**Second Report**

# PREPARATION OF UPAZILA STRUCTURE PLAN, URBAN AREA PLAN AND ACTION PLAN

## Structure and Methodology of strategic Environmental Assesment

# PREPARATION OF UPAZILA STRUCTURE PLAN, URBAN AREA PLAN AND ACTION PLAN

## Contents

# PREPARATION OF UPAZILA STRUCTURE PLAN, URBAN AREA PLAN AND ACTION PLAN

## 1.0 Introduction

One of the main reasons for haphazard urban growth in Bangladesh is the lack of effective land use control mechanisms. Planning has been done for some big cities (Dhaka, Chittagong, Khulna and Rajshahi) while all other cities and towns are growing without any approved plan. The people of the rural areas are migrating towards urban areas due to push factors such as river erosion, lack of employment opportunities etc. It is becoming extremely difficult to provide the swelling urban population with appropriate civic facilities due to lack of proper institutional arrangements. In this context, the government has been transforming important urban areas into Paurashavas to provide socio-economic and infrastructure facilities to the population and the process is continuing. However, it is not possible to develop these Paurashavas in a planned manner without preparing appropriate urban plans first.

Preparation of Master Plans for Paurashava should be done at three levels. At the first level a structure plan will have to be prepared developing framework for development activities within the Paurashava. At the second level, that is, Paurashava level a master plan/urban area plan consisting of a land use plan, a transportation and traffic management plan and a drainage and environmental management plan will have to be prepared following the strategies and policies set out in the structure plan. A ward/local action plan proposing specific projects for implementation during the first five years of the plan period will have to be prepared on the basis of the master plan.

## 2.0 Structure Plan

The structure plan should set out in broad terms the general policies and proposals of strategic importance for the development and use of land in the area, taking account of national policies. The structure plan should not contain detailed policies or site specific proposals to be used for development control (which are matters for Master Plan / Urban Area Plan), but should concentrate on providing a strategic framework within which detailed policies can then be framed in the Master Plan. The structure plan should include policies on:

- the conservation and improvement of the natural and built environment;

- the economy of the area, including major industrial, business, retail and other employment – generating and wealth-creating development;
- the level, location and distribution of housing provision;
- a transport and land-use strategy and the provision of strategic transport facilities including highways, railways, and other infrastructure requirements;
- waste treatment and disposal, land reclamation and reuse;
- tourism, leisure, sports and recreation, community facilities; and
- environmental hazards and their management.

## 2.1 Assessment and Analysis

For formulating strategies and policies various assessments should be conducted to determine and evaluate the opportunities and constraints that may exist within the paurashava. In particular attention should focus on :

- Major physical development issues facing the paurashava.
- Opportunities for and constraints in future physical extensions of the paurashava.
- The rate and direction of past and future urban growth in the Paurashava.
- The amount of land (for housing and different types of activities) that will be needed for future extensions and the suitable areas for such extensions.
- Measures for steering future growth of the paurashava in desirable directions.
- Environmentally sensitive areas and their protection.
- Investment priorities that will make the town functionally efficient and strengthen its economy.
- Institutional changes that will improve the delivery of services, operation and maintenance of facilities and physical planning and implementation.

## 2.2 Information

Basic data needed for structure planning include the following:

**Population data**

- Present population estimates
- Population growth rates
- Population by age and sex groups
- Population projection for 20 years
- Size of the households

- Population by categories of employment

### Economic activities

- Economically active and non-active population
- Data on economic activities by sectors, including the informal sector
- Sources of employment, unemployment and under employment
- Medium and long-term investments planned by the private sector
- Natural resources

**Land Use**

- General categories and areas
- Ownership and status of land
- Vacant land available for development
- Existing land regulation

**Infrastructure Assessment**

- Data on existing infrastructure
- Types of services available
- Areas and populations served
- Problems resulting from inadequacy of infrastructure systems and services
- Projection of infrastructure needed

**Community Facilities**

- Existing facilities by number and size
- Deficiencies
- Projected needs

**Environmental Data**

- Topography
- Drainage Pattern
- Location and size of environmentally sensitive areas
- Location and size of environmentally affected areas..

## 2.3 Scope of Work for a Structure Plan Report Preparation

The structure plan should be presented in both written and graphic form. The written documentation is as important as the physical plan. The structure plan should be presented following the content as suggested below:

**Section 1: Introduction**

- Background of the project
- Objectives of the Structure Plan
- Structure Plan Area and Planning period

**Section 2: Critical Planning Issues**

- **Existing Development Pattern**
  Description of the Paurashavas' administrative, economic, social, physical and environmental characteristics; growth pattern of the Paurashava; functional linkages and hierarchy in the national and regional context; catchment area; population; land use and urban services; agencies responsible for different sectoral activities, etc. (These descriptions should be supported by necessary maps, diagrams and tables).

