

**PART A INTRODUCTION AND COUNTRY SETTING****CHAPTER 1 INTRODUCTION****1.1 Background****(1) Study Background**

Bangladesh, located on the low lying Bengali Delta formed by the three major rivers of Padma, Jamuna and Meghna, suffers from flood every year caused by the surface runoff out of the extensive river basins and the retard of drainage of rainfall over the land during the wet season. To cope with this chronic flood, Flood Control, Drainage and Irrigation Project (FCD/I), consisting of 58 huge projects aiming mainly at controlling flood, has been formulated since 1964 and then partly implemented. However, huge construction costs, long implementation period and technical problems made further implementation difficult.

After the devastating floods occurred in consecutive two years of 1987 and 1988, Bangladesh, in cooperation with donor countries and agencies under the initiative of the World Bank, initiated Flood Action Plan (FAP) to formulate comprehensive nation-wide plans against flood, and 26 studies have been conducted. While many studies have proposed structural measures to protect and/or control floods, others have introduced flood-proofing concept, which create better environment on living with floods, allowing floods instead of controlling flood. The FAP studies have partly been implemented up to date.

In the meantime, in July 1998, an unprecedented flood submerged three-fourth of the land area, brought about the loss of more than 1000 lives as well as tremendous economic losses. Local people, especially those living in flood vulnerable areas of Char and Haor, seriously suffered from the flood. Many of them have been evacuated from their living areas to municipalities nearby as well as Dhaka during the flood period, causing social problems due to poor shelter environment. Besides the steady population increase in the country, deteriorated environment in the upstream areas of the major rivers has been reported to exaggerate the flood scale. Under such situation, flood-proofing concept becomes increasingly important.

Local Government Engineering Department (LGED), established in 1992 under the Ministry of Local Government, Rural Development and Cooperatives (MLGRD&C), as a responsible agency for rural development, technology extension and rural infrastructure development, etc., has implemented small scale structural measures against flood, such as flood shelter, submersible embankment, etc., as well as non-structural measures like rural education and sanitary enlightenment. LGED, recognizing the necessity to formulate comprehensive flood measures according to the area specific conditions, requested the Government of Japan to extend a technical assistance on flood measures in flood vulnerable areas of Char and Haor in October 1999.

In response to the request, the Government of Japan through Japan International Cooperation

Agency (JICA), an official agency of Japan responsible for extending technical assistance to developing countries, dispatched a preliminary mission to Bangladesh during 15 days from 5<sup>th</sup> to 19<sup>th</sup> of August, 2000, and the Scope of Work on the Study for Rural Development Focusing on Flood proofing (the Study) was agreed and signed upon by both sides on 14<sup>th</sup> August, 2000.

## **(2) Study Area and objectives**

### Study Area

The Study Areas to be covered by this technical cooperation are the Char area in four districts of Gaibandha, Jamalpur, Kurigram and Sirajganj and the Haor area in four districts of Habiganj, Kishoreganj, Netrokona and Sunamganj.

### Study objectives

The study objectives, as agreed on by LGED and JICA, are:

- (1) to formulate a master plan of flood-proofing in the study area;
- (2) to conduct a feasibility study on the priority project(s); and
- (3) to transfer technology to counterpart personnel in the course of the Study.

## **1.2 Guide to the Main Report**

This is the Final Report. The remaining part of the report is organized in the following way. In Chapter 2, existing conditions of Bangladesh as a whole is overviewed putting emphasis on policy and institutions in relation to flood and environmental aspects.

In Chapter 3, existing conditions of the Study Area are described mostly based on the results of the field surveys conducted as a part of the JICA Study. In Chapter 4, problems which the local people in the Study Area face are identified based on the description of the previous Chapter and PCM workshop outcomes, and the problem structure of the Study Area is analyzed.

In Chapter 5, development goal objectives and basic strategy for the rural development of the Study Area are established, and development framework and scenario are worked out. Project ideas are presented and prioritised.

In Chapter 6, model projects and sector-wise programs are presented. Investment requirements are presented. Institutional arrangements for the master plan implementation are proposed. The results of Initial Environmental Examination (IEE) are also presented.

In Chapter 7, feasibility study for the model area in Char is described. In Chapter 8, feasibility study for the model area in Haor is presented.

Finally in Chapter 9, conclusion and recommendation are described.