groups were found to have caused work stoppage in the sampled firms for an average of a little less than 2 days per month.

A major labour problem confronting the firms in the small-scale sector is the shortage of specifically trained labour. Some 59.57 per cent of our sample firms reported to have faced difficulties in recruiting adequately skilled employees. The situation is particularly precarious in agro-based and manufacturing enterprises where only 9 per cent and 8 per cent of the employees are found to have formal training. This poor stock of formally trained workers in the small-scale enterprises vividly reflects the need for providing formal training facilities for their labours (Table XVI).

On an average our sample firms experience a high job turnover rate (about 21 per cent) of their employees. Because of their small size enterprises in this sector can not offer job ladders to their employees. Naturally, workers in such a labour market can not be expected show a continuing commitment to the firms. Under such a situation firms adopt their technology to a relatively unskilled and unstable labour force. This occurs despite the fact that with a more desirable group of workers it would have been feasible to improve their business performance.

III.3 Problems Regarding Public Utilities

Electricity, water, telephone and gas are the four major public utilities used by the small-scale enterprises. Regularity of supply, tariff structure and quality of customer services of these utilities have important implications for the efficiency of the enterprises in the small-scale sector.

Most of the enterprises covered by our sample were found unhappy with the utility authorities. User enterprises of these four utilities were asked to rank the

utilities in order of difficulties they faced. Electricity ranked first with 87.64 per cent reporting it as the number one problem. This is followed by water and telephone with 18.92 per cent and 17.95 per cent, respectively (Table XVII).

In the case of electricity, disruption in power supply was identified as the most important problem followed by unfavourable price structure and billing. For water unfavourable price structure came first and for telephone, billing was the most acute problem (Table XVIII). The utility authorities were found to be very slow in their response to the application for connection. The average days taken to get connection were 55, 50 and 122 for electricity, water and telephone respectively.

The extent of damage that poor utility services inflict on the productive enterprises can be inferred from the fact that our survey sample reported to have lost an average of about 9 work hours per week due to power failure. The maximum hours reported was 36 per week.

III.4 Institutional Problems

It is widely believed that bureaucracy is a widespread phenomenon that puts a constraint on productive enterprises across Bangladesh. Officials in public sector organizations often lack professionalism, maintain unsympathetic attitude and recourse to unfair dealings. To get rid of bureaucratic 'red tapes', entrepreneurs often take recourse to bribing these officials. A class of 'rent seekers' is thus developed at different levels of government offices. Of late, rowdy element (called *mastans*) and political party workers have emerged as professional extortionists.

Being asked to rank the problems they face in dealing with government offices, 62.69 per cent of the firms in our sample reported corruption as the number one problem (Table XIX). This is followed by harassment by government officials and too many regulations with 25.37 per cent and 8.96 per cent reporting respectively. Respondents were also asked to name the groups and organizations they have to bribe/pay tolls for running their business. More than half of the firms reported that they had to bribe illegal toll collectors, tax officials, party cadres and utility officials on a regular basis (Table XX).

III. 5 Problems Regarding Productivity

Productivity of an enterprise may be constrained mainly by low quality of its labour force, inability of the enterprise to maintain and modernise its plant due to dependence on imported equipments and machinery and supply irregularity and fluctuations in the prices of raw materials. The first one is already deal with. The problem of maintenance and modernization is less acute for small-scale enterprises which rely more on indigenous sources for machinery and spare parts. Only 31.41 per cent of the respondent enterprises were found using all imported machinery. Dependence on imported machinery and spare parts

appears to be the highest for manufacturing enterprises but very insignificant for agro-based enterprises (Table XXI).

Productivity in the sample firms, however, were found to have suffered due to interruption in the supply and frequent fluctuations in the prices of raw materials. Exactly one-third of the respondents reported that the supply of raw materials were their firms fluctuated frequently. Price fluctuations for raw materials appear to have created problems for more enterprises in agro-based and manufacturing categories compared to service categories (Table XXII).

III. 6 Marketing Problems

Most of the enterprises in the small-scale sector grew up in response to local demand. Some of these enterprises appeared to have been facing stiff competition from foreign goods. Some 43 per cent of the respondents reported the availability of imported substitute for their products (Table XXII). The more liberal trade regime of the last few years and the existence of an expanding illegal trade sector have been drawing in a large amount of foreign goods. The imported goods have a competitive edge over local goods because of their quality, lower price and peoples' preference for foreign goods.

IV. SUGGESTIONS FOR IMPROVEMENTS

IV.1 Institutional Credit

That the shortage of finance is a major impediment in the way of establishment and growth of small-scale sector is well known to all concerned. Quite sound policies were suggested and framed, and directives and guidelines issued to the financial institutions to augment the flow of credit to this sector. Yet not much headway could be made in this respect. It has become evident that the most difficult part in channelling credit to the small-scale sector is not the formulation of policies but rather to translate these policies into executive and legislative actions and to provide for the institutional arrangements to implement them.

It is therefore suggested that solutions to the problems of institutional credit to the small-scale enterprises should be sought through — firstly, defining policy strategies to accelerate the process of loan disbursement, ensure its use and timely recovery; and secondly and more importantly, designing appropriate institution(s) that assure efficient and effective execution of these policies.

The policy strategies emerging from the analysis of our survey data can be spelled out as follows:

- i) Controls and regulations should not be imposed beyond the level which is required to bring the essential financial discipline among the assisted enterprises. The stringent conditions in the name of ensuring loan recovery should be replaced by efficient appraising of

- the project, continuous monitoring of its operation and providing technical assistance and advice when required.
- ii) The lending agencies should show greater flexibility in respect of collateral requirements, particularly in the case of loan applicants with adequate skills and technical knowledge to run the proposed project. Collateral conditions can also be relaxed in favour of personal guarantees, where the loan approving authorities think it appropriate.
 - iii) The present loan application formalities and documentation procedures should be simplified. The application form should not seek any information which are unnecessary and non-specific to the project and for which records are not maintained in the firm.
 - iv) Special care should be taken at the appraisal stage to ensure that funds are not channeled into projects which are not in consonance with actual market needs. The appraiser should also see that the prospective loanees have the desired level of entrepreneurial and managerial expertise which is a vital factor for the survival of the project.
 - v) Following the suggestions of the Fourth Five-Year Plan (1990-95), banks and financial institutions should be directed to increase the quota of loan facilities to small-scale sector from 5 per cent at present to 15 per cent of their loan portfolios.

On the institutional front, the present credit operation by commercial banks and specialized development financing institutions is plagued with a single structural problem: accumulation of a huge amount of non-performing loans, directly impairing the very foundation of these institutions—their financial strength. These structural problems emanate from inability of these organizations in formulating and adhering to sound credit policies discussed earlier. We rule out the need for creating a new specialised lending institution in the public sector to replace the NCBs for conducting credit operation in the small-scale sector. We consider it as indicative of typical bureaucratic elusion—an attempt to cure managerial weakness with office extension.

The NCBs can be expected to improve their performance in supplying credit to the small-scale enterprises if it is granted a large degree of autonomy and freedom of operation with respect to its finance and planning, and choice and management of its personnel. Resolution of problem areas discussed above depends on unqualified acceptance of a simple axiom by the NCBs: credit operation in small-scale activities, to be successful, must be backed by a number of non-banking services including proper project identification, efficient and unbiased project appraisal, adequate end-use supervision, continuous monitoring and provision of technical cooperation/assistance whenever required.

An analysis of the size distribution of sample firms in section B shows that some 57.45 per cent of the selected enterprises belong to the two smaller size classes having current capital upto Tk 500,000. This brings out the possibility of involving NGOs in supplying and managing credit need of selected size of small enterprises requiring capital not exceeding Tk 500,000. Some NGOs have excellent track record of gearing their organizational structure and operational procedures to diverse fields of credit operation in rural areas. We do not see any reason why they should not be able to bring their experience and inherent efficiency to bear on the credit operation in small-scale enterprises of urban areas. We recommend that NGOs might be invited and inspired to participate in the supply and management of credit to the small-scale productive enterprises in urban areas.

IV. 2 Labour

In order to increase the availability of trained labour, basic technical education should be introduced in school curricula. Increased interactions between productive enterprises and formal training institutions are essential for increasing the relevance of public training in meeting industry's needs. BSCIC, in collaboration with the Ministry of Youth, may organize short training programmes on such fields as poultry and dairy farming for which no course are offered in vocational training institutions.

Firms may be encouraged to provide on-the-job and off-the-job training to their employees through fiscal incentives. Rules can be established through legislative decree for allowing productive enterprises to deduct up to twice the amount of all expenses incurred in staff training from their taxable income.

IV.3 Public Utilities

Greater priority should be given to supplying electricity to productive activities as opposed to non-productive user groups so that maximum use is made of the generating capacity available within the country. The bureaucratic 'red tape' that characterises the utility authorities should be removed. The demand for privatising utility services is already in the air. Government should give a serious consideration to this suggestion. Introduction of modern billing system, rationalization of price structure for industrial use of utilities, improvement of customer services and lowering of overhead cost for utility connection are the other popular demands voiced by the respondents of our survey.

IV. 4 Marketing

To help solve the marketing problems of small-scale enterprises, particularly the workshops and light engineering works, BSCIC introduced a sub-contracting programme in 1982. This well-intentioned programme failed to serve the purpose it was designed for due mainly to lack of well designed policy measures, conceptual backwardness and above all lack of concerted efforts

among agencies involved in the process. We suggest that the programme should be revitalised and be extended to as many enterprises as possible. Some categories of enterprises in the small-scale sector are of recent origin and are still at their nascent stage. In order to allow them to get matured they should be provided protection from foreign competition through appropriately designed tariff policies. For firms producing import substitute commodities, the tariff structure should be rationalised in case of raw materials, machinery and spare parts so that they can effectively compete with foreign goods both with respect to price and quality. Efforts should be made to promote products with export potential.

IV. 5 Productivity

Inter-agency cooperation between BSCIC, Bangladesh Centre for Industrial and Scientific Research (BCISR), Bangladesh Institute of Technology (BIT) and Bangladesh Technical Assistance Centre (BTAC) should be increased with a view to developing appropriate and affordable technologies for the small-scale sector. Government should establish diagnosis centre for dairy animals poultry birds especially for broilers.

IV. 6 Institutional Problems

The present bureaucratic orientation of the government agencies should be reduced with the introduction of representative bodies at different levels which are more directly accountable to the people.

Table I
Frequency Distribution of Small-Scale Enterprises Selected in the Sample

Group/Category Observations	No. of	Percentage of the Sample
Agro-based Enterprises	36	38.3
Poultry Farms	6	
Dairy Farms	9	
Nurseries	7	
Furniture Marts	7	
Sweetmeats and Confectioneries	7	
Manufacturing Enterprises	27	28.7
Steel and Metal products	6	
Tailoring Shops	7	
Shoes and Leather products	7	
Machine Parts Workshops	7	
Service Enterprises	31	33.00
Private Educational Institutions	8	
Computer Training Centres	7	
Community Centres	7	
Automobile Engineering Workshops	5	
Construction Firms	4	
	94	100.00

Table II
Distribution of Firms by Size of Capital and Yearly Sales

	Percentage of Firms			
	Agro-based (N=36)	Manufacturing (N=27)	Service (N = 31)	Total (N-94)
1. Size Classes of Current Capital (in Tk)				
Upto 100,000	16.67 (6)	18.52 (5)	22.58 (7)	19.51 (18)
100,001-500,000	30.56 (11)	44.44 (12)	41.94 (13)	38.30 (36)
500,001-1000,000	19.44 (7)	3.70 (1)	12.90 (4)	12.77 (12)
1000,001-2000,000	11.11 (4)	14.81 (4)	9.68 (3)	11.70 (11)
2000,001 -5000,000	13.89 (5)	14.81 (4)	12.90 (4)	13.83 (13)
5000,001+	8.33 (3)	3.70 (1)	0.00	4.26 (4)
Average Size of Current Capital; (in Thousan Tk)	1679.31	1243.	33758.06	1250.27
2. Size Classes of Yearly Sales (in Tk)				
Upto 500,000	38.89 (14)	51.85 (14)	51.61 (16)	46.81 (44)
500,001-1000,000	22.22 (8)	25.93 (7)	22.58 (7)	23.40 (22)
1000,001 -5000,000	16.67 (6)	14.81 (2)	16.13 (3)	15.96 (13)
5000,001+	22.22 (8)	7.41 (2)	9.68 (3)	13.83 (13)
Average Size of Current Capital (in Thousand Tk)	2869.53	1325.89	1411.10	1933.68

Note : Figures in the parentheses indicate absolute number of firms.

Table III
Frequency Distribution of Firms by Age

Age (years)	Agro-based	Manufacturing	Service	Total
0-5	17 (47.22)	14 (51.85)	16 (51.61)	47 (50.00)
6-10	8 (22.22)	2 (7.41)	9 (29.03)	19 (20.21)
11-20	7 (19.44)	6 (22.22)	5 (16.13)	18 (19.91)
>20	4 (11.11)	5 (18.52)	1 (3.22)	10 (10.64)
Total	36 (100.00)	27 (100.00)	31 (100.00)	94 (100.00)

Table IV
Type of Ownership of Sampled Firms

Type of Ownership	Agro-based (N=36)	Manufacturing (N=27)	Service (N=31)	Total (N=94)
Individual	77.78 (28)	70.37 (19)	48.39 (15)	65.96 (62)
Partnership	13.89 (5)	0.00	48.39 (15)	21.28 (20)
Family	8.33 (3)	14.81 (4)	3.23 (1)	8.51 (8)
Others	0.00	14.81 (4)	0.00	4.26 (4)

Table V
Distribution of Sources of Finance (Average of %)

Type of Ownership	Agro-based	Manufacturing	Service	Total
Own and Family	91.19	86.30	74.55	84.30
Non-Institutional Credit	8.25	10.37	21.42	13.20
Institutional Credit	0.56	3.33	4.03	2.50
Total	100.00	100.00	100.00	100.00

Table VI
Employment Pattern in Respondents Firms

Type of Employees	Average Percentages of Total Employees			
	Agro-based (N=36)	Manufacturing (N=27)	Service (N=31)	Total (N=94)
Administrative/ Technical	14.08 (2.6)	15.29 (2.44)	54.22 (6.610)	24.65 (3.89)
Skilled/ Semi-Skilled	49.49 (9.28)	67.25 (10.70)	15.10 (1.84)	45.82 (97.23)
Unskilled	30.08 (5.64)	14.60 (2.33)	25.10 (3.06)	24.33 (3.84)
Apprentice	6.35 (1.19)	2.76 (0.44)	5.58 (0.68)	5.20 (0.81)
Total Employees	100.00 (18.75)	100.00 (15.96)	100.00 (12.19)	100.00 (15.78)
Casual Employees	26.51 (4.97)	17.42 (2.78)	80.48 (9.81)	37.64 (5.94)
Female Employees	1.01 (0.19)	0.94 (0.15)	32.32 (3.94)	8.94 (1.41)

Note: Figures in parentheses give the number of employees.

Table VII
Employment Pattern in Respondents Firms

Employees	Agro-based (N=36)	Manufacturing (N=27)	Service (N=31)	Total (N=94)
1 - 10	52.78 (19)	48.15 (13)	58.06 (18)	53.19 (50)
11 - 20	27.78 (10)	33.33 (9)	29.03 (9)	29.97 (28)
21 - 50	2.78 (1)	11.11 (3)	9.68 (3)	7.45 (7)
Above 50	16.67 (6)	7.41 (20)	3.23 (10)	9.57 (9)
Total	100.00 (36)	100.00 (27)	100.00 (31)	100.00 (94)

Table VII
Employment Pattern of Different Sizes of Firms

Size of Firm by Size of Current Capital in Tk	Average Number of Employees				
	Adminis- trative Technical	Skilled/ Semi- Skilled	Un- Skilled	Appren- tice	Row Total
Upto 100,000	1.39	3.50	1.33	0.17	6.39
100,001-500,000	5.14	3.75	2.17	0.61	11.67
500,001-1000,000	3.75	2.58	3.25	0.67	13.25
1000.001-2000,000	2.45	11.45	5.18	0.00	19.09
Above 2000,000	4.94	17.00	9.59	2.53	34.06

Table IX
Average Growth of Employment in Sample Enterprises of Different Vintages

Age of Firms (Years)	Average Growth of Employment*			
	Agro-based	Manufacturing	Service	Total
0-5	106.88 (17)	62.67 (14)	24.04 (16)	65.51 (47)
6-10	172.52 (7)	25.00 (2)	87.49 (9)	113.61 (18)
11-20	131.06 (7)	136.30 (6)	129.92 (5)	132.00 (18)
Above 20	72.22 (4)	74.91 (5)	180.00 (1)	84.32 (10)
Average Growth of All Firms	120.88 (32)	78.51 (27)	64.57 (31)	89.81 (93)**

Note : Average growth of employment : $\frac{(\text{Current number of employees} - \text{Initial number of employees}) \times 100}{\text{Initial number of employees}}$

** One respondent firm could not give the initial number of employees.

Table X
Major Cost Components of Firms

Cost Components as Percentage of Yearly Sales	Agro-based	Manufacturing	Service	Total
1. Total Wage Bill	8.89	17.59	30.50	15.80
2. Cost of Raw Materials	45.85	51.02	34.22	44.07
3. Cost of Machinery	0.45	3.32	7.62	2.74

Table XI
Capital-Labour Ratio, Sales-Capital Ratio and Sales-Labour Ratio for Different Sizes of Firms (All Firms)

Size Classes of Firms by Size of Current Capital (In Tk)	Capital-Labour Ratio	Sales-Capitals Ratio S/K	(Sales-Labour Ratio ,000 TK) S/L
Upto 100,000 (N=18)	10.34	5.12	52.95
100,0001-5000,00 (N=36)	28.41	2.12	60.83
500,001-1000,000(N=9)	67.29	1.87	125.82
1000,001-2000,000 (N=24)	80.95	2.04	165.53
Above 2000,000(N=7)	132.46	1.25	165.68
Average	79.23	1.55	122.54

Table XII
Problems of Firms Regarding Productivity

	Agro-based	Manufacturing	Service	Total
Percentage of Firms Reporting the Supply of Raw Materials as (Total N = 81)				
a) Irregular	36.11 (13)	37.04 (10)	0.00 (0)	28.40 (23)
b) Highly Irregular	2.78 (1)	3.7 (1)	11.11 (2)	4.94 (4)
c) Fairly Regular	61.11 (22)	59.26 (16)	88.89 (2)	66.67 (43)
Percentage of Firms Reporting the prices of Raw Materials as Frequently Fluctuating (N=81)	69.44 (25)	59.26 (16)	11.11 (2)	53.09 (43)
Average Proportion of Under Utilization of Plant Capacity	24.94	39.26	30.63	31.23

Table XIII
Credit Profile of Firms

Items	Agro-based	Manufacturing	Service	Total
a) Proportion of firms ever receiving credit	8.33 (3)	18.52 (5)	16.13 (5)	13.83 (13)
b) Proportion of credit recipient firms receiving credit during the last 3 years	8.33 (3)	18.52 (5)	16.13 (5)	13.83 (13)
c) Average amount received during the last years (in '000 Tk)	536.37 (3)	943.40 (5)	426.34 (5)	683.62 (13)
d) Average amount of outstanding credit (in'000 Tk)	1146.67 (3)	758.200 (5)	426.34 (5)	720.21 (13)

Table XIV
Ranking of Reasons Given by Respondents for not Obtaining Bank Loans
(N = 28) Percentage of the Firms Reporting

Reasons	Percentage	Rank
1. Could not pay bribes	32.14	I
2. Adequate collaterals for mortgage could not be provided	28.57	II
3. Location of the firms in Chittagong created problems of communication	14.28	III
4. Stringent conditions could not be fulfilled	14.28	III
5. Too many regulations	3.57	IV

Table XV
Ranking of Stated Reasons for Turning Down Loan Applications (N=28)

Bank Stated Reasons	Percentage of Firms Reporting	
	Percentage	Rank
1. Lack of proper collaterals for mortgage	57.14	I
2. Proper formalities are not fulfilled	14.28	II
3. Insufficient assets owned by firms	10.71	III
4. Lack of permanent assets	7.14	IV
5. Necessary documentation are not provided	3.57	V
6. Rented location	3.57	V

Table XVI
Supply Attributes of Labour of Sample Firms (N=94)

	Agro-based % (#)	Manufacturing % (#)	Service % (#)	Total % (#)
Sources of Labour Supply (per cent)				
a. Local	46.66 (8.75)	44.30 (7.07)	69.79 (8.48)	51.85 (8.18)
b. Non-local	53.33 (10.00)	55.70 (8.89)	30.43 (3.71)	48.18 (7.60)
Residential Status (per cent)				
a. Labour settled in urban areas	89.33 (16.75)	96.29 (15.33)	96.06 (11.71)	92.90 (14.66)
b. Labour commuting from rural areas	10.67 (2.0)	3.70 (0.63)	3.94 (0.48)	7.10 (1.12)
Skill Attainment (per cent)				
a. Formally trained	8.91 (1.67)	8.14 (1.30)	47.09 (5.74)	18.38 (2.90)
b. On the job trained	91.09 (17.08)	91.85 (14.66)	52.91 (6.45)	81.62 (12.88)
Labour Turnover				
a. Average number of employees left the job last financial year per firm	4.31	3.44	2.16	3.85
b. Average number of employees join last financial year per firm	4.36	2.26	2.24	3.12
c. Rate of job turnover	22.99	21.55	17.72	21.23

Note: Figures in the parentheses are the average numbers.

