

A Peer Review of the Integrated Agricultural Development Plan: A Report for the Ministry of Agriculture

Executive Summary

The Ministry of Agriculture (MOA) adopted a National Agricultural Policy (NAP) in 1999, with the overall objective “*to make the nation self-sufficient in food, through increasing production of all crops including cereal, and ensure a dependable food security system for all*”. The MOA has also developed a Plan of Action (POA) to pave the way for implementing the NAP for the crop sector. An Inter-Ministerial Working Group (IMWG) has taken the initiative of formulating an Integrated Agricultural Development Plan (IADP) that seeks to ensure effective implementation of the NAP. The over-arching goal of the IADP is the implementation of NAP through establishment and maintenance of an enabling environment for all stakeholders in the agriculture sector. A Policy and Planning Framework and an Institutional/Agency Management framework have already been developed by the IADP. The frameworks determine among other things, the number of programs consistent with strategic themes stipulated by the Plan of Action of the NAP and assess institutional reforms needed for creating an enabling environment for efficient and effective implementation of the programs. This is a report of a Peer Review Group appointed by MOA to assess the IADP concept and the process, and the two frameworks.

The Group would like to commend the MOA for undertaking this initiative, which could provide valuable inputs into the on-going GOB initiative of preparing the Poverty Reduction Strategy Paper (PRSP). If completed according to the guidelines of the IADP Concept Paper, Bangladesh will have a specific, measurable, achievable, and realistic and time bound (SMART) agricultural development plan based on a logical framework approach, with a system of management in place for effective implementation.

It is stipulated that the development of the IADP will take about four years and will cost approximately US\$6.0 million or about one percent of the revenue plus development budget for the agriculture sector. The cost of this intensive planning effort thus appears reasonable. Since the preparation of IADP will continue in 2004 and 2005, the activities for developing detailed programs should be considered as part of the preparation for the PRSP, and can follow the agriculture sector review proposed by the government.

We suggest that the Policy Planning Support Unit of MOA develops a close working relationship with the Agriculture and Rural Development Division of the Ministry of Planning so that the excellent work completed so far can be effectively used for the preparation of the pro-poor agricultural strategy of the PRSP. **We recommend that the work completed so far be presented to higher levels of government to obtain political commitment and ensure ownership of the concerned stakeholders of the Plan.**

We suggest that mid-level government officials should be given responsibility for developing the stipulated programs, instead of leaving it entirely in the hands of international and domestic consultants. The selected government officials should supervise the work of the consultants for preparing the program documents. In case they lack the skills for doing this job, they may be sent for training in a reputed institution abroad along with the domestic consultants for acquiring the necessary skills. This will help enhance the capacity of the government for doing this work and facilitate ownership of the plan by those who will be in charge of implementing them. It may also lower the cost of preparing the plan by reducing the need for hiring high-cost international consultants.

1. Background

- 1.1 The development partners in Bangladesh want the government to have clear and elaborate sector policies consistent with the poverty reduction strategy, and a comprehensive framework for the implementation of the strategy. To facilitate this orientation major donors in the agriculture sector in Bangladesh have focused on promoting a change process within the Ministry of Agriculture (MOA) from individual projects to a sector wide approach, with clear strategic direction towards effectiveness and efficiency in medium and long-term development planning.
- 1.2 The Ministry of Agriculture (MOA) adopted a National Agricultural Policy (NAP) in 1999 with the overall objective “*to make the nation self-sufficient in food through increasing production of all crops including cereals, and ensure a dependable food security system for all*”. The NAP contains 18 specific policy objectives. The MOA has also developed a Plan of Action (POA) to pave the way for implementing the NAP for the crop sector. A similar Strategic Framework document is being planned for the fisheries and livestock sub-sectors under the Ministry of Livestock and Fisheries (MLF).
- 1.3 Against this background, an Inter-Ministerial Working Group (IMWG) has taken the initiative of formulating an Integrated Agricultural Development Plan (IADP) that seeks to ensure effective implementation of the NAP. The IMWG is represented by the MOA, the MFL, and the Ministry of Planning (MOP) and is chaired by the Additional Secretary, MOA. A Policy and Planning Support Unit (PPSU) has been established within the Planning Wing of the MOA, with financial assistance from the Danish International Development Assistance (DANIDA) to support capacity building processes.
- 1.4 The overarching goal of the IADP is the implementation of NAP through establishment and maintenance of an enabling environment for all stakeholders in the agriculture sector. The IADP has formulated four specific objectives to achieve this goal:
 - Ensure consistency of national and sector goals, regulatory frameworks and implementation of interventions;
 - Establish and maintain an enabling environment for all stakeholders where they can act for their own interest as well as for the interest of the national economy;
 - Develop adequate management capacity of the sector institutions to carry out the oversight and the regulatory functions and to provide right incentives for all stakeholders to perform efficiently; and
 - Achieve efficient utilization of scarce financial and human resources through reduction of wastages and minimizing duplication of development efforts due to lack of coordination among different government and donor agencies.
- 1.5 Towards realizing the above objectives, a **Concept Paper** for the IADP has been approved by the IMWG that identified the need for preparing four interlinked **strategic frameworks**:
 - Policy and Planning Framework;
 - Institutional/Agency Management Framework;
 - Information Systems Management Framework; and

