

# ANNUAL REPORT 2009-2010



**BANGLADESH AGRICULTURAL DEVELOPMENT CORPORATION  
MONITORING DIVISION**

# ANNUAL REPORT

## 2009-2010

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## FOREWORD

In fulfillment of the statutory requirement as outlined in the charter of the Bangladesh Agricultural Development Corporation, the annual report for the year 2009-2010 has been prepared and hereby forwarded. This report contains financial & physical aspects of 15 development projects (7 under crop sub-sector and 8 under irrigation sub-sector) and 45 programs (9 programs under crop sub-sector & 36 programs under irrigation sector) executed by BADC. The annual report for the year 2009-2010 is the outcome of extensive and collective efforts of different executing divisions of the corporation in general and Monitoring Division in particular. It would be more appreciable if the annual report on the activities of BADC brought out in time.

However, the officers and the staffs of the Monitoring Division, who worked hard for its compilation, deserve appreciation.

Md. Zahir Uddin Ahmed ndc  
Chairman  
BADC

# PREFACE

Publication of annual report on the activities of BADC is a statutory obligation. In fulfillment of such statutory requirement, The Monitoring Division of the Corporation, in close co-operation of the executing divisions and project offices has prepared the annual report for 2009-2010.

This annual report has exclusively dealt with the financial and physical achievements of 15 development projects (7 under crop sub-sector and 8 under irrigation sub-sector) and 45 programs (9 programs under crop sub-sector & 36 under irrigation sector) executed by BADC.

This annual report has been prepared jointly by Mr. Ahmed Hasan Al Mahmud, Chief Monitoring (Additional Charge), Mr. Sheikh Mohammed Saiful Islam, Deputy Chief (Monitoring), Mr. Shahin Mia, Research Officer & Mr. Md. Abul Kashem, Asstt. Administrative Officer of this division assisted them. The services rendered by them are thankfully acknowledged. We also gratefully acknowledge the valuable co-operation extended by the officers of the executing divisions and project offices in providing data / information required to prepare this report.

The annual report for 2009-2010 was prepared and circulated to the concerned divisions for comments. Then it is finalized in accordance with comments received from them.

Finally, we are also thankful to the Chairman, BADC for his valuable advice and encouragement extended to us in bringing out the report in present shape.

Chief  
Monitoring Division  
BADC, Dhaka

# BADC MANAGEMENT

## WHOLE - TIME MEMBERS OF THE BOARD:

1. Chairman
2. Member-Director in-Charge of Fertilizer Management
3. Member-Director in-Charge of Minor Irrigation
4. Member-Director in-Charge of Finance
5. Member-Director in-Charge of Seed & Horticulture

## EX-OFFICIO MEMBERS OF THE BOARD:

1. The Registrar, Co-operative Societies.
2. The Director-General, Bangladesh Rural Development Board.

The Board of Directors, headed by the Chairman, is responsible for the overall management of the Corporation. The Government appoints all the whole time Member-Director including the Chairman. The Secretary of the Corporation acts as Secretary to the Board of Directors.

The Corporation functions through five wings viz, Administration, Finance, Fertilizer Management, Seed & Horticulture and Minor Irrigation. Each wing excepting the Administration wing is headed by a whole-time Member-Director. The Administration wing functions under the direct supervision of the Chairman, assisted by the Secretary of the Corporation.

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# CHAPTER-I

## CROP SECTOR

### Introduction:

Agriculture is the dominant economic activity in Bangladesh and regarded as the lifeline of the economy of Bangladesh. Its role is vital in enhancing productivity, profitability, income generation, employment and poverty alleviation in the rural areas for improving the livelihood of majority people. Agro-climatic conditions and fertile lands of the country are favourable for growing different kinds of crops round the year. But the country is at present facing the challenges of increased food production for growing population under stress of decreasing land resources and climate change challenges like drought, salinity, flood, unpredicted rains, tidal surges, cyclone, etc. The major activities to face the challenges is to increase production of agricultural crops through incremental use of quality seeds at farmers' level for vertical expansion along with horizontal expansion at the coastal areas (Charlands) and cultivation of climate resilient crop varieties to stabilize food security.

For the development of agriculture, availability of quality seeds is utmost essential need to be ensured. BADC is the only public sector organization mandated to multiply all new improved varieties evolved from research institutes under NARS and agricultural universities. BADC has gained technological superiority by dint of which has earned the reputation for its seeds as **"Standard Quality."** BADC has experienced, trained and skilled human resources, modern facilities like 32 foundation seed multiplication farms, 75 contract growers zones, 52 modern and scientific seed processing & preservation centers, seed quality testing laboratories, a well developed marketing networks consisting of 100 seed sale centers, 7,028 seed dealers throughout the country, and a strong internal quality control system. BADC multiplies seeds of high yielding varieties of cereals (rice, wheat, maize), Jute, Potato, Vegetables, Pulses and Oils crops following the steps of seed technology to help meet up the national requirements of quality seeds. BADC has attached emphasis and priorities to produce and supply of more foundation seed. To cope with climatic vulnerabilities, BADC is also multiplying and distributing seeds of different crop varieties resilient to climate change. BADC has undertaken varietal purification program of local popular cultivars keeping in view of protecting local varieties from extinction. BADC is conducting adaptive trials of rice, wheat, and sorghum imported from abroad which have drought tolerance, heat tolerance and short life cycle. BADC has also started seed multiplication of indigenous crops like Cheena, Kaon, Sorghum, Barley etc., to fit these crops in the Northern and South-western regions of the country. BADC has strengthened its capacity and capability which will bring significant qualitative and quantitative improvement of seed supply. Quality seed of BADC contributes to increase crop production significantly, help in filling the gap between requirement and availability and can balance the equation, **"Food = People."** Promotion of quality seed, therefore, is an important and urgent priority issue to attain and maintain sustainable Food Security for us and for our future generation.

### 1.01 Quality Seed:

Seed is the most valuable, basic and vital living input for increasing agricultural production. The effectiveness of the other inputs like fertilizers, irrigation, pesticides and crop management can only be virtualized to the productivity of agriculture if seeds of high quality used. If the seed is not quality one, the use of other inputs become less fruitful or sometimes wasteful. All other inputs and crop management practices create favorable environment for this living input, so that, a plant can grow perfectly and give the potential yield. But it has to go a long way to establish the importance of quality seed. Several steps are taken for its development at different stages. Varietal



development, multiplication, processing, preservation, quality control these are various processes which ultimately contribute to the good seed for production of good crop. Here, we should cite a reference of the memorable version of Kelly (1985) that “Seeds are the focal point around which strategies to boost crop yield can be built.” From his version we can easily understand the value of quality seed which alone can contribute to the increase of yield by 15-20%.

Globally it has been scientifically proved and recognized that per unit yield of agricultural crops can be increased to the extent of over 20% by using high quality seeds of high-yielding varieties (HYVs)/modern varieties (MVs) and hybrids. The use of quality seed can also contribute to exploiting the yield potentiality of HYVs/MVs/hybrids by minimizing the yield gaps. The production of above 20% higher yield due to use of quality seed can greatly help achieving sustainable food security for the emerging population within the limited land (although cultivable lands are regularly diverting to non-agricultural purposes), limited water and other agricultural resources.

The scenario of the quality seed use in our country is encouraging. At present the quality seed supply to the farmers of Bangladesh have achieved to the land mark of above 20% (cumulative average of all agricultural seeds), this significant contribution is mainly achieved through the formal system (public & private sector) against the total requirement of all kinds of seeds. It may be mentioned here, out of national 20% coverage of quality seeds of all crops, the contribution of BADC is 13% (average of all crops). It is notable that in case of Boro rice seed BADC alone supplies more than 60 % and for Wheat it is more than 40%. The supply of quality seeds through formal system is remarkably increasing. The balance seeds supplying through informal system is not recognized to be quality seeds because in the informal system seeds are not produced by following the steps of seed technology, rather food grains are used as seed. The source and quality of these seeds are not known and assumedly poor quality, the reason is that, seed production, preservation and quality control measures taken by the farmers are not followed by the technology. The use of these poor quality seed is the major factor for low productivity of crops. Unless all the seeds we put to our soil are of quality seed, our challenge for achieving food security of the country can't be fulfilled. In prioritizing different issues of agriculture, supply of quality seed to the farmers should be considered as a top priority issue. For increasing quality seed supply to the farmers, the whole seed system needs to be reviewed. The capacity and capability of both public and private sector should be strengthened for the improvement of seed system.

### **1.02 BADC Seed System:**

Bangladesh Agricultural Development Corporation (the then East Pakistan Agricultural Development Corporation) is a state owned corporation of the Government of Bangladesh (GoB) under the administrative control of Ministry of Agriculture (MoA). The then East Pakistan Agricultural Development Corporation (EPADC) was established in 1961, EPADC was later renamed into Bangladesh Agricultural Development Corporation (BADC) after independence of Bangladesh in 1971.

#### **Quality Policy of BADC:**

BADC as a Nodal agency of the MoA, promoting the use of quality seeds through its national networks, is committed to contribute to the prosperity of farmers by supplying quality seeds, agro-inputs and other related services ensuring continual improvement in systems and processes. As a public organization BADC has been achieving its mandate through proactive, customer sensitive and responsive approach, technological up-gradation, up-scaling the capacity, knowledge sharing, competency enhancement and maintaining a conducive work culture.

## Quality Objectives of BADC:

- a. To ensure timely availability of quality seeds to farmers by:
  - Ensuring procurement of adequate quantity of breeder seed (BS) and multiply - foundation Seed (FS), certified seed (CS) and truthfully labelled seed (TLS).
  - Undertaking inspections, quality checks and testing of seeds at different levels.
  - Ensuring availability of adequate seed processing and preservation facilities.
  - Developing network of dedicated and competent seed producers and seed dealers.
- b. To optimize organizational efficiency.
- c. To ensure continual competency development through training of employees, contract growers & dealers.
- d. To continually improve the farmers' satisfaction.

Since its inception in 1961, BADC under the Ministry of Agriculture has been playing pioneering role in the development of seed system in the country. In 1962-63, BADC for the first time in the public sector as a mandate for contributing to the development of agriculture, had undertaken the program of supplying quality seeds of improved varieties to the farmers for increasing the per unit yield of agricultural crops. The visionary program was started with the supply of a meager quantity of 13.8 MT quality seeds. This program of supplying quality seeds of improved varieties by the public sector-BADC for the first time in the country was created a significant impact to the farmers and the development of seed system in the country. At present, BADC has been producing quality seeds of more than 1,44,000 MT through its own 32 Seed Multiplication Farms and 75 Contract Growers Zones located at different agro-ecological zones and agro-climatic conditions of the country. BADC has been marketing quality seeds through its own seed sale centers and seed dealers across the country. BADC has established strict quality control system to ensure supply of quality seeds to farmers. BADC has established 28 Quality Control Laboratories including one Central Quality Control Laboratory at Gabtoli, Mirpur, Dhaka to undertake seed testing to check the quality of seeds. Besides, production and distribution of true seeds, BADC is also involved in the production of Tissue Culture Plants like potato. It also undertakes supply of seedlings/saplings of fruits crops through its 9 Horticulture development centers and 13 Agro service centers. Seed marketing is carried out through channels namely 22 Regional Seed Sales Centers 42 District Seed Sales Centers 36 Upazila Seed Sales Centers of BADC. There are 7,028 registered Seed Dealers of BADC spread to rural areas of all over the country who accounts for more than 80% of the sale turn over.

BADC plays a key role in the implementation of various schemes of the Ministry of Agriculture related to quality seed production and distribution to the farmers. BADC also provides technical support to the private sector agencies including NGOs and farmers by imparting training to the personnel and farmers/growers engaged in the production of seeds. BADC is also providing services to the private sector organizations and NGOs for seed processing, preservation and quality control at different seed processing centers of BADC.

BADC is also performing the mandate of the GoB to production seeds of different crops to meet up the emergency crisis of seeds during untoward natural calamities like floods, drought, salinity and other abiotic stresses. After independence of Bangladesh in 1971, the BADC in the year 1974-75 started well thought and highly organized “formal seed supplying system,” as a result the quantity of 576 MT of quality wheat seeds was supplied to the farmers.

BADC has been mandated by the MoA to produce and supply quality seeds of 4 (rice, wheat, jute, potato), out of 6 notified crops (rice, wheat, jute, potato, sugarcane, mesta & kenaf) and major non-notified crops out of 73 non-notified crops (the Field and Seed Standard approved by NSB) through BADC’s own Seed Multiplication Farms and Contract Growers Zones.

BADC could have successfully increased the supply of quality seeds to the quantity of 79,937 MT in 2007-08, 90,928 MT in 2008-09, and 1,03, 572 MT in 2009-10. Keeping in view to help

the country achieving self-sufficiency in food grain production by improving the productivity of agriculture with the use of quality seeds, the BADC has a vision with the projection of supplying 2,45,300 MT of quality seeds by 2020-21.

Statement of Seed Production, Processing, Preservation and Quality Testing Facilities of BADC

| Description of Facilities   | Establishment<br>(in No.) |
|---|---------------------------|
| Seed Multiplication Farms   | 23                        |
| Jute Seed Multiplication Farms  | 2                         |
| Pulse & oils Seed Multiplication Farms  | 3                         |
| Vegetable Seed Multiplication Farms   | 2                         |
| Potato Seed Multiplication Farms  | 2                         |
| Horticulture Development Center   | 9                         |
| Agro-Services Center  | 13                        |
| Contract Growers Zones (for all kind of seeds)  | 75                        |
| Seed Processing and Preservation Centers (along with seed testing mini laboratories at each of the centers) | 52                        |
| Potato Seed Cold Storage  | 19                        |
| Central Seed Testing Laboratory   | 1                         |
| Regional Seed Marketing Offices   | 22                        |
| Transit Seed Stores   | 22                        |
| Regional Seed Sales Centers under Regional Seed Marketing Offices   | 22                        |
| District Seed Sales Centers   | 42                        |
| Upazila Seed Sales Centers  | 36                        |
| Total Seed Sales Centers  | 100                       |
| Registered Seed Dealers   | 7,028                     |

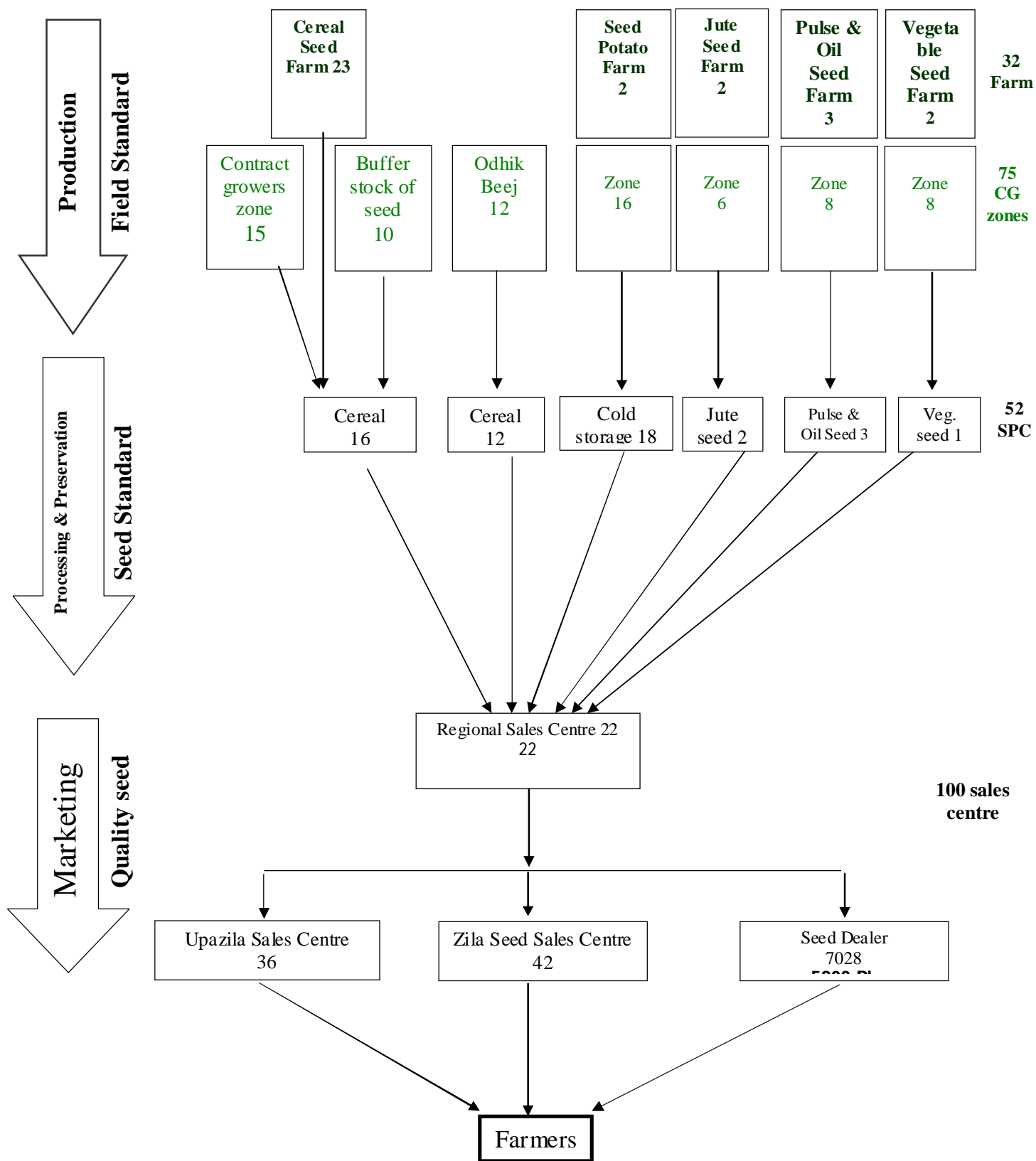
BADC has developed a very organized supply chain of quality seeds. In this supply chain BADC initially collects high quality Breeder Seed (BS) of improved varieties from National Agricultural Research System (NARS) like BRRI, BARI, BINA, BJRI and as well as from Agricultural Universities, multiply those BS through production of quality Foundation Seed (FS) at the BADC's own 32 Seed Multiplication Farms (SMF) located at different agro-ecological zones of the country. The FS are multiplied through production of quality Certified Seed (CS) and Truthfully Labelled Seed (TLS) through 75 Contract Growers' Zones (CGZ) located at different agro-ecological zones and climatic conditions of the country. The produced seeds are procured and then processed and preserved at 52 modern and scientifically developed Seed Processing and Preservation Centers (SPC). The quality of the seed is maintained in the Seed Processing and Preservation Centers. The seed samples from different SPCs are collected by the Central Seed Testing Laboratory, Gabtoli, Mirpur, Dhaka for quality testing of the preserved seeds.

The produced seeds after passing through processing, preservation, quality control and packaging distributed to the final users-the farmers through a very well-organized marketing networks across the country. There are 22 Regional Seed Marketing Offices (RSMO) of BADC, under those RSMOs there are 22 Regional Seed Sales Centers (RSSC), 42 District Seed Sales Centers (DSSC) and 36 Upazila Seed Sales Centers (USSC). Under the seed supply chain of BADC, there are 7,028 Registered Seed Dealers of BADC at the grass root level of the country from where farmers can easily buy quality seeds of BADC. Farmers can buy quality seed of BADC from district seed sale centre and upazila seed sale centre directly.

The seed as a living planting material has got chance to become degenerated due to its continuous use without being replacement by new quality seeds. As such the replacement of seeds is essential at regular interval. In this regard it is mentioned in “The Seed Rules, 1998” that the seeds should be replaced with quality seeds of improved varieties at least three years interval . With a view to maintaining the continuity of the quality seed supply system, the BADC as a mandate, maintains the collection of BS from NARS (BRRI, BARI, BINA, BJRI) and Agricultural Universities and multiply the BS through production of FS and thereby from FS to production of CS and TLS by ensuring the “Field Standard” and “Seed Standard” of the National Seed Board (NSB) of the Ministry of Agriculture. The produced quality seeds are made available to the farmers on regular basis so that farmers can replace their own saved poor quality seeds with quality assured seeds of BADC for improving the productivity of Agriculture.

The seed supply chain of BADC is shown in Fig.-1. The seed production target and actual achievement is shown in Fig.-2. The vision 2021 of BADC is shown in Fig.-3

**Figure 1: Seed Production, Processing and Marketing Network of BADC**



**Figure-2: Seed Supplied by BADC from 2008-09 to 2011-12 (Quantity in mt.)**

| S<br>L<br>N<br>o             | Name<br>of the<br>crop | Area<br>(Lac<br>hec.) | Agronomic<br>requiremen<br>t of Seed<br>(mt.) | 2008-09      |             | 2009-10       |             | Area<br>(Lac<br>hec.) | Agronomic<br>requiremen<br>t of Seed<br>(mt.) | 2010-11       |             | 2011-12       |             |
|------------------------------|------------------------|-----------------------|---|--------------|-------------|---------------|-------------|-----------------------|---|---------------|-------------|---------------|-------------|
|                              |                        |                       |   | Quantit<br>y | %           | Quantit<br>y  | %           |                       |   | Quantit<br>y  | %           | Quantit<br>y  | %           |
| 1                            | Aus<br>(HYV)           | 6.00                  | 15000   | 856          | 5.7         | 777           | 5.2         | 8.75                  | 21875   | 944           | 4.3         | 1054          | 4.8         |
| 2                            | Aman<br>(Hyv)          | 36.15                 | 90375   | 16949        | 18.8        | 17681         | 19.6        | 42.00                 | 105000  | 20442         | 19.5        | 26227         | 25.0        |
| 3                            | Boro<br>(HYV)          | 37.50                 | 93750   | 36525        | 39.0        | 44417         | 47.4        | 39.80                 | 99500   | 58002         | 58.3        | 63826         | 64.1        |
|                              | Boro<br>(Hybrid)       | 10.00                 | 15000   | 49           | 0.3         | 69            | 0.5         | 8.00                  | 12000   | 410           | 3.4         | 714           | 6.0         |
| <b>Total rice<br/>Seed</b>   |                        | <b>89.65</b>          | <b>214125</b>                                 | <b>54379</b> | <b>25.4</b> | <b>62944</b>  | <b>29.4</b> | <b>98.55</b>          | <b>238375</b>                                 | <b>79798</b>  | <b>33.5</b> | <b>91821</b>  | <b>38.5</b> |
| 4                            | Wheat                  | 4.25                  | 63750   | 19971        | 31.3        | 23429         | 36.8        | 4.15                  | 62250   | 27069         | 43.5        | 27304         | 43.9        |
| 5                            | Maize                  | 1.80                  | 6250  | 83           | 1.3         | 40            | 0.6         | 2.00                  | 7000  | 131           | 1.9         | 296           | 4.2         |
| 6                            | Barley                 |                       |   |              |             |               |             |                       |   |               |             | 0.32          |             |
| 7                            | Kaon                   |                       |   |              |             |               |             |                       |   |               |             | 2.34          |             |
| 8                            | Cheena                 |                       |   |              |             |               |             |                       |   |               |             | 0.88          |             |
| <b>Total cereal<br/>Seed</b> |                        | <b>95.70</b>          | <b>284125</b>                                 | <b>74433</b> | <b>26.2</b> | <b>86413</b>  | <b>30.4</b> | <b>104.70</b>         | <b>307625</b>                                 | <b>106998</b> | <b>34.8</b> | <b>119424</b> | <b>38.8</b> |
| 9                            | Seed<br>potato         | 4.25                  | 600000  | 13462        | 2.2         | 13987         | 2.3         | 4.80                  | 600000  | 18899         | 3.1         | 20442         | 3.4         |
| 10                           | Pulse<br>Seed          | 6.58                  | 23184   | 843          | 3.6         | 668           | 2.9         | 7.00                  | 23184   | 1208          | 5.2         | 1426          | 6.2         |
| 11                           | Oil Seed               | 7.36                  | 17578   | 906          | 5.2         | 727           | 4.1         | 7.38                  | 17578   | 1012          | 5.8         | 1092          | 6.2         |
| 12                           | Jute Seed              | 4.50                  | 4000  | 914          | 22.9        | 1230          | 30.8        | 4.65                  | 4000  | 1621          | 40.5        | 1589          | 39.7        |
| 13                           | Vegetabl<br>e Seed     | 7.50                  | 2822  | 58           | 2.1         | 86            | 3.0         | 7.55                  | 2822  | 102           | 3.6         | 120           | 4.3         |
| 14                           | Spices<br>Seed         | 4.78                  | 155463  | 312          | 0.2         | 461           | 0.3         | 4.99                  | 155463  | 612           | 0.4         | 107           | 0.1         |
| <b>Grand Total</b>           |                        | <b>130.67</b>         | <b>1087172</b>                                | <b>90928</b> | <b>8.4</b>  | <b>103572</b> | <b>9.5</b>  | <b>141.07</b>         | <b>1110672</b>                                | <b>130452</b> | <b>11.7</b> | <b>144200</b> | <b>13.0</b> |

**Figure-3: Demand & Projected Seed Production Program of BADC from 2009-10 to 2014-15 & Vision 2020-21**

**Fig. mt.**

| SL No                    | Name of crops  | Area (Lac hec.) | Agronomic requirement of Seed (mt.) | Projection    |           |               |           |               |           |               |           |               |           |               |           | Vision 2020-21 |           |
|--------------------------|----------------|-----------------|-------------------------------------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|----------------|-----------|
|                          |                |                 |                                     | 2009-10       |           | 2010-11       |           | 2011-12       |           | 2012-13       |           | 2013-14       |           | 2014-15       |           | Quantity       | %         |
|                          |                |                 |                                     | Quantity      | %         | Quantity      | %         | Quantity      | %         | Quantity      | %         | Quantity      | %         | Quantity      | %         |                |           |
| 1                        | Aus (HYV)      | 6.00            | 15000                               | 1350          | 9         | 1350          | 20        | 1350          | 9         | 1350          | 9         | 1350          | 9         | 1350          | 9         | 1500           | 10        |
| 2                        | Aman (Hyv)     | 36.15           | 90375                               | 22590         | 25        | 27100         | 30        | 31630         | 35        | 36150         | 40        | 40660         | 45        | 45187         | 50        | 54000          | 60        |
| 3                        | Boro (HYV)     | 37.50           | 93750                               | 59799         | 64        | 61500         | 66        | 62730         | 67        | 64000         | 68        | 66000         | 70        | 68000         | 73        | 70000          | 75        |
|                          | Boro (Hybrid)  | 10.00           | 15000                               | 508           | 3         | 1000          | 7         | 2000          | 13        | 3500          | 23        | 5000          | 33        | 5000          | 33        | 7000           | 47        |
| <b>Total rice Seed</b>   |                | <b>89.65</b>    | <b>214125</b>                       | <b>84247</b>  | <b>39</b> | <b>90950</b>  | <b>42</b> | <b>97710</b>  | <b>46</b> | <b>105000</b> | <b>49</b> | <b>113010</b> | <b>53</b> | <b>119537</b> | <b>56</b> | <b>132500</b>  | <b>62</b> |
| 4                        | Wheat          | 4.25            | 63750                               | 26000         | 41        | 27000         | 42        | 28000         | 44        | 29000         | 45        | 30000         | 47        | 31000         | 49        | 35000          | 55        |
| 5                        | Maize          | 1.80            | 6250                                | 191           | 3         | 500           | 8         | 1000          | 16        | 1500          | 24        | 2000          | 32        | 2200          | 35        | 2500           | 40        |
| <b>Total cereal Seed</b> |                | <b>95.70</b>    | <b>284125</b>                       | <b>110438</b> | <b>39</b> | <b>118450</b> | <b>42</b> | <b>126710</b> | <b>45</b> | <b>135500</b> | <b>48</b> | <b>145010</b> | <b>51</b> | <b>152737</b> | <b>54</b> | <b>170000</b>  | <b>60</b> |
| 6                        | Seed potato    | 4.25            | 600000                              | 18000         | 3         | 20000         | 3         | 22000         | 4         | 24000         | 4         | 28000         | 5         | 36000         | 6         | 60000          | 10        |
| 7                        | Pulse Seed     | 6.58            | 23184                               | 1014          | 4         | 1225          | 5         | 1550          | 7         | 2100          | 9         | 2510          | 11        | 2510          | 11        | 6300           | 27        |
| 8                        | Oil Seed       | 7.36            | 17578                               | 1188          | 7         | 1275          | 7         | 1450          | 8         | 1900          | 11        | 2265          | 13        | 2265          | 13        | 4300           | 24        |
| 9                        | Jute Seed      | 4.50            | 4000                                | 1263          | 32        | 1440          | 36        | 1600          | 40        | 1720          | 43        | 1850          | 46        | 2000          | 50        | 2500           | 63        |
| 10                       | Vegetable Seed | 7.50            | 2822                                | 102           | 4         | 100           | 4         | 103           | 4         | 132           | 5         | 142           | 5         | 152           | 5         | 200            | 7         |
| 11                       | Spices Seed    | 4.78            | 155463                              | 632           | 0         | 700           | 0         | 800           | 1         | 900           | 1         | 1000          | 1         | 1100          | 1         | 2000           | 1         |
| <b>Grand Total</b>       |                | <b>130.67</b>   | <b>1087172</b>                      | <b>132637</b> | <b>12</b> | <b>143190</b> | <b>13</b> | <b>154213</b> | <b>14</b> | <b>166252</b> | <b>15</b> | <b>180777</b> | <b>17</b> | <b>196764</b> | <b>18</b> | <b>245300</b>  | <b>23</b> |

### **1.03 Crop Sector under Revenue Program:**

BADC is implementing its mandated responsibilities of seed production, processing, preservation and distribution of different kinds of seeds through the following Programs under revenue budget:

- I. Production of Improved Cereal Seeds through Seed Multiplication Farms.
- II. Improved Cereal Seed Production through Contract Growers.
- III. Procurement, Processing and Distribution of Improved Cereal Seeds Program.
- IV. Jute Seed Program.
- V. Agro Service Center.
- VI. National Vegetable Seed Program.
- VII. Buffer Stock of Seed and its Management Program.
- VIII. Hybrid Vegetable Seed Production, Processing, Storage and Distribution Program.
- IX. Hybrid Rice Seed Production, Processing and Preservation Program.

