

I Country-Program Evaluation

Bangladesh

Project Sites

Nationwide

1. Overview

The Japan International Cooperation Agency (JICA) and the Ministry of Foreign Affairs of the Japan formulates country-program assistance strategies in order to allocate and utilize limited aid resources in an efficient and effective manner. Reviewing and evaluating past projects in economic and technical cooperation is highly conducive to improvements in future projects. The same is also true at a macro level. In the search for an effective cycle of reviews and strategy building, country assistance strategies should be designed and redesigned on the basis of findings and lessons drawn from country, as well as sector-wise assistance reviews.

JICA initiated a country-program evaluation study in 1989 by simply building upon a collection of ex-post project evaluations conducted over several representative aid projects chosen from major aid areas. This review method, however, did not verify the relevance and validity of chosen aid schemes and selection of key sectors of cooperation. That is, it did not and could not evaluate the validity of JICA's country-program assistance strategy as a whole. Furthermore, the past studies generally neglected the evaluation of impacts on poverty and gender problems. JICA was, consequently, called upon to develop country-program evaluation methods that would incorporate both verification of assistance policy relevance and analysis of poverty and gender concerns. A distinctive feature of the present country-program evaluation is that it addresses verification and analysis in both these areas, and seeks to link them to proposals for improvement of future assistance strategy regarding Bangladesh.

This evaluation study aimed to present a framework for a country-wise evaluation study by analyzing macro- as well as micro-level economic/social data, and the evolution of aid strategies and key sectors of cooperation by the Bangladeshi government and major donors since its independence. The validity of JICA's aid strategies, as manifested in its allocation of aid projects across the major aid areas, was then evaluated in relation to the priority development issues/areas identified through economic/social data analysis, as well as to the successive development plans of the Bangladeshi government and the aid strategies of the other major donors. On the other hand, standard ex-post project evaluations were also conducted in order to confirm achievements in the field. In summary, this country-program evaluation study was conducted in search of



answers to the following two sequential questions: 1) In what development sectors and modalities should JICA engage in economic and technical cooperation? 2) How should JICA improve its effectiveness in the chosen areas of development cooperation? In each step of the evaluation, the study team tried to incorporate poverty and gender analyses as key areas of impact evaluation.

2. Evaluated Projects

This evaluation evaluates the relevance of JICA cooperation policy regarding all JICA cooperation carried out since the independence of Bangladesh in 1971 and confirms the cooperation impacts of following projects.

(1) Central Extension Resources Development Institute

Agricultural Mechanization Training (FY1973-1975, Project-type technical cooperation)

Agricultural Extension (FY1975-1983, Project-type technical cooperation)

Establishment of Central Extension Resources Development Institute (FY1975-1976, Grant aid)

Dormitory Construction of Central Extension Resources Development Institute (FY1981, Grant aid)

(2) Model Rural Development Project

Model Rural Development (FY1987-1989, Development study)

Model Rural Development (FY1991-1994, Grant aid)

Agricultural Development (FY1993-2000, Individual experts)

Model Rural Development (FY1993-2000, JOCVs)

(3) Improvement of Water Supply System in New District Towns (FY1984-1988, Grant aid)

(4) Agriculture Training Center for Women (FY1985, Grant aid)

(5) Meghua and Meghua-gumti Bridge Construction

Meghua and Meghua-gumti Bridge Construction (FY1983-1984, Development study)

Meghua and Meghua-gumti River Bridge Design (FY1984, Grant aid (detail design))

Meghua and Meghua-gumti Bridge Construction (FY1986-1990, Grant aid)
 Meghua and Meghua-gumti Bridge Construction (FY1990-1995, Grant aid)
 Meghua and Meghua-gumti River Shore Protection Measures (FY1992, Grant aid)

(6) Storm and Water Drainage System Improvement in Dhaka

Storm and Water Drainage System Improvement in Dhaka (FY1985-1987, Development study)
 Storm and Water Drainage System Improvement in Dhaka (FY1989-1992, Grant aid)

(7) Construction and Rehabilitation of the Sewerage (FY1987-1990, Grant aid)

(8) Construction of Multipurpose Cyclone Shelter

Construction of Multipurpose Cyclone Shelter Phase I (FY1993, Grant aid)
 Construction of Multipurpose Cyclone Shelter Phase II (FY1994, Grant aid)
 Construction of Multipurpose Cyclone Shelter Phase III (FY1995, Grant aid)

3. Members of Evaluation Team and Period of Evaluation

(1) Preliminary Study (12 December 1998-22 December 1998)

Team Leader:

Dr. Shigeru OTSUBO, Associate Professor, Graduate School of International Development, Nagoya University

Sub-Team Leader/Evaluation Planning:

Mr. Naoto OKAWA, Deputy Director, the Office of Evaluation and Post-Project Monitoring, JICA

Poverty/Gender:

Ms. Keiko IKEDA, Former JICA Expert (currently Lecturer, Faculty of Education, Shizuoka University)

(2) Full-Scale Study (27 February 1999-24 March 1999)

Team Leader:

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Development Planning:

Dr. Kunio TAKASE, Executive Director, International Development Center of Japan

Agriculture Sector:

Mr. Isao DOJUN, Chuo Kaihatsu Corporation

Social Sector:

Ms. Kimiko ABE, International Development Center of Japan

Industrial Sector:

Mr. Yukihiko TERADA, International Development Center of Japan

Disaster/Environment Sector:

Mr. Junji KAMATA, CTI Engineering Co., Ltd.

(3) Evaluation Seminar (1-5 February 2000)

Team Leader:

Dr. Shigeru OTSUBO, Associate Professor, Graduate School of International Development, Nagoya University

Sub-Team Leader/Evaluation Planning:

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4. Evolution and Current State of Development (Macro Socioeconomic Analysis)

(1) Overview of Development in Bangladesh

Since attaining independence in 1971, Bangladesh has been committed to national development in the search for economic self-reliance and poverty eradication, in spite of numerous adverse conditions. The country is densely populated, not endowed with natural resources, and is subjected to repeated floods, cyclones, and other natural disasters that cause considerable socio-economic loss.

The economic development of Bangladesh in the 1970s and 1980s was characterized by the monopolistic position of the public sector in economic activities and the country's high dependence on external assistance. This is similar to the development history of many developing countries after their post-World War II independence. High tariff and non-tariff barriers were established to protect the profits of domestic state-owned enterprises (SOEs). The country adopted the import-substitution industrialization strategy, an inward-looking strategy adopted by most developing countries in that era, with the exception of some newly industrializing economies in East Asia.

In the 1980s, Bangladesh's current account deficit accounted for more than 9% of GDP on average, thus reaching the danger zone. The balance of payments has constantly been a weak point for Bangladesh in its development efforts. The great flood of 1988 resulted in higher governmental disaster management expenditures, damage to agricultural products, a decline in tax revenues due to the shrinkage of economic activity due to traffic shutdown, and a rise in cereal and other food imports, all of which together aggravated the balance of payments. This prompted the Bangladeshi government to address economic stabilization, liberalization, and other structural adjustment efforts with the support of the IMF and the World Bank. Between 1989 and 1994, the country advanced at an eye-catching rate in both economic stabilization and liberalization. This resulted in an improved balance of payments and the strongest foreign currency reserves since gaining independence. The inflation rate was also at its lowest level since independence. Most importantly, domestic savings showed signs of increase.

(2) Evolution and Current State of Economic Development

This section mainly uses macro-economic indicators based on the Bangladeshi development overview in Section (1) to present the changes and actual conditions of Bangladesh's

economic development to provide a broader grasp of the development issues involved.

Table 1 summarizes the changes in the average economic growth rate and per capita income increase rate for the past two decades, their recent trends, and the World Bank's growth projections for the five years to come. World Bank statistics indicate that the average GDP growth rates for 1977-87 and 1988-98 were 5.0% and 4.7%, while per capita GNP growth rates were 2.6% and 3.1%. These rates must be considered allowing for the fact that they were the growth from a level when economic activity was of a small absolute size. These

growth rates can safely be called fairly good for numbers achieved under the poor conditions after independence which included nationalization, inefficient management of firms, private sector stagnation, lack of infrastructural development, political instability, small private foreign capital, and an undeveloped domestic financial sector.

Table 2 compares Bangladesh's economic growth accomplishments with the average indicators of South Asia and other developing countries. It should be noted that in spite of the abovementioned development results, the economic living standard represented by Bangladesh's per capita income of

Table 1 Major economic indicators (1): Economic growth rate, per capita income growth rate

(percent average annual growth)

| | 1977-87 | 1988-98 | 1997 | 1998 | 1999-2003* |
|-------------------------------|---------|---------|------|------|------------|
| GDP | 5.0 | 4.7 | 5.4 | 5.0 | 5.5 |
| GNP | 5.2 | 4.8 | 5.5 | 5.9 | |
| Population | 2.5 | 1.7 | 1.6 | 1.6 | |
| GNP per capita | 2.6 | 3.1 | 3.8 | 4.2 | 3.9 |
| Exports of goods and services | 4.9 | 14.4 | 14.5 | 14.3 | 9.3 |

Note: *Projections from World Bank *Global Economic Prospects*.

Source: Compiled from *World Bank At-a-Glance Table* (September 1999) and *World Development Indicators* (1999)

Table 2 Major economic indicators (2): Comparison of Bangladesh with South Asia and low-income countries

| | Bangladesh | South Asia Average | Low-Income Average |
|---------------------------------|------------|--------------------|--------------------|
| 1998 | | | |
| Population, mid-year (millions) | 125.6 | 1,305* | 3,515* |
| GNP per capita (WB Atlas, US\$) | 350 | 430 | 520 |
| GNP (WB Atlas, US\$ billions) | 44.0 | 555* | 1,844* |
| Average growth (1992-98) | | | |
| Population (%) | 1.6 | 1.8 | 1.7 |
| Labor force (%) | 2.9 | 2.3 | 1.9 |

Note: *Group total.

Source: Excerpt from World Bank *At-a-Glance Table* (September 1999).

Table 3 Major economic indicators (3): Economic structure (GDP share, growth rate, and number of employees of different sectors)

| | 1977 | 1987 | 1997 | 1998 |
|---------------------------------|-------------|--------------|-------------|--------------|
| (% of GDP) | | | | |
| Agriculture | 37.5 | 31.3 | 23.1 | 22.4 |
| Industry | 25.0 | 22.2 | 27.1 | 28.2 |
| Manufacturing | 18.5 | 15.2 | 17.3 | 18.3 |
| Services | 37.5 | 46.5 | 49.8 | 49.4 |
| | 1977-87 | 1988-98 | 1997 | 1998 |
| (percent average annual growth) | | | | |
| Agriculture | 3.6 | 2.6 | 6.1 | 3.0 |
| Industry | 4.3 | 6.9 | 5.6 | 8.3 |
| Manufacturing | 2.9 | 7.0 | 6.2 | 9.2 |
| Services | 6.4 | 4.7 | 4.8 | 4.2 |
| GDP | 5.0 | 4.7 | 5.4 | 5.0 |
| | Census 1974 | | LFS 1995-96 | |
| (number of employed, thousand) | | (% of total) | | (% of total) |
| Agriculture | 16,839 | 78.7 | 34,530 | 63.2 |
| Industry | 1,072 | 5.0 | 5,226 | 9.6 |
| Manufacturing | 1,026 | 4.8 | 4,085 | 7.5 |
| Service | 3,496 | 16.3 | 14,847 | 27.2 |

Source: Compiled from *World Bank At-a-Glance Table* (September 1999), *Labor Force Survey* 1985-86, *Labor Force Survey* 1995-96, BBS.

US\$350 is still low. In addition, the labor force is rising greatly due to the population composition and the participation of women in the labor market, even though population growth control has proved somewhat effective. An average annual economic growth rate of about 7% is considered necessary to absorb the labor force.