- Implementation/Funding Framework.

The first two frameworks have already been developed for the crop sector managed by the MOA. The two frameworks determine among other things (see below) the number of programs consistent with strategic themes stipulated by the Plan of Action of the NAP and assess institutional reforms needed for creating an enabling environment for efficient and effective implementation of the programs.

- 1.6 The **Process Action Plan** of the IADP stipulates a Peer Review and a Development Partner Review with the aim of assessing the feasibility of the Concept Paper, and the strengths and weaknesses of the Policy Planning and the Institutional Management Frameworks. These assessments will be used as inputs to facilitate decisions regarding whether or not the relevant program documents should be developed.
- 1.7 A Peer Review Group (PRG) was appointed in early December 2003 to review the work already completed. The Group consisted of the following members:
- Dr. Mahabub Hossain (Chair)
 - Dr. M.M. Rahman
 - Dr. Quazi Shahabuddin
 - Dr. M. Zainul Abedin

A brief profile of the members of the Peer Review Group is given in Annex 2.

- 1.8 The PRG have gone through a number of documents and critically examined the four main documents: *i)* The IADP **Concept Paper**, *ii)* The IADP **Process Action Plan**, *iii)* The IADP **Policy and Planning Framework** and *iv)* The IADP **Institutional/Agency Management Framework**. The members of the Group have also met a number of senior government officials under the MOA and the Ministry of Planning (MOP), and a private sector organization (see Annex 1 for the list of persons met). The following are observations and recommendations of the Peer Review Group.

2. The Conceptual Framework and the Process Action Plan

- 2.1 The Group would like to commend the Ministry of Agriculture for undertaking this initiative, which could provide valuable inputs into the on-going GOB initiative of preparing the Poverty Reduction Strategy Paper (PRSP). The IADP concept paper is well thought-out. The objectives and the process of the IADP as stipulated in the Concept Paper are mentioned in the paragraphs 1.4 and 1.5 of this report. The Concept Paper has laid out detailed guidelines for preparations of the four frameworks. **If completed according to the guidelines, Bangladesh will have a specific, measurable, achievable, and realistic and time bound (SMART) agricultural development plan based on a logical framework approach, with a system of management in place for effective implementation.**
- 2.2 The Concept paper was careful to note the painful experience of the failure of the Programmatic approach undertaken in the Health sector. It was recognized that the prevailing project-based development approach that takes into consideration needs

of existing public sector organizations should continue. But, it should be within the framework of a programmatic approach that minimizes excessive fragmentations of development activities and duplications and wastages, and ensures coordination of activities among different organizations/ministries. It also believes in a gradualist approach to reform the institutions for creating an enabling environment for effective implementation of the plan, rather than destroying the existing organizational culture or pushing major restructuring of the system in one stroke.

