CHAPTER 7

PRIORITIZATION AND INVESTMENT NEED

7.1 Programmes

This` Master Plan ultimately boils down to a set of Programmes and activities across all branches of agriculture and other related fields. Based on field study, regional consultations and interaction with various stakeholders, a list of interventions have been identified under 26 programmes across 10 thematic areas as follows:

- Crops, horticulture and agro-forestry
- Fisheries
- Livestock
- Nutrition
- Water management
- Polder management
- Drainage improvement
- Agri-business
- Agricultural credit
- Capacity building

7.2 Prioritization Criteria

Based on problems and potentials, programmes and interventions have been identified. All interventions are important. However, all the activities cannot be implemented in one go. As there are constraints of resource and capacity, the proposed interventions need some prioritization. The following criteria have been used for prioritization.

- Urgency of the program
  - o people's desire
  - o government's interest
  - o response to climate change threat
- Number of beneficiaries

Priorities are grouped into four categories in line with the criteria used in the CIP (Government of Bangladesh, 2011). These are:

- **Top:** Interventions will provide immediate benefits to large sections of the population and already there is GoB commitment.
- **High:** Interventions where efforts will benefit the people and has regional and area-based importance and need to be implemented immediately.
- **Medium:** Important interventions where implementation are needed in future.

- **Low:** Interventions where implementation depends on the availability of resources.

Most of the programmes and interventions need early implementation. However, Top and High priority interventions should commence immediately.

7.3 Approaches to Prioritization

A three-pronged strategy has been adopted in the prioritization exercise. A preliminary list of interventions was prepared incorporating activities from each component and program. Firstly, a sense of direction was found through discussion with officials of relevant agencies over a number of meetings. Secondly, opinions were sought from all stakeholders in regional consultations that were organized in Barisal, Khulna, Chittagong and Noakhali in January-March 2012. Each consultation was attended by 40-60 participants from different GoB agencies, NARS institutes, private sector, academia, local government, CBOs, farmers and the civil society. In each consultation, participants were grouped into following thematic areas:

- crop, horticulture, agro-forestry and nutrition;
- fisheries;
- livestock;
- agro-business; and
- water management and irrigation

Each group held brain-storming sessions and their collective opinions on respective sectoral interventions were documented.

Thirdly, the study team after scrutinizing and reviewing all the opinions received from GoB agencies and regional consultations prepared a harmonized list.

7.4 Period of Implementation

Based on identified programmes and interventions, relevant Ministries/Departments and agencies will prepare project document for implementation within the Master Plan period. Based on need and availability of resources, implementation periods may be categorized as

- Short Term (ST): Implementation requires 1-3 years.
- Medium Term (MT): Implementation requires 1-6 years.
- Long Term (LT): Implementation requires 1-10 years and beyond.

7.5 Investment Need

Resources are indeed required for implementation of programmes. This has been estimated separately for each intervention and has been spread over the entire period of implementation. Direct financial costs have been considered. Economic analysis of particular activities, if necessary, may follow later by concerned implementing agency when it goes for detailed conceptualization and feasibility.

Investment needs have been estimated using appropriate unit, say, per ha (for crop related activities), or size (for small scale dairy farm), or per km (for repair of embankment), or per m3 (for river dredging). Investment need of ongoing or already proposed interventions were directly

derived from the CIP, while estimates for newly proposed interventions were made in consultation with officials of relevant agencies.

Total investment need is estimated at 578,026 million taka (57,802.6 crore taka), which is equivalent to about US$ 7,225 million. Component wise investment need has been presented in Figure 7.1.

Among the interventions, 24 have been marked as 'Top' priority, which account for 258,673 million BDT while 37 are identified as 'High' priority that would require 265,955 million BDT (Tables 7.1, 7.2, 7.3, 7.4 and 7.5).

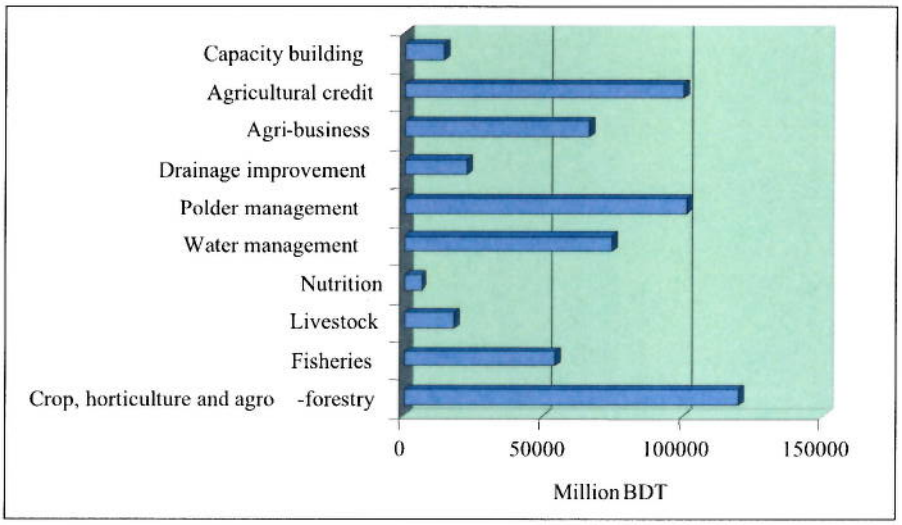

Figure 7.1: Investment need

Table 7.1: Interventions and investment need by priority

Priority	No. of interventions	Investment need (million)	
		BDT	US$
Top	24	258,673	3,196
High	37	265,955	2,778
Medium	19	46,795	1,169
Low	5	6,603	83
Total	**85**	**578,026**	**7,225**

Numbers may not add to totals due to rounding

It may be mentioned that components are interdependent. One component cannot be taken in isolation for implementation, as its efficacy depends on implementation of the others. For example, investments in crop, horticulture, fisheries and livestock would positively affect nutrition and, hence, investments particularly targeted to 'nutrition' do not necessarily mean that these are the only ones for nutrition. Similarly, absence of investments in water and polder management, as well as

credit, would render the whole plan redundant. Therefore a holistic approach to the Master Plan is needed rather than negotiation at the programme level.

Some interventions may need one time investment; some interventions need investment for several years, while annual allocation is needed for certain interventions for entire period of the plan (Figure 7.2). It should also be remembered that investment in general of the programmatic areas has already begun.

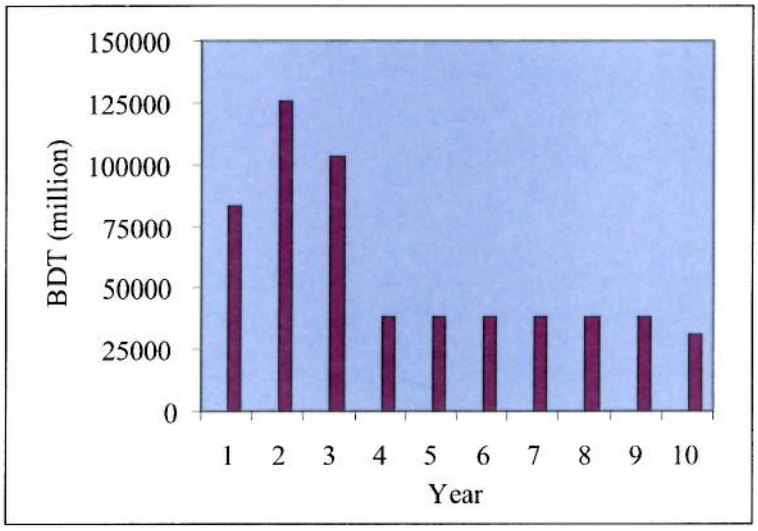

Figure 7.2: Annual investment need

7.6 Financing

Financing of the programmes outlined in the Master Plan is important and challenging. Concerted efforts are required in this direction by bringing all possible sources on board. Financing sources will include, among others, the following:

- Special allocations from the Annual Development Programme (ADP). The ADP will be aligned and harmonized in line with investment needs and priorities of the Master Plan.
- The Development Partners (DP). This is very much expected as the Bangladesh Development Forum also requested for such a Master Plan in 2010. The Economic Relation Division (ERD) will organize consultations with DPs to seek financial assistance from them for priority program areas.
- The private sector needs to take a lead role in the Master Plan, particularly in financing agri-business programmes. The construction of the Padma Bridge will open up opportunities for the private sector to contribute in the national development, particularly in the southern region.

