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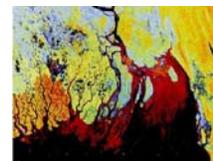
**INTEGRATED COASTAL ZONE MANAGEMENT
PLAN PROJECT**

**INVESTMENT AND FINANCING STRATEGY
FOR
COASTAL ZONE DEVELOPMENT IN BANGLADESH**

Working Paper
WP037

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PDO-ICZMP

**Program Development Office
for
Integrated Coastal Zone Management Plan
(PDO-ICZMP)**

**Investment and Financing Strategy
for
Coastal Zone Development in Bangladesh**

Working Paper
WP037

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ABBREVIATIONS AND ACRONYMS

ADP	Annual Development Program
BRDB	Bangladesh Rural Development Board
CDPEMF	Coastal Disaster Preparedness & Emergency Mitigation Fund
CDS	Coastal Development Strategy
CIDA	Canadian Agency for Development Agency
CN	Concept Note
CEDF	Coastal Environment and Development Facility
DFID	Department for International Department (of the United Kingdom)
ICZMP	Integrated Coastal Zone Management Program
IDCOL	Infrastructure Development Company Ltd.
I-PRSP	Interim Poverty Reduction Strategy Paper – Bangladesh
MSMEs	Micro, small and medium enterprises
NEC	National Economic Council
NGO	Non governmental organization
NORAD	Norwegian Agency for Development
PCP	Project Concept Paper
PDO-ICZM	Program Development Office of Integrated Coastal Zone Management
PIP	Priority Investment Program
SMEs	Small and medium enterprises
TAPP	Technical Assistance Project Proforma

1 PURPOSE AND SCOPE

Investment and financing strategy for the coastal zone is an integral part of the Coastal Development Strategy (CDS) that attempts at translating the Coastal Zone Policy into actionable programs and projects. The investment and financing dimension of the CDS outlines the program priorities that should guide the identification and formulation of project interventions. Mechanisms and institutional processes for prioritizing programs and projects are equally important for investment prioritization.

Public sector programs and Government policies and regulatory measures provide the enabling environment for private sector investment activities. Government's poverty reduction strategy (GoB 2004b) assigns a greater role of the private sector in poverty alleviation, employment and income generation. The strategy explores opportunities for increased private sector participation in productive economic activities utilizing the resource base of the coastal areas. Additionally, in line with Government policy, the investment strategy also seeks increased participation of private sector in infrastructure investments and management and operation of publicly owned infrastructure assets. The fragility of the coastal resource base will require carefully designed regulatory measures that the government must develop and enforce effectively. Such issues can be effectively addressed through public private partnership, increased dialogue between Government and private sector, and coordination and sharing of knowledge among entrepreneurs on investment and development opportunities. Mechanisms and instruments to mobilize greater participation of the private sector should therefore constitute an important aspect of the investment strategy.

Financing mechanisms are explored in terms of funding of public sector programs for the coastal zone. While the Government's Annual Development Program (ADP) is the program budgeting instrument for funding public sector programs, there would be the need for the creation of dedicated funding schemes for meeting special needs of the coastal zone. The financing strategy explores such feasible dedicated funding schemes. The strategy also identifies various sources of financing for private sector business and investment undertakings.

The preparation of the paper is based on the considerable work done by the Program Development Office for Integrated Coastal Zone Management Program (PDO-ICZM), especially in the areas of public sector investment strategy options and program priorities. The knowledgebase of PDO-ICZM is extensive on Government policies and public sector interventions, while it has also captured local level development priorities through extensive consultations at the local level (local government and communities). Thus, much of the articulation of public sector investment and financing strategy is based on review of documents available in the PDO-ICZM organizational knowledgebase and consultations with the program staff whose insights and ideas have provided valuable information for formulation of the investment and financing strategy. References on project reports and documents on workshops and conferences on private sector development issues were reviewed and additional insights on private sector investment issues were gained from consultation with entrepreneurs involved in business activities that have considerable potential for further growth in the coastal zone.

A. INVESTMENT STRATEGY

2 OVERVIEW

The ICZMP has identified the coastal zone as a region of opportunities which could be exploited for sustainable development of the region and greater contribution to the national economy. The coastal region is also vulnerable to environmental degradation and climatic upheavals. Any large-scale exploitation of resources therefore must meet strict environmental guidelines and norms. There is also a large number of people living below poverty levels and efforts need to be made in terms of increasing opportunities for better livelihood in the coasts.

One third of the country is in the coastal zone and inhabited by a population of 35.1 million (PDO-ICZMP 2004d). The territorial boundaries of the coastal zone are based on the presence of a pre-determined threshold of any of the three elements: tidal water movements, salinity intrusion, and cyclones and storm surges. Consequently, 19 districts constituting 147 upazilas have been identified to comprise the landward coastal zone. Of these 48 upazilas are considered as “exposed” directly to vulnerabilities from natural processes. The administrative unit underlying the identification of spatial units for the landward coastal zone provides an operational modality for public sector investment program which will be implemented through local level administration at the upazila level. The other part of the coastal zone is the exclusive economic zone (EEZ). The seaward coastal zone offers opportunity for considerable economic development and support for the national economy.

A Coastal Zone Policy, approved by the Government in January 2005, accounts for the specific needs of the coasts and provides a framework for integrated management and development of coastal resources. This policy ensures that future management and development of coastal resources remain intimately tied with national developmental policies and goals. The ICZM investment strategy responds to these coastal policies and is expected to become a part of the coastal development strategy presently under preparation.

The ICZM investment strategy requires identification of opportunities in which major efforts and interventions with scarce resources will produce greater net benefit. Every opportunity has a threat and if those threats are not well understood unrealistic assumptions will be created in terms of expected time series for investments and their feasibility. The strategy also requires a clear delineation of roles and responsibilities of different stakeholders participating in the management and development of coastal resources. This ICZM investment strategy requires continued role of public sector investment but allocated to projects prioritized through an enhanced planning and programming process. The investment strategy further assumes that a greater part of investment that will be required to generate economic activities, employment and income within the coastal zone must come from the private sector. The paramount role of the private sector, therefore, cannot be minimized. An important element of the strategy is for the creation of appropriate enabling environment for encouraging private sector investments in all sectors including micro, small and medium manufacturing, and large-scale manufacturing and infrastructures. Private sector investments should also be guided by appropriate environmental regulations to ensure that the fragile resource base in the coasts is not undermined.

Although the investment strategy constitutes participation of major stakeholders, i.e. public and private sectors and NGOs, it remains with the public sector to plan and program major investment programs for the development of coastal areas. They relate to infrastructure, environment, safety and protection, education and health. It must also have an analytical framework for prioritizing interventions, albeit through an institutionalized planning and investment programming process that forms an integral part of the national planning and budgeting process. The optimality of the public

sector investment program would thus be established by maximizing the attainment or implementation of a set of priority development projects subject to budget constraint. Currently, and as outlined in a note to the formulation process of Priority Investment Program (PIP) (PDO-ICZMP 2004e), a project-based approach is considered. However, it will be equally useful to defining sectoral opportunities and pursue a programmatic approach to investment allocations to obtain maximal results of scarce resources.