2.3 It is stipulated that the development of the IADP will take about four years and will cost approximately US\$6.0 million or about one percent of the revenue plus development budget for the agriculture sector. The cost of planning thus appears reasonable. Since the preparation of IADP will continue in 2004 and 2005, the activities for developing detailed programs should be considered as part of the preparation for the PRSP, and should follow the agriculture sector review proposed by the political leadership.

2.4 On inter-ministerial coordination we fully agree with the stipulation of the IADP Concept Paper that the establishment of an enabling environment for the farmers and service providers would require intensive coordination among ministries involved in various aspects of development activities. However we disagree with the statement that only MOA and MLF are prime candidates to become fully engaged in the IADP activities. Indeed many of the functions that IADP performs are mandates of the Agriculture and the Rural Development Division of the Ministry of Planning. Also a bottom up, community participatory approach to planning and implementation of development activities that IADP and indeed PRSP strongly endorse would require involvement of the Local Government Division of Rural Development Ministry. These latter ministries deserved to be actively involved in the Inter-Ministerial Working Group. The Peer Review Group suggests that the Policy Planning Support Unit of MOA develops a close working relationship with the Agriculture and Rural Development Division of the Ministry of Planning so that the excellent work completed so far can be effectively used for the preparation of the agriculture section in the PRSP.

2.5 From our meetings with government officials we observed that senior policy makers were not adequately informed of the activities of the IADP. This was observed from our meetings with both the Ministry of Agriculture and the Ministry of Planning. Some of the senior officials in the National Agricultural Research Systems were reportedly not aware of the preparation of the report of the Institutional Framework. There is a risk that the excellent reports of the IADP already prepared may gather dust unless there is an ownership of this work from the high levels of the government. These reports should be circulated widely to relevant high-level government officials.

2.6 The limited knowledge of senior government officials and policy makers of the IADP activities may be the result of frequent changes in the government positions at the senior levels and lack of an element in the **Process Action Plan** that ensures a) transparency of on-going IADP activities and b) adequate feedback mechanism from the members of the Inter-ministerial Group to senior officials in respective ministries. It appears that the representatives in the IMG group do not prepare reports of the meetings and pass it on to their seniors. They merely attend the meeting of the IMG and comment on the agenda in their personal capacity.

2.7 The Peer Review Group recommends that the work completed so far be presented to higher levels of government to obtain political commitment and ensure ownership of the concerned stakeholders of the Plan. In this context we endorse the following comments (modified) made in the report of the Agency Management Framework (AMF):

“There are several action steps that must be satisfied prior to moving to the next phase of the IADP development:

- Present the draft reports of the PPF and AMF before the concerned stakeholders and then to higher levels of government to seek their views for improving the formulation of the framework and their commitment for its further development and implementation. The commitment could be in the form of written approval of such a proposal sent in a formal manner.
- Ensure that the process of developing the stipulated program be collaborative, consultative and transparent. The process should generate a sense of partnership among key stakeholders, foster debate and discussions among them on the issues and options, and encourage articulation and communication through periodic public reporting on the progress made.”

2.8 We suggest that mid-level government officials be given responsibility for developing the document of the stipulated programs, instead of leaving it entirely in the hands of international and domestic consultants. The selected government officials should supervise the work of the consultants for preparing this document. In case, they lack the skills for doing this job, they may be sent for training abroad along with the domestic consultants for acquiring the necessary skills. This will help enhance the capacity of the government for doing this work and facilitate ownership of the plan by them. It may also lower the cost of preparing the plan by reducing the need for hiring high-cost international consultants.

3. Policy and Planning Framework

3.1 The New Agricultural Policy (NAP) has formulated 18 specific policy objectives. An analysis of the causal relations among these specific objectives shows that two of these objectives are central to achieving all other specific objectives and the overall objective. These are:

- Ensure profitable and sustainable agricultural production systems to raise real incomes of farmers thereby improving their livelihoods and expand the domestic market for industrial products and services;
- Establish agriculture as a diversified and sustainable income-generating sector through strengthening farming systems based agricultural production and agro-forestry programs.

It has been suggested in the PPF that these two specific objectives be anchor points for the national development program and interventions in the sector if the overall and other 16 specific objectives are to be achieved. We agree with this analysis of NAP objectives.

