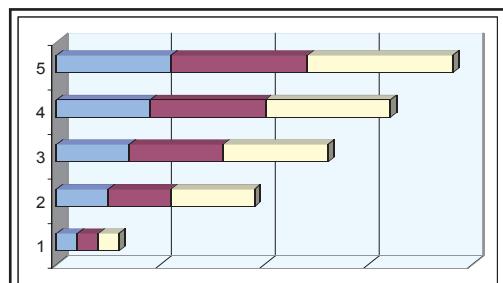


General Objectives for Strategic Plan 2002-2006

The strategic plan should be realistic, achievable and clearly focussed on where the department wants to go in a given period. Unlike the previous strategic plan, the strategic objectives in this plan have been kept in short, simple and clearly focussed on DAE's goal and mission. In developing this plan, emphasis has been given to addressing the issues of national goal and priorities like reducing poverty, improving the livelihood of rural farmers and means of providing efficient and effective services for sustainable agricultural growth and development. It is hoped that this plan will guide DAE managers in achieving DAE's goal and mission in most effective way. It will also provide a framework within which the DAE activities can function to achieve the necessary improvements in agricultural extension services. DAE remains committed to the Revised Extension Approaches as the basis for service delivery. On this basis, five specific objectives have been selected to be achieved by 2006:

- Increase agricultural productivity;
- Provide pro-poor services;
- Strengthen partnership and links with Local Government;
- Develop DAE as an effective institution for providing quality and quantity services and
- Develop performance measurement.



Increase Agricultural Productivity

Food Security

Food security is a must for the sociopolitical stability of the country. As a government organization DAE is mandated to pay full attention to increase agricultural production and productivity considering technological revolution, agro-ecological and climatic condition, and pests and diseases infestation etc. Considering these factors DAE has undertaken various activities through different projects. For example, the Special Programme for Food Security (SPFS) is working with farmers in agronomic, livestock and agro-forestry development in 21 selected Upazilas of 16 districts where poverty is pervasive, in order to develop mechanisms to address food security. DAE recognises that the current nominal food grains self sufficiency does not equate with food security for all.

DAE will work closely with the poor, to assist them in crop and non- crop activities (livestock and fish, agro-forestry etc) and develop mechanisms for addressing food insecurity by 2006

Input and Credit Support

The timely supply of agricultural inputs (seed, fertilizer and micro-credit etc.) is crucial for crop production. DAE assesses seed and fertilizer requirements from blocks and districts based on the cropped area to determine the country's input requirements annually. This information is then passed on to the concerned authorities for necessary action. Although the distribution and selling of inputs lies in the private sector, DAE monitors the availability and proper distribution of seeds and fertilizers. By doing this, DAE is acting as a liaison agency between farmers, suppliers and Government. DAE also recognises the importance of farm mechanization and irrigation, and will seek to motivate farmers in their procurement and use. Directly, DAE will continue to motivate farmers to produce, store and use their own seeds through the Production, Storage and

Distribution of Quality Seeds at Farmers Level.

Banks and NGOs supply the micro-credit. The Upazila Agricultural Officer and Deputy Director are the members of Upazila and District credit committees respectively. The DAE will continue to play active roles in the credit committees so that appropriate persons get credits.

DAE will continue to serve as a liaison agency between farmers and other organisations, both public and private suppliers for proper distribution of credits and quality inputs timely at a fair price



Crop Diversification

Crop diversification is the growing of diversified crops with the objectives of addressing soil health, land utilization, environment, bio-diversity and nutrition. In this regard DAE has undertaken various activities for diversifying crops through a number of projects such as Crop Diversification Project (CDP) and Northwest Crop Diversification Project (NCDP), which are developing mechanisms for adopting diversified cropping patterns. This diversification will optimize land use, income, resource use, and help increasing cropping intensity. It will also help in conserving soil health and bio-diversity.

DAE will develop crop diversification mechanisms and encourage farmers to grow diversified crops (pulses, oils crops, vegetables, tubers and fruits etc) instead of mono crop by 2006



Appropriate Land Use

The total area of the country is about 14.76 million hectares, out of which hill area is about 12 per cent. The coastal area is nearly 2.85 million hectares, (which constitutes over 30 per cent of the net cultivable areas). Hill areas are mostly suitable for horticultural crops such as fruits, high value spices and condiments, vegetables and some cash crops like rubber and tea while in coastal area rice and some specific pulses, spices and oilseed crops perform better under adverse saline condition. A significant proportion of the total land area is under char and haor where only seasonal crops are grown in limited scale. To ensure maximum utilization of these areas, location specific appropriate cropping patterns with suitable crop varieties needs to be developed locally.

On the other hand, a variety of crops are grown in the plain land. There is a little scope for horizontal expansion of these areas because of the continuing reduction of cultivable land. A vertical expansion of crop production of these areas is only possible through diversification and intensification of crops. The existing cropping intensity of the plain areas is better than that of hill, char and haor and costal areas which can easily be increased by converting single and double cropped into double and triple cropped areas respectively.

For this, proper land use plan and utilization at the local level is a must and DAE should take necessary steps in this respect.

Considering the interest of small and marginal farmers and sharecroppers, whilst recognizing that land is rapidly being lost from agricultural use (80,000 ha per year). On the other hand much land is underutilized, emphasis will be given on proper utilization of hill, char, haor, costal, plain areas including homestead areas for

income generation which will help poverty alleviation, and maximization of returns from the agricultural land.

DAE will identify and promote appropriate land use patterns to ensure optimum land use

Soil Health Improvement

Good soil health means presence of required amount of organic matter (at least 2.5-5%) in soil having normal physical and chemical properties to uphold its fertility and productivity in satisfactory stage. In Bangladesh, soil health has been reduced drastically probably due to depletion of organic matter (gone below 1%) content in soil, resulted from imbalance fertilizer use, frequent cultivation of the same crop in the same soil and intensive crop production.

Soil health should be managed carefully to preserve it in a healthy and fertile state for generation after generation. In order to maintain soil health DAE has already undertaken programmes like- green manure production, organic matter management, use of crop residues, use of animal slurries, introduction of proper cropping pattern and improved crop production techniques through Soil Testing and Fertility Management Sub-project of ASIRP and Integrated Soil Fertility and Fertilizer Management Project (SFFP). These need further strengthening through the motivation of farmers.