#### **I) PRODUCTION OF IMPROVED CEREAL SEEDS THROUGH SEED MULTIPLICATION FARMS (SMF)**

### **1.04 Introduction:**

The production of improved seeds through Seed Multiplication Farms (SMFs) has been successfully performing since inception of BADC in the year 1961-62. At present, BADC has 23 SMFs having 1801.79 hectares of cultivable lands. These farms have been greatly contributing since its establishment for multiplication of foundation seeds by using breeder seeds collected from different research institutes and agricultural universities. The foundation seeds are used for production of Certified Seeds (CS) and Truthfully Labeled Seeds (TLS) through Contract Growers Zones of BADC. The activities of the SMFs are of recurring nature. The Program namely, "Production of Improved Seeds Through Seed Multiplication Farms" has started functioning in the year 2008.

### **1.05 Objective:**

- i) Multiplication of breeder seeds to foundation seeds.
- ii) Multiplication of foundation seeds to certified seeds.
- iii) Impart training to seed growers regarding on modern seed production technologies & techniques.
- iv) Making foundation seeds available to the organized seed growers.
- v) Carrying out observation and adaptive trials, selection of improved varieties and building up stock of foundation seeds.
- vi) In-service Training to officials and field staff of BADC on scientific and modern seed production technologies, and farm management.
- vii) Production of hybrid rice seeds and maize seeds.

### **1.06 Seed Multiplication Farms (SMFs):**



The Seed Multiplication Farms (SMFs) Program comprises of 23 SMFs of different sizes located at different agro-ecological zones of the country. Gradually, these farms have been modernized through land development, introduction of modern farm machinery and equipment as well as adoption of scientific and modern seed production technologies and practices. The total area of these 23 farms is about 2248.80 hectares out of which the cultivable land is about 1801.79 hectares. The Table-1.01 shows the total area and cultivable land of different SMFs of BADC.

**Table-1.01**

Total Area and Cultivable Land of Different Seed Multiplication Farms of BADC

| Sl. No. | Name of the Farm | Location                  | Total Area (ha) | Cultivable Land (ha) |
|---------|------------------|---------------------------|-----------------|----------------------|
| 1       | Pathila          | Dattanagar, Jhenaidah     | 238.46          | 171.66               |
| 2       | Mathura          | Dattanagar, Jhenaidah     | 188.66          | 168.42               |
| 3       | Gokulnagar       | Dattanagar, Jhenaidah     | 236.18          | 200.81               |
| 4       | Karincha         | Dattanagar, Jhenaidah     | 230.77          | 194.33               |
| 5       | Kushadanga       | Dattanagar, Jhenaidah     | 197.17          | 180.97               |
| 6       | Sadhuhati        | Sadhuhati, Jhenaidah      | 40.49           | 32.79                |
| 7       | Boalia           | Godaipur, Khulna          | 42.32           | 30.77                |
| 8       | Noor nagar       | Chuadanga, Chuadanga      | 39.94           | 31.58                |
| 9       | Meherpur         | Baradi, Meherpur          | 166.85          | 134.41               |
| 10      | Tebunia          | Tebunia, Pabna            | 178.14          | 137.65               |
| 11      | Nilphamari       | Nilphamari, Nilphamari    | 39.69           | 36.47                |
| 12      | Mirpur           | Gaboli, Dhaka             | 45.65           | 24.29                |
| 13      | Madhupur         | Kakraid, Tangail          | 202.02          | 142.63               |
| 14      | Kashimpur        | Gabtali, Mymensingh       | 39.32           | 32.44                |
| 15      | Netrokona        | Netrakona, Netrakona      | 46.96           | 41.79                |
| 16      | Pangsha          | Pangsha Rajbari           | 41.77           | 34.21                |
| 17      | Tambulkhana      | Kanaipur, Faridpur        | 41.89           | 33.36                |
| 18      | Panchgachia      | Panchgachia, Feni         | 33.29           | 27.43                |
| 19      | Sylhet (Sadar)   | Islampur, Sylhet          | 42.12           | 34.01                |
| 20      | Itakhola         | Itakhola, Hobigonj        | 49.49           | 38.06                |
| 21      | Jhilonja         | Cox's bazar, Cox's bazar, | 33.20           | 23.48                |
| 22      | Lakutia          | Lakutia, Barisal          | 33.95           | 21.88                |
| 23      | Thakurgaon       | Thakurgaon, Thakurgaon    | 40.49           | 28.34                |
| Total:  |                  |                           | 2,248.80        | 1,801.79             |

From Table 1.01, it appears that the area under individual farm ranging from minimum 33.20 hectares to maximum 238.46 hectares. Total area of 23 farms is 2,248.80 hectares, out of which the total cultivable land is 1,801.79 hectares. The farms are mainly used for producing foundation seeds from breeder seeds.

### 1.07 Seed Production:

The Seed Multiplication Farms are operated through efficient supervision and management by highly experienced and trained seed technologists. Breeder Seeds are collected from different research institutes like BIRRI, BARI, BINA, BJRI, and Agricultural Universities and used for production of Foundation Seeds of Rice, Wheat, Maize, Seed Potato, Vegetables, Pulses and Oilseeds. The quality seeds are produced with the adoption of modern and scientific seed production technologies and farm management. The target and actual production of Foundation Seeds during 2009-10 and actual production of 2008-09 are shown in Table-1.02

**Table 1.02**

**Crop-wise Target and Actual Production of Foundation Seeds in Seed Multiplication Farms  
During 2009-2010 and Actual Production of 2008-2009**

[Figure in metric ton]

| Name of Seed                     | 2008-2009<br>(FS)<br>Actual<br>achievement | 2009-2010 (FS) |                       | % Achieved |           |
|----------------------------------|--|----------------|-----------------------|------------|-----------|
|                                  |  | Target         | Actual<br>achievement | 2009-2010  | 2008-2009 |
| <b>Rice Seed:</b>                |  |                |                       |            |           |
| Aus (HYV)                        | 796  | 750            | 640                   | 85         | 105       |
| Aman (HYV)                       | 1,864                                      | 2,419          | 2,046                 | 85         | 94        |
| Boro (HYV)                       | 2,531                                      | 2,893          | 2,405                 | 83         | 94        |
| <b>Total Rice:</b>               | 5,191                                      | 6,062          | 5,091                 | 84.33      | 97.67     |
| Wheat (HYV)                      | 612  | 606            | 675                   | 111        | 86        |
| Maize<br>(Composite/Hybrid)      | 43   | 90             | 87                    | 97         | 78        |
| Potato<br>( Improved<br>Variety) | 805  | 3,287          | 3,541                 | 107        | 81        |
| <b>Grand Total</b>               | 6,651.00                                   | 10,045.00      | 9,394.00              | 94.67%     | 89.67%    |

Note: (FS) means foundation seed

It reveals from Table 1.02, that the rice seed production was 5,091 MT against the target of 6,062 MT (the achievement was 84.33%) in 2009-2010, the achievement was 97.67 % in 2008-2009. The wheat seed production was 675 MT against target of 606 MT (the achievement was 111%) in 2009-10, and the achievement was 86% in 2008-09. The maize seed production was 87 MT against target of 90 MT (the achievement was 97 %) in 2009-10, and the achievement

was 78% in 2008-09. The seed potato production was 3,541 MT against target of 3,287 MT (the achievement was 107%) in 2009-10, and the achievement was 81% in 2008-09.

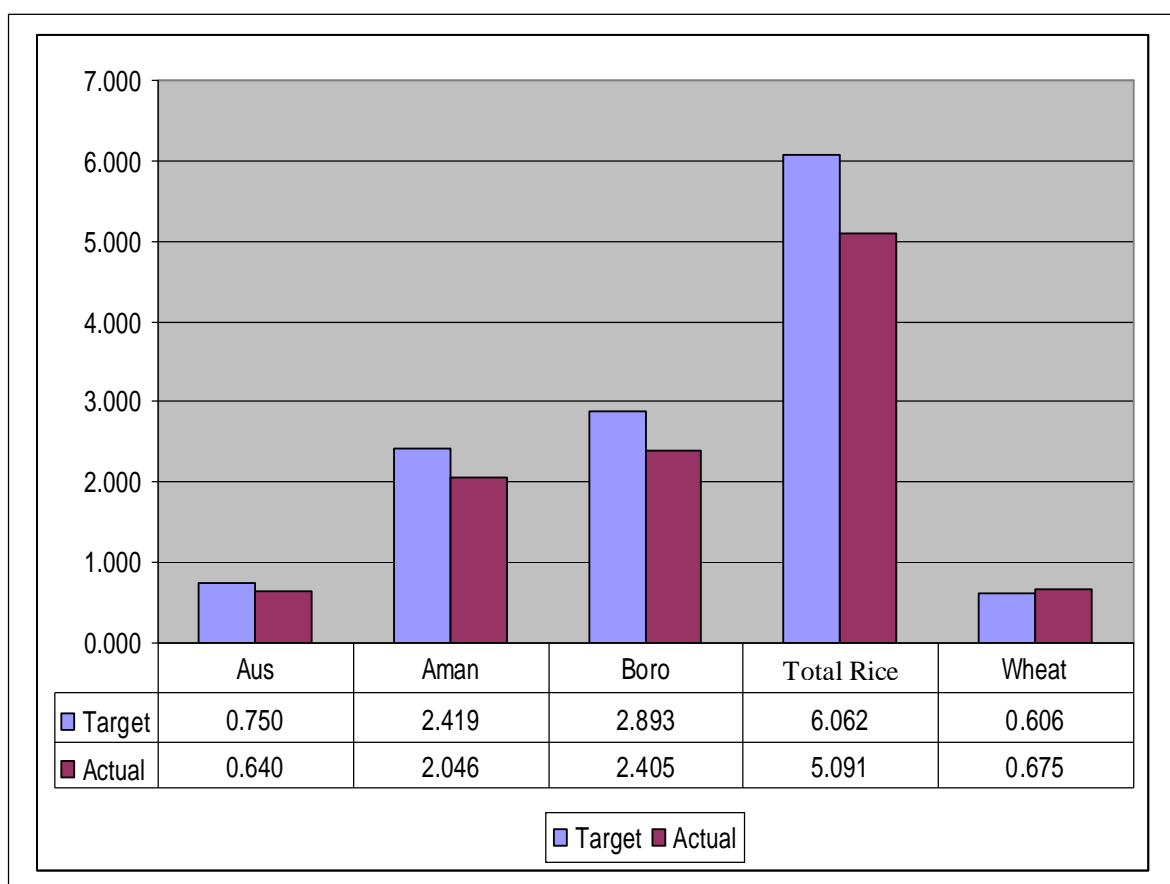
The farm- wise and crop wise target and actual production of rice and wheat seeds during 2009-2010 is shown in Chart-1.:

**1.08 Trend of Seed Production:**

The trend of production of rice and wheat seeds in Seed Multiplication Farms in 2009-2010 and in 2008-2009 is presented through Bar Chart -1 and Bar Chart-2.

### BAR CHART-1 TARGET AND ACTUAL PRODUCTION OF FOUNDATION SEEDS OF RICE AND WHEAT IN SEED MULTIPLICATION FARMS DURING 2009-2010

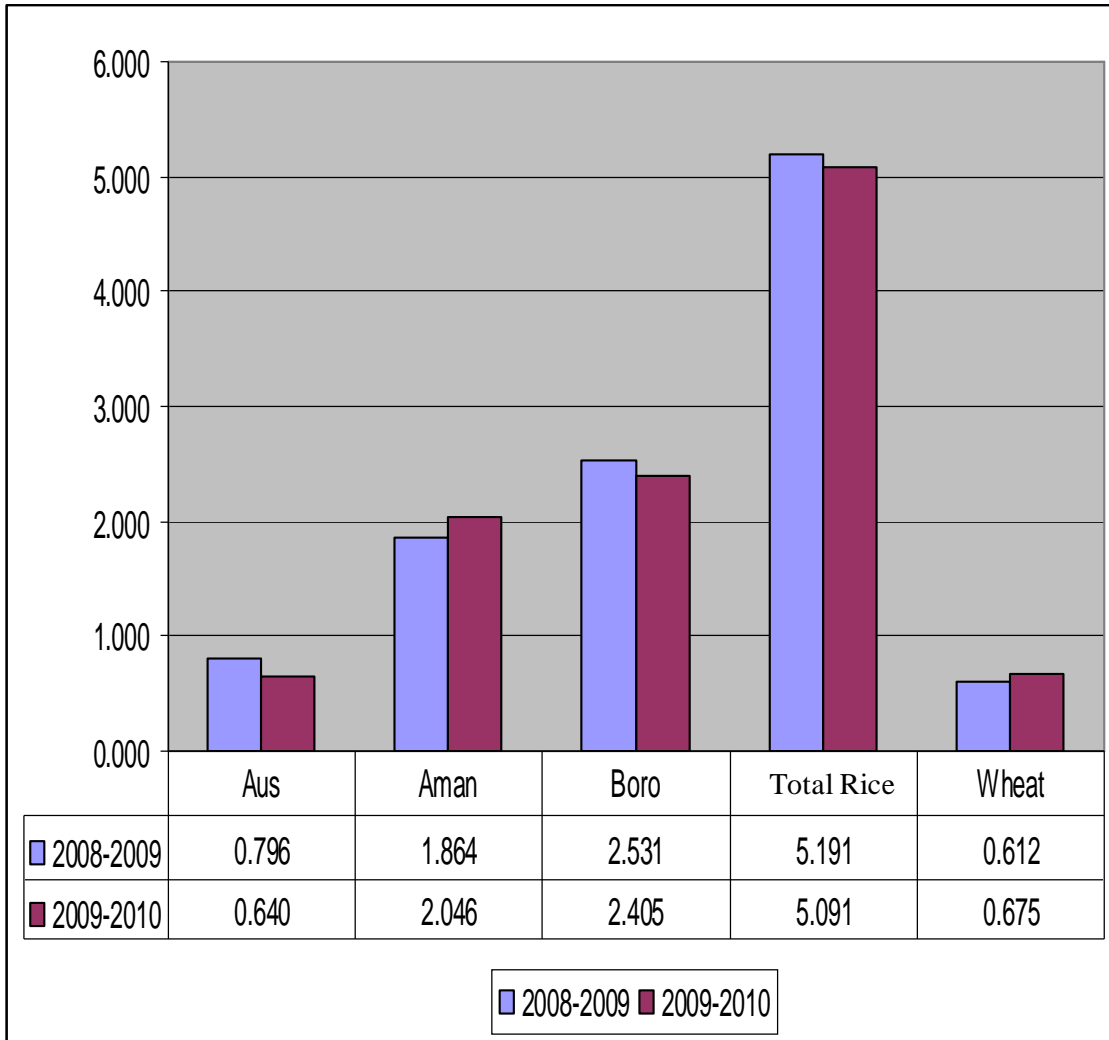
(Figure in '000' metric ton)



## BAR CHART-2

### PRODUCTION OF FOUNDATION SEEDS OF RICE AND WHEAT IN SEED MULTIPLICATION FARMS DURING 2008-2009 AND 2009-2010

(Figure in '000' metric ton)



## **II) IMPROVED CEREAL SEED PRODUCTION THROUGH CONTRACT GROWERS**

### **1.09 Introduction:**

Improved Seed is the basic component of modern agriculture. To cope with the growing demand of food for the growing population, it is necessary to bring about qualitative change in agriculture production through extensive expansion of the use of improved seeds along with appropriate technology. Improved seeds produced in BADC's Seed Multiplication Farms are not sufficient enough to meet up the national requirement of seed. On the other hand seeds of different crops produced by BADC have high demand and acceptance to the farmers. So to cope with the growing demand of improved seeds of HYVs/MVs/Hybrids in large quantity, BADC started producing seed by the selected farmers in different area at farmer's fields under the "Registered Growers Scheme". Later, BADC undertook a project namely "Production of Improved Cereal Seeds through Contract Growers" in 1976. In the contract growers system, the seeds are produced following all steps of seed technology which is more systematic, organized and effective than earlier system. The project was included in the Revenue Program in 2003-2004.

### **1.10 Objective:**

- To select and organize growers and arrange their training on seed technology for production of quality seeds.
- To arrange production of certified seed / truthfully labeled seeds by multiplication of foundation seeds through contract growers.
- To ensure supply of various agricultural inputs to the contract growers in time.
- To provide technical assistance and other facilities for establishment of seed industries in the private sector.

### **1.11 Contract Growers' Zones:**

To Produce Certified Seed (CS) and Truthfully Labelled Seed (TLS) BADC has established several Contract Growers Zones (CGZs) with unitary and block-wise Divisions throughout the country concentrating specially in the safe seed producing area. Under the running program there are 15 CGZs with a total of 31,320 contract farmers involved. A list of CGZs with command area and the number of contract growers is given below in Table-1.04

**Table 1.04****List of Contract Growers' Zones with Command Area and Number of Farmers**

| <b>Sl. No.</b> | <b>Name of Contract Growers Zones</b> | <b>Command area (ha)</b> | <b>Total number of farmers involved</b> |
|----------------|---------------------------------------|--------------------------|---|
| 1              | Dhaka                                 | 1,135.34                 | 879                                     |
| 2              | Modhupur (Tangail)                    | 2,068.87                 | 3,208                                   |
| 3              | Jamalpur                              | 2,531.20                 | 1,699                                   |
| 4              | Itakhola (B.Baria)                    | 1,646.96                 | 2,448                                   |
| 5              | Chittagong                            | 1,270.87                 | 821                                     |
| 6              | Faridpur-Barisal                      | 2,344.41                 | 2,458                                   |
| 7              | Chuadanga                             | 5,343.18                 | 4,697                                   |
| 8              | Meherpur                              | 2,831.30                 | 3,563                                   |
| 9              | Jessore                               | 2,041.44                 | 1,466                                   |
| 10             | Tebunia (Pabna)                       | 1,973.71                 | 1,804                                   |
| 11             | Rajshahi                              | 2,325.68                 | 2,938                                   |
| 12             | Bogra                                 | 2,579.56                 | 1,257                                   |
| 13             | Rangpur                               | 1,622.18                 | 926                                     |
| 14             | Dinajpur                              | 3,580.00                 | 1,975                                   |
| 15             | Thakurgaon                            | 3,199.55                 | 1,181                                   |
|                | <b>Total</b>                          | <b>36,494.25</b>         | <b>31,320</b>                           |

**1.12 Seed Production:**

The foundation seeds produced in Seed Multiplication Farms are distributed to the contract growers for production of CS/TLS. At present BADC have 15 contract growers' zones all over the country. Under this project, CS/TLS of HYV/MVs of rice and wheat are produced through contract growers under close supervision of BADC's technically sound personnel. The target and actual production of rice and wheat seeds produced through contract growers during 2009-2010, and actual production of 2008-2009 is shown in Table 1.05

**Table 1.05**

**Target and Actual Production of Seeds by the Contract Growers during 2009-2010 and Actual production of 2008-2009**

(Figure in metric ton)

| Name of Seed | 2008-2009 (CS/TLS) Actual achievement | 2009-2010 (CS/TLS) |                    | % Achieved |           |
|--------------|---------------------------------------|--------------------|--------------------|------------|-----------|
|              |                                       | Target             | Actual achievement | 2009-2010  | 2008-2009 |
| Rice Seed:   |                                       |                    |                    |            |           |
| Aus (HYV)    | 65                                    | 416                | 84                 | 20         | 54        |
| Aman (HYV)   | 8,951                                 | 10,596             | 9,376              | 88         | 90        |
| Boro (HYV)   | 23,275                                | 29,569             | 29,452             | 99         | 115       |
| Total Rice:  | 32,791                                | 40,581             | 38,912             | 69%        | 86.33%    |
| Wheat (HYV)  | 14,220                                | 16,582             | 16,581             | 100        | 98        |
| Maize (HYV)  | -                                     | 35                 | 31                 | 88         | -         |

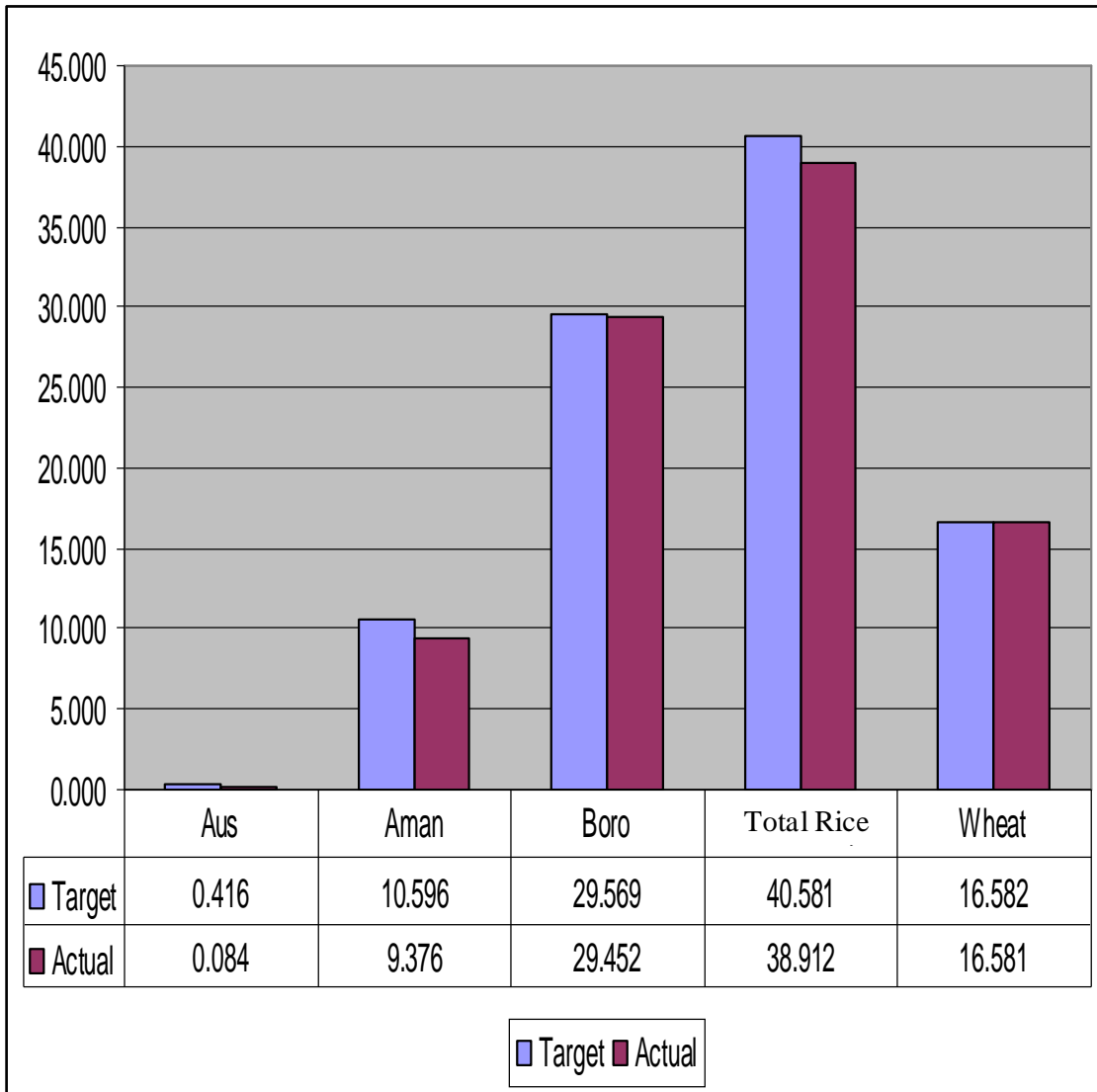
It appears from Table 1.05, that the in 2009-10, the production of Aus rice seed was 84 MT against target of 416 MT (the achievement was 20%), the production of Aman rice seed was 9,376 MT against target of 10,596 MT (the achievement was 88%), the production of Boro rice seed was 29,452 MT against target of 29,569 MT (the achievement was 99%), the total production of rice seed was 38,912 MT against target of 40,581 MT (the achievement was 69%), the production of Wheat seed was 16,581 MT against target of 16,582 (the achievement 100 %). The production of Maize was 31 MT against target 31 MT (the achievement was 88%). In 2008-09 the total production of Rice seed was 32,791 (the achievement was 86.33%), the production of Wheat was 14,220 MT (the achievement was 98%).

**1.13 Trend of Seed Production:**

Chart-3 shows the Bar Chart presentation of Target and Actual production of cereal seeds in 2008-09 and Chart-4 shows the Bar Chart presentation of the production of cereal seeds through contract growers during the year 2009-2010 and 2008-2009

### CHART – 3 TARGET AND ACTUAL PRODUCTION OF SEEDS THROUGH CONTRACT GROWERS DURING 2009-2010

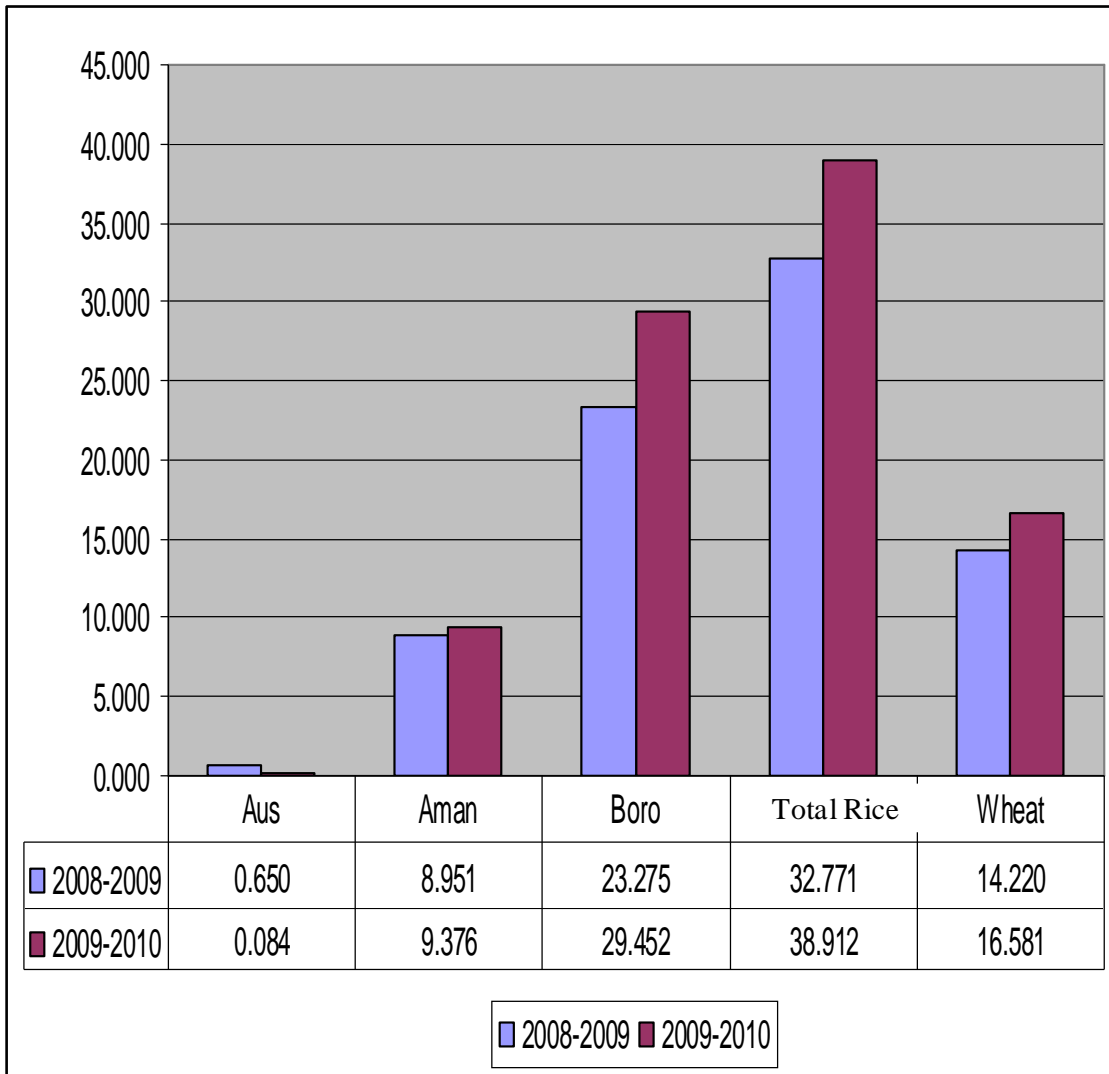
(Figure in '000' metric ton)





**CHART – 4**  
**PRODUCTION OF SEEDS THROUGH CONTRACT GROWERS**  
**DURING 2008-2009 AND 2009-2010**

(Figure in '000' metric ton)





### **III) PROCUREMENT, PROCESSING AND DISTRIBUTION OF IMPROVED CEREAL SEEDS**

#### **1.14 Introduction:**

BADC produces HYV/MV and Hybrid seeds of different crops at Seed Multiplication Farms (SMF) and through Contract Growers Zones (CGZ). After production, the seeds are procured by BADC, processed (cleaning, drying, grading, testing, treating etc.) and preserved in the 16 (sixteen) Seed Processing Centers (SPC) for next growing season. The seeds are distributed to the farmers through BADC marketing channel. The first stage of the Program is collection of seeds from SMFs and CGZs and send to BADC's Seed Processing Centers (SPC) for Processing and Preservation. The quality of seeds largely depends on proper processing and preservation in ideal condition. The 16 (sixteen) seed processing centers are equipped with modern and scientific seed processing, preservation and seed testing facilities. There is one seed testing laboratories at each of the 16 SPC, and also a well equipped high standard Central Seed Testing Laboratory at Gabtoli, Mirpur, Dhaka. The seeds quality tested at individual seed testing centers of 16 SPC are monitored through sample testing of seeds at the Central Seed Testing Laboratory.