Table 3 presents changes in Bangladesh's economic structure. Agriculture, which has shrunk to as little as a quarter of GDP in terms of production, still hires nearly two-thirds of the labor force. This suggests how important agriculture is in the fight against poverty. The fact that there is no longer much room to expand agricultural lands, together with the fact that the food gap is still about 10%, makes one conclude that continued agricultural productivity improvement is essential.

Table 4 shows the status of the labor force in Bangladesh. An examination of the status of the poorly paid for those who work no more than 35 hours a week shows that the national average is 34.6%, with the rate for men 12.4% and that for women 70.7%. In rural areas, where women workers are concentrated, three-quarters of women workers are poorly paid and face difficult times. This, together with the poorly paid rate of 38% in rural areas, endorses the spread of poverty in rural areas in economic terms. The cultivation of rural industries and other measures to create jobs for people in rural areas is indispensable. In cities, too, providing motivated women with jobs is one of the most important issues to be resolved in order

to control the waste of economic resources for building the nation.

Table 5 shows the changes that have taken place in Bangladesh's major import and export items since the country began achieving higher export growth in the 1990s. Jute and jute products which used to account for 60% of total exports have declined significantly. Instead, exports in the 1990s have been led by ready-made garments, which account for 60% of total exports, along with leather products, prawns and other frozen foods. The share of these four items now make up 80-90% of total exports. Expectations run high for the diversification of export items now that the export market is projected to become much more competitive due to the lapsing of the Multi-Fiber Arrangement (MFA). Bangladesh urgently needs to diversify its manufacturing exports, and introduce private direct investment from abroad.

Table 6 shows the changes and recent state of the balance of payments and the resource balance of the Bangladeshi economy, along with the expenditure structure that forms the basis of them. The domestic gross investment ratio (relative to GDP) rose from 17% in 1977, to 19% in 1987, and has risen further to about 22% in recent years. The domestic savings that should be supporting that ratio has shown only a modest rise in ratio to GDP: from 11.5% in 1977 to 10.4% in 1987, and then to 15% to 17% in recent years. The resource balance (in ratio to GDP) expanded from

Table 4 Major economic indicators (4): Unemployment and Underemployment

| | National | | | Urban Areas | | | Rural Areas | | |
|---------------------------|----------|------|-------|-------------|------|-------|-------------|------|-------|
| | All | Men | Women | All | Men | Women | All | Men | Women |
| Population (million) | | | | | | | | | |
| 1. Labor force | 56.0 | 34.7 | 21.3 | 10.2 | 7.4 | 2.8 | 45.8 | 27.3 | 18.5 |
| 2. Unemployed | 1.4 | 0.9 | 0.5 | 0.5 | 0.3 | 0.1 | 1.0 | 0.6 | 0.4 |
| 3. Employed = (1) - (2) | 54.6 | 33.8 | 20.8 | 9.7 | 7.0 | 2.7 | 44.8 | 26.7 | 18.1 |
| 4. Work < 15 hours | 7.8 | 1.5 | 6.3 | 0.7 | 0.1 | 0.6 | 7.1 | 1.4 | 5.7 |
| 5. Work < 35 hours | 18.9 | 4.2 | 14.7 | 1.9 | 0.7 | 1.2 | 17.0 | 3.5 | 13.5 |
| Employment rate (%) | | | | | | | | | |
| Unemployment (2) / (1) | 2.5 | 2.6 | 2.3 | 4.9 | 4.1 | 3.6 | 2.2 | 2.2 | 2.2 |
| [(2) + (3)] / (1) | 16.5 | 7.1 | 31.7 | 11.3 | 6.2 | 24.5 | 17.6 | 7.4 | 32.8 |
| Underemployment (5) / (4) | 34.6 | 12.4 | 70.7 | 19.6 | 10.0 | 44.4 | 37.9 | 13.1 | 74.6 |

Note: Figures Numbers may not add up due to rounding.

Source: *Bangladesh Poverty Assessment* 1998, World Bank, 1998, Annex Table A3.5, [compiled from *Labor Force Survey* 1995-96, BBS, Tables 5.6 and 5.7].

Table 5 Major economic indicators (5): Major export/import items

(Tk billion, FOB)

| | 1992/93 | 1993/94 | 1994/95 | 1995/96 | 1996/97 |
|--|---------|---------|---------|---------|---------|
| Exports | 88.0 | 98.0 | 131.3 | 138.5 | 165.7 |
| Ready-made garments | 48.0 | 56.5 | 74.4 | 82.0 | 98.9 |
| Jute goods | 10.5 | 9.6 | 13.7 | 12.4 | 13.3 |
| Fish & prawns | 7.9 | 10.1 | 13.2 | 13.1 | 14.0 |
| Leather | 5.9 | 6.3 | 8.8 | 9.0 | 9.0 |
| Imports | 159.3 | 167.7 | 234.6 | 271.4 | 303.0 |
| Yarn, fabric etc. for garment industry | 36.3 | 40.3 | 53.1 | 64.0 | 74.0 |
| Machinery & transport equipment | 14.4 | 16.9 | 29.1 | 39.6 | 40.9 |
| Petroleum & petroleum products | 13.8 | 11.4 | 15.4 | 13.1 | 16.0 |
| Chemicals | 7.3 | 9.2 | 13.8 | 15.2 | 21.0 |
| Iron & Steel | 4.2 | 5.2 | 8.3 | 7.5 | 18.6 |
| Food | 5.0 | 3.0 | 12.0 | 22.6 | 4.2 |

Source: *Economic Trends*, Bangladesh Bank.

Table 6 Major economic indicators (6): Economic structure (expenditure structure, resource balance and balance of payments)

| | 1977 | 1987 | 1997 | 1998 |
|---|---------|---------|--------|--------|
| BOP (US\$ millions) | | | | |
| GDP | 9,500 | 23,800 | 41,000 | 42,300 |
| Exports of goods and services | 464 | 1,301 | 5,083 | 5,879 |
| Imports of goods and services | 932 | 2,876 | 7,655 | 8,049 |
| Resource balance | -469 | -1,576 | -2,572 | -2,170 |
| Net income | -31 | -122 | -107 | -100 |
| Net current transfers | 325 | 731 | 1,770 | 1,750 |
| Current account balance | -174 | -966 | -906 | -520 |
| Financing items (net) | 305 | 1,169 | 589 | 651 |
| Change in net reserves | -130 | -203 | 320 | -131 |
| Reserves including gold | | | 1,719 | 1,739 |
| (number of import months) | | | 2.7 | 2.6 |
| Resource Balance (% ratio to GDP) | | | | |
| 1. Private consumption | 87.0 | 86.4 | 80.1 | 78.3 |
| 2. General government consumption | 1.4 | 3.2 | 4.6 | 4.4 |
| 3. Gross domestic savings = GDP 100 - (1) - (2) | 11.5 | 10.4 | 15.3 | 17.3 |
| 4. Gross national savings | 11.8 | 12.6 | 19.4 | 21.2 |
| 5. Gross domestic investment | 17.0 | 19.0 | 21.6 | 22.4 |
| 6. Exports of goods and services | 5.2 | 5.5 | 12.4 | 13.9 |
| 7. Imports of goods and services | 10.7 | 14.1 | 18.7 | 19.0 |
| 8. Resources balance = (6) - (7) = (3) - (5) | -5.5 | -8.6 | -6.3 | -5.1 |
| 9. Current account balance | -1.8 | -4.1 | -2.2 | -1.2 |
| | 1977-87 | 1988-98 | 1997 | 1998 |
| (percent average annual growth) | | | | |
| GDP | 5.0 | 4.7 | 5.4 | 5.0 |
| Private consumption | 5.3 | 4.4 | 2.4 | 1.6 |
| General government consumption | 5.3 | 5.9 | 6.0 | -0.3 |
| Gross domestic investment | 4.4 | 6.0 | 10.0 | 11.2 |
| Exports of goods and services | 4.9 | 14.4 | 14.5 | 14.3 |
| Imports of goods and services | 6.6 | 10.5 | 2.0 | 0.6 |

Source: Compiled from *World Bank At-a-Glance Table* (September 1999).

Table 7 Major economic indicators (7): Fiscal structure, development budget, and deficit of state-owned enterprises

| | 1985-90 | 1990/91 | 1991/92 | 1992/93 | 1993/94 | 1994/95 | 1995/96 | 1996/97 ^a |
|---------------------------------------|---------|---------|---------|---------|---------|------------------|------------------|----------------------|
| (% of GDP) | | | | | | | | |
| Overall fiscal deficit | -7.4 | -7.2 | -5.9 | -5.9 | -6.0 | -6.8 | -5.7 | -5.4 |
| Total revenue | 8.8 | 9.6 | 10.9 | 12.0 | 12.2 | 12.1 | 11.5 | 11.8 |
| Tax revenue | | 7.8 | 8.8 | 9.6 | 9.3 | 9.6 | 9.2 | 9.5 |
| Non-Tax revenue | | 1.8 | 2.1 | 2.4 | 2.8 | 2.6 | 2.3 | 2.3 |
| Total public expenditure ^b | 16.3 | 16.8 | 16.8 | 17.8 | 18.1 | 18.9 | 17.1 | 17.4 |
| Revenue expenditure (Current) | 7.9 | 8.7 | 8.3 | 8.9 | 8.9 | 8.8 | 8.7 | 8.8 |
| Social sectors (% of Current) | | 22.6 | 24.0 | 27.0 | 27.1 | 27.4 | 25.6 | 26.0 |
| Development expenditure (ADP) | 7.1 | 6.2 | 6.3 | 7.1 | 8.4 | 8.6 | 7.4 | 7.7 |
| Social sectors (% of ADP) | | 17.4 | 17.9 | 22.4 | 24.4 | 31.0 | 29.1 | 34.5 |
| Net foreign financing | 7.0 | 6.2 | 4.9 | 5.6 | 4.9 | 4.9 | 3.6 | 3.6 |
| Net domestic financing | 0.4 | 1.0 | 1.0 | 0.3 | 1.1 | 1.9 | 2.1 | 1.5 |
| Gross losses of SOEs | 1.1 | 2.1 | 1.9 | 1.1 | 0.8 | NA | NA | NA |
| Net losses of SOEs | 0.8 | 1.8 | 1.6 | 0.7 | 0.6 | 0.6 ^c | 0.2 ^c | NA |
| Domestic resources (% of ADP) | | | 25.0 | 26.2 | 35.8 | 43.0 | 42.3 | 49.0 |
| Foreign resources (% of ADP) | | | 75.0 | 73.8 | 64.2 | 57.0 | 57.7 | 51.0 |

Note: Numbers may not add up due to rounding.

a. Estimated outcome.

b. Also includes food account deficits, other capital expenditures and net lending, and residuals in fiscal accounts.

c. Crude estimates.

Source: Bangladesh: Compiled from Bangladesh: *Economic Trends and the Policy Agenda*, World Bank and ADB (May 1998), Table 13, *Bangladesh Economic Review 1997*, Ministry of Finance (Govt. of Bangladesh).

Table 8 Major economic indicators (8): External debts and resource flows

(US\$ millions)

| | 1977 | 1987 | 1997 | 1998 |
|--------------------------------------|------------|------------|------------|---------------------------------|
| Total debt outstanding and disbursed | 2,518 | 10,149 | 15,125 | 16,354 |
| % of GDP | 26.4 | 42.7 | 36.9 | 38.7 |
| Total debt service | 148 | 547 | 705 | 686 |
| Ratio to exports (%) | 27.8 | 28.0 | 10.6 | 9.3 |
| Composition of net resource flows | | | | |
| Official grants | 0 | 662 | 736 | 589 |
| Official creditors | 274 | 774 | 326 | 265 |
| Private creditors | -1 | 1 | -28 | -23 |
| Foreign investment | 0 | 2 | -116 | 252 |
| 1997 | Bangladesh | South Asia | Low Income | Severely Indebted Low Income |
| Total debt/GNP (%) | 35.1 | 26.2 | 47.6 | 73.6 |
| Debt service/export earnings (%) | 10.6 | 20.3 | 16.9 | 13.2 |
| Concessional debt/Total debt (%) | 95.2 | 49.5 | 44.9 | 39.6 |
| Short-term debt/Total debt (%) | 1.2 | 5.3 | 10.8 | 14.6 |

Source: Compiled from *World Bank At-a-Glance Table* (September, 1999), *Global Development Finance 1999* (GDF), World Bank.