DAE will motivate farmers for improving soil health through different programmes



Sustainable Agriculture and Environment

The country's challenge is to achieve sustainable food production, reduce poverty and foster economic growth in agriculture. Sustainability is about managing our resources to satisfy our needs and the needs of the future generations by protecting the quality of the environment and conserving natural resources. Agriculture is closely linked to the natural environment. We can not grow crops, trees, raise livestock or catch quality fish without natural resources such as land, water, sunlight etc. Environmental issues are complex, comprising a mixture of ecological, socio-economic and biophysical relationships. It can not be dealt with by one organization alone. In Bangladesh this is even more so where high population place enormous pressure on land and other natural resources. It is important to link environmental issues with agriculture. With the objective of sustainable agriculture and environment the department along with other extension service providers should work together to improve farming productivity whilst conserving the environment. Strengthening Plant Protection Services (SPPS), SFFP, CDP and NCDP have been working in this respect.



DAE will promote sustainable environment management through participatory community-based environmental resources management (environment protection and conservation activities) for sustainable agricultural development

Commercialization

Commercialization is important to make agriculture profitable. The issues to be considered for rapid commercialization are: promoting production for the domestic market, mechanization, promoting agricultural exports through local/foreign entrepreneurs and the introduction of location-specific technologies for specific crops.



In general there is good domestic market for vegetables and fruits near big cities and towns. Farmers surrounding cities and towns can be encouraged to grow crops (staple and high value) for urban consumption. DAE along with the Department of Marketing should conduct market feasibility study and inform farmers as and when necessary.

Considering the needs of resource poor farmers, special emphasis should be given for the development of agri- business and trades through establishing commercial zones. The farmers will be given necessary support -services for the production and marketing of quality goods. It is worthwhile to mention here that Bangladesh in 1997-98 exported 24,000 tons of horticultural produce, earning US \$33 millions. This is lucrative but highly competitive. The country has the potential to catch foreign markets through exporting high quality but selected vegetables and fruits. The department should work closely with relevant organizations and entrepreneurs by providing appropriate information.

DAE will develop its role in promoting commercial agriculture among farming communities



Opportunities for the Non-farm Economy in Agriculture Development

Most of the people (52.65 per cent) in rural areas have no land. The rural non-farm economy of the country is increasing fast and rural livelihoods are becoming diversified. In the past, rural non-farm activities played an important role in generating new sources of employment in rural areas.

Through rapid expansion of non-farm activities, government's strategies are to make the rural non-farm sector the leading sector of Bangladesh's rural economy. For accelerating rural non-farm growth, measures should be taken to strengthen both backward links e.g. agricultural equipment and repair services, marketing of fertilizer, seed and other inputs as well as forward links to agricultural activities like processing and marketing of agricultural products.

DAE needs to take the advantage of diversified opportunities across the whole farm and non-farm sectors through small-scale agro-business, agro-processing, nursery development, cottage industries and poultry rearing and livestock development.

These activities will also generate employment opportunities for landless female headed households to engage in non-land based agricultural development.



DAE will encourage in strengthening backward and forward links in rural non-farm activities for creating opportunities on non-land based agricultural development through NGOs and Private Sectors

Provide Pro-poor Services Poverty Reduction as a Priority



For rapid poverty reduction, the government's priority is to develop rural areas where the majority of the poor live. This requires the accelerated growth of agricultural and rural non-farm sectors. In line with the Poverty Reduction Strategy/2002 of the Government, DAE is carrying out following activities through different projects like Marginal and Small Farm Development Project (MSFDP); Barisal, Patuakhali, Jhalakathi, Barguna Small Holder Support Project, Agricultural Diversification and Intensification Project (ADIP) and Mymensingh -Jamalpur-Sherpur Small Holder Agricultural Development Project. The interventions being made are:

- Formation of farmers group in order to provide services to more farmers in a shortest possible time;
- Undertake appropriate agricultural activities through farmer institution in the areas where most of the poor people live. These activities are taken to help reduce poverty through enhancing rural wages, creating synergies for diversifying the rural economy and enabling the supply and access of low-cost food to improve nutritional status and food security of the people;



- Encourage agricultural growth and productivity through improving the ability of farmers especially landless, marginal and small to adopt new technology with appropriate mix of incentives;
- Provide needs based services for poor people through delivery of effective extension programmes;
- Encourage people's participation in the local level planning mechanisms so that beneficiaries can use their resources in most effective way;
- Accelerate rural non-farm growth to strengthen both backward links e.g. agricultural equipment and repair services, marketing of fertilizers, seeds and other inputs as well as forward links to agricultural activities like processing, storing and marketing of agricultural products and
- Formation of small enterprise and producer associations to support product standardization, quality control and flow of information necessary for access to domestic and foreign market.

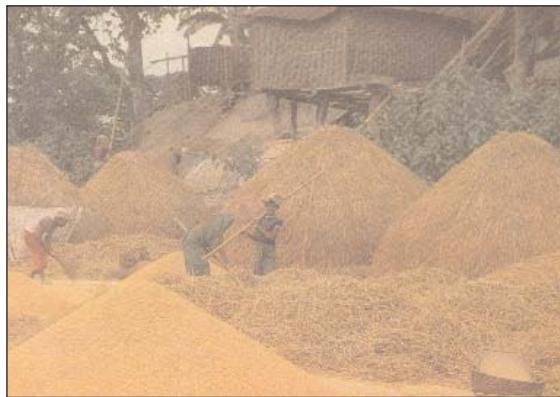
DAE will develop a people-centred development approach where people themselves will be the primary actors for eradicating hunger, poverty and other entities by 2006

Targeting

DAE's Mission Statement emphasizes that extension services should be provided to all categories of farmers. More than 50 per cent of the farm population is landless and their contribution to crop agriculture development is very limited. About 24 per cent are marginal farmers who are the tomorrow's poor. However, the department will encourage non-land based agricultural activities for landless farmers by providing necessary technologies and information. For this reason, the department will liaise

with Fisheries, Livestock, Forestry, NGOs and Private Sectors through UAECC and Local Government. In a broader way, the targeting will be achieved by:

- Identify the poor farmers in all farm size classes and plan activities accordingly;
- Planning specific activities in upazila and district plans for each of the category of farmers (female, male, small and marginal, medium and large);
- Motivating field staff to work with all categories of farmers including male, female, youth and small and marginal farmers, but particularly the poor; and
- Selecting technologies according to their appropriateness for specific categories of farmers.