The Coastal Zone Investment Strategy should be based on the principles that:

- i. the coastal ecosystems and environment are maintained and conserved;
- ii. the vulnerabilities of the population from storm surges, cyclones and floods are mitigated;
- iii. adequate infrastructures are established for the development and expansion of business activities and basic needs of the population; and
- iv. economic activities are carried out by the private sector supported through the appropriate enabling environment and incentives.

3 COASTAL ZONE POLICY

In order to complement and strengthen the existing national planning and budgeting mechanism, the Government with assistance of the country's development partners has established the Program Development Office of Integrated Coastal Zone Management (PDO-ICZM) to coordinate planning and support implementation and monitoring of development activities in the coastal zone. This process has been guided by the Government approved Policy Note on ICZM dated September 1999 – “Integrated Coastal Zone Management Concept and Issues” (MoWR 1999).

The PDO-ICZM has coordinated the preparation of a comprehensive ICZM policy and development strategy through a participatory approach. This has involved a series of consultations with sectoral line ministries and departments, local government agencies, and a cross-section of stakeholders at the district and upazila level. Additionally, the PDO-ICZM has undertaken a comprehensive review of an entire range of sectoral policies to assimilate the coastal dimension of these policies.¹ The resultant Coastal Zone Policy thus builds on the relevant segments of coastal issues in different national policies including national development policies at the macro and sectoral level. The draft policy harmonizes the entire range of national development policies that transcends beyond sectoral policies. Its implementation will thus require commitment of different ministries, departments and agencies to harmonize and coordinate their activities in the coastal zone under an effective institutional mechanism for coordination (as initiated by the PDO-ICZM).

The policy document acknowledges the vulnerable position of the coastal population arising from a lack of socio-economic development of the regions and points out the significant potential existing in exploiting coastal resources to mitigate vulnerability and contribute to regional and national economic development. Thus the policy goal of integrated coastal zone management is to “create conditions, in which the reduction of poverty, development of sustainable livelihoods and integration of the coastal zone into national processes can take place”.

¹ The sectoral policy documents assessed included: (a) Environmental Policy and Implementation Plan (MoEF, 1992), National Tourism Policy (MoCAT, 1992), National Forest Policy (MoEF, 1994), National Energy Policy (MoEP&MR, 1996), National Fish Policy (MoFL, 1998), National Policy for Safe Water Supply and Sanitation (MoLGRD&C, 1998), National Agricultural Policy (MoA, 1999), and Industry Policy (MoI, 1999).

The specific objectives of the ICZM policy are sharply focused on pro-poor growth with due considerations to environmental management and equity, as spelt out below:

- Economic growth.
- Meeting basic needs and creating livelihood opportunities for coastal communities.
- Reduction of vulnerabilities and enhancement of coping capacities.
- Equitable distribution of resources and economic benefits across social strata.
- Empowerment of coastal communities.
- Women's advancement and promotion of gender equality.
- Sustainable management of natural resources.
- Preservation and enhancement of critical ecosystems.

The challenge is to find feasible approaches to translating the policy statements into an action plan with detailed programs and projects supported by budget and other resources for implementation. The difficulty in implementing policies is largely due to the considerable coordination required among multiple ministries, departments and agencies. The ICZM policy planning process, including investment programming, must therefore address the following requirements for ensuring effective implementation of the national coastal zone policy:

- Internal mobilization within the sponsoring ministry.
- Support from other relevant ministries.
- Support from financial and planning organizations, including development partners.
- Public participation or participatory management.
- Approval from legal departments.
- Approval of the highest office or the Cabinet of Ministers.

Thus, the investment and financing strategy must be couched in the institutional framework and national/government decision-making process reinforced by the effective working of the above-mentioned institutional processes.

4 INVESTMENT STRATEGY

4.1 Strategy

The investment strategy for the coastal zone must address the set of specific issues that constrain development of the coastal areas as well as economic opportunities and development needs of the region. For investment planning purposes the 19 districts constituting the landward zone and the exclusive economic zone are covered in the program. The focus of the investment strategy can be established by addressing the rationale that underlies the coastal zone policy. Two most important rationales include:

- i. reduction of people's vulnerability to natural disaster, and
- ii. mitigating deterioration of the environment.

Additionally, the investment strategy should respond to three other development issues that have underlined the rationale for having a separate coastal zone policy. These include:

- i. disadvantaged position of the coastal areas,
- ii. poverty among people living in the coastal zone, and

iii. potential contribution the coastal zone can make to the national economy.

Addressing the policy rationale would therefore constitute the strategic objectives of the coastal zone investment strategy. Consistent with these objectives, the draft coastal development strategy (PDO-ICZMP 2005a) spells out priorities and indicative programs. Indicative time frame for these programs are also specified in the draft CDS, although the implementation plan of these interventions will change through the dynamic process of programming and budgeting.

The draft CDS covers comprehensively the economic development potential of the coastal zone. The draft Strategy is focused on resource management, water resources management, and local level community management of resources for improving sustainable livelihood opportunities. These are clearly important development and poverty issues, but the coastal zone also offers significant economic development opportunities. The draft Strategy thus emphasizes the economic growth strategy.

Economic growth is a critical dimension of poverty alleviation. The draft National Strategy for Accelerated Poverty Reduction (GoB 2004b), prepared through extensive research and consultations with stakeholders at the national and sub-national level, strongly emphasizes economic growth in spite of the observed inequity in the growth pattern since the late 1980s. At the national level the rather impressive economic growth of 5% per year in the past decade has been a result of increased industrial growth (currently over 7% per year) and rural non-farm economic and employment generating activities. The draft Poverty Reduction Strategy further recognizes any attempt to twist the growth pattern will undermine the achievements made in terms of reducing the incidence of poverty. Inequality and poverty at the rural household level must be undertaken through a program of improving agricultural productivity, enhancing the human capabilities of the poor through health and education, and provision of micro finance for supporting livelihood activities at the household level. Additionally, the Strategy points at development of rural infrastructures including market infrastructures and access to markets.

Consistent with the poverty reduction strategy at the national level, the Investment Strategy for the coastal zone must exploit the resource potential and economic growth opportunities in the region. Additionally, in view of the fragile environmental and resource base of the coastal zone, a careful balance of economic growth and environmental and natural resource management should accompany the investment interventions. The economic development program, which can be effectively advanced through increased investments by the private sector, will require provision of relatively large-scale investments in infrastructures – road transport, port, inland water transport, and power. A number of infrastructure projects will have significant implications for economic growth and industrial and agribusiness development at the national level. Thus, much of these infrastructure investments will be an integral part of the national program of infrastructure development. The coastal areas however suffer from specific constraints which will require specially designed infrastructure provisions. Remoteness of Sandwip and Kutubdia islands need to be supported by diesel-powered energy generation capacity and innovative investments for installation of power distribution systems. Wind energy and solar photovoltaic-based energy sources as well as alternative renewable energy for household, agriculture, educational, and health clinic facilities can also contribute significantly to the energy needs of the coastal zone.