Table XVII
Ranking of Difficulties with Public Utilities Faced by Firms

Utilities	Rank			Total Number of Firms Respondents
	First	Second	Third	
(Agro-based Activities)				
Electricity	87.50 (28)	12.50 (4)	0.00	100 (32)
Gas	20.00 (1)	0.00	0.00	100 (1)
Water	33.33 (6)	38.89 (7)	22.20 (4)	100 (18)
Telephone	8.33 (1)	75.00 (9)	16.66 (2)	100 (12)
(Manufacturing Activities)				
Electricity	100.00 (27)	0.00	0.00	100 (27)
Gas	0.00	0.00	100.00 (1)	100 (1)
Water	0.00	71.42 (5)	28.57 (2)	100 (7)
Telephone	0.00	100.00 (11)	0.00	100 (11)
(Services)				
Electricity	76.67 (23)	23.33 (7)	0.00	100 (30)
Gas	0.00	0.00	50.00 (91)	100
Water	8.33 (1)	66.67 (8)	25.00 (3)	100 (12)
Telephone	37.50 (6)	56.25 (9)	6.25 (1)	100 (16)
(Sample)				
Electricity	87.64 (78)	12.36 (11)	0.00	100 (89)
Gas	12.50 (1)	0.00	25.00 (2)	100 (98)
Water	18.92 (7)	54.05 (2)	24.32 (9)	100 (37)
Telephone	97 (97)	29 (29)	3 (3)	100 (39)

Table XVIII
Major Problem Regarding Utilities According to Acute of Problems

Problems	Percentage of Respondents Reporting as the Most Acute Problem			
	Electricity N=89 (94.68%)	Gas N=8 (8.51%)	Water N=24 (25.53%)	Telephone N=29 (41.49%)
Price	16.85	100.00	45.83	5.13
Irregular Supply	64.04	00.00	41.67	00.00
Breakdown	2.33	00.00	4.17	28.21
Billing	15.73	00.00	8.33	38.46
Customer Service	1.12	00.00	00.00	28.21

Table XIX
Ranking of Problems Firms Face in Dealing with Government Offices

Types of Problems (N=67)	Per cent of Firms Reported	Rank
1. Corruption	62.69 (42)	I
2. Harassment	25.37 (17)	II
3. Too many Regulations	8.96 (6)	II
4. Red-tapism and delay	2.98 (2)	IV

Table XX
Imported Content of Machinery, Spare Parts and Raw Materials Used by Firms

	Agro-based	Manufacturing	Service	Total
1. Machinery All imported	0.00 (15)	55.56 (12)	50.00 (27)	31.40
Partly Imported	34.29 (12)	33.33 (9)	20.83 (5)	30.23 (26)
Fully Domestic	65.71	11.11	29.17	38.37
Total	40.70 (35)	31.40 (27)	27.91 (24)	100.00 (86)
2. Average Import Content of Spare Parts (%)	3.11	57.59	54.26	34.80
3. Average Import Content of Raw Materials (%)	30.75	57.74	55.93	46.40 (90)

Urbanization in Bangladesh and Challenges of Development

Rita Afsar*

1.0 Introduction

The paper addresses four issues emerging from the growing urbanization in Bangladesh. These are:

- A comprehensive assessment of the process of urbanization.
- An indepth analysis of the present trends and components of urban growth.
- Examining the relationship between rapid urbanization, particularly the growth of large cities and productivity and efficiency in the context of a less developed country like Bangladesh
- Policy measures needed to face the challenges of rapid urbanization in Bangladesh.

1.1 The Global Urban Transition

The developing countries of the Asian region are undergoing a great urban explosion (UN, 1993b: 2-1), whereas the process of concentration of people in urban areas, has stabilized throughout most of the developed world. The number of people living in the urban areas of the developed regions nearly doubled from 452 million to about 0.87 billion and in the developing world it quadrupled, from 285 million to 1.71 billion over the last four and a half decades (1950-1995), accounting for two-thirds of all urban dwellers in the world. In addition, almost 46.7 percent of the world's urban population lived in Asia in 1995 amounting to 1.2 billion person in 1995, a number higher than the current urban population of the developed world (UN 1990; UN 1996). Asia's demographic situation is dominated by five large developing countries: China, India, Indonesia, Pakistan and Bangladesh with about four-fifths of Asia's total population and two-thirds of its urban population concentrated in these countries (Table 1). It is generally hypothesized that the countries that have low

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levels of urbanization are the ones experiencing most rapid urban growth (Skeldon 1990: 4). Bangladesh is one such country. It has a low overall level of urbanization, only around 20 per cent, compared to its neighbours, India, Pakistan and Sri Lanka, which had 25, 32 and 21 per cent urban population respectively in 1990 (Figure 1).

Table 1
Size of Urban Population in Selected Asian Countries (1970-2000).

Asia	Size of Urban Population (million)			
	1970	1990	1992	2000
Bangladesh	5.10	18.69	22.34	29.70
China	144.95	302.21	309.00	449.60
India	109.61	216.08	228.80	296.38
Indonesia	20.53	53.06	57.15	85.08
Pakistan	16.35	37.81	39.94	61.48
Total of five Countries	296.54	627.87	657.23	922.24
Asian total	481.73	974.26	994.17	1390.80
Share of five countries as percentage of the total urban population of Asia	61.56	64.44	66.11	66.31

Source: Afsar, 1995 and UN, 1996.

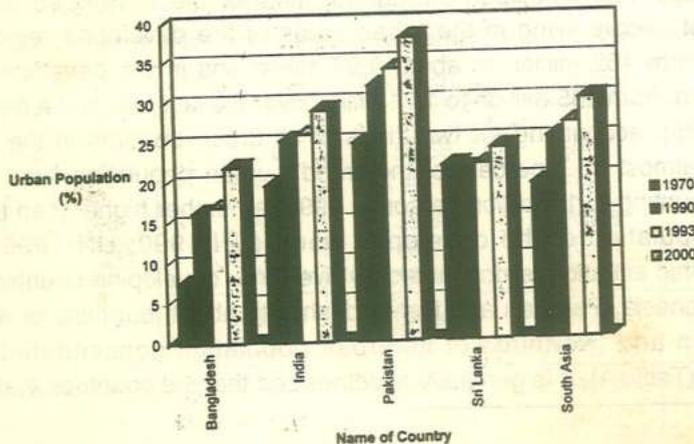


Figure 1 : Percentage of population living in urban areas in selected South Asian countries.

Source : Afsar, 1995

Based on a post enumeration survey conducted by BBS (1983b), Jordan (1993: 12) arrived at an estimate of 21.6 million people or about one-fifth of the total population of Bangladesh were living in urban areas in 1991, accounting for three times increase in the proportion of urban population in the total population of Bangladesh compared to 1970 level. Considerable increase in the proportion of urban population indicates that urbanization took place in Bangladesh. In terms of speed, rapidity and enormity, urbanization in Bangladesh poses one of the most serious challenges to the country's development planners and policy makers (UN 1993b: 1-1). It is important to provide a comprehensive assessment of the patterns of urbanization, the components of urban growth and the functional relationship between urbanization and economic development of the country along with policy measures needed to face challenges of the rapid urbanization. The present paper addresses these issues.

1.2 Size, Trends and Patterns of Urbanization in Bangladesh

From the beginning of the 20th century to 1991, about 21 million people were added to the country's urban population resulting in more than a 30 fold increase as opposed to only nearly a three-fold increase (30.7 to 88.3 million) of rural population (Table 2). The urban population grew at an annual rate of one to two per cent during the British period and about four per cent during the Pakistani period, with two noted exceptions. Higher growth rates of urban population were noted between the 1931 and 1941 censuses. Being conducted at the turning point of the history of the Indian sub-continent when the idea of partition was in vogue, this high rate of urban population growth was believed to be politically motivated as both Hindu and Muslim communities tried to overstate their numbers to show the numerical strength needed to claim for a separate state for each community (ESCAP 1981: 13).

The decline in the rate of urbanization in the next decade (1941-1951), can be explained as a cumulative outcome of the devastating Bengal famine and the subsequent outbreak of epidemics of cholera and smallpox during 1942-1944, the catastrophic consequences of the Second World War, the partition of India and subsequent communal riots (ESCAP, 1981: 13 and 24). The relatively low rate of urbanization during the British period (1757-1947) can be explained by the lack of industrialization in the area which now constitutes Bangladesh. With the growth of jute and textiles industries, mainly in Dhaka and surrounding areas, urbanization accelerated after the independence of the Indian sub-continent during the 1951-1961 period. The rate of urbanization increased sharply after liberation of Bangladesh from Pakistan and the subsequent spread of economic and commercial activities in the urban centres. The

number of urban centres rose dramatically from 78 in 1961 to 198 in 1974 and 491 in 1981 (ESCAP, 1981: 24). Before 1974, there was no city in Bangladesh that had population of one million. After 1974, Dhaka emerged as the only such city, having 1.7 million population, and Chittagong joined that rank in 1981 (BBS, 1987). These two cities absorbed a little over a third of the urban population in 1981. Even a cursory look at the distribution of the urban population over the years reveals significant increases in the size of major cities of Bangladesh, particularly in recent years (Figure 2). In the first half of this century (1901-1941), they contained around a third of the urban population which increased steadily and in 1991 around half of the urban population were found in those cities.

Table 2
Inter-censal Growth Rates of Population by Residence, 1901-1991

Census year	National population (000)	Growth rate (%)	Urban population (000)	Growth rate (%)	Rural population (000)	Growth rate (%)	Percent (Urban)
1901	28928	-	708	0.00	28226	0.00	2.40
1911	31555	0.94	807	1.40	30748	0.90	2.60
1921	33254	0.60	879	0.80	32376	0.50	2.60
1931	35604	0.74	1074	2.00	35428	0.90	3.00
1941	41997	1.70	1537	3.60	40460	1.30	3.70
1951*	44166	0.50	1820	1.70	42346	0.50	4.30
1961*	55223	2.26	31111	5.40	52112	2.10	5.60
1974*	76398	2.48	73901	6.70	69008	2.20	9.70
1981*	89912	2.32	140891	9.20**	75823	1.30	15.70
1991*	109877	2.01	215602	4.20	88317	1.50	19.60

1 Adjusted from Post Enumeration Check (PEC) of BBS (1983b and 1992b) which showed under count rate for urban areas in the order of 0.849 for 1961 and 1974 and 0.939 for 1981.

2 Adopted from Jordan (1993: 6) in absence of other rigorous estimates.

* Shows adjusted national figures drawn from BBS, 1984: 31, 36, BBS, 1992b: 2.

** Sudden leap in the growth rate of urban population is due to redefinition of urban areas in 1981 which included 3.8 million reclassified urban centres, not earlier defined as urban.

Source : Afsar, 1995.

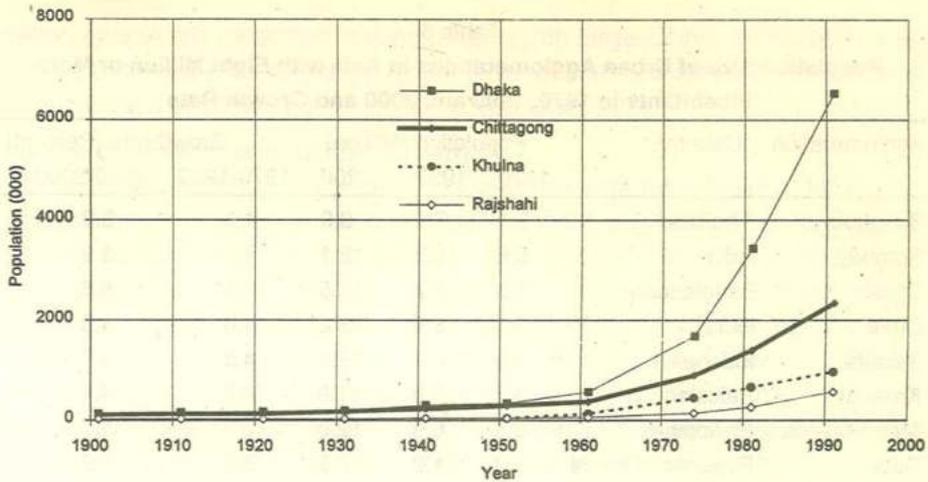


Figure 2 : Population of major cities in Bangladesh, 1901-2000.

Source : Afsar, 1995.

After the liberation Bangladesh faced serious problems of a war torn economy. There was a high rate of inflation, almost zero level productivity and domestic savings (Hossain, 1990: 2) and subsequent deterioration in the law and order situation in rural areas which accentuated rapid out-migration to the major cities. Availability of statutory rationing whereby the government ensured distribution of staple food at a minimum price in big cities was considered as the major pull factor in the city ward migration (Chaudhury, 1980). From 1965 onwards Dhaka gained more population than Chittagong and in 1975 it was double and is estimated to treble in the year 2000 and beyond (UN, 1993c: 128). Even when compared with other big cities in the ESCAP region, Dhaka experienced the highest growth between 1970-1990 and is projected to retain the same trend (Table 3). With the re-definition of urban areas, Dhaka's population expanded significantly from 1.6 million in 1974 to 3.7 million in 1981 enjoying an annual growth rate of 6.3 percent after adjusting for under-enumeration as suggested by the Post Enumeration Check survey (BBS, 1979: 142; BBS, 1984: 31, 36; BBS, 1992b: 2; Jordan, 1993: 6). Dhaka city's importance as a manufacturing, administrative, educational and commercial centre can be seen from the significant output from large scale industries (contributing one third to the total national GDP), the transport sector (contributing about a quarter to the total national GDP) and professional as well as specialized services (contributing about one-half to the national GDP) (Table 4). By the year 2005, Dhaka is projected to become the tenth largest cities of the world with a population of 14.5 million and by the year 2010, it is estimated that another 3.0

Table 3
Population Size of Urban Agglomerations in Asia with Eight Million or More Inhabitants in 1970, 1990 and 2000 and Growth Rate

Agglomeration	Country	Population (Million)			Growthrate (Percent)	
		1970	1990	200	1970-1990	1990-2000
Bangkok	Thailand	3.1	7.1	9.9	4.1	3.3
Bombay	India	5.8	12.2	18.1	3.7	3.9
Dhaka	Bangladesh	1.5	6.6	11.5	7.4	5.5
Delhi	India	3.5	8.8	13.2	4.6	4.0
Jakarta	Indonesia	3.9	9.2	13.4	4.3	3.7
Karachi	Pakistan	3.1	7.9	11.9	4.7	4.1
Metro Manila	Philippines	3.5	8.9	12.6	4.7	3.5
Seoul	Republic of Korea	5.3	11.0	12.9	3.6	1.6
Tianjin	China	5.2	9.2	12.5	3.0	3.0

Source: Afsar, 1995.

Table 4
Gross Regional Product of Major Cities as Proportion of Gross Domestic Product at Constant Market Price, 1990-91 by Broad Industrial Sector (Base 1984/85 = 100)

Sector	Dhaka	Chittagong	Rajshahi	Khulna
	Percentage of GDP	Percentage of GDP	Percentage of GDP	Percentage of GDP
Agriculture	5.6	5.5	6.7	5.4
Industry	31.2	30.8	1.0	5.1
Construction	10.4	6.4	5.8	5.0
Power, gas, water and and sanitary service	20.1	11.8	2.4	4.2
Transport, storage and communication	23.3	11.4	3.5	6.1
Trade services	10.9	10.8	5.5	5.3
Housing services	10.4	6.4	5.8	5.0
Public administration and defense	12.6	6.5	6.1	4.8
Banking and insurance	16.9	8.5	6.2	5.0
Professional and miscellaneous	15.4	8.2	5.1	5.6
GDP at constant market prices	13.1	9.7	5.3	5.3
(Million Taka)	59916	46794	22651	24565

Source: Afsar, 1995.

million people will be added making it the eighth largest city. In the same year both Jakarta and Karachi are projected to rank tenth and eleventh respectively, each having a population of 17 million (UN, 1993c: 127).

1.3 The components of Urban Growth

Natural increase and net migration of population from rural areas together with reclassification of urban areas constitute the three basic components of urban growth. Across the LDCs, it is generally hypothesized that at an early stage of development, when the levels of urbanization are low and rates of both urban and rural natural increase are moderately high, net migration will be more important to urban population growth than natural increase (Salas, 1986: 4). With one-fifth of its national population living in urban areas, Bangladesh is categorized as a less urbanized country. Jordan's estimates suggest that net migration and reclassification together contribute around two-thirds to urban growth between 1981 and 1991. Based on census data of 1974, 52 per cent of the total urban population in Bangladesh were estimated to be life long residents and the remaining 48 per cent were immigrants, mostly from rural areas or smaller towns (ESCAP, 1981: 34). Other estimates (UN, 1993b: 2-16, 2-17), however suggest that two-thirds of the urban growth in the 1970s was attributable to internal migration and reclassification. Table 5 demonstrates the dominant persistence of migration and reclassification, contributing between three-fifths and two-thirds to the urban growth of Bangladesh between 1980 and 1995. It further suggests that both reclassification and migration will remain the major components of urban growth until the year 2000 and beyond in Bangladesh, like most other South and South-East Asian countries.

However both migration and natural increase should be seen as complimentary and not as competing factors. An analysis of the specific contribution of different components of urban growth in Bangladesh is rendered difficult by lack of precise and complete data. Apart from conceptual ambiguities¹, the basis of enumeration in the population censuses varies over time and so does the definition of urban localities. Based on official data the UN estimate shows that the contribution of natural increase to urban growth has remained at around 40 percent between the 1980s and 1990s (Table 5). Using fertility and mortality data from the vital registration system of the BBS, Jordan (1993: 4) calculated the contribution of natural increase and migration to urban growth from cohort-survival projections. He attributed 36 percent of the total urban growth to natural increase between 1981 and 1991 which comes close to 37.6 percent estimated by the UN 1993b: 2-16) between 1985-1990 (Table 5). Both

¹A full Section is devoted on the sources of data and their problems in chapter 3 of the author's dissertation.

estimates show the substantial contribution of natural increase to urban growth. However it is often hard to demarcate between internal migration and natural increase, for example the children born to migrants after their arrival in the city which contribute significantly to urban population growth and is attributable to natural population increase (Hugo, 1991: 23). Consequently it is undeniable that rural-urban migration plays a critical role in the urbanization process of Bangladesh.

Table 5
The Components of Urban Growth by Country or Area
(percentage of urban growth).

Sub-region	1980-1985		1990-1995		2000-2005	
	Natural	Migration and Reclassification	Natural Increase	Migration and Reclassification	Natural Increase	Migration and Reclassification
South-East Asia	49.1	50.9	44.9	55.1	41.7	58.3
Indonesia	35.2	64.8	37.0	63.0	36.7	63.3
Malaysia	22.0	78.0	38.0	62.0	40.0	60.0
Philippines	66.0	34.0	62.4	37.6	57.0	43.0
Singapore	100.1	-0.1	100.1	-0.1	98.9	1.1
Thailand	39.6	60.4	31.4	68.6	31.2	68.8
South Asia	56.0	44.0	54.4	45.6	47.0	53.0
Bangladesh	37.6	62.4	39.9	60.1	41.9	58.1
India	55.6	44.4	52.1	47.9	44.8	55.2
Nepal	31.9	68.1	32.5	67.5	32.6	67.4
Pakistan	69.0	31.0	67.8	32.2	54.9	45.1
Sri Lanka	170.8	-70.8	66.8	33.2	33.6	66.4

Source: Afsar, 1995.

1.4 Urbanization and Development

It is argued that rapid urbanization in Bangladesh has serious implications for the level of productivity, the rate of economic growth and the state of urban infrastructure (Davis and Golden 1954; Hoselitz 1957; Lipton 1977) because there is a mismatch between the levels of industrialization and urbanization in Bangladesh (Laskar 1983: 29). The process of urbanization is costly and encroaches upon the rate of economic growth, since cities are growing faster than the capacity of the economy to support them (Richardson, 1987: 561-80; 1989: 362-363). The state of infrastructure is poor and unable to take growing urban pressures as the cities do not generate enough surplus to invest in basic urban services, such as, housing, transport, water supply, sanitation, etc.

(Richardson, 1989: 363; UN, 1993b: 2-34). Such a view is not uncontroversial and the evidence on which it is based has been criticised on a number of grounds. It is argued that 'there is no basis for the belief that primacy or over urbanization per se is detrimental to the efficiency goal of economic development' (Alonso, 1969).