-5.5% in 1977 to -8.6% in 1987. Later, the balance deficit shrunk to about 5% due to the Government's efforts to improve the fiscal current account and the growth in private savings due to the rise in the ready-made garments industry. Public foreign assistance has financed the majority of the resource balance deficits throughout the history of Bangladesh's development. In view of the recent fiscal consolidation on the part of the developed economies, however, prospects are low for the further presence of public foreign assistance. It is now imperative to mobilize domestic savings and take in private foreign capital. The elimination of poverty is considered to require high sustained growth at an annual rate of more than 7%. In fact, the continued growth of an economy requires a minimum investment rate of over 30%. It is desirable to increase the domestic savings ratio to about 25% and to finance the remaining deficiency with private long-term foreign capital. One must remove the factors that foreign investors loathe one by one, such as: (1) the prolonged limitations on private sector growth since independence; (2) the lack of direct and indirect finance both in quantity and quality for the private sector; (3) the prolonged immaturity of the industrial infrastructure and (4) the high frequency of *hartals* (general strikes) and other labor conflicts.

The privatization of state-run firms and other reforms are advocated by the Government and are pending matters considered by the World Bank, Asian Development Bank, and other major donors as conditions for continued assistance. Table 7 indicates that the gross losses of inefficient state-run firms reached 2.1% of the GDP in the early 1990s. As a result of partial privatization, the losses are on a downward trend, thus going in a desirable direction. A great delay is still seen in private sector advancement in national telecommunications, transportation, power generation, other important infrastructural sectors, and the primary resource basis through the development of high potential natural gases. Hopes run high for more active introduction of foreign capital in view of expertise and required large fixed investments. One should understand that the introduction of foreign capital is a policy direction followed by China, the Philippines, and other East and Southeast Asian nations. Resources saved through such processes can be invested

intensively in social sector development enabling compatibility of economic growth with poverty reduction. Furthermore, since introducing foreign capital is also effective in reducing the dependence of the development budget on foreign assistance directly and indirectly, foreign capital will help the nation achieve a domestic procurement rate of more than 60% of the development budget, one of the country's targets raised in the Fifth National Development Plan.

Table 8 summarizes the status of Bangladesh's external debts. These statistics indicate that Bangladesh's ratio of total outstanding debts to the GNP of 35% is higher than South Asia's average, but much lower than the developing countries' average of 47.6, and less than half of that of heavily indebted countries. Similarly, the country's ratio of debt services to export earnings is relatively low. It is also notable that most of Bangladesh's external debts are an accumulation of concessionary aids (95.2%), with short-term debts accounting for an extremely small percentage (1.2%). Therefore, although the dependence on external assistance is high, no debt problem has occurred. Instability is expected to rise in the future given the country's fragile economic foundation as Bangladesh becomes more dependent on private capital instead of concessionary assistance from foreign countries. If the Government avoids short-term private funds and introduces foreign capital, however, mainly in the form of direct investment while still depending on the continuance of concessionary assistance, then Bangladesh will be able to enjoy stable growth.

(3) Evolution and Current State of Social Development

Based on the overview of Bangladesh's development in Section (1) and the evolution and current state of economic development in Section (2), this section will present how the country's economic growth since independence has contribute to the country's social development. The section will then explore how the fruits of growth have been distributed among various social groups (such as gender, urban and rural groups), analyze the progress of the fight against poverty and human development, and monitor developmental issues.

Table 9 summarizes changes in the population and life

Table 9 Major social indicators (1): Population/life statistics, education, employment, etc.

| | 1972 | 1980 | 1990 | 1997 |
|---|-------------------|-------------------|-------------------|--------------------|
| Fertility rate (birth per woman) | 7.0 | 6.1 | 4.1 | 3.2 |
| Infant mortality rate (per 1,000 live birth) | 140.0 | 131.6 | 90.6 | 75.0 |
| Life expectancy at birth (years) | 44.9 | 48.5 | 54.7 | 58.1 |
| Male | 45.6 | 48.9 | 54.6 | 58.1 |
| Female | 44.1 | 48.0 | 54.8 | 58.2 |
| Adult illiteracy rate | 73.1 ^a | 70.7 | 65.3 | 61.1 |
| Male (% of males aged 15 and above) | 61.6 ^a | 59.0 | 54.0 | 50.1 |
| Female (% of females aged 15 and above) | 85.6 ^a | 83.1 | 77.0 | 72.6 |
| Malnutrition prevalence | | | | |
| Height for age (% of children under 5) | | 67.7 ^b | 64.6 | 54.6 |
| Weight for age (% of children under 5) | | 68.0 ^b | 65.8 | 56.3 |
| Safe water (% of population with access) | 56.0 ^a | 40.0 ^c | 84.2 ^d | |
| Rural areas | 61.0 ^a | 43.0 ^c | 85.0 ^d | 96.0 ^e |
| Sanitation (% of population with access) | | 4.0 ^c | 34.5 ^d | |
| Rural areas | | 2.0 ^c | 33.0 ^d | 36.0 ^e |
| Primary school enrollment (% gross) | 73.0 ^a | 61.0 | 72.0 | 102.0 ^f |
| Male | 95.0 ^a | 75.0 | 66.0 | 103.0 ^f |
| Female | 51.0 ^a | 46.0 | 77.0 | 102.0 ^f |
| Secondary school enrollment (% gross) | 26.0 ^a | 18.0 | 19.0 | |
| Male | 40.0 ^a | 26.0 | 25.0 | |
| Female | 11.0 ^a | 9.0 | 13.0 | |
| Urbanization (urban/total population) | 8.3 | 11.3 | 15.7 | 19.5 |
| (% average annual growth rate) | 1971-80 | 1981-90 | | 1991-98 |
| Population growth | 2.6 | 2.4 | | 1.6 |
| Urban population growth | 6.6 | 5.7 | | 4.7 |
| (% rate of underemployment) (See Table 4) | | | | 1995/96 |
| Unemployed or with less than 15 hours of work | | | | 16.5 |
| Male (% of male labor force) | | | | 7.1 |
| Female (% of female labor force) | | | | 31.7 |
| Employed but with less than 35 hours of work | | | | 34.6 |
| Male (% of male labor force) | | | | 12.4 |
| Female (% of female labor force) | | | | 70.7 |

Note: a. 1975 data; b. 1983 data; c. 1985 data; d. 1993 data; e. 1995 data; f. 1995-96 HES data.

Source: Compiled from *World Development Indicators 1999*, *Household Expenditure Survey 1995-96*, BBS, *Labor Force Survey 1995-96*, BBS.

Table 10 Major social indicators (2): Comparison of Bangladesh with South Asia and low-income countries

| | Bangladesh | South Asia (Average) | Low-Income Countries (Average) |
|---|------------------|----------------------|--------------------------------|
| Most recent estimate (latest year available, 1992-98) | | | |
| Population growth (% average for 1992-98) | 1.6 | 1.8 | 1.7 |
| Labor force growth (% average for 1992-98) | 2.9 | 2.3 | 1.9 |
| Urban population (% of total population) | 20 | 27 | 31 |
| Life expectancy at birth (years) | 58 | 62 | 63 |
| Infant mortality (per 1000 live birth) | 75 | 77 | 69 |
| Child malnutrition (% of children under 5) | 56 | 53 | |
| Access to safe water (% of population) | 84 | 81 | 74 |
| Illiteracy (% of population age 15+) | 61 | 49 | 32 |
| Gross primary enrollment (% of school-age population) | 73 ^a | India 98 | 101 |
| | 102 ^b | Nepal 86 | |
| | | Pakistan 46 | |
| | | Sri Lanka 108 | |

Note: a. *World Bank Education Expenditure Review* (July 1996). b. *Household Expenditure Survey 1995-96*, BBS, 1997.

Source: *World Bank At-a-Glance Table* (September, 1999), *World Bank Education Expenditure Review*, 1996, *Household Expenditure Survey 1995-96*, BBS.

Table 11 Major social indicators (3): Poverty rate (head-count ratio)

| Survey Year | (Number & Percent of Population Below Poverty Line Indicated) | | | | | |
|---|---|-----------------|----------------|-----------------|----------------|-----------------|
| | National | | Rural Areas | | Urban Areas | |
| | No. in million | % of population | No. in million | % of population | No. in million | % of population |
| Direct Calorie Intake Method Poverty Line 1: Absolute Poverty 2,122 K. Cal./Person/Day | | | | | | |
| 1995-96 | 55.3 | 47.5 | 45.7 | 47.1 | 9.6 | 49.7 |
| 1991-92 | 51.6 | 47.5 | 44.8 | 47.6 | 6.8 | 46.7 |
| 1988-89 | 49.7 | 47.8 | 43.4 | 47.8 | 6.3 | 47.6 |
| 1985-86* | 55.3 | 55.7 | 47.4 | 54.7 | 7.9 | 62.6 |
| 1983-84* | 58.4 | 62.6 | 51.1 | 61.9 | 7.3 | 67.7 |
| Direct Calorie Intake Method Poverty Line 2: Hard-core Poverty 1,805 K. Cal./Person/Day | | | | | | |
| 1995-96 | 29.1 | 25.1 | 23.9 | 24.6 | 5.2 | 27.3 |
| 1991-92 | 30.4 | 28.0 | 26.6 | 28.3 | 3.8 | 26.3 |
| 1988-89 | 29.5 | 28.4 | 26.0 | 28.6 | 3.5 | 26.4 |
| 1985-86* | 26.7 | 26.9 | 22.8 | 26.3 | 3.9 | 30.7 |
| 1983-84* | 34.3 | 36.8 | 30.2 | 36.7 | 4.8 | 37.4 |
| Cost-of-Basic-Needs (CBN) Method Poverty Line 1: The Lower Poverty Line, Very Poor | | | | | | |
| 1995-96 | | 35.6 | | 39.8 | | 14.3 |
| 1991-92 | | 42.7 | | 46.0 | | 23.3 |
| 1988-89 | | 41.3 | | 44.3 | | 22.0 |
| 1985-86 | | 33.8 | | 36.0 | | 19.9 |
| 1983-84 | | 40.9 | | 42.6 | | 28.0 |
| Cost-of-Basic-Needs (CBN) Method Poverty Line 2: The Upper Poverty Line, Poor | | | | | | |
| 1995-96 | | 53.1 | | 56.7 | | 35.0 |
| 1991-92 | | 58.8 | | 61.2 | | 44.9 |
| 1988-89 | | 57.1 | | 59.2 | | 43.9 |
| 1985-86 | | 51.7 | | 53.1 | | 42.9 |
| 1983-84 | | 58.5 | | 59.6 | | 50.2 |

Note: Poverty lines for absolute and hard-core poverty in 1983-84 and 1985-86 were estimated based on 2,200 and 1,800 Kcals respectively.