#### **1.15 Objectives:**

- Foundation, certified and truthfully labeled cereal seeds produced by the other seed production Program of BADC will be procured, processed and preserved at different seed processing centers.
- Procurement, Processing and Preservation of Cereal Seeds.
- The produced seeds after processing and preservation will be packed and dispatched to the different Regional Seed Storages and from there these seeds will be distributed to the dealers, farmers and private sectors through Seed Distribution Division.
- The quality of the seed will be tested at the Seed Testing Laboratories of the 16 Seed Processing Centers. The seed quality standard will be monitored through sample seed testing at the Central Seed Testing Laboratory, at Gabtoli, Mirpur, Dhaka.
- A well managed nationwide dealer networks will be developed and the efficiency of the dealers will be upgraded through regular training for effective seed distribution.
- Up-scaling the efficiencies of the officers and staff of BADC through various regular training on seed technology, skilled manpower will be developed in the country.
- Necessary seed processing, preservation, and seed testing facilities will be provided to the private sector.
- Necessary technical guidance and farmers training will be provided to the private seed producers on quality seed production, processing and preservation.
- To help the country attain self-sufficiency in foodgrain production through increasing the agricultural productivity by using quality seeds.

#### **1.16 Activities:**

The activities of this Seed Program may be categorized as follows –

- Procurement.
- Processing, Preservation.
- Quality Testing.

- Distribution.
- Training.
- Service to Private Sector

With a view to ensuring the supply of quality seeds of improved varieties, this Program has been functioning since 1976 to till-date. The BADC has established 16 Seed Processing Centers (SPC) having with a Mini Seed Testing Laboratory at each SPC situated at different locations of the country. There is one highly scientific and modern Central Seed Testing Laboratory at Gabtoli, Mirpur, Dhaka.

The success of this program is that BADC could have made available a total quantity of 76,864 MT quality seeds of Rice (Boro, Aman, and Aus), Wheat and Maize to the farmers. The seeds are distributed to the farmers through total 100 Seed Sales Centers across the country. The location of 100 Seed Sales Centers are (a) 64 District Seed Sales Centers located at each District Headquarters and (b) 36 Upazila Seed Sales Centers located at remote areas of Upazila.

**a. Procurement:**

The foundation seed (FS) produced at different Seed Multiplication Farms of BADC. The certified seed (CS) and truthfully labelled seed (TLS) are produced through 15 Contract Growers Zones (CGZ). The seed are collected/procured from SMFs and CGZs and supplied to the Seed Processing Centers for processing, preservation and quality control. The Table-1.06 shows the target and actual procurement of seeds during 2009-10 and actual procurement in 2008-09.

Table 1.06  
Target and Actual Procurement of Seeds during  
2009-2010 and Actual in 2008-2009

(Figure in metric ton)

| Name of Seed        | 2008-2009<br>Actual | 2009-2010 |        | % Achieved |           |
|---------------------|---------------------|-----------|--------|------------|-----------|
|                     |                     | Target    | Actual | 2009-2010  | 2008-2009 |
| Rice Seed:          |                     |           |        |            |           |
| Aus (HYV)           | 856                 | 1175      | 860    | 73         | 110       |
| Aman (HYV)          | 17749               | 22724     | 13209  | 58         | 142       |
| Boro (HYV/Hybrid)   | 44484               | 60165     | 39928  | 66         | 117       |
| Total Rice          | 63089               | 84064     | 53997  | 64         | 123       |
| Wheat Seed:         |                     |           |        |            |           |
| Local (HYV)         | 23533               | 27000     | 19769  | 73         | 99        |
| Import (HYV)        | -                   | -         | -      | -          | -         |
| Total Wheat         | 23533               | 27000     | 19769  | 73         | 99        |
| Maize Seed:         |                     |           |        |            |           |
| Local (HYV)         | 40                  | 151       | 117    | 77         | 159       |
| Import (HYV/Hybrid) | -                   | -         | -      | -          | -         |
| Total Maize:        | 40                  | 151       | 117    | 77         | 159       |

It appears from the Table-1.06 that in 2009-10 the actual procurement of rice seed was 53,997 MT against target of 84,64 MT (the achievement was 64%), the wheat seed was procured 19,769 MT against target of 27,000 MT (the achievement was 73%), the maize seed was procured 117 MT against target of 151 MT (achievement was 77%). In 2008-09 the rice seed was procured 63,089 MT (the achievement was 123%), wheat seed was procured 23,533 MT (the achievement was 99%), and maize seed was procured 40 MT (the achievement was 159%)

**b Processing and Preservation:**

With a view to maintaining quality of seeds BADC has established 16 Modern and Scientific Seed Processing Centers (SPC) at different locations of the country for processing, preservation and quality control of seeds. The 16 SPC have two types of storage facilities like normal storage facility and dehumidified storage (conditioned storage) facility. The name, location and storage capacity of 16 SPC are shown in Table-1.07.

Table 1.07  
List of 16 Seed Processing Centers (SPC) with their Storage Capacity

(Figure in metric ton)

| Sl. No. | Name of SPC | Location   | Storage Capacity (MT) |                      |        |
|---------|-------------|------------|-----------------------|----------------------|--------|
|         |             |            | Normal storage        | Dehumidified storage | Total  |
| 1.      | Chuadanga   | Chuadanga  | 5300                  | 2000                 | 7300   |
| 2.      | Madhupur    | Tangail    | 4800                  | 2100                 | 6900   |
| 3.      | Tebunia     | Pabna      | 4400                  | 100                  | 4500   |
| 4.      | Rajshahi    | Rajshahi   | 3600                  | 100                  | 3700   |
| 5.      | Rangpur     | Rangpur    | 4900                  | 100                  | 5000   |
| 6.      | Dinajpur    | Dinajpur   | 4700                  | 100                  | 4800   |
| 7.      | Thakurgaon  | Thakurgaon | 2800                  | 2000                 | 4800   |
| 8.      | Bogra       | Bogra      | 3800                  | -                    | 3800   |
| 9.      | Jessore     | Jessore    | 3700                  | 100                  | 3800   |
| 10.     | Meherpur    | Meherpur   | 1750                  | 100                  | 1850   |
| 11.     | Faridpur    | Faridpur   | 4900                  | -                    | 4900   |
| 12.     | Lakutia     | Barisal    | 800                   | -                    | 800    |
| 13.     | Mirpur      | Dhaka      | 3000                  | 100                  | 3100   |
| 14.     | Comilla     | Comilla    | 2900                  | 100                  | 3000   |
| 15.     | Itakhola    | Hobigonj   | 1700                  | 100                  | 1800   |
| 16.     | Chittagong  | Chittagong | 1500                  | -                    | 1500   |
| Total:  |             |            | 54,550                | 7,000                | 61,550 |

The seeds produced at Seed Multiplication Farms of BADC and Contract Growers Zones are collected and transported to the 16 Seed Processing Centers (SPC). At the 16 SPCs the collected seeds are properly processed, preserved and quality maintained through regular testing. The seed processing, preservation and quality control activities are done by experienced and technically sound personnel. The preserved quality assured seeds are distributed to the farmers through BADC well organized marketing networks across the country. The quantity of seeds preserved at 16 SPC in 2009-10 is shown in Table-1.08.

Table 1.08

The Seed Processing Center-wise quantity of Improved Seeds Procured,  
Processed and Preserved during 2009-2010

[Figure in metric ton]

| Sl. Nos. | Name of SPC    | Rice |       |       |       | Wheat |        |       | Maize |        |       |
|----------|----------------|------|-------|-------|-------|-------|--------|-------|-------|--------|-------|
|          |                | Aus  | Aman  | Boro  | Total | Local | Import | Total | Local | Import | Total |
| 1        | Chuadanga      | 255  | 3929  | 6894  | 11078 | 4902  |        | 4902  | 0     |        | 0     |
| 2        | Madhupur       | 99   | 2380  | 10046 | 12525 | 436   |        | 436   | 17    |        | 17    |
| 3        | Tebnia         | 100  | 677   | 2805  | 3582  | 1560  |        | 1560  | 12    |        | 12    |
| 4        | Rajshahi       |      | 306   | 1820  | 2126  | 939   |        | 939   |       |        | 0     |
| 5        | Rangpur        |      | 297   | 1419  | 1716  | 702   |        | 702   | 6     |        | 6     |
| 6        | Dinajpur       |      | 947   | 2411  | 3358  | 2418  |        | 2418  |       |        | 0     |
| 7        | Thakurgaon     |      | 414   | 1639  | 2053  | 3996  |        | 3996  |       |        | 0     |
| 8        | Bogra          | 6    | 454   | 1763  | 2223  | 237   |        | 237   |       |        | 0     |
| 9        | Jessore        | 310  | 1576  | 3161  | 5047  | 1797  |        | 1797  |       |        | 0     |
| 10       | Meherpur       | 3    | 672   | 1664  | 2339  | 1283  |        | 1283  | 82    |        | 82    |
| 11       | Faridpur       | 10   | 323   | 2590  | 2923  | 1347  |        | 1347  |       |        | 0     |
| 12       | Lakutia        |      | 31    | 170   | 201   |       |        | 0     |       |        | 0     |
| 13       | Mirpur (Dhaka) |      | 89    | 147   | 236   |       |        | 0     |       |        | 0     |
| 14       | Comilla        | 41   | 398   | 1437  | 1876  |       |        | 0     |       |        | 0     |
| 15       | Itakhola       | 2    | 296   | 1390  | 1688  | 152   |        | 152   |       |        | 0     |
| 16       | Chittagong     | 34   | 420   | 572   | 1026  |       |        | 0     |       |        | 0     |
| Total:   |                | 860  | 13209 | 39928 | 53997 | 19769 | 0      | 19769 | 117   | 0      | 117   |

It appears from the Table-1.08 that in 2009-10, BADC preserved a total quantity of 53,997 MT rice seed (Aus rice seed 860 MT, Aman rice seed 13,209 MT, and Boro rice seed 39,928 MT), 19,769 MT wheat seed, and 117 MT maize seed. All seeds were procured from local production; no seed was imported in 2009-10.

**c. Distribution:**

The seed supply chain of BADC is maintained from organized formal seed production, processing, preservation, quality control and ultimately to distribute quality assured seeds to the farmers. At each and every stage the quality is maintained as a result the BADC seed has been branded as quality seed and gained its popularity and momentum to the farmers. The seeds are distributed through very well organized marketing networks up to the remote rural areas of the

country. The seed distribution channels of BADC are comprised of 22 Transit Seed Sales Center, 42 District Seed Sales Centers, and 36 Upazila Seed Sales Centers. There are 7,028 registered seed dealers of BADC (they are also registered with the Seed Wing, Ministry of Agriculture). The target and actual distribution of seeds of different crops are shown in Table-1.09.

Table 1.09  
Target and Actual Distribution of Seeds during 2009-2010 and  
Actual of 2008-2009

| Name of Seed           | 2008-2009<br>Actual | 2009-2010 |        | [Figure in metric ton]<br>% Achieved |           |
|------------------------|---------------------|-----------|--------|--------------------------------------|-----------|
|                        |                     | Target    | Actual | 2009-2010                            | 2008-2009 |
| <b>Rice:</b>           |                     |           |        |                                      |           |
| Aus                    | 467                 | 777       | 724    | 93                                   | 55        |
| Aman                   | 15485               | 17681     | 11240  | 64                                   | 95        |
| Boro                   | 34279               | 44486     | 44395  | 99                                   | 95        |
| Total Rice:            | 50231               | 62944     | 56359  | 90                                   | 95        |
| Wheat                  | 15713               | 23429     | 23325  | 99                                   | 89        |
| Seed Potato            | 10846               | 13987     | 13987  | 100                                  | 92        |
| True Potato Seed (TPS) | 0.005               | 0.016     | 0.014  | 88                                   | 56        |
| Jute                   | 892                 | 1230      | 1230   | 100                                  | 96        |
| Maize (Rabi)           | 15                  | 40        | 40     | 100                                  | 18        |
| Oil Seeds              | 727                 | 727       | 727    | 100                                  | 101       |
| Pulse Seed             | 668                 | 668       | 668    | 100                                  | 80        |
| Winter Vegetable Seed  | 44.68               | 44        | 44     | 100                                  | 100       |
| Summer Vegetable Seed  | 41.99               | 42        | 42     | 100                                  | 100       |

It transpire from the Table-1.08 that in 2009-10, BADC distributed a total quantity of 56,359 MT rice seed against target of 62944 MT (the achievement was 90%), 23,325 MT wheat seed against target of 23,429 MT (the achievement was 99%), 13,987 MT seed potato against target of 13987 MT (the achievement was 100%), 0.014 MT of TPS against target of 0.016 MT (the achievement was 88 %), 1230 MT jute seed against target of 1230 MT (the achievement was 100%), 40 MT maize seed against target of 40 MT (the achievement was 100%), 727 oilseeds against target of 727 MT (the achievement was 100%), 668 MT pulse seed against target of 668 MT (the achievement was 100%), 44 MT winter vegetable seed against target of 44 MT (the achievement was 100%), and 42 MT summer vegetable seed against target of 42 MT (the achievement was 100%). The actual distribution of seeds in 2008-09 were rice 95%, wheat 89%, seed potato 92%, TPS 56%, jute seed 96%, maize seed 18%, oilseeds 101%, pulse seed 80%, winter vegetable seed 100% and summer vegetable seed 100%.

#### **e.Training:**

As per “The National Seed Policy, 1993,” BADC should provide technical assistance and other support/services to promote the development of private sector seed industry. BADC has strengthened its capabilities and facilities to provide technical support and services through imparting training to the human resources working in the private sector. The training includes seed technologies on quality seed production, processing, preservation, and seed quality control. The contract growers’ farmers are also getting training on seed production technologies. The

performance of Training imparted to the personnel working in the different public sector, private sector, and NGOs is shown in Table-1.10.

Table 1.10  
Training organized by BADC at Seed Testing and Training Center,  
Gabtali, Mirpur, Dhaka during 2009-2010

| Sl No  | Title  | Participating Organization/ Group | No. of Participants |         |       | Sponsored by                 | Duration of Training (day) |
|--------|--|-----------------------------------|---------------------|---------|-------|------------------------------|----------------------------|
|        |  |                                   | Govt.               | Private | Total |                              |                            |
| 1      | PGCC on Seed Technology  | Govt. and Pvt. Seed Co.           | 10                  | 10      | 20    | MDA/<br>DANIDA               | 2                          |
| 2      | Re-orientation OBM & Nutrition Technology                            | SEBA, TMSS<br>UDDIPAN             | -                   | 40      | 40    | SEBA                         | 2                          |
| 3      | Seed Quality Control   | Govt. & Pvt. Organization         | 7                   | 18      | 25    | DANIDA/<br>MoA               | 3                          |
| 4      | Cereal Seed Processing and Store Pest Management                     | Govt. and Pvt. Seed Company       | 5                   | 20      | 25    | DANIDA/<br>MoA               | 2                          |
| 5      | Seed Treatment   | BADC                              | 30                  | -       | 30    | BADC &<br>Housing Enterprise | 1                          |
| 6      | Vegetable Seed Processing, Preservation and Store Pest Management.   | BADC                              | 4                   | 17      | 21    | DANIDA/<br>MOA               | 3                          |
| 7      | Experience sharing of potato seed diseases                           | BADC                              | 14                  | -       | 14    | BADC                         | 1                          |
| 8      | Seed Technology, Seed Rules & Regulations                            | Seed Dealer                       | -                   | 25      | 25    | DANIDA/<br>MoA               | 1                          |
| 9      | Meeting for Annual Program Planning 2010-2011                        | BADC                              | 80                  | -       | 80    | DANIDA/<br>MDA               | 2                          |
| 10     | Hybrid Tomato Seed Production  | BADC                              | 20                  | -       | 20    | PRAMTO<br>L                  | 3                          |
| 11     | Seminar on Seed Processing and Preservation of Private Entrepreneurs | BADC                              | 18                  | -       | 18    | BADC                         | 1                          |
| 12     | Cereal Seed Processing and Preservation                              | Pvt. Seed Company                 | -                   | 25      | 25    | DANIDA/<br>MoA               | 1                          |
| 13     | Hybrid Vegetable Seed Production                                     | BADC                              | 24                  | -       | 24    | BADC                         | 1                          |
| Total: |  |                                   | 212                 | 155     | 367   |                              | 23                         |



**e. Service to Private Sector:**

As per “The National Seed Policy, 1993,” BADC should extend support service to the private sector seed industry through seed processing, preservation and quality control. BADC since 1991 has been providing support service to the private sector through access to seed processing (drying, cleaning, grading) and quality testing (seed moisture, purity and germination testing) on payment basis. The progress of seed processing and quality testing at different Seed Processing Centers (SPC) during 2008-09 and 2009-10 is shown in Table-1.11

Table 1.11

Quantity of Seeds of Private Sector Processed at  
Different SPCs during 2008-2009 & 2009-2010

| Sl. No. | Year      | Name of agencies under Private Sector               | Quantity of seed processed (in MT) | Service charges realized (in Lakh Taka) |
|---------|-----------|---|------------------------------------|---|
| 1       | 2008-2009 | a) Contract Farmers<br>b) Private Company<br>c) NGO | 58,787                             | 179.87                                  |
| 2       | 2009-2010 | a) Contract Farmers<br>b) Private Company<br>d) NGO | 60,641                             | 178.05                                  |

## IV) JUTE SEED PROGRAM

### 1.17 Introduction:

Jute is very important to the economy of Bangladesh. Jute is considered as Golden fiber in Bangladesh. It is a leading cash crop and still a major source of foreign exchange. Jute provides employment to a considerable labor force; at least 30% of the population is involved in raising the crop. The productivity of jute agriculture for production and quality jute fiber the important role is played by use of high quality jute seed. To replace the farmers' saved poor quality seeds the BADC has been playing pioneering role in supplying quality jute seeds to the farmers. The high quality improved pedigree Breeder Seed of jute is produced and supplied by the Bangladesh Jute Research Institute (BJRI) to BADC and other private sector organizations and NGOs. BADC multiplied BS of jute at the Jute Seed Production Farms (JSPF) and through Contract Growers Zones. The Jute Seed Multiplication Program of BADC is as follows.

### 1.18 Objective:

- Multiplication of breeder seeds (BS) to foundation seed (FS).
- Multiplication of FS to certified seed (CS).
- Multiplication of CS through Contract Growers and make available the improved quality jute seeds to the farmers.
- Training to contract farmers on jute seed production technologies and practices.
- Training to officials and staff of BADC on scientific and modern jute seed production, processing, preservation and quality control technologies.
- To develop modern jute seed processing, preservation and quality control facilities.

### 1.19 (A) Activities of Jute Seed Program:

As per the provision of the Jute Seed Program of BADC quality jute seed is produced at the BADC's own Jute Seed Multiplication Farms and through Contract Growers Zones. Breeder Seed (BS) is collected from BJRI and multiplied for production of Foundation Seed (FS) at the 2 (two) Jute Seed Multiplication Farms (JSMF) at Nashipur under Dinajpur District and at Chitla under Meherpur District. The FS is multiplied for production of Certified Seed (CS) through 6 (six) Contract Growers Zones (CGZ) located at different agro-ecological zones of the country.

As per the 5 years program target has been fixed for production 600 MT of FS at two JSMF and 8,000 MT of CS through six CGZ. The quality jute seed is processed, preserved and quality control is maintained at BADC Seed Processing Centers and distributed to the farmers.

### 1.19 (B) Jute Seed Production Farms and Contract Grower's Zones:

The Jute Breeder Seed (BS) collected from BJRI is multiplied through production of Foundation Seed (FS) at the BADC's own Jute Seed Multiplication Farm and FS is multiplied through production of CS at Contract Growers Zones of BADC. The list of Jute Seed Multiplication Farm is shown in Table-1.12 and list of Contract Growers Zones is shown in Table-1.13

Table-1.12

List of Jute Seed Multiplication Farm of BADC with Area and Cultivable Land

| Sl. No. | Name of the Farm | Location | Total Area (ha) | Cultivable Land (ha) |
|---------|------------------|----------|-----------------|----------------------|
| 1       | Nashipur         | Dinajpur | 243.70          | 206.48               |
| 2       | Chitla           | Meherpur | 162.52          | 136.84               |
| Total   |                  |          | 406.22          | 343.32               |

Table 1.13

List of Contract Growers Zones for Jute Seed Production

| Sl. No. | Name of Contract Growers Zones | Command Area (ha) | Total number of Farmers involved |
|---------|--------------------------------|-------------------|----------------------------------|
| 1       | Dhaka                          | 182.18            | 681                              |
| 2       | Tangail                        | 207.28            | 1,023                            |
| 3       | Bogra                          | 285.82            | 912                              |
| 4       | Jessore                        | 708.50            | 2,275                            |
| 5       | Kustia                         | 824.69            | 1,765                            |
| 6       | Rajshahi                       | 827.93            | 1,649                            |
| Total   |                                | 3,036.40          | 8,305                            |

**1.20 Production:**

The program and actual achievement of Jute Foundation Seed and Certified Seed Production during 2009-10 at BADC's own Jute Seed Multiplication Farms and at Contract Growers Zones are shown in Table-1.14.

Table 1.14  
Target and Actual Production of Jute Foundation Seed  
And Certified Seed during 2009-2010

(Figure in metric ton)

| Name of Farm/Zone   | Target |     |       | Actual Achievement |     |       | % Achieved |
|---|--------|-----|-------|--------------------|-----|-------|------------|
|   | Cap    | Oli | Total | Cap                | Oli | Total |            |
| A) Jute Foundation Seed<br>Production in Farms                    |        |     |       |                    |     |       |            |
| 1. Nashipur<br>(Dinajpur)   | 26     | 15  | 41    | 30                 | 17  | 47    | 115        |
| 2. Chitla (Meherpur)  | 18     | 10  | 28    | 19                 | 11  | 30    | 107        |
| Total (A):  | 44     | 25  | 69    | 49                 | 28  | 77    | 112 %      |
| B) Jute Certified Seed<br>Production in Contract<br>Growers Zones |        |     |       |                    |     |       |            |
| 1. Dhaka  | 80     |     | 80    | 82                 |     | 82    | 103        |
| 2. Tangail  | 86     | 20  | 106   | 85                 | 19  | 104   | 98         |
| 3. Bogra  | 80     | 23  | 103   | 78                 | 21  | 99    | 96         |
| 4. Rajshahi   | 45     | 240 | 285   | 40                 | 265 | 305   | 107        |
| 5. Kushtia  | 155    | 184 | 339   | 300                | 180 | 480   | 142        |
| 6. Jessore  | 140    | 128 | 268   | 214                | 145 | 359   | 134        |
| Total (B):  | 586    | 595 | 1,181 | 799                | 630 | 1,429 | 121%       |
| Grand Total (A+B):  | 630    | 620 | 1,250 | 848                | 658 | 1,506 | 120 %      |

Note: (i) Cap means Capsularis (Deshi Jute), (ii) Oli means Olitorius (Tossa Jute).

It appears from the Table 1.14 that BADC produced a total quantity of 1,506 MT of FS and CS against target of 1,250 MT (the achievement was 120%) in 2009-10. The total quantity of 77 MT of FS was produced against target of 69 MT (the achievement was 112%) in the BADC's own Farms, and total quantity of 1,429 MT of CS was produced against target of 1,181 MT (the achievement was 121%) at the Contract Growers Zones of BADC.

#### 1.21 Procurement and Processing:

Jute seed produced at BADC's own Jute Seed Multiplication Farms and through Contract Growers Zones are collected and procured by BADC and then properly processed and preserved at the two Jute Seed Processing Centers: (i) Chitla, under Meherpur District and (ii) Nashipur under Dinajpur District. The target and achievement of FS and CS of jute are shown in Table-1.15.

Table 1.15  
Target and Actual Procurement of Foundation Seed (FS) and  
Certified Seed (CS) of Jute during 2009-2010  
[Figure in metric ton]

| Name of Farm/Zone   | Target |     |       | Actual |     |       | % Achieved |
|---|--------|-----|-------|--------|-----|-------|------------|
|   | Cap    | Oli | Total | Cap    | Oli | Total |            |
| A) A) Jute Foundation Seed Collected from Farms :             |        |     |       |        |     |       |            |
| 1. Nashipur (Dinajpur)  | 26     | 16  | 42    | 30     | 17  | 47    | 112        |
| 2. Chitla (Meherpur)  | 18     | 10  | 28    | 19     | 11  | 30    | 107        |
| Total (A):  | 44     | 26  | 70    | 49     | 28  | 77    | 110        |
| B) Jute Certified Seed Procured from Contract Growers Zones : |        |     |       |        |     |       |            |
| 1. Dhaka  | 80     |     | 80    | 60     |     | 60    | 75         |
| 2. Tangail  | 86     | 20  | 106   | 40     | 17  | 57    | 54         |
| 3. Bogra  | 80     | 22  | 102   | 40     | 22  | 62    | 61         |
| 4. Rajshahi   | 45     | 240 | 285   | 30     | 193 | 223   | 78         |
| 5. Kushtia  | 155    | 184 | 339   | 250    | 160 | 410   | 121        |
| 6. Jessore  | 140    | 128 | 268   | 210    | 141 | 351   | 131        |
| Total (B):  | 586    | 594 | 1180  | 630    | 533 | 1163  | 99         |
| Total (A+B):  | 630    | 620 | 1,250 | 679    | 561 | 1,240 | 99         |

Note: (i) Cap means Capsularis (Deshi Jute), (ii) Oli means Olitorius (Tossa Jute).

It appears from the Table-1.15 that, BADC procured a total quantity of 1,240 MT jute seeds of FS (collected from two farms) and CS (procured from six Contract Growers Zones) against target of 1,250 MT (the achievement was 99%) in 2009-10. Out of total quantity of 1,240 MT, the FS was 77 MT (FS stage-1), and CS was 1,163 MT. The NSB approved "Field Standard" for jute seed was ensured before collection/procurement.

## V AGRO-SERVICE CENTER PROGRAM

### 1.22 Introduction:

With a view to make available the nutritious vegetables, fruits and spices directly in the market for human consumption of the country, BADC had established 4 Agro -Service Centers-ASC (formerly known as Agricultural Development Estates-ADE) nearest to the important cities of Dhaka, Chittagong, Rajshahi and Jessore in 1967-68. Each of the ASC has its own demonstration farms and also has project area within the command area of the ASC. During the period of SFYP (Second Five Year Plan) of the country, 12 more ASC were established, as a result the total numbers of ASC were increased to 16 (sixteen). The 9 ASC out of 16 were transferred to the Horticulture Development Project (HDP) of BADC. Subsequently 3 new ASC were established at Basisal, Patuakhali and Noakhali. Later one more ASC were transferred to

HDP, hence finally the total number of ASC under the HDP are now 10 (ten). The 2 (two) ASC located at Lama and Bandarban those were established during the TFYP (Third Five Year Plan) as one of the components of special Agricultural Development Project of the Chittagong Hill Tracts Development Board were included in the HDP. By the order of the Government one more centre was set up at Barguna for the period of 1998-2000. Later, it was extended for two more years as per the decision of the Ministry of Agriculture. After 2002, it was merged with the main project. Thus the total numbers of Agro-Service Centers are now stands at 13 (thirteen). This nature of this project is program oriented, as a result for its continuation it was approved by ECNEC for the period of July 2000 to June 2005. This project has been continuing under the revenue budget of BADC as a Program since January 2004.