1.4.1 Economic Growth, Productivity and Efficiency

The large cities generally make a disproportionate contribution to Gross Domestic Product (GDP) because they enjoy economies of scale and consequently have a higher national income and productivity per capita than the rest of the nation (Figure 3). Urban areas in Bangladesh generated one-third of the countries' GDP in 1985 despite having less than one-fifth of the nation's population. The contribution of urban areas to the GDP of other countries in the ESCAP region excepting the newly industrialized countries was estimated between one-third to one-half (UN, 1993b: 2-38). Moreover it is not necessary for developing countries to replicate the same stages of economic development as that of the developed countries. Although industrialization preceded urbanization in the west, it also led to the establishment of colonies for ready market and procurement of cheap sources of raw materials. It is not possible for the less developed countries to replicate the colonial experience of the west in the era of inter-dependence and strong networking among the developed nations. As a result developing countries must place more emphasis on trade and commerce. Table 6 suggests that except India, almost all countries in the ESCAP region have a greater proportion of GDP generated from trade than industries and Bangladesh is no exception. Trade contributed a quarter to GDP compared to industries' share of fifteen

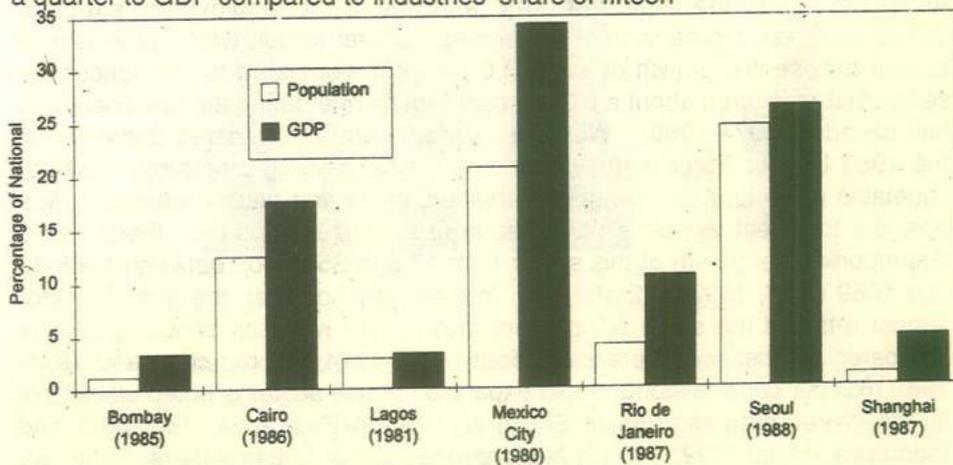


Figure 3 : Cities' share of national population and GDP.

Source : Afsar, 1995

Table 6
Estimated GDP from urban areas in selected Asian countries and major sectors, 1985.

Country	GNP per capita (US\$)	Non-agricultural GDP from urban areas (%)	GDP from non agricultural sector (%)	Estimated GDP from urban area (%)	Share of industry in GDP 1990 (%)	Volume of trade as a percentage of GDP, 1989
	1	2	3	4	5	6
Korea, Republic	6330	92	86	79	45	58.3
Hong Kong	13430	95	95	95	-	-
Singapore	14210	100	100	100	-	-
Indonesia	610	49	76	37	40	40.6
Philippines	730	75	71	53	35	41.7
Thailand	1570	53	77	41	39	65.8
Bangladesh	220	61	54	32	15	23.9
India	330	-	-	-	29	14.8
Pakistan	400	63	74	47	25	32.9
China	370	72	67	48	-	-

Source: Afsar, 1995

percent. It is encouraging that Bangladesh with its lowest per capita income has about one-third of GDP generated by urban areas. The table also suggests high productivity of the non-agricultural sector of urban areas for all countries. As a corollary to the growth of GDP, analysis of the employment structure shows more rapid expansion of the non-agricultural sector, which experienced annual exponential growth of about 8.0 per cent, compared to the agricultural sector that registered about a 6.0 per cent growth rate during the last one and a half decades (1974-1989). With the detailed, carefully prepared questions of the 1989 Labour Force survey, focusing on harvesting, threshing, husking, vegetable growing, processing, preservation, cattle and poultry farming, it was possible to detect women's participation in agriculture and thus there was a disproportionate growth of this sector from 17.5 to 35 million between 1985-86 and 1989 (BBS, 1992d: 22 and 30). Interestingly however, the tertiary sector almost retained the same 6.0 percent growth rate when its annual growth is compared against two reference periods, 1961-1974 (6.0 per cent) and 1974-1989 (6.3 per cent), although rapid expansion of this sector is noted elsewhere in the developing regions of South and South-East Asia, like India and Indonesia (Hugo, 1992: 9, 19; National Institute of Urban Affairs, 1988: 5). However the magnitude of employment generated by the tertiary sector in urban areas is much higher than other sectors. Of the total employed persons

in urban areas, about two-thirds worked in the tertiary sector represented mostly by trade and commerce in both 1974 and 1989 and the establishments were located predominantly in urban areas (Figure 4). The urban share of the total employment generated by finance, real estate and business services was two-thirds. The corresponding figure for the trade, hotels and restaurants was 52 percent. On the other hand the extent of employment generated by manufacturing and community, social and personal services was double in rural than urban areas. Figure 4 tends to suggest an important departure from the conventional wisdom by demonstrating that the manufacturing sector does not represent the major source of employment in urban areas. This is because manufacturing in Bangladesh is largely family based, small scale and cottage type activities. Also a number of mills in public jute and cotton textile sectors were closed down as a result of the structural adjustment measures adopted by the government in 1986 with assistance from the IMF and the World Bank. It was estimated (Sen, 1991) that about one-fifth to one-third of the employees of these units lost their jobs.

However many of these workers were reported to be absorbed in privately owned industries and other sectors, such as, transport, service and trading (Sen and Islam, 1993: 17). Subsequently, except privately owned garment, textile, metal fabrication, leather and a few assembling factories which mainly concentrate in Dhaka city, followed by Chittagong and Khulna, rural areas generate greater employment opportunities in manufacturing. The informal sector also plays an important role in

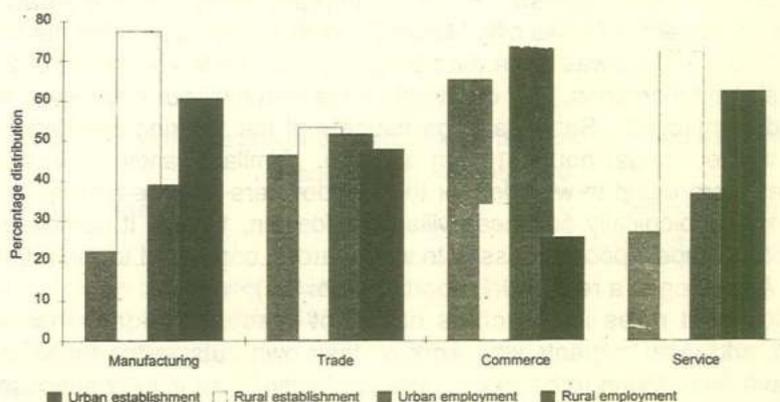


Figure 4: Percentage distribution of non-farm establishments and employment in urban and rural areas of Bangladesh.

Note: Trade = wholesale and retail trade, hotel and restaurants; Commerce = finance insurance, real estate, business services and Service = community, social and personal services.

Source: Afsar, 1995.

enhancing the absorptive capacity of the tertiary sector in urban areas. Conventional wisdom upholds that immigrants accept informal service sector employment at a wage 'below that prevailing in rural areas so that he may remain in the labour queue, hopeful for employment in the formal high wage sector' (Rogers *et al.* 1984: 271). Fishlow's work on Brazil (1972), Ballante's on South America (1979) and Kannappan's on India (1985 and 1988) suggest that nominal wage gaps are for the large part an outcome of skill, age, sex and occupational differentials, rather than regional wage gaps *per se*. Recent research on the informal sector revealed that entry into this sector often comes as a rational choice, due to lack of flexibility, prevalence of bureaucratic red tape and restrictive entry into the formal sector (Peterson *et al.* 1991: 12). Generally lower wage levels found in the informal sector are viewed as a desirable trade-off for greater flexibility in work hours by the labourers (Portes, Castells and Benton, 1989). Similarly selection of home for productive activities can be a reflection of a rational economic decision designed to reduce capital expenses (Strassman, 1987).

It is often argued that urbanization creates an imbalance in the demand and supply situation of the labour market due to the excessive supply of unskilled or semi-skilled migrants of prime working age (20-34 years) which affects productivity negatively (Todaro, 1969). However Hugo *et al.* (1987: 286) maintained that the concept of unemployment is of little relevance among urban workers, with low productivity and low earnings constituting a more important issue. Although this assessment was made in the context of Indonesia, it is equally valid for Bangladesh. From an indepth survey of the Agargaoan Squatters settlement in Dhaka city, Majumdar *et al.* (1989) found that the labour force participation rate was more than 90 percent for male population of 20-59 years. Using time criterion, only one-tenth of the active labour force were found to be underemployed. Rather a large majority of the working population (40 percent) worked longer hours (12) on average. Similarly landless workers in rural areas were found to work longer than landowners and the difference was greater in technologically advanced villages (Hossain, 1988). It demonstrates that poverty compels poorer masses to work harder, compared to the relatively well-off. According to a recent UN report (1993b: 3-1):

'Unemployment rates in the cities have not reached heights that were predicted, and even migrants who work on their own outside the formal wage sector have been found to be much more productive than initially supposed to be. This does not deny, however, the fact that although the productivity of migrant workers increased they still live in poverty, are subject to harsh working conditions and that the group that suffers most are women and children'.

A large proportion of the poor are found in highly labour intensive and low-paid activities. It is argued that the unequal distribution of technological progress between modern and traditional sectors, leads to differentiated growth in productivity, thus leaving the traditional sector labour force in a situation of low-

productivity and poverty (Oberai, 1993: 86). It is also alleged that the high cost of living in cities offsets its productive advantage (Lipton, 1980: 3; UN, 1993b: 3-4). It leads to such questions as to whether higher output generated in big cities can be used to create resources for building infrastructure needed for a decent living environment for the urban poor (Richardson, 1989: 362).

1.4.2 Distributional Aspects of Urbanization

A correlation exercise reveals that the urbanization levels of the four metropolitan cities, Dhaka, Chittagong, Khulna and Rajshahi are strongly related to their regional domestic product ($r = 0.99$) and their relative share in the country's GDP ($r = 0.95$) (Table 7). The cities' share of the GDP on a per capita basis shows a significant but not very strong relation ($r = 0.27$). This relationship is stronger with regard to income generated in the tertiary sector ($r = 0.99$) than in the secondary sector ($r = 0.84$). The value of r is found to be much greater than revealed from a similar exercise in India, where the secondary sector ($r = 0.69$) was found to be stronger than the tertiary sector ($r = 0.61$) (NIUA, 1988: 8 and 9). A significant relationship exists between the area and level of urbanization ($r = 0.61$) as opposed to India ($r = .09$). Data used for India referred to the 1981-82 period, when growth in industries and manufacturing might have been greater than the tertiary sector. Between 1980 and 1990, both the tertiary and secondary sectors experienced same rate of growth of production unlike Bangladesh, where the tertiary sector has always experienced higher growth rates (about 6 per cent) than other sectors (World Bank, 1993: 220-221). City dwellers' access to piped water ($r = 0.99$), sanitation ($r = 0.70$) and level of education showed significantly positive relationship with level of urbanization.

Table 7
Correlates of the Levels of Urbanization of the Four Metropolitan Cities of Bangladesh Around 1990

Correlates	Coefficient of Correlation with Level of Urbanization
Urban access to piped water (1991)	0.98*
Urban access to sanitary toilet (1991)	0.69
Urban literacy rate (1991)	0.82
Urban area (1991)	0.61
Regional per capita GDP (1989/90)	0.27
Regional GDP of the four cities (1989/90)	0.99*
Contribution of primary sector to national GDP (1989/90)	-0.60
Contribution of secondary sector to national GDP (1989/90)	0.84
Contribution of tertiary sector to national GDP (1989/90)	0.99*

Note: *significant at 0.01 level

Source: Afsar, 1995.

While urbanization is helping the processes of economic development and social change, it is neither being responded to with adequate legislation nor facilitated by cost-effective financial systems (UN, 1993b: 2-62). As a result there is wide class based variations manifests through huge proliferation of slum and squatter settlements and high magnitude of poverty. Table 8 shows that nearly half of the urban population live in slum and squatter settlements which could be only compared to that of Indonesia and the Republic of Korea. Except for Pakistan, Bangladesh showed the worst over crowding with approximately three persons per habitable room. In Bangladesh 44 of the urban population were found to live below the absolute poverty² line and 20.5 percent below the hard core³ poverty line. However it is interesting to observe that in 15 years the proportion of urban absolute poverty dropped subsequently from 81 per cent in 1973-74 to 44 percent in 1988-89. In five years time, while the situation improved dramatically in urban areas (as urban absolute poverty declined by twenty-two percentage points between 1983-84 and 1988-89), absolute poverty in rural areas recorded only a modest decline by nine percentage points during the same period.

Despite to 'high swings' in the trends of poverty, high population growth, slow growth in per capita GDP and increasing impacts of natural disaster one may question BBS estimates on poverty (UN, 1993b: 4-9). Some of the existing estimates on urban poverty (ADB, 1996) can also be questioned on grounds of sampling procedure and one shot nature of the survey. Nonetheless, the absolute size of the population below poverty line is very high by any standard. However persistence of poverty is a common problem in most of the mega cities. An ILO survey of mega cities revealed that the incidence of poverty in most such cities was as high as in the countries as a whole (Oberai, 1993: 189). Around one-third of the population in most mega cities, particularly in Latin America, is living in absolute poverty (Oberai, 1993: 82). Hence economic growth or productivity does not necessarily lead to prosperity nor are they hampered by the rapid urbanization. It rather indicates failure to manage urban growth for the benefit of the poorer masses.

There is no single authority responsible for urban development. Ministry of Public Works and Urban Development works for physical planning through three directorates/ departments such as Urban Development Directorate, Public Works Department and Housing and Settlement Department. Urban Development Directorate is assisted directly by special authorities like Rajdhani Unnayan Kartipakkha (RAJUK) etc. and the other two departments are served by their respective networks. On the other hand, the Ministry of Local Government, Rural Development and Co-operatives which is responsible for

² Estimated on the basis of recommended calorie intake of 2122 k calorie/day/person.

³ Estimated on the basis of recommended calorie intake of 1805 k. calorie/day/person.

Table 8
Slum and Squatter Formations and Urban Overcrowding in Selected Asian Countries and Cities.

Country	Urban Population in Slum/ Squatter Settlement	Persons per Habitable Room	Major City with Highest Population Density	
			City	Population per Km ² 1980-88
Republic of Korea	47	1.5	Seoul	15,932
Japan	-	0.8	Tokyo	13,973
Indonesia	54	-	-	-
Malaysia	15	1.2	Kuala Lumpur	4,712
Philippines	28	2.3	Manila	45,839
Thailand	16	-	Bangkok	3,486
Bangladesh	47	2.9	Dhaka	9,930
India	36	2.8	Calcutta	88,135
Pakistan	-	3.6	Karachi	3,990
Sri Lanka	21	2.1	-	-

Source: Afsar, 1995.

the delivery of basic services in urban areas though special bodies like Water Supply and Sewerage Authority (WASA), Local Government Engineering Department (LGED) and City Corporations as well as Municipalities. Moreover for transport, infrastructure, electricity, telephone there are respective Ministries. Hence there is a clearly disjunction between urban planning and management of delivery services. On the other hand, City Corporation such as Dhaka City Corporation (DCC) which was created by the Chief Martial Law Administrator vide ordinance XL of 1983 and made more accountable to the people with the provision for direct election of Mayor on the basis of adult franchise (GOB, Bangladesh Gazette, September 18, 1991: 489) neither have authority nor capacity and mandate for coordinating city's development activities. The pattern of expenditure of the DCC suggests that a lion's share of its capital expenditure (about half) goes into road maintenance (including buildings). Public health and repayment of loan consumes 20 percent each (Afsar, 1995). Public health activities are geared mainly to prevention of Malaria, provision for slaughter house and food inspection. Recently it is carrying out immunization at a large scale and taken up a few projects on construction of drainage and social waste removal from poorer communities to ensure better sanitation. It is also expected to play the key role of managing ADB's primary health care project. However education receives least priority in its budget while it has no direct role in employment generation and making provision for shelter for the poor. Moreover other important services, such as law and order, police, telephone, electricity, gas and water fall outside its

purview. Although there is no clear cut policy on urban poverty alleviation by the government, the National Housing Policy (NHP), 1993 made important policy statement on slum improvement. The policy states that the government would expand provision of water-supply, sanitation and basic services in slum and other settlements occupied by the poor' (Clause 5.11.1) and to 'integrate the provision of physical amenities in slums and squatter settlements with basic services including maternal and child welfare services and health care, structured on community participation and involvement of voluntary agencies and management of local bodies' (Clause 10.5.4).

Subsequently, the government has a limited number of projects in slum improvement and housing for the poor. Slum Improvements Project (SIP) is the major project covering City Corporations and 21 Municipalities. The project was financed by UNICEF from 1985 to 1995 and implemented by municipal authorities with technical support from LGED. So far it covered nearly 45,000 households in 25 cities representing a fraction (2%) of the total urban population. From July 1996, the project support from UNICEF continued only in 4 (four) City Corporations under a different program known as Urban Basic Service Delivery Project (UBSDP), while in other cities the program is funded by ADB with LGED's technical assistance. Similarly, there are few other projects such as World Bank supported Environment Improvement Project in Dhaka, Low Income Housing project in Chittagong and Dhaka which are *ad hoc* in nature. DCC has commenced a 20 million Taka Slum Improvement Project from its own fund in 1996-97 which represents only 0.56 percent of its total budget. It is also difficult for the DCC to ensure delivery of basic services and set a standard practice for the delivery system to ensure better coverage and cost effective due to lack coordinated institutional umbrella for urban services.

There are about 100 out of some 1500 NGOs which operate in urban areas who are mainly involved in credit and income generation activities (IGA), health, literacy and non-formal education and skills development. Only a few of them are involved to cater basic services and shelter. Therefore a vast majority of slum dwellers and squatters still remain outside the orbit of both formal and informal development programs. Hence compared to nearly three-fifths of households of Dhaka city who were served by direct WASA line at home and use sanitary toilets, figures come down to about a tenth and a fraction in the case of slum households. This is because a majority of slum dwellers (three-fifths) use non-sanitary toilets, followed by those who use common sanitary toilets. Moreover 58 and 40 percent of them respectively manage access tap water through informal sources and electricity illegally. Poorer people spend a tenth of the total expenditure on fuel and lighting which comes down to 6 percent in the case of urban households. At ages 16-20 and 21-24, school

enrollment rate were 29 and 13 percent respectively for both male and female adolescents respectively for Bangladesh as a whole (Mitra *et al.* 1994:15). However, it increases to 70 and 50 percent respectively in the case of age cohorts from urban non-slum households and is almost negligible for slum households (Afsar, 1995). Moreover poorer population of urban areas, particularly women are susceptible to threat of eviction, violence by *mastaans*, divorce, desertion and dowry related problems.

1.5 Challenges of Urbanization and Policy Implication

By the year 2000, nearly half of the population of developing countries will be living in urban areas and more than a quarter of the urban population is likely to concentrate in large cities (with a population of more than four million). Of the largest cities in 1995, 16 are mega cities with population of 8 million or more of which 12 are in developing world and 9 in Asia alone. Cities are neither good or bad: they contain elements of both. The challenge of the twenty first century is to make cities more successful and sustainable from social, economic and environmental perspectives for all citizens and for generations to come. Experiences show that progress is possible even when resources are scarce and poverty is widespread. They show that appropriate policy measures can make a difference.

In Bangladesh rural development and urbanization are often seen as two distinct process and dealt with exclusively. Population distribution measures in the past adopted a somewhat narrow approach which involved indirect controlling of internal migration by poorer population by placing greater priority on rural development and poverty alleviation and forced eviction. There were also sporadic attempts of administrative decentralization and development of growth centers. A sound population distribution strategy demands concerted efforts to combine development of non-agricultural activities and infrastructure development in rural areas, development of small market towns as commercial, industrial and services centers for rural hinterlands and as alternative destinations for those wishing to settle in urban places, and at the same time improve employment and living conditions in large cities.

While economic growth may be necessary to promote employment and incomes, it may not be sufficient to improve poverty conditions in Third-World mega cities. Much depend on the nature of growth process and whether or not supporting wage and employment growth policies are implemented. For example, in Bangladesh, there is rapid boom of ready made garments factories under private ownership as a direct response to expert oriented manufacturing policies undertaken by the government led to creation huge employment

opportunities for the semi or unskilled rural women in Dhaka city. Often it is argued to locate industry away from mega city to reduce population growth and environmental pollution. While such a strategy has obvious appeal, its implications for employment generation and poverty alleviation need to be carefully assessed. Since services sector may not be able to absorb all the increase in labour force, it is more appropriate to adopt a policy of selective industrial decentralization. Non-polluting light industries (electronics, clothing etc.) which are market oriented and labour intensive can be promoted. Moreover transfer of polluting industries such as tanneries, rubber factories, etc. from large cities should be accompanied by appropriate pollution-control measures, as well as creation of several new growth poles with adequate social and physical infrastructure.