In terms of strategic economic development of the coastal zone, there should be focused effort on the development of key sectors that offer significant growth opportunities. Two sectors are of highest priority, especially in view of the observed interest of the private sector to undertake investments in projects in these two sectors. These are tourism and fisheries. The private sector should be expected to play a dominant role in these sectors, while the government must provide the policy and regulatory frameworks for investment including inducing foreign direct investment.

Besides direct investment by the private sector, the modality of public private partnership will be critical to generating investment growth in both economic and infrastructure sectors. The public private partnership arrangement will not only assure effective outcome of investment projects, especially in infrastructure sectors, the modality will also leverage the potential of mobilizing financial resources from the private sector. Additionally, foreign direct investment and catalytic investment from private sector funding windows of International Financial Institutions (e.g. ADB, IFC/World Bank) will augment investment participation of domestic private sector entrepreneurs.

The role of NGO and micro finance organizations will also have a critical role in local level and household level economic activities. Details of these strategies are outlined in the following section.

4.2 Priority areas

The priority areas of investment should in principle be derived from the Coastal Development Strategy. Pending finalization of the development strategy, an indicative set of priority areas that should constitute the Investment Strategy are enumerated below. These have direct correspondence to the strategic objectives of the investment strategy spelt out in the early part of the preceding section.

- Mitigation of natural disasters, safety and protection.
- Environment management – protection and regeneration of the environment.
- Water resources management.
- Rural livelihoods and sustainable economic opportunities for coastal communities.
- Productive economic activities and focused development of tourism and fisheries sector.
- Infrastructure development.
- Social development including health and nutrition, education, and water and sanitation.

Pursuing development interventions in these broad areas of strategic priorities would address the national poverty reduction strategy as stated in the preceding section. It should be noted that the Government, development partners, NGOs and private sector are already actively engaged in each of these areas. This paper provides a cohesive framework within which investment projects of both public and private sectors can be prioritized. The relative role of public and private sector in each of these intervention areas is also identified as part of the Investment Strategy. The program areas identified below will be substantiated in the Coastal Development Strategy, while implementation of the strategy will require formulation of investment plans containing time-bound program and project interventions with associated budget provision.

a) Mitigation of natural disasters, safety and protection

Coastal areas and the resident population are vulnerable to recurrent natural disasters – cyclones, drainage congestion and floods. Agriculture, irrigation systems and livelihood activities of the local population are threatened and often disrupted by erosion of embankments, polders, and other similar infrastructures. Recurrent floods cause extensive damage to primary and secondary roads, feeder roads, rural roads, small bridges and culverts, and inland waterways support systems including small jetties. A significant size of public sector budget is allocated to meet the replacement investment requirement to put back the physical infrastructures in operating condition to prevent further disruption to economic and livelihood activities of the local population.

A substantial magnitude of public investment program is ongoing to address these investment requirements. Donor agencies support a significant proportion of the development budget to complement government provision of resources. Thus Government and donor support for these public investment programs will be critical in the future. Concurrently, capacity development programs will be needed to strengthen local level delivery structures and systems.

The priority investment program for mitigating natural disasters and ensuring safety and protection of the coastal population builds on the ongoing and planned program. The main components of the program include:

- Coastal embankment rehabilitation, including:
 - ◊ protection from saline water;
 - ◊ river bank and khal protection schemes;
 - ◊ rehabilitation and of polders, as well as extension of polders;
 - ◊ canal excavation;
 - ◊ construction of new embankments;
 - ◊ protection and extension of irrigation systems;
 - ◊ excavation of river and branch channels.
- Flood control and drainage:
 - ◊ Large scale flood control schemes;
 - ◊ small scale flood control and drainage;
 - ◊ estuary development to mitigate against river erosion and to prevent saline water intrusions including land settlement.
- Multipurpose cyclone shelter centers.

b) Environment management – protection and regeneration of the environment.

The environment and forestry management issues in the coastal areas are well documented (PDO-ICZMP 2004d). Both capacity development and capital investment interventions are called for addressing the following issues:

- Environment management and planning, including foremost continued capacity strengthening of the Department of Environment and Department of Forestry, participatory process in planning, advocacy and independent watch on development interventions which impact on environment and poverty.
- Biodiversity conservation. The priority for biodiversity program has been established which includes conservation of Sunderban reserve forest and forestry resources in south-eastern Bangladesh, and coastland and wetland biodiversity management in Cox's Bazar and Hakaluki haor.
- Forest resource management – conservation and afforestation.
- Pollution control – air quality control in the urban areas, industrial pollution control especially pollution caused by ship-breaking industrial activity in Chittagong, and cleaning and prevention of oil spillage from ships in Chittagong port area.

Public sector program will primarily address interventions in the above areas. Partnership with NGOs, which have comparative advantage in implementing community level resource management and environmental issues, will play a strategic role in the implementation arrangement of these program interventions.

c) Water resources management.

The draft of the Coastal Development Strategy (PDO-ICZMP 2005a) provides an outline of priority areas in addressing present and future water resources management issues. These include safeguarding the availability of fresh water, water supply and sanitation program in the small towns (pourashavas), integrated and decentralized approach to regional water resources management. Additionally, the future program will require extension of ongoing programs in respect of rural water supply management, environmental sanitation, sewerage disposal schemes, and small-scale

irrigation systems. Arsenic mitigation measures in the coastal areas will also require long-term capacity development and small investments at the community level.

Investments in water resources management will be primarily funded from the government budget while donor support will also be critical. Partnership with NGOs will be critical. For mitigation of oil spillage in Chittagong port and smaller jetties as well as control and prevention of industrial pollution resulting from industrial activities (particularly ship-breaking) can be effectively addressed in cooperation and partnership with the private sector. Government support for policy and legal frameworks for containing industrial pollution can be effectively implemented through participation of private sector in addressing the pollution and environmental issues. Investment in capacity building measures will thus constitute an important strategy.

d) Rural livelihoods and sustainable economic opportunities for coastal communities

The brief on “Living in the Coast – People and Livelihoods” (PDO-ICZMP 2004b), prepared by the Program Development Office for ICZM, provides a succinct profile of the major livelihood groups, their strategic choices to use their assets in income-earning (or cost-saving) activities and their susceptibility to vulnerabilities. The fragile resource base upon which a majority of the coastal population depend on for eking out their livelihoods is constantly under pressure of overexploitation and depletion. Thus, the strategy for enhancing livelihood opportunities for the poor in the coastal areas emphasizes the simultaneous attainment of the dual objective of improving income and employment (self and wage employment) and environment/natural resources management.

Livelihood activities in the coastal zone can be clustered into two broad groups (PDO-ICZMP 2004b):

- natural resource based activities, such as agriculture, salt processing, fishing, aquaculture, shrimp fry cultivation, dehydration of fish, extraction of forest resource, etc; and
- human resource based activities, such as livestock raising, poultry keeping, small scale boat building, fishing net making, fish processing, trading and other small scale manufacturing and service activities.