### **1.23 Objective:**

The main objectives of the Program are as follows:

- To increase production and ensure supply of fresh vegetables, fruits and spices in the country and to alleviate nutritional deficiency as well as to improve the quality of life of people of the project area through Agro-Service Centers.
- To reduce the pressure on cereal and pulses crops and to help meet up the growing demand for vegetables, fruits and spices with a view to changing the food habit of the people
- To organize cooperative society / farmers group for intensifying production of vegetables, fruits and spices through supplying all farm inputs including seeds, grafts/ gooties etc.
- To impart training to the farmers, technical guidance to the farmers on improved modern technology and farm practices and to supply agricultural inputs to the farmers for producing quality seeds, grafts, vegetables, fruits & spices.
- To provide transportation, marketing, packaging, sorting, grading, storing facilities etc. and also impart training to the farmers on grading, packaging of vegetables, fruits and spices etc

### **1.24 Location and Area of Agro - Service Centers:**

The location and area of 13 Agro Service -Center are shown in Table 1.16.

Table 1.16

## Location and Area of Agro -Service Centers

| Sl. No. | Location                         | Area of Demonstration Farm (ha) | Command Area (ha) |
|---------|----------------------------------|---------------------------------|-------------------|
| 1.      | Moeshwarpasha, Daulatpur, Khulna | 5.01                            | 7,874             |
| 2.      | Ramanandapur, Kotwali, Pabna     | 4.50                            | 7,874             |
| 3.      | Ashratnagar, Rangpur             | 4.72                            | 7,874             |
| 4.      | Chehelgazi, Dinajpur             | 20.46                           | 7,874             |
| 5.      | Dapunia, Jamalpur                | 4.37                            | 7,874             |
| 6.      | Latifabad, Kishoreganj           | 3.85                            | 7,874             |
| 7.      | Kumergaon, Sylhet                | 3.60                            | 7,874             |
| 8.      | Lama, Bandarban                  | 13.91                           | 7,874             |
| 9.      | Balaghata, Bandarban             | 4.42                            | 7,874             |
| 10.     | Charuria, Noakhali               | 4.72                            | 7,874             |
| 11.     | Lakutia, Barisal                 | 6.16                            | 7,874             |
| 12.     | Of khalishaof khali, Patuakhali  | 4.61                            | 7,874             |
| 13.     | Barguna, Sadar                   | 4.72                            | 7,874             |
|         | Total :                          | 85.05                           | 1,02,362          |

In order to implement the above objectives, all the ASCs situated at different places of the country are organized suitably. Besides, village-based farmers' co-operatives/groups are also organized in the project area of each of the ASC. These agro-based co-operatives/groups are assisted with all types of facilities through farmers' training, transfer of modern agricultural technologies, supply of quality seeds of improved varieties, seedlings, grafts, gooties etc. Agro - Service Centers have also arranged necessary facilities to ensure proper marketing of the products of the farmers in the project area. These activities of Agro- Service Centers has created a momentum and opened a new era of agricultural development in the project area so far as the production of agricultural crops particularly vegetables and fruits are concerned. The project has also created a positive impact on the socio-economic conditions of the farmers of the project area. The Table-1.16 is shown the name of the ASC, its demonstration area and command area.

### 1.25 Production:

As mentioned earlier, the main objective behind the establishment of 13 Agro Service -Centers were to accelerate the production of fresh vegetables, fruits and spices in the centers as well as in the project area. As such, all Agro -Service Centers could have successfully made concerted efforts for production of fresh vegetables, fruits, spices etc. on its demonstration farms. Table 1.17 shows the target and actual production of vegetables, fruits, graft/ gooties etc. in the Agro-Service Centers as well as in the project area during the year 2009-2010.

Table 1.17  
Target, Actual Production and Distribution of Agricultural Produces  
during 2009-2010

| Activities                          | Target | Production | Distribution | Achieved (in %) |
|-------------------------------------|--------|------------|--------------|-----------------|
| Vegetables (in MT.)                 | 47900  | 48100      | 48100        | 100             |
| Vegetables Seedlings (in Lakh)      | 35     | 35.10      | 35.10        | 101             |
| Graft & Gooties Seedlings (in Lakh) | 27     | 26.10      | 26.10        | 97              |
| Coconut Seedling (in Lakh)          | 275    | 255        | 255          | 93              |
| Fruits (in MT)                      | 886    | 938        | 938          | 106             |

During 2009-2010 the success of achievement was from 93% to 106% due to methodical and systematic implementation of the program and scientific adoption of technologies, proper management as well as efficient monitoring and evaluation of the program in the 13 ASC farms and its command area.

From Table 1.17 it appears that during 2009-2010, the successful achievement of individual program were vegetables 48,100 MT against target of 47,900 (the achievement was 100%), vegetable seedlings 35.10 lakhs against target of 35 lakhs (the achievement was 101%), graft & gooties seedlings 26.10 lakhs against target of 27 lakhs (the achievement was 97%), coconut seedlings 255 lakhs against target of 275 lakhs (the achievement was 93%), and fruits 938 MT against target of 886 MT (the achievement was 106%).

#### **1.26 Distribution:**

The success of production and distribution of different activities under the program in the 13 Agro -Service Centers as well as in the project area during the year 2009-2010 is shown in the Table-1.19.



Table 1.19  
Statement showing the Activities of Production and Distribution of Vegetables, Spices,  
Grafts/Gooties, Coconuts, and Fruits in the ASC's and in the Project Area  
During 2008-2009 and 2009-2010

| Sl. No s. | Activities                            | Unit      | 2008-2009 |        | 2009-2010 |        | Achieved (in %) |         |
|-----------|---------------------------------------|-----------|-----------|--------|-----------|--------|-----------------|---------|
|           |                                       |           | Target    | Actual | Target    | Actual | 2008-09         | 2009-10 |
| 1.        | Vegetable Production                  | MT        | 47800     | 47900  | 47900     | 48100  | 100             | 100     |
| 2.        | Vegetable Distribution                | MT        | 47800     | 47900  | 47900     | 48100  | 100             | 100     |
| 3.        | Spices crop production                | MT        | 245       | 230    | 250       | 253    | 94              | 100     |
| 4.        | Spices crop distribution              | MT        | 245       | 230    | 250       | 253    | 94              | 100     |
| 5.        | Vegetable Seedlings Production        | '000' no. | 3500      | 3490   | 3500      | 3510   | 100             | 100     |
| 6.        | Vegetable Seedlings Distribution      | '000' no. | 3500      | 3490   | 3500      | 3510   | 100             | 100     |
| 7.        | Grafts/Gooties of fruits Production   | '000' no. | 2400      | 2350   | 2700      | 2610   | 98              | 97      |
| 8.        | Grafts/Gooties of fruits Distribution | '000' no. | 2400      | 2350   | 2700      | 2610   | 98              | 97      |
| 9.        | Coconut Seedlings Production          | '000' no. | 255       | 220    | 275       | 255    | 86              | 93      |
| 10.       | Coconut Seedlings Distribution        | '000' no. | 255       | 220    | 275       | 255    | 86              | 93      |
| 11.       | Fruits Production                     | MT        | 886       | 890    | 886       | 938    | 100             | 106     |
| 12.       | Fruits Distribution                   | MT        | 886       | 890    | 886       | 938    | 100             | 106     |

From Table 1.19, it appears that the performances of the activities of Agro-Service Centers in respect of production and distribution of all other crops excepting vegetable and vegetable seedling production and distribution have increased in 2009-10 than 2008-09.

### 1.27 Marketing:

Marketing plays a vital role in the activities of supplying produces to the consumers. BADC, side by side, with the production in ASC's and project areas provides marketing facilities to the farmers/producers to sell their produces at fair price. With this end in view, BADC has set up its own sale centers and introduced mobile transport facilities through which the produces of the centers and project area are being sold. In addition to that, the marketing of produces of the farmers in the project area has further improved with the improvement of transport facilities in the area.

### 1.28 Training:

The Agro -Service Centers (ASC), as a part of its activities, are imparting training to the farmers of the project area on modern agricultural technologies for production of improved variety of winter and summer vegetables, fruits, grafts, gooties etc. and other non-traditional crops. The farmers training is being conducted in groups formed in the blocks/units in the project area. Necessary allowances and conveyances are also given to the farmers for taking part in the

training program. This training to the farmers is a regular phenomenon of ASC's and the farmers take part in the training program with enthusiasm, this training has been helping the farmers to acquire modern agricultural crop production technologies, practices and management as well as build up their capacities and capabilities on production and maintaining qualities of produces. The progress of Farmers' Training conducted during last five years is shown in Table 1.20

Table 1.20  
Progress of Farmers Training

| Sl. No. | Year             | No. of Farmers Participated in the Training |        |            |
|---------|------------------|---|--------|------------|
|         |                  | Target                                      | Actual | % Achieved |
| 1.      | 2004-2005        | 8,000                                       | 5,600  | 70         |
| 2.      | 2005-2006        | 7,500                                       | 7,500  | 100        |
| 3.      | 2006-2007        | 7,500                                       | 7,500  | 100        |
| 4.      | 2008-2009        | 7,500                                       | 7,500  | 100        |
| 5.      | 2009-2010        | 7,500                                       | 7,500  | 100        |
|         | Five Years Total | 38,000                                      | 35,600 | 93.68%     |

## VI) NATIONAL VEGETGABLE SEED PROGRAM

### 1.29 Introduction:

With a view to meeting up the national requirements of quality vegetable seeds of improved varieties BADC has undertaken the visionary and pragmatic Vegetable Seed Program in 2009-10.

### 1.30 Objective:

- Production, processing, preservation, quality control and supply of foundation and truthfully labelled seeds of improved varieties of summer and winter vegetable.
- To provide support service to the private sector and NGOs for vegetable seed processing, preservation, seed testing and quality control.
- To provide training to the farmers on quality vegetable seed production and also provide them support services for processing, preservation, seed testing and quality control.

### 1.31 Activities of the Program:

- Multiplication of high yielding modern varieties of vegetable seeds and distributing among the farmers.
- Create awareness to the farmers on use of improved varieties of vegetable seeds.
- Dissemination of vegetable seed production technologies to the private sector, NGOs and farmers.

- Support services to the private sector, NGOs, and farmers through providing vegetable seed processing, preservation, seed testing and quality control.
- Training to the farmers, private sector, NGOs and seed dealers on vegetable seed technologies.
- Provide technical assistance to the private sector and NGOs for development of seed industries.

### 1.32 Vegetable Seed Farms:

The Vegetable Seed Program has been implementing through quality vegetable seed production of improved varieties at 2(two) Vegetable Seed Farms located at Rangpur and Meherpur, 2(two) Contract Growers' Zones adjacent to the Rangpur and Meherpur Vegetable Seed Farms. The vegetable seeds produced at Vegetable Seed Farms and Contract Growers' Zones are processed, preserved, seed testing and quality control at the Central Vegetable Seed Processing Center situated at Gabtoli, Mirpur, Dhaka.

### 1.32 Production:

The Vegetable Seed Program has been implementing since 2009-10 through production and distribution of foundation seed (FS) and truthfully labelled seeds (TLS) of improved varieties of vegetables. Production and distribution of FS and TLS of vegetables in 2009-2010 is shown in Table 1.21.

Table 1.21  
Production of Vegetable Seeds during 2009-2010

[Figure in metric ton]

| Sl. No. | Season | Foundation Seed | Truthfully Labelled Seed | Total |
|---------|--------|-----------------|--------------------------|-------|
| 1       | Kharif | 12.21           | 32.58                    | 44.79 |
| 2       | Rabi   | 22.61           | 35.01                    | 57.62 |
| Total   | 34.82  | 67.59           | 102.41                   |       |

It may be noted here that facilities for preservation of 6.202 MT vegetables seed in dehumidified storage was provided to the private sector in 2009-10.

### 1.33 Private Sector Service:

Support services provided to the private sector for preservation of vegetable seeds in 2009-10 is shown in Table 1.22

Table 1.22

Vegetable Seed Preservation facilities provided to the private sector in 2009-2010

(Figure in metric ton)

| Sl. Nos. | Name of the Private Sector       | Name of the Vegetable Seed Preserved         | Quantity Preserved (in MT) |
|----------|----------------------------------|--|----------------------------|
| 1        | Khulna Seed House, Khulna        | Hybrid Tomato, Carrot, Pumpkin               | 0.0785                     |
| 2        | Sonamoni Beej Bhandar, Sathkhira | Hybrid Cauliflower, Carrot & Pumpkin         | 0.050                      |
| 3        | United Seed Store, Dhaka         | Hybrid Cauliflower, Cabbage & Carrot         | 3.469                      |
| 4        | ACI Limited, Dhaka               | Hybrid Tomato & Water melon                  | 5.159                      |
| 5        | Rajdhani Seed Company, Dhaka     | Hybrid Tomato, Cauliflower, Cabbage & Carrot | 0.821                      |
| 6        | Agriconcern Seed Ltd., Dhaka     | Hybrid Water melon                           | 0.187                      |
| Total    |                                  |  | 9.7645                     |

## VII) BUFFER STOCK OF SEED AND ITS MANAGEMENT PROGRAM

### 1.34 Introduction:

The natural calamities like floods, cyclones, hailstorms, excessive rainfall, rainfed, drought etc are common phenomenon in Bangladesh. These types of abiotic stresses causes substantial damage to the seedbeds, seedlings, vegetative stages, standing crops and harvesting stages of seeds and commercial crops as a result farmers incurred innumerable losses. The consequence of the natural calamities is that the post calamities agricultural rehabilitation program badly suffers due to shortage of quality seeds of improved varieties. Keeping in view to overcoming the seed shortage due to natural calamities and to help maintaining continuity of agricultural production BADC has come forward through launching a proactive program namely "Management of Buffer Stock of Seed" under the revenue budget in July, 1997 and it was continued up to June, 2001. The project was further extended for the period of five years from July, 2001 to June, 2005.

Taking into the consideration of the successful impact and immense importance, BADC had attached priority to continue the program from July, 2005 to June 2010. BADC has decided to continue the program from July, 2010 to June, 2013. Under this priority program the buffer stock of cereal seeds particularly rice and wheat seeds has been maintaining annually.

### 1.35 Objectives:

The main objectives of the Program:

- To ensure buffer-stock of seed for making available at the time of any natural calamity.
- To ensure stable, fair and competitive price of seed; and
- To help the country maintaining its foodgrain production by ensuring normal cultivation of agricultural crops with the use of quality seeds during any natural calamity.

### 1.36 Seed Production Zones:

The “Buffer Stock of Seed and its Management Program” for At present, has been implementing through 10 (ten) Contract Growers Zones, the number of contract farmers involved with this program are 4,607. A list of Contract Growers Zones with Command Area and number of Contract Growers involved is shown in Table-1.23:

Table 1.23  
List of Contract Growers Zones, Command Area, and number of Contract Growers

| Sl. No. | Name of Contract Growers zones | Command Area (ha) | Total number of Contract Farmers involved |
|---------|--------------------------------|-------------------|---|
| 1       | Madhupur, Tangail              | 1197.98           | 1518                                      |
| 2       | Itakhola, Habiganj             | 925.50            | 526                                       |
| 3       | Jessore                        | 1393.52           | 729                                       |
| 4       | Thakurgaon                     | 874.90            | 314                                       |
| 5       | Chuadanga                      | 1446.56           | 412                                       |
| 6       | Tangail                        | 444.53            | 864                                       |
| 7       | Jamalpur                       | 461.54            | 131                                       |
| 8       | Kishoreganj                    | 121.46            | 67  |
| 9       | Patuakhali                     | 64.78             | 25  |
| 10      | Jhalokathi (Barisal)           | 38.46             | 21  |
| Total : |                                | 6,969.23          | 4,607                                     |

### 1.37 Production:

During 2009-2010, the success of the “Buffer Stock of Seed and Its Management Program” as shown in the Table 1.24 that total production of Rice and Wheat Seeds was 13,019 MT against target of 13,250 MT (the achievement was 98%). The production of Aman rice seed was 2,073 MT against target of 2,250 MT (the achievement was 92%), the production of Boro rice seed was 8,449 MT against target of 8,600 MT (the achievement was 99%), and the production of Wheat seed was 2,497 MT against target of 2,500 MT (the achievement was 100%).

Table 1.24

Target and Achievement of the “Buffer Stock of Seed  
and Its Management Program” during 2009-2010

(Figure in metric ton)

| Sl. Nos | Name of Seed     | Target | Achievement | % Achieved |
|---------|------------------|--------|-------------|------------|
| 1       | Rice Seed:       |        |             |            |
|         | Aman seed (TLS)  | 2080   | 1679        | 81         |
|         | Boro seed (TLS)  | 8283   | 8224        | 99         |
|         | Total Rice Seed  | 10363  | 9903        | 96%        |
| 2       | Wheat seed (TLS) | 2200   | 2200        | 100        |
|         | Grand Total Seed | 12563  | 12103       | 96 %       |

Note: TLS means Truthfully Labelled Seed

VIII) HYBRID VEGETABLE SEED PRODUCTION, PROCESSING,  
PRESERVATION AND DISTRIBUTION PROGRAM

**1.38 Introduction:**

- To attain sustainability in hybrid vegetable seed, the production, processing, preservation and distribution program for vegetable seeds has undertaken by BADC in 2009-10.

**1.39 Objectives of the Program:**

- Production of Hybrid Vegetable Seeds locally by using parental lines.
- To reduce the import of Hybrid Vegetable Seed.
- Dissemination of Hybrid Vegetable Seed technology to the farmers, private seed producers and NGOs.
- Training to the farmers, private sector, NGOs, seed dealers on hybrid vegetable seed production, seed processing, preservation and quality control technologies.
- Create awareness towards acceptability and utilization of hybrid seed to increase the production of hybrid vegetable seed.

**1.40 Activities of the Program:**

- Multiplication of high hybrid vegetable seeds and distributing among the farmers.
- Increase acceptability and use of hybrid vegetable seeds by the farmers.
- Extension of hybrid vegetable seed technology by providing training to the farmers, private sector, NGOs and seed dealers
- Support services to the farmers, private sector, and NGOs through providing facilities for hybrid vegetable seed processing, preservation, testing and quality control at vegetable seed processing center.

- Provide technical assistance to the private sector for development of hybrid vegetable seed industry.

## IX) HYBRID RICE SEEDS PRODUCTION, PROCESSING, RESERVATION AND DISTRIBUTION PROGRAM

### 1.38 Introduction:

Rice is strictly self-pollinated crop. In conventional rice varieties, each flower contains both male and female organs, allowing the plant to reproduce itself through self-pollination (called inbreeding). Hybrid rice seeds are produced from crossing two genetically different parents. This results in the phenomenon of heterosis-commonly known as hybrid vigor-and the consequent higher yields. Therefore, for developing commercial rice hybrids, use of a male sterility system is essential. Male sterility by genetic or non-genetic means makes the pollen unviable and such rice spikelets are incapable of setting seeds through selfing. Thus, a male sterile line can be used as female parent of a hybrid. A male sterile line, when grown side by side with a pollen parent in an isolated plot, can produce a bulk quantity of hybrid seed due to cross pollination with the adjoining fertile pollen parent. The seed set on male sterile plants is the hybrid seed which is used for growing the commercial hybrid crop. Hybrid rice is the commercial rice crop grown from F<sub>1</sub> seeds of a cross between two genetically dissimilar parents. Hybrid vigor is expressed during the plant's early vegetative and reproductive growth stages.

Good rice hybrids have the potential of yielding 15-20% more than the best inbred variety grown under similar conditions. To exploit the benefit of hybrid rice, farmers have to buy fresh seeds every cropping season. We need to go for hybrid rice because yield levels of semi-dwarf varieties/HYVs/Modern varieties of the green revolution era have reached the plateau. More and more rice has to be produced on less land and with less inputs. Demand for rice is rapidly increasing with the increase in population, especially in less developed countries. Hybrid rice varieties have shown 15-20% higher yield potential than inbred rice varieties under farmers' field conditions.

Adoption and success of hybrid rice technology will depend largely on practical seed production technology; economic seed yields from hybrid rice plots; and efficient national seed production, processing, certification, and distribution programs in public and private sector. Hybrid rice seed production technology involves specialized skills and requires a thorough understanding of various practices to minimize costs and maximize returns. Hybrid rice technology exploits the phenomenon of hybrid vigor and involves raising a commercial crop F<sub>1</sub> seeds. The hybrid rice was for the first time released to the farmers for commercial cultivation in 1998 in Bangladesh mainly through private sector initiatives. In the public sector hybrid rice namely SL-8H super hybrid rice was introduced from the Philippines by BADC, this hybrid rice was approved and released by the NSB (National Seed Board) Ministry of Agriculture in the year 2008 for commercial cultivation by the farmers. Although the formal hybrid rice research initiated in 1993 in public sector-BRRI, but the BRRI developed hybrid rice was for the first time commercially released in 2001.

Hybrid rice technology has two major components-(a) research and (b) seed production. Both components must be strong to ensure an appropriate impact of this technology at the farm level. The transfer of hybrid rice technology requires active participation by the seed industry in the public, private, and NGO sectors. To transfer the available technology expeditiously, mass-scale training in seed production is needed. China's success in exploring the use of hybrid rice to meet

its increasing demand for rice has been phenomenal. Bangladesh demonstrated success in using the same technology adapted to its conditions is equally inspiring and encouraging. Research at IRRI, China and in other countries indicates that hybrid rice technology offers opportunities for increasing rice varietal yields by 15-20% beyond those achievable with improved, semidwarf, inbred varieties. The economic viability and adoption rate of hybrid rice technology depend on the level of hybrid rice seed yields in a country. Hybrid rice seed production involves several important seed production techniques.

Seed yield obtained in a hybrid rice seed production plot is a function of (i) the yielding ability of the fertile counterpart of the male sterile line used, (ii) the proportion of male sterile lines in relation to the pollen parent, and (iii) the outcrossing rate of the male sterile line. Improving any of these functions can help to increase hybrid rice seed yields. This would also improve seed production economics if input costs remained unchanged.

The key factors for increased hybrid rice seed production are:

- Choice of suitable fields and ideal seasons,
- Synchronization of heading and flowering parents,
- Row ratio and row orientation,
- Field management,
- Small and horizontal flag leaves,
- The number of panicles per square meter,
- The number of spikelets per panicle,
- Good panicle exertion,
- Leaf clipping,
- Synchronized flowering of seed and pollen parents,
- Gibberellic acid (GA<sub>3</sub>) application,
- Supplementary pollination.

BADC has undertaken large-scale hybrid rice seed production, processing, preservation, quality control and distribution program in 2009-2010.

### **1.39 Objectives of the Program:**

- i. To decrease import dependency by increasing local production of hybrid rice seed.
- ii. To increase availability of hybrid rice seed to the farmers.
- iii. To arrange training to the farmers on hybrid rice technologies.
- iv. To select potential hybrid rice adaptable to Bangladesh agro-climatic conditions through conducting field trials and demonstrate to the farmers by organizing field-days.
- v. To develop pure and high out-crossing and synchronization capabilities parent lines and to preserve in the genetic resource division of BRRI.



#### **1.40 Activities of hybrid rice seed Program:**

- Production of hybrid rice seeds.
- Transfer the hybrid rice technology to the farmers.
- Training to farmers on hybrid rice technology.
- Arrange visit of farmers to the hybrid rice seed production fields to demonstrate the hybrid rice technology to the farmers.

#### Production of Hybrid Rice Seed in the Year 2009-10

|                       |   |            |
|-----------------------|---|------------|
| ○ Target              | : | 508.00 MT  |
| ○ Actual Production   | : | 410.130 MT |
| ○ Percentage Achieved | : | 80.73 %    |

## CHAPTER-II

### **2.01 Crop Sector under ADP (Annual Development Program):**

The Annual Development Program (ADP) is funded from the Revenue Budget of the Government of Bangladesh. BADC undertakes number of Projects under ADP on different important development sectors. As a continuous process of development activities a good number of Projects/Programs have been undertaken by BADC under ADP of Ministry of Agriculture for the greater interest of quality seed production, processing, preservation, quality control and distribution to the farmers. The main theme of these Projects/Programs are to promote higher yields (15-20% as globally recognized by using quality seed alone) of agriculture with ultimate objective of helping the country to attain self-sufficiency in foodgrain production.

List of Projects/programs under ADP

- I. Strengthening of Quality Seed Production Project.
- II. Tuber Crops Development Project.
- III. Pulse & Oil Seed Project.
- IV. Integrated Quality Horticulture Development Project.
- V. Modernization & Strengthening of Facilities to Increase Supply of Quality Seeds.
- VI. Private Seed Sector Development Project.
- VII. Integrated Soybean Cultivation Project (BADC Component)
- VIII. Integrated Project for Increasing the Production of Onion, Garlic, Ginger, Turmeric and Chili.
- IX. Development & Multiplication of Agricultural Seed (2<sup>nd</sup> Phase).

### **I. STRENGTHENING OF QUALITY SEED PRODUCTION PROJECT**

#### **2.02 Introduction:**

BADC as a public sector organization is mandated to produce quality seeds and supply to the farmers. BADC performs this activities through its routine program and also through various Project and Programs. Although BADC as a public sector organization have its limitations but has been playing a pioneering roles to supply quality seeds against national requirements. BADC has earned reputation and popularity to the distributors and farmers in the seed supply chain system by supplying quality assured seeds.

BADC had started with the supply of only 13.8MT of quality seed in 1960s which is measured to be below 0.1% against the national requirements of seeds of all agricultural crops. At present BADC could have successfully achieved its glorious performances to the extent of supplying average 13% quality seed against national requirement for all agricultural crops. The contribution of supplying major crops like rice seed is above 38%,(Boro 64%, Aman 25%, Aus 5%), wheat seed is 44%, jute seed is 40%, potato seed is 3%, vegetable seed is 4%, pulse seed is 6%, oilseeds is 6%, spices seed is 0.1%.

In the formal and organized seed supply system BADC has undertaken a Cereal Seed Program namely “Strengthening of Certified Seed Production Program” for the Five Year period of 1997-2002. It was further revised for the period of 1997-2005. Later BADC launched a new

Project “Strengthening of Quality Seed Production Project” for the period of 2005-2008. During this period BADC could have produced and distributed 55,000 MT of cereal seeds of improved varieties. BADC has undertaken a visionary program for production and supply of 1,40,000 MT of quality seeds (rice, wheat, and maize) during 2008-2013.

### 2.03 Objectives:

- i. To produce 1,40,000 MT of quality cereal seeds(paddy, wheat & maize) through contract growers.
- ii. To process, preserve, quality control and distribution of seeds to the farmers.
- iii. To impart training to the farmers and private entrepreneurs on seed production, preservation, quality control technologies.
- v. To provide services to the private entrepreneurs on seed production, processing, preservation and quality control.
- vi. To help self-sufficiency of foodgrain production of the country through use of quality seeds.

### 2.04 Seed Production Zones and Processing Centers:

Under this project there are 12 (twelve) Contract Growers Zones for seed production and every zone has a Seed Processing Centre for seed processing, preservation, and quality control of seed.. Detailed description of the 12 Contract Growers Zones, along with area under each zone, number of farmers involved, Seed Processing Centers, and seed storage capacity are shown in Table-2.01.

Table 2.01

List of Contract Growers Zones along with Number of Farmers for Strengthening Quality Seed Production Project, Area under Each Contract Growers Zones and Capacity of Seed Storage in Seed Processing Centers

| Sl. No. | Name and Location of Contract Growers Zones | Command Area (ha) | Number of Farmers involved | Storage capacity of Seed Processing Center (MT) |
|---------|---|-------------------|----------------------------|---|
| 1       | Morakhola, Mymensingh                       | 1210              | 594                        | 2100  |
| 2       | Doulotdiar, Chuadanga                       | 1630              | 1565                       | 2970  |
| 3       | Tazhat, Rangpur                             | 561               | 276                        | 1850  |
| 4       | Puran Bogra, Bogra                          | 1235              | 527                        | 1360  |
| 5       | Mohipal, Feni                               | 1335              | 1142                       | 1075  |
| 6       | Kadamtali, Sylhet                           | 520               | 140                        | 680   |
| 7       | Narikeltola, Satkhira                       | 2572              | 1411                       | 1230  |
| 8       | Shibganj, Thakurgaon                        | 3373              | 1240                       | 1500  |
| 9       | Technogopara, Gazipur                       | 1524              | 994                        | 1150  |
| 10      | Shahpur, Banderpara, Jamalpur               | 936               | 609                        | 1850  |
| 11      | Netrokona                                   | 335               | 130                        | 1300  |
| 12      | Kishoreganj                                 | 308               | 101                        | 600   |
| Total : |   | 15,539            | 8,729                      | 17,665  |

## 2.05 Production, Processing and Preservation of Seeds:

The target and actual production of rice, wheat and Maize seeds in 2009-10 and actual production in 2008-09 is shown in Table-2.02

Table 2.02

Target and Actual Production of Rice, Wheat and Maize Seeds  
In 2009-10 and Actual Production in 2008-09.