DAE will emphasize non land based activities for landless farmers and at the same time focus on on-farm activities for small, marginal, women and unemployed youth



Gender Awareness: Women in Agriculture

The agricultural policy recognises farm women as "farmers" and mandates activities to meet their needs. For sustainable agricultural development their role can not be denied. Government is encouraging women involvement in nation building activities though their contribution in our societies are not yet fully recognized. The department seeks additional means and opportunities to promote equality of opportunity for all members of the farming community.

DAE will encourage women in decision making process for agricultural development specially Income Generating Activities.



Farmers Charters

The Department of Agricultural Extension has been rendering extension services to farmers for their betterment. But different surveys indicate that many people are not fully aware of these services. DAE needs to develop a farmer charter which will explain to farmers DAE's specific role and activities and services with standards. The farmer charter means advertising the DAE activities to the farmers which will make them aware to their right to access services and actively peruse these rights through both voice and choice. Farmers will be encouraged to form their own organization to reduce their

vulnerabilities and increase their voice. This will help widening DAE's exposure to a large number of farmers and converting farmer's unfelt needs into felt needs. AIS should take a leading role in this regard.

DAE will develop farmer charters by December 2003 and widely publicize using mass media and other means.

Develop Partnerships and Links with Local Government

The New Agricultural Extension Policy recognizes the value of partnership to provide integrated services to farmers. A supportive environment has already been established through NAEP. Partnership is a relationship based on trust and respect with all partner organisations working together to achieve common goals for maximum benefits of farmers. This implies a working relationship to plan and implement set activities through mutual sharing of resources, knowledge, information, ideas and experiences. A number of institutional mechanisms to encourage partnership between different types of agencies have been developed. These mechanisms include UADC, UAECC, DAEPC, ATC at union, upazila, district and regional level respectively including bilateral MoU with GO, NGO and private organisation. At the national level NATCC and EPICC are vital for partnership development.

DAE recognises that the greater the cooperation between the department and other extension service providers, the greater will be the accessibility of the poor to extension services. DAE has been working in partnership with other extension providers (GOs, NGOs, Private sector) to ensure the maximum utilization of its scarce resources in a cost effective way and also implementing collaborative



activities. DAE is still committed to continue partnership arrangements with other extension providers for the purposes of integrated service provision as well as sharing strengths and resources and learn from each other. DAE's current Strategic Plan is prepared considering all these realities and the issue of an integrated and coordinated extension approach for reaching all categories of farmers with their information needs. DAE recognises that UAECCs and DAEPCs have been linked to ASIRP funding for promoting partnership and necessary measures should be taken into consideration so that that their role is continued in the future without any external support.

Local government is one of the most desired institutions for improved governance, accelerated economic growth and faster poverty reduction. Attention is also drawn to the fact that Bangladesh have the highest population density in the world and it is difficult to govern such a vast population from **one centre**. Local Government at union level can play a vital role for establishing

Sarker. To support extension activities at the ward level, there should be at least one BS for each 3 wards. DAE has a sanctioned strength of 126640 BSs of which about 2360 posts are currently vacant. If these posts are filled up through recruitment, each UP will have 2-3 BSs and thus each 3 wards will have the support of at least one BS. The union Parishad should provide office for the Block Supervisors.

DAE will encourage and support Local Government in planning and implementation of all agricultural extension activities at the grass-root level and continue working in partnership with GOs, NGOs, Private sectors and Innovative Farmers for providing effective and efficient extension services

Develop DAE as an Effective Institution for Providing Quality and Quantity Services

The DAE was created in 1982 by merging six departments in order to provide unified extension services to farmer of the country. Considering the nature of extension services required for growth and development of the crop sector and also the logistics support needed to strengthen the management of DAE seven wings, namely Cash Crops Wing, Food Crops Wing, Training Wing, Plant Protection Wing, Field Services Wing and the Administration and Personnel Wing were created. The Project Implementation Wing was created in 1976 under the MoA and was transferred to DAE revenue head in 1999. On the other hand, Water Management and Agricultural Engineering Wing was created under development support of ASSP in 1997.

partnership mechanisms. The decentralization and devolution of power is necessary for good governance.

Under the local government system, Union Parishad (UP) is the lowest administrative unit and directly linked with the people. One UP is composed of 9 wards and each ward has one elected member. Each ward member will be the Head of one Gram Sarker. In total there are 4488 UPs having 40392 Gram



More than 20 years have passed since the reorganization of DAE in 1982. In the meantime, many things have changed including the changes of the DAE Wings' set objectives, manpower utilization, nature of extension approaches, resources allocation and their utilization. DAE has recognized the importance of quality and quantity extension services in achieving its mission. Providing quality service is a big challenge. A service is a quality service when it meets the demand of farmers in most cost-effective way. This demands restructuring the DAE's Wings as well as re-fixing of their tasks. In addition, DAE should give proper emphasis on human resource development and management and also improving the delivery mechanisms of extension services.

Redistribution of Non-technical Staff

The Department has an establishment of 16724 class III employees of which 3251 is currently vacant. Existing staffs are not well distributed, disadvantaged Upazilas in chars, haors and hill areas are understaffed. In addition, many class III employees are not properly utilized. Staff strength, utilization and redistribution of all require due attention.

DAE will redistribute and restructure all these staff by 2003

Cash Crops and Food Crops Wing

Jute, tobacco and sugarcane during eighties and upto mid nineties were the main cash earning crops both from domestic and foreign markets. Jute was then called **golden fibre of Bengal**.

For promoting the cultivation and production of these crops, an independent wing called Cash Crops Wing was created within the DAE. But with the passage of time jute failed to keep pace with synthetic

fibres for many reasons. Consequently jute lost its dominance as a cash crop and presently jute area has declined to a great extent. Cultivation of tobacco on the other hand is now being discouraged for its impact on human health. Because of these reasons, the cash crops wing has lost its importance as an independent wing.