In the past two decades NGOs in Bangladesh have built up an extensive network of support services for accessing the poor in improving their livelihood opportunities. As both funding agency and implementing partner of Government and multilateral and bilateral donors, a large number of NGOs currently have programs in the coastal zone in areas such as: community development to empower fisherfolk communities, agriculture and small agro-based activities, micro and small enterprise development involving both women and men entrepreneurs and self-employed, wetland resource management and providing capacity development for income earning opportunities, alternative livelihoods for the local population living in tidal wetlands of southwest coastal region, and other income and employment generation activities. Micro-credit programs and on a smaller scale small enterprise development support have gained extensive coverage in the 19 districts that make up the coastal zone. Micro-finance organizations like BRAC, Proshika, ASA and Caritas, which together account for 77% of the total micro-credit by all micro-finance-NGOs having their presence in the coastal zone (PDO-ICZMP 2004d). Micro-credit program of Government’s BRDB and small agricultural loans of the government’s Krishi Bank (agricultural bank) also provide support for income and rural employment generation in the coastal zone.

Micro-credit and small enterprise development at the household and community level would thus constitute a core strategy of the investment program aimed at poverty alleviation and natural resource management in the coastal zone. The program would harness the capacity of NGOs and micro-finance organizations for outreaching their program activities.

e) Productive economic activities and focused development of tourism and fisheries sectors

At the national level tourism and fisheries development have been identified as sub-sector that have the potential for generating employment and income as well as foreign exchange. The tourism sector has for many years been subject to public sector planning and management (BPC 2004). With the introduction of the Industrial Policy in mid-1980s private sector has been assigned to play an expanded role with additional incentives and regulatory support of the Government. Opportunities for private sector investment in tourism must be guided by carefully designed regulatory measures to ensure that the environmental and forestry conservation issues are simultaneously addressed.

Large-scale investment opportunities in tourism development including hotels and resorts, tourism site development and other tourist attractions and amenities exist in Cox's Bazaar, Chittagong and Chittagong Hill Tracts. Special projects within the framework of eco tourism are on the agenda in the Sunderbans, Chittagong Hill Tracts, Saint Martin Island, and other coastal sites. Foreign investment participation will augment the capacity of domestic investors in the tourism sector. International investors can bring in tested concepts for both large-scale tourism development as well as eco tourism.

Government has a major role in supporting private sector investment in tourism by providing a comprehensive sector strategy for tourism development in the coastal zone, parameters for eco tourism, and sustainable development issues that need to be integrated in small and large scale tourism projects.

In the fisheries sector Bangladeshi entrepreneurs have a strong track record. Their contribution to business generated from the fisheries sub-sector make up about 6% of gross domestic product. The future output of capture fisheries is projected to decline: for coastal and marine capture fisheries the output is likely to decline at the rate of 0.6% per annum over the next ten years. Inland fisheries output is also projected to decline by 0.9% per annum during the same period (PDO-ICZMP 2004d). The decline will have to be compensated by aquaculture output.

There is potential for a managed development of fisheries in the coastal zone which presently has a major share in the national production. There is scope for increasing capture/output of some marine fisheries. There is also potential for further exploitation of inland fisheries and aquaculture (both freshwater species and shrimp culture). Investment in the fisheries sector will large come from the private sector, while Government has a major development role in ensuring policies and regulatory measures to mitigate environmental problems associated with aquaculture and inland fisheries, overexploitation, and other negative externalities associated with capture and fish processing. Additionally, Government needs to ensure protection to investors, enforce measures against illegal fishing in the deep sea and sea piracy with increased logistics for improved law and order. The development issues should be addressed comprehensively by way of a strategic development plan for the fishery sector and creating opportunities for increased private sector investment within the framework of sustainable development of fisheries.

f) Infrastructure development

Infrastructure investments will necessarily entail lumpy, relatively large-scale investment projects in road transport, inland water transport, deep seaport in Chittagong, upgrading and expansion of Mongla port, improvements of supporting physical infrastructures in Chittagong and Khulna port, land port to facilitate trade with the neighbouring Myanmar, telecommunications access to remote islands and other areas of the coastal zone, power generation and extension of transmission lines, non-renewable sources of energy especially biomass, solar energy and wind energy.

Most of the above infrastructure projects are identified in the national programme for infrastructure development. In the coastal zone, special provisions will have to be made to extend infrastructure projects to serve the remote islands and other coastal areas. These infrastructures will support

industrial and social services projects in the coastal areas as well as establish strategic links with the national economy. Indeed national economic development will require infrastructures that will link with infrastructure and seaport and land port facilities in the coastal areas to serve the expansion of the country's exports. Consistent with the national strategy for infrastructure development, infrastructure projects in the coastal zone must also support promotion and development of rural non-farm economic activities. Such projects for the coastal zone will include, among others, small scale wind energy and solar energy, rural roads network, physical structures for marketing support to facilitate market penetration of goods produced in the rural economy and the remotely placed coastal communities as well as the islands.

While a large part of the investment projects in the infrastructure sectors will be provided by the public sector, there will be scope for increased involvement and participation of the private sector in such infrastructure projects. This is consistent with Government policy and guidance for private sector participation is provided for in the Government issued gazette on *Private Sector Infrastructure Guidelines*" (GoB, 2004a).

g) Social development including health and nutrition, education, and water and sanitation

Investment in social development should be consistent with the Government's poverty reduction strategy. Programs in health, population and nutrition support, education, and water and sanitation are developed in the context of sector wide programs at the national level. Coastal dimension of the social sector program would be identified and derived from the national level program. Much of the investments in these programs will come from the public sector budget, although the private sector and NGOs are key partners of the government in the delivery and implementation of projects. Outside of the government budget NGOs have a significant program budget for health and non-formal education. The private sector is also emerging as an important source of financing for hospitals and clinics as well as education.

4.3 Program/project prioritization process

The priority areas constituting coastal development strategy must be translated into programs and projects. Projects are nuts and bolts of interventions and these must be formulated through an institutional process (see below). These projects intended for implementation over a specified duration will form part of the **Investment Plan** to be updated on an annual basis. Projects will have indicative budget requirement and duration of implementation as well as implementation arrangements.

The process of developing an Investment Plan for the coastal zone on a rolling basis will be subject to the institutional mechanism of planning and programming adopted at the national level. The Annual Development Program (ADP) is the instrument that provides for the Investment Plan by sector and sub-sector. Projects included in the ADP are identified, appraised and approved by the line ministries. Where projects involve multi-sectoral interventions, a lead line ministry initiates coordination for identification and formulation of the projects. These along with their other projects are then included in the respective line ministry program for inclusion in the ADP. The national planning and programming process requires the Planning Commission to appraise and endorse projects identified and promoted by the line ministries. Depending on the size of a project budget, the National Economic Council (NEC) must approve projects before they can be included in the ADP. If projects are not included in the ADP, funding from the Government budget cannot be normally expected.

