EXECUTIVE SUMMARY

1. Introduction

The Master Plan for Agricultural Development in the Southern Region of Bangladesh covers three hydrological regions- south central, southwest and southeast of the coastal zone covering 14 districts. The Master Plan has been developed in accordance with, and as a logical consequence of, several other policies and programmes that are on board.

The coastal districts have generally been identified as a disadvantaged region in terms of poverty, food insecurity, environmental vulnerability and limited livelihood opportunities. The Ministry of Agriculture has therefore taken the initiative to prepare a comprehensive plan for the agricultural development in the region. The issue was highlighted in the Bangladesh Development Forum in 2010 and the Government put much emphasis to prepare such a Plan. The government has, therefore, recognized the current state of the region and especially mentioned the need for a Master Plan for the southern region in the Sixth Five Year Plan. The Ministry of Agriculture has taken the lead in the preparation process of the proposed Master Plan. It provides a detailed plan, estimates of investment need and a list of priority programmes.

The objective of the Master Plan is to provide a road map for an integrated agricultural development in the coastal districts of Bangladesh aiming at sustainable food security, poverty reduction and livelihood development for the poor. The Plan particularly focuses on, among others, the following:

a. increasing agricultural productivity;
b. improving water management and rejuvenating productivity of degraded lands;
c. developing climate resilient infrastructure and improving surface water irrigation system;
d. improving productivity of brackish water shrimp and capture fisheries; and
e. promoting smallholder poultry and dairy development.

It is expected that the combined outcome of all these interventions will lead to enhanced productivity, balanced growth, value chain management, increased employment and improved access to food and nutrition through appropriate institutional arrangements and sustainable resource management. The Master Plan covers the period from 2013 to 2021.

The Master Plan has been prepared by the Ministry of Agriculture in collaboration with the Ministry of Fisheries & Livestock and Ministry of Water Resources, and with technical assistance from the Food and Agriculture Organization of the United Nations (FAO). The preparation process included a multi-disciplinary team of national experts; backstopped by FAO's technical divisions and continuous consultations with the government line ministries and departments, National Agricultural Research System (NARS) institutes, Consultative Group on International Agricultural Research (CGIAR) centers, development partners and other stakeholders including farmers, local

government institutions, academia, community-based organizatons (CBOs), the private sector and civil society. A set of interventions have been selected through stakeholder consultations at the agency and regional levels. Prioritization and investment needs have also been determined through stakeholder consultations.

2. Social Profile

The southern region accounts for 27 percent of the area and 21 percent of the population of the country. The region has a total area of 39,617 sq. km, 6.38 million households and 29.86 million people as of March 2011. Non-farm households are 46 percent of total households. The extent of landlessness is as high as 65 percent in the southern region. Farmers and agriculture laborers are major livelihood groups. There are other occupational groups who earn their living from activities determined by coastal conditions, such as shrimp fry collector, salt farmer, shrimp farmer, fisher, etc.

Land is highly concentrated in few hands. Top 7 percent of households (medium and large farmers) own 36 percent land and top one percent of households (large farmers) own 10 percent land, while the bottom 46 percent households own only 13 percent land in the region.

Primary school enrolment rate is lower in the region than the national average, while literacy rate is higher. On the other hand, health situation is poorer in terms of population-hospital bed ratio, as well as the extent of severe child malnutrition. State of reproductive health is also relatively poor in the region.

3. Resource Base

The region has a network of many rivers and channels, most of which are under seasonal dependent tidal regime. Around 1.1 billion tons of sediment is carried down by the Ganges, the Brahmaputra and the Meghna rivers, the largest sediment load in any river system in the world.

Groundwater salinity in the coastal areas and offshore islands is a limiting factor in some parts of the region, although the water is generally fresh enough at greater depth (300m for domestic use). Groundwater availability in the upper aquifers is further limited due to the presence of silty clay in the upper soil strata. For this reason, groundwater irrigation in Barisal and Patuakhali region is not practiced. A declining trend is observed in Noakhali, which can be attributed to the increased detection of arsenic contamination in that area.

