

## Chapter 3

# Managing Char Development and Settlement: A Complex Process

CDSP-IV TA Team

Char Development and Settlement has several distinct dimensions, all of which have to be carefully considered both in themselves and in combination.

Firstly, we have to take into account the physical processes of land accretion through sedimentation and erosion and the evolution of topsoil, involving a complex process of desalinisation. Physical factors which also must be understood are the effects of the astronomical tides and meteorological factors affecting temperatures, precipitation, winds and tropical cyclones especially in relation to frequent tidal bores and storm surges which can, on occasion, be very large and dangerous for human and animal life.

Secondly, settlement is a human and social process, in which social organisation has to be considered carefully and gender issues taken into account. Law and security is extremely important and a fair and transparent land allocation policy is crucial, as is ensuring access of settlers to justice and the enforcement of human rights. The development of infrastructure for flood control, drainage, transport, shelter from cyclonic surges, water supply, sanitation, education etc. is also essential.

Thirdly, livelihoods which are generally directly or indirectly dependent on agriculture/fishery/livestock are essential for settlers to survive and thrive, so a dynamic and sustainable development of the agro-ecological system, involving the provision of extension advice and credit provision, and including social forestry development, is an important priority.

Finally, social development in terms of accessible and effective health, nutrition, family planning and education services is an essential part of the process in order for settlers to enjoy the benefits of settlement and be physically and mentally well prepared to meet its challenges.

In CDSP IV, previous experience has enabled an effective and integrated approach involving a number of Government Ministries and capable Non-Government Organisations to tackle these issues in a holistic way which provides inter-related opportunities and benefits to settler families.

Some of the factors making the Char Development and Settlement Project a complex one are briefly described in this chapter.

## **Climate Change**

Harsh natural conditions (i.e. flooding, cyclones and a lack of fresh water) and an unfavourable socio-economic situation (i.e. lack of a secure land title, poor communication infrastructure, lack of institutions and governance) in char areas mutually reinforce chronic vulnerability to climate conditions and natural disasters. Although people have always adapted to the climate, the current process of climate change coupled with extreme vulnerability and exposure makes increasing the adaptive capacity of the char population essential, especially for the medium and long term.

As it is impossible to anticipate exact future impacts of climate change – particularly at local scale – climate change adaptation should have an intermediate goal of empowering communities to adapt to the impacts in a broader development perspective, which is exactly what CDSP-IV is doing. CDSP-IV includes both community-based and engineering interventions, which has proved to be a very effective approach as it not only addresses climate change adaptation but also increases the resilience of communities to current climate conditions, while simultaneously improving the socio-economic situation in the chars.

The overall objective of CDSP-IV is to improve the economic situation and living condition of the population in the coastal areas of South-eastern Bangladesh with special reference to the poorest segment of the population. In doing this the project reduces current vulnerability to climatic conditions and increases the capacity of the char communities to adapt to climate change impacts. Along with providing physical security through infrastructural development, CDSP has also assisted the char dwellers in receiving legal land titles which is the first priority of the settlers.

## **Integrated Development**

Experience from CDSP I, II, III and IV shows that, thanks to the reduced vulnerability provided by the infrastructure, combined with the security of land tenure, higher incomes, and other socio-economic improvements, people have invested in better housing, more resilient agriculture and effective local institutions capable of dealing with changing conditions. This holistic approach in CDSP with interventions across a wide range of different sectors is a model for the development of coastal communities to avoid the future risk of climate change. The Government of Bangladesh is now trying to replicate this model in other char areas to help the coastal communities to adapt to the changing climate.

## Riverbank Erosion

A major challenge for coastal development in Bangladesh is the continuous river bank erosion. The major rivers in Bangladesh carry large amounts of sediments, especially during the monsoon season which makes the rivers braided and creates a migrating pattern of channels and char lands (BDP2100, 2017). It is very difficult to predict the accretion and erosion process in the Bay of Bengal. Prediction is only sometimes possible at medium term (10-20 years) to identify roughly which areas will likely accrete and which will erode. River studies are necessary on land erosion and accretion for the planning of any new project in char areas. For physical char development, two other aspects are also important: the minimum land level for empoldering and the accretion rate in front of planned polders in view of drainage opportunities.