The ICZM planning process must complement the ADP process. Additionally, the national planning process itself is presently in transition from a rather static five-year planning approach to a dynamic system of three-year rolling development plans under the umbrella of a national strategy for poverty reduction. The draft "National Strategy for Poverty Reduction" (GoB 2004b) provides a strategic

framework for poverty reduction. Future plans and programs will be couched in the framework of the national strategy for poverty reduction.

The ICZM process cannot be a parallel planning process. The Coastal Development Strategy and its annual implementation plans (and the associated investment plans) should be considered as an operational mechanism to implement the national poverty reduction strategy to ensure compliance with the overall development goals in the coastal zone of Bangladesh. Thus, the value added dimension of the ICZM process must be well established. Essentially, the ICZM planning and programming process will have an enriched focus on identifying development strategies and program priorities for addressing the coastal development needs. Where line ministries have difficulties in identifying program and project interventions requiring multi-sectoral and cross-sectoral interventions, the ICZM process will provide this value added dimension to planning and programming. Further, the ICZM will institute mechanisms for effective dialogue with the private sector.

Under the coordination of the Program Development Office for ICZM, an enhanced system of participatory planning has been established. At the national level, focal points have been instituted in government agencies (ministries and agencies) and selected knowledge based institutes. These organizations provide resource persons for identifying specific needs of the coastal zone. Position papers regarding strategies and program interventions are prepared by these agencies which also connect with their field level units. At the local level, the ICZM process has established linkage with local government structure to induct people's participation in planning and implementation in development activities in the coastal zone. The operational linkage between the ICZM support structure and the local government structure is elaborated in the draft Coastal Development Strategy (PDO-ICZMP 2005a).

The participatory planning and program/project identification process adopted under the ICZM process is augmented by application of project formulation instruments, not used by the sectoral line ministries. The ICZM process invokes an innovative instrument called Concept Notes (CN) that facilitates a flexible approach to documenting program/project ideas and design. The use of CN forms a building block for developing **Priority Investment Program (PIP)** for the coastal zone. The CN preparation process allows any organization or agency (public or private) to identify and formulate a "concept". A CN does not have a prescribed format, but it must cover the minimum set of information for designing a project intervention, including: a detailed description of the project in terms of objectives, expected outputs, approach, institutional arrangements. Indicative cost/budget, modalities for monitoring must also be included in a CN. Formulation of Concept Notes is a continuous and rolling process. Presently, the PDO-ICZM coordinates and facilitates identification and elaboration of CNs.

Concept Notes are included in the PIP for the coastal development program. Working in close cooperation with the line ministries, the CNs which are proposals for concrete actions are then translated into the Government's TAPP and PCP format to enable the line ministries to include the project interventions in the ADP. Thus, the CN preparation process augments the formulation of TAPP and PCP.

To sum up, the process outlined above provides for:

- A sharper focus on identifying priority programs and projects which conform to the strategic priorities of the Coastal Development Strategy and the national poverty reduction strategy.
- Enhanced technical capacity for participatory planning and project formulation process that can effectively complement the planning and programming work of the line ministries and local government.

- A more effective mechanism for inducting private sector, NGO and civil society participation in development management and economic development.
- Formulation of Priority Investment Program (PIP) on a rolling basis to support implementation of the coastal development strategy.

Clearly, institutionalizing and sustaining the above planning and PIP preparation process will require a dedicated organizational unit as is currently provide for by the Program Development Office for ICZM.

4.4 Private Sector

The draft National Strategy for Accelerated Poverty Reduction (GoB 2004b) assigns the strategic role of private sector in being the engine of growth. Consistent with the national strategy, the role of private sector will thus be critical for the overall development of the coastal zone.

Section 3.3 above described the process of prioritizing programs and projects that primarily relates to the public sector investment program. Private sector investment decisions will be made by entrepreneurs in response to government policies and incentives for private sector investment opportunities. Thus the CSD and the public sector program must provide the incentive framework for increased participation of the private sector. Government must provide specific requirements for private sector development in the coastal zone. These include policy and regulatory framework and governance arrangements to ensure efficient and transparent working of the market. Equally important is the provision of infrastructure and social services that have significant implications for operation and productivity growth of private sector operation.

Private sector participation in the coastal zone will be undertaken, in line with GoB's 'Bangladesh Private Sector Infrastructure Guidelines 2004' through the following modalities:

- Private sector investment in manufacturing and processing.
- Private sector investment in services, such as tourism services, container yard facilities, etc.
- Private sector investment in infrastructures including power generation and distribution, alternative and renewable sources of energy, road transport, air transport, inland waterways, port development, land development including facilities for industrial activities (e.g. special economic zone, export processing zone), and telecommunications.
- Private sector provision of management services of government owned facilities and assets.
- Private sector investment in infrastructure services while it will lease-in Government owned facilities and assets.
- Increased participation as contractor/sub-contractor of public sector development programs as well as of outsourced services of Government.

4.5 Enabling macroeconomic environment

The impressive growth of the Bangladesh economy in the order of 5% per annum in the past 12 years has been supported by Government effort in successfully maintaining a stable macroeconomic environment (ADB & Govt. of Japan, 2004). Fiscal deficit has been contained at around 4 to 4.5% of GDP, the inflation rate has been kept low at below 5% per year through prudent monetary and fiscal policy, efficiency of the market operation and market competition has been pursued through a gradual reduction in import tariffs and quantitative controls on import, as well as adoption of a floating exchange rate regime in May 2003. The latter together with a steady increase in exports and inflow of foreign remittances contributed to building up of the gross official foreign exchange reserve in the past three years, which is now adequate to cover at least 3 months of the import bill.

Other reform measures reinforced private sector investment and a reasonable growth in foreign direct investment in recent years. Such measures include reform of the financial sector to provide for greater investment resources for private sector investment, privatization and closure of a large number of loss-making state owned enterprises, increased private sector friendly industrial policy including special incentives for exporters, and a number of support programs for private sector development (such as the Bangladesh Bank administered equity and entrepreneurship fund that provides for venture capital fund for information technology and agribusiness). Additionally, foreign direct investment has been encouraged in gas exploration and downstream distribution, private sector investment participation in power generation, and public private partnership in other infrastructure development, maintenance and operation.

Considering vulnerabilities of the coast and critical ecosystem; the following financial incentives may be considered:

- provision of Tax holiday for a certain period of time on primary products and service sector investment
- provision of Insurance facilities for risk bearing activities including fishermen and marine resource discoveries
- fixation of reasonable rate of interest on borrowed capital
- creation of special fund for women participation in social and economic activities like primary health care, education, sanitation, safe drinking water, cottage industry, gardening, fish processing, marketing of produced goods, etc.

4.6 Constraints to investment growth and private sector development

However, as documented in a number of recent studies including the Government draft poverty reduction strategy paper (GoB 2004b), investment response and the resultant GDP growth have fallen short of the potential created by the maintenance of a stable macroeconomic environment. Clearly, the source of growth will come from the private sector as already evidenced by the relative growth of private sector investment to the macroeconomic and other economic reform measures undertaken by the Government since the early 1990s. Table 4.1 shows the relative growth of private investment in the economy.