Contrary to cash crops, horticultural crops like fruits, vegetables, flowers and their processing, canning and marketing have emerged as high value crops both from the point of nutrition and earnings from domestic and foreign markets. DAE should now give special support to government, Non-government and Private Sectors for the promotion of production, processing and marketing of those crops.

Considering the present status of cash crops and importance of horticultural crops, DAE is convinced to restructure the Cash Crops and Food Crops Wings as (I) Crop Wing and create a new wing named (ii) Horticulture Development Wing (HDW) by reallocating the existing man power of these two wings and utilizing the resources specially horticultural nurseries.

The main functions of the Horticulture Development Wing

The main function of the HD Wing will be to:

- Support farmers and private entrepreneurs in producing and processing of more value added crops;
- Ensure the full utilization of the existing Horticulture Centers (HC) by restructuring and providing specialized services to them. The function of existing horticultural centres will also be refocusing on more technical areas such as production of tissue vials for flowers and fruit crops. This will then be sold to private parties for the production of high quality, diseases free saplings for domestic use and export purposes;



- Horticultural centers will also be engaged for producing quality seedlings and saplings;
- In the long term, DAE recognises that it should be engaged in developing contract farmers and through them promoting production, processing, storing and distribution of high quality vegetable seeds and seedlings for encouraging horticultural based agro-industry. This will be done on a geographical basis determined on the strength of the private sectors. Moreover rural youth, women and other farmers will be trained on pre and post harvest technologies of horticultural crops;
- DAE recognizes that in the long term it should be de-engaged in subsidised seedling and sapling production and sale. DAE wishes to develop further capacity of the private sector and poor farmer in this regard and
- The Wing should review the performances of the HCs periodically and act upon accordingly.

The main functions of the Crop Wing

The main function of CW will be to serve as a liaison with research agencies, promotion of crop diversification, seed production and providing specialized services to DAE staff. The new Crop Wing will be responsible specifically for:

- Acting as the main point of contact between DAE and research institutes for developments of crop technologies through NATCC;
- Maintaining technical liaisons with related industry;
- Overseeing the conversion of up-to-date technology into extension message and staff training module where

appropriate;

- Harness knowledge and information from various sources (in country and overseas) and continue updating FSW staff in new opportunities in the crop sector;
- Developing Annual Crop Production Plan;
- Producing DAE Annual Report;
- Conducting study on the adoption and adaptability of technologies at farm level and their cost effectiveness;
- Ensuring the Agricultural Technical Committees fulfil their Terms of References (ToR). Maintaining the records of economics of different crops;
- Providing technical guidance to DG and other wing Directors and field staff in respect of crop production ;
- Providing technical guidance to DG/ Government on tariffs and policy issues such as marketing, distribution, utilization and production of crops;
- Link with educational institutions such as Bangladesh Agricultural University, Sher-e- Bangla Nagar Agricultural University, Bangbandhu Sheikh Mujibur Rahman Agricultural University and
- Maintain liaison and linkage with other extension service providers.

DAE will re-structure Cash Crop and Food Crop Wings into Horticulture Development and Crop Wing without creating any new posts and re-allocation of resources by 2004



Plant Protection Wing

Plant Protection Wing has been playing a pivotal role in controlling pest and diseases of agricultural crops. Previously pesticides were considered as the **Panacea** for the control of agricultural pests. With the passage of IPM policy, the Government is discouraging use of pesticides by the farmers, even through aerial application for environmental reasons. With the changed situation, the Aerial spray capability needs to be restructured. Further, the existing posts of Pilots, Assistant Pilots, APCOs and Medical Officer may have to be reconsidered along with Airstrips and Planes.

The initial job of Plant Protection Mukaddam (PPM) and Spray Mechanics(SM) were to collect diseased plant, insect sample, and help farmers in spraying fields, and to repair and maintain spray machines. Their services could not be utilized fully since privatization of pesticides and agricultural equipment. So, the posts of PPM and SM should be reviewed and restructured through adjustment to other support posts. Likewise the post of Out Board Motor (OBM) operators of FSW may have to be restructured. Furthermore, the functioning of PPW will have to be strengthened through creating two posts of Additional Directors -one for focal point activities like quality control, standardization & quarantine services and the other for pest management & extension activities. In addition, for proper implementation of National IPM Policy, one post of AEO (PP) as PPI at the Upazila level and one AEO (PP) at the regional offices may be created.

DAE will re-distribute or adjust the posts of officers and staff of the Plant Protection Wing in suitable positions by 2004 and strengthen its functions

Field Services Wing

The Field Services Wing has the responsibility of supervision of all extension programmes and activities of DAE. Core extension activities include transfer of technologies according to needs of farmer, monitoring progress and problems, feedback etc. and also conducting research on Extension Approach. Development on a routine basis for its continual improvement. To ensure that DAE provides efficient extension services to farmers, 12,640 posts of BSs were created during reorganization of the department.

During the introduction of ASSP in early nineties there was a World Bank enforced embargo on recruitment of BSs and other support staff. Since then no support staff and BSs have been recruited. As a result more than 2360 BSs position are lying vacant. Moreover, there are some districts and upazilas where BSs and officers are somewhat saturated and in other places they are few in numbers especially in remote areas such as chars, hills and haors. In order to provide effective services equally the field level officers and BSs need to be re-distributed. The government has decided that Union Parishad will be the focal point of development and forthcoming Gram Sarker will be basic unit of each Union Parishad.

In order to strengthen activities of extension services at Union Level for assisting UP chairman and members of each UP of the country, an Agricultural Extension Services Unit headed by an agricultural graduate should be gradually established. World Bank imposed embargo on recruiting of BSs should now be withdrawn and DAE should fill up the vacant post through recruitment so that on an average each UP has 2-3 BSs. The intra wing structure and jobs also need to be redefined.

DAE will strengthen extension services at union level by re-distributing BSs by 2003 to Union Parishad offices, which will become one-stop-shop for agricultural advice and service



Training Wing

Training Wing (TW) is playing a vital role in developing professionally versatile DAE manpower capable of facing challenges for agricultural growth and development. The TW has developed significant staff capabilities since 1982 through ATIs and CERDI. CERDI is responsible for officers while ATI is for Block Supervisors and farmers. ATIs have been upgraded and Block Supervisors (BSs) were trained to Technical Board standard diploma level. ATI is also responsible for providing in-service training to BSs and support staff.