Source: *Household Expenditure Survey* 1991-92, 1995-96, BBS, *1998 Bangladesh Poverty Assessment*, World Bank.

statistics, illiteracy rate, school enrollment, access to safe water and sanitation, and urbanization since Bangladesh became independent. The enhancement of per capita income with limited resources absolutely requires the control of population growth. As a result of the conscious allocation of foreign assistance and an important portion of the national budget to family planning, the total fertility rate went down from 7.0 in 1972 to 3.2 in 1997. Consequently, the population growth rate declined from 2.6% on the annual average in the 1970s to 1.6% in the 1990s. The infant mortality rate about halved from 140 in 1972 to 75 in 1997, while life expectancy at birth went up from 45 years in the first days of independence to 58 years in 1997. The adult illiteracy rate improved from 735 in the first days of independence to 61%. School enrollment statistics reported by the World Bank reveal no rise in primary and secondary enrollment, but a recent Household Expenditure Survey of 1995-96 indicates that primary schooling has spread to most of the population. Primary schooling became compulsory in 1990, with textbooks free of charge.

A close look at the gender gap reveals an eye-catching rise in the enrollment of female students in primary schools, but seems to have a little longer way to go until that results is reflected in the decline of female adult illiteracy. While some of these basic life statistics are eye-catching, the prevalence of infant malnutrition of more than 50% still needs improvement. As presented in the preceding section, the low employment of workers is serious, with low employment and low utilization

rates of women being particularly conspicuous. Job opportunities are a social right. Furthermore, monetary earnings presumably produce economic effects and enhances women's position in a socio-economic context. Serious efforts are thus called for in order to improve female employment.

Table 10 attempts to compare recent social indicators for Bangladesh with averages from other Southwest Asian and low-income countries. As previously mentioned, the rate of population growth is being suppressed in Bangladesh and is lower than that of other Southwest Asian and low-income countries, but because the growth rate of the labor force is accelerating with the change in population makeup and the progress made in women's social participation, the continual expansion of employment opportunities will be an important issue both economically and in terms of contributions to social rights. In addition, based on a comparison of social indicators, it has become clear that because the pace of urbanization in Bangladesh is comparatively slow, agricultural development continues to be highly emphasized in socioeconomic policies, and that policies aiming to improve the adult literacy rate by enhancing elementary education will be necessary. In the future, before the number of urban poor increases even further as a result of urbanization, it will be crucial to improve the literacy rate of the urban poor and increase their access to employment. Additionally, adult literacy education in rural areas is one of the most important issues in rural development.

Table 11 shows changes in the incidence of poverty since

Table 12 Major social indicators (4): Inequality-income distribution (Gini coefficient)

| | 1983-84 | 1985-86 | 1988-89 | 1991-92 | 1995-96 |
|----------|---------|---------|---------|---------|---------|
| National | 0.360 | 0.370 | 0.379 | 0.388 | 0.432 |
| Urban | 0.370 | 0.370 | 0.381 | 0.398 | 0.444 |
| Rural | 0.350 | 0.360 | 0.368 | 0.364 | 0.384 |

Source: *Household Expenditure Survey* 1991-92, 1995-96, BBS.

Table 13 Major social indicators (5): Inequality-regional gaps (1995-96)

| Division | Very poor (CBN method lower poverty lines) | | | | | Poor (CBN method upper poverty lines) | | | | |
|-------------------|--|------------|-------|--------|----------|---------------------------------------|------------|-------|--------|----------|
| | Barisal | Chittagong | Dhaka | Khulna | Rajshahi | Barisal | Chittagong | Dhaka | Khulna | Rajshahi |
| Headcount | | | | | | | | | | |
| Division | 43.9 | 32.4 | 33.0 | 32.2 | 41.6 | 59.9 | 44.9 | 52.0 | 51.7 | 62.2 |
| Rural | 44.8 | 35.3 | 41.5 | 33.2 | 44.4 | 60.6 | 47.2 | 58.9 | 51.5 | 65.7 |
| Urban | 28.9 | 12.1 | 10.8 | 25.8 | 19.2 | 47.7 | 29.2 | 33.6 | 53.3 | 33.9 |
| National | | | 35.6 | | | | | 53.1 | | |
| Rural | | | 39.8 | | | | | 56.7 | | |
| Urban | | | 14.8 | | | | | 35.0 | | |
| Share of the poor | | | | | | | | | | |
| Division | 8.6 | 23.8 | 28.8 | 10.9 | 27.9 | 7.9 | 22.2 | 30.3 | 11.7 | 27.9 |
| Rural | 8.3 | 22.7 | 26.2 | 9.7 | 26.4 | 7.5 | 20.3 | 24.9 | 10.1 | 26.2 |
| Urban | 0.3 | 1.1 | 2.6 | 1.2 | 1.4 | 0.4 | 1.8 | 5.4 | 1.6 | 1.7 |
| National | | | 100.0 | | | | | 100.0 | | |
| Rural | | | 93.3 | | | | | 89.0 | | |
| Urban | | | 6.7 | | | | | 11.0 | | |

Source: *Household Expenditure Survey* 1995-96, BBS.

Table 14 Major social indicators (6): Inequality-gender, literacy, education and land ownership

| Characteristic of Head of Household | (Percentage of Population below Poverty Line Indicated) | | | | | |
|--|---|--------|-------|--------|-------|--------|
| | National | | Rural | | Urban | |
| 1. Using the CBN Method Lower Poverty Line | | | | | | |
| National | 35.6 | | 39.8 | | 14.3 | |
| Gender of Head | | | | | | |
| Male | 35.3 | | 39.4 | | 14.4 | |
| Female | 38.8 | | 45.3 | | 13.7 | |
| Literacy Status | | | | | | |
| Illiterate | 47.3 | | 49.3 | | 29.0 | |
| Literate | 19.8 | | 24.3 | | 6.9 | |
| Education Level | | | | | | |
| No education | 48.0 | | 50.1 | | 29.0 | |
| Completed class I-IV | 30.6 | | 33.0 | | 16.2 | |
| Completed class V-IX | 22.7 | | 25.8 | | 10.7 | |
| Completed SSC+ | 6.9 | | 11.0 | | 1.7 | |
| Size of Land Holding (acres) | (#s in the parentheses are the percent distribution of household) | | | | | |
| Landless | 39.9 | (10.0) | 57.9 | (6.4) | 19.4 | (28.0) |
| 0.01 - 0.04 | 50.5 | (14.1) | 63.1 | (12.3) | 22.1 | (22.8) |
| 0.05 - 0.49 | 47.0 | (35.2) | 53.1 | (36.5) | 13.2 | (28.7) |
| 0.50 - 1.49 | 30.9 | (19.0) | 33.5 | (20.8) | 4.5 | (10.0) |
| 1.50 - 2.49 | 21.4 | (8.9) | 22.9 | (9.8) | 3.6 | (4.0) |
| 2.50 - 7.49 | 16.0 | (10.9) | 17.4 | (12.0) | 0.6 | (5.3) |
| 7.50 or more | 2.4 | (2.0) | 2.6 | (2.2) | 0.0 | (1.1) |

Note: Percentage of the population living below the poverty line indicated, expressed as a percentage of the total population in that particular group.

Source: *Household Expenditure Survey* 1995-96, BBS.

the 1980s, for which comparable data is available. The poverty rate as measured by the Direct Calorie Intake (DCI) method (2,122 kcal) declined from 62.6% in 1983-1984 to 47.5% in 1991-1992, but later on showed no improvement despite accelerated economic growth supported by the recent economic structural reforms. The population categorized as the poor changed from a downward to an upward trend at the end of the 1980s. The DCI method based on the poverty line of 1,805 kcal reveals some improvement in the poverty rate in the 1990s, but with a much slower rate. The poverty rate calculated with the Cost-of-Basic-Needs (CBN) method reveals no improvement in the poverty rate in the 1980s and a decline in the poverty rate in the 1990s, but with a rise in the absolute number of the poor. The indicators based on the DCI method reveal no major difference in the poverty rate between cities and rural areas, but 82% of the poor live in rural areas. The CBN method (lower poverty line) that allows for household expenditures for things other than food reveals that the poverty rate of rural areas is 39.8% (1995), a rate much higher than the urban poverty rate of 14.3%. This indicator also shows that 93% of the poor live in rural areas (see Table 13)¹.

Table 12 shows changes in the Gini coefficient, which shows the degree of inequality in income distribution (0.0: complete equality, 1.0: complete inequality). The national Gini coefficient continued to rise from 0.36 in 1983-84 to 0.43 in 1995-96, showing a rise in inequality in income distribution with economic development. Comparing changes in the Gini coefficient between cities and rural areas shows that inequality rose greatly in cities, while hardly any rise in inequality is seen in rural areas. These trends in the indicators suggest that the fruits of economic growth has been attributed mainly to the urban non-poor.

The slower decline in the incidence of poverty and the rise in the poor headcount are mainly due to the following reasons: (1) most of the fruit of economic growth at an annual average rate of 4.7% (in 1988-98) has been attributed mainly to the urban non-poor; (2) the rise in job creation has not been enough to absorb the expanding labor force; and (3) the number of landless and small-land farmers is rising in rural areas. The fruit of economic development has not reached the rural poor, who are the main target in the fight against poverty. For



Site of Model Rural Development capable of irrigated farming

Bangladesh's economy, it is generally said that in order to absorb a growing labor force while making sure that the fruit of development reaches the poor, as well as the non-poor, requires economic growth at an annual average rate of over 7% and effective measures to control the growing inequality in income distribution. It is also said that, to that end, it is necessary to continuously increase agricultural productivity, continuously promote the industry, and promote rural development, including development of rural industries.

Table 13 shows the regional gaps in the incidence of poverty as measured with the CBN method. As described earlier, measurements taken with the CBN method, which considers expenses for daily necessities other than food, result in a further conspicuous concentration of poverty in rural areas. Looking at the statistics by region, one finds that the Barisal and Rajshahi divisions show the highest incidences of poverty, which seems to be because the large cities with low incidences of poverty are not included. A fight against poverty through infrastructure development, energy supply, increased access to information, education, and medical/hygienic services targeted towards the poor in regions predominated by rural areas, and in rural areas in regions with large cities is highly desired.

Table 14 shows differences in the incidence of poverty depending on the social characteristics of the head of household.

Table 15 Major social indicators (7): Poverty and educational opportunity

| Percentage of Children Aged 6-10 Enrolled | | | | | | |
|--|----------|-------|-------|----------|-------|-------|
| Gender | Poor | | | Non-Poor | | |
| | National | Rural | Urban | National | Rural | Urban |
| Both Sexes | 71.0 | 71.3 | 67.4 | 86.9 | 87.8 | 83.9 |
| Boys | 70.8 | 71.0 | 68.3 | 87.6 | 88.2 | 85.1 |
| Girls | 71.3 | 71.6 | 66.3 | 86.2 | 87.1 | 82.9 |
| Percentage of Children Aged 11-15 Enrolled | | | | | | |
| Gender | Poor | | | Non-Poor | | |
| | National | Rural | Urban | National | Rural | Urban |
| Both Sexes | 49.1 | 49.3 | 45.3 | 70.6 | 70.6 | 70.6 |
| Boys | 46.6 | 47.2 | 39.1 | 68.7 | 68.0 | 71.3 |
| Girls | 51.9 | 51.9 | 52.5 | 72.7 | 73.6 | 69.9 |

Note: 1. Poor/non-poor defined respectively as whether or not the child resides in a household where the per capital expenditure is less than the lower CBN poverty line.
2. Population aged 6-10 (11-15) years old that were enrolled in school (in any grade), expressed as a percentage of the total population of children aged 6-10 (11-15) years old.

Source: *Household Expenditure Survey 1995-96*, BBS.