The promotion of self-employment should be a crucial component of anti-poverty programs in mega cities like Dhaka. City Corporation should given authority to generate employment by adopting more appropriate land-use planning and zoning regulations. With the help of relevant government department, NGOs and private sector, enriching the capacity of the urban poor and informal sector workers to engage in more productive activities through the provision of productive assets, credit and training, infrastructure and access to market is an important means of raising their income levels. Enskilling the poorer people and develop management and entrepreneurial skills are the other options for increasing their productivity and income. However, staff members of the city corporation should be given adequate training and made accountable to a regulatory body comprised of the Mayor, other urban stakeholders and also representatives of the poorer people for efficient functioning.

Lack of access to social services negatively affects labour productivity and welfare of the urban poor. Absenteeism due to illness raises production cost in general and often impinges on workers income as a result of positive measures adopted by employers such as salary cut, dismissal etc. Frequent illness among children also leads to absenteeism among working women which prejudices employers against hiring women. However no lasting solution to the problems of urban environmental degradation, housing and inadequate access to social services can be envisaged without strengthening the resource base of cities and improving productivity and incomes of the urban poor. Hence via partnership between public and private sectors and via community operation and management, City Corporations should extend safe water, sanitation and health services. To accomplish this task within limited budget, public

expenditure and social services should be redirected from rich to poor households. The pricing structure for water, electricity and other services should be made more equitable by charging progressively higher price to households using more of such services. This will lead to improve the city revenue base, promote a more related use of service and raise quality and productivity of the labour force. Provision of information about nutrition, family planning, health care and delivery systems need to be similarly adapted to the specific needs of the urban poor.

Time and again, people in the developing world have demonstrated innovativeness in creating their own shelter, once provided with basic support and inputs. Land tenure can also serve as an incentive to encourage urban poor to participate in self-help housing and routine maintenance of infrastructure. Following the Bombay Municipal Corporation *de jure* tenancy and basic amenities can be granted to those slum dweller who form co-operatives and undertake routine maintenance of the infrastructure. City authorities who are primarily oriented towards the provision and maintenance of urban infrastructure and services should be thoroughly reoriented and recapitulated with the urgency of sustainable urban development.

1.6 Conclusion

This paper has examined the extent of urbanization in Bangladesh and its relationship with economic development. The rate of urbanization in Bangladesh is higher than other countries in the ESCAP region. Although reclassification and net migration constitute major components of urban growth, the contribution of natural increase has been substantial since 1960s. Like other developing countries, urban areas of Bangladesh contribute more to the GDP than their share of total population. It has demonstrated that rapid urbanization does not necessarily hinder productivity and nor does productivity automatically lead to alleviation of poverty and congenial living condition if there is no back up of adequate policy, efficient institutional frameworks, particularly management, sound financial and effective delivery systems. In conclusion it can be said that 'rapid urbanization is neither a crisis nor a tragedy. It is a challenge for the future' (UN, 1990: 90).

References

- Afsar, R. (1995): "Causes, Consequences and Challenges of Rural Urban Migration in Bangladesh", Doctoral Dissertation, University of Adelaide, Australia.
- Alonso, W. (1978) : "Problems, Purposes and Implicit Policies for a National Strategy of Urbanization", in Population Distribution and Policy, S. M. Maize (ed.), Washington D. C: Government Printing Office.
- Asian Development Bank (1989) : Asian Development Outlook, Manila: Asian Development Bank.
- Ballante, D. (1979) : "The North South Differential and Migration of Heterogenous Labor", American Economic Review, 69: 166-75.
- Bangladesh Bureau of Statistics (1979) : Statistical Pocket Book of Bangladesh 1978, Dhaka: Ministry of Planning.
- Bangladesh Bureau of Statistics (1983) : Bangladesh Population Census 1981, Post Enumeration Check (PEC), Dhaka: Ministry of Planning.
- Bangladesh Bureau of Statistics (1984) : Bangladesh Population Census 1981: Analytical Findings and National Tables, Dhaka: Ministry of Planning.
- Bangladesh Bureau of Statistics (1985) : Bangladesh Population Census: Thana Series, Dhaka Statistical Metropolitan Area (SMA), Dhaka: Ministry of Planning.
- Bangladesh Bureau of Statistics (1987) : Bangladesh Population Census 1981, Report on Urban Area: National Series, Dhaka: Ministry of Planning.
- Bangladesh Bureau of Statistics (1990) : Bangladesh Census of Non-Farm Economic Activities 1986: Zila Series, Dhaka: Ministry of Planning.
- Bangladesh Bureau of Statistics (1991), Report on the Household Expenditure Survey 1988-89, Dhaka: Ministry of Planning.
- Bangladesh Bureau of Statistics (1992a) : Post Enumeration Check (PEC), Dhaka: Ministry of Planning.
- Bangladesh Bureau of Statistics (1992b) : Statistical Pocket Book of Bangladesh 1992, Dhaka: Ministry of Planning.
- Bangladesh Bureau of Statistics (1993c) : Bangladesh Population Census Report 1991: Zila Series, Dhaka: Ministry of Planning.
- Chaudhury, R. H. (1980) : Urbanisation in Bangladesh, Dhaka: Center for Urban Studies, University of Dhaka.
- Centre for Urban Studies (1990) : The Urban Poor in Bangladesh, Vol. 1 Comprehensive Summary Report, Dhaka: Centre for Urban Studies, Dhaka University.
- Davis, K. and Golden, H. H. (1954) : "Urbanization and Development in Preindustrial Area", Economic Development and Cultural Change, 3(1): 6-26.

- Department of Environment (1990) : Bangladesh Paribesh Paribesh Adhidaptar, Dhaka: Department of Environment.
- Economic and Social Commission for Asia and the Pacific (ESCAP) (1981) : Population of Bangladesh, Country Monograph Series No. 8, New York: United Nations.
- Fishlow, A. (1972): "Brazilian Size Distribution of Income", *American Economic Review*, 69: 391-402.
- Hoselitz, B. F. (1957): "Generative and Parasitic Cities", *Economic Development and Cultural Change*, 3: 278-94.
- Hossain, M. (1988) : Nature and Impact of Green Revolution in Bangladesh, Research Monograph, Washington D. C: IFPRI.
- Hossain, M. (1990) : Briefing Paper, London: Overseas Development Institute.
- Hossain, S. (1993): "Women and Men in Bangladesh: Facts and Figures 1992: An Executive Summary": Presented at the Workshop on Compendium on Women and Men in Bangladesh 1992, Dhaka: Bangladesh Household Survey Capability Program, Bangladesh Bureau of Statistics, Ministry of Planning.
- Hugo, G. J. (1991): "Rural-Urban Migration, Economic Development and Social Change: Some Important Issues", Paper Presented in the Workshop on the Urbanisation and Urban Poor, Dhaka: Bangladesh Institute of Development Studies, July 27-29.
- Hugo, G. J. (1992): "Migration and Rural-Urban Linkages in the ESCAP Region", Paper Prepared for Pre-Conference Seminar of the Fourth Population Conference on Migration and Urbanization: Inter-Relationship with Socio-Economic Development and Evolving Policy Issues, Seoul: Republic of Korea.
- Hugo, G. J, Hull, T. H, Hull, V. J. and Jones, G. W. (1987) : The Demographic Dimension in Indonesian Development, Kuala Lumpur: Oxford University Press.
- Jones, G. W. (1993): "Population and Human Resources Development in Asia": in Selected Papers, The Fourth Asian and Pacific Population Conference, Asian Studies Series No. 124, Bali: UNESCAP, August 19-27.
- Jordan, D. (1993): "Urbanization Bangladesh & Dhaka", Dhaka: Dhaka Metropolitan Development Planning (DMDP).
- Kannappan, S. (1985) : "Urban Employment and Labour Market in Developing Nations": *Economic Development and Cultural Changes*, 33(4): 699-730.
- Kannappan, S. (1988), "Urban Labour Markets and Development", *Research Observer*, 3(2): 189-206.
- Khuda, B. E. (1991): "Labour Force in Bangladesh: Growth and Structure": in Proceedings of the Workshop on Dissemination of Statistics, Bangladesh

- Bureau of Statistics, Dhaka: November 3-4.
- Khuda, Z. R. M. M. (1993): "Potential Environmental Impacts of the Transition to a Mega City": *The Journal of Local Government*, 22(1): 12-33.
- Laskar, S. I. (1983): *Urbanisation in Bangladesh 1901-1981*, Dhaka: Bangladesh Institute of Development Studies, Research Report No. 34.
- Lipton, M. (1977): *Why Poor Stay Poor: A Study of Urban Bias in World Development*, Cambridge, Massachusetts: Harvard University Press.
- Lipton, M. (1980): "Migration from Rural Areas of Poor Countries: The Impact on Rural Productivity and Income Distribution", *World Development*, 8(1): 1-24.
- Majumdar, P, Mahmud, S. and Afsar, R. (1989) : "Squatter Life in the Agargaon Area", Dhaka: Bangladesh Institute of Development Studies, Mimeo.
- Mitra, S. N. *et al.* (1994): "Bangladesh Demographic and Health Survey 1993-94, Calkerton, Maryland; National Institute of Population Research and Training; Mitra and Associates and Micro International Inc.
- National Institute of Urban Affairs (1988) : *State of India's Urbanization*, New Delhi: National Institute of Urban Affairs.
- Oberai, A. S. (1993) : *Population Growth, Employment and Poverty in Third-World Mega-Cities: Analytical and Policy Issues*, Great Britain: St. Martin's Press.
- Peters, G. L. and Larkin, R. P. (1993) : *Population Geography: Problems, Concepts and Prospects*, USA: Kendall Hunt Publishing Company (Fourth Edition).
- Peterson, W. (1966): "Urban Policies in Africa and Asia", *Review*, 10: 24-35.
- Peterson, G. E., Thomas K. and Jeffrey, P. T. T. (1991) : *Urban Economics and National Development*, Washington, D. C: USAID, Office of Housing and Urban Programs.
- Portes, A, Castells, M and Benton, L. A. (1989) : *The Informal Economy: Studies in Advanced and Less Developed Countries*, Baltimore, Madison: Johns Hopkins.
- Report of the Task Forces on Bangladesh Development Strategies (1991), "Social Implications of Urbanisation", Dhaka: University Press Limited.
- Republic of Indonesia (1993) : *Manpower and Employment Situation in Indonesia*, Jakarta: The Ministry of Manpower.
- Richardson, H. W. (1984): "Towards a National Urban Development Strategy for Thailand": in *Equity with Growth: Planning Policies for Small Towns in Developing Countries*, H. D. Cramm r and P. J. Swan (eds.): Bangkok: Asian Institute of Technology.
- Richardson, H. W. (1987): "The Costs of Urbanisation: A Four Country Comparison": *Economic Development and Cultural Change*, 35: 561-80.

- Richardson, H. W. (1989): "The Big, Bad City: Mega City Myth", *Third World Planning Review*, 11(4): 356-372.
- Rodgers, A, Castro, L. J, Keyfitz, N, Ledent, J, Philpov, D, Willekens and Williamson, J. G. (1984) : *Migration, Urbanization and Spatial Population Dynamics*, Boulder, Colorado: Westview Press.
- Salam, A. and Hossain, S. (1991): "Selected Indicators on Demographic and Socio-Economic Situation of Bangladesh 1990", in *Proceedings of the Workshop on Dissemination of Current Statistics*, Dhaka: Bangladesh Bureau of Statistics, Ministry of Planning.
- Salas, R. M. (1986) : *The State of World Population*, New York: United Nations Fund for Population Activities.
- Sen, B. (1991) : "Privatisation in Bangladesh: Process, Dynamics, Implications": in *Privatisation Trends and Experiences in South Asia*, V. Kanesalingam (ed.), India: MacMillan.
- Sen, B. and Islam, Q. T. (1993): "Monitoring Adjustment and Urban Poverty in Bangladesh: Issues, Dimensions and Tendencies", Dhaka: Bangladesh Institute of Development Studies, Mimeo.
- Skeldon, R. (1990) : *Population Mobility in Developing Countries: A Reinterpretation*, London: Bellhaven.
- Todaro, M. P. (1969) : "A Model of Labour Migration and Urban Unemployment in Less Developed Countries": *American Economic Review*, 59(1): 138-148.
- United Nations (1990) : *Human Development Report 1990*, New York: Oxford University Press.
- United Nations (1992) : *World Population Monitoring Report 1991*, New York: United Nations.
- United Nations (1993a) : *State of Urbanisation in Asia and the Pacific*, Bangkok: ESCAP.
- United Nations (1993b), *World Urbanization Prospect: The Revision*, New York: United Nations.
- United Nations (1996) : *Human Development Report 1996*, UNDP, New York: Oxford University Press.
- UNDP-UNCHS (1993) : "Urban and Shelter Sector Review", Draft Report, Dhaka.

The Determinants of Labour Absorption in Bangladesh Agriculture : A Time Series Analysis

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I. INTRODUCTION

The adoption of seed-water-fertilizer based new agricultural technology has increased production in the crop sector of Bangladesh. The growth rate of production in the last two decades were just sufficient to maintain the food-population balance despite high population growth with a stable amount of food import. But the growth rate is not sufficient enough to sustain the food-population balance in the future. In Bangladesh the greatest hope to increase the growth rate of production in the crop sector is posed upon widespread adoption of HYVs of rice and wheat. Adoption of HYVs have been found to affect both output and employment positively. It is a widely held view that, agricultural development in a land scarce, labour surplus economy should not only increase output but also increase employment (Ishikawa 1978 ; Booth and Sundrum 1985). It is specially true for Bangladesh with massive unemployment and underemployment in both rural and urban sector.

The objective of the present study is to estimate the extent of labour use in the crop sector of Bangladesh and to analyze its' determinants. Special attention has been given to the impact of modern varieties on labour use in agriculture. The importance of seasonal differences in the labour absorption is also analyzed. The crops considered in this paper includes rice, wheat and jute.

II. EMPLOYMENT IN THE CROP SECTOR

Agricultural sector in Bangladesh produces nearly half of the GDP although its' share is declining in recent years while it still dominates in providing employment and absorbs about three-fourths of the labour force. Labour supply in the agricultural sector has increased rapidly due to demographic factors. The spread of HYVs have increased labour demand but at a very slow rate and non-agricultural employment has grew only marginally.

The proportion of rice and wheat area covered by modern varieties has increased from 13% in 1973/74 to 37% in 1990/91 (BBS 1982 and 1992). Production of cereal crops mainly HYV rice and wheat has contributed

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significantly to the higher growth rate of production in recent years. The growth of the crop sector output in the post-liberation period was mainly due to the rapid diffusion of the modern varieties. Increased use of HYVs may have contributed nearly two-thirds of the increase in crop output during the last decade (Khan and Hossain 1989). There exist a vast opportunity to increase the growth of crop production by expanding the irrigated area, since irrigation is said to be the leading input in the new technology package.

The impact of modern varieties on income distribution is determined primarily by the adoption rate of the new technology across different farm size groups and its' effect on employment. It has been argued that, if the small farmers also adopt the modern technology simultaneously with the larger farmers and if adoption of modern varieties increases labour use in crop production, then rural income distribution will move in favour of the lower segments of the rural population (Hossain 1988). The situation may be reversed if labour-displacing technologies are adopted along with the modern varieties.

The major problem in analyzing the extent of labour use over time in Bangladesh agriculture is the absence of reliable statistics. Several studies (Khan 1985; Muqtada 1986) provided a cross sectional estimate of the labour requirement in the crop sector. In one study (Alauddin and Tisdell 1991) the authors have presented estimates of labour requirements in agriculture over time. These studies estimated the labour requirements by using the crop-wise information on labour coefficients and acreage. To serve the purpose of this study, a similar method was used to derive approximate quantitative estimates of total labour requirement in the crop sector of Bangladesh over time. (See appendix for the methodology). Since there is lack of reliable crop-specific labour coefficient data, the estimates of labour requirements are not accurate and they are highly sensitive to the labour coefficients adopted. The estimates of labour requirement were derived for rice, wheat and jute. In deriving the estimates, special attention has been given to the modern and traditional varieties of the cereal crops. Minor cereals and other cash crops were excluded from the analysis due to lack of reliable information on labour use in these crops. Therefore, the estimates of labour requirement and related findings should be interpreted with a degree of caution.

The estimated annual and seasonal labour requirement over time and labour intensities (defined as labour required per unit of land) for rice, wheat and jute have been presented in Table-I. The annual total labour requirement for rice, wheat and jute have increased very slowly over the last two decades. Employment generated in the *kharif* season have slowed down in the same period and in the late 1980s, the declining tendency has become more pronounced. On the other hand, labour absorption in the *rabi* season have registered a significant increase over the last twenty years. The higher labour absorption in the *rabi* season has been able to offset the declining labour

absorption in the *kharif* season and therefore annual labour absorption has increased marginally. The higher growth of labour absorption in the *rabi* season has probably moderated the inter-seasonal differences in employment. Several other studies also showed that, the seasonal fluctuations in employment in agriculture has become less pronounced. But the growth of overall labour absorption in the crop sector have failed significantly to keep pace with rising labour force.

In the *kharif* season the acreage of *aus* and jute have declined while *aman* acreage remained stagnant over the last two decades. Jute has been replaced by the HYV crops. Since jute is more labour intensive than *kharif* HYVs, the cropping pattern change has contributed to the declining labour absorption in this season. On the other hand, the acreage of *rabi* season HYV crops have increased significantly. Since *rabi* season HYV crops require more labour input than the traditional varieties, the labour absorption in this season increased significantly.

Table I
Trends in Labour Intensity and Total Labour Requirement:
Annual and Seasonal Dimensions (1965/66 -1990/91)

Year	Labour Intensity (Mandays per acre)			Total Labour Requirement (Million Mandays)		
	Annual	Kharif	Rabi	Annual	Kharif	Rabi
1965-66	63.52	62.93	74.59	1617.36	1522.41	94.95
1966-67	63.75	63.02	74.57	1578.36	1461.42	117.07
1967-68	63.88	62.98	76.91	1722.47	1589.72	132.74
1968-69	64.22	62.90	78.14	1704.00	1523.89	180.12
1969-70	64.67	63.14	80.55	1826.68	1627.00	199.68
1970-71	65.11	63.10	82.97	1758.42	1531.41	227.00
1971-72	64.84	62.86	82.64	1618.63	1412.20	206.43
1972-73	66.31	64.03	85.99	1744.33	1509.48	234.85
1973-74	67.11	64.45	89.11	1806.05	1547.55	258.49
1974-75	66.57	63.33	89.72	1725.79	1440.29	285.48
1975-76	66.28	63.17	89.55	1801.14	1513.84	287.30
1976-77	65.89	63.49	88.70	1740.59	1518.14	222.47
1977-78	66.49	63.56	88.61	1798.67	1515.74	280.93
1978-79	66.88	64.08	87.58	1852.54	1563.22	289.32
1979-80	67.69	64.60	86.78	1898.86	1559.57	339.29
1980-81	67.57	64.46	84.99	1926.08	1558.32	367.76
1981-82	67.91	64.21	87.49	1940.76	1543.71	397.05
1982-83	68.63	64.41	89.64	1981.21	1548.64	432.59

(Contd.)

Table : 1 Contd.)

1983-84	68.86	64.80	89.55	2001.41	1574.91	426.51
1984-85	69.65	64.99	88.95	1992.24	1497.46	494.78
1985-86	70.44	66.21	90.66	2088.11	1623.53	464.57
1986-87	70.34	65.54	91.24	2079.98	1575.69	504.29
1987-88	71.10	64.86	92.94	2008.47	1425.15	583.31
1988-89	73.39	65.40	95.56	2054.24	1346.15	708.10
1989-90	73.60	65.84	95.30	2101.62	1384.26	717.35
1990-91	74.47	66.42	94.34	2189.43	1389.75	799.68

* See appendix for the methodology of the construction of labour requirement data.

III. SOME EMPIRICAL FINDINGS

Muqtad 1986 ; Hossain 1991 ; and Alauddin and Tisdell 1991 have used the similar process to obtain the data-base for employment in the crop sector of Bangladesh. But due to different labour coefficients chosen for the same crop in different studies, the employment figures vary significantly.

In his cross-section study, Muqtada have found positive relationship between employment and its' major determinants i.e., HYV area, irrigated area and fertilizer use. He also found a strong negative relationship between employment with farm size and land-man ratio. The impact of tenancy, literacy rate and cropping intensity on employment was found to be negligible. The impact of wage rate on employment was found to be positive but insignificant. Muqtada's main conclusions are : a) agrarian structure and the level of innovation are the dominant factors explaining the variation in labour use in the crop sector; b) employment is primarily related to 'acreage effect' and very little with 'yield effect'; and c) due to labour market imperfections, wage rate is not a significant factor that determines employment.

Mosharaff Hossain used a decomposition method to separate out the effect of the different component elements of the growth of employment in the crop sector over time. Since labour coefficients were assumed to be fixed over time, it was argued that growth in employment will result purely from area effect. Hossain found that : a) cropping pattern and cropping intensity shift had the most significant positive impact while the net area shift had a significant negative impact on employment growth over time; b) the most significant positive contribution to the annual growth of employment came from *boro* followed by *wheat and aman*; and c) decrease in the acreage of jute had a significant negative impact on employment growth in the crop sector of Bangladesh.