**Fig. 3.1.** Riverbank erosion in Shantipur, Noler Char, 2018.

## **Project coordination and internalisation**

CDSP-IV is unusual in development terms, in that it successfully brings together ten different organisations. The programme is co-financed by the Government of Bangladesh, the Government of the Netherlands, and IFAD, and relies on the cooperation and cross-sectoral information sharing of six government departments, namely: Bangladesh Water Development Board, Forest Department, Local Government Engineering Department, Department of Public Health Engineering, Department of Agricultural Extension, and the Ministry of Land. Four partner Non-Government Organisations are also taking part: Sagarika Samaj Unnayan Sangstha, Dwip Unnayan Songstha, Society for Development Initiatives and BRAC. The large number of parties involved with the project requires appropriate coordination mechanisms at the national and local levels. For example, in order to avoid a potential tension between the advisory and support functions with regard to the implementing agencies on the one hand, and the monitoring of quality control and recommendations on payments on the other hand, meetings between the agency concerned and management of the Technical Assistance (TA) team are organized to facilitate a situation in which both functions can be fulfilled successfully.

The activities for which the TA team has an initiating and leading role always take place under the responsibility of the Project Management Committee and the Project Coordinating Director of the BWDB. In addition, the sub-contracting, and in most cases tendering, for those activities for which that is required (for instance NGO selection, commissioning of studies) are done by the main consulting firm.

Consolidation of achievements of earlier phases, is one of the aims of CDSP. Internalisation is understood as incorporating concepts and experiences of CDSP I, II and III into the approaches and working methods of the participating government agencies. The aim is to make these agencies better prepared for future char development programmes. This has proven to be a difficult task, with limited but, at the same time, significant achievements.

## **Alignment with Country Policies**

CDSP is very well aligned with MDGs, SDGs, and several important government policies which are mentioned in the following section.

## **National Poverty Reduction Strategy (National Strategy for Accelerated Poverty Reduction 2009-11)**

The second poverty reduction strategy identified chars as being a pocket of extreme poverty and it specifically mentions the Char Development and Settlement Project – which is designed to support economic development and poverty reduction. In this strategy, water management, agriculture, forestry, rural roads, land policy and disaster management are all focal areas for pro-poor growth, to which the project is contributing. Supporting strategies include actions to reach extreme poor groups, support for better water and sanitation, especially where groundwater conditions are unfavourable (such as the saline coastal area), and adapting to climate change (CDSP-IV, 2012).

## **The Coastal Development Strategy (2006)**

CDS has evolved around nine strategic priorities:

- Ensuring fresh and safe water availability
- Safety from man-made and natural hazards
- Optimising the use of coastal land
- Promoting economic growth emphasising non-farm rural employment
- Sustainable management of natural resources
- Improving livelihood conditions of the people, especially of women
- Environmental conservation
- Empowerment through generating and disseminating information and knowledge
- Creating an enabling institutional environment.

CDSP arguably has strong credentials as far as seven of these strategic priorities are concerned, with relatively less emphasis on non-farm employment and on environmental conservation. The Coastal Development Strategy is very much formulated along the lines of the principles of Integrated Coastal Zone Development, and CDSP is at heart an ICZM-project, contributing in a significant way to applying ICZM in Bangladesh. In the eyes of the staff of the ICZM-project that ceased to exist in 2006, CDSP was an ideal environment for piloting certain ideas, such as establishing a District Information Centre as a dissemination vehicle for coastal information and creating a connection between data bases of coastal projects with the central coastal data base at the Water Resources Planning Organization (WARPO). These activities were indeed included in CDSP III. However, since 2006, implementation of the strategy has not taken place due to reduced funding and changes in governmental priorities.

## **Bangladesh Delta Plan 2100**

Owing to the deltaic formation of the country, the configuration of the rivers and the challenges posed by natural disasters and climate change, Bangladesh has been ranked as the 5th most vulnerable country in the world in terms of risks from natural hazards. In view of the special long-term challenges for development outcomes presented by climate change and natural hazards, the Government has decided to formulate a long-term Bangladesh Delta Plan 2100 (BDP2100) with the help of the Netherlands Government. The BDP2100 looks primarily at the medium-term measures (2030-50) but also seeks to address the longer-term challenge of sustainable management of water, ecology, environment and land resources in the context of their interaction with natural disasters and climate change.