Table 4.1: Public and Private Investment, 1991-2004

Year	(in current prices)				
	Total Investment (as % of GDP)	Public Investment (as % of GDP)	Private Investment (as % of GDP)	Share of Public Investment (%)	Share of Private Investment (%)
1990/91	16.9	6.6	10.3	39.2	60.8
1991/92	17.3	7.0	10.3	40.3	59.7
1992/93	18.0	6.5	11.5	36.1	63.9
1993/94	18.4	6.6	11.8	36.1	63.9
1994/95	19.1	6.7	12.4	35.2	64.8
1995/96	20.0	6.4	13.6	32.1	67.9
1996/97	20.7	7.0	13.7	33.9	66.1
1997/98	21.6	6.4	15.3	29.4	70.6
1998/99	22.2	6.7	15.5	30.3	69.7
1999/00	23.0	7.4	15.6	32.2	67.8
2000/01	23.1	7.3	15.9	31.4	68.6
2001/02	23.2	6.4	16.8	27.5	72.5
2002/03	23.4	6.2	17.2	26.5	73.5
2003/04p	23.4	6.1	17.5	25.9	74.1

Source: BBS 2004

Note: Figures for 2003/2004 are provisional estimates.

Higher growth in investment can be realized by removing the impediments to private sector investment and increased participation in the economy. Firm level studies and investment climate surveys (Asia Foundation & DIL 2003) have highlighted the deficiencies in the laws and regulations and their enforcement mechanisms that constraint private sector investment and entrepreneurial activities. Corruption, inefficient government bureaucracy, and crime and theft are the top three factors that are affecting the business environment in Bangladesh. There is also a host of key governance and regulatory issues that affect the private sector activities including transparency in the formulation and implementation of policies and regulations, lack of or delay in contract enforcement and dispute resolution, cumbersome and corruption-prone land titling and transfer procedures, and labor laws which are inadequate in discouraging politicization of labor relations, etc. Deteriorating law and order is increasingly restraining investment undertaking in the private sector.

As important as governance, access to infrastructure (transport, power, gas, port facility, etc.) has critical bearing on private sector investment. Deficiencies in these infrastructures have undermined productivity, efficiency and competitiveness of the private sector. In its industrial policy and poverty reduction strategy, Government has recognized the importance of developing and expanding the capacity of infrastructure provisions through greater participation of the private sector. Similarly, ongoing reforms of the financial sector and capital market are aimed at enhancing private sector access to finance and investible resources.

These constraints to private sector investment and economic growth identified at the national level are equally applicable to private sector investment in the coastal zone. There are however other specific problems and constraints that impede private sector investment in the coastal zone. These include, among others, high cost of infrastructure provisions in the remote coastal areas and the islands, lack of transport infrastructure that limits the extension of a market infrastructure support for a large part of coastal zone, lack of power supply, limited outreach of private sector financial institutions, lack of access to and inadequate information and knowledge about the large number of development support programs (including those funded by donors) for private sector growth, and a severe shortfall in skilled and productive labor force and middle management expertise. Alleviation of these constraints will require special Government and donor support programs, as well as a strategy to outreach support programs for private sector development in the coastal zone. In addition, the fragile resource base in a large part of the coastal zone and environmental degradation issues will require a careful management of private sector activities. Policies and regulatory measures must be developed and efficiently implemented to ensure that balance between economic activity undertaken by the private sector and environmental and natural resource management.

Private sector investment opportunities in the coastal zone

Assessments of ongoing private sector investment activities, Government policy and program initiatives, donor-support programs and technical studies of unexploited opportunities utilizing the local resource base provide indication of opportunities for private sector investment in the coastal zone. Three of such studies prepared by the PDO-ICZM offer an overview of investment opportunities in the coastal zone.² These studies have also highlighted the major constraints faced by the private sector in exploiting the full potential of the business and investment opportunities in the coastal zone and the key issues that need to be addressed for sustainable economic activities and the support the Government must provide for promoting private sector while ensuring that the enabling environment for sustainable private sector investments is concurrently supported and reinforced by policy and regulatory measures. This information together with other information sources and

² PDO-ICZMP (2003b), PDO-ICZMP (2004a) and PDO-ICZMP (2004d)

perception of entrepreneurs consulted provide an indication of the specific investment opportunities for the private sector.

On small scale operations coastal communities and private sector enterprises have opportunities in agriculture and livestock, agro-based industries, marine processed fish, fish preservation, crab and shell fish farming, fish oil processing, dehydrated fish, salt processing, trade and commerce.

Opportunities in medium to large-scale industries include ship-breaking, deep sea fishing, shrimp processing. The economic potentials of tourism and fishery sectors are well recognized. Economic activities undertaken mostly by the private sector are already reasonably established in these sectors. However, the potentials remain under-exploited. Adequate policies for and investments in the two sectors should result in significant economic gains benefiting both the region and nation. The PCU-ICZM should coordinate in consultation with relevant Government agencies preparation of a comprehensive assessment and framework for the development of tourism and fisheries sectors.

The need for infrastructure development is outlined in section 3.2 above. Government policies and incentives now provide for considerable opportunity for private sector participation in deep seaport development, supporting port infrastructures, maintenance and operation of seaport, investment in land port, power generation and distribution, inland water transport, telecommunications, wind energy and solar energy applications. Until recently the power sector only benefited clear policy guidelines and operational modalities for private investment in power projects. With the issuing of the Government gazette on "Private Sector Infrastructure Guidelines" (GoB 2004a), the private sector include foreign investors are given clearer direction as to making investment proposals and participation in infrastructure projects.

NGOs play an important role in applying appropriate low-cost technologies and investment and capacity building support for micro and small-scale enterprises in the rural economy of Bangladesh. NGOs presently have an effective presence in the coastal zone, but they would need to be further encouraged to outreach their support activities in the remote coastal areas. In the area of infrastructure development, NGOs have comparative advantage in promoting and developing capacity for application of non-renewable energy sources including wind energy and solar. Partnership between NGO and private sector should be explored to further implementation of these innovative energy related projects.

The investment strategy must be supported by a viable financing strategy for both public sector and private sector investments. The following section articulates the financing strategy for the coastal zone.

Private Sector Forum for Development of the Coastal Zone

Private sector investment participation can be optimized by way greater partnership and cooperation between government and private sector. The partnership arrangement will require Government policy-making and designing of support programs to be responsive of private sector needs and perceptions. The institutions of chambers of commerce and trade association at the national and regional level conduct dialogue and consultations with the Government on private sector issues. It would be useful to organize a separate Private Sector Forum aimed at creating a better understanding between the private sector and the Government and to attract more investment in the coastal zone. The Forum would also offer opportunity for knowledge sharing and debating on issues pertaining to policies, regulations, laws and public sector program support as well as articulation of investment opportunities in the coastal zone. The Forum could meet semi-annually to discuss these issues.