3.2 The Peer Review Group considers that the goal of the NAP of achieving self-sufficiency of all crops is neither realistic given the constraints of available natural

resources in the country nor consistent with the national policy goals. In view of the shrinking land resources and evolving technology, crop choices should be dictated by comparative advantage in a dynamic setting. The focus should be more on achieving self-reliance rather than self-sufficiency, except for the dominant staple food (rice) for which social and political considerations rather than economic efficiency are major concerns. There is an inadequate analysis of this issue in the PPF. We hope that the Agriculture Sector Review proposed by the present government will sharpen the analysis of this issue and modify the sector goals and strategies.

- 3.3 We agree with the context, vision and thrust of the Policy and Planning Framework. The context of the PPF mentions that the government's commitment to attain the Millennium Development Goal of reducing poverty by 50 percent over 1990-2015 will require a long-term growth of national income by seven percent per year. The agriculture sector must grow by 3.5 to 4.0 percent per year in order to support that growth in national income. It would have been useful to do further analysis to specify what should be the composition of growth of different sub-sectors and crops that is consistent with those overall macro-targets. Since the growth of population has started declining and the income-induced growth in demand for cereals is becoming weak with high-levels of cereal consumption, it would be difficult to achieve a 3.5 to 4.0 percent annual growth in agriculture with the emphasis on cereal production, which was main thrust of government policies in the past. Sustaining this level of agricultural growth requires increasing focus on fisheries, livestock and agro-processing that have high-income elasticity of demand.
- 3.4 An analysis of the required growth in supply of different agricultural activities for the next five to 10 years with simple demand projection models would have given useful guidance to consultants who will be engaged in developing the stipulated Funding and Implementation Frameworks of specified programs. It is true that market will provide signals to supply-demand imbalances to which farmers will respond. But in an agriculture dominated by small and marginal farmers, fluctuations in prices themselves create disincentives for agriculture and become a source of vulnerability for the poor people that any planning activity must seek to avoid. A major role of the government in subsistence-oriented agriculture is maintaining stability of prices.
- 3.5 The vision of the PPF is the adoption of a three-pronged overall strategy for reinforcing developments in agriculture. These are:
- Raise the productivity of existing crops through increasing yields and higher cropping intensity so that scarce natural resources be released for supporting crop diversification;
 - Diversify crop production to meet the growing demand for non-cereal crops and capture the export market for crops in which Bangladesh has comparative advantage; and
 - Expand non-crop agriculture and agro-processing activities to generate higher incomes for rural households.

We agree with the above strategy for accelerating the growth of the agriculture sector. The critical condition for success would be creation of an enabling

environment for the implementation of the programs through appropriate institutional reforms.

3.6 The PPF provides an excellent analysis of the roles of different stakeholders in the agriculture sector in the context of strengthening the partnership approach and the expanding role given to the private sector for future development in agriculture. In this context the PPF rightly suggests that the government's role be limited to:

- Create and maintain a favorable macro-economic policy environment for providing incentives to the private sector for participation in development activities;
- Introduce risk-reducing legal, financial and institutional arrangements for proper functioning of the markets;
- Encourage competition in the input and output markets, preventing the emergence of monopoly and cartels, and protecting consumers and farmers from unfair trading practices;
- Provide subsidies and price support for a few strategically important agricultural inputs and commodities;
- Provide environmental protection in areas of divergence between social and private interests; and,
- Invest in the production of public goods in which the private sector will not come forward as they do not expect to fully capture the returns from the investment.

3.7 The PPF however did not elaborate what are the public goods in agriculture in the present development stage in Bangladesh. For example, a) would the private sector be interested in investment in agricultural research and in what kind of research activities (in the continuum of basic-strategic-applied- adaptive research)? b) Can some of the extension activities be taken over by the NGOs? c) Would the private sector invest in agricultural education? These are debatable issues that needed further analysis in the document so that the government can take a clear position. The discussion of two members of the Peer Review Group with a private sector entrepreneur suggested a major constraint to development of agro-processing business was the lack of technologies on post-harvest processing that should come from the public sector research institutions. The discussions indicated that the private sector in Bangladesh was not yet ready to invest in technology development research, although they might participate in downstream technology validation research. The analysis of this issue is important for prioritization of the public sector agriculture development programs, and for determining the balance in resource allocation among different programs.