Alauddin and Tisdell used time series regression analysis to analyze the determinants of employment in the crop sector and also attempted to analyze the seasonal pattern of employment. The findings of Alauddin and Tisdell can

be summarized as : a) employment is positively related to irrigated area, along with jute and HYV area; b) employment in the *kharif* season is significantly positively related to jute and HYV area; c) for all crops, employment in the *rabi* season was found to be positively related to irrigation and HYV area, but the relationship was found to be negative for the cereal crops; and d) modern methods of irrigation were found to be negatively related to employment for the *rabi* season.

Muqtada's study is the most comprehensive one which analyzed the economic, technological and structural variables which may affect employment in the crop sector. One troubling aspect of his analysis is that he found a positive relationship (although insignificant) between employment and wage rate. While Hossain's findings are consistent, the conclusions drawn by Alauddin and Tisdell regarding the *rabi* season is inconsistent with the theoretical and empirical observations.

IV. DETERMINANTS OF EMPLOYMENT

To analyze the determinants of employment in the crop sector of Bangladesh over time, labour intensity has been used as the dependent variable measured in terms of man-days of labour required per unit of cropped area per year. Seasonal labour intensities—measured in mandays of labour required per cropped area per season—were also used as dependent variable to analyze the seasonal difference in labour absorption. The time period covered is from 1969/70 to 1987/88.

The impact of the acreage variables namely HYV area (HYV), area under irrigation (IRR) and area irrigated by modern methods (IRRM) (measured as percentages of gross cropped area) were found to be significantly positively related to the labour intensity. (See Table-II). The results reveal that irrigation has the most significant influence on employment in the crop sector. Area under competing crops (CMCROP) have been found to have different impact on employment in different season. Unlike Muqtada's study, real wage rate was found to affect employment negatively but in some cases the coefficient was insignificant.

The regression results show that the diffusion of modern varieties affect employment in the crop sector significantly. Employment is negatively related to real wage although the relationship is insignificant in some cases. Irrigation was found to have the most significant positive impact on employment. Even modern irrigation method was found to have positive impact on employment.

Area under competing crops (CMCROP) - jute in *kharif* season - was found to have positive impact on employment while the *rabi* season competing crops (oilseeds and pulses) was found to have negative impact. Since jute is more labour intensive than its competing crops (*aus* and *aman*) while oilseeds and

pulses are less labour intensive than its competing crops (*boro* and wheat), the results are as expected.

Employment was found to be positively related to HYV area and irrigated area in both the seasons. The impact of the adoption of HYVs and irrigated area on employment were found to be more pronounced in the *rabi* season than in the *kharif* season. It reflects the fact that *rabi* season HYVs are more labour intensive. This result contradicts with Alauddin and Tisdell's findings. They found that, employment in the *rabi* season was negatively related to irrigation and HYV area for *rabi* cereal crops.

Contrary to the findings of Alauddin and Tisdell, employment in both of the seasons was positively related to the area irrigated by modern methods, although they are less labour-intensive than the traditional methods. The result reflect the fact that, irrigation increases labour use in crop production regardless of the techniques used.

Table II
Regression Results

Dependent Variable	Independent Variables								
	Constant	HYV	IRR	IRRN	WAGE	CHCROP	D-W	R-2	E
ANNUAL	56.21 (58.11)		0.73 (16.27)		-0.01 (-0.12)*	0.14 (2.68)	2.23	0.96	137
Labour intensity	63.83 (80.37)			0.53 (15.98)	-0.23 (-2.06)	0.09 (1.63)	2.02	0.96	132
Kharif season	60.31 (169.8)	0.16 (19.82)			-0.03 (-0.60)*	0.32 (9.33)	2.11	0.96	151
	61.20 (97.14)		1.04 (10.01)		-0.23 (-2.56)	0.28 (4.43)	1.50	0.86	39
	61.64 (98.50)			0.24 (9.70)	-0.24 (-2.55)	0.33 (5.00)	1.59	0.86	37
Labour intensity	91.58 (25.18)	0.66 (4.44)			-0.44 (-0.87)*	-0.53 (-2.00)	0.82	0.63	11
Rabi season	80.12 (21.54)		1.53 (6.36)		-0.28 (-0.69)*	-0.40 (2.16)	1.74	0.77	21
Labour intensity	92.68 (33.20)			0.89 (6.45)	-0.74 (-2.02)	-0.52 (-2.68)	1.12	0.77	21

Figures in parentheses are the *t* statistics.

* Insignificant *t* values.

V. POLICY IMPLICATIONS

The findings of the study has some interesting policy implication. The results suggest that, further diffusion of modern varieties and expansion of irrigated area has a great potential for generating employment in the crop sector. In Bangladesh, the greatest hope to increase production in agriculture is posed on the diffusion of modern varieties. It has already been established that irrigation is the leading input in the modern technology package. This paper confirms the fact that irrigation is also the most significant factor that generates employment in the crop sector.

Even modern methods of irrigation increases employment, although the extent of employment expansion would be severely moderated in the future if modern methods replaces traditional methods of irrigation. *Kharif* season still seems to prefer traditional methods of irrigation while modern irrigation facilities are increasing at a faster rate in the *rabi* season. Modern methods of irrigation in the *rabi* season has expanded mostly in the previously unirrigated area, resulting in expansion of employment; while in the *kharif* season modern methods of irrigation is expanding at the expense of the traditional methods. Since traditional methods are more labour intensive than the modern methods, *kharif* season has been found to generate less employment compared to *rabi* season in relation to modern method of irrigation. Rapid adoption of modern methods of irrigation in the *kharif* season in the future may result in displacing labour and thus reducing employment in the *kharif* season.

Jute acreage has been found to be a significant determinant of employment in the *kharif* season. The decline in jute acreage over the last decade has resulted in lower labour absorption in the *kharif* season. In the 1980s jute faced a very intense competition with its synthetic competitor and was loosing ground. But in the future jute seems to have a renewed prospect due to the world-wide campaign against synthetic fibre on environmental grounds. We should try to recapture the world market jute and jute goods.

The *rabi* season non-cereal crops are less labour intensive than the cereal crops and the cereal crops expanded rapidly at the expense of the non-cereal crops. Therefore employment in the *rabi* season has registered significant growth. The possibilities of employment expansion in the crop sector of Bangladesh in the future depends upon the diffusion of HYVs and jute. We should try to exploit all the scopes there exist to generate employment in the crop sector of Bangladesh through technological innovation and shifting towards labour intensive crops. But in doing so there may arise a conflict between achieving self sufficiency in cereal production and crop diversification with employment generation in agriculture.

VI. LIMITATIONS OF THE ANALYSIS

The major limitation of the paper is concerned with the process of construction of the data-base on labour absorption. The total labour requirement and labour

intensity figures are quite sensitive to the chosen labour coefficient in crop production. It may even be argued that, the variations in the total labour requirement and labour intensity figures reflect the variations associated with acreage of the different crops under consideration. The exclusion of some crops also limits the analysis. On the other hand, the exclusion of the structural or institutional variables as the determinants of employment also limits the scope of the paper. Despite these limitations, the findings of the study are quite consistent with the theoretical and empirical findings.

VII. SUMMARY AND CONCLUSION

Over the last two decades, employment in the crop sector of Bangladesh has shown an increasing trend, primarily due to the significant increase in employment in the *rabi* season. *Kharif* season employment has not increased at all and seems to have declined in the late 1980s. The growth of employment in the *rabi* season can be attributed to the high rate of adoption of the labour-intensive *rabi* crops. The high rate of growth of employment in the *rabi* season has reduced the inter-seasonal differences in employment and it indicates a more stable pattern of employment throughout the year in the crop sector.

Labour use in the crop sector of Bangladesh has been found to be determined primarily by the changes in the crop sector which are associated with the level of technological innovation, i.e., irrigation, adoption of HYVs etc. Irrigation had the most significant impact on labour use in the crop sector of Bangladesh. Modern irrigation methods were also found to be positively associated with employment but its impact on employment is less visible than traditional methods. In the *kharif* season, jute area was found to be a very significant determinant of labour use. On the other hand, competing *rabi* crops acreage (pulses and oilseeds) was found to have a negative impact on labour use in the *rabi* season.

Wages were found to have negative impact on employment which probably signifies that, the labour use in Bangladesh agriculture is becoming more labour market oriented. But the prevalence of family labour in the face of massive underemployment prevents the market to operate smoothly.

The performance of the crop sector in generating employment is not satisfactory. Except for *boro* rice, the adoption rate of HYVs have slowed down in the 1980s compared to 1970s. If this trend persists in the future, the growth of labour-use in the crop sector may start to decline. We should therefore place greater importance on employment expansion in the non-farm sector of Bangladesh in the future.

REFERENCES

- Ahmed, Iftikhar (1977): "Technological Change and Labour Utilization in Rice Cultivation : Bangladesh." in *Bangladesh Development Studies*, Vol-6(3), 1977.
- Ahmed, Iqbal (1978) : "Unemployment and Underemployment in Bangladesh Agriculture." in *World Development*, Vol-6(11/12).
- Ahmed, Mushtaq (1984) : *Modern Rice Production Technology : Employment and Income Generation in Bangladesh*, Dhaka.
- Alauddin, Mohammad and Clem Tisdell (1991): "The Green Revolution and Labour Absorption in Bangladesh Agriculture : The Relevance of the East Asian Experience." in *Pakistan Development Review*, Vol-30(2). Summer .
- BBS : *Statistical Yearbook of Bangladesh*. Various Issues.
- BBS : *Monthly Statistical Bulletin of Bangladesh*. Various Issues.
- Booth, A. and R. M. Sundrum (1985): *Labour Absorption in Agriculture : Theoretical Analysis and Empirical Investigations*, Oxford University Press, Melbourne.
- David, Cristina C. and Keijiro Otsuka (1990): "Modern Seed Fertilizer Technology and Adoption of Labour Saving Technologies : The Philippine Case." in *Australian Journal of Agricultural Economics*, Vol-34(2).
- Hossain, Mahabub (1988): *Nature and Impact of the Green Revolution in Bangladesh*. Research Report No-67, IFPRI. Washington.
- Hossain, Mahabub; M. Mokaddem Akash; M.A. Quasem and M.A. Jabber, (1990): *Differential Impact of Modern Rice Technology : The Bangladesh Case*. BIDS/BRRI, Dhaka.
- Hossain, Mosharaff (1991): *Agriculture in Bangladesh : Performance, Problems and Prospects*. UPL, Dhaka.
- Hossain, Mosharaff (1995): "Population and Supply and Absorption of Labour in Bangladesh." in *Holiday*, February 10, 17 and 27.
- Hye, Sayed A. (1993): "Review on Labour and Employment" in M. Asaduzzaman and K. Westergaard (eds) *Growth and Development in Rural Bangladesh : A Critical Review*, UPL, Dhaka.
- Ishikawa, Shigeru (1978): *Labour Absorption in Asian Agriculture: An Issues Paper*. ILO, ARTEP, Bangkok.
- Jayasuriya, S. and R. T. Shand (1986): "Technical Change and Labour Absorption in Asian Agriculture : Some Emerging Trends." in *World Development*, Vol-14(3).

- Khan, Azizur Rahman and Mahabub Hossain (1989): *The Strategy of Development in Bangladesh*, Macmillan/OECD, London.
- Khan, M. M. (1985): "Labour Absorption and Unemployment in Rural Bangladesh." in *Bangladesh Development Studies*, Vol-13(3-4). 1985.
- Mahmud, Wahiduddin (ed.) (1981): *Development Issues in an Agrarian Economy—Bangladesh*, Center for Administrative Studies, Dhaka.
- Muqtada, M. (1986): "Determinants and Possibilities of Employment Expansion in the Crop Sector." in R. Islam and M. Muqtada (eds) *Bangladesh : Selected Issues in Employment and Development*, ILO, ARTEP, New Delhi.
- Rahman, Atiq and Rizwanul Islam (1985): *Labor Use in Rural Bangladesh : Study with Micro-Level Data*, ILO, ARTEP, Bangkok.
- Tisdell, Clem and Mohammad Alauddin (1992): "The Ishikawa Curve and Agricultural Productivity in Bangladesh : Some New Findings" in *Hitotsubashi Journal of Economics*, Vol-33, 1992.

Appendix

METHODOLOGY OF LABOUR REQUIREMENT ESTIMATES

To estimate the aggregate labour requirement in the crop sector, it is necessary to have crop-wise information on labour use per unit of cropped area. But there do not exist any systematic and regular information on labour inputs in crop production in Bangladesh. The Ministry of Agriculture provides information on crop-wise and operation-wise input use in the 'Costs and Returns Survey'. On the other hand, a number of studies done by individuals and/or organizations based on micro level surveys have also provided information on labour use in crop production. Some of these are reported in Table-III. The wide variety of the estimates suggest that, it would be incorrect to take any one of them as accurate and it was assumed that, an average of the available estimates would serve our purpose better than any single estimate. The average of the different estimates of labour coefficients used to derive total labour requirement may be thought as the minimum labour inputs required for the production of the crop. The assumption of the constancy of the labour coefficients over time seems unrealistic and labour inputs in crop cultivation may change significantly with the changes in farm size, degree of mechanization and changes in cropping pattern. But the impact of these factors on labour coefficients are expected to emerge after a long time (Muqtada 1986). Moreover, minimum use of capital-

intensive machines, massive underemployment and extensive use of family labour in agriculture suggest that, labour coefficients actually may not have changed too much over time in Bangladesh.

Table III
Labour Requirements in Crop Cultivation
(Mandays per Acre)

	AUS		AMAN		BORO		WHEAT		JUTE
	LOCAL	HYV	LOCAL	HYV	LOCAL	HYV	LOCAL	HYV	
01.	77.9	92.4	53.1	80.9	72.5	109.7	—	64.4	105.6
02.		60.4	70.3		82.6	96.4	—	—	88
03.	46.2	75.7	54.7	75.7		68.8	36.4	45.7	66.8
04.	56.6	62.2	62.4	69.2	70.2	87.2	—	—	—
05.	56	79	53	73	83	88	42	48	—
06.	—	—	61	76	79	115	—	—	—
07.	72	107	68	91	75	108	35	65	105
08.	61.5	82.2	53.4	64.3	—	82.2	—	—	—
09.	—	—	56.7	66.4	81.7	120.2	—	—	—
10.	61.5	79.8	59.2	74.1	76.6	97.3	37.8	55.8	91.4
	(7)	(7)	(9)	(9)	(8)	(9)	(3)	(4)	(4)

Sources :

- 1-4 Compiled from Islam and Muqtada (ed.) (1986).
1. Costs and Returns Survey for Bangladesh, AER, GOB.
2. Khan *et al.* (1981).
3. ADB Report.
4. Muqtada and Alam (1983).
5. IFDC Survey quoted from Hossain, Mahabub (1988).
6. Ahmed, Mushtaq (1984).
7. Second Five Year Plan quoted from Hossain, Mosharaff (1991).
8. BIDS/BRRI Survey from Hossain, Mahabub *et al.* (1990).
9. Khan (1980) from Jayasuriya and Shand (1983).
10. Average of the available estimates. Figures in parenthesis are the number of sources.

Labour required for the production of a crop has been derived by multiplying the constant crop-specific labour coefficients with the corresponding crop acreage and total labour requirement has been derived by adding all the crop specific labour requirements. Total labour requirement for the crops were divided by corresponding gross cropped area to derive the annual and seasonal labour intensities.

Three estimates of labour intensity were calculated, one is the overall or annual labour intensity which measures the labour required in man-days per acre for all the crops under consideration for one crop year, the second one is the labour intensity for the *rabi* crops and finally the labour intensity for the *kharif* crops. By this procedure, we implicitly assume that, the quality of labour used in different crops and in different operations are similar and additive. Ignoring the qualitative aspects of labour, we estimated the extent of labour use in the crop sector of Bangladesh over time.

There is also another problem which must be mentioned, namely the exclusion of crops in the calculation of labour intensity. Specially, the *rabi* season labour intensity must be interpreted cautiously since only *boro* and wheat crop has been taken into account. The exclusion of winter cereal and vegetable crops is expected to result in an underestimation of the *rabi* season total labour requirement while overestimating the *rabi* season labour intensity, since the major winter crops (pulses and oilseeds) requires less labour while some of the winter crops are labour intensive. On the other hand, *aus*, *aman* and jute represent the major crops in *kharif* season and so *kharif* season labour intensity is quite complete on its coverage. Annual labour intensity also faces the same problem like *rabi* season labour intensity, but since *aus*, *aman*, *boro*, wheat and jute covers more than 85% of total cropped area, the calculation of annual labour intensity can be considered as a representative one. The exclusion of other crops like sugarcane, tea, tobacco etc. may have resulted in an underestimation of the labour intensity, since these crops are highly labour intensive. But since these crops are cultivated over the whole year and they cover only a small proportion of cropped area, the downward bias in estimating labour intensity is not a serious problem for the purpose of our analysis.

The Impact of Irrigation on Agrarian Labour Relations : A Case Study of Brammattor and Islampur Villages of Chittagong District

Md. Abdul Mannan Chowdhury *

The present paper aims at dealing with the changes in agrarian structure and labour relations in an area which has been one of the most dominant research fields of Social Sciences in post-independent era. The main aim of the paper is to examine the nature and direction of the change which is taking place in agrarian society due to various factors in general, and irrigation facility in particular. It also aims at examining the changing agrarian structure in the land-holding pattern and emerging relations among the various classes of agrarian society, such as relations between landowners, tenants and labourers. Further, it also aims to examine if this change is leading to harmonious or contractual society.

I. INTRODUCTION

The agrarian structure and the actual conditions of the agricultural labourers influence each other and thus, they are inter-related. Various aspects of labour conditions, such as the relationship between the labourers, tenants, sharecroppers and political power play a significant role in shaping the agrarian structure. In Bangladesh villages, agriculture labourers in most cases have been absolutely dependent upon their landlords. In some cases, they are even "bonded labourers" being bound to their masters by different feudal systems like tied loan, exploitation by exorbitant rate of interest etc. In recent times, we notice a new awakening in labourers regarding their rights and privileges which encourage them to fight against the socio-economic evils perpetrated on them by their masters. The land reform legislation has also strengthened their consciousness to some extent in this regard. As a result, we observe an increase in labour wages in recent times.

The relationships between landlord and the tenants have also taken a new turn. The tenancy rights provided by the land reform legislation, instead of safeguarding the interest of the tenants, has made the landlords more careful and they have stopped leasing their lands to the poor tenants for long terms. This development strained the relations between both these groups.

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The relations between landowners and sharecroppers have also undergone a similar change because the landlords now have become more conscious and want that the sharecroppers do not hold on their lands for longer periods of time. As a result, lack of mutual trust has developed between these two groups. Besides, political power has also become more concentrated in the hands of the landowning and asset-owning classes much against the norms of democratic spirit.

It is held that among the factors like industrialisation, modernisation, population pressure, land reform, HYV technology, irrigational facilities, politicisation of rural, trade unionism, communication development etc., provision of irrigational facilities play a significant role in bringing about certain major changes in the agrarian structure and relations, such as landholding patterns, relations among the peasant categories, agricultural output and so on. Hence the present paper is an attempt to examine the structural changes, if any, in rural Bangladesh because of improvement in irrigational facilities. Its main concern, therefore, is to find out the differences and similarities between an irrigated village and a non-irrigated one with respect to agrarian structure and labour relations.

Review of Literature

There are some studies on different economic impacts like, income, employment, productivity etc. and cost-benefit analysis of irrigation in Bangladesh. So far known, no study has yet been made in Bangladesh relating to the impact of irrigation on agrarian structure and labour relations in specific way. However, there are some studies in India on the similar issue. Below is an attempt to make a brief review of some of those important studies.

Thorner (1956) may be regarded as a pioneer in the study of agrarian structure and relations. Thorner in his study examined various problems of the irrigation in India and clarified several conceptual problems relating to the issue. He is of the opinion that the Indian agrarian structure is a flexible network of internal relations obtaining between different classes.

Thorner and Thorner (1962) found it highly risky to sum up the agrarian change of the one and a half decades in India because the families in rural India have mixed farms and are engaged in different economic activities which agrarian vary from family to family. The relations in traditional agriculture were found to undergo changes due to factors like population, rail-road transportation, land reform, HYV technology and industrial revolution.

Epstein (1962) found that the provision of irrigation facilities have led to certain social changes such as, change from subsistence to cash economy, from exchange to direct marketing, from unsystematic to specialised position of cropping.

Alexander (1975) found that there is a new awareness on the part of the oppressed labourers relating to their rights and privileges.

Page (1975) found that the changes in technology and variety of crops have definite impact upon agrarian relations since these lead to a change in the skills of the labourers and standard of living of the labourer.

Parthasarathy and Prasad (1975) found that new technology led to several positive changes in agrarian relations relating to distribution of land and gross product, factor rewards and the levels of different section of cultivators.

Agarwal (1975) found that irrigation has enabled labourers to become farmers and their income and standard of living increased.

Singh and Singh (1975) found that labourers are getting employment throughout the year because of intensive cropping, increased irrigation and labour intensive agriculture.