The literacy or illiteracy of the head of household shows a major gap in the poverty rate (47.3 versus 19.8). The importance of literacy education is reconfirmed here. The difference in the incidence of poverty depending on the educational background of the head of household shows that there is a clear negative correlation between the educational background and the poverty rate. Particularly eye-catching is a decline in the poverty rate from the category of people with no education to that of primary school graduates (48.6 versus 30.6), thus showing the importance of primary schooling, which is important for acquiring basic literacy skills. Finally, an analysis of the relationship between the area of lands owned and the incidence of poverty shows that the poverty rate declines as one owns more land. This again makes us recognize how important it is to promote rural industries which give these "minor farmers" opportunities to earn extra income. Although loans granted to non-farm self-employed households in rural areas through a micro-credit program implemented by Grameen Bank, BRAC, Shapla-Neer, and other NGOs have brought about some results. It is hoped that these benefits will in the future be distributed intensively to "minor farmers" and landless households and be targeted even more at women.

Table 15 showing the relationship between poverty and access to school, indicates that primary school enrollment of children from poor households is 71%, a large gap from that of children from non-poor households (86.9%). The difference in access to secondary school is even more remarkable. Enrollment is only 49.1% for poor households against 70.6% for non-poor households. This shows that there is a "vicious circle of poverty". To destroy that circle requires measures designed to offer wider access to school for poor children. It is desirable to build more schools in poor regions and combine them with more practical programs such as Food for Education²⁾.

5. Overall Trends in Foreign Aid

(1) Trends in Donor Aid

During the period from 1973 to 1996, the Government of Bangladesh received 31.1 billion dollars in assistance from other governments and multilateral agencies. The assistance received

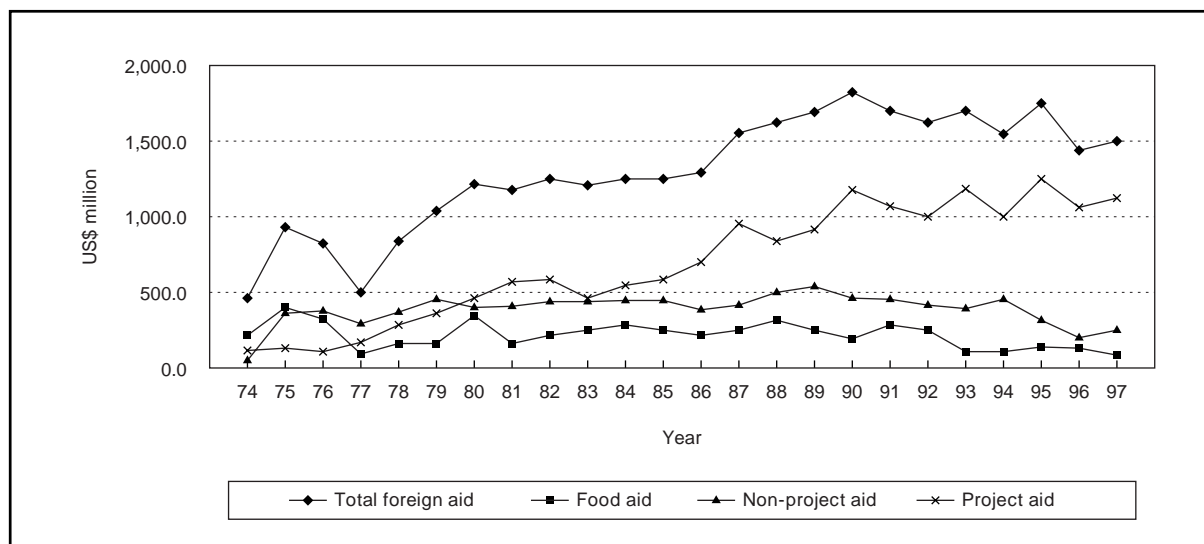


A school established as part of Model Rural Development Project

amounted to about 47% of the total government budget, and was approximately equal to the development budget. Since 1973, the annual amount of donor assistance has grown together with the government budget and the development budget (the budget for development investment, which amounts to half of the government budget). Since 1991, however, the figures have flattened out as a result of improved government finances brought about by structural adjustment policies and aid fatigue among donors. By 1996, assistance had fallen to about 1.5 billion dollars, equivalent to approximately 27% of the annual government budget.

By type, assistance includes food aid (supplies of rice, wheat, and so on in response to food shortages), non-project aid (provision of capital for importation of foreign commodities in order to assist with balance of payments problems), and project aid (provision of capital for the implementation of concrete development projects). Of these forms of assistance, project aid has been on the increase since the time of independence, and in recent years has accounted for approximately 75% of total assistance, Food aid and non-project aid have been on the decrease in recent years, reflecting an improvement in the balance of payments due to food self-sufficiency, export expansion, and so on. Classifying assistance in terms of grants and loans, total assistance is equally divided

Figure 1 Changes of foreign aid by type



between the two types, and neither type shows significant change over time.

Considering that total donor assistance amounts to the equivalent of one-half the government budget, that project budgets, which are directly linked to the development budget, are on the increase, and that capital is made available by food aid and non-project aid together with project aid, it becomes apparent that approximately 80% of the development budget comes from assistance. Thus the significance of the role played by donors in the development of Bangladesh becomes very clear. In other words, development in Bangladesh has taken place due to the pivotal fact of donor assistance.

The major donors in terms of aggregate assistance are the IDA (18% share of total assistance), Japan (15.8%) the ADB (11.8%), and the United States (10%). The assistance provided by these four donors makes up 55.6% of total assistance to Bangladesh. Furthermore, although the United States has rapidly trimmed its assistance in recent years, the share held by these four donors in total assistance has actually increased during that time (from 61.9% over 1990-1994, to 63.6% over 1995-1996). This trend has not brought any change in the amount of project assistance, which is directly linked to the development budget, but it has caused the share held by Japan in total project assistance to fall to 10.9%. Japan has now slipped down to third place in that respect.

(2) Trends in Japanese and JICA Aid

Japan has actively provided assistance to Bangladesh, primarily in the form of financial cooperation, due to its consideration of various factors. For example, Japan traditionally enjoys a friendly relationship with Bangladesh, and that country has extremely great need for development because it has the largest population of all the Least Developed Countries (LLDCs), has repeatedly experienced natural disasters, and has moved toward structural adjustment, including democratization and liberalization of economy. From 1973 to 1996, Japan's assistance amounted to a total of approximately 5.2 billion dollars, which was equivalent to about 8% of the total government budget during that period. Annual assistance increased sharply from 1986, and despite fluctuations, it has remained within the range of 300 to 400 million dollars. The

1996 figure was 320 million dollars, equivalent to approximately 6% of the annual government budget.

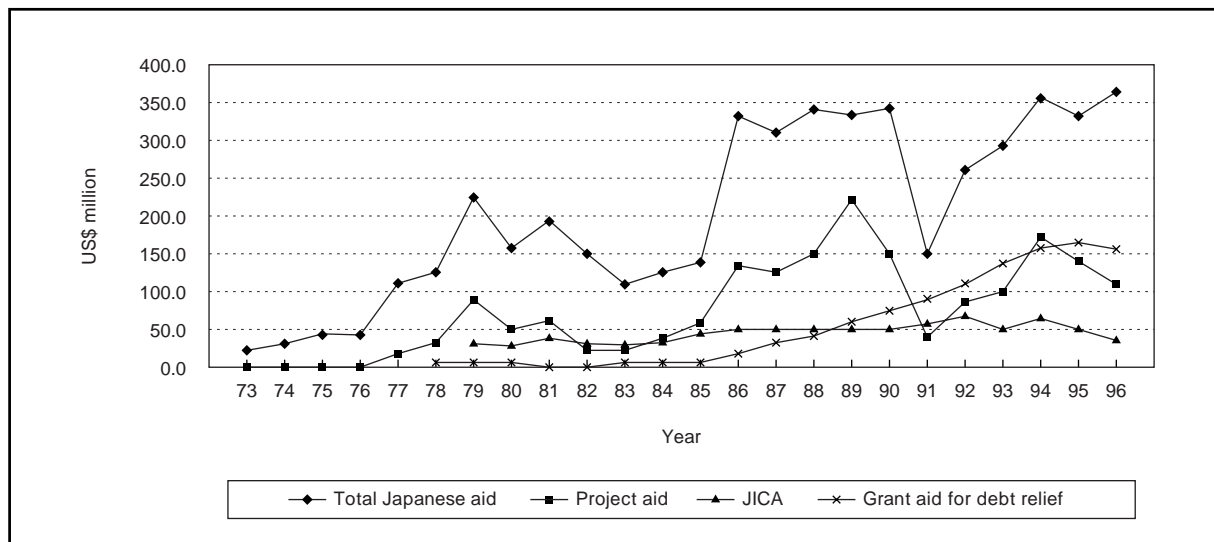
The portion of Japanese government assistance that JICA implemented in the form of technical cooperation or was involved with in the form of grant aid cooperation from 1973 to 1996 amounted to 840 million dollars (180 million dollars of technical cooperation). This is equivalent to 1.3% (0.27% for technical cooperation) of the total government budget during that period. Annual assistance has fluctuated, but has remained in the range of 50 million dollars (about 40 million dollars in grant aid cooperation and 10 million dollars in technical cooperation). The 1996 figure was 34 million dollars (14.3 million dollars in technical cooperation), equivalent to approximately 0.6% (0.26% for technical cooperation) of the annual government budget.

As this shows, JICA does not have a particularly great influence on development in Bangladesh in terms of total amounts of assistance. However, this amount would place it twelfth in the donor assistance ranking, above Sweden (total assistance of 550 million dollars) and Norway (total 520 million dollars).

Looking at Japanese aid by type, we find that food aid amounts to 8% of the total (16.5% of total donor assistance), non-project aid accounts for 55% (50%), and project aid has a 37% share (53.5%). Japanese assistance is characterized by a higher proportion of non-project aid than is typical of donor assistance, and a lower proportion of project aid. This is because Japan has adopted a debt relief policy toward Bangladesh whereby it provides grant aid for that purpose every year in an amount equal to the principal and interest payments due on yen-denominated loans made up to 1987. The amount of this grant has increased every year since 1985, which accounts for the distinctive characteristics of Japanese assistance to Bangladesh. This is the reason that, as noted above, Japan's ranking in terms of project aid (its share in total project assistance from all donors is 10.9%) has slipped down to third place.

Grants and loans make up 43.9% of total assistance, and in this Japan shows no major difference from other donors. When examined in time series, however, it becomes apparent that the increasing size of debt relief grants has pushed the

Figure 2 Changes in Japanese assistance by type



grant ratio higher. It reached nearly 70% during the 1995-1996 period.

6. Country-Program Evaluation

(1) Sectoral Distribution of Development Budget and Donor Assistance

1) Distribution of the Government Development Budget to Each Sector

The government of Bangladesh has been formulating development plans and engaging in development activity since the country gained its independence. Summarizing from the development plans, the objectives since independence have consistently placed emphasis on (1) poverty alleviation, including self-sufficiency in food, (2) economic independence, and (3) special objectives set by sector.

The figures for allocation of the total development budget and total donor assistance (project aid only, here and below) from 1973 to 1996 are presented by sector in Figure 3. The largest components of the total development budget are power and natural gas development (22.7%), transportation (17.5%), agriculture and rural development (14.2%), and water resource development, centered on flood control (11.8%). The other sector allocations, in order of size, are industry (7.7%), education (7.4%), population, public health, and medical care (6.7%), water supply and housing (5.8%), and telecommunications (4.3%).