3.8 There is also inadequate analysis on whether the present macro-economic framework, particularly the fiscal and commercial policies are conducive to private sector participation in development. Do activities of some semi-government organizations crowd-out private sector investment in agriculture? Are government regulations and controls of markets excessive? Do regulations and controls promote rent seeking of government officials from the private sector? Are tariffs and indirect taxes of different items consistent with policy directives given for development of agro-processing business or export promotion? These are important issues that concern the private sector entrepreneurs, and must be addressed by

IADP and appropriate measures suggested for greater involvement of the private sector in agricultural development.

3.9 The asymmetry of trade-based mechanism of rice price stabilization, including the failure of the domestic price support program in the context of the WTO rules has not received proper attention in the PPF. The issue of food security should be analyzed in a comprehensive framework emphasizing availability, access and utilization in the context of both trade liberalization and regional trading arrangements.

3.10 Although, the overall approach on NAP has been observed to be broadly consistent with those identified in the Interim PRSP document's agricultural strategy, there is further need for prioritization of the programs under the IADP and identifying different stakeholders' roles in them so that these conform to the sector interventions and strategies in the full PRSP currently under preparation.

4. The National Development Programs (NDP)

4.1 The draft PPF suggested establishment of the 15 Programs to implement the NAP and PoA. Six Programs have been suggested for activities related to the '*Crop Production Chain*', four belonging to the '*Support Programs Area*' and five Programs are related to '*Crosscutting Themes*'. The IADP sees the first group of programs having a strong farming systems approach. Each program should design interventions covering the entire chain of activities, including marketing and trade, service provision, and regulations. It views the second group as forming the critical elements of the support environment that enable farmers to undertake efficient and sustainable agricultural activities. The third group of Programs should derive their significance from the role they would play in ensuring productivity, sustainability, and equity of the agricultural production system.

4.2 The IADP suggested the following programs:

A. The Crop Production Chain

1. The National Seed Development Programs
2. The National Fertilizer and Soils Programs
3. The National Minor Irrigation Programs
4. The National Pest Management Programs
5. The National Agricultural Mechanization Programs
6. The National Agricultural Marketing and Agro-business Program

B. The Agricultural Support Programs

1. The National Agricultural Research Programs
2. The National Agricultural Extension Programs
3. The National Agricultural Education Programs
4. The National Agricultural Credit Programs

C. The Crosscutting Programs

1. The National Land Use Programs
2. The National Homestead/Food-based Nutrition Programs

3. The National Women in Agriculture Program
4. The National Agricultural Environment Program
5. The National Agricultural Support and Contingency Program

It has been recognized that the Program areas suggested may change as new challenges uncover and new compulsions emerge.

- 4.3 The draft IADP outlined objectives and structure of each of the national programs, reflecting the potential role of existing institutions within the purview of the relevant Program. Each Program will have a number of components, which, if necessary, will be divided into subcomponents to fit into the mandates of a number of responsible implementing agencies. The IADP foresees that some organizational changes may be necessary within both the MOA and the agencies under the MOA. The IADP also recognizes that the formulation of the national Program will follow the existing planning process. It has suggested the general methodology to be followed in specifying the content ensuring the inter-linkages and compatibility with NAP objectives.
- 4.4 The Peer Review Group is in general agreement with the planning, implementation and management process of individual programs. However, we feel that the suggested programs and the components are not fully in line with the IADP concept, policy analysis and general understanding of a programmatic approach. Paragraphs below explain these aspects.
- 4.5 The Policy Planning Framework argued that ‘establishment of agriculture as a diversified and sustainable income generating sector through strengthening of **farming systems** based agricultural production and agroforestry Programs’ is one of the two key specific NAP objectives. Rest of the NAP objectives are essentially hinged on these two key objectives. This is also in agreement with the seven policy thrusts of IADP, which rightly emphasize on the adoption of the livelihoods and farming systems approaches as overriding concern in ensuring sustainability of the proposed interventions. The proposed National Programs should reflect this analysis and conclusion.
- 4.6 Further, crop diversification or intensification, whether for subsistence or commercial purposes, will depend on a wide range of factors, including the physical, biological, socio-economic and policy environments. The perception of the farmers of these environments, the potential role of the technologies available to produce the expected benefits, farmers’ ability to use the technologies and farmers’ needs and aspirations contribute to the farming systems in a given area. Experiences suggest that agro-ecologically-based farming systems is the preferred entry point for a Programmatic approach to agricultural development. The agro-ecological environment provides the first level of challenge to whether a certain crop, related production technology, cropping pattern or farming systems will have comparative (biological, social, economic or otherwise) advantage or not in that particular ecosystem. Any intervention towards land use planning should take note of it.
- 4.7 As has been discussed in the IADP documents, the contents of the national Programs should be based on identified needs of the farmers. Any components, sub-components, or sub-Programs should only be logical sub-division of the