Surface water salinity is a normal hazard in many parts of the study area. In the southwest region surface water salinity has been accentuated by the reduction in dry season flows entering the Gorai distributaries, following the diversion of the Ganges flow upstream of the border. Salinity now reaches as far as Khulna, creating problems for normal agricultural practices.

In the monsoon, most of the rivers and *khals* are navigable. But in the dry season, most of these contain less water. Many internal rivers and *khals* in the network have been silted up and water is not desirably available in the dry season.

Wetlands (ponds, *beels* and *baors*) are common features in the landscape and are used as water

reservoirs. Ponds are used for fish culture and other household uses. *Beels* are inter-connected with the open river system and, in terms of habitat for aquatic species, form an integral part of the floodplain system.

The natural environment of the region is largely diversified. The region has different land types, soils, and agro-ecological systems and is also rich in biodiversity comprising different bio-ecological zones. Intertidal areas are biologically active and play a crucial role in the food and reproduction cycles of many marine species, and form potentially new cultivable land.

Two-thirds of the net cropped area is under poorly-drained condition. The dominance of poorly-drained soil of the region indicates that the removal of salinity from soil is a major constraint for agriculture.

Soil texture corresponds to relative proportions of sand, silt and clay. It is very important for crop production. The dominant soil textures are clay loam which is followed by clay. The southwestern areas are mostly clay to clay loam and the southeastern areas are mostly clay loam to loamy in texture. The clayey soil is not favourable for preparing land for dry land crops in the Rabi/dry season.

Soil salinity is one of the main constraints for crop production in the southern region. The withdrawal of fresh water from upstream, irregular rainfall, introduction of brackish water for shrimp culture, faulty management of sluice gate and polders, regular intrusion of tidal saline water during high tide in the unprotected lands, capillary rise of soluble salts etc. are the main causes of increased soil salinity in the surface soil. About 1.05 million hectares in the region are affected by soil salinity. Most of the areas are under low level of available soil moisture.

4. Resource Management

The region lags behind the country in terms of the intensity of agricultural (crop) land use. Land is predominantly single (50%) and double (40%) cropped, the cropping intensity being 159 percent, compared to 176 percent in Bangladesh as a whole, according to agricultural census of 2008. In the southern region, 15 percent of total cultivable land is either fallow and/or not being used. Major physical factors responsible for land being not used intensively are soil salinity, water salinity, subsidence, water logging, lack of surface water irrigation system (lifting device) and farmers' knowledge gap. The major cropping patterns are Fallow-T.Aman-Fallow (38.5% of the NCA), followed by B.Aus-T.Aman-Rabi (24.1% of the NCA) and T.Aus-T.Aman-Fallow (14.1% of the NCA).

Minor irrigation programme is overwhelmingly dependent on extraction of groundwater. The extent of surface water irrigation using low-lift pumps (LLP) is small.

Polders, numbering 139, are major interventions in the region. Over the period of time, a lot of changes have occurred. While these contributed significantly in enhancing food production in the initial period, they are now gripped in second generation problems, both social and environmental.

- ***Siltation***: Due to empoldering, natural inundation outside the polders has been obstructed by embankments resulting in higher elevation of land outside the polder and no siltation inside.
- ***Drainage***: Because of siltation of outfall channels, channels within polders have significantly lost drainage capability resulting in water logging. The problem has been compounded by siltation of internal drainage channels.
- ***Water logging***: Because of land accretion, particularly in the Meghna estuary, many rivers and *khals* (drainage canals) have been silted up. Onrush of upstream flow and prolonged rainfall often cause water logging. This problem has been aggravated by empoldering.
- ***Salinity***: Though soil salinity declines in the long run because of empoldering, problem recurs because of erosion and embankment failure mainly due to breaches or overtopping by storm surge.

5. Challenges

The region is overwhelmingly conditioned by its geographical location, hydrological and morphological character and geo-physical and bio-physical characteristics. Proximity to the sea has added further dimensions to its vulnerabilities and opportunities. The region faces many challenges.