When these budget allocations are examined by development plan period, the following characteristics emerge:

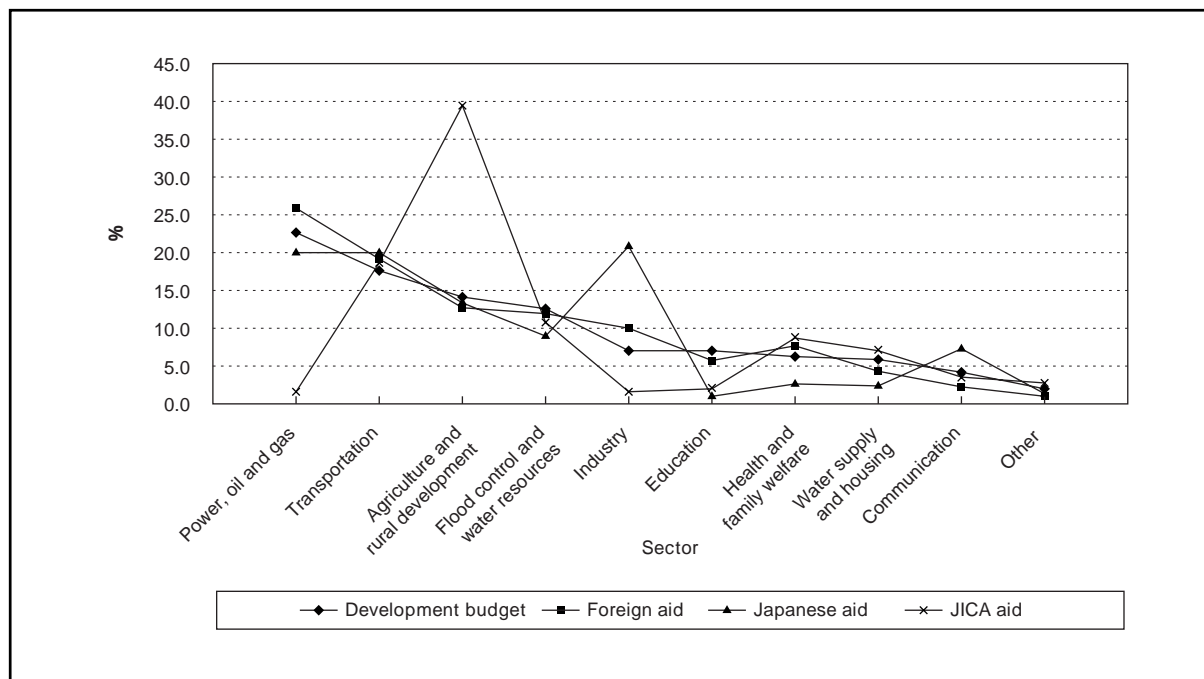
- (a) The major budget components were more or less consistently allocated to power and natural gas development, transportation, and flood control.
- (b) Agriculture (including forestry and fishery industries)

used to be allocated the largest share of the budget, over 20%, in order to reach the goal of food self-sufficiency. However, as the level of self-sufficiency improved, the allocations to this sector decreased sharply beginning with the Third National Development Plan (1985-). In place of agriculture, budget allocations to rural development have been taking an increasing share, although gradually.

- (c) Industry used to be allocated a major share of the budget, over 10%, in connection with the goal of industrialization by means of state-run enterprises. Since the Fourth National Development Plan (1990-), however, allocations to this sector have dropped sharply, as the government has adopted an increasingly clear policy stance favoring structural adjustment for industrialization by private capital.
- (d) Budget allocations to social sectors (education, population and public health, and water supply and housing) have been increasing since the Third National Development Plan (1985-). Since that plan, education in particular has been allocated a gradually increasing share, and in the periods since 1995 this sector has received 14.6% of the budget, placing it after power and natural gas development.

To summarize the above, the absolute insufficiency of food supply and development infrastructure in Bangladesh at the time of independence in 1971 caused the government to assign priority to the development goals of eliminating poverty and becoming economically independent. In keeping with these goals, the government placed emphasis on agriculture, power and natural gas, transportation, flood control, and other such infrastructure development. It also worked toward industrialization by means of state-run enterprises. Although it has consistently emphasized

Figure 3 Allocation of development budget and foreign aid by sector



infrastructure development since the mid-1980s, Bangladesh has experienced improving self-sufficiency in food and a policy transition toward industrial development driven by the private sector instead of state enterprise. These events have been accompanied by a shift of emphasis away from agriculture and industry and toward development in social sectors, primarily education.

2) Sectoral Allocation of Donor Assistance

A comparison of donor assistance and the development budget shows that from 1970 to the mid-1980s, the donors placed greater emphasis on industry than on agriculture, and more emphasis on infrastructure development. Otherwise, trends in donor assistance were linked to trends in the development budget, and total allocations per sector from the development budget have more or less paralleled corresponding allocations of total donor assistance. This reflects the large components of donor assistance in the development budget, and no doubt also the extent of donor influence over the formulation and implementation of government development policy.

3) Sectoral Allocation of Japanese and JICA Assistance

Comparison of the proportional allocation of total Japanese assistance with the development budget shows that more or less the same degree of emphasis is placed on power and gas, transportation, agricultural and rural development, and flood control as by the development budget. However, Japanese assistance to industrial development is nearly triple the government budget allocation (7.4% of the development budget, 21.1% of Japanese assistance). Conversely, Japanese assistance is also characterized by its lesser emphasis on education, public health and medical care, water supply, and other social sectors. Looking by time period, we find that assistance was focused on infrastructure (57.4%) and agriculture (32%) at the end of the 1970s, but the weight given to industry increased during the 1980s until, during the 1985-1989 period, approximately half of assistance was being concentrated on the industrial sector. On entering the 1990s, industry's share dropped sharply, and assistance was focused instead on infrastructure. Only 10-15% of the government development budget went to the industrial sector during the 1980s, and donor assistance showed the same trend. Moreover, donor assistance to this sector dropped from the 20% level seen during the 1970s. Amid this change, Japan occupied the anomalous position of directing approximately half of its assistance into this sector. This emphasis on industry in Bangladesh also stands out markedly when compared with the proportions of sectoral allocation of Japanese assistance in other developing countries.

The area of JICA involvement that receives the most marked emphasis is agriculture and rural development (39.7%, heavily emphasized in both technical cooperation and grant aid). Allocations to other sectors are transportation (18.7%, mainly grant aid), flood control (11.2%, emphasized by both technical cooperation and grant aid), population and public health (8.7%, mainly technical cooperation), and water supply and housing (7.0%, mainly grant aid), and these are generally in line with government development budget proportions. When examined in time series, it is clear that the emphasis on agriculture and rural development has



A cyclone shelter constructed through grant aid. During normal times, it is used as a school

lessened significantly, while that on transportation, flood control, and population and public health has increased.

(2) Evaluation Findings

1) Macro-Evaluation Findings

The purpose of this section is to verify the relevance of government and donor selection of sectors and issues for emphasis, working in light of the above analysis and from the perspective of efficient economic and social development. Based on the results of this verification, the relevance of JICA's selection of focal sectors and issues will then be verified.

It is clear that verification must have criteria. Bangladesh, like many other developing countries, has set the elimination of poverty and economic independence as its twin goals for economic and social development. Therefore, the efficiency of economic and social development in attaining those two goals will serve as the perspective for verification.

(a) Verification of the Relevance of Priority Development Sectors and Issues of Government and Donors

a) Relevance of the Selection of Priority Development Sectors

At the time Bangladesh gained its independence in 1971, its infrastructure had not been built up because policies had centered on West Pakistan during the Pakistan period, and the infrastructure that did exist in the country was destroyed during the war for independence. Furthermore, food demand exceeded supplies by more than 20%, and the people of Bangladesh were starving. The base conditions for development suffered further deterioration under the repeated onslaught of major natural disasters such as floods and cyclones that occurred nearly every year. Because of the situation it faced at the time of independence, the government gave priority to budget allocations for improvement of the fundamental conditions for development. Budget priority was thus directed toward the goals of self-sufficiency in food production and development of infrastructure, as well as funding for measures to control disasters that threatened those goals. This policy was appropriate in that it emphasized efforts to improve the foundation for measures to eliminate poverty and attain economic independence. Food production has now increased and the country is approaching self-sufficiency. Development of infrastructure and institution of

disaster control measures, through still far from adequate, are moving forward. These have provided the base for the growth and stabilization of the economy in Bangladesh over recent years.

At the same time, however, the budget also emphasized allocations for industrialization through state-run enterprise as the avenue to economic independence. Adequate measures were not taken in social sectors such as education, population, public health, and medical care. This, as a result, gave rise to adverse factors that inhibited dynamic and sustained economic growth. The poorest countries, like Bangladesh, have accumulated very little private capital, so for the first phase of development, a government may unavoidably place state-run enterprises in charge of providing services even in areas where private-sector activity could be viable. In particular, it may be supposed that investment in state-run enterprises that produce basic necessities for economic and social development, such as investment in fertilizer plants, may be highly relevant while a country is facing the most urgent issue of food self-sufficiency. However, the management of state-run enterprises becomes inefficient because of small domestic markets and frequent exercise of political control that prevents market mechanisms from operating easily. Resistance by vested interests and other factors make improvement of management difficult. Even as deficits weigh heavily on the national finances, the preservation of vested interests in state-run enterprises limits the market. This tends to become a major adverse factor that prevents the fostering of private enterprise. This pattern also fits the trend seen in Bangladesh, which was described earlier. Meanwhile, development lagged behind in the social sectors, where adequate measures failed to be taken, and Bangladesh still ranks low in public health and medical care standards and literacy rates compared to other countries of Central and South Asia. This is a major factor that impedes economic and social development. Therefore, the emphasis placed by the government of Bangladesh on industrialization through state-run enterprise in the initial stage of national development may have had relevance at that time. However, government mismanagement of state-run enterprises resulted in deficits, and placed a heavy burden on the national finances, thus in effect nullifying that relevance. Moreover, that financial burden was one reason that adequate budgetary measures were not taken in the social sectors. Economic and social development have proceeded so slowly in Bangladesh because (1) the base conditions for development were so poor, (2) the international economic environment changed under the oil crises of the 1970s and 1980s, and also due to (3) political instability and disjointed policies in combination with (4) the failures engendered by the policy of emphasizing state-run enterprise and depreciating the social sectors, which remained in effect until the 1980s.

On entering the 1990s, structural adjustment provided the occasion for the government to make the shift to a thoroughgoing policy of industrial development led by private capital, which extended to privatization of state-run enterprises. Private-sector participation was also sought in infrastructure sectors, and allocations from the development budget emphasized social sectors, especially education. These were relevant choices that allocated limited fiscal resources to efficient economic and social development. One indication

of their relevance is the stable economic growth that took place from the 1990s.

b) Relevance of the Selection of Priority Issues in Major Sectors

The analysis of trends in government and donor development activity in the major sectors clarified the issues on which the government and donors placed emphasis (priority issues). However, the selection of priority issues was also studied for its relevance in terms of the efficient attainment of the final goals of development in Bangladesh, namely the elimination of poverty and economic independence. The results of this examination were as presented below.

Priority issues and the outcome of development on the major sectors appear in Table 16 based on an analysis of trends in development activities performed by the Government and donors.

The central issue emphasized in the agricultural sector is the advancement of agriculture, particularly by attainment of self-sufficiency in food production and rural development to improve farmers' incomes and living standards. Other priority issues were selected as ways of supporting the resolution of this central issue. These selections may be considered relevant in terms of antipoverty policy for Bangladesh, where approximately 80% of the population is rural and about half of that group is poor.

The priority issues in industrial sectors include (1) expansion of the power supply, expansion of power service areas, and natural gas utilization in the energy sector, and (2) construction of a domestic transportation network and development of international gateways in the transportation sector. Efforts to resolve these issues are crucial for provision of the basic conditions for economic independence. Therefore, this choice of priority issues is considered relevant. Transportation projects are implemented on the basis of close coordination between the government and donors on issues in order of their priority, which is also relevant in terms of the efficiency of implementation.

In the industry sector, the selection of the policy of industrialization by state-run enterprises that continued into the 1980s and selection of the 1990s policy of promoting private capital and advancing exports, were assessed for relevance above. The policy of nurturing small enterprise, which was implemented from the end of the 1970s, did not extend only to the nurturing of supporting industries for the purpose of economic independence, but was also effective in creating jobs for the poor. This selection thus had relevance as a poverty alleviation measure, as well.