identified needs for intervention. The components or sub-components should not be identified to give work to an existing institution or to justify their existence. Institutions should only be identified as implementing agencies of the identified interventions/components/subcomponents.

4.8 In view of the above, it is felt that the proposed National Programs and their components need some adjustments to bring them in line with the policies and concepts of IADP and experiences gained elsewhere on programmatic approach. The implementation of these programs and their components or subcomponents will rest with the public sector development, extension or research organizations, with policy support and regulatory functions remaining within the exclusive domain of government. However, it is also recognized that there will be active stakeholder participation in developing appropriate policies and regulatory measures.

4.9 IADP may consider the following National Programs and their structures that reflect the foregoing discussions and comments.

A: Ecosystem Based Core Programs

1. Program for the Irrigated ecosystem
2. Program for the Rainfed Highlands
3. Program for the Flood-prone ecosystem
4. Program for the Coastal ecosystem
5. Program for the Hill agriculture
6. Program for the Charlands
7. National Program for the Homesteads Production System (with a strong component on mainstreaming women in development)

B: Strategic Programs

1. Seed Development Program
2. Land and Water Resources and Soil Fertility Management Program
3. Agricultural Marketing and Agro-business Development Program
4. Food-based Nutrition Program
5. Natural Disaster and Vulnerability Management Program

C: Agricultural Support Programs

1. Agricultural Research Program
2. Agricultural Extension Program
3. Agricultural Education Program

4.10 Each of the above programs **under section A** will have the following components:

- Socio-economics of livelihood and farming systems
- Development, validation and extension of improved variety and seeds
- Crop management and farming systems improvement (to include agro-forestry, crop-livestock and crop-fisheries systems)
- Pest management (to include insects, diseases and weeds for crop livestock and fisheries systems)
- Natural resources and environment management - soil fertility, irrigation water, and biodiversity for crops, livestock and forestry species
- Post-harvest processing and mechanization
- Credit support

- Mainstreaming of women

The Programs under Section B and C will incorporate activities derived from the components of the ecosystem-based programs, and activities of strategic interest for Bangladesh. They should also contain policy and regulatory functions for guiding the private sector and protecting the interests of the small and marginal farmers and consumers.

- 4.11 One advantage of organizing the core program by ecosystem is that *it will allow the **integration** of activities for the development of crops, livestock, fisheries and forestry, which we understand is the spirit of IADP.* This will also help integrate the two parallel planning activities for the IADP under the MOA and the MLF.
- 4.12 We do not think that there should be separate programs for environment protection, mainstreaming of women, and on credit. They should be components of the ecosystems based national programs.