Sea Level Rise and Climate Change

It is estimated that inundated area in the region will increase by 14 percent by 2100 with a sea level rise scenario of 88 cm. The adverse impact of climatic events will manifest in lower crop productivity and less cropping intensity. Increased frequency of extreme events such as cyclone, storm surge, sea level rise, soil and water salinity, incidence of pest attack and diseases, erratic rainfall and higher temperature will be observed. People's food security will be at risk.

Erosion

Coastal and river bank erosion has been a regular phenomenon in off-shore islands, particularly in Bhola, Hatiya, Sandwip and Kutubdia. Due to bank erosion, Sandwip has lost 180 km^2 in last 100 years; Bhola Island has been squeezed to 3,400 km^2 from 6,400 km^2 since 1960 and Kutubdia, lost 65 percent of its area in last 100 years.

Salinity

Salinity is a major constraint that hinders production of crops. But all areas are not saline at all times. In the southern region, Khulna, Bagerhat and Satkhira are the worst hit by water salinity, while Feni, Lakhshmipur and Pirojpur are least affected. Embankments and polders are constructed surrounding these areas to protect agricultural land. But occasionally high tidal surge hits these areas and saline water enters inside the polders and destroys standing crops.

Water logging

Water logging, both perennial and seasonal, is a severe problem. The drainage system consists of a dense network of different types of natural canals and drains. The system includes the major

perennial rivers such as the Gorai flowing along northern boundary and other rivers marking the eastern boundary, which are either distributaries or tributaries of these rivers and flowing mostly from north to south. Off take of these distributaries and outfall of the tributaries are silted up disconnecting water flow in the dry season. As a result of interrupting drainage system and siltation of rivers/canals, permanent water logging in the form of '*Beel'* has been created in this

region. Among the major *beels* are Beel Dakatia in Jessore and Khulna and Bhutiar Beel in Bagerhat. Noakhali Khal is the main drainage channel of the region which is completely silted up causing severe water-logging.

Vulnerable polders

Many polders are in dilapidated conditions in terms of breach and slip in the embankment, erosion, poor repair works, drainage congestion and location in the risk zone. Water control structures in many places are damaged or non-functional. The emerging threat of climate change and consequent sea level rise has made many of these polders more vulnerable. Bangladesh Water Development Board (BWDB) has categorized 51 polders as "most vulnerable" and another 55 polders as "medium vulnerable".

Land use conflict

Shrimp farmers bring saline water inside the polder by cutting embankment or using LLP. This affects salinity balance inside the polders and causes damage to crops in surrounding fields. Competing land use often results in confrontation and violence and thereby affects the social fabric. Polders have not been designed for the multi-functional land use and the BWDB has no mechanism to deal with land use conflicts. The state of water management is generally poor. Competing land use between crop and shrimp often results in confrontation among the farmers.

Lack of availability of quality surface water for irrigation

The southern region has a network of rivers and canals and plenty of water is available in the main rivers around the year. But during *rabi* and pre-*kharif* season there is a dearth of quality surface water for irrigation. Most of the rivers are tidally influenced and water salinity is higher than the irrigation threshold level for agricultural crops. Other than some pockets, expansion of surface water irrigation is constrained by poor quality water, mostly brackish and saline. The areas identified for expansion of surface water for *boro* and *T.aus* crops also require investment for infrastructure development and creation of lifting devices.

Availability of very limited number of stress tolerant crops and cultivars

The NARS system has developed many promising technologies including development of new varieties of crops and management practices for the favorable eco-system of Bangladesh. However, very few salt, drought and submersive tolerant cultivars or appropriate management practices to improve cropping intensity for boosting agricultural production have been developed so far for the southern region The productivity of already developed cultivars is also not promising against the severe stresses encountered.

Population and employment

Population of the region is increasing while availability of land for agriculture is decreasing. This means that in future, availability of food will be constrained, with the risk of further malnutrition. With increasing urbanization and demand for infrastructure, cultivable land will be more and more shifted to other land uses. There will be increased pressure on the natural resource base, with risks of further degradation of land and water quality. With increasing social mobility, particularly of women, and with increased adult population, the supply of labor force will increase. There is a need for additional 0.2 million jobs every year to maintain at least the present level of employment, if not more.