In the social sectors, the central issue emphasized in education is basic education, and since the mid-1980s, the emphasis has been on primary education. As noted in Chapter 2, Section 3, primary education is extremely effective in lowering the incidence of poverty, and it is also essential in terms of supplying a labor force with a certain level of quality to the labor market for the purposes of industrial development and economic independence. Therefore, this selection is relevant.

In public health and medical care, the issues of family planning and preventive and primary medical care centered on maternal and child health have been emphasized. This

Table 16 Final Development Goal, Priority Development Sector and Priority Issues

| Final Development Goal | Sector (Priority development sector with underline) | | Allocation of Development Budget and Foreign Aid | | | | Priority Issues (Items that are Priority Issues of development activities performed by the government and donors as well as JICA's cooperation are indicated by ●; items that are not priority issues of JICA's cooperation in the development activities are indicated by ○) | Accordance of JICA's Assistance Issues | Major Effects of Development Activities Conducted by Government and Donors |
|---|--|---------------------------|--|-------------|-------------|---|--|---|--|
| | | | Development Budget | Foreign Aid | Japan's Aid | JICA's Aid | | | |
| Poverty Eradication | Agriculture and Rural Development Sector | | 14.2 | 12.9 | 14.3 | 39.7 | | Accordance | <ul style="list-style-type: none"> Production of edible cereals (ton) 10,181 (1972) 19,399 (1998) |
| | Industry Sector | Power, Oil and Gas | 22.7 | 25.9 | 19.6 | 1.2 | <ul style="list-style-type: none"> Expansion of electric power generation Expansion of electric power supply covering area Utilization of natural gas for power generation | — | <ul style="list-style-type: none"> All gross power generation (MkWh) 717 (1971) 11,858 (1996) Natural gas utilization rate for power generation (%) 43 (1971) 84.5 (1996) Population rate with access of electricity (%) 6.6 (1982) 14.4 (1991: Urban 62.7, Rural 8.6) |
| | | Transportation | 17.5 | 17.8 | 19.4 | 18.7 | <ul style="list-style-type: none"> Building up a domestic transportation network, centering on road network, that connects metropolitan areas and major regional cities, and urban and rural areas Enhancement of interface points with foreign countries such as airports and harbors | Accordance | <ul style="list-style-type: none"> Road kilometer (high type, km) 3,509 (1972) 9,842 (1995) Traffic volume (thousand tons) 69,532 (1975) 146,422 (1995) |
| | | Industry | 7.7 | 10.1 | 21.1 | 1.8 | <ul style="list-style-type: none"> Before 1990 (before the change in governmental policy): import substitution by state enterprise, centering on fertilizer After 1990 (after the change in governmental policy): expansion of export products making use of Bangladesh's comparative advantages, such as a cheap labor force; establishment of a system for the promotion of foreign investment and exports Consistently following independence: fostering of small-scale industries | — | <ul style="list-style-type: none"> Quantum index of industrial production (1981 = 100) Total 217.4 Garment 20,507.1 Printing and publishing 882.9 Pottery china and earth wear 631.1 Fertilizer 431.4 Glass products 380.7 |
| | | Telecommunication | 4.3 | 2.2 | 7.1 | 3.5 | | | |
| Economic Development (Economic Self-reliance) | Social Sector | Education | 7.4 | 5.9 | 0.6 | 1.9 | | — | <ul style="list-style-type: none"> Primary school enrollment (% gross) 73 (1972) 102 (1997, Male 103, Female 102) Adult illiteracy rate (% of age 5 and above) 73.1 (1975) 61.1 (1997, Male 50.1, Female 72.6) |
| | | Health and Family Welfare | 6.7 | 8.2 | 2.9 | 8.7 | <ul style="list-style-type: none"> Dissemination of family planning Enhancement of primary health and medical care system, especially for maternal and infant health care | Partial accordance (JICA is also working on the issues mentioned to the left, but past priority issue was the establishment of a secondary and tertiary health care system.) | <ul style="list-style-type: none"> Population growth (%) 2.6 (1971-80) 1.6 (1991-98) Life expectancy at birth (year) 44.9 (1972) 58.1 (1997, Male 58.1, Female 58.2) Infant mortality rate (per 1000 live birth) 140 (1972) 75 (1997) Maternal mortality rate (per 10,000 live birth) 700 (1980) 400 (1996) Safe water (% of population with access) 56.0 (1975) 84.2 (1993, Rural 96.0 (1995)) |
| | Water Supply and Housing | 5.8 | 4.6 | 2.7 | 7.0 | <ul style="list-style-type: none"> Establishment of a metropolitan water supply network Establishment of a rural water supply network | Partial Accordance | <ul style="list-style-type: none"> Population with access to clean water (%) 56.0 (1975) to 84.2 (1993 rural areas 96.0 (1995)) | |
| | Disaster Sector (Flood Control and Water Resource) | 11.8 | 10.9 | 8.8 | 11.2 | <ul style="list-style-type: none"> Minimizing damage caused by disaster, especially flood and cyclone | Accordance | | |

selection takes consideration of the rapidly growing population and the epidemiological factors underlying the leading causes of death. It is, therefore, relevant for poverty alleviation as well as for economic independence.

In sectors related to disaster control, plans and measures for minimizing disaster damage are selected as priority issues, but their relevance is not open to examination. Furthermore, these plans and measures are implemented on the basis of cooperation and coordination between the government and donors, and should also be considered relevant in terms of the efficiency of implementation.

As found above, the selection of priority issues by the government and donors in the major sectors has generally been, with the exception of the industry sector until the 1980s, compatible with the stage of development in each sector. Representative data that indicates the state of development in each sector have also improved. Therefore, these selections are considered relevant from the perspective of efficient economic and social development.

(b) Verification of the Relevance of JICA's Selection of Priority Development Sectors and Assistance Issues

The various donors have limited assistance resources, and they do not only select the sectors to be given priority by the government and the donors. They also determine assistance issues and implementation methods in light of the strengths and weaknesses of their own assistance regimes (the nature of grant and loan aid schemes, expert resources, possession of relatively superior technology, etc.). It is rare, therefore, for the priority sectors and assistance issues selected by individual donors to encompass all the priority sectors and issues selected by both the government and other donors. The relative emphasis they place on allocations to individual priority sectors may also fail to coincide exactly or closely with the emphasis placed by the government and other donors. However, this is not in itself reason to deny the relevance of their particular assistance. It is sufficient if the various individual donors provide assistance that, while cognizant of the priority sectors and issues of the government and other donors, takes best advantage of their own particular assistance regimes.

Working from this assumption, the survey group verified the relevance of JICA's selection of priority sectors and assistance issues. It was determined that JICA is providing assistance to the priority sectors mainly of agriculture and rural development, as well as to transportation and flood control, and that these coincide with priority sectors selected by the government and other donors. The assistance issues JICA selects within these main sectors show some discrepancies as the result of constraints on its expert resources in the public health and medical care sector, for example, but it was determined that the JICA selections are for the most part compatible with the priority issues. It was also demonstrated that representative data indicating the state of development in each of those sectors have shown improvement.

At the level of macro-evaluation, the above shows that JICA has generally provided relevant assistance that takes consideration of priority sectors selected by the government and also of the strengths and weaknesses of its own assistance regime (the nature of its technical cooperation and grant aid

cooperation as assistance schemes, its expert resources, the relative superiority of Japanese technology, etc.). There was some self-searching over the perception that JICA should have placed greater emphasis on the education sector. However, it may be supposed that JICA assistance is making a solid contribution to development in Bangladesh.

(3) Project Evaluation Findings

Project evaluation was conducted on the eight major projects, and the results may be summarized as follows: Assistance is generally producing the expected impacts, and good use is being made of the facilities and equipment provided, in particular. The sustainability of assistance impact, however, has problems in connection with maintenance and the replacement of obsolete facilities and equipment.

Adverse factors that interfere with the furthering of assistance impact, including the above, arise mainly from shortages of operating, maintenance, and equipment replacement expenses and delays in related projects. These result from inadequate funding by the government of Bangladesh. However, insufficient studies at the time of project formation and inadequate transfer of maintenance technology and systems on the part of JICA also contribute in no small way to the problem.

Results of each project evaluation are as follows:

1) Central Extension Resources Development Institute

More than 15 years has passed since the end of JICA cooperation, and the Central Extension Resource and Development Institute (CERDI), the implementing organization in Bangladesh, has reorganized its activities in order to specialize in training. So, it is not currently conducting any research and development on dissemination techniques. As a result, this evaluation was performed in order to determine whether or not the results of JICA cooperation could be maintained and extended through this training. Although personnel expenses for CERDI staff have been secured, severe financial circumstances have made it very difficult for CERDI to conduct training with its own budget. Therefore, in addition to facilities established and know-how accumulated as a result of JICA cooperation, CERDI is proactively taking advantage of budgets and highly-skilled human resources belonging other affiliated organizations in order to continue its training activities.

2) Model Rural Development Project

This project was implemented in order to maintain and improve roads, set up a growth center, establish irrigation facilities, build elementary schools, and perform activities in conjunction with local cooperatives, all of which produced results. However, while there appeared to be no problem with cooperative-affiliated activities as long as there was support from the Bangladeshi government and the activities of Japan Overseas Cooperation Volunteers (JOCV), after the end of JICA cooperation, there was concern over whether Bangladesh would be able to continue the operation and management of the cooperatives by itself.

3) Improvement of Water Supply System in New District Town

This project contributed to improving the health of residents in the project area by supplying safe and clean

drinking water. It also reduced the burden on women to draw water, and improved quality of life. Although the constructed water facilities have since become rundown, they are being properly maintained and managed. However, the fact that water fees are not collected and water is often lost before it is provided to consumers remain issues.

4) Agriculture Training Center for Women

At the Agriculture Training Center for women that Japan constructed through grant aid, the Japanese NGO "Organization for Industrial, Spiritual and Cultural Advancement International (OISCA)" is conducting training activities in order to promote productive activities by rural women. The fact that the Government of Bangladesh recognized the impact of this training and established three similar training facilities within Bangladesh is deserving of special mention. Although support from the Government of Bangladesh is financially insufficient, the government budget has been received for improvements to the training facilities and an increase in the number of staff. Also, maintenance and management of the facilities and equipment is being adequately performed by OISCA.

5) The Meghua and Meghua-gumti Bridge Construction

This project received an extremely high evaluation from the Bangladeshi side. Even before the pros, cons, and effects of building a bridge had been investigated, bridge construction in the two project areas had been considered by the people of Bangladesh to be extremely crucial to the transportation infrastructure. The two bridges remain in use, and transportation between Dhaka and Chittagong has improved far beyond the initial expectations of the plan. Another effect of this project is that Bangladesh's expectations of Japanese cooperation on the establishment of infrastructure have risen. The development of public bus routes to the city of Dhaka has also had a favorable impact on the livelihoods of residents in neighboring areas. However, because large-scale infrastructure projects like this one affect surrounding areas in various ways, such as by improving land value and changing land usage, it will be important to investigate and formulate various schemes in order for adequate consideration of their consequences.

6) Storm and Water Drainage System Improvement in Dhaka

The pump facilities, sluices, and drainage canals established through this project alleviated the problem of flood damage which had long affected the people of Dhaka. The constructed drainage facilities were appropriate in terms of placement, scale, and timing, and have produced beneficial socio-economic effects such as revitalizing the market and improving health and sanitary conditions. The fact that spare parts that could be procured domestically were supplied was appropriate in order to encourage sustainability by the Bangladeshi side.