5. The Agency Management Framework

- 5.1 The Agency (Institution) Management Framework (AMF) is one of the four frameworks identified in the IADP Concept Paper that seeks to ensure effective implementation of NAP by creating and maintaining an enabling environment for the participation of all stakeholders. The AMF provides guidelines for institutional development programs. The Institutional analysis was carried out in three clusters; a) the National Agricultural Research System (NARS), b) the Department of Agricultural Extension, and c) the smaller agencies in one cluster. The analysis also includes a review of the private sector and NGO activities in agricultural development and the nature of their partnership with public sector agencies.
- 5.2 The AMF is an excellent document that provides an assessment of the institutional attributes of the MOA agencies in relation to relevance, efficiency and sustainability. Based on the analysis of the previous attempts at institutional reforms, a workable reform agenda for the MOA agencies have been suggested. This is a general framework, which should be able to guide the actual reform process within the limits of the government's "standardization policy" and rules of business following the "principles of exclusion." The Peer Review Group **suggests** that the document be published and widely circulated.
- 5.3 The Group considers the following reform agenda for the Agricultural Research Institutes (ARI's) as long pending issues that should be sincerely addressed by the government:
- Creation of an Agricultural Research Service (ARS) under the control of BARC.
 - Provision of in-situ promotion to ARS professionals on the basis of merit.
 - Introduction of block grants for research funding of ARI's.
 - Framing of own financial rules for the NARS System.

However these reforms will be difficult to implement without a strong commitment from the political leadership and senior government officials. It is an open secret that the existing controls on the recruitment, promotion, training, and human resource development are often used by the lower level government officials for rent-seeking.

5.4 A few issues which could have been emphasized in the section on research management are:

- Ensuring effective participation of farmers and extension staff in research planning and review of research results;
- Partnership between public and private sector institutions for technology validation and up-scaling through farmer participatory research;
- Seeking alternative sources of funding for the research institutes through selling services to the private sector and international organizations, and
- Skill enhancement of researchers through post-doctoral and visiting scientists programs with international research organizations.

5.5 One of the issues related to management of research is to ensure effective participation of stakeholders in identifying researchable problems and priorities. This is mentioned with respect to farming systems research project, but has not been raised as a research management issue. Research Institutes in many countries have developed and institutionalized different mechanism for stakeholder participation in agricultural research. Bangladesh research system is yet to institutionalize this process despite working for a long time in farming systems research. IADP's main purpose will be affected, if participation of key stakeholders in research planning is not ensured.

5.6 Partnerships linking multiple actors for providing research services has been discussed in the analytical part of the AMF report, but not included in the development agenda as an institutional issue. Public sector research institutions alone cannot solve all technical problems faced by the agriculture sector. In large developing countries such as in China and India the private sector is becoming a major player in the field of agricultural innovation, and the public and the private sectors' domain of agricultural innovation may overlap. It will be useful to clearly delineate these domains for the private and the public sector, and also to identify the area of synergy where the public and private sector should work under the partnership mode. This poses a challenge as well as offers an opportunity for sharing knowledge and resources for solving many problems in partnership.

5.7 It is also important to strengthen the existing linkages and build new partnerships with international agricultural research centers for collaborative research for solving problems that national system alone cannot deal with. Such partnership is also required to expose national scientists to new scientific developments, and to continually update their research skills through training and post-doctoral facilities. Combining collective action and knowledge and sharing resources of potential actors through building and managing partnerships is an innovative way of increasing the efficiency of agricultural research. This issue should find a place in the institutional development program.

- 5.8 Implementation of R&D activities through programmatic approach will heavily depend on inter-agency collaboration. It is a major problem area, and must be addressed as an important institutional issue. This problem is acute at the operational level. Effective mechanism will have to be developed for closer inter-agency collaboration for effective implementation of R&D activities through programmatic and systems approach.
- 5.9 Recent concept of an efficient organization is that it must be sensitive to changes in the internal and external environment, it must be pro-active, and remain ready to change in response to new challenges. A research institution of this standard will need to attract and retain high quality staff, which is not possible in Bangladesh under the present service conditions. The working conditions could be improved through establishment of an incentive scheme, which could be developed even without changing the salary structure. This issue should not be overlooked and avoided again on the plea that it is a sensitive issue.
- 5.10 The issue of the governance of NARS received inadequate attention. The current Governing Board of BARC has inadequate representation of stakeholders. The governance structure needs to be changed to include representation from farmers' organizations, NGOs and the private sector. It is also necessary to examine the functions and the composition of the Management Committees of the Research Institutes, including the Chairmanship of the Committee.
- 5.11 The establishment of the Agricultural Research Service will certainly facilitate inter-institutional movement of scientists. This will offer the scientists opportunity to widen their knowledge base and professional skills. More important are the development of leadership skills and the movement of scientists with organizational skills in the leadership positions. The system of promotions and inter-institutional transfers should have flexibility to identify and groom research leaders who can bring dynamism and excellence in the system.
- 5.12 The issues identified for development of Department of Agricultural Extension (DAE) are:
- Rationalizing all projects under a program approach;
 - Staffing rationalization;
 - Transferring administration of BCS (Agriculture) to DAE;
 - Streamlining extension training;
 - Improving coordination among different hierarchical levels; and
 - Institutionalizing stakeholder participation