Implementation of an intervention should not start until and unless total financing is guaranteed. It is better to start with fewer interventions and complete them, rather than embarking on too many interventions and leaving them half-done.

Table 7.2 : Distribution of interventions by priority and duration of implementation

Crop, horticulture and agro forestry

Sl No.	Programme	Intervention	Cost (Million BDT)	Cost criteria	Priority	Implementation duration
1	**Productivity Enhancement of Rice**	i. Increase productivity of T. Aman through improved management practice in non-tidal and non-saline phases	14000	65% area will be increased. Target area: 815 ha, will be achieved by 10 years (extension programme and input support); Tk 100m/district/year.	T	MT
		ii. Promotion of HYV T.Aus in varied region of the coast	7000	Yield increase target is 65%. Area will be increased by 35% of the potential area (573632 ha) in 10 years; Tk 100m/district/year.	T	ST
		iii. Enhance Boro area where quality surface water is available through improved lifting and distribution system	2370	Boro area 2437000 ha. Of the total area 40% are DL and 60% are LLP. For 10 years.	H	LT
		iv. Production and supply of locally adapted seeds	2000	Lump sum	T	ST
	Sub Total		**25370**			
2	Promotion of potential cropping patterns incorporating diversified new crops	i. Increase cropping intensity with remunerative cropping patterns for varied regions.	1110	Of the total area (2056479 ha), 20% area will be considered in 10 years.	H	LT
		ii. Establishing rice-cum-fish farming system in suitable areas	550	Potential area 120, 000 ha. 70% will be achieved in 10 years.	M	MT
		iii. Promote pulse (khesari, mungbean and chickpea, cowpea, oil seeds: sesame, groundnut, etc.) area for non-saline and non-tidal area (NARS varieties)	2000	Existing MHL area 1,692,007 ha. 10% will be achieved (pulse) in 10 years.	T	ST
		iv. Encourage mushrooms cultivation as alternative livelihood for rural women	50	Up scaling of mushroom production in 10% of MHL area (169,200 ha) will be considered. A lump sum amount TK.50 million.	M	MT
		v. Mapping of vegetables & species suitable for cultivation in various agro-climatic situations	110	Target area is 2785.43 ha; of the total target area 30% of HL and 10% of MHL will be covered in 10 years.	H	ST
		vi. Introduction of Beekeeping as alternative livelihood for marginal an d landless farmers	50	Bee keeping for 12 ha of land. 25 box/ha; Tk 3000/box; for 10 years.	M	MT
	Sub Total		3870			
3	Technology generation a nd	i. Area specific crop / variety selection by conducting adaptive trials (NARS)	5000	Adaptive trial of 25 crops for up scaling; for 10 years	H	ST

Sl No.	Programme	Intervention	Cost (Million BDT)	Cost criteria	Priority	Implementation duration
	R&D strengthening	i. Area specific crop / variety selection by conducting adaptive trials (NARS)	5000	Adaptive trial of 25 crops for up scaling; for 10 years	H	ST
		ii. Strengthening R&D of salt tolerant and high yielding potential crop and forage cultivers	2000	Lump sum: Tk. 200 million/year	T	MT
		iii. Submergence tolerant crop variety selection	150	Lump sum: Tk. 150 million	H	LT
		iv. Selection of crop varieties suitable for late planting and heat tolerant condition	100	Lump sum: Tk. 100 million	L	LT
		v. Developing management package for unfavourable ecosystems with conservation of natural resources	10000	Lump sum: Tk. 1000 million /year	T	MT
		vi. Establishment & strengthening of Research and Extension and private sector linkage for location specific technology development and promotion	200	Lump sum: Tk. 200 million.	H	LT
		vii. Improved management practices for fish and rice culture	5000	Lump sum: Tk500 million/year	M	MT
		Viii. Lab facility development of NARS institutes in the region	10000	Lump sum	H	LT
		viii. Strengthening on -farm research for technology packaging	3000	Lump sum	H	MT
	Sub Total		**35450**			
4	**Input supply system**	i. Production and supply of quality seed of different crops	610	61 ton seed/year; Tk 100/kg; for 10 years.	T	ST
		ii. Delineation of soil fertility problems and nutrient deficient areas in order to promote balanced fertilizer use	10000	Tk 1000 million/year; for 10 years.	H	MT
		iii. Promotion of tillage implements, post harvest loss reduction tools and small farm machinery	10000	Lump sum: farm mechanization cost for 10 years	H	LT
	Sub Total		**20610**			
5	**Promotion of fruit cultivation**	i. Mapping of potential fruit species for diversified agro -climatic situations	50	Lump sum: Tk 50 million for survey	H	ST
		ii. Zoning for suitable underutilized fr uit production and marketing	150	5 Zones; cost/zone: Tk 30 million	M	ST
		iii. Commercialization of coconut cultivation	5000	Lump sum: Tk 500 m/year	M	LT
		iv. Collection of fruit tree germ plasm from public and private sources for promotion in the southern coas tal districts.	500	Lump sum: Tk 50 million/year; for 10 years	L	MT

Sl No.	Programme	Intervention	Cost (Million BDT)	Cost criteria	Priority	Implementation duration
		v. Up-scaling of HDP technique for quality mango and boroi cultivation.	1500	Lump sum: Tk 150m/year	M	ST
		vi. Capacity enhancement of Isolated Coconut Garden, Ramu, as coconut germ plasm center	500	Lum psum: Tk 50 million/year; for 10 years	H	MT
		vii. Introduction of proven technologies for fruit production and post harvest management	10000	Lump sum: Tk 1000 million/ye; for 10 years	H	ST
		viii. Expansion of guava cultivation through Ditch and Dyke method in waterlogged areas	200	Lump sum: Tk 20 million/year; for 10 years	H	ST
		ix. Intercropping and improved management practices within coconut plantation	1000	Lump sum: Tk 100 million/year ; for 10 years	M	MT
	Sub Total		**18900**			
6	Intensification and productivity enhancement of vegetables and spices	i. Introduction of proven new crops and management practices against different gradient of salinity: sugar beat, chilli, sweet potato, barley, soybean, QPM, etc. (Rabi crops)	7000	Tk 700 million/year; for 10 years	H	MT
		ii. Identification of farmers' innovative practices in saline zone and improving those for up scaling	1200	Lump sum: Tk 120 million/year; for 10 years	M	ST
		iii. Expansion of spices (eg. ginger, chillies, turmeric etc.)	2000	Lump sum: Tk 200 million/year	H	LT
		iv. Improved management of betel leaf cultivation	500	Lump sum: Tk 500 million	M	ST
	Sub Total		**10700**			
7	Popularizing agro-forestry practices	i. Promoting agro forestry and establishment of nursery for fruits and fast growing species	150	Lump sum: Tk 150 million	M	MT
		ii. Introduction of agro forestry and afforestation in char lands and embankments	5000	Lump sum: Tk 5000 million	M	MT
	Sub Total		**5150**			

Fisheries

Sl No.	Programme	Intervention	Cost Million (BDT)	Costing criteria	Priority	Implementation duration
1	Improving management of pond resources for enhancing production of fish	i. Development of upazila wise database of ponds, ditches, closed canals, & other water bodies and capacity building	**6000**	Survey cost of upazila for one year.	T	ST
				Per unit cost of quality seed cost: Tk.500000/upazilla/yrear. For 140 upazila; for 5 years.		
				Training & extension cost for 140 upazila for 10 years.		
				Fish feed for 10 years for 140 upazila.		