- **Identification of urban growth area**
  Based on analyses of patterns and trends of development, and projection of population, land use and economic activities for next 20 years, urban growth area should be determined. This may be larger than the Paurashava area and include immediate hinterland.

- **Development problems of the Paurashava**
  Identification and description of physical, socio-economic and environmental problems.

**Section 3: Higher Level Plans and policies**

Discussion of relevant portions of national plan and relevant national policies such as land use policy, housing policy, environment policy, coastal management policy and different laws and regulations related to urban development.

**Section 4: Urban Land Development Strategies**

Policies and strategies with particular attention to:

- Optimization of existing urban land resources (Densification, infill development, fringe area development etc.).
- Planned new area development
- Areas for conservation and protection

**Section 5: Strategies and policies for sectoral Development.**

- **Socio-economic sectors**
  (Population, economic development and employment generation, housing and slum improvement, social and community facilities, tourism and recreation facilities etc.)

- **Infrastructure sectors**
  (Transport, utilities, flood control and drainage etc.)

- **Environment**
  (Natural resources, environmental hazards, air and water quality, sanitation etc.)

**Section 6: Implementation Issues**

Institutional strengthening of paurashavas, capacity building, resource mobilization etc.

## 3.0 Urban Area Plan (UAP)

Urban Area Plan is prepared for managing and promoting development over medium term on the basis of the strategies set by the longer-term structure plan. Basically the UAP will be an interpretation of the structure plan over the medium term (10 to 15 years). The **coverage of the UAP** will be existing urban areas and their immediate surroundings with the purpose of providing development guidance in these areas where most of the urban development activities are expected to take place over the next 20 years. Delineation of the Urban Plan Area should be based on the basis of the urban growth area as identified in the Structure Plan. It will contain more details about specific programmes and policies that require to be implemented over the medium term. The UAP will consist of the following plans:

- Land Use plan

- Transportation and traffic Management plan

- Drainage and Environmental Management Plan

## 3.1 land use plan

The land use plan is the principal component of the Master plan/Urban Area Plan. The plan must consider the allocation of land for residence, business, industry, municipal facilities public and private recreation, major institutional facilities, mixed uses, open space and natural and fragile areas. Optimum intensities and standards of development must be established for each use classification and location, based upon current development, natural land characteristics, and projected municipal services and facilities.

Allocations of land use must consider impacts on surface and ground water resources, wetlands, coastal features, and other sensitive and fragile natural resources. Judgements must be made on the ability of various existing and new land use controls to properly protect these natural resources.

The characteristics, trends and projections of population and employment will be essential input to the allocation of land areas for use. The plan should show how the projections have been used to determine amounts of land needed for residential, industrial, and other purposes. These quantitative relationships carry over to other components of the plan in that certain facilities and services (utilities, transportation, recreation areas etc.) are needed to support the land allocation to each use.

## 3.2 Transportation and Traffic Management Plan

The goal of the plan for the transportation system should be to provide a balanced transportation system that meets the needs of the community by accommodating the movement of people, goods, and services at an optimum level of safety, economy and efficiency. This plan shall consist of the inventory and analysis of existing and proposed circulation systems, street patterns and any other modes of transportation in the paurashava in co-ordination with the land use plan. The focus of local concern will be municipal streets and roads, pedestrian circulation, local marine facilities, local bicycle paths, parking and other facilities providing or supporting the transportation of people and goods within the Paurashava. This focus will also include associated land uses such as terminals, stations and other shipping facilities.

## 3.3 Drainage and Environmental Management Plan

The main objective of the environmental management plan should be to protect and enhance the environment. This plan should address the major environmental issues facing a paurashava. From environmental management perspective it is important that critical areas, natural resource lands and the environment be protected. In addition, environmental infrastructure such as water supply, storm drainage sanitary sewer and solid waste management facilities that are required to mitigate negative environmental consequences resulting from individual and collective human activities, should be properly planned and implemented. Proper management of existing infrastructure and services is also of crucial importance. This plan should cover the following environmental features and issues where applicable:

**Natural Resources**

- Forests and natural vegetation
- Streams and water bodies
- Watlands
- Shorelines
- Aquifers
- Water quality
- Air quality

**Environmental hazards**

- Flood hazard
- Severe storm hazard (cyclone, storm surge etc.)
- River bank erosion

**Environmental infrastructure**

- Drainage system
- Water supply system
- Sewerage and sanitation
- Solid waste management

## 4.0 Action Plan

The action plan is a separate component covering first five year period of the Master plan. It examines, in the context of the Urban Area/Master plan, those items that might be implemented in this period and thus contains more detail on these items. The plan should be prepared in consultation with ward committees, local agencies and paurashava officials. The action plan should consist of (but not limited to) the following:

- Project selection and prioritisation
- Cost estimate and sources of finance
- Phasing of implementation
- Implementing authorities/agencies etc.

## 5.0 Table of Contents for a Upazila Structure Plan in Payra-Kuakata Comprehensive Plan Area

**Chapter 1: Introduction**

1.1 Project Background