(Figure in MT)

| Sl. No. | Name of Seed | 2008-09<br>Actual | 2009-2010 |           | % Achieved |         |
|---------|--------------|-------------------|-----------|-----------|------------|---------|
|         |              |                   | Target    | Actual    | 2009-10    | 2008-09 |
| 1       | Rice Seed:   |                   |           |           |            |         |
|         | Aman         | 5523.09           | 7260.00   | 7021.22   | 97         | 127     |
|         | Boro         | 12345.87          | 18503.00  | 17547.95  | 95         | 142     |
|         | Total Rice:  | 17,868.96         | 25,763.00 | 24,569.17 | 95         | 137     |
| 2       | Wheat        | 6,699.48          | 7,300.00  | 7,300.00  | 100        | 109     |
| 3       | Maize        |                   | 31.00     | 13.10     | 42         |         |
|         | Grand Total: | 24,568.44         | 33,094.00 | 31,882.27 | 96         | 130     |

From Table-2.02 it appears that, in 2009-10 the total production of rice, wheat and maize seeds was 31,882.27 MT against target of 33,094.00 MT (the achievement was 96%), in 2008-09 the production was 24,568.44, achievement was 130%. In 2009-10 the production of rice seed was 24,569.17 MT against target of 25,763.00 MT (the achievement was 95%), in 2008-09 the rice seed production was 17,868.96 MT, the achievement was 137%. In 2009-10 the production of wheat seed was 7,300 MT against target of 7,300 MT (the achievement was 100%), the production of maize seed was 13.10 MT against target of 31 MT (the achievement was 42%), in 2008-09 the production of wheat seed was 6,699.48 MT, the achievement was 109%.

## II. TUBER CROPS DEVELOPMENT PROJECT

### 2.06 Introduction:

Potato is the third most important food crop in the world after rice and wheat in terms of human consumption. More than a billion people worldwide eat potato, and global total potato crop production exceeds 300 million metric tons. Potato is a critical crop in terms of food security in the face of population growth and increased hunger rates. For example, China, the world's biggest consumer of potatoes, expects that fully 50% of the increased food production it will need to meet demand in the next 20 years will come from potatoes. The first modern "convenience food," potato is energy-rich, nutritious, easy to grow on small plots, cheap to purchase, and ready to cook without expensive processing. CIP's (in Peru) genebank maintains the largest collection of potato in the world, including more than 7,000 accessions of native, wild, and improved varieties.

In Bangladesh potato is considered to be most important food crop next to rice and wheat. Bangladesh achieved a remarkable success in potato production to take it to sixth rank in the

world map. Potato has a great impact on our national economy and food security point of view. To feed the increasing population, potato can play an important role in Bangladesh. The per capita consumption of potato as vegetable is 40kg per head per annum (kg/h/a) It can help substantially to reduce pressure on cereals if the production is increased as well as food habit of the people could be changed and the diversified use of potato like industrial processing and export are explored.

Higher yield is pre-requisite to minimize the cost of production of potato. The role of quality seed potato is pivotal to increase per unit yield. The national average per unit yield is around 15 MT/ha, which is very poor. The main reason of poor yield is using poor quality seed potato by the farmers.

To overcome the yield gap and ensure availability of quality seed potato of improved varieties, BADC initiated a breakthrough program by importing quality seed potato for the first time in Bangladesh in 1960s. A Project was undertaken by BADC namely “Potato Seed Production, Procurement, Preservation and Distribution” in 1969-70. To preserve seed potato, 5 Cold Storages were established by 1978 by BADC.

During the period of 1987-1995, BADC established 5 new cold storages under the “Crop Diversification Program (CDP).” During the period of Second Phase of the CDP in 1995-2000, three new cold storages were established by BADC, the capacity of each cold storages are 1,000 MT, the cold storages were installed at Domar, Sromongal and Sherpur. The capacity of cold storages of Chandpur and Kashimpur were increased from 500 to 750 MT of each by 2000. By 2000, the total capacity of 13 cold storages of BADC were 11,000 MT. During the period of 2004-2008, the Project namely “Potato Seed Project,” 5 more cold storages were established and also increased the capacity of old 3 cold storages through BMRE (Balancing, Modernization, Rehabilitation and Expansion). Finally the total number of 18 cold storages were established by 2004-2008 period and capacity was increased to 16,950 MT.

At present the area under potato cultivation, use of quality potato, production and yield per hectare have significantly increased. But there is scope to further improvement.

The role of BADC in supplying quality seed potato is limited to 2.3% to 2.5% against national requirement of quality seed potato (around 6 lakh metric tons of seed potato is required). Keeping in view to increasing the supply volume of quality seed potato, BADC has been implementing the “Tuber Crops Development Project.”

### **2.07 Objective:**

- a) To increase supply of quality seed potato in the country through production, preservation and distribution.
- b) To produce potato breeder seed through tissue culture technique in order to reduce import dependency.
- c) To improve quality of seed potato through training to the contract growers, NGO’s, private seed producers, unemployed men and women.
- d) To increase yield of potato by using quality seeds of improved varieties.
- e) To help the country in achieving food security through production of more potato, income generation and alleviate poverty.

### **2.08 Contract Growers’ Zones:**

BADC has 16 Contract Growers Zones(CGZ) located at different agro-climatic conditions and agro-ecological zones of the country. BADC producing quality TLS (Truthfully Labelled Seed) through these sixteen CGZs under direct supervision, monitoring and quality control by efficient and experienced officials and staff of BADC. The list of CGZ, command area under each CGZ,

area under each CGZ, number of farmers under each command area and number of farmers involved in seed potato production in 2009-10 are shown in Table-2.03.

Table 2.03

List of Contract Growers Zones, Command Area, Area under Cultivation, number of Farmers under Command Area and number of Farmers involved in Seed Potato production in 2009-10

| Sl. No. | Name of Contract Growers Zones | Command Area (ha) | Area Cultivated in 2009-10 (ha) | No. of Farmers in the Command Area | No. of Farmers involved |
|---------|--------------------------------|-------------------|---------------------------------|------------------------------------|-------------------------|
| 1       | Kashimpur, Gazipur             | 218.04            | 91.09                           | 266                                | 118                     |
| 2       | Jamalpur                       | 400.81            | 148.58                          | 1046                               | 321                     |
| 3       | Sherpur                        | 517.48            | 125.51                          | 1275                               | 111                     |
| 4       | Kishoreganj                    | 485.87            | 129.55                          | 1476                               | 357                     |
| 5       | Srimongal                      | 15.36             | 12.15                           | 27                                 | 27                      |
| 6       | Homna, Comilla                 | 63.04             | 40.49                           | 275                                | 44                      |
| 7       | Chandpur                       | 187.91            | 80.97                           | 379                                | 95                      |
| 8       | Faridpur                       | 322.27            | 101.21                          | 677                                | 273                     |
| 9       | Jessore                        | 350.23            | 109.31                          | 951                                | 68                      |
| 10      | Baradi, Meherpur               | 165.53            | 52.63                           | 212                                | 57                      |
| 11      | Kustia                         | 207.06            | 32.39                           | 521                                | 47                      |
| 12      | Rajshahi                       | 244.13            | 117.41                          | 714                                | 335                     |
| 13      | Bogra                          | 241.21            | 64.37                           | 438                                | 59                      |
| 14      | Rangpur                        | 259.94            | 97.45                           | 469                                | 29                      |
| 15      | Nashipur, Dinajpur             | 116.63            | 60.73                           | 212                                | 100                     |
| 16      | Thakurgaon                     | 252.5             | 95.14                           | 485                                | 134                     |
|         | Total:                         | 4,048.01          | 1,358.98                        | 9,423                              | 2,175                   |

### 2.09 Production:

The Table-2.04 shows the variety wise target & actual production of seed potato through Contract Growers Zones during 2009-2010 and actual production in 2008-2009.

Table 2.04  
Target and actual production of seed potato through Contract Growers Zones  
during 2009-2010 and actual production in 2008-2009

(Figure in MT)

| Name of<br>Seed Potato<br>Variety | 2008-2009 | 2009-2010 |           | % Achieved |           |
|-----------------------------------|-----------|-----------|-----------|------------|-----------|
|                                   | Actual    | Target    | Actual    | 2009-2010  | 2008-2009 |
| Diamant                           | 4291.18   | 8705.00   | 8734.72   | 100        | 204       |
| Cardinal                          | 3107.31   | 2941.32   | 3057.92   | 104        | 98        |
| Asterix                           | 1595.28   | 2283.86   | 2273.85   | 100        | 143       |
| Felsina                           | 3135.08   | 0         | 0         |            |           |
| Granola                           | 2279.95   | 4496.42   | 4702.85   | 105        | 206       |
| Provento                          | 112.40    | 0         | 0         |            |           |
| Courage                           | 34.00     | 126.70    | 103.77    | 82         | 305       |
| Multa                             | 5.60      | 0         | 0         |            |           |
| Patrones                          | 10.40     | 0         | 0         |            |           |
| Seedling Tuber                    | 27.90     | 30        | 26.40     | 88         | 95        |
| Total:                            | 14,599.10 | 18,583.30 | 18,899.51 | 102        | 129       |

From table 2.04 it appears that, BADC through its Contract Growers Zones produced 18,599.51 MT. seed potato during 2009-10 against the target of 18,583.30 MT (the achievement was 102%), in 2008-09 the actual production was 14,599.10 MT, the achievement was 129%.

### III. PULSE & OIL SEED PROJECT

#### 2.10 Introduction:

Bangladesh is deficit in edible oil and pulse production. According to WHO/FAO the daily requirements of edible oil are 22g/h/d and pulse are 45g/h/d to fulfill the daily nutritional requirements. But in Bangladesh, the present consumption of edible oil is around 12 g/h/d and pulse is around 10 g/h/d. At present we have to import sufficient quantities of oilseeds, crude oil and grain pulses to meet up the national deficiency in edible oil and pulses. There is enormous potentiality because the agroclimatic conditions and agro-ecological zones are suitable to produce oilseeds and pulses in Bangladesh. There are improved varieties and technologies by which at least one-third of requirements can be fulfilled through local production of oilseeds and pulses. The productivity of oilseed and pulse production per nit is poor because of non-availability of required quantity of quality seeds.

With a view to overcoming the dilemma of shortage of quality seed, BADC took the initiative and launched a proactive and well-thought visionary Project namely “Production, Processing and Distribution of Quality Pulse and Oilseeds” during the Second Five Year Plan period of 1980-85. Having inspired with the successful impact, the Project was continued up to 2004-2008 period. During the Bridge Phase of 2008-09 the Project was implemented through BADC’s own fund. Taking into active consideration of the national interest for supporting the country to minimize import basket of oilseed and pulse by infusion of efforts for increasing local production, the Project was highly appreciated and approved in the ECNEC for its continuation up to the period of July 2009 to June 2014 with the target of production of 13,880 MT of quality pulse and oilseeds by BADC.

### **2.11 Objectives:**

- To ensure supply of 3,435 MT of quality foundation seed (FS) and 10,445 MT of truthfully labeled seed (tls) of pulse & oil seeds to the farmers.
- To develop facilities for processing, preservation, quality control of pulse and oil seeds.
- To impart train to the contract growers, private seed entrepreneurs and NGOs on seed production, processing and preservation of pulse and oilseeds.
- To ensure supply of FS and TLS of pulse and oil seed to different programs of the Government for increasing national production.

### **2.12 Activities of the Project:**

- Production of 3,435 MT of FS and 10,445 MT of TLS of pulse & oil seed.
- Providing training to 3,000 contract growers and 60 officials and staff of BADC.
- Procurement of different agricultural machineries and implements such as tractor, power tiller, disc harrow and disc plough, rotavator, cleaner-cum-grader, dehumidifier, deep tube well etc.
- Construction of seed storage buildings, office rooms, farmers training rooms, inspection rooms, covered and open threshing floors.

### **.13 Seed Production Zones:**

Under the project there are 7 Contract Growers Zones (CGZ) with a command area of 4,438.87 hectares and number of farmers involved are 3,340. The List of CGZ is shown in Table-2.05.



Table 2.05

Location, Command Area, No. of Farmers involved in the Contract Grower Zones under Pulse and Oil Seed Project

| Sl. No. | Location of Contract Growers Zones | Command Area (ha) | No. of Farmers involved |
|---------|------------------------------------|-------------------|-------------------------|
| 1       | Amjhupi Contract Growers Zone      | 830.77            | 1683                    |
| 2       | Tebunia Contract Growers Zone      | 1080.57           | 660                     |
| 3       | Narsingdi Contract Growers Zone    | 868.42            | 1239                    |
| 4       | Brahmanbaria Contract Growers Zone | 639.27            | 378                     |
| 5       | Feni Contract Growers Zone         | 834.41            | 401                     |
| 6       | Tangail Contract Growers Zone      | 357.89            | 253                     |
| 7       | Rajshahi Contract Growers Zone     | 379.35            | 219                     |
| 8       | Faridpur Contract Growers Zone     | 278.95            | 190                     |
| Total : |                                    | 4438.87           | 3340                    |

Table-2.06

Location and Area of the Farms and Storage facilities under Pulse and Oil Seed Project

| Sl. Nos. | Location of the Office                      | Area (Acre) | Surveyed Area (ac) | No. of Scheme | No. of contract growers | Storage capacity (MT) |
|----------|---|-------------|--------------------|---------------|-------------------------|-----------------------|
| 1.       | Amjhupi Farm, Meherpur                      | 18.83       | -                  | -             | -                       | -                     |
| 2.       | Tebunia Farm, Pabna                         | 12.55       | -                  | -             | -                       | -                     |
| 3.       | Faridpur Farm                               | 7.29        | -                  | -             | -                       | -                     |
| 4.       | Amjhupi Seed Processing Center, Meherpur    | -           | -                  | -             | -                       | 550                   |
| 5.       | Tebunia Seed Processing Center, Pabna       | -           | -                  | -             | -                       | 750                   |
| 6.       | Narsingdi Seed Processing Center, Narsingdi | -           | -                  | -             | -                       | 350                   |
| Total :  |   | 38.67       | -                  | -             | -                       | 1650                  |

## 2.14 Production, Processing and Preservation:

The main components of this project are production, processing and preservation of FS & TLS of Pulses & Oil seed. The target and achievement of the project during 2009-10 and actual achievement in 2008-09 are shown in Table-2.07:

Table 2.07

### Production, Processing and Preservation of Pulses & Oils Seeds

| Name of Seed | 2008-2009<br>Actual<br>(MT) | 2009-2010      |                | % Achieved |           |
|--------------|-----------------------------|----------------|----------------|------------|-----------|
|              |                             | Target<br>(MT) | Actual<br>(MT) | 2009-10    | 2008-2009 |
| Pulse Seed   | 668.49                      | 1020           | 1208           | 118        | 181       |
| Oil Seed     | 727.45                      | 1070           | 1012           | 95         | 139       |
| Total:       | 1,395.94                    | 2,090          | 2,220          | 106        | 159       |

In 2009-2010 a total quantity of 2,220 MT of seed was produced, processed, and stored against target of 2,090 MT (the achievement was 106%). In 2008-09 the actual production was 1,395.94 MT, the achievement was 159%. In 2009-10, the crop-wise achievement were pulse seed production 1,208 MT against target of 1,020 MT (the achievement was 118%), the oilseed production was 1,012 MT against target of 1,070 MT (the achievement was 95%). In 2008-09, the actual production of pulse seed was 668.49 MT (the achievement was 181%), and Oilseed was 727.45 MT (the achievement was 139%).

## 2.15 Procurement and Construction:

The Project was commenced in 2009-10, as such the procurement activities was limited. The progress of procurement of machinery and equipment of the Project in 2009-10 is stated hereunder:

| Item               | Procured (in No.) |
|--------------------|-------------------|
| • Moisture meter   | : 4               |
| • Fumigation sheet | : 8               |
| • Tarpaulin        | : 50              |
| • Gunny bags       | :                 |

## **IV. INTEGRATED QUALITY HORTICULTURE DEVELOPMENT PROJECT**

### **2.16 Introduction:**

The Project namely “Horticulture Development Project (HDP)” for the period of July 1989 to June 1999, funded by Asian Development Bank (ADB) and United Nations Development Program (UNDP), there were three implementing agencies, (a) BADC, and (b) DAE (Department of Agricultural Extension) were responsible for development and extension of horticulture crops, and (c) BARI (Bangladesh Agricultural Research Institute) was assigned with research component for horticulture crops.

Under the project, BADC has established 9 (nine) Horticulture Development Centers (HDC), 9 (nine) Sales Centers and one Cold Storage for preservation of Vegetables and Fish. These facilities are still using under the Horticulture Development Project.

After completion of First Phase of the HDP, the Second Phase was commenced for the period of January 2000 to June 2005 funded by the Revenue Budget of the GoB (Government of Bangladesh).

After completion report submitted to the Ministry of Agriculture (MoA), the MoA instructed BADC to prepare and submit Project Proposal for next 3 years of the existing Horticulture Development Project. Accordingly BADC prepared and submitted “Development Project Proposal (DPP)” with an amount of Tk. 279.103 million for 3 (three) years effective from July 2005 to June 2008. On the basis of final project proposal a meeting of pre-evaluation committee was held on 13-04-2006 in the Planning Commission. The DPP has been finally prepared keeping in conformity with the decision of the Project Evaluation Committee.

At present BADC is implementing “Integrated Quality Horticulture Development Project (IQHDP)” Phase-II approved by ECNEC on 6th July 2010 for the period of July 2010 to December 2013.

Fruits and vegetables are the sources of different vitamins and minerals. The people of Bangladesh consume less quantity of vegetables and fruits in their daily diet compared to minimum requirement. At present Bangladesh is on the road map of self-sufficiency in foodgrain production particularly in cereals, but the production of vegetables and fruits are not yet achieved self-sufficiency. More over the production of spices crops have been decreasing sharply over the years and huge amount of foreign exchange are being spent for import of different spices. Government has given special emphasis and importance on accelerating production of fruits, vegetables and spices side by side with cereal crops.

The farmers of newly selected project area are being provided with practical training to the farmers and demonstration in the Horticulture Development Centres (HDC) and in the Project area. The farmers are being motivated and develop their skillness on production of horticultural crops. It will help increase production of vegetables and fruits on commercial basis, provide self employment and create income generation opportunities in the Project area.

## 2.17 Objectives of the Project:

- i. To produce improved quality of seeds, seedlings, grafts, gooties, saplings, cuttings of high yielding varieties of fruits, vegetables, flowers, orchids, ornamental and medicinal plants etc. in the demonstration farms of Horticulture Development Centers and ensure distribution among the farmers as well as nearby city/town dwellers.
- ii. To increase production of quality fruits, vegetables, spices at farm level and provide support services along with logistic facilities for marketing of these produces in local & export market with a view to increasing supply of horticultural products and to remove malnutrition as well as create employment opportunity for poor people including destitute women and generate income.
- iii. To motivate “Project area farmers” in newly selected area to increase cultivation of vegetables, fruits, flowers, spices of modern varieties of horticultural crops.
- iv. To transfer modern and appropriate technology and promoting new varieties of Horticulture evolved by Research Institutes and Agricultural Universities at farmer’s level and selected project area for sustainable development.
- v. To provide training to the Farmers of the Poject area, Nurserymen and NGOs on modern & appropriate technologies on horticultural crops with a view to developing technical expertise and skillness of farmers & others concerned.
- vi. To organize and setup demonstration plots/farms in the Horticulture Development Centers and Project area to demonstrate new varieties OF horticulture crops along with modern technologies.
- vii. To provide assistance in marketing of horticultural products produced in “Project area” for getting fair prices.
- viii. To provide technical support and assistance on Production, Marketing and Storage of fruits and vegetables in the Project area farmers and exporters with a view to strengthening export-oriented activities of fruits and vegetables in private sector.
- ix. To disseminate latest technology for qualitative and quantitative improvement of horticulture.
- x. To introduce tissue culture technology for varietal purity of Potato, Banana, Papaya, Strawberry etc.
- xi. To introduce organic agriculture in HDC and Project area as a method of biodiversity.
- xii. To provide technical and logistic support to the producer and exporter to reduce post harvest losses.

## 2.18 Location and Area of Horticulture Development Centers:

Table-2.08

| Name                                | District                         | Area (ha) | Command Area (ha) |
|-------------------------------------|----------------------------------|-----------|-------------------|
| 1. Kashimpur HDC                    | Gazipur                          | 25.78     | 1620              |
| 2. Patiya HDC                       | Chittagong                       | 10.08     | 1620              |
| 3. Rajshahi HDC                     | Rajshahi                         | 8.14      | 1620              |
| 4. Jessore HDC                      | Jessore                          | 8.17      | 1620              |
| 5. Tangail HDC                      | Tangail                          | 5.83      | 1620              |
| 6. Muktagachha HDC                  | Mymensingh                       | 6.88      | 1620              |
| 7. Bogra HDC                        | Bogra                            | 4.86      | 1620              |
| 8. Comilla HDC                      | Comilla                          | 4.05      | 1620              |
| 9. Kushtia HDC                      | Kushtia                          | 4.86      | 1620              |
| 10. Vegetable and Fish Cold storage | Dhaka                            | -         | 162               |
| 11. Urban Sales Centres             | 4 different places of Dhaka city | -         | -                 |
| Total:                              |                                  | 78.65     | 14742             |

## 2.19 Production and Distribution:

### 2.19.1 Production:

Though there was no approved Project in Horticulture Division during FY 2009-10 but the Horticulture Division of BADC has made remarkable achievement through production of fruits, vegetables, spices, seedlings, saplings, grafts, gooties etc. Table 2.09 shows the target and actual production of vegetables, fruits, graft/gooties in Horticulture Development Centers as well as in the Project area during the year 2009-2010.

Table 2.09

## Target and Actual Production of Vegetables, Fruits, Grafts/Gooties in Horticulture Development Centers during 2009-2010

| Sl. No s.                 | Item                         | Unit      | Target |         |        | Actual   |           |           | % Achieved |
|---------------------------|------------------------------|-----------|--------|---------|--------|----------|-----------|-----------|------------|
|                           |                              |           | Farm   | Project | Total  | Farm     | Project   | Total     |            |
| 1. Vegetables             |                              |           |        |         |        |          |           |           |            |
| 1.1                       | Summer Vegetables            | mt.       | 95     | 65200   | 65295  | 96.15    | 55642     | 55738.15  | 85.36      |
| 1.2                       | Winter Vegetables            | mt.       | 220    | 140050  | 140270 | 170      | 140100    | 140270    | 100        |
| 2. Seedlings and Saplings |                              |           |        |         |        |          |           |           |            |
| 2.1                       | Vegetable & Spices Seedlings | '000' no. | 2200   | 12000   | 14200  | 2250     | 13000     | 15250     | 107.39     |
| 2.2                       | Fruit Seedlings              | '000' no. | 400    | 2400    | 2800   | 327.38   | 2081.43   | 2408.81   | 86.03      |
| 2.3                       | Flower Seedlings             | '000' no. | 50     | 1000    | 1050   | 29.32    | 793.90    | 823.22    | 78.40      |
| 2.4                       | Medicinal Plant Seedlings    | '000' no. | 20     | 145     | 165    | 8.75     | 130.73    | 139.48    | 84.53      |
| 2.5                       | Other Seedlings              | '000' no. | 30     | 660     | 690    | 15.76    | 649.33    | 665.09    | 96.39      |
| 2.6                       | Coconut Seedlings            | '000' no. | 210    | 0       | 210    | 210      | 0         | 210       | 100        |
| 3. Grafts and Gooties     |                              |           |        |         |        |          |           |           |            |
| 3.1                       | Graft/ Gooties of Fruits     | '000' no. | 70     | 800     | 870    | 52.84    | 586       | 638.84    | 73.43      |
| 3.2                       | Graft/ Gooties of Flowers    | '000' no. | 20     | 380     | 400    | 11.21    | 286.96    | 298.17    | 74.54      |
| 4. Seeds                  |                              |           |        |         |        |          |           |           |            |
| 4.1                       | Vegetable & Other Seeds      | kg        | 10978  | 5000    | 15978  | 41227.15 | 2683.50   | 43910.65  | 274.82     |
| 5. Fruits                 |                              |           |        |         |        |          |           |           |            |
| 5.1                       | Different Fruits             | mt.       | 8,000  | 40,000  | 48,000 | 8,599.05 | 41,131.23 | 49,730.28 | 103.60     |

In 2009-10, it appears that significant quantity of seeds, vegetables, fruits, seedlings, grafts/gooties, have been produced and marketed through 9 Horticulture Development Centers and Command area. In 2009-10, a program to produce 2,05,565 MT of vegetables, 19,115 thousands seedlings and saplings of vegetable & spices, fruits, flowers, medicinal plants, coconut and other crops, 1,270 thousands grafts/gooties of flowers & fruits, 15,978 kg vegetables & other seeds and 48,000 MT fruits in 9 Horticulture Development Centers and in the Project area.

In 2009-10, the actual production was 196,008.15 MT of vegetables (95.35% against target), 19,496.60 thousands seedlings and saplings of vegetable, spices, fruits, flowers, medicinal plants, coconut and other crops (101.99% against target), 937.01 thousands grafts/gooties of flowers & fruits (73.38% against target), 43,910.65 Kg vegetables & other seeds (274.82%

against target) and 49,730.28 MT fruits (103.60% against target) in 9 Horticulture Development Centers and in the Project area.

### 2.19.2 Distribution:

Table 2.10 shows the target and actual distribution of vegetables, fruits, seeds and seedlings during the year 2009-2010.

Table 2.10  
Target and Actual Distribution of Vegetables, Fruits, Grafts/Gooties and Seeds in Horticulture Development Centers during 2009-2010

| Sl. No.                   | Item                        | Unit      | Target |         |       | Actual   |          |          | % Achieved |
|---------------------------|-----------------------------|-----------|--------|---------|-------|----------|----------|----------|------------|
|                           |                             |           | Farm   | Project | Total | Farm     | Project  | Total    |            |
| 1. Vegetables             |                             |           |        |         |       |          |          |          |            |
| 1.1                       | Summer Vegetables           | mt.       | 97     | 56450   | 56547 | 95.95    | 56417.00 | 56512.95 | 99.94      |
| 1.2                       | Winter Vegetables           | mt.       | 190    | 91160   | 91350 | 188.63   | 91149.00 | 91337.63 | 99.99      |
| 2. Seedlings and Saplings |                             |           |        |         |       |          |          |          |            |
| 2.1                       | Vegetable & Spice Seedlings | '000' no. | 530    | 6250    | 6780  | 529.68   | 6247.95  | 6777.63  | 99.97      |
| 2.2                       | Fruit Seedlings             | '000' no. | 390    | 1850    | 2240  | 385.83   | 1848.98  | 2234.81  | 99.77      |
| 2.3                       | Flower Seedlings            | '000' no. | 32     | 790     | 822   | 30       | 783.10   | 813.10   | 98.92      |
| 2.4                       | Medicinal Plant Seedlings   | '000' no. | 18     | 160     | 178   | 1576     | 149.33   | 165.09   | 92.75      |
| 2.5                       | Other Seedlings             | '000' no. | 82     | 750     | 832   | 38.95    | 747.94   | 826.89   | 99.39      |
| 2.6                       | Coconut Seedlings           | '000' no. | 203    | 0       | 203   | 203      | 0        | 203      | 100.00     |
| 3. Grafts and Gooties     |                             |           |        |         |       |          |          |          |            |
| 3.1                       | Graft/ Gooties of Fruits    | '000' no. | 76     | 620     | 696   | 74.81    | 617.35   | 692.16   | 99.45      |
| 3.2                       | Graft/ Gooties of Flowers   | '000' no. | 12     | 285     | 297   | 10.69    | 283.49   | 294.18   | 99.05      |
| 4. Seeds                  |                             |           |        |         |       |          |          |          |            |
| 4.1                       | Vegetable & Other Seeds     | kg        | 41230  | 3150    | 44380 | 41225.55 | 3106.50  | 44332.05 | 99.89      |
| 5. Fruits                 |                             |           |        |         |       |          |          |          |            |
| 5.1                       | Different Fruits            | mt.       | 8610   | 40120   | 48730 | 8602.10  | 40116.23 | 48718.33 | 99.98      |

From Table 2.10, it appears that during 2009-2010 there was a Program to distribute 1,47,897 MT of vegetables, 11,055,000 seedlings and saplings of vegetable & spices, fruits, flowers, medicinal plants, coconut and other crops, 9,93,000 grafts/ gooties of flowers & fruits, 44,380 kg vegetables & other seeds and 48,730 MT fruits in 9 Horticulture Development Centers and in the Project area.

In 2009-10, the actual distribution was 147,850.58 MT of vegetables (99.97% against target), 11,020.52 thousands seedlings and saplings of vegetable & spices, fruits, flowers, medicinal plants, coconut and other crops (99.69% against target), 986.34 thousands grafts/gooties of flowers & fruits (99.33% against target), 44,332.05 kg vegetables & other seeds (99.89% against target), and 48,718.33 MT fruits (99.98% against target) in 9 Horticulture Development Centers and in the Project area.