Sl No.	Programme	Intervention	Cost Million (BDT)	Costing criteria	Priority	Implementation duration
		ii. Intensification of fish production by introducing mono-sex tilapia, GIFT tilapia Thai Koi, & Pungus of mono culture and mixed culture in the deltaic area including water logged areas of Noakhali & Lakshmipur	5000	5 ha/upazila pond area each for Tealapia, Thai Koiand Pungus for demo (total 15 ha); for 10 years; in 140 upazila; of total cost, 50% supported by Govt.	H	MT
		iii. Pilot project for integrated community based flood plain aquaculture (Daudkandi model)	16560	Total flood plain area: 115000 ha; 20% will be used for piloting; Govt will support 30 % of total cost.	M	LT
	Sub Total		27560			
2	Community based Pen and Cage culture	i. Piloting of community based pen & cage culture in selective rivers, their tributaries & semi closed water bodies of Noakhali, Lakshmipur , Pirojpur, Patuakhali and Barisal	650	1 km each for three sites; for 3 years	H	MT
		iiPromotion of cage/pen culture	10000	10000 farmers/year/50% govt support; Tk 1000m/year	H	LT
	Sub Total		10650			
3	Production and protection of quality broods, stocks, fingerlings, shrimps and prawns	i. Establish & maintain community based fish sanctuaries	575	Tk. 0.5 million / upazilla; 115 upazila; for 10 years.	T	MT
		ii. Community based open water stocking & biological management	2000	Tk. 200 million/upazilla; 115 upazila; for 10 years.	H	ST
		iii. Stock assessment of pelagic and demersal fisheries resources	1375	Lump sum	H	ST
		iv. Improvement of quality of brood stocks of native major carps as well as the Chinese exotic carps & raising of inbred free quality fry, fingerlings, juveniles of shrimps & prawn through the development of union based nursery; operated by private sector with technical assistance from DoF (PPP)	3000	Lump sum: 2 ha/upazilla; 140 upazila; for 10 years.	T	LT
		v. Upgradation & development of DoF hatcheries & fish seed multiplication farms	2500	25 hatcheries; Tk 100 million/hatchery	H	ST
		Vi. Strengthening & enforcing of Jatka-Hilsha conservation protection & development	4600	46 upazilas to be covered; for 10 years.	H	LT
		Vii Establishing crab hatchery for th e promotion crab fattening	100	Lump sum. Tk 100 million	H	MT
	Sub Total		**14150**			

Sl No.	Programme	Intervention	Cost Million (BDT)	Costing criteria	Priority	Implementation duration
4	Enforcing land zoning and productivity enhancement of shrimp	i. Identification of underutilized shrimp ghers & enhancing the production of shrimp and prawn by introducing shrimp/prawn, shrimp/prawn with paddy, shrimp & brackish water fin fish after paddy	200	34 upazila to be covered; Tk 60 million/year; for 10 years	L	MT
		ii. Piloting of semi intensive shrimp culture with target production of 1200 -1500kg/ha in the selective areas of Khulna, Sathkhira, Bagerhat & Cox's Bazar district	2000	15 upazila for piloting; for 10 years.	T	MT
	Sub Total		**2200**			

Livestock

Sl No.	Programme	Intervention	Cost Million (BDT)	Costing criteria	Priority	Implementation duration
1	Community based dairy development	i. Community livestock and dairy development in the southern region, replication and up scaling of dairy farming in Satkhira (Tala model)	2975	Farm size: 5 cattle; Tk. 850000/farm; 140 upazila; 1 farm/upazi la; for 10 years ; govt support 50%	T	ST
		ii. Promotion of HYV fodder cultivation	1000	Lump sum Tk. 3000 million	H	MT
		iii. Strengthening health care(HC)	5000	Lump sum; 100% Govt. support; Tk 500m/year.	T	LT
		iv. Establishing AI service center in each union	3300	3 AI centers/union; 50% support by the govt.	H	ST
	Sub Total		**12275**			
2	Establishment of commercial buffalo and sheep farms	i. Establishing improved buffalo farm	5000	200000 (buffalo); Tk. 50000/unit; Govt support: 50%	H	LT
		II. Upgradation of local buffalo and sheep breeds	1000	Lump sum Tk. 1000 million	M	LT
	Sub Total		6000			

Nutrition

Sl No.	Programme	Intervention	Cost Million (BDT)	Costing criteria	Priority	Implementation duration
1	Synergizing homestead farming with nutrition educa tion	i. Promoting integrated homestead agriculture (vegetables, fruits, pond fish culture, poultry, duck & dairy).	6000	2 demo/village; total 10000 demo in 5000 villages; Tk. 10000/demo/year; for 10 years.	T	ST
		ii. Incorporate nutrition component in agricultur al BCC and IEC activities at different level for mass communication (audio visual, printing media etc).	250	10 video documentary for each of 25 million	H	LT
	Sub Total		**6250**			

Water Management

Sl No.	Programme	Intervention	Cost Million BDT	Costing crite ria	Priority	Implementation duration
1	Surface water augmentation	i. Excavation/r e-excavation of silted and dried up canals and fish migratory routes, construction of water control structures, construction of irrigation canals and pump houses.	31170	Canal l ength: 3117000m; width: 50 m; depth: 2m; Tk 100/cubic meter	T	MT
		ii. Surface water conservation through construction of rubber dam / cross -dam / regulator, etc for development of irrigation	5000	Lump sum: Tk 5000 million	L	MT
		iii. Excavation of reservoir/ pon d for water conservation for surface water irrigation development.	5000	Lump sum: Tk 5000 million	M	MT
	Sub Total		41170			
2	Enhance Irrigation potentials	i. Integrated on farm water management including double lifting, infrastructure dev elopment	30000	Lump sum	H	LT
		ii. Promotion of solar energy for operating irrigation equipment.	560	Lump sum demo for 200 units	M	MT
		iii. Rehabilitation and improvement of Muhuri, Bhola and Barisal I rrigation Project	2525	Cost/ha: Tk 10000	M	ST
		i. Exploration of groundwater aquifer for high value non -rice crops in suitable areas	500		M	ST
	Sub Total		33585			

Drainage improvement

Sl No.	Programme	Intervention	Cost Million BDT	Costing criteria	Priority	Implementation duration
1	Restoration of degraded la nd	i. Restoration of severely waterlogged areas in Noakhali mainland	2509	Lump sum: Tk 2109 million	T	MT
		ii. Improving drainage, water logging and flood management through c apital dredging of silted up rivers in southwest region	20000	Length: 200 km; width: 2 00m; depth: 2m; Tk 250/Cubic meter	H	LT
		iii. Community driven and managed TRM in selected beels	100	Tk 10 million/2500 ha beel; for 10 beels.	T	LT
	Sub Total		22609			