CERDI and ATIs have physical facilities including big farmland, ponds, fruit trees, orchard etc. Inadequate institutional development planning and fund constraints hamper effective utilization of physical and human resources, developmental activities and overall performances of CERDI and ATIs. All ATIs and CERDI should have their own business plans for self finance. Had there been any business plans for CERDI and ATI for self-finance through utilization of their resources, they could probably be survived independently.

Personnel database managed by Administration and Personnel Wing is not properly developed for training management and planning purposes. In real term, DAE would like to use the personnel database to support training management and decision-making process. DAE also wishes to further develop the capacity of the ATIs and CERDI with a long-term view of making them independent and reduce their dependency on DAE for fund.

By 2003, DAE will strengthen CERDI and ATI's capabilities and facilities by providing quality, dedicated and competent staff and adequate resources. At the same time CERDI and ATIs will develop their business plan and reduce their dependency on DAE for fund. The Training Wing will also develop Training Information System (TIS) to support unified training management and planning for DAE



Administration and Personnel Wing

Administration and Personnel Wing is performing major activities in respect of maintaining up-to-date records of almost 24000 DAE staff, their appointment, promotion and transfer as directed by DAE Management Committee. This wing is responsible for coordinating annual revenue budget with other wings, maintaining records of all revenue accounts and returns of DAE, ensuring audit activities of all departmental revenue and project accounts and also advising Planning and Evaluation Wing on their consolidation into Annual Development Programme (ADP). Considering the gravity of responsibilities, the wing should be restructured through upgrading the post of Additional Director (Administration and Personnel) into Director (Administration and Personnel). The job description, function and responsibilities should be upgraded accordingly.

DAE will upgrade the post of Additional Director (A&P) to Director (A&P) and update its functions

Planning & Evaluation Wing

The main function of the wing is to develop new projects, monitoring and evaluating the activities of on-going projects and reporting their status to MoA, Planning Commission and External Resources Division.

Performance of the wing is not yet maximized. To maximize the output of this wing a Director should head it. Accordingly, DAE will review and redefine activities of this wing. Each and every staff should have specific responsibility and accountability with proper job description. DAE also will ensure how MIS can best be linked and updated through strengthening MIS activities and persons involved in MIS.

DAE will strengthen the performance by re-defining the responsibility and accountability of this wing by 2003

Project Implementation Wing

The Project Implementation Wing (PIW) was created in 1976 under the direct control of the MoA and was transferred to DAE in 1999 under revenue head. The main function of this wing is to look into all physical and infrastructural activities of DAE like construction and maintenance of CERDI, ATIs, ADAEs and DDAE Offices, Seed Certification Agency (SCA), Horticulture Centres, Mushroom Culture Centres, Upazila Offices, Training Centres, BSs quarters, procurement activities of DAE projects and maintenance of DAE Headquarter. Presently an Executive Engineer heads this wing. He is to maintain liaison with PDs, Directors and DG of DAE to perform his duties and responsibilities properly. As a big public organization DAE has its physical resources spread all over the country. Moreover DAE has a good number of projects. For maintaining all these resources as well as for effective procurement of goods, the wing should be re-strengthened and be headed by a Director. To assist the Director, there should be one post of Superintendent Engineer and two posts of Executive Engineers with support staff.

DAE will strengthen Project Implementation Wing through proper restructuring

Finance, Audit and Account Section

The Finance, Audit and Account Section is headed by an Assistant Director under the direct control of Additional Director (A & P) Wing. This section deals with all financial matters such as preparing budget, allocating funds, and maintaining records of

all revenue accounts and returns of the DAE including all field units. In addition the AD represents DAE budget committee meeting at national level. The post of AD is a junior post and not competent enough to represent big organization like DAE. It may be mentioned that other department has same post in the rank of Additional Director or Director. The audit and accounts section should be strengthened to the rank of Additional Director (Finance). There should be two Assistant Directors to assist the Additional Director. Moreover the function and role of this section should be reviewed and strengthened.

DAE will upgrade the post of Assistant Director (Finance) to Additional Director (Finance) for providing effective audit and account services by 2003

Water Management and Agricultural Engineering Wing

The Water Management and Agricultural Engineering Wing was created during ASSP and later on ASIRP took that responsibility. All the posts of this wing are under the development head. The wing will cease to exist with closing of ASIRP. The main role of this wing is to provide training and technical advice to DAE field staff and farmer on on-farm water management, food processing,



post-harvest technologies and agricultural mechanization. Considering the decreasing- increasing land-man ratio of the country, there is no other choice than to go for intensification of land use for vertical increase in crop production. Irrigation, farm mechanization and food processing will be crucial issues for crop production in the coming days. And as such, the services of the Agricultural Engineering and Water Management Wing are very important. DAE recognises that this wing should be permanent and its activities should be strengthened through proper restructuring for covering all Upazilas and Districts and be headed by a Director.

DAE will seek opportunities to bring Water Management and Agricultural Engineering Wing under the revenue head by 2003

Resource Centre

Farmer is the focal point of all agricultural extension activities. The success of any extension activity depends on farmers and their relationships with extension personnel. To cope with the agricultural changing situation farmer's knowledge and skill need to be continuously updated. Farmers need technical information from one central place. With the support of DAE the Local Government of Rangamati district council has already established resource centers for assisting farmers in getting information from one place. SAIP- IFAD funded project has started establishing 30 Union Agricultural Extension centers in Mymensingh, Jamalpur and Sherpur districts. Another 7 resources centers are being established in IEA Upazilas (Kachua, Nakla, Bashkhali, Kalai, Kulaura, Lohagara, and Digholia). DAE will assist local Government in establishing resource centre in Union Parishad Offices/complex to provide

technological information including logistics support to farming communities. These centres should be enriched with information related to agricultural aspects in the form of leaflets, booklets, pamphlet, flash card, flip charts, posters and life specimen of different insects-pests and diseases. These will also be used as farmers' training center. UAO, ULO and UFO will monitor and support their activities.