A comparative statement regarding the activities of Horticulture Development Centers during the year 2008-2009 and 2009-2010 is shown in Table 2.11



Table 2.11

Comparative Statement showing the Activities (Production & Distribution)  
of HDC's during 2008-2009 and 2009-2010

| Sl. No. | Activities                               | Unit      | 2008-2009 |        | 2009-2010 |           | Achievement (%) |           |
|---------|--|-----------|-----------|--------|-----------|-----------|-----------------|-----------|
|         |  |           | Target    | Actual | Target    | Actual    | 2008-2009       | 2009-2010 |
| 1.1     | Vegetable Production                     | mt.       | 205460    | 192405 | 205565    | 196008.15 | 94              | 95.35     |
| 1.2     | Vegetable Distribution                   | mt.       | 192405    | 185561 | 147897    | 147850.58 | 96              | 99.97     |
| 2.1     | Vegetable & Spices Seedling Production   | mt.       | 14130     | 14347  | 14200     | 15250     | 102             | 107.39    |
| 2.2     | Vegetable & Spices Seedling Distribution | mt.       | 14347     | 11580  | 6780      | 6777.63   | 81              | 99.97     |
| 3.1     | Fruit Seedlings Production               | '000' no. | 2700      | 2813   | 2800      | 2408.81   | 104             | 96.03     |
| 3.2     | Fruit Seedlings Distribution             | '000' no. | 2813      | 2535   | 2240      | 2234.81   | 90              | 99.77     |
| 4.1     | Flower Seedlings Production              | '000' no. | 1020      | 1142   | 1050      | 823.22    | 112             | 78.40     |
| 4.2     | Flower Seedlings Distribution            | '000' no. | 1142      | 1002   | 822       | 813.10    | 88              | 98.92     |
| 5.1     | Medicinal plant Seedlings Production     | '000' no. | 125       | 287    | 165       | 139.48    | 230             | 84.53     |
| 5.2     | Medicinal Plant Seedlings Distribution   | '000' no. | 287       | 313    | 178       | 165.09    | 109             | 92.75     |
| 6.1     | Other Seedlings Production               | '000' no. | 560       | 706    | 690       | 665.09    | 126             | 96.39     |
| 6.2     | Other Seedlings Distribution             | '000' no. | 706       | 699    | 832       | 826.89    | 99              | 99.39     |
| 7.1     | Coconut Seedlings Production             | '000' no. | 210       | 210    | 210       | 210       | 100             | 100       |
| 7.2     | Coconut Seedlings Distribution           | '000' no. | 210       | 160    | 203       | 203       | 76              | 100       |
| 8.1     | Prod. of Grafts/Gooties of Fruits        | '000' no. | 650       | 723    | 870       | 638.84    | 111             | 73.43     |
| 8.2     | Distbn. of Grafts/Gooties of Fruits      | '000' no. | 723       | 631    | 696       | 892.16    | 87              | 99.45     |
| 9.1     | Prod. of Grafts/Gooties of Flowers       | '000' no. | 265       | 272    | 400       | 298.17    | 103             | 74.54     |
| 9.2     | Distbn. of Grafts/Gooties of Flowers     | '000' no. | 272       | 235    | 297       | 294.18    | 86              | 99.05     |
| 10.1    | Prod. of Vegetable & other Seeds         | kg        | 4200      | 22760  | 15978     | 43910.65  | 542             | 244.82    |
| 10.2    | Distbn. of vegetable & other Seeds       | kg        | 22760     | 22653  | 44380     | 44332.05  | 100             | 99.89     |
| 11.1    | Production of Fruits                     | mt.       | 40080     | 43199  | 48000     | 49730.28  | 108             | 103.60    |
| 11.2    | Distribution of Fruits                   | mt.       | 43199     | 40537  | 48730     | 48718.33  | 94              | 99.98     |

### 2.19.3 Marketing:

Marketing plays a vital role in the activities of supplying produces to the consumers. BADC, in addition to production in HDC's and in the Project area provides marketing facilities to the farmers/producers to sell their produces at fair price. Keeping this in view, BADC has set up its own sale centers and introduced mobile and cool chain transport facilities through which the produces of the centers and project area are being sold. In addition to that, the marketing of

produces of the farmers in the project area has further improved with the improvement of transport facilities in the area.

#### **2.19.4 Training:**

Since there was no approved project in 2009-10, so farmers training program could not be conducted.

Conclusion:

The activities of Horticulture Development Centers (HDC) are strengthening day by day through producing more vegetables, fruits, spices, medicinal plants, coconut, graft, gooties of different fruits and flowers in the Demonstration Farm as well as in the Project area so that the increasing demand of fresh vegetables, fruits & spices of the growing population could be met up.

### **V. MODERNIZATION & STRENGTHENING OF FACILITIES TO INCREASE SUPPLY OF QUALITY SEEDS**

#### **2.20 Introduction:**

This project was approved by ECNEC on 04-10-2006 and it was taken up by BADC in the year 2006-07. It was further approved for the year 2008-2009 to 2010-2011. In the light of Seed Policy, 1993, BADC has started providing facilities to private sector. But as BADC can hardly utilize full rated capacity of its age- old Processing Centers, it has become difficult to cater to the needs of growing demand of private sector to provide services of storage and processing after meeting BADC's own requirement.

It is therefore, necessary to make renovation and modernization BADC's seed Processing Centers established in early seventies for effective utilization both by BADC as well as to provide support services for private sectors. After modernization and renovation of Seed Processing Centers, BADC will be in a position to provide necessary facilities to private sectors for processing, storage, and quality control of seeds. As a result, total supply of quality seed both in public and private sector will increase considerably which will go a long way in increasing agriculture production in Bangladesh.

#### **2.21 Objectives:**

The main objectives of the Project are:

- To increase the volume of Foundation Seeds of Cereals, Pulses, Oils, Vegetables, Jute gradually by decreasing its Truthfully Labeled Seed (TLS) production and provide support to private seed producers through expansion, modernization, renovation and strengthening of facilities and enhancement of capacities of 53,000 MT and capacity for dehumidified storage from 1,400 to 2,300 MT.
- To examine the quality of procured seeds and ensure proper processing, preservation as well distribution of the same to the farmers
- To provide services to private seed producers in respect of seed processing, preservation and quality control.
- To assist execution of the government's enhanced Program of seed production, procurement and distribution.

- To develop Management Information System (MIS) linking all seed offices/ field offices engaged in production, processing, seed testing laboratories and marketing.
- To extend Farmers Training facilities to BADC Nos.nel, seed growers for production, processing and preservation of quality seeds.

## 2.22 Progress:

Progress of work in Modernization & Strengthening of Facilities to increase Supply of Quality Seeds during the year 2009-2010 is shown below in Table-2.12:

Table 2.12  
Progress of Work during 2009-2010

| Name of the Item                | 2009-2010   |             | % Achieved | Remarks |
|---------------------------------|-------------|-------------|------------|---------|
|                                 | Target      | Actual      |            |         |
| Dehumidifier (100 MT capacity)  | 9 nos.      | 9 nos.      | 100%       |         |
| Dehumidifier (500 MT capacity)  | 6 nos.      | 6 nos.      | 100%       |         |
| Dehumidifier (200 MT capacity)  | 15 nos.     | 15 nos.     | 100%       |         |
| Fumigation Sheet (247 nos.)     | 247 nos.    | 261 nos.    | 106%       |         |
| Auto Seed Processing Plant      | 3 nos.      | 3 nos.      | 100%       |         |
| Combine Harvester (small size)  | 3 nos.      | 3 nos.      | 100%       |         |
| Vegetable Cold Storage (200 MT) | 1 nos.      | 1 nos.      | 100%       |         |
| 11 KVA Electrical Sub-Station   | 7 nos.      | 7 nos.      | 100%       |         |
| Bituminous Road                 | 1000 meters | 1000 meters | 100%       |         |
| Haring Bond Bone Road           | 4500 sqm    | 4500 sqm    | 100%       |         |
| Sunning Floor (sqm)             | 600 sqm     | 600 sqm     | 100%       |         |
| Office Building                 | 100 sqm     | 100 sqm     | 100%       |         |

## VI. PRIVATE SEED SECTOR DEVELOPMENT PROJECT

### 2.22 Introduction:

This project was taken up by BADC during the year 2008-2009. The project is being implemented in Kulaura FSC (Moulavibazar), Naogaon FSC (Naogaon), Gopalganj FSC (Gopalganj), Bhola FSC (Bhola), Nokla FSC (Sherpur), Ramu (Cox's Bazar) and Patuakhali FSC (Patuakhali).

### 2.23 Objectives: The main objectives of the project are:

- Produce a considerable amount of quality seed through operating 7 Farmers seed centers;
- Operate the existing 7 Farmers Seed Centers, established under the Bangladesh German Seed Development Project;
- Renovate, repair and reconstruction of unused fertilizer/ seed godowns of BADC to make those useable as seed processing and preservation centers;
- Form self-reliant seed producing farmer groups/ farmers seed companies in private sector who will produce seed and utilize physical facilities of BADC so that they themselves can process, preserve and arrange marketing of their seed;
- Train up the farmers seed companies and their contract growers, seed entrepreneurs, interested NGO personnel and target group members and thus establish them as seed producers so that they can become self reliant by marketing their own seed. As a result, supply of quality seed will increase and a stable seed structure will be created in the country which will enable the farmers using quality seed at low cost; and
- Provide facilities like transport, processing, grading, packing, storing etc. to the farmers' seed enterprises formed in the project area and organize Farmers Training Programs on these activities, so that quality seed production and distribution in private sector can be possible. As a result, skilled manpower will be created in private sector for seed production, processing, quality control and running seed businesses.

### 2.24 Progress:

Progress of work in Seed Development Project under Private Seed Sector (PSSDP) during 2009-10 is shown in Table-2.13:

Table 2.13  
Progress of work during 2009-2010

| Name of the Item   | 2008-2009 |        | % Achieved | Remarks |
|--|-----------|--------|------------|---------|
|  | Target    | Actual |            |         |
| Seed Production through farmers' Seed Company in Collaboration with PSSDP (MT) | 1500      | 1500   | 100        |         |
| Farmer's Farmers Training (in No.)   | 355       | 355    | 100        |         |
| Workshop / Seminar (in No.)  | 1         | 1      | 100        |         |
| Field Day (in No.)   | 7         | 7      | 100        |         |

## VII. INTEGRATED SOYBEAN CULTIVATION PROJECT (BADC COMPONENT)

### Introduction:

This project has been taken by the government from 2005-2006 to 2009-2010. The project has been implementing by Department of Agricultural Extension (DAE), Bangladesh Agricultural Development Corporation (BADC) and Bangladesh Agricultural Research Institute (BARI). The Lead agency is DAE; BADC is implementing the seed production part.

BADC is implementing the project in Amjhupi (Meherpur), Tebunia (Pabna), Brahmondi (Narsinghdi), Shimrailkandi (Brahmanbaria), Domrakandi (Faridpur) and Noakhali region (Feni, Noakhali and Luxmipur district).

### 2.26 Objectives:

The main objectives of BADC component are:

- Production, Processing, Preservation, Quality Control and Distribution of 25 MT of foundation seed & 93 tons of truthful labelled seed of soybean seed during the project period.
- Increase processing, preservation and storage facilities of Soybean seed.

### 2.27 Activities:

The major activities of the projects are:

- a) Production, Processing, Preservation and Distribution of 25 tons of foundation seed & 93 tons truthfully labeled seed of soybean seed during the project period.
- b) Farmers Training 720 (seven hundred twenty).
- c) Procurement of processing machineries and equipments.
- d) Construction of 1 (one) seed godown (capacity 100 metric ton)
- e) Construction of 2000 sft threshing floor.

### 2.28 Achievements:

The achievements of this project during 2009-2010 in shown in the Table 2.14

Table 2.14

#### Integrated Soybean Cultivation Project (Progress of work during 2009-2010)

| Item  | 2009-2010 |        | Achieved (%) |
|---|-----------|--------|--------------|
|   | Target    | Actual |              |
| 1. Seed Production, Preservation & Distribution:      |           |        |              |
| a) Foundation Seed (FS) in kg                         | 2,000     | 2,000  | 100          |
| b) Truthfully Labelled Seed (TLS) in kg               | 16,500    | 16,500 | 100          |
| 2. Farmers Training (in No.)                          | 128       | 128    | 100          |
| 3. Construction works (100 MT Capacity Godown) in No. | 1         | 1      | 100          |

## VIII. INTEGRATED PROJECT INCREASING THE PRODUCTION OF ONION, GARLIC, GINGER, TURMERIC AND CHILI

### 2.29 Introduction:

This project was taken up by BADC during the year 2009-2010. The project is being implemented in 30 Seed Multiplication Farms, 9 Horticultural Centers and 13 nos. of Agro Service Centers of BADC.

### 2.30 Objectives:

The main objectives of the project are:

- To produce, process, preserve, quality control and supply 30 metric ton seeds and 60 metric ton bulb of onion, 358 metric ton bulb of garlic, 414 metric ton rhizome of ginger, 718 MTcorm of turmeric and 2.3 metric ton seeds of chili both foundation and truthfully labeled seeds.
- To establish 250 metric ton storage facilities to preserve Onion, Chili, Ginger, Turmeric and Garlic and to establish 40 sqm dehumidified seed store for preservation of Onion seeds.
- Training to the personnel of the Project, and 600 farmers, and organizing 2 seminars/workshops with a view to transferring seed technology of 5 spice crops to the non-government organization and related services to produce more spice crops.

### 2.31 Progress:

Progress of work under this project during the year 2009-2010 is shown in Table-2.15:

Table 2.15

Progress of work under the Development Project during 2009-2010

(Figure in MT)

| Sl. Nos. | Name of the Item            | 2009-2010 |          | % Achieved | Remarks |
|----------|-----------------------------|-----------|----------|------------|---------|
|          |                             | Target    | Actual   |            |         |
| 1        | Training to Farmers         | 160 nos.  | 160 nos. | 100        |         |
| 2        | Seed production of Onion    | 172.120   | 166.585  | 96         |         |
| 3        | Seed production of Turmeric | 293.000   | 272.230  | 93         |         |
| 4        | Seed production of Ginger   | 147.000   | 145.600  | 99         |         |
| 5        | Seed production of Garlic   | 20.000    | 10.000   | 50         |         |
| 6        | Seed production of Chili    | 0.500     | 0.300    | 60         |         |

## IX. DEVELOPMENT AND MULTIPLICATION OF AGRICULTURAL SEEDS (2<sup>nd</sup> Phase)

### 2.32 Introduction:

This project has been taken up by BADC during the year 2009-2020. The project is being implemented for popularizing and multiplication of seed of newly released varieties all over the country. Production of potato plantlets through tissue culture technology for increasing the quality seed potato and decreasing import dependency of seed potato which will help saving the foreign currency. Block demonstration will be performed in 27 (twenty seven) districts of Bangladesh to popularize the technology.

### 2.33 Objectives:

- i) To produce potato plantlets from two tissue culture laboratories and supply it to seed producers and other projects of BADC for increasing quality seed potato and decreasing import dependency of seed potato as well as saving the foreign currency.
- ii) To establish block demonstrations and arrange field days by using new varieties of potato and strawberry for popularizing and creating awareness of the farmers about those varieties.
- iii) To train up farmers and field officers for scaling up their knowledge and skillness about modern production technologies of those varieties.

## CHAPTER – III

### **3.01 Irrigation Sector under Revenue Program:**

BADC is implementing its mandated responsibilities of Irrigation Sector through the following programs under revenue budget:

1. Program for removing water logging and increasing agriculture production in Jessore District
2. Program for removing water logging and increasing agriculture production in Khulna-Bagharhat- Shatkhira-Perojpur District
3. Program for Removing water logging and increasing agriculture production in Kustia-Jhanidha District
4. Program for removing water logging and increasing agriculture production in Pabna-Nator District
5. Program for removing water logging and increasing crop production in Noakhali-Comilla-Sunamganj District
6. Program for removing and increasing crop production in Tangail District.
7. Program for Monitoring & Forecasting saline water intrusion, irrigation water quality and water logging Program in southern area.
8. Program of field survey data collection and report writing for Increasing Agriculture production through removal water logging (S & DC).
9. Barisal-Jhalokhati District Minor Irrigation Development Program
10. Patuakhali-Barguna District Minor Irrigation Development Program
11. Perojpur District Minor Irrigation Development Program
12. Bhola District Minor Irrigation Development Program
13. Greater Khulna District Minor Irrigation Development Program
14. Madaripur-Shariatpur District Minor Irrigation Development Program
15. Gopalganj District Minor Irrigation Development Program
16. Faridpur District Minor Irrigation Development Program



17. Noakhali-Laksmipur District Minor Irrigation Development Program
18. Moulovibazar-Hobigang District Minor Irrigation Development Program
19. Sylhet-Sonamgang District Minor Irrigation Development Program
20. Kishorgang District Minor Irrigation Development Program
21. Itna-Mitamine and Austogram Upazila of Kishorgang District Minor Irrigation Development Program
22. Netrokona Haor area Minor Irrigation Development Program
23. Greater Kustia-Jessore District Minor Irrigation Development Program
24. Narayanganj-Munshiganj District Minor Irrigation Development Program
25. Dhaka District Minor Irrigation Development Program
26. Tangail District Minor Irrigation Development Program
27. Mymensingh District Minor Irrigation Development Program
28. Brahmanbaria District Minor Irrigation Development Program
29. Jamalpur District Minor Irrigation Development Program
30. Bogra District Minor Irrigation Development Program
31. Sherpur District Minor Irrigation Development Program
32. Comilla District Minor Irrigation Development Program
33. Gaibandha District Minor Irrigation Development Program
34. Rangpur-Nilfamari District Minor Irrigation Development Program
35. Kurigram-Lalmonirhat Minor Irrigation Development Program
36. Gopalganj Sadar and Tungipara Upazila of Gopalganj District Minor Irrigation Development Program.

# 1. PROGRAMME FOR REMOVING WATER LOGGING AND INCREASING AGRICULTURAL PRODUCTION IN JESSORE DISTRICT

## a. Objectives of the program:

- Reclamation of cultivable land and increase crop production by removing water logging through re-excavation of derelict canal.
- Drain out of soft water from water logging area and supply to nearby agricultural land for irrigation through double lifting or by floating pumps.

## b. Location of the program:

|          |          |                          |
|----------|----------|--------------------------|
| Division | District | Upazila                  |
| Khulna   | Jessore  | Manirampur, Jhikargacha. |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 984.00 Lac
- e. Allocation of the year 2009-2010 : 656.95 Lac
- f. Expenditure of the program in the year 2009-2010 : 602.24700 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

## h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal                         | Km   | 12.50     | 12.50     | 12.50       | 100                    |
| Construction of embankment                    | Km   | 18        | 18        | 18          | 100                    |
| Construction of different hydraulic structure | Nos. | 9         | 9         | 9           | 100                    |
| Procurement of Low Lift Pump (LLP)            | Set  | 15        | 15        | 15          | 100                    |
| Training                                      | Nos. | 750       | 300       | 450         | 150                    |

## 2.PROGRAM FOR REMOVING WATER LOGGING AND INCREASING AGRICULTURAL PRODUCTION IN KHULNA-BAGERHAT-SHATKHIRA-PEROJPUR DISTRICT

**a. Objectives of the program:**

- Reclamation of cultivable land and increase crop production by removing water logging through re-excavation of derelict canal.
- Drain out of soft water from water logging area and supply to nearby agricultural land for irrigation through double lifting or by floating pumps.

**b. Location of the program:**

| Division | District                   |
|----------|----------------------------|
| Khulna   | Khulna, Bagerhat, Satkhira |
| Barisal  | Perojpur                   |

c. Program period : July/2009 to June/2011

d. Estimated cost of the program : 946.45 Lac

e. Allocation of the year 2009-2010 : 498.75 Lac

f. Expenditure of the program in the year 2009-2010 : 454.74 Lac

g. Physical progress of the program in the year 2009-2010 : 100%

h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal                         | Km   | 80        | 37        | 37          | 100                    |
| Construction of different hydraulic structure | No   | 32        | 12        | 12          | 100                    |
| Construction of earthen dam                   | Km   | 12        | 7         | 7           | 100                    |
| Training                                      | Nos. | 1200      | 750       | 750         | 100                    |

### 3. PROGRAM FOR REMOVING WATER LOGGING AND INCREASING AGRICULTURE PRODUCTION IN KUSTIA- JHANIDHA DISTRICT

**a. Objectives of the program:**

- Reclamation of cultivable land and increase crop production by removing water logging through re-excavation of derelict canal.
- Drain out of soft water from water logging area and supply to nearby agricultural land for irrigation through double lifting or by floating pumps.

**b. Location of the program:**

| Division | District  | Upazila  |
|----------|-----------|--|
| Khulna   | Kushtia   | Kushtia Sadar, Khoksha, Kumarkhali, Doulatpur. |
|          | Jhenaidah | Jhenaidah Sadar, Kotchandpur, Mohespur.        |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 766.49 Lac
- e. Allocation of the year 2009-2010 : 352.30 Lac
- f. Expenditure of the program in the year 2009-2010 : 347.88 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

**h. Target and achievement of the main component of the program during 2009-2010**

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal                         | Km   | 80        | 40        | 40          | 100                    |
| Construction of different hydraulic structure | Nos. | 22        | 11        | 11          | 100                    |
| Training                                      | Nos. | 750       | 150       | 150         | 100                    |

#### 4. PROGRAM FOR REMOVING WATER LOGGING AND INCREASING AGRICULTURAL PRODUCTION IN PABNA – NATORE DISTRICT

##### a. Objectives of the program:

- Re-excavation of canal & khal to remove stagnant water from crop field.
- Increase availability of surface water for irrigation by re-excavation derelict khal/ nala.
- To bring back about 1400 hectares of land from water logging condition to a state of cultivation.
- To improve overall water logging situation in the program area and increase crop production.
- To bring single cropping land to double cropping land.

##### b. Location of the program:

| Division | District | Upazila  |
|----------|----------|--|
| Rajshahi | Pabna    | Pabna Sadar, Iswardi, Atgharia, Chatmohar, Faridpur, Bhangura, Santhia, Bera, Sujanagar. |
|          | Natore   | Natore Sadar, Baghatipara, Baraigram, Lalpur, Singra, Gurudaspur.                        |

|    |  |   |                        |
|----|--|---|------------------------|
| c. | Program period   | : | July/2009 to June/2011 |
| d. | Estimated cost of the program                          | : | 228.95 Lac             |
| e. | Allocation of the year 2009-2010                       | : | 74.40 Lac              |
| f. | Expenditure of the program in the year 2009-2010       | : | 73.83 Lac              |
| g. | Physical progress of the program in the year 2009-2010 | : | 100%                   |

##### h. Target and achievement of the main component of the program during 2009-2010

| Item                   | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|------------------------|------|-----------|-----------|-------------|------------------------|
|                        |      |           | Target    | Achievement |                        |
| Re-excavation of khal. | Km   | 30        | 14.25     | 14.25       | 100                    |
| Training               | Nos. | 1140      | 780       | 780         | 100                    |

## 5. PROGRAM FOR REMOVING WATER LOG AREA AND INCREASING CROP PRODUCTION IN NOAKHALI-COMILLA-SUNAMGANJ DISTRICT

### a. Objectives of the program:

- To recover the irrigable land and increase of crop production by removing of water logging through re-excavation of derelict khal.
- Drain out soft water from water logging area and supply to nearby agricultural land for irrigation through 5 cusec low lift pump (LLP)
- Providing training to 1140 farmers/ pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

### b. Location of the Program:

| Division   | District                     |
|------------|------------------------------|
| Chittagong | Noakhali, Comilla, Sunamganj |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 428.25 Lac
- e. Allocation of the year 2009-2010 : 316.70 Lac
- f. Expenditure of the program in the year 2009-2010 : 239.51 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal   | Km   | 28        | 11        | 11          | 100                    |
| Construction of embankment  | Km   | 11.50     | 6         | 6           | 100                    |
| Construction of different hydraulic structure   | No   | 30        | 5         | 5           | 100                    |
| Procurement of Low Lift Pump (LLP)  | No   | 27        | 27        | 27          | 100                    |
| Construction of electric lines with supply of transformer and other accessories with supply of transformer, meter & other accessories | Nos. | 14        | 14        | 14          | 100                    |

## 6. PROGRAM FOR REMOVING WATERLOG AREA AND INCREASING CROP PRODUCTION IN TANGAIL DISTRICT

### a. Objectives of the program:

- Provide irrigation facilities for 364 hectare land using 10 nos. of diesel operated LLP
- Provide irrigation facilities to 3500 hectare land reserving water by creating water reserve through re-excavation of 70 Km khal
- Production of 9660 MT food grain by ensuring optimum use of surface water and thus extending irrigation area through implementation of appropriate technology and developing of irrigation structures.
- Providing training to 1200 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

### b. Location of the Program:

| Division | District | Upazila             |
|----------|----------|---------------------|
| Dhaka    | Tangail  | Bashail & Shakhipur |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 932.80 Lac
- e. Allocation of the year 2009-2010 : 695.75 Lac
- f. Expenditure of the program in the year 2009-2010 : 453.28 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-2010

| Item                                | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|-------------------------------------|------|-----------|-----------|-------------|------------------------|
|                                     |      |           | Target    | Achievement |                        |
| Re-excavation of khal/nala          | Km   | 70        | 55        | 55          | 100                    |
| Construction of irrigation channel  | Km   | 9.9       | 3.5       | 3.5         | 100                    |
| Construction of hydraulic structure | Km   | 7         | 4         | 4           | 100                    |
| Procurement of L.L.P                | Nos. | 10        | 10        | 10          | 100                    |

## 7. FORECASTING SALINE WATER INTRUSION, IRRIGATION WATER QUALITY AND WATER LOGGING PROGRAM IN SOUTHERN AREA

**a. Objectives of the program:**

- To observe salinity intrusion of the southern part of Bangladesh.
- To prepare data bank of costal ground water.
- Preparation of updated Groundwater Zoning Map of 2010 and its comparison with that of 2004.

**b. Location of the program:**

| Division   | District   | Upazila   |
|------------|------------|---|
| Khulna     | Khulna     | All Upazila of coastal area and data collection of whole Bangladesh |
| Chittagong | Chittagong |   |
|            | Noakhali   |   |
| Barisal    | Barisal    |   |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the Program : 568.52 Lac
- e. Allocation of the year 2009-2010 : 464.35 Lac
- f. Expenditure of the program in the year 2009-2010 : 292.74 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

**h. Target and achievement of the main component of the program during 2009-2010**

| Item                             | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|----------------------------------|------|-----------|-----------|-------------|------------------------|
|                                  |      |           | Target    | Achievement |                        |
| Purchase of laboratory equipment | Nos. | 34        | 34        | 34          | 100                    |
| Installation of observation well | Nos. | 180       | 100       | 100         | 100                    |
| Training                         | Nos. | 1200      | 750       | 750         | 100                    |

**8. PROGRAM OF FIELD SURVEY, DATA COLLECTION AND REPORT WRITING FOR INCREASING AGRICULTURAL PRODUCTION THROUGH REMOVAL OF WATER LOGGING (S&DC)**

**a. Objectives of the program:**



- To identify the reason of water logging, its impact and to identify possible remedy.
- To increase crop production and recover cultivable land by removing water logging problem and assessment of agro environmental impact.
- To create awareness and maintain livelihood (co existence) changed social condition due to global warming and climate change.
- To collect data, information from the root level of society through their active participation.

**b. Location of the program:**

| Division   | District   | Upazila   |
|------------|------------|---|
| Khulna     | Khulna     | All Upazila of coastal area and data collection of whole Bangladesh |
| Chittagong | Chittagong |   |
|            | Noakhali   |   |
| Barisal    | Barisal    |   |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 362.30 Lac
- e. Allocation of the year 2009-2010 : 233.85 Lac
- f. Expenditure of the program in the year 2009-2010 : 179.22 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

**h. Target and achievement of the main component of the program during 2009-2010**

| Item                                       | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|--|------|-----------|-----------|-------------|------------------------|
|  |      |           | Target    | Achievement |                        |
| Purchase of Global positioning Syster(GPS) | Nos. | 4         | 4         | 4           | 100                    |
| Purchase of digital camera                 | Nos. | 1         | 1         | 1           | 100                    |
| Purchase of computer                       | Nos. | 1         | 1         | 1           | 100                    |
| Training                                   | Nos. | 13500     | 9000      | 9000        | 100                    |

**9. BARISAL-JHALOKHATI DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM**

**a. Objectives of the program:**

- Increasing irrigation facility to 5032 hectares of land by using 73 Nos. diesel engine.

- To grow more 12580 MT food grain by expanding command area ensuring optimum utilization of surface water through developing irrigation infrastructure and appropriate technology.
- To reduce poverty and facilitating self employment of unemployed youth of program area by enhancing their skillness through effective training program.