Polder Management

Sl No.	Programme	Intervention	Cost (Million BDT)	Costing criteria	Priority	Implementation duration
1	Ensure community managed polder development	i. O&M by community based institutions.	2780	Tk 2m x 139 polders X 10 yrs	T	MT
		ii. Emergency public fund for disaster management	13620	Tk 5 m x50 polders X 1 0 yrs	T	LT
		iii. Legal framework for implementation of institutional arrangements.	50	Lump sum	T	ST
	Sub total		**16450**			
2	Construction of climate resilient polders	i. Repair and rehabilitation of damaged polders	284	5 9 m /km breach, for 48 km	T	MT
		ii. Coast al embankment improvement with climate resilient structures	83700	0.124m/ha, for 675000 ha of most vulnerable polders	H	LT
	Sub total		**83984**			
3	Promotion of land accretion process	i. Noakhali -Urir Char Cross -Dam	803	Dam: 3 3 km Yr 1 : 250 m Yr2 : 391 m Yr3 : 162 m	L	MT
		ii. Sustainable use of accreted land resources	90	Tk 0 018 m/ha/yr for 5000 ha annually	H	LT
	Sub Total		**893**			

Agri-business

Sl No.	Programme	Intervention	Cost Million BDT	Costing criteria	Priority	Implementation duration
1	Enhance capa city building	i. Establishment of market infrastructure with value chain management addressing processing, postharvest management and grading	40000	Market infrastructure at upazila , union and growth centers	T	MT
		ii. Training and awareness building of all ty pes of stakeholder	5000	Lump sum	H	LT
	Sub Total		**45000**			

Agri-business (continued)

Sl No.	Programme	Intervention	Cost Million BDT	Costing criteria	Priority	Implementation duration
2	Processing centre	i. Enhancement of milk, meat, fish, fruits and vegetable processing center	20000	1 medium sized beef processing unit of 100 cattle/day can process Cost of one goat processing unit. 500 goats /day can process. Cost of one unit of chi cken processing plant Plant capacity 10000 lit/day. 2 insulated milk tankers (2500 lit capacity) 2 nos. Insulated milk delivery van 5000 lit capacity.	H	LT
		ii. Establishment of independent quality control certification laboratory	200	lump sum	H	ST
	Sub Total		**20200**			
3	Salt production	Salt productivity enhancement through improved management practice	500	Lump sum for demo	M	MT
	Sub Total		**500**			
4	Fish drying	i. Promotion of community based fish dryer	500	Lump sum for demo	H	LT
	Sub Total		**500**			

Agricultural Credit

Sl No.	Programme	Intervention	Cost (Million BDT)	Costing criteria	Priority	Implementation duration
1	Special farm credit	i. Establishing a revolving credit fund for farmers and small & medium entrepreneurs with maximum 3 % service charge	100000	Lump sum	T	LT
	Sub Total		100000			

Capacity Building

Sl No.	Programme	Intervention	Cost (Million BDT)	Costing criteria		Implementation duration
1	Strengthening of public sector agencies and local government institutions	i.Human resource develo pment of the Public sector Extension agencies and Technology providers including recruitment of field level staffs.	5000	Lump sum	T	MT
		ii. Training and capacity building of the members of Local Government bodies, community organizations, Agri-business e ntrepreneurs and farmers on technology modules	9000	Lump sum	H	LT
	Sub Total		**14000**			

Table 7.3: List of top and high priority interventions

A. Top priority interventions

Sl No	Thematic area	Intervention		Investment need (million BDT)
1	Crop, horticulture and Agro - forestry	i.	Increase productivity of T. Aman through improved management practice in non -tidal and non-saline phases	14000
		ii.	Promotion of HYV T. Aus in varied region of the coast	7000
		iii.	Production and supply of locally adapted seeds	2000
		iv.	Promote pulse (khesari, mungbean and chickpea, cowpea, oil seeds: sesame, groundnut, etc.) Area for non -saline and non - tidal area (NARS varieties)	2000
		v.	Strengthening R&D of salt tolerant and high yielding potential crop and forage cultivers	2000
		vi.	Developing management package for unfavourable ecosystems with conservation of natural resources	10000
		vii.	Production and supply of quality seed of different crops	610
2	Fisheries	viii.	Development of upazila wise database of ponds, ditches, closed cana ls, & other water bodies and capacity building	6000
		ix.	Establish & maintain community based fish sanctuaries	575
		x.	Improvement of quality of brood stocks of native major carps as well as the Chinese exotic carps & raising of inbred free quality fry, fingerlings, juveniles of shrimps & prawn through the development of union based nursery; operated by private sector with technical assistance from DoF (PPP)	3000
		xi.	Piloting of semi intensive shrimp culture with target production of 1200 -1500kg/ha in the selective areas of Khulna, Sathkhira, Bagerhat & Cox's Bazar district	2000
3	Livestock	xii.	Community livestock and dairy development in the southern region, replication and up scaling of dairy farming in Satkhira (Tala model)	2975
		xiii.	Strengthening health c are(HC)	5000
4	Nutrition	xiv.	Promoting integrated homestead agriculture (vegetables, fruits, pond fish culture, poultry, duck & dairy).	6000
5	Water management	xv.	Excavation/r e-excavation of silted and dried up canals and fish migratory routes, construction of water control structures, construction of irrigation canals and pump houses.	31170
6	Drainage improvement	xvi.	Restoration of severely waterlogged areas in Noakhali mainland	2509
		xvii.	Community driven and managed TRM in selected beels.	100
7	Polder mana gement	viii.	O&M by community based institutions.	2780
		xix.	Emergency public fund for disaster management.	13620
		xx.	Legal framework for implementation of institutional arrangements.	50
		xxi.	Repair and rehabilitation of damaged polders	284
8	Agri - business	xxii.	Establ ishment of market infrastructure with value chain management addressing processing, postharvest management and grading	40000
9	Agricultural credit	xiii.	Establishing a revolving credit fund for farmers and small & medium entrepreneurs with maximum 3 % service c harge	100000
10	Capacity building	xiv.	Human resource development of the Public sector Extension agencies and Technology providers including recruitment of field level staffs.	5000
Total				**258673**

B. High priority interventions

Sl No	Thematic area		Intervention	Investment need (million BDT)
1	Crop, horticulture and agro forestry	i.	Enhance Boro area where quality surface water is available through improved lifting and distribution system	2370
		ii.	Increase cropping intensity with remunerative cropping patterns for varied regions.	1110
		iii.	Mapping of vegetables & species suitable for cultivation in various agro -climatic situations	110
		iv.	Area specific crop / variety selection by conducting adaptive trials (NARS)	5000
		v.	Submergence tolerant crop variety selection	150
		vi.	Establishment & strengthening of Research and Extension and private sector linkage for location specific technology development and promotion	200
		vii.	Lab facility development of NARS institutes in the region	10000
		viii.	Strengthening on -farm research for technology packaging	3000
		ix.	Delineation of soil fertility problems and nutrient deficient areas in order to promote balanced fertilizer use	10000
		x.	Promotion of tillage implements, post harvest loss reduction tools and small farm machinery	10000
		xi.	Mapping of potential fruit species for diversified agro - climatic situations	50
		xii.	Capacity enhancement of Isolated Coconut G arden, Ramu, as coconut germ plasm center	500
		xiii.	Introduction of proven technologies for fruit production and post harvest management	10000
		xiv.	Expansion of guava cultivation through Ditch and Dyke method in waterlogged areas	200
		xv.	Introduction of proven new crops and management practices against different gradient of salinity: sugar beat, chilli, sweet potato, barley, soybean, QPM, etc. (Rabi crops)	7000
		xvi.	Expansion of spices (Ginger, chilli, turmeric etc.)	2000
2	Fisheries	xvii.	Intensification of fish prod uction by introducing mono-sex tilapia, GIFT tilapia Thai -Koi, & Pungus of mono culture and mixed culture in the deltaic area including water logged areas of Noakhali & Lakshmipur	5000
		xviii.	Piloting of community based pen & cage culture in selective rivers, their tributaries & semi closed water bodies of Noakhali, Lakshmipur, Pirojpur, Patuakhali and Barisal	650
		xix.	Promotion of cage/pen culture	10000
		xx.	Community based open water stocking & biological management	2000
		xxi.	Stock assessment of pelagic and demersal fisheries resources	1375
		xxii.	Upgradation & development of DoF hatcheries & fish seed multiplication farms	2500
		xxiii.	Strengthening & enforcing of Jatka -Hilsha conservation, protection & development	4600
		xxiv.	Establishing crab hatchery for the promotion crab f attening	100
3	Livestock	xxv.	Promotion of HYV fodder cultivation	1000
		xxvi.	Establishing AI service center in each union	3300
		xxvii.	Establishing improved buffalo farm	5000