The Forum should be co-chaired by a representative from the Government (lead line ministry for the coastal zone program) and a representative from the private sector. The Forum can form technical working groups around thematic topics or areas such as tourism, fisheries, energy, road transport,

inland waterways, port development issues, SME development, marketing support for small and micro enterprises, and other similar topical issues that can be determined by the Forum.

The PCU-ICZM can provide support for the Private Sector Forum for the coastal zone. The support would include, among others, organization of forum meetings, organization of logistical and management support for the meetings, information dissemination to the Forum members, mobilization of funds to undertake technical work for the Forum, identification, engagement and supervision of consultants, and maintenance of a knowledge base on private sector development issues and opportunities in the coastal zone.

B. FINANCING STRATEGY

5 INTRODUCTION

The draft CDS points to a multitude of financial sources available for implementation of the CDS. There are three sources of financing the investment level required for coastal zone development: the treasury (public sector budget), multilateral institutions and donors, and private sector. Additionally, for local level, small-scale investment undertakings NGOs can make a significant contribution to the financing needs for projects.

Data on the current level of financing is not available at this time. A rapid and sustained level of investment for the development of coastal zone, in particular for the establishment of basic infrastructure and development of the tourism and fishery sectors cannot be maintained unless private sector financing is forthcoming. It is therefore critical that the investment strategy provides opportunities for increased role of the private sector investors and that finance in terms of debts and equity are made available.

The vulnerability of the coastal zone from natural disasters is indeed an issue, which needs to be addressed. However, it is important to separate the long-term objective of protection and maintenance of the eco-system of the coasts from sudden emergency disasters that affect large numbers of the population annually. The former will require a planned investment strategy whose funding should be earmarked from budgetary commitments and donor finances as part of that commitment. The ADB Integrated Flood Protection Program is an example. Environmental management will remain a key task of the government and that limited available finances could best be used through integrated planning and phasing of investments. It is difficult to justify a pledge fund for such purposes.

A large number of financing vehicles exist in the country for micro, small and medium enterprise development. Below is an outline of financing possibilities that should be explored for the financing of public sector and private sector investment projects in the coastal zone.

6 FINANCING OF MICRO, SMALL AND MEDIUM ENTERPRISES

Data on micro, small and medium enterprises in the coastal zone do not exist. However, a recent survey of private enterprises (Daniels, 2003) at the national level suggest that micro, small and medium enterprises, employing less than 100 employees, there are more than six million of such enterprises employing about 31 million people or 40% of the population 15 years and older. One out of every 13 persons owns an enterprise in the MSME sector. More than 90% of the MSMEs employ ten or fewer employees and about 60% of the enterprises have one or two workers. Thus micro and small enterprises are predominant in the MSME group.

About three-quarters of the MSMEs contribute more than 50% of the household income in the urban and rural areas, and about three quarters of all MSMEs are located in the rural areas. At the macro level, MSMEs contribute 20 to 25% of GDP, of which manufacturing contributes the most followed by agriculture and trade. Of this, small enterprises employing 2 to 5 workers contribute 50%, micro enterprises having one worker contribute 25%, enterprises employing 6 to 10 workers 10%. Enterprises operating in the range of medium scale, employing 21 to 100 workers contribute only 7% to the MSMEs value added in GDP. Thus, more than 85% of the total contribution to GDP comes from small enterprises with 2 to 5 workers only.

The industrial structure of the MSMEs sector consists of primarily wholesale and retail trade and repairs (40%), production and sale of agricultural goods (22%), services, services (15%) and manufacturing (14%). Trade and service activities are concentrated in urban areas and agricultural goods in the rural areas. Table 6.1 shows the industry distribution of MSMEs in both rural and urban areas.

Table 6.1: Industry Distribution of Micro, Small and Medium Enterprises

Sector	Rural % of MSMEs	Urban % of MSMEs	Total % of all MSMEs
Agriculture	27	5	22
Fishing	5	1	4
Manufacturing	14	15	14
Construction	1	1	1
Wholesale, retail trade, and repairs	38	48	40
Hotels and restaurants	2	13	5
Transport, storage and communications	3	2	3
Financial services		0	0
Real estate, renting, & business activities	3	3	3
Education		0	0
Health and social work	1	1	1
Other service activities	2	4	3
Unidentified	3	6	4
Total	100	100	100

Source: Daniels (2003).

The 19 districts in the coastal zone is not expected to have a similar structure of micro, small and medium enterprises. In the more remote areas of the coastal zone and islands there is likely to be a greater concentration of micro and small enterprises.

Micro finance would constitute a key source of financing for micro enterprises at the household and community level. A large number of micro finance organizations and NGOs through projectised assistance are presently providing support to micro enterprise income generating activities in the coastal areas. These institutions and projects should be encouraged and supported with additional development funds for expanding and further outreaching their financing and development activities.

Small and medium enterprises are now receiving greater attention of the Government and donor agencies. The Government instituted Taskforce on development of small and medium enterprises (MoI 2004) further reassured national strategy and support programs for SMEs. The recommendations of the Taskforce have now guided Government agencies and international development agencies to formulate specific programs for SME development. The Bangladesh Bank has established a dedicated fund for SME financing. This fund is available to the private and nationalized commercial banks for refinancing of their on-lending to SME projects.

In response to the Government strategy, a number of the country's development partners have earmarked funds for augmenting the SME financing capacity. In this regard, the World Bank and Asian Development Bank have designed and approved a sizeable funding program for SMEs. Other donor agencies such as NORAD and CIDA have also approved funding on a smaller scale for enhancing SME access to funds. Additionally, the ADB has a pipeline program that will include a financing component for agribusiness development, of which a large proportion should be expected to comprise SMEs in the agro-based industry. The Norwegian Agency for Development (NORAD) has a long-term program of financing small enterprises through the two nationalized commercial banks.

Besides the financing facility, a number of donor agencies have capacity building support programs for SME development (ADB 2004a). These programs are built on strategies to develop national and local capacity for business development services which can be accessed by SMEs, training for upgrading trade skills and business management capability of enterprises, marketing development support, and technology transfer through technical and joint venture collaboration between Bangladeshi enterprises and foreign investors. The main development partners having such support programs are: Asian Development Bank, Danish International Development Assistance (DANIDA), GTZ German Technical Cooperation, Swiss Development Cooperation (SDC), Swiss International Development Assistance (SIDA), UK's Department for International Development (DFID), and the World Bank including its private sector financing window the International Financial Corporation (IFC).

Bangladesh private commercial bank and non-banking financial institutions are now beginning to respond to the opportunities for low cost refinancing facilities offered by the Bangladesh Bank and a number of international development agencies. A number of these banks have begun to build their operational capacity to outreach their financing activities to small towns which including those in the coastal zone. BRAC Bank for instance has initiated a program to recruit up to six hundred field officers who would perform the function of "customer relations officer" to outreach its small enterprise financing facility to remote areas.

Clearly, these financing windows should be exploited for the SMEs in the coastal zone. It would be useful to launch a capacity building program under the coordination of PDO-ICZM to sensitize the SMEs in the coastal zone about these funding facilities.