Mishra (1979)'s study found that land, labour, credit, input and community market have promoted a class of capitalist farmers in rural India and a change in production relations.

Chattapadhaya (1982) argues that agricultural development with its accompanying technological change like the use of HYV, irrigation etc. has led to changes in agrarian structure.

Alexander (1980, 1982, 1983)'s works are quite extensive in the sense that he has covered almost all aspects of the social change brought about the irrigation. He found that irrigation led to an overall economic development which in turn, ushered in a social change which was followed by increased economic activity, occupational specialisation and a change in the traditional pattern of social relations.

Bhalla (1983) found that agriculture has undergone an important change because of the introduction of canal irrigation.

The foregoing studies have failed to take into account some significant aspects, related either to irrigation or to the consequent general development which may crucially influence the agrarian set up in Bangladesh. For instance, the size of landholding and its relation to irrigation, the changes in the power structure and political affiliations as affected by irrigation have not been adequately examined in the above stated studies. Besides, in developing democratic country like Bangladesh the expansion of irrigational facilities in the wake of agricultural development assumes greater importance. Likewise, the social change brought about by irrigation has to be investigated more deeply and the direction of such a change has to be analysed more precisely. There is nothing specific in the above-cited studies regarding these significant aspects relating to such changes and irrigation which is responsible for such changes. In particular, the direction and nature of these changes have to be studied closely. Because in rural Bangladesh, the changes caused by irrigation affect social relations which

tend to become either cooperative or conflicting as they significantly affect the interest of the parties involved.

Major Objectives of the Study

Based on the above background and review of literature the following should be undertaken as the major objectives of the present study:

- (a) To examine if the labour relations and relations among various elements of agrarian structure experience basic changes due to the expansion of irrigation facilities.
- (b) To examine the influence of irrigation on the socio-economic relations of the peasant community with particular focus upon changes in the working conditions of labourers, wage structure, occupational structure etc.
- (c) To analyse the emerging trends of agrarian structure and relations.

Hypothesis of the Study

The availability of irrigation tends to bring about certain basic changes in the agrarian structure and labour relations.

II. METHODOLOGY

- (a) **Selection of the Study Area :** Two villages located in Chittagong district of Bangladesh have been selected for study. The villages are Brammattor and Islampur. Brammattor is an irrigated village while Islampur is a non-irrigated village. Apart from irrigation, both the villages are almost identical with respect to geographical, social, political and cultural characteristics.

Both the villages belong to Rangunia Thana of Chittagong District. Brammattor is situated in No. 3 Rangunia Union of Rangunia Thana while Islampur is situated in No. 1 Rajanagar Union of the same Thana. The village Brammattor is situated at a distance of about 25 miles from the city of Chittagong while Islampur is situated at a distance of about 30 miles from the city of Chittagong. Brammattor is surrounded by Ghagra Khal in the north, Sonargaon in the south, hills in the east and Ghagra Khal in the west. Brammattor is surrounded by old Rangunia village in the north, Gumal beel in the south and east and the village Santi Niketan in the west. The main road inside Brammattor is of brick-soling, while the main road inside Islampur is earthen one. Faju Chowdhury Road is the main road in Islampur while the main road in Brammattor is Korban Ali Road. The principal means of transport in Brammattor is rickshaw, trolley, pushcart etc. while rickshaw and old-model jeep are the principal means of transport in Islampur. The village Islampur is well-known for the holy shrine of Hazrat Shah Sufi Syed Ahsan Ullah (R). Brammattor is divided into three parts:

Eastern Brammattor, Central Brammattor and Southern Brammattor. Rice is the principal crop in both the villages. The method of cultivation in Brammattor is a mixture of both modern and traditional types while traditional method is prevalent throughout Islampur. The inhabitants of both the villages are Muslims. In Brammattor institutional irrigation came into operation since 1968 while Islam is still without any kind of irrigational facilities. The size of population of both the villages is almost similar. The number of households in Brammattor is 964 while the same in Islampur is 805. The literacy rate in Islampur is about 40 per cent while it is about 65 per cent in Brammattor. Agriculture is the principal occupation for the villagers in both the villages. The age-composition of population in the two village shows that a vast majority of people of these two villages are in the age-group of 40 years. The mean age is 42 years for men and 38.20 for women.

The mean family size is 6 members in the irrigated village and 7 members in the non-irrigated village.

The main income per household for the irrigated village is Tk 3500.00 per month and it is Tk 2000.00 per month for the non-irrigated village.

(b) Selection of the Respondents : All the household heads of the selected villages have been taken for study and as such the unit of study is the household head.

(c) Criteria Used for Examining the Changes in Agrarian Structure and Labour Relations : The criteria used for examining the changes in agrarian structure and labour relations are landownership pattern, land distribution pattern, pattern of cultivation, changes in farming technology and farmer-labourer relations, changes in the types of labour used, working conditions, mode of payment of wages, changes in the wage rate and kinds of wage paid, freedom of labourer to choose type of work and employer, changes in standard of living of labourers, changes in attitudes and inter-personal relations, worker's cooperation in the work, changes in working hours, wage determination, changes in occupational structure etc.

(d) Data Collection: Data have been collected on different aspects of irrigation household. Among other, data include information on landownership pattern, nature and types of cultivation, farming technology, farmer-labourer relations, effects of changing relations on labourers, farmer's capacity to employ labourer, working conditions, nature of wage payment, reasons for change in wage, nature of wage payment, changes in occupational structure etc.

(e) Methods of Data Collection : Data have been collected through structured interview schedule, participant observation, historical method and group interview etc. Some secondary data have also been collected from *tahsil* office, Thana Statistical Department, census reports etc.

The interview schedule consists of two parts: Schedule-A and Schedule-B. Schedule-A deals with background information about each household such as, occupation, educational level, size of family, number of earning members, income level etc. Schedule-B covers information relating to the size and type of landholding and the socio-economic relations between farmers and labourers, the irrigation and technabgg etc.

(f) Technique of Analysis: The collected data have been processed with due care and arranged in tables. Arithmetic mean, ratios, percentages etc. have been used for analysis. The analysis of the data is analytical one

III. AGRARIAN STRUCTURE OF THE STUDY VILLAGES

According to Thorner (1956), the agrarian structure is the sum-total of the ways in which each peasant group operates in relation to the other groups and as such it is not an external framework within which different classes work. Some of these agrarian relations are defined and enforced by law, some are customary and some are of a flexible or fluctuating in nature. A comparative analysis of the agrarian structure of the study villages is presented below:

(a) The Landownership Pattern : The following table shows the landownership pattern in the two villages.

It is evident from the above table that the percentage of landless and marginal farmers is higher in the non-irrigated village. The percentage of small and medium farmers is higher in the irrigated village than in the non-irrigated village while the percentages of large farmers in both the villages are almost similar. The above fact shows that the introduction of irrigation in the irrigated village of Brammattor has not made any significant differences in the agrarian structure of the irrigated village.

The data shown in the above table reveal the facts that the landless people are greater in number in the non-irrigated village. It might be due to the fact that the extent of proverty is higher in the non-irrigted village leads the poor people of Islampur to dispose of their land through distress sale of their land and thereby become landless.

It might be due to the fact that the extent of poverty is higher in the non-irrigated village which leads the poor people of Islampur to dispose of their land through distress sale of their land and thereby become landless.

(b) Land Distribution : The following table shows the distribution of households according to farm size and farmer categories in the study villages:

Table I
Landownership Pattern in Islampur and Brammattor

Landownership	Islampur	Brammattor
Yes (landowners)	566(70.22)	772 (80.08)
No (landless)	240.(29.78)	192 (19.91)

Table II
Land Distribution and Farmer Categories in Islampur and Brammattor

Farm Size	Islampur	Brammattor
Landless	240 (29.78)	192 (19.92)
Marginal Farmers (Upto 1 acre)	166 (20.60)	104 (10.79)
Small Farmers (Upto 2 acres)	150 (18.61)	130 (13.48)
Medium Farmers (Above 2 upto 4 acres)	211 (26.18)	496 (51.45)
Large Farmer (Above 4 acres)	39 (4.84)	42 (4.36)

(c) **Landowners and Cultivation** : The following table shows the nature cultivation of land in the study villages:

Table III
Landowners and Cultivation in Islampur and Brammattor

Self-Cultivation	Islampur	Brammattor
Yes	380 (67.94)	376 (48.70)
No	186 (32.86)	396(51.30)

From the above table it is evident that the percentage of self-cultivation is higher in the non-irrigated village than in the irrigated village. This might be due to labour requirement in the irrigated village is higher which can not be met by the family labour alone.

Table IV
Types of Self-cultivation in Islampur and Brammattor

Types of Cultivation	Islampur	Brammattor
By Family	274 (72.10)	208 (55.32)
By Hired Labour	25 (6.58)	64 (17.02)
Both by Family and Hired	81 (21.32)	104 (27.66)

The above table shows that the use of family labour by the self-cultivators is higher in the non-irrigated village. In the irrigated village the use of hired labour is higher.

Table V
Landowners and Types of Cultivation of Others

Types of Cultivation	Islampur	Brammattor
Leased out	25 (13.44)	62 (15.66)
Sharecropping	157 (84.41)	322 (81.31)
Tenancy	3 (1.61)	8 (2.02)
Others	1 (0.54)	4 (1.01)

The above table shows that most of the non-cultivating landowners both in the irrigated and non-irrigated villages are getting their land cultivated by sharecroppers. The percentage of household who leased out their land who cultivated their land through tenancy is higher in the non-irrigated village than in the irrigated while the reverse is true in case of sharecropping.

IV. CHANGES IN FAMILY TECHNOLOGY AND FARMER-LABOURER RELATIONS

(a) **Changes in Farming Technology** : The following table shows the data relating to the respondent's opinion with regard to the changes in farming technology. It is evident from the table that most of the respondents in the irrigated village have taken recourse to modern technology while the reverse is the case in the non-irrigated village.

Table VI
Changes in Farming Technology in Islampur and Brammattor

Opinion	Islampur	Brammattor
Yes	61 (7.57)	904 (93.78)
No	745 (92.43)	60 (6.22)

(b) Changes in Farmer-Labour Relations: It is evident from the following table that most of the people of the irrigated village are of the opinion that there is a change in the relationship between farmers and labourers mainly due to a change of technology while the majority of the households in the non-irrigated village did not identify any such change.

Table VII
Changes in Farmer-Labour Relations in Islampur and Brammattor

Direction of Change	Islampur	Brammattor
Informal and Independent Relations	5 (41.66)	610 (75.30)
Unproductive and Non-cooperative Relations	3 (25.00)	50 (6.17)
Competitive and Conflicting Relations	1 (8.33)	110 (13.58)
Understandable and Dependable Relations	1 (8.33)	30 (3.70)
Others	2 (16.66)	10 (1.23)

The above table indicates that in the irrigated village most of the respondents are of the view that informal and independent relations are emerging whereas in the non-irrigated village the situation is quite reverse. Therefore, it follows that the introduction of irrigation technology leads to a change in the farmer-labour relations conspicuously from the traditional to the modern type. So, the farmer-labourer relations due to introduction of irrigation technology change from dependent, attached, unproductive and contractual type to informal and independent type.

(c) Adverse Effects of Changing Relations on Labourers: The following table indicates the opinion of the respondents who have identified a change of technology and the resultant change in the relationship between the farmers and labourers and the effects of new relations on labourers.

Table VIII
Opinion Regarding Adverse Effects of Changing Technology

Opinion	Islampur	Brammattor
Yes	5 (41.61)	134 (16.54)
No	7 (58.33)	676 (83.46)

From the information presented in the above table it can be concluded that there is a positive effect of the changing technology on labourers. The irrigation technology has imposed the condition of the labourers and their position in the society. In the non-irrigated village the condition of labourer is not satisfactory since the demand for labour in the non-irrigated village is very low.

Table IX
Adverse Effects of Changing Technology

Effects	Islampur	Brammattor
Increase in demand for labourers decreased their dependence on farmers	2 (40.00)	64 (47.76)
The farmers became more self-dependent due to rise in labour demand	1 (20.00)	32 (32.88)
Durable and dependable relations declined	1 (20.00)	24(17.91)
Conflicting and contractual relations	1 (20.00)	10 (7.46)
Emerged	—	4(2.98)

It is evident from the above table that among others, the main adverse effects of changing relations on labourers are lessening of their dependence upon farmers due to the rise in the demand for labourers, decline in the durable and dependent relations and emergence of conflicting and contractual relations. Of these effects, lessening of the dependence of the labourers upon farmers appears to be most significant. About 48 per cent of the respondents in the irrigated village who identified adverse effects of changing relations regarded this effect as the most significant one.

V. SOCIO-ECONOMIC RELATIONS OF FARMERS AND LABOURERS

In this section an attempt has been made to examine if the economic and social relations have changed due to the introduction of irrigation technology. To make an analysis of the impact of irrigation upon economic and social relations of labourers the following criteria have been used:

- i) The nature of change of farmer's capacity to employ labourers;
- ii) The nature of change of the different categories of labourers in terms of duration of employment and the emerging farmer-labour relations;
- iii) The nature of change of the working conditions. The working conditions include nature of payment of wages, labourer's attitude towards landowners, the determining factors for change in attitude etc.
- iv) The nature of social relations between farmers and labourers.

In the study villages we find three kinds of labourer. These are: bonded labourer, attached labourer and daily or casual labourer. The bonded labourers are those labourer who have to serve the landlord on the basis of his bond of loan until the debt is cleared. This type of labourer has to work for the landlord for meager wages. The attached labourers are those who exclusively work for a single employer at least for a crop season or for a year on the basis of oral contract between the labourer and the employer. This type of labourer is paid monthly either in cash or in kind. The daily or casual labourers are those who work for the day and take daily wages for their work. They work on daily contract basis and serve more than one employer during the period of one year. They are usually employed for a day or for a sequence of days and are paid daily wages in both cash and kind for different types of farm and non-farm work in almost all the seasons of an agricultural year. Of the three kinds of labourer, the number of the daily or casual labourer is high both in the irrigated and non-irrigated villages. Let us now discuss the impact of irrigation on socio-economic relations of farmers and labourers on the basis of the criteria described above.

(a) The Nature of Change of the Farmer's Capacity to Employ Labourers:

In the old days there were few landowners and most of the people belonged to the labourer and tenant categories. In such situation, the supply of labourer was abundant and the landowner was in a bargaining position to employ labourer. But this situation has changed in recent times due to various factors such as, increase in demand for labourers, distribution of *khas* lands to the landless farmers, restoration of tenancy rights to the tenants and sharecroppers, fixation of minimum wages to the labourers etc. These factors made the labourers relatively self-dependent and reduced the farmer's capacity to appoint labourers at a higher wage. The findings in the study villages also conform to this view. Out of 806 respondents in the non-irrigated village, only 106 (i.e., 13.15 per cent) household employ labourers while in the irrigated village, out of 964 respondents only 168 (17.42 per cent) employ labourers for cultivation of their land. From this information, however, it is not clear if the introduction of irrigation has led to the decline in the capacity of the employer to employ labourer since the percentage of labour use is higher in the irrigated village compared to that in the non-irrigated village.

(b) Change in the Farmer-Labour Relations : A change has taken place in the farmer-labourer relations. Of the three kinds of relations stated at the outset of this chapter, the casual or daily labourers are now more prevalent in the study villages. In the earlier days, the appointment of labourers on annual basis

ensured security of work for the labourer and security of labourer for the farmer. But in recent times this system has changed and most of the labourers now prefer casual or daily labour system because of the following reasons:

- i) Attached labour means fewer wages and more work. It implies bondage with the employer. On the other hand, the casual labourer or daily labourer is free to work with any person he wants and whenever he wants. He also gets cash payment which is higher than the monthly or yearly payment.
- ii) In case of attached labourer the work is heavier and the working condition is also not satisfactory. But reverse is the case in case of casual or daily labourer. In this case the work is reasonable and the working condition is also satisfactory. The casual or daily labourers work in consonance with certain time and wage conditions agreed upon by both parties at the very beginning itself.

The following table shows the types of labour employed in the study villages.

Table X
Types of Labour in Islampur and Brammattor

Opinion	Islampur	Brammattor
Bonded Labour	2 (1.89)	2 (1.19)
Attached Labour	28 (26.41)	26 (15.48)
Casual or Daily Labour	76 (71.70)	140 (83.33)

It is evident from the above table that in the non-irrigated village 71.70 per cent of the employers employ casual or daily labourers while in the irrigated village the percentages is still higher. In the irrigated village 83.33 per cent of the employers employ casual labour. It is also evident that the number of bonded labourers employed by the employees is not at all significant. However, the number of attached labour employed by the employees significant. However, the number of attached labour employed by the employees is not negligible. It is also noticeable that the number of attached labourer employed by the employers is higher in the non-irrigated village. From this table it is also noticeable that the number of households employing casual or daily labour is higher in the irrigated village which implies that irrigation encourages daily labourers more than the attached labourers. This might be due to the fact that the labour demand has risen due to irrigation and the wage for casual labour has risen more than the rise in wage for attached labour. On the other hand, the percentage of attached labour employed in the non-irrigated village is

higher since security of labour is more important in this village and also because there is no increase in demand for labour in this village specially during the slack season when there is uncertainty of yield and work and also less intensity of agriculture. On the other hand, in the irrigated village the timely supply of water is assured and agriculture is not dependent upon uncertainty to rainfall. Here the labourer is more certain of their work. So, being assured of a constant demand for work and higher wages, the labourers in the irrigated village prefer to be casual labour than to be attached labour. On the other hand, in the irrigated village labourers prefer to be attached labour because their work and wages are very much dependent upon monsoons and seasons which are very much uncertain by their very nature. Therefore, with a view to avoiding the risk of unemployment the labourer in the irrigated village prefer to remain as attached labour.

(c) Working Conditions: In the earlier days the working conditions of the labour were precarious. There was no fixed timings for work. The wages for the same kind of work were also not uniform throughout the village. The payment of wages was also irregular. The work load was also very heavy. However, the working conditions of labourer are now undergoing changes. Irrigation has led to a change in the working conditions of labourers. Most of the labourers in the irrigated village opined that a positive change took place in their working conditions (Table XI).

It is also observed that the labourers are not more free to chose their work according to their choice. They are now conscious enough to realise their rights. As a result, the employer-farmer can not exploit them at all. Rather, the farmers are found to be exploited by the labourers. Sometimes the farmers in the irrigated village have to take a persuasive role to persuade the aggressive labourers to do their work.

Table XI

Change in Working Conditions of Labourer in Islampur and Brammattor

Opinion	Islampur	Brammattor
Yes	42 (30.00)	396 (82.50)
No	82 (85.42)	28 (24.58)

(d) Changes in the Payment of Wages: A change in the payment of wages is observed both in the irrigated and non-irrigated villages. The wage rate has increased and the working hours are now uniform in both the villages. The wages are now paid in cash rather than in kind. However, the wages for the

same kind of work are not same in both the villages. The wage rate is higher in the irrigated village compared to that in the non-irrigated village. In the irrigated village the wage rate varies from Tk 80.00 to Tk 120.00 per day while it varies from Tk 80.00 to Tk 100.00 in the non-irrigated village. However, though there is an increase in money wage, the increase in real wage is not very significant compared to the earlier days as is evident from the opinions expressed by the respondents in the two study villages (Tables XII and XIII)

Table XII
Change in Wage Rate in Islampur and Brammattor

Opinion	Islampur	Brammattor
Yes	125 (52.98)	150 (78.12)
No	115 (47.92)	42 (21.88)

Table XIII
Change in the Kinds of Wages in Islampur and Brammattor

Kinds of Wage Changed	Islampur	Brammattor
Nominal Wage Changed	79 (63.20)	122 (81.33)
Real Wage Changed	46 (36.80)	28 (18.67)

However, though most of the respondents that the increase in wage is nominal, yet a careful observation reveals that the increase in wage has led to a change in living conditions of the labourers. The labourers in the independent from the employer-farmer.

(e) Promptness in Payment of Wages: The payment of wage in both the study villages is found to be regular and timely. Since no significant difference is observed in the payment of wages in both the villages, it may be concluded that irrigation has not influenced the nature of payment of wages.

(f) Causes of Increase of Wage Rate and Promptness in the Payment of Wages : Attempt has also been made to find out the causes of increase and promptness in the payment of wages. It is observed that besides irrigation, many other factors also played a part in causing a change in wages and promptness in the payment of wages (Table XIV)

Table XIV
**Reasons for Change in Wages and Promptness in the
 Payment of Wages in Islampur and Brammattor**

Reasons	Islampur	Brammattor
Increase in Production	19 (15.20)	84 (56.00)
Great Demand for Labour	43 (34.40)	112 (74.67)
Greater Awareness of the Worker of his Rights	15 (12.00)	50 (33.33)
Price Rise	67 (53.60)	98 (65.33)
Other	11 *8.80)	10 (6.66)

As is evident from Table XIV many factors have contributed to the change in wage rate and promptness in the payment of wages. Among the factors, price rise in the non-irrigated village and rise in demand for labour in the irrigated village appear to have significant influence upon the change in wage rate and promptness in the payment of wages. Besides, increase in production, greater awareness of workers of his rights are also found to have some influence upon the change in wages.