4	Nutrition	i.	Incorporate nutrition component in agricultural BCC and IEC activities at different level for mass communication (audio visual, printing media etc).	250
5	Water management	ii.	Integrated on farm water management including double lifting, infrastructure development	30000
6	Drainage improvement	iii.	Improving drainage, water logging and flood management through capital dredging of silted up rivers in southwest region	20000
7	Polder management	iv.	Coastal embankment improvement with climate resilient structures	83700
		v.	Sustainable use of accreted land resources	90
8	Agri-business	vi.	Training and awareness building of all types of stakeholder	5000
		vii.	Enhancement of milk, meat, fish, fruits and vegetable processing center	20000
		viii.	Establishment of independent quality control certification laboratory	200
		ix.	Promotion of community based fish dryer	500
9	Agricultural credit		----	-----
10	Capacity building	x.	Training and capacity building of the members of Local Government bodies, community organizations, Agri-business entrepreneurs and farmers on technology modules	9000
	Total			**265,955**

Of the total 85 interventions 24 are short duration (ST) amounting to BDT 57, 745 million and 33 interventions are medium term (MT) amounting to BDT 161,931 million. Long term interventions require the largest amount of BDT 358,350 million (Figure 7.3).

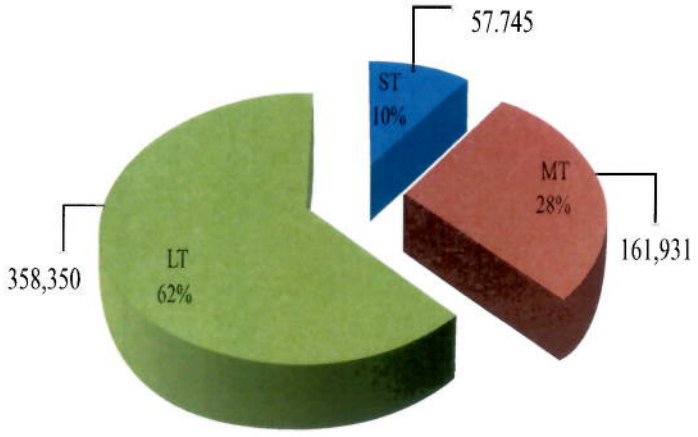

Figure 7.3: Investment (BDT in million) by duration of implementation.

Table: 7.4: Programme location

Crops, Horticulture & Agro-forestry

Sl No.	Programme	Cost (Million BDT)	Programme location
1	Productivity enhancement of rice	25370	Greater Barisal and Noakhali region
2	Promotion of potential cropping patterns with adjustment of diversified new crops	3870	Greater Noakhali, Greater Barisal, Some places of Khulna region
3	Technology generation and R&D strengthening	35450	Entire Southern region
4	Inputs supply system	20610	Entire Southern region
5	Promotion of fruit cultivation	18900	Greater Barisal, Chittagong and Noakhali
6	Intensification and productivity enhancement of winter and summer vegetables	10700	Greater Barisal and sole places of Khulna region
7	Popularization of agro-forestry practices	5150	Entire Southern region
	Sub total	**120050**	

Fisheries

Sl No.	Programme	Cost (Million BDT)	Programme location
8	Improve management of pond resources for enhancing production of fishes	27560	Greater Barisal and Noakhali
9	Community based Pen and Cage culture in open water system	10650	Greater Barisal, Lakshmipur and waterlogged inland area of Noakhali
10	Production and protection of quality broods, stocks, fingerlings, shrimps and Prawns	14150	Entire Southern region
11	Enforcing land zoning and productivity enhancement of shrimp	2200	Greater Khulna region and Cox Bazar
	Sub total	**54560**	

Livestock

Sl No.	Programme	Cost (Million BDT)	Programme location
12	Community based dairy development	12275	Greater Khulna and greater Barisal
13	Establishment of commercial farms of buffalo and sheep in Bhola and Noakhali	6000	Bhola and Noakhali region
	Sub total	**18275**	

Nutrition

Sl No.	Programme	Cost (Million BDT)	Programme location
14	Synergizing homestead farming with nutrition education	6250	Entire southern region

Water Management

Sl No.	Programme	Cost (Million BDT)	Programme location
15	Surface water augmentation	41170	Greater Barisal and Khulna
16	Enhance Irrigation potentials	33585	Greater Barisal and Chittagong
	Sub total	**74755**	

Drainage Improvement

Sl No.	Programme	Cost (Million BDT)	Programme location
17	Restoration of degraded land	22609	Entire southern region

Polder Management

Sl No.	Programme	Cost (Million BDT)	Programme location
18	Ensure community managed polder development	16450	Entire southern region
19	Coastal embankment improvement with climate resilient structures	83984	Mainly Khulna region
20	Promotion of land accret ion process	893	Meghna estuary
	Sub total	**101327**	

Agri-business

Sl No.	Programme	Cost (Million BDT)	Programme location
21	Enhance capacity building	45000	Entire southern region
22	Processing centre for milk, meat, fish and vegetable	20200	Entire southern region
23	Salt production	500	
24	Fish drying	500	
	Sub total	**66200**	

Agri. Credit

Sl No.	Programme	Cost (Million BDT)	Programme location
23	Special farm credit.	100000	Entire Southern region

Capacity Building

Sl No.	Programme	Cost (Million BDT)	Programme location
26	Strengthening of public sector agencies and Local government institutions	14000	Entire Southern region

Grand Total: 578,026 (Million BDT)

Table 7.5: Year-wise investment need

Sl No	Programme	Total cost (million BDT)	Year-wise investment need (million BDT)									
			1	2	3	4	5	6	7	8	9	10
Crop, Horticulture and Agro -forestry												
1	Productivity Enhancement of Rice	23370	1169	2629	2629	2629	2629	2629	2629	2629	2629	1169
2	Promotion of potential cropping patterns incorporating diver sified new crops	3870	194	435	435	435	435	435	435	435	435	194
3	Technology generation and R&D strengthening	37450	1872	4213	4213	4213	4213	4213	4213	4213	4213	1872
4	Input supply system	20610	1031	2319	2319	2319	2319	2319	2319	2319	2319	1031
5	Promotion of fruit cultivation	18900	945	2126	2126	2126	2126	2126	2126	2126	2126	945
6	Intensification and productivity enhancement of vegetables and spices	10700	535	1204	1204	1204	1204	1204	1204	1204	1204	535
7	Popularizing agro -forestry practices	5150	258	579	579	579	579	579	579	579	579	258
	Sub total	**120050**	**6004**	**13505**	**13505**	**13505**	**13505**	**13505**	**13505**	**13505**	**13505**	**6005**
Fisheries												
8	Improving management of pond resources for enhancing production of fish	27560	2756	8268	2067	2067	2067	2067	2067	2067	2067	2067
9	Community based Pen and Cage culture	10650	1065	3195	799	799	799	799	799	799	799	799
10	Production and protection of quality broods, stocks, fingerlings, shrimps and Prawns	14150	1415	4245	1061	1061	1061	1061	1061	1061	1061	1061
11	Enforcing land zoning and productivity enhancement of shrimp	2200	220	660	165	165	165	165	165	165	165	165
	Sub total	**54560**	**5456**	**16368**	**4092**	**4092**	**4092**	**4092**	**4092**	**4092**	**4092**	**4092**
Livestock												
12	Community based dairy development	12275	1227	3682	921	921	921	921	921	921	921	921
13	Establishment of commercial buffalo and sheep farms	6000	600	1800	450	450	450	450	450	450	450	450
	Sub total	**18275**	**1827**	**5482**	**1371**	**1371**	**1371**	**1371**	**1371**	**1371**	**1371**	**1371**
Nutrition												
14	Synergizing homestead farmi ng with nutrition education	6250	425	758	633	633	633	633	633	633	633	633
	Sub total	**6250**	**425**	**758**	**633**	**633**	**633**	**633**	**633**	**633**	**633**	**633**