The Block Supervisors and field extension agents of other organizations should be kept updated about transferable appropriate technologies on a routine basis. For this, One Resource Center at each upazila shall have to be developed by the UAECC with all-essential supports and facilities. Moreover, monthly training programme for all extension agents at upazila level will be reintroduced using these facilities.

DAE will provide day to day agricultural extension services to farmers through resource centres at Union levels by 2003



Human Resources Development

The organisations that do not learn faster than the rate of change in the environment will eventually die. The strength of DAE can not be borrowed, it has to be developed. Only the DAE people can make DAE stronger. The concepts, methods and techniques of extension work are continuously changing with the increased opportunity of research and studies. Managers need to be competent enough to carry out the extension activities to meet diverse needs of farmers. Moreover, as time passes new dimensions are added to extension programmes that demand special knowledge and skills of professional staff and proper human resource development plan.

The department has formulated its training policy. The policy objective is:

To train DAE managers so that they can make the BSs competent enough to assist farmers solve their agricultural problems and to promote partnership among extension providers and to coordinate all DAE's project training activities through Training Wing.

DAE will develop proper human resources development plan

Information Technology

A management information system is a system for collecting, storing, analyzing and providing information to support extension and development activities in most efficient way. The ability of any organization to make effective use of information and communication technology has become a critical success factor in recent years. In DAE, this system is in place but not well coordinated and effective.

The department has started developing its Internet facilities, including e-mail for effective information sharing with other

extension service providers at home and abroad. DAE has already developed its own web site (www.daebd.org) for easy, quick and accurate flow of information.

DAE will develop a mechanism to bring all departmental and project activities under a common management information system. This will help and ensure the effective use of resources and quick decision making by the top management. The success of the DAE in this area depends to a great extent on the high quality of its IT manpower. To obtain the full benefit from this, DAE will provide training to staff and officers to improve MIS-related competencies using the following facilities:

- Updating CERDI for continued development of IT professionals in agriculture,
- Developing ATIs' facilities for continued development of staff skills on IT activities;
- Strengthening Control Room by providing logistics support (appropriate software, and hardware) and manpower and
- Establishing Local Area Net Work (LAN).



DAE will develop a mechanism to bring all departmental and project activities under a common management information system



Human Resource Management

To increase work efficiency, staff must have strong motivation. The best motivation is the self-motivation of knowing oneself- first and then doing the right thing at the right time. For the motivation of staff appropriate measures will be taken. Some of these are:

- Appreciation/ recognition letters for good performance;
- Provision for financial support;
- Provision for physical rewards;
- Recommendations for promotion or higher pay scale;
- Recommendations for higher studies or foreign training ;
- Punishment for poor performance and
- In line with GoB policy, providing special allowances to staff and officers working in difficult and remote areas (like hill allowances).

Leadership Development

Efficient leadership is important for the success of any organisation. Leaders create the vision for tomorrow. Leadership is important in attempting to increase employee satisfaction and achieving the organization's goal. The Management Committee of DAE is principally responsible for leadership of change and implementation of the DAE's mission and strategic issues. But to make DAE an efficient organisation a visionary leadership and commitment is required at every stage, block, upazila, district, region and national level. All the DAE members should demonstrate their self-commitment, sincerity, honesty, working spirit at every stages of their duties. Every manager should have thorough knowledge about the physical and socio-economic and environmental conditions of their respective areas. A succession plan is required to fill up the leadership gap.

To achieve the organizational goal, devolving decision-making including finance to local level is a priority. At present DAE Wing Heads have no power and authority to carry out their responsibilities independently. Further, DAE should seek further delegation of authority from MoA. To make DAE more effective, the Management Committee needs to delegate more power and authority at all tiers in the areas of:

- Decision making in technical aspect and
- Administrative and financial matter.

DAE will create opportunities for the development of leadership qualities among field staff and officers to run organisation effectively and at the same time DAE will delegate adequate administrative and financial matters to its field staff

Accountability

Accountability at all tiers starting from BSs to DG to be ensured. In the hierarchy authority will continuously monitor the activities of the subordinates and report to next higher authority. For the sake of transparency and accountability, every monitoring report at all tiers should be made available to immediate superior offices. Moreover, professionalism in DAE must be ensured so that the DAE personnel can perform their duties and responsibilities in an organized and professional manner. Accountability to farmers will be developed as farmers' awareness of their rights to service is raised through the Farmers Charter process.

DAE will ensure accountability at all tiers through effective supervision and monitoring



Moving from Project to Programme



At present DAE has many projects. Different projects have different aims and objectives with different operational systems. The Revised Extension Approach (REA) has been introduced by DAE in 1995 but actual implementation is still sporadic. Many projects do not follow the principles of REA. Many projects and DAE managers have not yet recognized the importance of decentralized, participatory planning system. It is expected that henceforth DAE should develop programmes based on its Strategic Plan, REA and NAEP principles and all future project should follow it. The existing projects should also adjust their activities based on the NAEP and REA principles where possible. All project activities to be made transparent and accountable.

A programme approach implies:

- Management of groups of existing projects with similar objectives as single programmes;
- Preference for programme support in the future (particularly with donor support) and
- DAE has already began this process by grouping projects with similar objectives under wing directors.

Future DAE projects will be supportive to DAE programmes for strengthening integrated and unified extension services

Strengthening DAE's Mass Media and Marketing Information System

DAE recognises that farmers have major information needs that could best be met through mass media, but also recognises that its own mass media skills are weak. The Agricultural Information Service (AIS) is under the administrative control of the Ministry, though the majority of its staff are deputed from DAE. For greater integration between mass media and direct contact approaches to extension, AIS with its present structure and strength should be merged with DAE and strengthened.



Similarly, marketing has been identified as a critical area for agricultural development in the country, and again, DAE recognises that its marketing support skills are weakly developed - even in the area of marketing information. The Department of Agricultural Marketing (DAM) is under the direct control of the Ministry of Agriculture, and, like AIS is poorly resourced. DAM should be brought within DAE and strengthened to ensure farmers have access to the most up to date marketing information - which may also require mass media support. AIS, and DAM should work under the DAE administrative umbrella.