(g) Freedom to Choose Type of Work and Employer : It is observed that irrigation has made the labourers more free to choose work and employer according to their choice.

Table XV
**Freedom of the Labourer to Choose Type of Work and Employer
 in Islampur and Brammattor**

Opinion	Islampur	Brammattor
Yes	98 (82.50)	174 (90.63)
No	42 (17.50)	18 (9.37)

However, though the percentage of labourers who are free to choose type of work and employer according to their choice is higher in the irrigated village, yet it is found that most of the labourers in both the villages are free to choose type of work and employer according to their choice (Table VI). The labourers who think that they are not free to choose work and employer according to their choice regard bondage of previous loan, dependence on employer in trouble, lack of land, lack of work etc. as causes for lack of freedom of labourers to work according to their choice (Table VII).

Table XVI
**Reasons for Lack of Choice of Employer and Type of Work
 in Islampur and Brammattor**

Opinion	Islampur	Brammattor
Bondage of Earlier Loan	4 (9.52)	—
Dependency of Employer in Trouble	20 (47.62)	10 (55.56)
Lack of Land	2 (4.76)	—
Lack of Self-work	16 (38.10)	8 (44.44)

Among the causes, dependency on employer in trouble and lack of self-work are found to be the major causes for lack of choice of employer and type of work by the labourer both in the irrigated and non-irrigated villages.

(h) Change in the Standard of Living : Attempt has been made to collect data on the change in the standard of living of the labourers, if any. The collected data reveal that 63.25 per cent of the respondents in the non-irrigated village come across changes in their living standard.

Table XVII
Changes in the Living Standard of the Labourers in Islampur and Brammattor

Opinion	Islampur	Brammattor
Yes	61 (63.54)	198 (41.25)
No	35 (36.46)	282 (58.75)

It is also observed during the field survey that the labourers now put on better clothes and use goods like wristwatch, transistors etc. The food habits of the labourers have also changed. The labourers now take tea and tiffin in tea-shops or restaurants which was unthinkable only a decade ago. The higher percentage of the labourers with a change in their living standard in the irrigated village may be due to higher income and employment of the labourers resulting from irrigational facilities.

(i) Change in Attitudes and Inter-personal Relations: Attempt has also been made to analyse the effects of a change in attitudes and inter-personal relations of the labourers and landowners. It is found that the people are more self-conscious and the relationship between the labourer and landowner is more cordial and friendly in the irrigated village compared to those in the non-

irrigated village. This may be due to the better economic security of the people resulting from irrigation.

(j) Worker's Cooperation in the Work: The farmers and landowners complain that the workers at present do not cooperate with them and the workers are more aggressive now. On the other hand, most of the labourers state that they are very much cooperative with their employer-farmer.

Table XVIII
Workers Cooperative in the Work as per Opinion of Farmers and Labourers

Opinion	Islampur		Brammattor	
	Farmer (N = 380)	Laboure (N = 240)	Farmer (N = 376)	Labour (N = 192)
Yes	82 (21.58)	240(100.0)	168(44.68)	192(100.0)
No	298(78.42)	--	208 (55.32)	--

From Table XVIII it is evident that majority of the workers in both the villages opine that they are cooperative while most of the farmers complain that the workers are non-cooperative. However, the percentage of farmers who pass opinion against the workers is higher in the non-irrigated village compared to that in the irrigated village while the percentage of farmers who pass opinion in favour of the workers is higher in the irrigated villages. Interestingly, all the workers in both the villages claim themselves to be cooperative. The farmers who regard the workers as non-cooperative identify the causes like increase in demand for labourers, non-attachment and freedom of labourers, higher wages, labour shortage, different alternative avenue for work, taking advantage of the situation by workers etc. for non-cooperation of workers with the farmers (Table XIX).

Table xix
Types of Labour in Islampur and Brammattor

Reasons	Islampur (N = 298)	Brammattor (N = 208)
More demand for labourers	60 (20.13)	90 (43.27)
Freedom and non-attachment of labour	125 (41.95)	20 (9.62)
Higher wage rate	92 (46.46)	40 (19.23)
Labour shortage	22 (7.38)	32 (15.38)
Alternative source of work	1 (0.34)	10 (4.81)
Workers take advantage of the situation	--	16 (7.69)

From Table XIX it is evident that most of the respondents in the irrigated villages (43.27 per cent) regard increase in demand for non-operative of the workers while most of the respondents (41.95 per cent) in the non-irrigated village regard freedom and non-attachment of labourer as the main cause of non-cooperation of labourers. This reveals the fact that the people of the non-irrigated village is more conservative compared to the people in the irrigated village.

(k) Scarcity of Local Labourers and Employment of Immigrant Labourers:

Most of the respondents in the study villages opine that local labour is available as per requirement of the farmer. The respondents who claim that labourers are not available in sufficient number of times of need meet the requirement of labourer by engaging immigrant labourers from neighbouring villages or other districts.

(l) Reasons for Labourer's Dependence Upon Farmers : The labourers who are dependent upon farmers regard the causes like lack of land lack of work economic hardship, lack of awareness etc. as the main causes for their dependence.

Table XX
Reasons for Labourer's Dependence Upon Farmers in Islampur and Brammattor

Reasons	Islampur	Brammattor
Lack of Land	—	10 (55.56)
Lack of Work	13 (30.95)	—
Lack of Awareness	2 (4.76)	2 (11.11)
Economic Hardship	27 (64.29)	6.(33.33)

As is evident from Table XX lack of land appears to be the major cause of dependence of the workers upon farmers in the irrigated village while economic hardship is the major cause of dependence of the workers in the non-irrigated village.

(m)Farmer-Labourer Inter-Personal Relations: In the past the farmer-labourer inter-personal relations were very cordial. The farmer used to present clothes, money, food etc. to the labourers on festival days, marriage ceremonies etc. On the other hand, the labourers also used to present vegetables, flowers, chicken, eggs etc. to the farmers as a sign of goodwill. Besides, there was no fixed time of work. The labourer used to adjust himself with the farmer's work and need and the labourer did extra-work without

claiming any extra-payment. The labourer's relations with the farmer were submissive and dependable mixed with a sense of respect and cooperation. It is alleged that this cordial relationship between the farmer and labourer has been changing in recent times due to changing in the social value system, individual or institution fixing the wage rate and extending help to the labourers in time of need like ill-health, construction of house, marriage ceremony etc. However, the findings as presented in Table XXI indicate a mixed result regarding the matter:

(i) *Exchange of gifts between farmers and labourers*: It is evident from Table XXI that the relations between farmer and labourer are very much formal. The data show that only 3.33 per cent of the labourers get gift from farmer on any occasion in the non-irrigated village while the percentage of the labourers receiving the gift in the irrigated village is only 2.08 per cent. However, the

Table XXI

Farmer-Labour Relations in Islampur and Brammattor

Types of Relations	Islampur	Brammattor
Gifts received by labourers from farmers on any occasion	8 (3.33)	4 (2.08)
Gifts received by farmer from labourer on any occasion	10 (94.17)	8 (4.17)
Free services rendered to the farmer by labourer on any occasion	2 (0.83)	2 (1.04)
Respectful address to the farmers by the labourers	240 (100.00)	192 (100.00)
Non-verbal sign of respect shown to the farmer by the labourer when the later meets the former	5 (2.08)	2 (1.04)
Disgraceful words used by the farmer in talking with the labourers	75 (31.25)	30 (15.63)
Labourer's house is visited by the farmer on occasions like sickness, birth or death of labourer's kin	25 (10.42)	10 (5.21)
Labourers are allowed to enter into the dwelling house of the farmer	20 (8.33)	12 (6.25)
Food served by the farmer to the labourer inside farmer's dwelling house	10 (4.17)	4 (2.08)
Fixed timings of work of the labourer	23 (96.25)	192 (100.00)
Extra wage received by worker for extra work	234 (97.50)	95 (98.96)

Note : The parameters used in the table are based on Satyanarayana (1992) with slight modifications.

percentage of labourers giving presents to the farmer is same in both the village.

(ii) *Rendering free service to the farmers by the labourers*: The percentage of labourers rendering free service to the farmers is very negligible in both the villages. This implies that traditional value system is going to be replaced by modern consciousness.

(iii) *Use of respectful words and non-verbal sign of respect to the farmer by the labourer* : All the labourers in both the villages opine that they address a farmer respectfully. The percentage of labourers showing non-verbal sign of respect to the farmer is abit higher in the non-irrigated village indicating the conservative feeling of the people in the village. The percentage of labourers facing disgraceful words from the farmers is higher in the non-irrigated village which indicates the low degree of consciousness of the villagers owing to illiteracy.

(vi) *Farmer's visit to the labourer's house* : A high percentage of the labourers in the non-irrigated village is of the opinion that the farmers visit their house during crises and need and allow them to take food inside farmer's house which indicate the high degree of emotional attachment of the villagers in the non-irrigated village. It implies that irrigation has made the villagers abit mechanical, so to speak.

(v) *Working hours and extra-payment for extra-work*: All the labourers in the irrigated village and 96.25 per cent of the labourers in the non-irrigated village are of the opinion that there is a fixed time for work and most of them (97.50 per cent in the non-irrigated village and 98.96 per cent in the irrigated village) get extra-wage for extra-work. The fact indicates that the people of the irrigated village are more rational then those of the non-irrigated village.

(vi) *Decision makers of wages* : Attempt has also been made to know about the decision-makers of wages of the labourers (TablXXII)

Table XXII
Decision-makers of Wages in Islampur and Brammattor

Decision-makers	Islampur	Brammattor
Farmer	20 (2.48)	2 (0.21)
Labourer	55 (6.82)	482 (50.00)
Both	731 (90.69)	480 (49.79)

From the table (Table XXII) it is evident that in the non-irrigated village 90.69 per cent of the respondents are of the opinion that both the farmers and labourers together decide the wage rate. But in the irrigated village the opinion is divided. Fifty per cent of the respondents opine that only the labourers take

part in wage fixation while 49.79 per cent hold the view that both the labourers and the farmer take in wage fixation.

(vii) *Helping the labourers* : In the earlier days the farmers used to help the labourers during occasions like birth, death, marriage, construction of houses etc. so as to make the labourers obliged to do their work sincerely and with reasonable wage. This lead to the development of an informal relation between the farmer and the labour. Data has been collected to examine if the same system exists now.

Table XXIII

Occasions of Farmers Helping Labourers in Islampur and Brammatto

Occasions	Islampur	Brammatto
Sickness or trouble	150 (39.47)	130 (34.57)
Education of children	20 (5.26)	50 (13.30)
Both of the above	—	20 (5.32)
Construction of house	85 (22.37)	100 (26.64)

From Table XXIII it is evident that 39.47 per cent of the farmers in the non-irrigated village and 34.57 per cent of the farmers in the irrigated village during sickness or troubles of labourers. In case of education of the children of the labourers, a higher percentage of the farmers (13.30 per cent) in the irrigated village compared to the non-irrigated village (5.26 per cent) help the labourers. Similarly, a higher percentage of the farmers (26.60 per cent) in the irrigated village as compared to 22.37 per cent in the non-irrigated village help the labourers for constructing a house. This again indicates a higher degree of change of the moral attitude of the farmers in the irrigated village. However, when the labourers are asked to express their reactions on the opinion expressed by the farmers regarding their help to the labourers, most of the villagers in both the villages reply that they get very little help from the farmers in time of need and crisis.

VI. CHANGES IN OCCUPATIONAL STRUCTURE

Attempt has been made to examine the effect of irrigation on occupational structure of the respondents. It is assumed that since irrigation encourages more economic development, there will be a change in hereditary or traditional occupation. It is observed that many people have changed their hereditary occupation with the change in their education status or earning.

From Table XXIV it is evident that both in the irrigated and non-irrigated village there is an increase in the number of sons who follow agriculture as their occupation in comparison with the number of their fathers. Similar trend is also observed in case of occupations like labour, service, business and skilled labour. In case of rearing of livestock there is a decline in number of sons following father's occupation in the non-irrigated village while the reverse is true in case of the irrigated village. In case of artisans as occupation, there is a decline in the number of sons following father's occupation in the non-irrigated village while there is a slight increase in the number of sons following the same occupation of artisans in the irrigated village. Therefore, no definite pattern of changes in the occupational structure due to irrigation is observed in the study village.

Table XXIV

Occupational Deviance of the Respondents from that of their Fathers

Opinion	Islampur		Brammattor	
	No. of Father	No. of Sons	No. of Father	No. of Sons
Retired or Deceased	10 (1.24)	15 (1.86)	40 (4.15)	34 (3.53)
Agriculture	401 (49.81)	410 (50.93)	560 (58.09)	602 (62.45)
Labour	142 (17.64)	240 (29.81)	150 (15.56)	192 (19.92)
Artisan	05 (13.04)	10 (1.24)	10 (1.04)	2 (0.21)
Government or Private Service	5 (0.62)	50 (6.21)	20 (2.07)	60 (6.2)
Business	2 (0.25)	65 (8.07)	4 (0.41)	33 (3.33)
Skilled Labour		15 (1.86)	2 (0.20)	24 (2.49)
Rearing of Livestock	805 (100.0)*	552 (68.57)*	760 (78.84)*	830 (86.10)*
Did not Reply	140 (17.39)	--	178 (18.46)	18 (1.877)

* The figures are overlapping.

(a) Occupational Changes of the Respondents : Attempt has also been made to examine the occupational changes of the respondents due to irrigation. Table XXV describes the pattern of occupational changes of the respondents.

From Table XXIV it is evident that the percentage of the respondents who change occupations is higher in the irrigated village compared to that in the non-irrigated village. In the irrigated village 39.21 per cent of the respondents

change their occupation while 15.16 per cent of the respondents change their occupation in the non-irrigated village. Of the respondents who change occupation, 18.03 per cent change agriculture as occupation in the non-irrigated village while 13.23 per cent change the same in the irrigated village. The percentage of respondents changing occupations like labour, artisans, service is higher in the irrigated village compared to that in the non-irrigated village while the percentage of respondents changing occupation like business, rearing of livestock is higher in the non-irrigated village compared to that in the irrigated village.

Table XXV
Occupational Changes in the Respondents in Islampur and Brammattor

Occupation Changed	Islampur	Brammattor
Agriculture	22 (18.03)	50 (13.23)
Labour	15 (12.30)	58 (15.34)
Artisans	10 (8.20)	64 (16.93)
Service (Government or Private)	11 (9.02)	46 (12.17)
Business	28 (22.95)	64 (16.93)
Rearing of Livestock	31 (25.41)	82 (21.69)
Others	5 (4.10)	14 (3.70)

(b) **Causes for Change of Occupation** : Attempt has been made to examine the reasons for change of occupation of the respondents. The main causes for change of occupation of the respondents are shown in Table XXVI.

Table XXVI
Causes for Change of Occupation in Islampur and Brammattor

Opinion	Islampur	Brammattor
Irrigational facilities	—	132 (34.92)
Lack of sufficient land	22 (18.03)	50 (13.23)
Lack of sufficient work	15 (12.30)	2 (0.53)
Seasonal unemployment	31 (25.41)	2 (0.53)
Selling of land	25 (20.49)	50 (13.23)
Lack of capital	10 (8.20)	78 (20.63)
Ill health	9 (7.38)	30 (7.94)
Poverty	9 (7.38)	28 (7.41)
Other	1 (0.82)	3 (1.58)

Both in the irrigated and non-irrigated villages, the respondents identified the factors like lack of sufficient land, lack of sufficient work, seasonal unemployment, selling of land, lack of capital, poverty etc. as the main causes for change of their occupation. However, in the non-irrigated village people regard lack of sufficient land (18.03 per cent), seasonal unemployment (25.41 per cent) and lack of sufficient work (12.30 per cent) as the major causes for change of their occupation while in the irrigated village availability of irrigational facilities (34.92 per cent), lack of capital (20.63 per cent) and selling for land (13.23 per cent) and lack of sufficient land (13.23 per cent) as the major causes. Almost similar percentages of the respondents both in the irrigated and non-irrigated villages regard ill-health and poverty as the causes for changes of their occupation.

VII. SUMMARY OF THE FINDINGS AND CONCLUSION

(i) *Landownership pattern*: In case of landownership pattern there are no significant differences in the two study villages. However, the following basic features may be pointed out from the pattern of land ownership in the two study villages.

In the irrigated village, about 75 per cent of the land is in the hands of the marginal, small and medium farmers who constitute about 95 per cent of the landowners and the remaining 25 per cent of the land is in the hands of the 5 per cent of the landowners of the villages. On the other hand, in the non-irrigated village about 79 per cent of the land is in the hands of the marginal, small and medium farmers who constitute more than 93 per cent of the landowners and the remaining 21 per cent of the land is in the hands of 7 per cent of landowners of the villages.

(ii) *Farmer categories* : The percentages of landless (92.78 per cent), marginal farmers (20.60 per cent), small farmers (18.61 per cent) and large farmers (4.84 per cent) are higher in the non-irrigated village compared to those in the irrigated village. In the irrigated village, the percentages of landless marginal farmers, small farmers and large farmers are 19.92 per cent, 10.79 per cent and 4.36 per cent respectively.

In the irrigated village the percentage of medium farmers is higher (51.45 per cent) compared to that in the non-irrigated village. The higher percentage of the medium farmers in the irrigated village may be due to the availability of irrigational facilities which has made it possible to bring more unused land into cultivation.

(iii) *Land distribution pattern* : A considerable part of the land (25 per cent of the land in the irrigated village and 21 per cent of the land in the non-irrigated village) is still in the hands of the large farmers who constitute only 5 per cent in

the irrigated village and 7 per cent in the non-irrigated village.

(iv) *Self-cultivation* : Self-cultivation is higher in the non-irrigated village. This might be due to the shortage of attached labour. The low extent of self-cultivation in the irrigated village may be due to the fact that higher economic status resulting from irrigational facilities make the people conscious who now want to send their children to school rather than sending them to the field as labourers.

(v) *Use of modern technology* : The modern technology (water, seed, fertilizer etc.) is used more intensively in the irrigated village than in the non-irrigated village.

Types of labour : The attached labour system has disappeared and has been replaced by free labour who work for daily wages. The labourers are free in the sense they can choose their employers and the type of work they desire to do. In the non-irrigated village, however, still some form of attached labour exists.

Changes in the conditions of labourers : Changes have occurred in the condition of labourers both in the irrigated and non-irrigated villages. But the changes relating to the conditions of labour are not so striking in the non-irrigated village. The following basic changes relating to conditions of labour in the irrigated villages have been observed.

- a) There is greater availability of work throughout the year in the irrigated village compared to that in the non-irrigated village.
- b) In the irrigated village the wages are higher than in the non-irrigated village.
- c) In the irrigated village the people have been able to consume a greater variety of food items and spend more money on clothes because of higher income.
- d) The general standard of living of the people is higher in the irrigated village than that in the non-irrigated village.
- e) The labourers in the irrigated village show a higher degree of consciousness of their rights compared to that in the non-irrigated village.
- f) Wage payment has now become regular and prompt in both the villages.
- g) Though the practice of rendering free service to the landlords has largely disappeared in both the villages, traces of its survival are still found in the non-irrigated village.
- h) As claimed by the landowners, the labourers receive assistance (in cash or kind) from the landowners in times of need in both the villages. However, the practice is more common in the non-irrigated village.
- i) The life-styles of people have changed in both the villages. However, such changes are more conspicuous in the irrigated village.
- j) There are no significant differences between the irrigated and non-irrigated village with regard to the occupational background. However, the percentage of agricultural labour is higher in the non-irrigated village.

Occupational structure : The traditional occupational structure has experienced several changes in both the villages. However, the changes are more conspicuous in the irrigated villages. It is observed that a majority of the respondents' sons have deviated from their hereditary occupations. Some of the children of the respondents have shown a tendency to deviate from their hereditary occupation. It is also observed that traditional values are finding away in the irrigated village more strikingly than in the non-irrigated village. It is noticeable that in the irrigated village the number of children attending schools has increased whereas in the non-irrigated village still a sizeable number of children does not attend schools and is employed as servants and labourers. In fine, it may be concluded that irrigation has an impact on the labour relations and agrarian structure in the irrigated village. But the impact of irrigation on landownership pattern is not so significant in the village. However, it should be mentioned here that this is simply an explorative study based on survey of two sample villages which needs further extension, elaboration and verification.