**b. Location of the program:**

| Division | District   | Upazila  |
|----------|------------|--|
| Barisal  | Barisal    | Barisal Sadar, Babuganj, Banaripara, Agailjhara, Gournadi, Wazirpur, Hijla, Mehendiganj, Muladi, Bakerganj |
|          | Jhalokathi | Jhalokathi Sadar, Nalchiti, Rajapur, Kathalia  |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 981.50 Lac
- e. Allocation of the year 2009-2010 : 632.60 Lac
- f. Expenditure of the program in the year 2009-2010 : 596.32 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%
- h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal                         | Km   | 62        | 25        | 25          | 100                    |
| Construction of irrigation channel            | Km   | 19.50     | 12        | 12          | 100                    |
| Construction of different hydraulic structure | Nos. | 21        | 9         | 9           | 100                    |
| Training                                      | Nos. | 1200      | 750       | 750         | 100                    |

## 10. PATUAKHALI-BARGUNA DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Increase food production through optimum utilization of surface water by development irrigation infrastructure and applying modern technology.
- Ensuring food security through increasing production of food crops.
- Increase irrigation coverage especially in less developed area.
- To create self employment opportunity for operators and fieldmen of irrigation equipment and farmers by upgrading their skillness through training.

### b. Location of program:

| Division | District   | Upazila   |
|----------|------------|---|
| Barisal  | Patuakhali | Patuakhali Sadar, Dumki, Mirzagong, Bauphal<br>Dasmina, Galachipa, Kalapara |
|          | Barguna    | Barguna Sadar, Amtali, Bamna, Betagi, Patharghata                           |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 939.30 Lac
- e. Allocation of the year 2009-2010 : 641.50 Lac
- f. Expenditure of the program in the year 2009-2010 : 624.15 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-2010

| Item                                | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|-------------------------------------|------|-----------|-----------|-------------|------------------------|
|                                     |      |           | Target    | Achievement |                        |
| Re-excavation of khal /nala         | Km   | 39        | 15        | 15          | 100                    |
| Construction of irrigation channel  | Km   | 13.60     | 10        | 10          | 100                    |
| Construction of hydraulic structure | Nos. | 42        | 10        | 10          | 100                    |
| Procurement LLP                     | Nos. | 101       | 101       | 101         | 100                    |

## 11. PEROJPUR DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Increasing irrigation facility to 4432 hectares of land by using 73 Nos. diesel engine.
- To grow more 11080 MT food grain by expanding command area ensuring optimum utilization of surface water through developing irrigation infrastructure and applying appropriate technology .
- To reduce poverty and facilitating self employment of unemployed youth of program area by enhancing their skillnessness through effective training program.

### a) Location of program:

| Division | District | Upazila  |
|----------|----------|--|
| Barisal  | Perojpur | Perojpur Sadar, Nazirpur, Zia Nagar, Bhandaria, Nesarabad, Mothbaria , Kaukhali. |

- c) Program period : July/2009 to June/2011
- d) Estimated cost of the program : 981.30 Lac
- e) Allocation of the year 2009-2010 : 628.00 Lac
- f) Expenditure of the program in the year 2009-2010 : 608.98 Lac
- g) Physical progress of the program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal                         | Km   | 50        | 20        | 20          | 100                    |
| Construction of irrigation channel            | Km   | 19.50     | 12        | 12          | 100                    |
| Construction of different hydraulic structure | Nos. | 25        | 7         | 7           | 100                    |
| Procurement of Low Lift Pump (LLP)            | Nos. | 73        | 73        | 73          | 100                    |
| Training                                      | Nos. | 1200      | 750       | 750         | 100                    |

## 12. BHOLA DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- To grow more food grain through optimum utilization of surface water by developing irrigation infrastructure and applying modern and local appropriate technology.
- To create self employment opportunity for operators & fieldmen of irrigation equipment and farmers by upgrading their skillness through training.

### b. Location of programme:

| Division | District | Upazila  |
|----------|----------|--|
| Barisal  | Bhola    | Bhola Sadar, Daulatkhan, Lalmohan, Borhanuddin, Charfession, Tajumuddin. |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 985.15 Lac
- e. Allocation of the year 2009-2010 : 630.50 Lac
- f. Expenditure of the program in the year 2009-2010 : 620.05263 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal                         | Km   | 51        | 20        | 20          | 100                    |
| Construction of irrigation channel            | Km   | 17.70     | 12.10     | 12.10       | 100                    |
| Construction of different hydraulic structure | Nos. | 34        | 7         | 7           | 100                    |
| Procurement of Low Lift pump(LLP)             | Nos. | 65        | 65        | 65          | 100                    |
| Training                                      | No   | 1200      | 800       | 800         | 100                    |

### 13. GREATER KHULNA DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

**a. Objectives of the program:**

- Provide irrigation facilities to 3250 hectare land using 85 nos. electricity/ diesel operated Low Lift Pump (LLP)
- Production of 6380 MT additional food grain by ensuring optimum use of surface water and thus extending irrigation area through implementation of appropriate technology and developing irrigation structures.
- Providing Farmers Training to 1200 farmers/ pump operator of the Program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

**b. Location of program:**

|          |                              |
|----------|------------------------------|
| Division | District                     |
| Khulna   | Khulna, Bagerhat & Satkhira. |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 987.05 Lac
- e. Allocation of the year 2009-2010 : 707.40 Lac
- f. Expenditure of the program in the year 2009-2010 : 565.10 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

**h. Target and achievement of the main component of the program during 2009-2010**

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal                         | Km   | 48        | 29        | 29          | 100                    |
| Construction of different hydraulic structure | Nos. | 26        | 12        | 12          | 100                    |
| Procurement of Low Lift Pump (LLP)            | Nos. | 85        | 85        | 85          | 100                    |
| Construction of Irrigation channel            | Km   | 13        | 8.4       | 8.4         | 100                    |

## 14. MADARIPUR-SHARIATPUR DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Production of 7000 MT additional food grain by ensuring optimum use of surface water and thus extending irrigation area through implementation of appropriate technology and developing irrigation structures.
- Provide irrigation facilities to 4730 hectare land using 84 nos. electric/ diesel operated Low Lift Pump (LLP)
- Providing training of 1200 farmers / pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

### b. Location of the program:

| Division | District   | Upazila   |
|----------|------------|---|
| Dhaka    | Madaripur  | Madaripur Sadar, Shibchar, Kalkini, Rajoir                        |
|          | Shariatpur | Shariatpur Sadar, Zajira, Gosairhat, Damudiya, Bhedarganj, Naria. |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 985.05 Lac
- e. Allocation of the year 2009-2010 : 630.40 Lac
- f. Expenditure of the program in the year 2009-2010 : 581.66 Lac
- g. Physical progress of the Program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal                         | Km   | 40        | 20        | 20          | 100                    |
| Construction of irrigation channel            | Km   | 19.40     | 11.50     | 11.50       | 100                    |
| Construction of different hydraulic structure | Nos. | 14        | 7         | 7           | 100                    |
| Procurement of Low Lift Pump (LLP)            | Nos. | 85        | 85        | 85          | 100                    |
| Training                                      | Nos. | 1200      | 750       | 750         | 100                    |

## 15. GOPALGANJ DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Production of 6150 MT additional food grain by ensuring optimum use of surface water and thus extending irrigation area through implementation of appropriate technology and developing irrigation structures.
- Provide irrigation facilities to 2460 hectare land using 87 Nos electric/diesel operated Low Lift Pump (LLP)
- Providing training to 1200 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

### b. Location of the program:

| Division | District  | Upazila   |
|----------|-----------|---|
| Dhaka    | Gopalganj | Gopalganj Sadar, Tungipara, Kotalipara, Kasiani, Maksudpur. |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 988.05 Lac
- e. Allocation of the year 2009-2010 : 611.40 Lac
- f. Expenditure of the program in the year 2009-2010 : 570.39 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation derelict khal                   | Km   | 40        | 20        | 20          | 100                    |
| Construction of irrigation channel            | Km   | 13.30     | 6.8       | 6.8         | 100                    |
| Procurement of Low Lift Pump (LLP)            | Nos. | 87        | 87        | 87          | 100                    |
| Construction of different hydraulic structure | Nos. | 18        | 10        | 10          | 100                    |
| Training                                      | Nos. | 1200      | 750       | 750         | 100                    |



## 16. FARIDPUR DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Provide irrigation facilities to 4560 hectare land using 82 Nos. of (electricity/diesel) Low Lift Pump (LLP)
- Production of 7000 MT additional food grain by ensuring optimum use of surface water and thus extending irrigation area through implementation of appropriate technology & developing irrigation structures.
- Providing training to 1200 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

### b. Location of the program:

| Division | District | Upazila  |
|----------|----------|--|
| Dhaka    | Faridpur | Faridpur Sadar, Nagarkanda, Bhanga, Sadarpur, Boalmari, Alfadanga, Madhukhali, Saltha & Char Bhadrasan |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 985.05 Lac
- e. Allocation of the year 2009-2010 : 630.40 Lac
- f. Expenditure of the program in the year 2009-2010 : 580.13 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation derelict khal                   | Km   | 38        | 20        | 20          | 100                    |
| Construction of irrigation channel            | Km   | 20.40     | 11.50     | 11.50       | 100                    |
| Procurement of Low Lift Pump (LLP)            | No   | 82        | 82        | 82          | 100                    |
| Construction of different hydraulic structure | Nos. | 13        | 7         | 7           | 100                    |
| Training                                      | Nos. | 1200      | 750       | 750         | 100                    |

## 17. NOAKHALI-LAKSMIPUR DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Provide irrigation facilities to 1970 hectare land using 79 nos. of Low Lift Pump (LLP)
- Production of 5800 MT food grain by ensuring optimum use of surface water and thus extending irrigation area through implementation of appropriate technology & developing of irrigation structures.
- Providing training to 1200 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

### b. Location of the program:

| Division   | District  | Upazila   |
|------------|-----------|---|
| Chittagong | Noakhali  | Noakhali Sadar, Begumganj, Chatkhil, Senbag, Companiganj, Hatiya, Sonaimuri, Subarnachar & Kabir Hat. |
|            | Laksmipur | Laksmipur Sadar, Ramganj, Raipur, Ramgati, Kamalnagar   |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 970.15 Lac
- e. Allocation of the year 2009-2010 : 622.50 Lac
- f. Expenditure of the program in the year 2009-2010 : 616.44 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

### h) Target and achievement of the main component of the program during 2009-2010

| Item   | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|--|------|-----------|-----------|-------------|------------------------|
|  |      |           | Target    | Achievement |                        |
| Re-excavation of khal                        | Km   | 40        | 20        | 20          | 100                    |
| Construction of irrigation channel           | Km   | 11        | 8         | 8           | 100                    |
| Procurement of Low Lift Pump (LLP)           | Nos. | 79        | 79        | 79          | 100                    |
| Construction of differen hydraulic structure | Nos. | 43        | 12        | 12          | 100                    |
| Training                                     | Nos. | 960       | 510       | 510         | 100                    |

## 18. MOULVIBAZAR HABIGANJ DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Provide irrigation facilities to 2000 hectare land using 45 nos. of Low Lift Pump (LLP)
- Production of 6000 MT food grain by ensuring optimum use of surface water and thus extending irrigation area through implementation of appropriate technology & developing of irrigation structures.
- Providing training to 1200 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

### b. Location of the program:

| Division | District    | Upazila  |
|----------|-------------|--|
| Sylhet   | Habiganj    | Habiganj Sadar, Baniachang, Chunarughat, Lakhai, Bahubal, Nabiganj, Ajmeriganj, Madhabpur. |
|          | Moulvibazar | Moulvibazar Sadar, Sreemongal, Rajnagar, Kulaura, Barlekha, Kamalganj, Juri.               |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 839.29 Lac
- e. Allocation of the year 2009-2010 : 533.00 Lac
- f. Expenditure of the program in the year 2009-2010 : 478.05 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal                         | Km   | 34        | 13.35     | 13.35       | 100                    |
| Construction of irrigation channel            | Km   | 17.70     | 9.7       | 9.7         | 100                    |
| Procurement of diesel engine                  | Nos. | 45        | 45        | 45          | 100                    |
| Construction of different hydraulic structure | Nos. | 45        | 18        | 18          | 100                    |
| Training                                      | Nos. | 1200      | 750       | 750         | 100                    |

## 19. SHYLET-SONAMGANG DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Production of 7875 MT food grain by ensuring optimum use of surface water & thus extending irrigation area through implementation of appropriate technology & developing of irrigation structures.
- Provide irrigation facilities to 2450 hectare land using 59 nos. of Low Lift Pump (LLP)
- Providing training to 1200 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

### b. Location of the program:

| Division | District  | Upazila   |
|----------|-----------|---|
| Sylhet   | Sylhet    | Sylhet Sadar, Fenchuganj, Companyganj, Balaganj, Biswanath, Golapganj, Beanibazar, Zakiganj, Kanaighat, Gowainghat and Jaintapur. |
|          | Sunamgonj | Sunamgonj Sadar, Chattak, Dowarabazar, Taherpur, Biswambharpur, Dharmapasha, Jamalganj, Derai, Jagannathpur and Sulla.            |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 974.29 Lac
- e. Allocation of the year 2009-2010 : 655.50 Lac
- f. Expenditure of the program in the year 2009-2010 : 493.26 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal                         | Km   | 30        | 4.8       | 4.8         | 100                    |
| Construction of irrigation channel            | KM   | 23.4      | 12.30     | 12.30       | 100                    |
| Procurement of L.L.P                          | No   | 59        | 59        | 59          | 100                    |
| Construction of different hydraulic structure | Nos  | 34        | 9         | 9           | 100                    |
| Training                                      | Nos  | 1200      | 750       | 750         | 100                    |

## 20. KISHOREGANJ DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Provide irrigation facilities to 2226 hectare land using 85 nos. of Low Lift Pump (LLP)
- Provide irrigation facilities to 2250 hectare land reserving water by creating water reserve through re-excavation of 45 Km Haor/ Beel/ khal.
- Production of 11190 m. ton food grain by ensuring optimum use of surface water and thus extending irrigation area through implementation of appropriate technology & developing of irrigation structures.
- Providing training to 1200 farmers/pump operator of the program area enhances their skillness and thus creates opportunity for self employment and poverty alleviation.

### b. Location of the program:

| Division | District    | Upazila   |
|----------|-------------|---|
| Dhaka    | Kishoreganj | Kishoreganj Sadar, Hosainpur, Pakundia, Karimganj, Tarail, Katiadi, Bajitpur, Nikli, Kuliarchar, Bhairab, Mithamain, Itna, Austogram. |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 977.29 Lac
- e. Allocation of the year 2009-2010 : 648.50 Lac
- f. Expenditure of the program in the year 2009-2010 : 551.54 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of haor/ beel/ khal             | Km   | 45        | 15        | 5.50        | 100                    |
| Construction of irrigation channel            | Km   | 13.40     | 9         | 9           | 100                    |
| Procurement of Low Lift Pump (LLP)            | Nos. | 85        | 85        | 85          | 100                    |
| Construction of different hydraulic structure | Nos. | 30        | 8         | 8           | 100                    |
| Training                                      | Nos. | 1200      | 750       | 750         | 100                    |

## 21. KISHORGANG DISTRICT ITNA-MITAMINE AND AUSTOGRAM OF MINOR IRRIGATION DEVELOPMENT PROGRAM

**a. Objectives of the program:**

- Production of 7910 MT additional food grain by expanding irrigation facilities to 3164 hectare land through using 121 diesel operated Low Lift Pump (LLP)
- Production of 2500 MT food grain providing irrigation to 1000 acre land through re-excavation of Bhuyaneer Beel.
- Providing training to 1200 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

**b. Location of the program:**

| Division | District    | Upazila                        |
|----------|-------------|--------------------------------|
| Dhaka    | Kishoreganj | Mithamain, Itna and Austogram. |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 927.79 Lac
- e. Allocation of the year 2009-2010 : 723.50 Lac
- f. Expenditure of the program in the year 2009-2010 : 638.38 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

**h. Target and achievement of the main component of the program during 2009-2010**

| Item                               | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|------------------------------------|------|-----------|-----------|-------------|------------------------|
|                                    |      |           | Target    | Achievement |                        |
| Re-excavation of haor/beeel/khal   | Km   |           | 2         | 1.75        | 86                     |
| Construction of irrigation channel | Km   | 32.3      | 9         | 9           | 100                    |
| Procurement of Low Lift Pump (LLP) | Nos. | 121       | 121       | 121         | 100                    |
| Training                           | Nos. | 1200      | 750       | 750         | 100                    |

## 22. NETROKONA HAOR AREA MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Provide irrigation facility to 2170 hectares of land using 61 nos. diesel operated L LP set.
- Provide irrigation facilities to 2800 hectare land reserving water by creating water reserve through re-excavation of 56 Km Haor/ Bee/ Khal.
- Production of 12425 MT food grain by ensuring optimum use of surface water & thus extending irrigation area through implementation of appropriate technology & developing of irrigation structures.
- Providing training to 1200 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

### b. Location of the program:

| Division | District  | Upazila  |
|----------|-----------|--|
| Dhaka    | Netrokona | Netrokona Sadar, Atpara, Madan, Khaliajuri, Mohanganj, Durgapur, Barhatta and Kalmakanda |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 966.29 Lac
- e. Allocation of the year 2009-2010 : 654.00 Lac
- f. Expenditure of the program in the year 2009-2010 : 559.97 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-2010

| Item                                | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|-------------------------------------|------|-----------|-----------|-------------|------------------------|
|                                     |      |           | Target    | Achievement |                        |
| Re-excavation of canal              | Km   | 56        | 17        | 17          | 100                    |
| Construction of irrigation channel  | Km   | 16.2      | 11        | 11          | 100                    |
| Procurement and LLP                 | Nos. | 61        | 61        | 61          | 100                    |
| Construction of hydraulic structure | Nos. | 23        | 9         | 9           | 100                    |
| Training                            | Nos. | 1200      | 750       | 750         | 100                    |

## 23. GREATER KUSTIA-JESSORE DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Provide irrigation facilities to 2320 hectare land using 87 nos. electric/ diesel operated Low Lift Pump (LLP)
- Production of 5,800 MT additional food grain by ensuring optimum use of surface water and thus extending irrigation area through implementation of appropriate technology & developing irrigation structures.
- Providing training to 600 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

### b. Location of the program:

| Division | District  | Upazila                               |
|----------|-----------|---------------------------------------|
| Khulna   | Kushtia   | Kushtia Sadar, Khoksha,               |
|          | Meherpur, | Meherpur Sadar , Gangni               |
|          | Chuadanga | Chuadanga Sadar                       |
|          | Jessore   | Jessore Sadar, Manirampur, Abhoynagar |
|          | Magura    | Mohammadpur , Shalikha                |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 844.00 Lac
- e. Allocation of the year 2009-2010 : 545.50 Lac
- f. Expenditure of the program in the year 2009-2010 : 513.08 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal - nala                  | Km   | 30        | 15        | 15          | 100                    |
| Construction of irrigation channel            | Km   | 13.8      | 8         | 8           | 100                    |
| Procurement of Low Lift Pump (LLP)            | Nos. | 87        | 87        | 87          | 100                    |
| Construction of different hydraulic structure | Nos. | 18        | 8         | 8           | 100                    |
| Training                                      | Nos. | 600       | 600       | 600         | 100                    |



## 24. NARAYANGANG-MUNSHIGANG DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Provide irrigation facilities to 2200 hectare land using 70 nos. of Low Lift Pump (LLP)
- Production of 7550 MT food grain by ensuring optimum use of surface water and thus extending irrigation area through implementation of appropriate technology & developing irrigation structures.
- Providing training to 1320 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

### b. Location of the program:

| Division | District    | Upazila  |
|----------|-------------|--|
| Dhaka    | Narayangonj | Bandar, Sonargaon, Rupganj and Araihasar                         |
|          | Munshiganj  | Munshiganj Sadar, Serajdikhan, Sreenagar, Tangibari and Gazaria. |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 984.80 Lac
- e. Allocation of the year 2009-2010 : 631.30 Lac
- f. Expenditure of the program in the year 2009-2010 : 558.55 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal                         | Km   | 47        | 20.65     | 20.65       | 100                    |
| Construction of irrigation channel            | Km   | 11.60     | 7.40      | 7.40        | 100                    |
| Procurement of Low Lift Pump (LLP)            | Set  | 70        | 70        | 70          | 100                    |
| Construction of different hydraulic structure | Nos. | 66        | 19        | 19          | 100                    |
| Training                                      | Nos. | 1350      | 540       | 540         | 100                    |

## 25. DHAKA DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Provide irrigation facilities to 1750 hectare land using 40 nos. of Low Lift Pump (LLP)
- Production of 4375 MT additional food grain by ensuring optimum use of surface water & thus extending irrigation area through implementation of appropriate technology & developing irrigation structures.
- Providing training to 1320 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

### b. Location of the program:

| Division | District | Upazila                         |
|----------|----------|---------------------------------|
| Dhaka    | Dhaka    | Dohar, Nawabganj and Keraniganj |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 819.80 Lac
- e. Allocation of the year 2009-2010 : 520.80 Lac
- f. Expenditure of the program in the year 2009-2010 : 401.508 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal                         | Km   | 30        | 14.35     | 14.35       | 100                    |
| Construction of irrigation channel            | Km   | 13.5      | 8.5       | 8.5         | 100                    |
| Procurement of Low Lift Pump (LLP)            | Nos. | 40        | 40        | 40          | 100                    |
| Construction of different hydraulic structure | Nos. | 40        | 10        | 10          | 100                    |
| Training                                      | Nos. | 780       | 540       | 540         | 100                    |

## 26. TANGAIL DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Provide irrigation facilities to 1092 hectare land using 30 nos. of Low Lift Pump (LLP)
- Provide irrigation facilities to 2800 hectare land reserving water by creating water reserve through re-excavation of 56 Km khal.
- Production of 9730 MT food grain by ensuring optimum use of surface water & thus extending irrigation area through implementation of appropriate technology & developing irrigation structures.
- Providing training to 1320 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

### b. Location of the program:

| Division | District | Upazila  |
|----------|----------|--|
| Dhaka    | Tangail  | Tangail Sadar, Delduar, Nagarpur, Mirzapur, Bashail, Shakhipur, Kalihati, Ghatail, Modhupur, Bhuapur, Dhanbary and Gopalpur. |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 923.80 Lac
- e. Allocation of the year 2009-2010 : 525.80 Lac
- f. Expenditure of the program in the year 2009-2010 : 421.55 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%
- h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal                         | Km   | 56        | 25        | 25          | 100                    |
| Construction of surface irrigation channel    | Km   | 8.4       | 4.9       | 4.9         | 100                    |
| Construction of different hydraulic structure | Nos. | 53        | 15        | 15          | 100                    |
| Procurement of Low Lift Pump (LLP)            | Nos. | 30        | 30        | 30          | 100                    |
| Training                                      | Nos. | 1320      | 750       | 750         | 100                    |

## 27. MYMENSINGH DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Provide irrigation facilities to 1184 hectare land using 37 nos. of Low Lift Pump (LLP).
- Provide irrigation facilities to 2900 hectare land reserving water by creating water reserve through re-excavation of 58 Km khal
- Production of 10,120 MT food grain by ensuring optimum use of surface water & thus extending irrigation area through implementation of appropriate technology & developing irrigation structures;
- Providing training to 750 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

### b. Location of the program:

| Division | District   | Upazila   |
|----------|------------|---|
| Dhaka    | Mymensingh | Mymensingh Sadar, Muktagacha, Haluaghat, Dhubaura, Fulpur, Phulbaria, Bhaluka, Goffargaon, Nandail, Iswarganj, Gouripur and Trishal |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 920.30 Lac
- e. Allocation of the year 2009-2010 : 524.80 Lac
- f. Expenditure of the program in the year 2009-2010 : 488.52 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal/nala                    | Km   | 58        | 25        | 25          | 100                    |
| Construction of irrigation channel            | Km   | 9.5       | 6.5       | 6.5         | 100                    |
| Procurement of Low Lift Pump (LLP)            | Nos. | 37        | 37        | 37          | 100                    |
| Construction of different hydraulic structure | Nos. | 41        | 16        | 16          | 100                    |
| Training                                      | Nos. | 750       | 450       | 450         | 100                    |

## 28. BRAHMANBARIA DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Provide irrigation facilities to 2500 hectare land using 99 nos. of Low Lift Pump (LLP).
- Production of 5000 MT additional food grain by ensuring optimum use of surface water & thus extending irrigation area through implementation of appropriate technology & developing irrigation structures.
- Providing training to 750 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

### b. Location of the program:

| Division   | District     | Upazila  |
|------------|--------------|--|
| Chittagong | Brahmanbaria | Brahmanbaria Sadar, Kashba, Nabinagar, Bancharampur, Nasirnagar, Sarail, Ashuganj and Akhaura. |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 967.30 Lac
- e. Allocation of the year 2009-2010 : 637.80 Lac
- f. Expenditure of the program in the year 2009-2010 : 570.03 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%
- h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal/ nala                   | Km   | 55        | 23        | 23          | 100                    |
| Construction of irrigation channel            | Km   | 12.20     | 7.30      | 7.30        | 100                    |
| Procurement of Low Lift Pump (LLP)            | Nos. | 99        | 99        | 99          | 100                    |
| Construction of different hydraulic structure | Nos. | 26        | 8         | 8           | 100                    |
| Training                                      | Nos. | 750       | 360       | 360         | 100                    |

## 29. JAMALPUR DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Provide irrigation facilities to 1484 hectare land using 78 nos. of Low Lift Pump (LLP).
- Provide irrigation facilities to 1400 hectare land reserving water by creating water reserve through re-excavation of 28 Km khal.
- Production of 7,210 MT food grain by ensuring optimum use of surface water & thus extending irrigation area through implementation of appropriate technology & developing irrigation structures;
- Providing training to 750 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

### b. Location of the program:

| Division | District | Upazila  |
|----------|----------|--|
| Dhaka    | Jamalpur | Melandah, Motherganj, Islampur, Bakshiganj and Dewanganj |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 934.30 Lac
- e. Allocation of the year 2009-2010 : 704.30 Lac
- f. Expenditure of the program in the year 2009-2010 : 646.99 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-201

| Item                                | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|-------------------------------------|------|-----------|-----------|-------------|------------------------|
|                                     |      |           | Target    | Achievement |                        |
| Re-excavation of khal/ Nala         | Km   | 28        | 10        | 10          | 100                    |
| Construction of irrigation channel  | Km   | 8.4       | 7.5       | 7.5         | 100                    |
| Procurement of Low Lift Pump (LLP)  | Nos. | 78        | 78        | 78          | 100                    |
| Construction of hydraulic structure | Nos. | 119       | 69        | 69          | 100                    |
| Training                            | Nos. | 750       | 450       | 450         | 100                    |

### 30. BOGRA DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

**a. Objective of the program:**

- The irrigated land of the program area will be increased through modern minor irrigation techniques which will increase the additional food production of 3825 MT. As a result income of the farmers of the project area would be increased help to develop socio-economic of the poor people and also National Strategy for Poverty Reduction.

**b. Location of the program:**

|          |          |   |
|----------|----------|---|
| Division | District | Upazila   |
| Rajshahi | Bogra    | Shibganj, Sherpur, Sonatola, Sariakandi and Gabtali |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 966.30 Lac
- e. Allocation of the year 2009-2010 : 273.20 Lac
- f. Expenditure of the program in the year 2009-2010 : 258.11 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

**h. Target and achievement of the main component of the program during 2009-2010**

| Item                               | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|------------------------------------|------|-----------|-----------|-------------|------------------------|
|                                    |      |           | Target    | Achievement |                        |
| Re-excavation of khal/ Nala        | Km   | 15        | 5         | 5           | 100                    |
| Construction of irrigation channel | Km   | 27        | 4.03      | 4.03        | 100                    |
| Installation of DTW                | Nos. | 45        | 45        | 45          | 100                    |
| Training                           | Nos. | 720       | 480       | 480         | 100                    |

### 31. SHERPUR DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

#### a. Objectives of the program:

- Provide irrigation facilities to 1904 hectare land using 78 nos. of Low Lift Pump (LLP);
- Provide irrigation facilities to 1800 hectare land reserving water by creating water reserveness through re-excavation of 36 Km Haor/ Bill/ khal;
- Production of 9260 MT food grain by ensuring optimum use of surface water & thus extending irrigation area through implementation of appropriate technology & developing irrigation structures;
- Providing training to 750 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

#### b. Location of the program:

| Division | District | Upazila   |
|----------|----------|---|
| Dhaka    | Sherpur  | Sherpur Sadar, Nakla, Nalitabari and Jhenaigati |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 870.30 Lac
- e. Allocation of the year 2009-2010 : 602.80 Lac
- f. Expenditure of the program in the year 2009-2010 : 561.42 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

#### h. Target and achievement of the main component of the Program during 2009-2010

| Item                                | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|-------------------------------------|------|-----------|-----------|-------------|------------------------|
|                                     |      |           | Target    | Achievement |                        |
| Re-excavation of khal               | Km   | 36        | 15        | 15          | 100                    |
| Construction of irrigation channel  | Km   | 14.2      | 10.20     | 10.20       | 100                    |
| construction of hydraulic structure | No   | 54        | 18        | 18          | 100                    |
| Procurement of Low Lift Pump        | Nos. | 78        | 78        | 78          | 100                    |
| Training                            | Nos. | 750       | 450       | 450         | 100                    |



## 32. COMILLA DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

### a. Objectives of the program:

- Provide irrigation facilities to 1386 hectare land using 43 nos. of Low Lift Pump (LLP);
- Production of 3000 MT food grain by ensuring optimum use of surface water & thus extending irrigation area through implementation of appropriate technology & developing irrigation structures;
- Providing training to 1140 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

### b. Location of the program:

| Division   | District | Upazila  |
|------------|----------|--|
| Chittagong | Comilla  | Comilla Sadar, Burichang, Daudkandi, Chowddagram, Brahmanpara, Barura, Muradnagar, Monoharganj, Debidwar, Nangolkot, Laksam, Chandina and Homna. |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 774.90 Lac
- e. Allocation of the year 2009-2010 : 589.10 Lac
- f. Expenditure of the program in the year 2009-2010 : 557.51 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

### h. Target and achievement of the main component of the program during 2009-2010

| Item  | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal/ Nala                   | Km   | 50        | 30        | 30          | 100                    |
| Construction of surface irrigation channel    | Km   | 8.8       | 8.8       | 8.8         | 100                    |
| Procurement of Low Lift Pump                  | Nos. | 43        | 43        | 43          | 100                    |
| Construction of different hydraulic structure | Nos. | 37        | 8         | 8           | 100                    |
| Training                                      | Nos. | 720       | 600       | 600         | 100                    |

### 33. GAIBANDHA DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

#### a Objectives of the program:

- To produce additional of 8645 MT food grain by extending irrigation area ensuring proper utilization of surface water through irrigation infrastructure development and applying sustainable technology.
- To provide irrigation facilities to 3458 hacter of land by utilizing 60 Nos. of surface irrigation channel and 62 Nos. of diesel driven low lift pump(LLP)
- To provide privilege to poverty alleviation and to create opportunity of self-employment by increasing efficiency through 600 nos. of farmers and pump operator across the project area.