This is an excellent set of agenda for improving DAE's performance. However, the size of DAE itself is a major problem both in terms of structure and staffing, which are closely linked. In addition to staff rationalization, review of its structure and role in the context of appearance of many more players in the field of agricultural extension would be useful.

5.13 Among the smaller agencies, the Soil Resources Development Institute (SRDI), The Department of Agricultural Marketing (DAM) and the Seed Certification Agency were assessed. However this cluster excluded the assessment of the Agricultural Information Service (AIS), managed by the MOA. This is an important organization

for the delivery of extension messages and related information to farmers. In view of the recent development in information and communication technologies the role of this institution in dissemination of improved technologies and information and knowledge assumes critical importance. An analysis of improving the effectiveness and efficiency of this organization for implanting the NAP must contain a place in the agency management framework.

5.14 In the case of the Department of Agricultural Marketing (DAM), formulation of a separate institutional development program has been suggested to bring about radical changes in its mandate, organizational structure and staffing with new service rules. The emphasis is well placed for supporting the objectives of commercialization, agro-business development and export orientation.

5.15 The issue of **decentralization** and involvement of local government, farmer organizations, NGOs and CBOs in agricultural development planning at the field level has not been addressed anywhere as an institutional issue. The program may think of considering this as an important issue, which is also emphasized as a key element in the process of the preparation of PRSP.

Annex 2 Brief profile of the members of the Peer Group

Mahabub Hossain (Ph.D), an economist by training has been working as the Head of Social Sciences Division, International Rice Research Institute (IRRI), Philippines since 1992. He served as the Director General, of the Bangladesh Institute of Development Studies (BIDS), Dhaka during 1989-1992; and as a Visiting Scientist at the International Food Policy Research Institute (IFPRI) at Washington DC, USA during 1985-87. His major area of interest is rural development policy, income distribution and poverty analysis, and research planning.

M. Motlubor Rahman (Ph.D), an eminent Agricultural Scientist and Administrator (Retired, now in Bangladesh). He has been the Program Director and the Regional Director (Asia-Pacific), International Service for National Agricultural Research (ISNAR), The Hague, Netherlands. Prior to leaving Bangladesh for working in the CGIAR, he was the Executive Chairman of the Bangladesh Agriculture Research Council, and the Director General of the Bangladesh Agricultural Research Institute. One of his outstanding contributions is facilitating the reform of the National Agricultural Research System (NARS) of Uganda.

Quazi Shahabuddin (Ph.D), Economist and Director General, Bangladesh Institute of Development Studies (BIDS), Dhaka. He worked in the Planning Commission and was a major contributor to the water sector planning for developing the National Water Plan in the 1980s, and the comprehensive food policy and food security studies conducted by the International Food Policy Research Institute (IFPRI) in the 1990s. His major area of interest is agriculture sector modeling and agriculture policies.

M. Zainul Abedin (Ph.D), Farming System Specialist, Coordinator of the project on Validation and Up-scaling of Technologies in the Flood-prone Ecosystem of South and Southeast Asia implemented by the International Rice Research Institute (2003 to present). He founded the On-Farm Research Division, Bangladesh Agricultural Research Institute (BARI) and provided leadership in developing institutional mechanism for research-extension-farmer linkages in Bangladesh and Kenya. He has worked for a number of the CGIAR institutes managing special projects on technology validation using farmer participatory research tools.