Credit

Volume of institutional credit is conspicuously low. About 80 percent of the volume of credit available comes from non-institutional sources largely dominated by *mohajans* and *dadanders*. They charge interest on loans at exorbitant rates, generally 10 percent per month. Loan conditionality of *dadanders* is quite stringent, as they lend money with the guarantee of repayment in the form of products whose price is fixed unilaterally by them in advance. This is a common practice for fishers who borrow money from *bahadders* before taking the fleet to the estuary and the sea, and dispose of the catch at a price or proportion determined by the *bahadder*. Advance sale of labor in crop fields in exchange for loans (cash or rice) is also common.

Market linkage

Density of market in the region is low compared to other locations of Bangladesh. Post-harvest loss is very high, particularly in the monsoon season, due to absence of market infrastructure and facilities. There are few collection centers/packing houses for sorting, grading/packaging. Warehousing facilities at village/union level for perishable commodities are absent. Market places are exposed and so highly vulnerable to cyclone and tidal surge.

Other challenges

The other challenges are poor land use and low productivity, changing of fish migratory routes due to insufficient upstream flow, siltation and pollution, fresh water scarcity for domestic purpose and irrigation, absence of coordination among service providers, conflicting demand for natural resources, narrow project approach, water management organizations have not been developed, or system collapses after withdrawal of the project, minimum accountability of service providers, lack of a holistic approach on farming system, etc.

6. Current Scenario and Development Potentials

Despite these many challenges, the region has considerable potential for crop, horticulture, fishery, livestock and value chain enhancement. The region is largely dominated by medium high land which is suitable for different agricultural practices around the year. The productivity of rice in all seasons can be increased more than two tonnes per hectare through expansion of suitable HYV cultivars, better agronomic management practices and on-farm water control. There is opportunity

for increasing surface water irrigation. The salinity level in many areas is less than the threshold limit of many crops, indicating that about 0.7 million ha of land could be brought under surface water irrigation.

There is scope to increase coverage and productivity of T. Aus rice in the region using improved management practices. Total potential T.Aus area is 740,346 ha of which 38% is suitable and 40% is moderately suitable. Potential surface water irrigation area in the region is 695,200 ha, while potential Boro area under surface water irrigation is estimated at 467,000 ha.

The following strategic interventions are suggested for increasing **productivity** of different crops and sustaining cropping patterns:

- Productivity increase of T.Aman in tidal and non-tidal areas;
- Productivity enhancement of T.Aus along with development of HYV Aus varieties, as well as introduction of short duration (85-90 days) and submergence tolerant varieties;
- Expansion of *boro* cultivation and productivity enhancement;
- Promotion of pulses (khesari, mungbean, cowpea and chickpea), oilseeds (sesame, sunflower, groundnut etc.) and new crops (maize, chili, sugar beet, soybean, mushroom, jute and chewing sugarcane).

In addition to these, the following should be emphasized for diversifying food and nutritional sources:

- promote mixed fruit orchards and intercropping for increasing production of horticulture food crops at low cost, e.g. maize, sorghum, millets, etc;
- encourage intercropping in order to produce more non staple food crops;
- encourage development of biotechnology in animal and plant breeding and facilitate exchanges of new advances in biotechnology;
- capacity building for promoting post harvest handling, processing, preservation and storage with a focus on preserving micronutrient rich foods.

There is also good potential to increase production of fish by developing capture fisheries, promoting cage culture, fish seed multiplication farms and marine fish production. Brackish water shrimp farming has expanded fast, but with very low yields. With improved organization it is possible to double productivity in this area through improved technology, better scientific management and more investments. While it is necessary to restrict unplanned expansion of shrimp culture in areas (149,730 ha) where the potential is low, it is also important to promote it in areas where the suitability is high (150,508 ha).

Possibility of fish productivity enhancement through cage/pen culture exists in the south-central area. Total area suitable for cage/pen culture is estimated at 7,900 ha. Marine fishery has also very high potential, but needs appropriate management and a conservation strategy. The major interventions needed are:

- Piloting of community based pen and cage culture;

- Community based open water stocking and biological management;
- Enhance productivity of pond culture;
- Enforcing land zoning and productivity enhancement of shrimp;
- Establishing and maintaining fish sanctuaries.