Sl No	Programme	Total cost (million BDT)	Year-wise investment need (million BDT)									
			1	2	3	4	5	6	7	8	9	10
Water Management												
15	Surface water augmentation	41170	2059	4117	12351	3234	3234	3234	3234	3234	3234	3234
16	Enhance Irrigation potentials	33585	1679	3358	10075	2639	2639	2639	2639	2639	2639	2639
	Sub total	**74755**	**3738**	**7475**	**22426**	**5873**	**5873**	**5873**	**5873**	**5873**	**5873**	**5873**
Drainage Improvement												
17	Restoration of degraded land	22209	1110	2221	6663	1745	1745	1745	1745	1745	1745	1745
	Sub total	**22609**	**1110**	**2221**	**6663**	**1745**	**1745**	**1745**	**1745**	**1745**	**1745**	**1745**
Polder Management												
18	Ensure community managed polder development	16450	1645	3290	4935	940	940	940	940	940	940	940
19	Construction of climate resilient polde rs	83984	8398	16797	25195	4799	4799	4799	4799	4799	4799	4799
20	Promotion of land accretion process	893	89	179	268	51	51	51	51	51	51	51
	Sub total	**101327**	**10132**	**20087**	**30398**	**5790**	**5790**	**5790**	**5790**	**5790**	**5790**	**5790**
Agri-business												
21	Enhance capacity building	45000	2250	4500	13500	3536	3536	3536	3536	3536	3536	3536
22	Processing centre	20200	1010	2020	6060	1587	1587	1587	1587	1587	1587	1587
23	Salt production	500	25	50	150	39	39	39	39	39	39	39
24	Fish drying	500	25	50	150	39	39	39	39	39	39	39
	Sub total	**66200**	**3310**	**6620**	**19860**	**5201**	**5201**	**5201**	**5201**	**5201**	**5201**	**5201**
Agricultural Credit												
25	Special farm credit	100000	50000	50000	--	--	--	--	--	--	--	--
	Sub total	**100000**	**50000**	**50000**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Capacity Building												
26	Strengthening of public sector agen cies and Local government institutions	14000	1400	2800	4200	800	800	800	800	800	800	800
	Sub total	**14000**	**1400**	**2800**	**4200**	**800**	**800**	**800**	**800**	**800**	**800**	**800**
Total		**578026**	**83402**	**125316**	**103148**	**39010**	**39010**	**39010**	**39010**	**39010**	**39010**	**31510**

CHAPTER 8

IMPLEMENTATION AND MANAGEMENT

8.1 Institutional Framework and Governance

Government mainly deals with two areas: public administration and development. With the passage of time, the role of the government in Bangladesh has undergone significant changes and a host of other institutions have emerged to cater the needs of the people. Development is no more an exclusive domain of the public sector. Under changed circumstances, different formations belonging to the national government, local government, private sector and a wide range of civil society organizations have developed with competing and complementary roles in development. Besides, there are formal and informal functional groups and coalitions of the people at the local level who are increasingly being acknowledged as focus of all development efforts. This has replaced the earlier notion that the people are mere recipients and objects of development services and governance. All these social and institutional entities, however, operate under a nexus of power relations and linkages, which frames the overall institutional environment.

If institutional arrangements work well, people tend to believe that "good governance" prevails. Good governance is defined as harmony between performance of the state and aspiration of the society. Lack of good governance produces disparity, injustice, deprivation and lawlessness in the society in general and for the poor in particular. In order to attain a higher rate of poverty reduction, there is no escape from ensuring good governance (GED, 2005).

However, the governance agenda has suffered from being insufficiently grounded in an understanding of where the governance 'needs' of the poor and of vulnerable groups including women lie. Some service providing agencies are present up to the upazila level and some of these agencies, such as the Department of Agricultural Extension and Health and Family Welfare, have extension staff even below the upazila level. However, the general perception about them is that they are not delivering services to the required extent. Even if they are posted at the union level their mode of operation is still essentially top-down.

The issue of governance has seldom been addressed in conventional development literature, though fruits of development are often lost due to lack of good governance. Women continue to face entrenched barriers and insecurities in deepening their gains achieved in social and economic fronts. Governance weaknesses stand in the way of acceleration in the growth process (GED, 2005).

Local level units of line Ministries/Departments have the mandate and the authority to play certain roles and deliver specific services. This has not been a smooth as expected. The main constraints as envisaged by the government are outlined below.

- Although 'village' is the basic geographic unit in Bangladesh and constitutes the bottom-most entity for identification of development needs in rural areas, there are farmers organizations, CBOs and local NGOs working in the grass root level. It is necessary to motivate the poor farmers to effectively participate in the development process.
- There are a number of government agencies for service delivery at various tiers of local government. But in the absence of effective 'clientele' organization, the delivery structure remains rather inaccessible. In particular, this system often does not reach the poor and the disadvantaged.
- Various efforts to organize the people at the grassroots level through local government bodies also did not succeed.
- The government personnel who were sent to the rural areas to work for the poor largely proved to be inadequately motivated for participatory local level development for various reasons such as inadequate training, incentive structure, logistics, colonial legacy, etc.
- The understanding at different levels of the needs emphasized for effectiveness of "participatory local level planning". The usual emphasis was on the need for "educating the poor" before they could effectively participate (Planning Commission, 1998).

In recent years, a change in the declared strategy of the public authorities is being observed. Community participation in the development process is increasingly being emphasized by the government. Participatory water management has been declared as a major thrust in the SFYP. This approach would be followed in all water sector projects right from the identification up to monitoring and evaluation. The approach is mandatory for all public sector institutions (Planning Commission, 2011).

8.2 Sustainable Polder Management

It is no exaggeration to say that the southern region is a region of polders. Polders are now part of the natural setting in the coastal zone. While these have contributed significantly in enhancing food production, they are now confronting second generation problems, both social and environmental. Any strategy for poverty reduction must address these problems for a durable solution.
There are many problems, while resources are scarce. Resources need to be utilized in a context of competing and often conflicting demand, in a manner that optimizes their utility.

Optimum utilization of polder infrastructures has been affected by failure to take institutional aspects into account. Experiences of the past decades have led the Ministry of Water Resources and the Bangladesh Water Development Board (BWDB) to acknowledge the fact that an appropriate institutional structure for water management is the missing link. Since 2000, this is being adopted in different strategies and approaches. However, most of the institutional interventions have not sustained or are unlikely to keep going because of the *ad hoc* nature of the planning process. In a special project like CDSP, this somehow works. But this is far from being mainstreamed in the sponsoring agency, the BWDB. A sustainable institutional framework is yet to be in place. Against this backdrop, the following aspects need urgent attention.

a) **People's Participation and Ownership:** Sustainable management of polders can only be convincing and successful if the people, particularly the poor, are able to enhance their livelihoods in harmony with nature. The most contributing elements in a program toward attaining such a difficult goal is to consider the people the motor of development. This needs continuous support from all endogenous and exogenous entities and processes. They together constitute the institutional environment that can promote people's initiatives, ownership and belongingness and encourage participation of all stakeholders to achieve the desired goals in all stages of resource management.