DAE will discuss with appropriate authorities how AIS and DAM can be brought within DAE for better utilization of their resources and services



Develop Performance Measurement

Development of Unified Monitoring & Evaluation System

Means of measuring performance is important to know the impact of services delivered. Every manager should find out the evidence of better services that they have provided to farmers. To measure performance the DAE has introduced several monitoring systems.

The DAE has introduced Technical Audit (TA) for measuring performance of the activities carried out at district and upazila levels. The Additional Director at region is responsible for conducting TA. The objective of the TA is to ensure that extension personnel are performing their duties properly. At the time of Technical Audit they check demonstration and training registers and fortnightly work schedules and BS diaries. They also check how the current season's activities are planned and implemented, and provide suggestions or direction for any lack or failure. This system even is not being followed properly.

The Seasonal Extension Monitoring System (SEMS) was too complex and did not work properly because of too many variables. The upazila staff could not use information collected through SEMS because of complex system of data processing and interpretation. Moreover the SEMS was perceived as an ASSP system. The system will be officially abandoned.

Apart from these two, almost all the projects and wings have their own data collecting and monitoring systems. There are as many as 30 to 40 reporting forms existing in the field some of which are simply a duplication and repetition of each other. These are very time consuming, paper works, not cost effective and sustainable. Moreover, the existing monitoring system does not tell us

how many technologies the farmers have adopted. In order to avoid this chaotic situation a unified monitoring and evaluation system with simple indicators should be developed.

DAE has made considerable progress in developing MIS capacity. However, some of the staff in the MIS section are under the ASIRP and therefore have an uncertain future. DAE needs to decide the future of the MIS section as an integral part of its structure.

DAE will review existing monitoring system and develop unified M & E system with simple and few indicators that will reflect the performance of extension services

Reliable Database

Database is a storehouse of knowledge and can play a vital role in cross- sector as well as cross-wing interactions in respect of providing chronological information about crop production, agro-climatic and meteorological and human resource management. DAE wants to align a database in all sectors, line ministries and sectoral policies making a link to its own web site for up-taking technology and relevant information. The DAE's current personal database will be updated for providing assistance to management of the DAE in staff management, recruitment, posting and transfer and coordinating those activities.

DAE will keep continuing updating reliable databases from national to district level and link to its web site



Objectives and Mechanism to Review DAE Strategic Plan 2002-2006

The current strategic plan will be assessed using following indicators:

Objective	Objectively Verifiable Indicator	Means of Verification
Increase Agricultural Productivity	1. Overall agricultural GDP increased by 6-8 % per year	BBS
	2. The production of crops increased in line with the targets specified in the National Agriculture Policy Plan of Action ¹	BBS, Reports, NAP Reliable Database
	3. At least five crop diversification cropping patterns developed and promoted by 2006.	CDP, NCDP and ADIP reports
Provide Pro-poor Services	4. The proportion of poor households ² receiving at least one service per year from DAE increases by 50-55 % by 2006 from the 2003 baseline ³	Contact surveys
Develop partnership and Links With Local Government	5. By 2004 all Block Supervisors redistributed to UP offices and worked with Local Government and other extension providers for providing effective services to farmers	Office orders, UP offices
	6. By 2006, DAE supports Local Government and other partners in establishing at least 1 resource centre in every Upazila	Resource centres, DAE/LGED reports
	7. 4,488 Union Parishad Standing Committees on Agriculture operational and fulfilling Terms of Reference by 2005, with the direct support of DAE Block Supervisors	UP reports and plans
Develop DAE as an institution for providing quality and quantity services	8. By 2004, DAE completed the restructuring / redistribution of all staff to appropriate places for their effective utilisation	DAE reports (Administration and Personnel Wing)
	9. By 2005 restructuring of wings and department suggested in this strategic plan has been implemented	Formation of 2 wings (Crop and Horticulture Wing)
	10. The proportion of households receiving advice from DAE and testing it, increases by two folds by 2006 from the 2003 baseline ³	Contact and KAP surveys
	11. Proper business plans are developed by CERDI and ATIs by December 2003	Business plans
	12. The Training Wing developed DAE's HRD plans by mid 2004	HRD plans
	13. Proportion of male and female farmers aware of the services of the Department increased from 19.1 per cent and 4.0 per cent respectively in 2000 to 30% in 2006.	Contact and KAP surveys, Farmers Charter
	14. The proportion of households indicating they have received a service from DAE through a group approach increases by at least 60% by 2006 from the 2003 baseline ³	Contact and KAP surveys
	15. Proportion of male and female farmers in direct individual contact with Departmental staff increased by 25% in 2006.	Contact and KAP surveys, Farmers Charter
	6. A common and unified Management Information System / Monitoring and Evaluation System is developed and functioning properly by 2004.	MIS and databases

- 1 By 2012, production increased from 1.5 million metric tonnes to 5 million metric tonnes for vegetables; 1.0 metric tonnes/ha (mt/ha) to 2.5 mt/ha for oilseeds; 1 mt/ha to 2.0 mt/ha for pulses and 2 million metric tonnes to 3 million metric tonnes for wheat. Target for cereal grains (rice) is to sustain self-sufficiency.
- 2 Poor households are defined as those with an annual income of Tk 20,000 (US\$1/capita/day) or less.
- 3 An ASIRP supported Contact Survey is planned for mid 2003, and this will provide baselines for these indicators.



DAE will ensure no overlaps with BBS in M&E data collection.

Moreover the following procedures will also be considered:

- Inclusion of strategic progress in the monthly meeting at upazila, district and regional levels;
- Submission of progress report in prescribed form to national level;
- Supervision by Headquarter level officers;
- Fixing accountability for poor implementation of the strategic plan;
- Conduct survey/case studies on the implementation of any objective, Ensuring DAE Management Committee monitoring of progress against Strategic Plan objectives;
- Routine Supervision and
- Use of BS Diary.

One good achievement of the previous T&V system was the routine supervision of senior officers. Every officer had monthly target of supervision along with a list of items to be observed during supervision. A chain supervision system should be reintroduced in order to enforce accountability throughout the hierarchy. Implementation Strategy of the DAE Strategic Plan

DAE will ensure annual review of the implementation of this Strategic Plan as part of the preparation of DAE Annual Report by Crop wing

Implementation Strategy of the DAE Strategic Plan

The DAE Management Committee is responsible for the implementation of this strategic plan. For proper implementation of the plan, DAE will seek assistance, cooperation and coordination from all partners, donors, departments (NGOs and GOs) and other stakeholders.