The region has a wide coverage of fallow land, river and canal and vast accreted area, which can be utilized for livestock rearing. The density of sheep, goat and duck in Noakhali, Bhola and Patuakhali is high and can be further expanded. At the household level, back-yard poultry rearing is a common practice and can be further promoted. Following interventions are considered:

- Replication and upscaling of community livestock rearing including poultry, duck and dairy development in the southern region;
- Upscaling community-based dairy farming as that of the Satkhira model;
- Promotion of HYV fodder cultivation;
- Strengthening animal health care services;
- Establishing Artificial Insemination (AI) service center in each union.

There is a large potential to **augment water resources** by reactivating the silted-up rivers through re-excavation. In Barisal region, dry season irrigation can be greatly facilitated using surface water, which remains fresh almost all year round. In other areas, rainwater harvesting could be a potential source of irrigation and livestock rearing.

Potential areas for intervention are:

- Excavation/re-excavation of silted and dried up canals, construction of water control structures and pump houses
- Surface water conservation through construction of rubber dam / cross-dam / regulator, etc for development of minor irrigation
- Excavation of reservoir/ pond for water conservation for surface water irrigation development
- Restoration of severely waterlogged areas in Noakhali mainland
- Improving drainage, water logging and flood management through capital dredging of silted and dried up rivers
- Community-driven tidal river management (TRM) in severely waterlogged areas in the southwest region
- Integrated on-farm water management
- Rainwater harvesting through construction of water reservoirs
- Promotion of solar energy for operating irrigation equipment
- Rehabilitation and improvement of Muhuri, Bhola and Barisal Irrigation Project
- Operation and Maintenance (O&M) of irrigation structures by community-based institutions
- Legal framework for implementation of local level institutional arrangements
- Repair and rehabilitation of damaged polders

- Redesigning and new construction of climate resilient polders
- Accelerating land accretion through construction of cross-dam
- Sustainable use of accreted land resources

Areas of potential in **agri-business development** are:

Crops and agro-forestry

- Oil extraction plant for Soybean in Noakhali and coconut in Khulna and Noakhali
- Promoting value addition to farm produce and processed products by environmental and user-friendly post harvest technologies and byproduct utilization
- Developing refrigerated and/or non-refrigerated storage technology for preservation of potato, sweet potato, aroids, onion, spices and fresh vegetables
- Developing refrigerated storage technology for fresh cut vegetables and fruit cobblers
- Developing processing and preservation technologies for fruits, vegetables and spices
- Establishment of fruit processing plants

Fisheries

- Support establishment of shrimp and fish processing and preservation plants in private sector in Khulna, Satkhira, Barisal, Bhola, Noakhali and Cox's Bazar
- Support to environment friendly quality fish drying plants in Noakhali, Khulna and Cox's Bazar
- Support to establishment of modern hatcheries in the private sector

Livestock

- Expansion of Milk Vita activities in Bhola, Chittagong and Khulna region. Other milk processors also need to be encouraged with special incentives
- Meat processing plant could be established in Chittagong, Noakhali, Khulna, Barisal and Bhola
- Establishment and expansion of feed mills in Chittagong, Noakhali and Khulna
- Promotion of private veterinary health care practices through training of professionals and para-professionals and providing credit facilities.

Transport

- Building and improving roads and river transport network with good cargo handling facilities
- Develop growth centers and inland ports
- Improving safety standards for transporting agricultural commodities

In addition, **homestead gardening and nutrition education** programmes need to be scaled up. Future agricultural intervention programmes should include explicit objectives of improving nutritional status with a focus on addressing child malnutrition. Child stunting needs to be addressed through strengthening linkages between complementary feeding

requirements/practices and agricultural production.

7. Prioritization of Investment Needs

Based on field study, regional consultations and interaction with various stakeholders, 85 interventions have been identified under 26 programs across 10 components. The components are crops, horticulture and agro-forestry; fisheries; livestock; nutrition; water management; drainage management; polder improvement; agri-business; agricultural credit; and capacity building.