7) Construction and Rehabilitation of the Sewerage

This project established sewage treatment plants, pumps, and lift stations in order to adequately handle wastewater. The fact that both the biological oxygen demand (BOD) and suspended solids (SS) indexes for the treated water improved



A market is held twice a week at the growth center. On non-market days, the center is used for sorting potatoes

beyond the projected figures indicate that the project was able to accomplish its objective. The reduction in the BOD index has also been instrumental in preventing the water quality of the Buriganga River, into which the treated water is discharged, from deteriorating. Also, out of consideration for the eradication of poverty, the labor-intensive methods this project utilized in building construction provided employment opportunities primarily to the impoverished classes. The facilities are functioning without any major problems, but securing operating expenses will become an issue in the future. Also, because the accumulation of cracks and garbage in the drainage ditches leading up to the sewage treatment plant causes them to become clogged and leak a great deal of water, the amount of water flowing into the sewage treatment plant has been reduced to between 50% and 70% of original expectations. In order to fully realize the results of this project, the Bangladeshi side will be required to take the responsibility to adequately clean and maintain these ditches³⁾.

8) Construction of Multipurpose Cyclone Shelter Center

In the history of disaster relief to Bangladesh, there had been one great rush to construct shelters following a major natural disaster, but ten years later, Bangladesh has continued to be the stage for frequent major natural disasters. Therefore, because the question of how to use shelters during non-crisis periods had become an important issue, this project, which introduced the concept of having the shelters function as schools during normal times, was extremely relevant. The project was also appropriate in that the design for the facility emphasized windows, natural light, and natural ventilation out of consideration for reducing the management and maintenance burden on the bangladeshi side. It was not possible to judge whether or not the immediate goal of this project, which was to protect the lives of approximately 30,000 people who lived in dangerous areas that were likely to be damaged by cyclones, was accomplished, as there have fortunately been no cyclones since the completion of the project. However, the accomplishment of the project's secondary objective-to provide a safe and secure educational environment-can be adequately evaluated based on the fact that school attendance rates have improved by approximately 20% and the employment rate of instructors has also risen.

However, when the cyclone center is functioning as educational facility, it receives an adequate level of management and maintenance, but because there is no management system to enable it to function as a shelter during a disaster, it will be necessary to work towards increasing the awareness of the Bangladeshi side and of area residents, and to institute a training program, with the participation of local residents, to provide guidance to refugees in times of crisis.

The Bangladeshi side has continued to point out the high cost of Japanese grant aid. For example, in the cyclone shelter project, the high management fees charged by the companies receiving orders, which were primarily Japanese, increased the cost of facilities by other aid institutions; however, it has been recognized that the quality of the facilities is relatively high. Also, there are possibilities for cost-cutting efforts, such as promoting the local procurement of materials and equipment.

(4) Conclusion

In summary, this review study concludes that JICA has so far been working consciously to implement assistance to Bangladesh in an efficient manner, providing appropriate assistance in most cases in terms of both selecting assistance issues (projects) and displaying assistance effects. In its development cooperation, JICA has effectively taken into consideration the advantages and disadvantages of its own assistance system, such as the nature of the assistance scheme, expert resources, and relative advantage of Japanese technology. It can be said that JICA's assistance contributed steadily to the development of Bangladesh. In the future continuing and further efforts should be made to (1) secure sustainability in assistance, (2) enhance capability to assess at the earlier stages of projects the possible impacts on poverty and gender issues, and (3) examine proper modality of assistance in order to produce development effects for the poor.

7. Lessons Learned and Recommendations

(1) Directions for Future Cooperation

The key issues in the national development plan have been gradually shifting over time depending on the degrees to which previous development targets were fulfilled. Ultimate development goals of poverty eradication and satisfaction of the basic needs, however, remain the basis for the series of development plans. The major goal of the fifth national development plan, launched in 1997, is again the elimination of poverty by improving income standards and satisfying basic needs. The government's new policy stance is one of reconsidering the roles of the government in the market by aiming at high economic growth driven by exports and by dynamism in the private sector. The adopted policy is to engage in social sector development and anti-poverty activities in parallel to an attainment of high income growth through expanding economic activities as a way to ensure that the fruit of development is spread throughout its population, particularly the poor.

The major issues in the fifth national development plan to fulfill these major goals are as follows:



A lagoon constructed through construction and rehabilitation of the sewerage

- 1) Allocate a larger portion of development resources to less developed regions and rural areas. Develop industries with comparative advantage (i.e., labor-intensive industries), and increase export-bound production in an attempt to create jobs and raise productivity.
- 2) Achieve self-sufficiency in food production and diversify and increase the production of higher value-added export-bound agricultural commodities.
- 3) Develop infrastructure and other economic services in order to provide an enabling environment for private sector-led economic growth.
- 4) Promote decentralization of power by fostering efficient local self-governing bodies and by authorizing them to formulate and implement development projects on a regional level, thus enhancing living standards in rural areas and ensuring equality in the socio-economic structure in rural areas.
- 5) Develop human resources mainly through compulsory primary schooling and vocational training.
- 6) Protect the environment through sustainable development and fulfill the optimal utilization of natural resources.
- 7) Put emphasis on female schooling and vocational training and create employment opportunities for women to earn income in an attempt to narrow the gender gap.

The selected key issues of development in the Fifth National Development Plan cover most of the development issues identified in Chapter 2, and capture well the existing development needs. JICA therefore, must commit itself efficiently to these key development issues identified in the national development plan while coordinating its assistance policy effectively with the World Bank, Asian Development Bank, USAID, and other donors. JICA is not unrelated to such areas as 1) promotion of rural industries, literacy education in rural areas, overall rural development projects including vocational training; 2) training to increase employment opportunities for women in rural areas; 3) the spread of compulsory primary education for all children and technical assistance in an attempt to enhance education; 4) adult literacy schooling and vocational training in urban areas; 5) projects designed to provide people expanded access to hygienic services; and 6) projects to reinforce regional autonomous organizations. JICA, however, should ensure that the benefits

of these projects accrue to target groups within poor segments and poor regions by, for instance, promoting its linkage with NGOs. In addition to these micro-level projects designed for social development, the country will need a supply of personnel such as policy advisors on macroeconomic management and technical assistance designed to convey know-how on the software aspect of economic development in search of efficient and sustained increases in national income. Japan possesses strong expertise in such areas as product promotion related to export (trading and marketing business), trade practices, trade controls, finance for small-and medium-size firms, development of securities markets, privatization of the transport, communications, and energy sectors, and institutions and policies designed to combine growth with equality. One can safely say that Japan's potential to contribute to Bangladesh's development, which seems to be aiming to develop its socioeconomic structure in the style of East Asia rather than that of the West, is considerably high.

(2) Lessons Learned for Improved Formation and Implementation of Assistance Projects

Project evaluation findings identified the following adverse factors that interfere with the promotion of assistance impact: 1) Partial discord between the contents of assistance and the needs of Bangladesh; 2) shortage of operational budget; 3) insufficient consideration for gender issues; 4) shortage of technology for using the equipment provided; 5) barriers to related projects that are preconditions for promoting assistance effects; 6) problems with the maintenance of facilities and equipment (responsibilities and organization, expenses, technology; 7) shortage of budget for renewing antiquated equipment.

The following lessons were extracted as ways for working toward resolution of the above adverse factors: 1) Reinforcement of project-cycle management, participation of inhabitants, and reconsideration of assistance according to the situation; 2) follow-up in technical cooperation for capital grant aids; 3) drafting and implementing projects while paying careful attention to their relation to other projects; 4) provision of facilities and equipment; 5) financing the local cost; 6) rule out carrying out development surveys with means other than capital grant aid and yen loans; and 7) linkage with NGOs.

(3) Lessons Learned for JICA Assistance from Poverty and Gender Perspectives

JICA's cooperation projects have the potential to contribute greatly to the reduction of poverty in rural areas through the participation of women in production and other activities. It is hoped that JICA will undertake such issues as providing women and the poor with access to production resources and encourage them to participate in decision-making, thus increasing their household incomes help reduce poverty.

Given below is a summary of suggestions, mainly on gender issues, from the viewpoint described above. "Women in Development" policies in Bangladesh are changing from 1) the principle of separating women as a special target and implementing projects in line with the traditional division of roles, to 2) reducing gender gaps and promoting empowerment of women by reflecting gender needs in all sectors it intervenes. To realize cooperation projects that meet these needs of the Government and people of Bangladesh, finding a good way to



Under Model Rural Development Project, various training is implemented in order to improve the productivity of rural women in cooperatives, such as the leasing of goats

incorporate social gender consideration into previous cooperation projects will presumably be the first issue to be resolved.

First, if JICA continues to put emphasis on projects for infrastructure development through grant aid, it will be necessary to create a practical working system that actually reflects the needs of women and the poor from the stage of development research to the stage of review. Needless to say, the necessity of such a system has long been mentioned by JICA. In fact, various manuals have been compiled, such as *Infrastructure and Gender Analysis: Checklist for Rural Roads Projects*, and a manual for a mission member for social and WID consideration in development research. However, since these attempts were launched only recently and because of a shortage in manpower, these documents are not sufficiently used.

Second, it is indispensable to understand well what are recognized as priority gender issues in each sector of cooperation. The National Action Plan for Women's Advancement, compiled in 1997, presents action plans concerning gender issues to be tackled in 13 different sectors.

JICA's WID-related cooperation projects in Bangladesh are, regardless of sector, designed specifically for women (such as in the case of the Agricultural Training Center for Women), or projects where women's and men's components are separated within the project (Model Rural Development Project), both limit their activities within traditional women's roles. This approach will be significant also in the future in the sense that opportunity is secured for women, because the reality is that, unless a specific project is prepared explicitly as "designed for women," it is still difficult for women to be direct beneficiaries. As for adults, it is unrealistic in the cultural context of Bangladesh to mix up men and women beneficiaries. On the other hand, it is considered that this approach has narrowed the scope of participation of Bangladeshi women in development efforts. Assuming that the purpose of training for women, for example, is to make them economically independent and increase their household incomes, one cannot expect real effects unless one considers those portions in touch with gender norms—not only the learning of production techniques, but also resources and capital required for production, managerial skills, and participation in rural markets dominated by men. The emphasis of a development plan shifted to include improving

unequal access to resources and opportunities between men and women in a specific sector, that is, the improvement of the gender structure in a more substantial sense. Furthermore, to increase employment and income, it is important to link the project thoroughly to the development of rural infrastructures.

Finally, almost all of the strategies prepared so far for assistance to Bangladesh have mentioned that sufficient consideration should be given to gender norms and religious and cultural constraints. In recent years, there have been a series of incidents where meetings of women assisting NGOs were disturbed by Islamic fundamentalists. The importance of caution is therefore still high. On the other hand, it is also a fact that there have been major changes, such as a rapid rise in the number of women workers in cities, a rise in female enrollment in rural areas, and a rise in the number of women participating in out-of-home socioeconomic activities such as working with micro-credit programs. In the old days when women found it far harder to to out freely than now, the Grameen Bank took the approach of "bankers going to women in villages instead of waiting for them to come" and they were accepted. Just like that bank's policy, it would be necessary to understand what the gender norm constraints are faced by men and women and to explore aggressively alternative plans to avoid those constraints.



Road established by Model Rural Development Project. It has become a mini-cab depot

- 1) For a comparison of poverty indexes, such as the DCI and CBN methods, refer to the World Bank's *1998 Bangladesh Poverty Assessment*.
- 2) A program that gives grain to children who attend school in order to induce parents to send their children to school.
- 3) Based on the development survey "Construction and Rehabilitation of the Sewerage" conducted in 1998, JICA dispatched a preliminary survey team for the grant aid project "Construction and Rehabilitation of the Sewerage" in May 2000. Cooperation on the establishment of additional sewage facilities and the cleaning and maintaining of sewage pipes is scheduled to begin shortly.