BIBLIOGRAPHY

1. Aggarwal, P.C . 1975: "Some Observations on Changing Agrarian Relations in Ludhiana, Punjab", Changing Agrarian Relations in India, Hyderabad: National Institute of Rural Development.
2. Alexander, K.C. 1975: "Changing Labour-cultivator Relations in South India", Changing Agrarian Relations in India, Hyderabad, National Institute of Rural Development.
3. ____ 1980: "Economic Development and Social Change", *Behavioural Sciences and Rural Development*, Vol. 3, No. 6.
4. ____ 1982 : "Agricultural Development and Social Transformation", *Behavioural Sciences and Rural Development*, Vol. 1, No. 6.
5. ____ 1983: "Agricultural Growth and Occupational Change in 'Ganganagar, Rajasthan", *Social Action: A Quarterly Review of Social Trends*, Vol. 33, No. 1.
6. Bhalla, G.S.1983 : "Peasant Movement and Agrarian Change in India", *Social Scientist*, Vol. 11, No. 123.
7. Chattapadhaya, M.1982 : "Note : Role of Female Labour in Indian Agriculture", *Social Scantiest*, Vol. 10, No. 7.
8. Chambers, Robert 1983 : "Rapid Appraisal for Improving Existing Canal Irrigation Systems", Discussion Paper Series No. 8, New Delhi: The Ford Foundation.
9. ____ 1980 : "Basic Concepts in the Organisation of Irrigation", in *Agricultural Development in Asia*, E. Walter Coward (ed.), Cornell: Cornell University Press.
10. Chowdhury, Anwarullah 1982: *Agrarian Social Relations and Development in Bangladesh*, New Delhi: Oxford and IBM Publishing Company.
11. Chowdhury, Md. Abdul Mannans 1988: "A Socio-economic Study of Gravity-flow Irrigation in Bangladesh: A Case Study of Chittagong District", Dhaka: Bangladesh University Grants Commission.

12. Coward, F. Walter, Jr. and Ahmed, B.1979: "Village, Technology and Bureaucracy: Patterns of Irrigation Organisation in Comilla District, Bangladesh", Comilla, Bangladesh.
13. Coward, E.; Walter, Jr.1980: "Irrigation Development: Institutional and Organisational Issues", in *Irrigation Development in Asia*, E.W. Coward (ed.), Cornell: Cornell University Press.
14. ____ 1984: "Improving Policies and Programmes for the Development of Small-Scale Irrigation Systems", Cornell: Cornell University Press.
15. Duewel, John 1981 : "Promoting Participatory Approaches to Cultivating Water-user Associations: Two Studies from Central Java", Paper prepared for ADC sponsored workshop in Investment Decision to Further Develop and Make Use of Asia's Irrigation Resources". Ag Bangkok: Agricultural Development Council.
16. Epstein, T.S. 1962: *Economic Development and Social Change in South India Bombay*. Oxford University Press.
17. Hamid, M.A. et al. 1978 : "Irrigation Technologies in Bangladesh", Rajshahi: Department of Economics, Rajshahi University.
18. Hanratty, Martin 1983 : "Minor Irrigation Development in Bangladesh", Dhaka: USAID.
19. Hannah, L.M. 1976 : "Hand Pump Irrigation in Bangladesh", *The Bangladesh Development Studies*, Vol. IV, Dhaka: Bangladesh Institute of Development Studies.
20. Hossain, Md. Belayet, 1981: "Choice of Techniques in Small-scale Irrigation in Bangladesh", *The Bangladesh Development Studies*, Vol. IX.
21. Mishra, G.P. (1979): "Distributional Effects of Rural Development Strategies: A Case Study", *Economic and Political Weekly*, Vol. 14, No. 39.
22. Page, V.S. 1975: "Changing Agrarian Relations in Maharashtra", in *Changing Agrarian Relations in India*, Hyderabad: National Institute of Rural Development.
23. Parthasarathy, G. and Prasad, D.S. 1975: "The New Technology within Agriculture and Changes in Agrarian Relations", *Changing Agrarian Relations in India*, Hyderabad : National Institute of Rural Development.
24. Rudra, Ashok, 1978: "Class Relations in India Agriculture", *Economic and Political Weekly*, Vol. VIII, No. 22.
25. Singh, Rajendra1976: "Changing Agrarian Relations in India", *Sociological Bulletin*, Journal of Indian Sociological Society, Vol. 25, No. 12.
26. Satyanarayana, G.1992 : *Changing Agrarian Structure and Labour Relations* , Jaipur: Rawat Publications.
27. Singh, D. and Singh, V.K.1975 : "Changing Agrarian Relations in Uttar Pradesh: Some Observations", in *Changing Agrarian Relations in India* Hyderabad: National Institute of Rural Development.
28. Thorner, D.1956: *The Agrarian Prospects in India* , Delhi: University press.
29. Thorner, D. and Thorner, D.1962 : *Land and Labour in India* , Delhi: Asia Publishing House.
30. Wensely, C.1982 : "Agency Assistance to Farmer Managed Irrigation Systems - A Case Study in Bangladesh", Cornell: Cornell University Press.

Economics of Tobacco Control : Bangladesh Perspective

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Economics was once used to be called a dismal science. In the popular perception, economics was regarded as devoid of broader human welfare and capable only of dealing with the market-place behaviours of individuals in their hedonistic pursuit of pleasure. Given this reputation of our discipline, the economics of tobacco would appear to be even a more dismal subject of enquiry. However, modern-day economics has developed to an extent so that its tools of analysis can now be fruitfully applied to capture the moral, ethical and social dimensions of such problems as tobacco consumption.

Tobacco consumption is primarily a public health problem and the value of human life lost due to tobacco is beyond economic costing. However, the production and consumption of tobacco is a worldwide economic activity that involves huge amount of productive resources and large sums of consumer expenditures. The advocacy and adoption of tobacco control policies thus raises important economic arguments that need to be addressed. In the context of a developing country like Bangladesh, these arguments need a special scrutiny in view of the extreme scarcity of resources and the very low standards of living.

The Issue of Consumer Sovereignty and Informed Choice

In spite of the enormous social and human costs inflicted by tobacco consumption, the number of tobacco-consuming people continues to grow unabated throughout the developing world. Clearly, we have a problem here—a social one. In a democratic society, how should the government strike a proper balance between respecting individual rights and freedom on the one hand and promoting the society's collective welfare on the other? And what has economics to say or do with this?

The people who oppose governmental ban or restrictions on tobacco consumption tend to cast the debate in terms of an individual's right to freedom and sov-

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ereignty of choice. The principle of consumer sovereignty is invoked as an advocacy in favour of the free-market outcome. Such an advocacy is flawed on several freedom grounds including a very respective way of viewing individual. In his *Four Essays on Liberty*, Isaiah Berlin pointed out the important difference between the "negative" and the "positive" views of freedom¹.

The negative view defines freedom solely as a person's independence from restrictions or interference by governments, institutions or any other authorities, so that the less restrictions there are, the more free an individual is. It is however the positive view of freedom on which the case for tobacco control must rest. This view of freedom is concerned not with the presence or absence of restrictions, but with a person's capability—his ability to enjoy a healthy and productive life.² Since tobacco consumption seriously impairs this capability of an individual, any policy that promotes his unrestricted right to consume tobacco does so only at the cost of severely undermining his positive aspects of freedom. This would be more so in an impoverished country like Bangladesh where, for most people, tobacco consumption usually diverts consumer expenditures away from essential foods and other items of subsistence.

The consumer sovereignty argument also ignores the problem of rationality of consumer choice as applied to tobacco consumption. When an individual makes a voluntary decision to consume tobacco in the full knowledge of its harmful effects, can such a decision be called rational in the sense of individual utility maximization? Given the time-lag between tobacco consumption and the onset of its harmful effects, the consumer decision-making in such a case represents a phenomenon of extreme myopia that can hardly be called rational.

Even a more serious problem of interpretation of consumer rationality may arise when decisions are made in a situation of uncertainty, lack of information and (or) social pressure and persuasion. The problem of consumer rationality in such a situation has been elaborated in a pioneering work by the Nobel Prize winning economist Herbert Simon³. According to him, the process that leads one to choose a particular activity, say, cigarette smoking, is often much more important than making the choice itself. A young adult may pick up the habit of smoking not so much because he is a rational utility maximizer, but because he may be yielding to peer pressure or acting under the influence of tobacco

¹ See Berlin, Isaiah, *Four Essays on Liberty*, Oxford University Press (London and New York), 1969.

² See Sen, Amartya, "Food and Freedom", *World Development*, Vol. 17, No. 6, 1989.

advertising and media blitz. The proper response from the society's point of view then is to inform, educate and warn him about the consequences of smoking so as to enable him to make a rational decision.

Even if we had taken a purely utilitarian approach to consumer decision-making, there would still be a case for tobacco control on the ground that tobacco consumption harms not only the immediate consumer but also the society at large. In economics, these effects go by the name of "externalities" which are basically benefits and costs accruing to third parties and therefore do not get reflected in the market forces of demand and supply. In the case of tobacco, these externalities would include the public health care costs in respect of tobacco-related diseases, the harmful health effects on other people through so-called "passive smoking", the loss of productive efficiency of the work force due to tobacco consumption, and many other environmental effects of tobacco.⁴ The case for tobacco taxation rests, at least in part, on the ground of such externalities.

Trends in Tobacco Production and Consumption

The results of the various rounds of the Household Expenditure Survey conducted by the Bangladesh Bureau of Statistics show that the expenditure on tobacco products on the average accounts for about 2.5 per cent of total household expenditure in urban areas and about 2 per cent in rural areas.

As can be seen from Table 1, the share of expenditure on tobacco has been increasing over the years. While these estimates are averages for all households, the expenditure shares would be much higher for the actual tobacco consuming households. The poorer households are found to spend almost as large a proportion of their income on tobacco as richer households. This implies that the income elasticity of demand for tobacco in value terms is close to, but perhaps slightly larger than unity (although in quantity terms, it is likely to be less than unity because of the fact that the poorer people go for the lower-priced products). The per capita consumption expenditure on tobacco for the population as a whole is thus expected to increase at about the same rate as per capita income, unless of course tobacco consumption behaviours are changed and (or) tobacco control measures are introduced.

Another revealing aspect of the results of the Household Expenditure Survey is

4 For a discussion of these various economic costs inflicted by tobacco, see Mackay Judith, "Tobacco Economics in the Third World", in Proceedings of the Third Asia-Pacific Conference on Tobacco or Health, organised by Asia-Pacific Association for the Control of Tobacco, June 1993, Omiya, Japan.

5 Total household expenditure, particularly in the case of rural farm households, include imputed value of home produced goods used for household consumption.

that the average household expenditure on tobacco exceeds the expenditure on many essential food items taken separately. These food items include pulses, milk and milk products, fruits and sugar and "gur" for the urban households, and all these items except pulses for the rural households. Again, this aspect of the expenditure patterns would be of course more striking for the actual tobacco-consuming households. For a great majority of these households, especially the poorer ones, tobacco consumption is likely to be at the cost of the nutritional welfare of the household members.

The domestic price trends for different tobacco products, besides income growth and changes in habits, are an important determinant of the growth in habits, are an important determinant of the growth in tobacco consumption. This is where the taxation of tobacco products, through its influence on consumer prices, has a role to play. It can be seen from Tables 2 and 3 that the prices of tobacco products do not show any general rising trends in relation to the overall consumer price index (CPI). While the prices of some cigarette brands may have increased slightly ahead of the CPI, the relative prices of the lower-quality tobacco products (that is, tobacco leaf and *bidi*) have significantly declined since the mid-1980s. Unlike the case of "normal" consumer item, this relative pattern of price movements for the tobacco products is likely to have a perverse welfare impact by inducing the poorer people to consume more tobacco.

In the absence of any large volume of trade in tobacco products in Bangladesh, domestic consumption is largely based on domestic production, except for the unknown volume of tobacco products smuggled into the country. The current annual production of cigarettes in the country is estimated to be over 12 billion sticks. Which works out to about 220 cigarettes annually per person aged 15 years and above. This figure is higher than the corresponding estimate for India (190 per adult person per year), although far lower than those for the developed industrialised countries.⁶

These figures must be viewed in light of the fact that in Bangladesh, as also in India, tobacco is consumed by a vast majority of people not in the form of smoking cigarettes, but in the form of smoking *bidis* and chewing tobacco.

The data presented in Table 4 shows a somewhat declining trend both in the annual tobacco harvest and in the production of manufactured cigarettes. While

⁶See Aghi, Mira B., "Tobacco and the Indian Women", in the proceedings of the Third Asia-Pacific Conference on Tobacco or Health, 1993, *op. cit.*

this appears to be an encouraging development, there is evidently some discrepancy between these production trends in consumer expenditure along with the price trends discussed earlier. An explanation for this partly lie in an increasing production of domestic demand met from smuggling, but more information would be needed to satisfactorily resolve this problem of data inconsistency. As regards officially recorded trade in tobacco products, the volume of both export and import seems to be rather small (Table 5).

Policy Issues

An argument often put forward by the tobacco companies lobby is that tobacco cultivation yields revenue to farmers and that the tobacco industry creates jobs. Therefore, any control of tobacco consumption would supposedly have a negative impact on income and employment generation in the economy. This is a totally misleading argument particularly in the context of less developed economies, since it is the scarcity of productive resources rather than the deficiency in demand that mainly constrains income and employment generation in these economies. In fact, the production and consumption of tobacco is doubly harmful to these economies; firstly, by causing the harmful health effects from consumption, and secondly, by diverting away scarce resources like land and capital from other socially productive uses.

Tobacco cultivation accounts for only about half a per cent of the country's net cultivable area and about 3 per cent of the area under *rabi* crops (that is crops grown in the dry winter season when tobacco is also grown). The cropping intensity of land in this season is limited by the coverage of irrigation facilities and the availability of residual moisture in the soil. Profitability estimates show that although returns per hectare from tobacco cultivation may be higher than those from such competing crops as pulses and oilseeds, there are many high-value crops like vegetables, spices and potato which yield even much higher returns. The potential profitability of these later crops are particularly high under improved technologies, but the adoption of such technologies is constrained by farmers' lack of knowledge and their limited access to institutional credit. There is thus a role to play for the public sector extension agencies and NGOs in helping tobacco farmers to adopt potentially more attractive alternative crops and cropping patterns.

Taxation of tobacco products can be a means of both generating government revenue and restraining the growth of tobacco consumption. Empirical studies in many countries have shown that tobacco has a price—inelastic demand so

that higher rates of taxes on tobacco are likely to yield higher revenue. While high tobacco taxes can be justified because of their deterrent effect on tobacco consumption, focusing on the "benefits" of tobacco tax revenue alone may prevent the government from taking strong tobacco control measures. For example, banning tobacco promotion may be a desirable policy—although it may adversely affect revenue from tobacco taxes by reducing the demand for tobacco products.

In Bangladesh, the taxes on the domestic production of cigarettes are quite high and these taxes account for a very large share of the indirect tax revenue collected from domestic sources.⁸

However, the rate of duty on *bidi* production is relatively much lower, while other lower-priced tobacco products are exempt from taxes presumably because of the problem of administering taxes on such products. Such a pattern of taxes is liable to provide poorer people more inducement for tobacco-consumption. To the extent that higher taxes on cigarettes could actually reduce the production of cigarette, this would reduce the demand for raw materials, thus making the tax-exempt tobacco products even cheaper. This problem needs to be tackled by adopting policies that could discourage farmers from growing tobacco. Taxing cigarettes is thus not enough. As regards import of tobacco products, the quantitative restrictions have been gradually relaxed in recent years as part of general import liberalisation. However, the import of tobacco products is currently subject to high tariffs. It has been argued in the context of the on-going tariff reforms that the existing duty on tobacco imports are prohibitively high and that a lower duty rate would contribute to government revenue by diverting illegal imports into the legal channel. This argument is again an example of how an exclusive concern for tax revenue can distort policy priorities for tobacco control. Smuggled tobacco can perhaps replace legal imports only at an increasing cost to smugglers, since a higher volume of smuggling is likely to entail higher risks and "transaction costs". Higher duties or restrictions on tobacco imports are therefore likely to have a desirable effect by

⁷See Mahmud, W. Rahman, S.H. and Zohir, S., *Agricultural Growth Through Crop Diversification in Bangladesh*, Working paper, International Food Policy Research Institute (Washington, DC), July 1994; also see Islam, N. and Karim, Z. "Alternative farming options for tobacco farmers in Bangladesh", *Tobacco Alert*, January 1993.

⁸ The domestic duty rate on cigarettes has increased from 220 per cent in the 1980s to the current rate of about 350 per cent of the value of production at factor cost.

raising the domestic prices of imported tobacco directly or indirectly, although the government may lose revenue in the process. Instead of lowering the import duty rate, an appropriate policy in this case would be to strengthen anti-smuggling measures as far as possible.

To sum up, tax policies and other economic measures concerning tobacco production and consumption need to be viewed as part of a national integrated strategy for tobacco control.

Table 1

Household Expenditure on Tobacco Products in Urban and Rural Areas

	Urban			Rural		
	1980/81	1985/86	1988/89	1980/81	1985/86	1988/89
Per cent of Total Household Expenditure	2.30	2.24	2.47	1.57	1.86	1.96
Percent of Expenditure	4.12	4.45	4.44	2.28	2.85	2.90

Source : Estimated from the published results of the Household Expenditure Survey of respective years conducted by the Bangladesh Bureau of Statistics.

Table 2
Trends in Production of Cigarettes and Tobacco Crop: 1984/85-1993/94

Year	Cigarettes (Billion Sticks)	Tobacco Crop	
		Crop Area (000 Acres)	Production (000MT)
1984/85	14.39	128	50
1985/86	14.37	132	47
1986/87	14.76	114	40
1987/88	14.03	117	42
1988/89	14.09	113	39
1989/90	13.07	111	38
1990/91	12.65	94	34
1991/92	12.54	91	34
1992/93	11.52	89	36
1993/94	12.03	91	38

a = 1 acre=0.405 hectare.

Source : Bangladesh Bureau of Statistics, *Monthly Statistical Bulletin*, various issues.

Table 3
**Consumer Price Index (...) for Middle Income Group and Retail Prices of Tobacco
 Products in Dhaka City : 1984/85 - 1993/94**

Year	CPI (Middle Income) 1984/85 =100 ^a	Tobacco Leaf (Motihari) Taka/Seer	Bidi (Best Quality) Taka/25 Sticks	Cigarette Brands		
				Capstan	Scissors	Star
				(Tk./Packet of 10 Sticks)		
1984/85	397	39.18	1.76	6.56	4.79	3.40
1985/86	436	33.60	1.96	6.14	5.07	4.17
1986/87	481	42.84	1.98	6.58	5.52	4.77
1987/88	536	46.62	2.00	7.30	6.38	5.49
1988/89	579	48.17	2.54	7.55	6.66	5.60
1989/90	633	55.81	2.99	9.91	7.84	6.97
1980/91	689	51.02	2.57	9.85	7.31	6.91
1991/92	724	60.02	2.80	10.14	8.32	7.08
1992/93	734	60.39	2.67	n.a	9.33	7.38
1993/94	747	57.50	2.61	n.a.	9.99	7.03

^a Converted from the base of 1973/74 = 100

Source: Bangladesh Bureau of Statistics, *Monthly Statistical Bulletin*, various issues.

Table 4
Indicators of Prices of Tobacco Products in Dhaka City Deflated by Consumer Price Index.

Year	CPI (Middle Income)	Tobacco (Motihari)	Cigarette Brands		
			Capstan	Scissors	Star
			(Tk./ Packet of 10 Sticks)		
1984/85	100.00	100.00	100.00	100.00	100.00
1985/86	78.09	101.40	84.84	96.38	111.68
1986/87	90.25	92.58	82.41	95.11	115.79
1987/88	88.13	84.17	82.05	98.65	119.60
1988/89	84.30	98.95	78.55	95.33	112.93
1989/90	89.34	106.55	94.31	102.65	128.57
1990/91	75.03	84.14	86.12	87.93	117.10
1991/92	84.00	87.24	84.37	95.24	114.18
1992/93	83.37	82.05		105.35	117.40
1993/94	78.00	78.81		110.84	109.89

Note: The respective prices are converted to indicates with 1984/85 as base and deflated by the CPI index.

Source: Bangladesh Bureau of Statistics, *Monthly Statistical Bulletin, various issues.*

Table 5
**International Trade in Unmanufactured Tobacco
 In Bangladesh; 1986/87 - 1991/92**

	1980/81	1985/86	1988/89	1980/81	1985/86	1988/89
Import	649	995	1,129	806	677	1,567
Export	302	505	2,089	869	1,185	n.a

Note : Trade in manufactured tobacco products is insignificant.

Source: Bangladesh Bureau of Statistics, *Statistical Yearbook of Bangladesh (various issues)*

REFERENCES

- Aghi, Mira B. (1993): "Tobacco and the Indian Women", in the Proceedings of the Third World Asia-Pacific Conference on Tobacco or Health, organized by Asia Pacific Association for the Control of Tobacco, June 1993, Omiya, Japan.
- Berlin, Isaiah (1969): *Four Essays on Liberty*, Oxford University Press (London and New York).
- Mackay, Judith (1993): "Tobacco Economics in the Third World", in the Proceedings of the Third World Asia-Pacific Conference on Tobacco or Health, organized by Asia Pacific Association for the Control of Tobacco, June 1993, Omiya, Japan.
- Islam, N. and Karim, Z. (1993): "Alternative Farming Options for Tobacco Farmers in Bangladesh", *Tobacco Alert*, January, 1993.
- Mahmud, W., Rahman, S.H. and Zohir, S. (1994): *Agricultural Growth Through Crop Diversification in Bangladesh*, Working Paper, International Food Policy Research Institute (Washington, DC).
- Sen, Amartya, (1989): "Food and Freedom", *World Development*, Vol. 17, No. 6.
- Simon, Herbert (1978): "Rationality as Process and as Product of Thought", *American Economic Review*, 68.