Priorities are grouped into four categories in line with the criteria used in the Country Investment Plan (CIP). These are:

1) **Top**: Interventions will provide immediate benefits to large sections of the population and there is already commitment from the Government of Bangladesh.
2) **High**: Interventions where efforts will benefit people in specific areas and are needed to be implemented immediately.
3) **Medium**: Important interventions where implementation may be needed in future.
4) **Low**: Interventions where implementation depends on the availability of resources (Table 1).

Table 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

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 funding sources on board. Financing sources will include, among others, the following.

Special allocations will be made in the Annual Development Programme (ADP). The ADP will be aligned and harmonized in line with investment needs and priorities of the Master Plan. The resource gap will be met through financial assistance from the Development Partners (DPs). This is very much expected as the Bangladesh Development Forum also requested for such a Master Plan in 2010. In addition, many interventions already have some activities underway.

The private sector, such as the Chambers of Commerce and Industries, is a key player, which needs to take a lead role in the Master Plan, particularly in financing agri-business programs. The

construction of the Padma Bridge will open considerable opportunities for the private sector to contribute to the national development, particularly in the southern region.

8. Implementation and Management

The southern region contains a large number of polders. But what matters more than infrastructure is the need for a people-centred focus which must be embedded in all planning exercises. In the context of polders, the spotlight should be on farmers and their endogenous institutions. All service providing agencies should harmonize their roles and relationships and work out an arrangement that would yield maximum benefit for the people living in polders.

A sustainable institutional framework is yet to be put in place. Union Parishad (UP) is the most sustainable Local Government Institution (LGI) that has passed the test of time. UP must have a broader mandate to play a facilitating role in developing and promoting field level institutions, as well as in providing umbrella support to all community-based institutions. Lessons learnt from the Netherlands and Vietnam on engagement of local communities in implementation and O&M of polders need to be utilized in the implementation process of the Master Plan.

The Master Plan is a multi-level and multi-sectoral collaboration involving several ministries, departments, and other entities including the local government and the private sector. Certain programmes are of very local nature; others will 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 their respective sectoral programmes as per existing administrative norms. However, new institutional arrangements need to be in place to facilitate coordination among the stakeholders whose activities affect one another.

To coordinate the implementation, the Ministry of Agriculture will continue to function as the lead Ministry, while the Department of Agricultural Extension will be the lead agency. An Inter-Ministerial Implementation Coordination Committee will be responsible for overall coordination and amount oversight. To ensure overall coordination of implementation, the following arrangements are recommended:

- 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 of Fisheries and Livestock will be the Co-Chairs. The members of the committee will comprise of the Secretaries of the Ministry of Agriculture, Ministry of Water Resources, Ministry of Fisheries and Livestock, Ministry of Water Resources, Ministry of Fisheries and Livestock, Ministry of Food, Ministry of Disaster Management and Relief, Ministry of Land, Local Government Division, Rural Development and Co-operative Division, Economic Relations Division, Member-Generals of the Economics Division, Agriculture, Water resources and Rural Institution Division and Planning Commission and Chief Executives of all participating departments/organizations..

Inter-Ministerial Implementation Committee (IMIC): The Secretary of the Ministry of Agriculture

will be the Chair. Secretaries of the Ministry of Agriculture, 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 and Co-operative Division, Economic Relations Division and Member-General of 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. Members of the committee will consist of the Secretaries of the Ministry of Agriculture, 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 and Co-operative Division, Economic Relations Division, Member-Generals of Economics Division and Agriculture, Water Resource and Rural Institution Division of the Planning Commission and Chief Executives of all participating departments/organizations/forums.

- A District Implementation Committee (DIC) will be in place involving all available Division/District level members of the relevant organizations. The Additional Director of the Department of Agricultural Extension covering the district will be the Chair.
- 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.
- A senior officer of the Ministry of Agriculture not below the rank of an Additional Secretary will be responsible for day to day coordination of the implementation process from Dhaka.
- Each participating department/organization will nominate a focal point as operational contact in relation to Master Plan activities and maintain contact with the lead agency for liaison and coordination.
- Committees at all levels will meet on a regular basis.

It has to be acknowledged that all stakeholders are important and relevant. Their participation as partners will definitely add strengthen and legitimacy for the implementation of the Master Plan.