CDSP aligns well with these specific goals and covers 6 blocks among the 8 blocks of integrated issues covered. Among six components of CDSP-IV, four of them directly and indirectly address the impacts of climate change. This is done through, for example, effective management of water resources for protection from climate change, constructing climate resilient infrastructure, and livelihood support to improve livelihoods and household resilience. In addition, the 'Institutional Development' and 'Knowledge Management' component of CDSP-IV covers the last block of the Delta Plan, which is Governance.

### **BDP2100 specific goals**

Goal 1: Ensure safety from floods and climate change related disasters;

Goal 2: Enhance water security and efficiency of water usages;

Goal 3: Ensure sustainable and integrated river systems and estuaries management;

Goal 4: Conserve and preserve wetlands and ecosystems and promote their wise use;

Goal 5: Develop effective institutions and equitable governance for in-country and trans-boundary water resources management;

Goal 6: Achieve optimal and integrated use of land and water resources.

## **Agricultural Khas Land Management and Settlement Policy 1997 (including 1998 Amendment)**

State-owned land is known as khas land in Bangladesh. In 1997, the Khas Land Settlement Policy was promulgated, authorising khas land to be distributed for a 99 year lease period. CDSP works in 'char land' which is state-owned land and falls into the broader category of khas land. The aim of the project is to improve the security of landless people who are informally occupying char land by providing them with legal title. The land settlement process of CDSP follows the

provisions of agricultural khas land management and settlement policy of 1997. Over the years of CDSP implementation the process has been streamlined and simplified making it faster and more accessible for the char settlers.

### **Social Forestry Rules 2004 (Amended in 2010 and 2011)**

In Bangladesh, involvement of local people in forest management has changed much in recent years. Since the 1980s, forest people came to be viewed as important stakeholders for forest conservation rather than destroyers of the forest. Forest law has been changed to facilitate social forestry and to strengthen forest protection by involving local people. The Forest (Amendment) Act 2000 facilitates social forestry in Bangladesh and gives the concept of social forestry a clear shape. In 2004, Social Forestry (SF) Rules came into force which state that, for efficient management of SF a nine-member SF Management Committee for each locality of social forestry is constituted. The members of the committee are elected by the beneficiaries of the concerned social forestry locality with a minimum of one-third being elected from women participants (Jashimuddin, 2012).

CDSP-IV is implementing different types of social forestry programmes and to maintain these plantations, the project uses Social Forestry Groups (SFGs) who are the core of the social forestry approach.

### **Guidelines for Participatory Water Management (2001)**

In 2001, the Ministry of Water Resources (MoWR) shifted responsibilities for water management away from state implementing agencies towards community-based Water Management Organisations (WMOs), with limited involvement of local government institutions, by formulating the Guidelines for Participatory Water Management (GPWM) in 2001 within the framework of National Water Policy, 1999 (Dewan et al, 2014).

The MoWR defined Participatory Water Management (PWM) Rules through a gazette notification in 2014. The Rules relate to formation and functions of WMOs in water resources projects. The most important shift which the PWM Rules 2014 suggest is that from now on the WMOs will be registered under Bangladesh Water Development Board (BWDB) rather than the Department of Cooperatives (DoC). The Rules emphasise a larger enrolment of local stakeholders in the Water Management Groups (WMGs) and their participation in Operation and Maintenance (O&M) of the water management infrastructure.

CDSP follows the GPWM to form WMOs in project areas for the development of the institutional framework and capacity of the local stakeholders to gradually establish ownership through participatory water management.

Some of the lessons learnt of CDSP regarding managing this complex process of char development are:

- Every char is different in terms of their dynamic environment (i.e. sea facing or hinterland) and socio-economic situation. Thus, requires a flexible planning with maximum time horizon of 20 years. This is however challenging for projects as activities need to fit within a project time horizon of 5 to 7 years.
- As mentioned above in this chapter a major challenge for coastal development in Bangladesh is the continuous river erosion making it difficult to predict the accretion and erosion process in the Bay of Bengal. Prediction is only sometimes possible at medium term (10-20 years) to identify roughly which areas will likely accrete and which will erode.
- Char development is an integrated process and cannot be done in isolation. We have to consider the surrounding environment during planning such as future accretion of the surrounding areas to determine the drainage design and O&M. This is an important issue to consider during a feasibility study.
- Char development should be embedded in wider government plan. CDSP is mentioned in Bangladesh government planning documents and the ICZMP as the way to develop new chars. However, account needs to be taken of competing uses of new chars such as fish/shrimp farming, and Rohingya resettlement.