Building people's ownership needs intensive and meaningful engagement of the LGI. UP is the most sustainable LGI that has passed the test of time. Although the UP is used by all GoB agencies for their sectoral purposes and interests, there have been little efforts to empower it and make it functional in every respect. In fact, WMA can function as a taskforce of the UP on water management. Through this, field level institutions will be integrated and mainstreamed in the existing administrative structure and would facilitate devolution of authority to the local level. Lessons learnt from others such as the Netherlands and Vietnam on engagement of local communities in implementation and O&M of polders need to be utilized in the implantation process of the Master Plan.

The concept of Integrated Coastal Zone Management (ICZM) is highly relevant and important in this respect, which offers a means of balancing the competing demands of different users of the same resource and of managing the resources to optimize the benefits that is consistent with the country's goals (MoWR, 2005). ICZM principles work through the local government institutions as a first step towards mainstreaming, adhering to the principles of decentralization. The crux of the problem is to promote community-driven development through enabling participatory local governance and community belongingness and ownership of programs.

b) **Legal status:** As envisaged in the GPWM, a three-tier structure for the WMOs should be in place, such as, the WMG at the sub-polder/village level, the WMA at the system level and the WMF at the catchments level. The WMOs may be registered with the BWDB or with the Department of Co-operatives to have legal status, as well as to have flexible mode of operation for social and economic development of their members that often transcend water management functions. A legal status would definitely empower field level community institutions.

c) **Functionality:** The WMOs should aspire and strive to expand their activities and should not remain confined to water management alone. The 'incentive' factor is of critical importance. Social actions and economic activities on a regular basis would keep community institutions going. This means a WMO should not remain confined as a consultative body, but should become functional in a way that brings tangible economic benefits for its members.

d) **Mandate:** Sometimes it is argued that certain actions are not permissible under the existing mandates and Acts of sponsoring organizations like the BWDB. If this is the case, it is

necessary to amend the mandates and Acts, rather than fitting field level institutions to predetermined domains. For example, registering the WMOs as statutory body under the BWDB, the BWDB Act should be amended.

e) **Facilitation by BWDB:** The BWDB must not be solely a regulatory body, but should function as a facilitating agency to allow community based institutions to develop, function and prosper.

f) **Allocation for O&M:** To keep polder infrastructures in good shape, budgetary allocation for O&M should be increased and amounts should be spent prudently. A community based O&M system combining beneficiary contribution and government endowment fund should be in place.

g) **Allocation for LCS:** The functionality of grassroots institutions like the WMGs is critically dependent on access to common resources and collective actions that bring tangible benefits for the members in the short run. In this context, all possible public resources for maintenance works that require unskilled labor should be earmarked for the WMGs. According to the field level BWDB source, about seven million taka is typically available for annual maintenance work per polder, mostly earthwork, which the WMGs are capable of undertaking. This entire amount should be allocated to local institutions, thus providing some employment benefit and income support to poor farmers of WMG.

h) **Capacity of BWDB:** The BWDB does not have sufficient in-house capacity to develop, monitor and improve the WMGs and their quality. The BWDB should be allowed to have the optimum level of staffing to monitor and maintain polder infrastructures. This would involve high overhead costs. Some tasks should be transferred to local government and NGOs to keep costs at a reasonable level.

i) **Coordination mechanism:** A better management of natural resources would require improved cooperation between water sector organizations and other relevant agencies. So, BWDB should maintain close linkage with other Ministries through the Ministry of Water Resources and horizontal linkage with other line departments at the central level, as well as at the field level.

j) **Conflict resolution:** With respect to common public resources, it is necessary to encourage the people to identify trade-offs among different users for the purpose of conservation and resolution of conflicts. Zoning for appropriate and profitable land use should be done involving all stakeholders. This should be linked with administrative actions in the form of incentives and disincentives to promote or discourage certain activities in certain areas based on suitability and trend. Polders with suitable land for shrimp culture should be designed in compliance with requirements of shrimp culture.

8.3 Other Stakeholders

There is a broad spectrum of civil society organizations (CSO) including NGOs and academia, which plays a vital role in the development process. These stakeholders can provide not only

valuable expertise, but also can function as watchdog in the implementation process.

Among the CSOs, NGOs are the most organized operating at all levels throughout the country. Their main aims are advocacy, social mobilization, human development and poverty alleviation. They mostly work with a target group approach, addressing most of their programs to the poor and women.

There is a wide range of CBOs operating at the grass roots level. Among these are landless groups, women's groups, farmers' cooperatives, fishers' cooperatives, etc. that are organized at the micro level. These are mostly village-based. These are often perceived as extended arm of the NGOs.

The banking system expanded in the rural areas quite rapidly in the 1970s and 1980s. Yet heavy dependence of the rural poor on informal sector moneylenders who charge high interest rates has continued to limit their creative potential to contribute more to national growth (Planning Commission, 1998). During this period, NGOs have emerged as a major source of micro credit that has almost overwhelmed other community development programmes. People often view NGOs as alternative service providers.

The key question remains how to incorporate NGOs in partnerships that go beyond project implementation. The following are few general observations that may be taken into account while further exploring such partnerships.

NGOs are a fact of life in socio-economic development of the country and a widely accepted vehicle to channel contributions of DPs to grassroots development processes. Their focus on social and environmental issues gives them the status of "action groups" than representatives of the public. In other words, they are fundamentally not democratic in the sense of being accountable to a general electorate.

NGOs have slowly changed their working scope and working areas. From "organized philanthropy", they now provide complementary services to government functions, such as primary education and public healthcare.

There is a scope for collaboration between the UPs and NGOs. UP officials would like to share resources mobilized by NGOs, while NGOs want more help from UP officials in implementing their projects (The World Bank, 2002). Nonetheless, there is considerable space for mutually satisfying cooperation.

Private sector

The private sector is gaining more and more space in the economy. While agriculture has always been in the private sector, investments from the organized private sector are critically important. In this way, agriculture can transcend primary production and enter the sphere of value chain and agro-processing. A key pre-requisite is investment in rural infrastructure.

Private investments in non-rice agricultural activities are constrained by a number of factors including the absence of adequate roads, power and finance. Rapid progress will be achieved if investments in these areas are targeted.

Public-Private Partnership (PPP) has been a declared policy of the government. The government recognizes that strong public-private partnership can play a catalytic role in mobilizing additional resources and creating additional capacity which would help implementing public programs. Accordingly the government has put emphasis on PPP to ensure development of infrastructure and utility services by attracting investment and improving the expertise and technology (Planning Commission, 2011).

Private sector organizations and forums will be included in the planning and monitoring process of the Master Plan at the national and local levels.

8.4 Implementation Mechanism

Once the Master Plan is adopted, the Government commits to support its implementation. An essential approach to implementation would be to mainstream it in existing policies and programs of the Government. This necessitates the following:

- Focus shall be given on incorporating the plan (interventions) in ongoing and future programs of relevant Ministries and agencies;
- The Master Plan will be implemented through existing ministries/departments and organizations;
- Existing policies and programs of participating ministries/departments will be harmonized to suit the requirements of the Master Plan;
- Adequate resource will be allocated in the Annual Development Programme (ADP) of all relevant ministries;
- Where more than one ministry/department is involved in the implementation of a particular program, inter-ministerial/department linkage and coordination mechanism will be in place;
- Engaging the local government and co-management, understood as a range of management systems where responsibilities are shared between the government and the communities, will be the mode of management at the local and the district level.