DAE will seek a plan of action by which the strategic plan will be implemented. Among other things the following course of action will get priority:

- The Management committee will expedite the proposed restructuring of DAE with appropriate authorities within the plan period;
- While implementing the SP farmers opinions and needs will be given highest priorities considering their agro-socio economic conditions;
- All projects under DAE should work in line with this SP;
- The NAEP Committees will remain responsible for initiating the implementation of the plan at national, regional and field level and
- Monitor the progress of the implementation of this plan.



APPENDIX - 1

Medium Term Expenditure Framework

Under the National Agriculture Policy Plan of Action (crop sector), total annual expenditure requirements are shown at 7.2 billion Taka per year from 2002 to 2012. There is no budget envelope for agriculture in the latest iPRSP.

This annex sets out DAE financial position.

Table 2 sets out revenue budget situation, Table 3 sets out development budget situation. With respect to Table 3, DAE is now working in line with revised governmental planning procedures - Three-Year Rolling Investment Plans have replaced Five-Year Plans.

Table 2: Revenue Budget ('000 Taka)

Cost Centre	Revised 2000/2001	Actual 2000/2001	Budget 2001/2002	Required 2002/2003
DAE (HQ and PIW)	52052	47208	52344	50338
Field Services	187440	188365	190440	212035
Plant Protection	25385	25378	25860	28834
Cash Crops	3380	3363	3463	3679
Food Crops	91858	65215	66165	73317
Agriculture Training	61256	61146	62280	88159
Upazila Agriculture Offices	1495767	1481301	1577567	1707828
Grand Total	1917138	1871976	1978119	2164190

Note that Food Crops Wing is to be restructured as Horticulture Development Wing, and Cash Crops Wing as Crops Wing.



APPENDIX - 2

Table 3: Development Budget (000 Taka)

Project Name	Donor	Revised Allocation 2002/2003			Proposed Allocation 2003/2004		
		Total	Taka	PRA	Total	Taka	PRA
Agricultural Diversification and Intensification Project - DAE Component	IFAD	1250	100	1180	1230	130	1100
Mymensingh, Jamalpur, Sherpur Smallholder Agricultural Improvement Project	IFAD	1360	110	1250	1827	237	1590
Construction of 10 Rubber Dams in Small and Medium Rivers		40	40	0	79	79	-
Gopalgonj, Madaripur, Shariatpur Pirojpur Integrated Area Development Programme	IDB	414	164	250	2589	789	1800
Barisal, Patuakhali, Jalakathi and Borguna Smallholder Project	IDB	400	150	250	1465	315	1150
Agricultural Services Innovation and Reform Project - DAE Component	IDA/DFID	480	280	200	1088	488	600
Integrated Soil Fertility and Fertilizer Project - 2nd Phase	DANIDA	759	84	675	779	79	700
Supplementary Irrigation in Drought Affected T. Aman		300	300	0	631	631	-
Increase Post-flood Agricultural Production Through Block Demonstration - TCTTI Model		50	50	0	180	180	-
Development of Existing HTC in CHT		75	75	0	473	473	-
Mushroom Cultivation in CHT (1st Phase)		60	60	0	197	197	-
Agricultural Training Institute at Chittagong Hill Tract		45	45	0	395	395	-
Production, Storage and Distribution of Quality Seed at Farmers Level		900	900	0	-	-	-
Accelerating Sugar Production in Non-Mill Zones (2nd Phase)		100	100	0	158	158	-
Integrated Agricultural Development in Sylhet		250	250	0	789	789	
North-West Crop Diversification Project	ADB	1400	350	1050	3596	596	3000
Strengthening ATIs		50	50	0	197	197	-
Strengthening Plant Protection Services - 2nd Phase	DANIDA	758	50	708	1118	118	1000
Crop Diversification Project Phase II - DAE Component		190	190	0	151	157	-
Integrated Maize Promotion Project - 2nd Phase Revised		140	140	0	114	114	-
Integrated Horticulture and Nutrition Development Project - TAPP	UNDP	600	100	500	899	99	800
Small Farmer Agro-Forestry Development Project	German	200	75	175	437	12	425
Special Programme for Food Security	Japan	252	52	200	557	32	525
Char Development and Settlement Project	Dutch	135	35	100	157	16	141
Total		10,201	3,751	6,450	19106	6275	12831



APPENDIX - 3

List of References

1. Agricultural Services Innovation Reform Project (2001) "Extension Services Survey 2000, Draft Report" Dhaka, Bangladesh
2. Bangladesh Bureau of Statistics (1996) "Census of Agriculture" Volume 1 & 2, Dhaka, Bangladesh
3. Bangladesh Institute of Development Studies (2001) "Bangladesh Human Development Report 2000" Dhaka, Bangladesh
4. Department of Agricultural Extension (1999) "Agricultural Extension Manual" Ministry of Agriculture, Dhaka, Bangladesh
5. Department of Agricultural Extension (1999) "The Department of Agricultural Extension Strategic Plan 1999-2002" Ministry of Agriculture, Dhaka, Bangladesh
6. Economic Relations Division (2002) "Bangladesh: A National Strategy for Economic Growth, Poverty Reduction and Social Development" Ministry of Finance, Dhaka, Bangladesh
7. Ministry of Agriculture (1996) "New Agricultural Extension Policy" Dhaka, Bangladesh
8. Ministry of Agriculture (1999) "National Agriculture Policy" Dhaka, Bangladesh
9. Ministry of Agriculture (2002) "Bangladesh: Plan of Action on National Agriculture Policy" Dhaka, Bangladesh
10. Ministry of Agriculture (2002) "National Integrated Pest Management Policy" Dhaka, Bangladesh
11. Ministry of Local Government, Rural Development and Co-operatives (2000) "National Rural Development Policy: Draft" Dhaka, Bangladesh
12. Public Administration Reform Commission (2000) "Public Administration for the 21st Century: Report of the Public Administration Reform Commission" Dhaka, Bangladesh