Creation of Coastal financial institution

The existing banking mechanism/facilities provided by both public and private institutions is not only enough but far from reaching the door step of a farmer living in coastline or in remote 'char' and 'island'. Thus; in order to provide banking facilities for savings and investment and promote economic growth in CZ; special attention should be provided to protect and safeguard coastal people's interest through creation of a 'Coastal Development Bank' like Rajshahi Krishi Unnayan Bank (RAKUB) - created for agricultural development of Rajshahi region.

Coastal Community Fund for creation of micro-credit in the coastal zone may also be created under private or NGO initiatives.

7 INFRASTRUCTURE PROJECT FINANCING

Financing of infrastructure projects has traditionally been the domain of public sector development budget. In the past ten years Government has opened up scope for the private sector to participate in investment undertakings in the private sector. There is now an explicit role of private sector participation in infrastructure financing in Government investment policy and its poverty reduction strategy.

A large part of the infrastructure projects in the coastal zone would still require Government interventions. These include in particular those which have yield social return and less attractive to private investment investments. Such projects include water resource management, construction of polders and associated physical infrastructures, roads and highways and similar investment projects which would yield financial return in the very long run.

However, there is ample scope for private sector investment participation in a wide range of infrastructure projects. Government has been successful in wooing private investment in power projects, telecommunications, airport maintenance and operation, toll bridge operation, land port development, small renewable energy projects, and other infrastructure projects. Government has now formulated mechanisms and incentives for greater participation of private in infrastructure projects through the public private partnership modality. Additionally, Government has recently established clear guidelines on private sector investment in infrastructure projects (GoB 2004a).

International development agencies, particularly World Bank and Asian Development Bank have been proactive partners of the Government in formulating strategies and establishing funding schemes for private investment in infrastructure projects. For instance, the ADB through its private sector financing window has taken investment stake in telecommunications projects as well as large scale manufacturing projects. World Bank has assisted Government in establishing the Infrastructure Development Company Limited (IDCOL) for provision of infrastructure financing. The Bank together with DFID and CIDA have additionally created the Infrastructure Investment Financing Centre (IIFC) to provide technical assistance in formulating and developing feasibility studies and business plans for infrastructure projects. These facilities offer considerable scope for catalyzing private sector investment in infrastructure projects in the coastal zone.

Creation of Special Funding Mechanism for Public Sector Programs/Projects

The objective of the funding mechanism to tackle the problems of natural hazards like erosions, cyclones, salinity, and climate change, and for other development activities. Multilateral institutions and donors will be expected to finance the facility. The long-term objective of sustainable development of natural resources should be separated from the emergency natural disasters that affect the coasts. Finances are needed to meet both sustainable development of the coasts and to ensure relief needed in case of natural disaster. Therefore, it is more effective to create two separate facilities in order to mobilize finances for the coasts.

The creation of a **Coastal Environment and Development Facility** could pave the way for strengthening efforts to combat coastal environmental problems and in ensuring sustainable development of natural resources. The Government could embark on the creation of a Facility (Coastal Environment and Development Facility), somewhat similar to several environmental and business development facilities, such as the ones established by multilateral institutions and donors. This facility would be managed and operated independently of the Government, but within a framework of a comprehensive program for coastal protection and environmental management adopted by the Government.

The vulnerability of the coasts from unexpected natural disasters, if high and recurring, cannot be met through earmarked public finances. The procedures and administrative compliances of multilateral institution and bilateral donor finances will also not allow rapid mobilization of funds to meet emergency needs for investments due to sudden natural disasters. Under the circumstances, it would be useful to create the proposed **Coastal Disaster Preparedness & Emergency Mitigation Fund** with the explicit objective of mitigating unexpected tolls from cyclones, floods and damages to the environment.

Coastal Environment and Development Facility

The Coastal Environment and Development Facility (CEDF) would be largely based on the Coastal Development Strategy and on its prioritized interventions for coastal development. These prioritized areas will include the following:

- *Sustainable development of natural resources*, including agriculture, forestry and biodiversity, freshwater resources and water resource management. These areas form the bulk of the strategic interventions suggested in the CDS.
- *Coastal Zone Management / Marine Protected Areas*: sustainably improve selected coastal zones and marine protected areas.
- *Increasing the livelihood of coastal communities*, including the development of small scale income generating projects, health, education and advocacy related projects that enhance local level small artisan and craft productions
- *Sustainable development of industries*: financing of industries and services in tourism and fisheries sectors, introduction of cleaner technology and improvement of quality and standards of products and services in the two sectors.

The assistance should be based on a programmatic approach and focus on geographical limited areas. The objective of the CEDF would be met through interventions in the four focus areas or components. In this regard the creation of the facility would be conditioned on the completion of strategy and investment plans, as suggested in the CDS, and in their adoption.

An independent Board consisting of representatives from the donors sponsoring the Facility and appropriate authorities of the Government would execute the CEDF. An autonomous management body staffed with small technical professionals would operate and monitor the implementation of the facility.

Coastal Disaster Preparedness & Emergency Mitigation Fund

The vulnerability of the coastal communities from sudden natural disasters cannot be met through public finances and quick mobilization of donor support. A Coastal Disaster Preparedness & Emergency Mitigation Fund (CDPEMF) could be set up under pledge of support from bilateral donors, which could then be drawn down at times of emergency. This fund is not similar to a relief effort which becomes necessary during cyclones, floods and storm surges in order to provide short-term safety to victims of natural disasters. The objective of the disaster relief fund would be to establish (a) permanent shelters to victims, (b) comprehensive rehabilitation programs for erosion victims, and (c) embankments and construction of dykes.

The CDPEMF will be based on funds pledged by various bilateral donors utilized on a revolving basis. The criteria for the use of the funds would need to be established and perhaps incorporated within the country assistance programs of the donors.

C. CONCLUSIONS

The investment strategy articulated in this paper forms an integral part of the Coastal Development Strategy. Public sector, private sector as well as NGOs are stakeholders in the investment program. Their role and investment contribution have been identified in the strategy. Public sector investment programming will assume a greater participatory dimension. The mechanism will be facilitated by the PCU-ICZM which will also ensure that the programs and projects are integrated with the ADP and national planning and budgeting process.

The investment strategy places emphasis on public private partnership including participation of NGOs who have comparative advantage in implementing interventions at the local, community level. Institutional mechanism for mobilizing investment from the private sector is also explicated in the strategy.

Financing of the investment program will come from government budget, private investment (including foreign investment), NGO program resources, and multilateral and bilateral donors. The financing strategy identifies a number of donor-funded projects that can be accessed for project and income generating activities in the micro, small and medium enterprises. The strategy proposes the creation of two dedicated funding facilities - the Coastal Environment and Development Facility, and the Coastal Disaster Preparedness & Emergency Mitigation Fund. These financing facilities will be available for programs/projects to meet both sustainable development of the coasts and to ensure relief needed in case of natural disaster.

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