8.5 Public Sector Capacity

As the government agencies are the main anchorage points for implementation of the Master Plan, it is of utmost importance that they have necessary human resources with required background and competence. At the moment, most of these agencies lack adequate extension staff at the field level. The situation is particularly precarious for Department of Livestock Services and Department of Fisheries. Research stations of Bangladesh Agriculture Research Institute (BARI) and Bangladesh Rice Research Insititue BRRI in Khulna, Barisal and Noakhali are ill equipped with professionals and facilities and they cannot carry out their mandate properly.

It is an imperative to modernise the entire system of research and extension. All vacant posts need to be filled on an urgent basis. It is also necessary to increase the number of extension staff and base them at the union level, so that they can deliver services at the doorstep of farmers. At the

same time, necessary infrastructure and logistic support need to be arranged to facilitate stay and retention of staff in remote areas.

8.6 Institutional Setting

The Master Plan for agricultural development consists of a multi-level and multi-sectoral interventions involving several ministries, departments and other entities including the local government, the CSOs and the private sector. Certain programmes are of very local nature, and some would involve more than one district. Thus, institutionalization of the Master Plan requires a functional mechanism for coordination and interaction between and among the many parties involved at national, district and local levels.

It is recommended that relevant line agencies will implement respective sectoral programs as per existing administrative norms. However, institutional arrangements need to be in place to facilitate coordination among the stakeholders whose activities affect one another.

To coordinate these activities, the Ministry of Agriculture will function as the lead Ministry. An Inter-Ministerial Implementation Committee will be responsible for overall coordination and oversight. To ensure overall coordination of implementation of the Master Plan, the following institutional arrangements will be made:

a. Inter-Ministerial Implementation Coordination Committee (IMICC): The Minister in charge of the Ministry of Agriculture will be the Chair, while Ministers of the Ministry of Water Resources and Ministry Fisheries & Livestock will be the Co-Chairs. Secretaries of the Ministry of Agriculutre, Ministry of Water Resources, Ministry of Fisheries and Livestocks, Ministry of Environment and Forests, Ministry of Food, Ministry of Disaster Management and Relief, Ministry of Land, Local Government Division, Rural Development & Co-operative Division, Economic Relations Division, Member-General Economics Division and Agriculture, Water Resource and Rural Institution Division of the Planning Commission and Chief Executives of all participating departments/organizations/forums will be member.

b. Inter-Ministerial Implementation Committee (IMIC): The Secretary of the Ministry of Agriculture will be the Chair. Secretaries of the Ministry of Water Resources, Ministry of Fisheries and Livestock, Ministry of Environment and Forests Ministry of Food, Ministry of Disaster Management and Relief, Ministry of Land, Local Government Division, Rural Development & Co-operative Division, Economic Relations Division and Member-General Economics Division and Agriculture, Water Resources and Rural Institution Division of the Planning Commission and chief executives of all participating departments/organizations/forums will be the member.

c. A District Implementation Committee (DIC) will be in place involving all available Division/District level members of relevant organizations/forums. The Additional Director of the Department of Agricultural Extension covering the district will be the Chair. The committee will implement decisions of IMIC and send feedback. It will periodically review performance of programs.

d. An Upazila Implementation Committee (UIC) will be set up at the upazila level. The Deputy Director of the Department of Agricultural Extension covering the upazila will be the Chair.

e. Each participating Department/ organization/ forum will nominate a focal point as operational contact in relation to Master Plan activities and maintain contact with the lead Ministry for liaison and coordination.

f. Committees at all levels will meet on a regular basis. The minimum meeting frequency will be as follows:

IMICC: Annually
IMIC: Six-monthly
DIC: Six-monthly
UIC: Three-monthly

The proposed institutional structure (Figure 8.1) will be formalized through a gazette notification to avoid any ambiguity or confusion, as well as to facilitate smooth functioning of the implementation process.

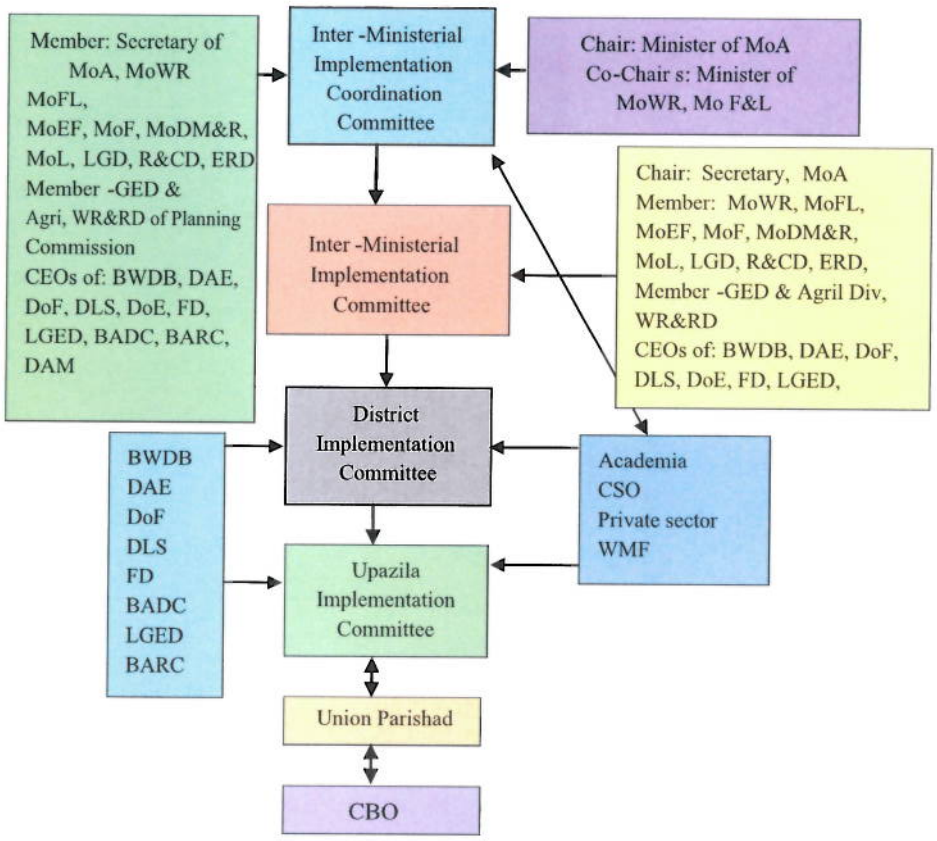

Figure 8.1: Proposed institutional setting

All stakeholders are important and relevant. Their participation in a setting as essential partners will definitely add fortitude and moral fiber in their institutional behavior.

The crux of the matter is to cultivate an administrative culture of working together for a common goal. This would necessitate radical shift of existing orientation and mindset of the people engaged in delivering services. In this backdrop, an institutional set up for the implementation of the Master Plan has been suggested.

8.7 Monitoring

A key to smooth implementation of the Master Plan would essentially require regular and functional monitoring. Committees at the four aforementioned levels will obviously review the progress of implementation and will resolve inter-agency coordination issues at respective spheres; this would also require a system of result-based monitoring. The lead Ministry/agency will prepare appropriate reporting tools and formats and, after endorsement by the IMIC, will use them during the implementation period. The format should be simple and easy to fill up and should include all vital information corresponding to necessary indicators of monitoring. In line with the government policy on ICT, The IMIC should put up a website for public use and should encourage different stakeholders to participate in e-discussion and providing comment.

An independent organization will be contracted to prepare Annual Monitoring Report throughout the plan period. This can be facilitated by the FAO.

A Mid-term Review will be done after three years from the commencement of implementation. A second mid-term review will be done after the sixth year.

The implementation of the Master Plan will be evaluated after the completion of the program after the tenth year.