#### b.Location of the program:

| Division | District  | Upazila   |
|----------|-----------|---|
| Rajshahi | Gaibandha | Gaibandha Sadar, Shaghatta, Fulchari, Sundarganj, Sadullapur, Palashbari, Gobindaganj |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 931.20 Lac
- e. Allocation of the year 2009-2010 : 646.40 Lac
- f. Expenditure of the program in the year 2009-2010 : 535.46 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

#### h. Target and achievement of the main component of the program during 2009-2010

| Item                                | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|-------------------------------------|------|-----------|-----------|-------------|------------------------|
|                                     |      |           | Target    | Achievement |                        |
| Re-excavation of khal/ nala         | Km   | 35        | 9         | 9           | 100                    |
| Construction of irrigation channel  | Km   | 18        | 15        | 15          | 100                    |
| Construction of hydraulic structure | No   | 62        | 22        | 22          | 100                    |
| Procurement of Low Lift Pump        | Nos. | 62        | 62        | 62          | 100                    |
| Training                            | Nos. | 600       | 480       | 480         | 100                    |

### 34. RANGPUR-NILPHAMARI DISTRICT MINOR IRRIGATION DEVELOPMENT PROGRAM

#### a. Objectives of the program:

- To grow 5650 MT more food grain through optimum utilization of surface water by developing irrigation infrastructure and applying modern and local appropriate technology.
- To irrigate more additional hectare land by using 45 nos. 2-cusec force mode Tube-Well.
- To create self-employment opportunity and alleviate poverty for the owners/ managers/ operators/ fieldsmen of irrigation equipment and farmers by improving skillness through training.

#### b. Location of the program:

| Division | District   | Upazila  |
|----------|------------|--|
| Rajshahi | Rangpur    | Rangpur Sadar, Gangachara, Pirganj, Pirgacha, Badarganj, Taraganj, Mithapukur and Kaunia |
|          | Nilphamari | Nilphamari Sadar, Saidpur, Jaldhaka, Kishoreganj, Domar and Dimla                        |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 988.20 Lac
- e. Allocation of the year 2009-2010 : 818.70 Lac
- f. Expenditure of the program in the year 2009-2010 : 618.99 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

#### h. Target and achievement of the main component of the program during 2009-2010:

| Item                                      | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|---|------|-----------|-----------|-------------|------------------------|
|   |      |           | Target    | Achievement |                        |
| Re-excavation of khal/ Nala               | Km   | 20        | 15        | 15          | 100                    |
| Construction of irrigation channel        | Km   | 22.50     | 14        | 14          | 100                    |
| 2-cusec force mode tube well installation | No   | 45        | 45        | 45          | 100                    |
| Installation of DTW                       | Nos. | 45        | 36        | 36          | 100                    |

### 35. KURIGRAM-LALMONIRHAT MINOR IRRIGATION DEVELOPMENT PROGRAM

#### a. Objectives of the program:

- Provide irrigation facilities to 1820 hectare land using 98 nos. of Low Lift Pump (LLP).
- Provide irrigation facilities to 2100 hectare land reserving water by creating water reserve through re-excavation of 42 Km khal.
- Production of 9800 MT food grain by ensuring optimum use of surface water & thus extending irrigation area through implementation of appropriate technology & developing irrigation structures.
- Providing training to 1200 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation.

#### b. Location of the program:

| Division | District    | Upazila  |
|----------|-------------|--|
| Rajshahi | Kurigram    | Chilmari, Rowmari, Nageswari, Rajibpur, Bhurungamari, Rajarhat, Kurigram Sadar, Olipur, Phulbaria. |
|          | Lalmonirhat | Lalmonirhat Sadar, Aditmari, Kaliganj, Patgram, Hatibandha   |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 821.55 Lac
- e. Allocation of the year 2009-2010 : 623.45 Lac
- f. Expenditure of the program in the year 2009-2010 : 561.179 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%
- h. Target and achievement of the main component of the program during 2009-2010

| Item                                | Unit | PP Target | 2009-2010 |             | Achieved in percentage |
|-------------------------------------|------|-----------|-----------|-------------|------------------------|
|                                     |      |           | Target    | Achievement |                        |
| Re-excavation of khal/ nala         | Km   | 42        | 20        | 20          | 100                    |
| Construction of irrigation channel  | Km   | 9.6       | 8.1       | 8.1         | 100                    |
| Construction of hydraulic structure | No   | 53        | 10        | 10          | 100                    |
| Procurement of Low Lift Pump        | Nos. | 98        | 98        | 98          | 100                    |
| Training                            | Nos. | 1200      | 450       | 450         | 100                    |

### 36. GOPALGANJ SADAR –TUNGIPARA -KOTALIPARA UPAZILA MINOR IRRIGATION DEVELOPMENT PROGRAM

#### a. Objectives of the program:

- Provide irrigation facilities to 532 hectare land using 26 nos. of Low Lift Pump (LLP);
- Production of 9400 MT additional food grain by ensuring optimum use of surface water and thus extending irrigation area through implementation of appropriate technology and developing irrigation structures;
- Providing training to 990 farmers/pump operator of the program area enhance their skillness and thus create opportunity for self employment and poverty alleviation;
- Reclamation of 3000 hectare cultivable land and increase crop production improving marshiland & Bill through excavating 40 Km of khal for flood control;
- Collecting data & information by observing ground water level (aquifer) from three Upazila.

#### b. Location of the program:

| Division | District  | Upazila                                 |
|----------|-----------|---|
| Dhaka    | Gopalganj | Gopalganj Sadar, Tungipara , Kotalipara |

- c. Program period : July/2009 to June/2011
- d. Estimated cost of the program : 981.84 Lac
- e. Allocation of the year 2009-2010 : 602.71 Lac
- f. Expenditure of the program in the Year 2009-2010 : 375.435 Lac
- g. Physical progress of the program in the year 2009-2010 : 100%

#### h. Target and achievement of the main component of the program during 2009-2010

| Item                                | Unit | PP<br>Target | 2009-2010 |             | Achieved in<br>percentage |
|-------------------------------------|------|--------------|-----------|-------------|---------------------------|
|                                     |      |              | Target    | Achievement |                           |
| Re-excavation of khal/ nala         | Km   | 40           | 15        | 15          | 100                       |
| Construction of irrigation channel  | Km   | 3.6          | 3         | 3           | 100                       |
| Construction of hydraulic structure | Nos. | 76           | 19        | 19          | 100                       |
| Procurement of Low Lift Pump        | No   | 26           | 26        | 26          | 100                       |
| Test Tube Well                      | Nos. | 30           | 15        | 15          | 100                       |
| Training                            | Nos. | 990          | 660       | 660         | 100                       |

## CHAPTER-IV

### IRRIGATION SECTOR UNDER ADP

4.1 The minor irrigation program of BADC has been privatized long before the year under report. As per decision of the government, BADC suspended taking up program pertaining to Deep Tube Well, Low Lift Pump and Shallow Tube Well since 1993-94 and cleared up residual stock of all kinds of irrigation equipment by way of sale. As a result, after privatization of minor irrigation program, BADC had no function relating to sale and operation of Low Lift Pump and Shallow Tube Well. But BADC has still some obligation for receiving payments and handing over ownership certificate of some Deep Tube Well to the farmers. Further to increase agricultural production by bringing more area under irrigation and also to strengthen the system of irrigation, BADC took up the following projects for implementation during 2009-2010.

1. Greater Barisal – Patuakhali Integrated Agricultural Development Project (1st Phase)
2. Pilot Project for Agricultural Production in Monga Prone Area through Modern Minor Irrigation
3. Ashugonj Polash-Agro-Irrigation Project (4<sup>th</sup> Phase)
4. Innovative use of Surface Water Project
5. Greater Bogra-Rangpur-Dinajpur Districts Integrated Area Development Project (2<sup>nd</sup> Phase)
6. Greater Mymensingh-Tangail Districts Integrated Agricultural Development Project (2<sup>nd</sup> Phase)
7. Greater Khulna-Jessore-Kushtia Districts Integrated Agricultural Development Project (2<sup>nd</sup> Phase)
8. Expansion of Irrigation through Utilization of Surface Water by Double Lifting (2<sup>nd</sup> Phase)

# 1. GREATER BARISAL-PATUAKHALI INTEGRATED AGRICULTURAL DEVELOPMENT PROJECT

## a. Objectives of the project:

- To grow additional food grains through optimum utilization of surface water by developing irrigation infrastructure and applying modern and local appropriate technology.
- To create self-employment opportunity for operators and fieldmen of irrigation equipment farmers by upgrading their skillness through training which can assist the government poverty alleviation program.
- To up-grade socio economic condition of the rural people of the project area.

## b. Location of the project:

| Division | District   | Upazila  |
|----------|------------|--|
| Barisal  | Barisal    | Barisal Sadar, Bakerganj, Muladi, Babuganj, Mehendiganj, Hijla Wazirpur, Banaripara. Agailjhara, Gournadi. |
|          | Jhalokathi | Jhalokathi Sadar, Nalchiti, Rajapur, Kathalia.   |
|          | Barguna    | Barguna Sadar, Amtali, Betagi, Bamna. Patharghata.   |
|          | Bhola      | Bhola Sadar, Daulatkhan, Lalmohan, Borhanuddin, Charfession Tajumuddin, Manpura.                           |
|          | Perojpur   | Perojpur Sadar, Nazirpur, Bhandaria, Shawrupkathi, Kaukhali, Zia nagar, Mothbaria.                         |
|          | Patuakhali | Patuakhali Sadar, Mirjaganj, Bauphal, kalapara, Dasmina Galachipa, Dumki.                                  |

- c. Project period : July/2006 to June/2010
- d. Estimated cost of the project : 1831.47 Lac
- e. Allocation of the year 2009-2010 : 173.00 Lac
- f. Expenditure of the project in the year 2009-2010 : 149.81 Lac
- g. Physical progress of the project in the year 2009-2010 : 100%

## h. Target and achievement of the main component of the project during 2009-2010

| Item  | Unit | DPP Target | 2009-2010 |             | Achieved in percentage |
|---|------|------------|-----------|-------------|------------------------|
|   |      |            | Target    | Achievement |                        |
| Re-excavation of derelict of khals & Nalas    | Km   | 250        | 16        | 16          | 100                    |
| Construction of different hydraulic structure | Nos. | 140        | 14        | 14          | 100                    |
| Construction of electrical line               | Nos. | 115        | 48        | 48          | 100                    |
| Vehicles                                      | Nos. | 16         | 8         | 7           | 88                     |
| Training                                      | Nos. | 2750       | 750       | 750         | 100                    |

## 2. PILOT PROJECT FOR AGRICULTURAL PRODUCTION IN MONGA PRONE AREA THROUGH MODERN MINOR IRRIGATION

### a. Objectives of the project:

- Production of more food grain, reduction & alleviation of poverty through developed and modern minor Irrigation technology and practices by optimum utilization of under ground water.
- Development of irrigation facilities & providing Irrigation facilities by rehabilitation of old unserviceable Deep Tube-Well.
- To increase crop intensity and to reduce yield gap through development of irrigation infrastructure & modern adaptable minor irrigation technology.
- To increase crop production by bringing fallow & uncultivated land under minor irrigation facilities through crop diversification.
- To increase cropping intensity from 200% to 250%
- To strengthen & restore soil health & properties.

### b. Location of the project:

| Division | District    | Upazila  |
|----------|-------------|--|
| Rangpur  | Lalmonirhat | Lalmonirhat Sadar, Aditmari, Kaliganj, Patgram and Hatibandha                            |
|          | Kurigram    | Chilmari, Rowmari, Nageswari, Rajibpur, Bhurungamari,                                    |
|          | Rangpur     | Rangpur Sadar, Gangachara, Pirganj, Pargacha, Badarganj, Taraganj, Mithapukur and Kaunia |
|          | Nilpamari   | Nilphamari Sadar, Saidpur, Jaldhaka, Kishoreganj, Domar and Dimla                        |
|          | Gaibandha   | Gaibandha Sadar, Shaghatta, Fulchari, Sundarganj, Sadullapur, Palashbari, Gobindaganj    |

- c. Project period : July/2007 to June/2011
- d. Estimated cost of the project : 2212.04 Lac
- e. Allocation of the year 2009-2010 : 725.00 Lac
- f. Expenditure of the project in the year 2009-2010 : 712.09 Lac
- g. Physical progress of the project in the year 2009-2010 : 100%



h. Target and achievement of the main component of the project during 2009-2010

| Item  | Unit | DPP<br>Target | 2010-2011 |             | Achieved in<br>percentage |
|---|------|---------------|-----------|-------------|---------------------------|
|   |      |               | Target    | Achievement |                           |
| Construction of irrigation channel  | Km   | 206           | 88        | 88          | 100                       |
| Construction of electric lines with supply of transformer and other accessories | Nos. | 206           | 91        | 91          | 100                       |
| 1- cusec force mode pump sinking  | Nos. | 106           | 44        | 44          | 100                       |
| 1-cusec suction mode pump sinkin  | Nos. | 100           | 44        | 44          | 100                       |

### 3. ASHUGANJ-POLASH AGRO IRRIGATION PROJECT (4<sup>th</sup> Phase)

#### a. Objectives of the project:

- To keep continuation of providing irrigation facilities to 16194 hectares (40,000 acres) of cultivable land by utilization of 1000 cusec & 600 cusec discharged cooling water (surface) of thermal power stations of Ashuganj and Ghorashal respectively per year through optimum utilization of the irrigation facilities developed up to 3<sup>rd</sup> phase of the project by applying modern and local appropriate technology.
- To expand irrigation facilities to additional 6073 hectares (15000 acres) of land per year through optimum utilization of irrigation infrastructure to be constructed in the 4<sup>th</sup> Phase of the project.
- To ensure food production of 70,000 MT of food grain against 16194 hectares (40,000 acres) of irrigated land and 26,250 MT of food grain against 6073 hectares (15,000 acres) of irrigated land i.e. 96,250 MT food grain in aggregate per year through implementation of the above stated activities.
- To create self-employment opportunity and alleviate poverty of 900 farmers and group managers by up-grading their skillness through 110,000 farm family, 275,000 (men 165,000 & women 110,000) labours through engaging themselves in all activities of irrigation, food grain production & processing under the project area.

#### b. Location of the project:

| Division   | District     | Upazila                                      |
|------------|--------------|--|
| Chittagong | Brahmanbaria | Ashuganj, Brahmanbaria, Sarail and Nabinagar |
| Dhaka      | Narshindi    | Palash, Narsindi Sadar and Shibpur           |

c. Project period

: July/2009 to June/2013

- d. Estimated cost of the project : 2353.26 Lac  
 e. Allocation of the year 2009-2010 : 900.00 Lac  
 f. Expenditure of the project in the year 2009-2010 : 897.90 Lac  
 g. Physical progress of the project in the year 2009-2010 : 100%

h. Target and achievement of the main component of the project during 2009-2010

| Component  | Unit | DPP<br>Target | 2009-2010 |             | Achieved in<br>percentage |
|--|------|---------------|-----------|-------------|---------------------------|
|  |      |               | Target    | Achievement |                           |
| Earthen canal excavation/ re-<br>excavation      | Km   | 50            | 16        | 16          | 100                       |
| Earthen embankment                               | Km   | 30            | 6         | 6           | 100                       |
| Construction of different hydraulic<br>structure | No   | 55            | 21        | 20          | 95                        |
| Retaining wall                                   | KM   | 1             | 0.40      | 0.40        | 100                       |
| Training   | Nos. | 900           | 180       | 135         | 75                        |
| Afforestation                                    | Nos. | 10000         | 2000      | 2000        | 100                       |

#### 4. INNOVATIVE USE OF SURFACE WATER PROJECT (2<sup>nd</sup> Phase)

##### a. Objectives of the project:

- Expanding irrigation area to 4777 hectares & to project additional 11942 tons of food grain after completion of the proposed 2<sup>nd</sup> phase project by optimum utilization of 25 nos. of 5-cusec Low Lift Pump (LLP) through re-excavation of 130 kilo meter (1300) thousand cubic meter) of khal-nala & hilly chhara construction of 31800 meter surface irrigation channel 57 nos. hydraulic structures by applying modern and local appropriate technology.
- Increasing irrigation area from 1173 hectares to 5950 hectares of land by utilization of total 85 nos. of 5-cusec Low Lift Pump (LLP) 25 nos. from 2<sup>nd</sup> phase & 60nos. from 1<sup>st</sup> phase) and use of reserve water from re-excavated of khal- nala/ hilly chhara and other infrastructures .
- Producing 14875 MT if food grain from 5950 hectares of irrigation land through utilization of irrigation equipment& infrastructures constructed in the 1<sup>st</sup> phase and to be constructed up to the 2<sup>nd</sup> phase of the project.
- To create self employment opportunity and alleviate poverty of 900 owner/ manager / operator fieldsmen of irrigation equipment and 1800 farmers by upgrading their skillness through training, 29750 farmer families , 74375 labourers (Men 44625 and Women 29750) through engaging themselves in all activities of irrigation, food grain production and processing under the project area.

##### b. Location of the project:

| Division   | District    | Upazila   |
|------------|-------------|---|
| Chittagong | Chittagong  | Mirsarai, Banshkhali, Raujan, Rangunia, Hathazari, Boalkhali, Satkania, Lohagara, Fatikchari, Sitakundu, Anwara, Patiya, Chandanaish. |
|            | Cox's Bazar | Chakoria, Kutubdia, Cox's bazaar Sadar, Ramu, Ukhia, Teknaf.  |
| Sylhet     | Sylhet      | Sylhet Sadar, fenchuganj, Companyganj, Balaganj, Biswanath, Golapganj, Beanibazar, Zakiganj, Kanaighat, Gowainghat, Jaintapur,        |
|            | Sunamganj   | Sunamganj Sadar, Chattak, Dowarabazar, Taherpur, Biswambharpur, Dharmapasha, Jamalganj, Derai, Jagannathpur, Sulla.                   |

- c. Project period : July/2009 to June/2014
- d. Estimated cost of the project : 2318.43 Lac
- e. Allocation of the year 2009-2010 : 880.00 Lac
- f. Expenditure of the project in the year 2009-2010 : 850.59 Lac
- g. Physical progress of the project in the year 2009-2010 : 100%

h. Target and achievement of the main component of the project during 2009-2010

| Item   | Unit | DPP<br>Target | 2009-2010 |             | Achieved in<br>percentage |
|--|------|---------------|-----------|-------------|---------------------------|
|  |      |               | Target    | Achievement |                           |
| Re- excavation of normal of khal               | Km   | 130           | 50        | 50          | 100                       |
| Construction of irrigation channal             | Km   | 31.80         | 12        | 12          | 100                       |
| Construction of discharge box of 5- cusec pump | Nos. | 53            | 20        | 20          | 100                       |
| Construction of pump shed of 5- cusec pump     | Nos. | 85            | 42        | 42          | 100                       |
| Procurement of 5- cusec electric pump          | Nos. | 25            | 25        | 25          | 100                       |
| Construction of different hydraulic structure  | Nos. | 57            | 29        | 29          | 100                       |

## 5. GREATER BOGRA-RANGPUR-DINAJPUR DISTRICT INTEGRATED AREA DEVELOPMENT PROJECT (2<sup>ND</sup> PHASE)

### a. Objectives of the project:

- To expand irrigated area by 2456 hectares after completion of the project (2<sup>nd</sup> phase) by optimum utilization of 20 nos. of 5-cusec Low Lift Pumps (LLP) and 110 nos. of rehabilitated 2-cusec Deep Tube Well (DTW) and also through construction of irrigation channel / buried pipe system & other infrastructures. Additional 6140 MT of food grain will be produced every year.
- To continue utilization of irrigation equipment and infrastructures already procured and constructed during the 1<sup>st</sup> phase of the project by which additional 2,800 hectares of land will be brought under irrigation which will produce 7,000 MT of food grain every year.
- To produce 13,140 MT of food grain per year from 5256 hectares of irrigated land through utilization of irrigation equipment & infrastructures constructed and to be constructed up to the 2<sup>nd</sup> phase of the project.
- To create self employment opportunity and alleviate poverty of 1500 Owner/ Manager/ Operator/ Fieldsmen of irrigation equipment and 1500 farmers by upgrading their skillness through training. 135550 farm families, 1055325 laborers (Men 633195 and Women 422130) through engaging themselves in all activities of irrigation, food grain production and processing under the project area.

### b. Location of the project:

| Division  | District                                     | Upazill  |
|-----------|--|--|
| Rangpur   | Rangpur                                      | Rangpur Sadar, Gangachara, Pirganj, pargacha, Badarganj, Taraganj, Mithapukur, Kaunia  |
|           | Dinajpur                                     | Dinajpur Sadar, Parbatipur, Phulbari, Birampur, Ghoraghat, Khanshama, Hakimpur, Birol, Birganj, Chirirbandar, Kaharole, Bochaganj, Nawabganj |
|           | Nilphamari                                   | Nilphamari Sadar, Saidpur, Jaldhaka, Kishoreganj, Domar, Dimla.  |
|           | Gaibandha                                    | Gaibandha Sadar, Palashbari, Shaghatta, Sundarganj, Sadullapur, Fulchari, Gobindaganj  |
|           | Kurigram                                     | Kurigram, Phulbari, Rajarhat, Ulipur, Chilmari, Rowmari, Nageswari, Rajibpur, Bhurungamari.  |
|           | Lalmonirhat                                  | Lalmonirhat, Aditmari, Kaliganj, Patgram, Hatibandha.  |
|           | Thakurgaon                                   | Thakurgaon, Baliadangj, peerganj, Haripur, Ranishangkoil,  |
| Panchagar | Pancharga, Tetulia, Atowari, Boda, Debiganj. |  |
| Rajshahi  | Bogra  | Bogra Sadar, Shajahanpur, Sherpur, Dhubchanchia, Dhunot, Sariahandi, Gabtali, Nandigram, Kahaloo, Adamdighi, Shibganj, Sonatola              |
|           | Joypurhat                                    | Joypurhat, Akkelpur, Kalai, Panchbibi, Khetlal.  |

### c. Project period

: July/2009 to June/2014

- d. Estimated cost of the project : 2310.96 Lac  
 e. Allocation of the year 2009-2010 : 520.00 Lac  
 f. Expenditure of the project in the year 2009-2010 : 459.27 Lac  
 g. Physical progress of the project in the year 2009-2010 : 100%

h. Target and achievement of the main component of the Project during 2009-2010

| Item  | Unit | DPP 2009-2010 |        |             | Achieved in percentage |
|---|------|---------------|--------|-------------|------------------------|
|   |      | Target        | Target | Achievement |                        |
| Re-excavation and development of derelict khals & Nalas                         | Km   | 50            | 10     | 7.25        | 72                     |
| Construction of different hydraulic structure                                   | Nos. | 62            | 12     | 12          | 100                    |
| Construction of electric lines with supply of transformer and other accessories | Nos. | 20            | 4      | 4           | 100                    |
| Construction of irrigation channel  | Km   | 18            | 1.2    | 1.2         | 100                    |

## 6. GREATER MYMENSINGH-TANGAIL INTEGRATED AGRICULTURAL DEVELOPMENT PROJECT

### a. Objectives of the project:

- To expand irrigation facilities of additional cultivable land per year after completion of the project (2<sup>nd</sup> phase) by optimum utilization of 25 nos. of 5-cusec Low Lift Pump (LLP) & 115 nos. of rehabilitated 2- cusec Deep Tube Well (DTW) through construction of irrigation channel/ buried pipe system & other infrastructure and by completion of carried over incomplete activities of the 1<sup>st</sup> phase during the 2<sup>nd</sup> phase by applying modern and local appropriate technology.
- To continue utilization of irrigation equipment and infrastructure already procured and constructed during the 1<sup>st</sup> phase of the project by which additional 4,900 hectares of land will be brought under irrigation producing 18,250 MT of food grains per year.
- To produce 18,925 MT of food grain per year from 9,271 hectares of irrigated of land through utilization of irrigation equipment & infrastructures constructed and to be constructed up to the 2<sup>nd</sup> phase project.
- To create self employment opportunity and alleviate poverty of 1,800 Owner/ Manager/ Operator/ Fieldsmen of irrigation equipment and 4,500 farmers by upgrading their skillness through Farmers Training 38,770 farmer families, 96,925 labors (58,155 men and 38,770 women) through engaging themselves in all activities of irrigation food grain production and processing under the project area.

### B.Location of the project:

| Division | District | Upazila |
|----------|----------|---------|
|          |          |         |

|       |             |  |
|-------|-------------|--|
| Dhaka | Mymensingh  | Bhaluka, Gafargaon, Muktagacha, Fullbari, Sadar, Haluaghat, Fulpur, Ishurganj, Nandail, Trishal, Dhubaura, Gouripur            |
|       | Kishoreganj | Kishoreganj, Karimganj, Kotiadi, Mithamoin, Itan, Kuliarchar, Bajitpur, Astagram, Hosainpur, Tarail, Pakundia, Bhairab, Nikli. |
|       | Netrokona   | Netrokona, Durgapur, Mohonganj, Kalmakanda, Kendua, Atpara, Purbadhala, Barhatta, of khaliajuri, Madan.                        |
|       | Tangail     | Tangail, Nagarpur, Kalihati, Modhupur, Ghatail, Bashail, Sakhipur Mirzapur, Delduar, Bhuapur, Gopalpur.                        |
|       | Jamalpur    | Jamalpur, Sarisabari, Melandah, Ishampur, Dewanganj, Madarganj Boxiganj.   |
|       | Sherpur     | Sherpur, Sreebordi, Nalitabari, Nokla, Jhenaigati.   |

- c. Project period : July/2009 to June/2014  
d. Estimated cost of the project : 2334.26 Lac  
e. Allocation of the year 2009-2010 : 540.00 Lac  
f. Expenditure of the project in the year 2009-2010 : 501.46 Lac  
g. Physical progress of the project in the year 2009-2010 : 100%

h. Target and achievement of the main component of the Project during 2009-2010

| Item  | Unit | DPP Target | 2009-2010 |             | Achieved in percentage |
|---|------|------------|-----------|-------------|------------------------|
|   |      |            | Target    | Achievement |                        |
| Re-excavation of khals & Nalas  | Km   | 50         | 13.50     | 13.50       | 100                    |
| Construction of electric lines with supply of transformer and other accessories of 5- cusec Low Lift Pump (LLP) | Nos. | 31         | 10        | 10          | 100                    |
| Construction of surface burried pipe irrigation channel for DTW   | Nos. | 115        | 30        | 30          | 100                    |
| Construction of pump shed for 5-cusec pump  | Nos. | 95         | 18        | 18          | 100                    |
| Training  | Nos. | 6300       | 450       | 450         | 100                    |

## 7. GREATER KHULNA JESSORE-KUSTHIA INTEGRATED AGRICULTURAL DEVELOPMENT PROJECT

**a. Objectives of the project:**

- To expand irrigated area by 4,044 hectares after completion of the project (2<sup>nd</sup> phase) by optimum utilization of 40 nos. of 5 cusec Low Life Pump (LLP) & 40 rehabilitated 2-cusec Deep Tube well (DTW) and also through construction of irrigation channel/ buried pipe system & other infrastructures by which Additional 10.110 MT of food grain will be produced very year.
- To continue utilization of irrigation equipment and infrastructures already procured and constructed during the 1<sup>st</sup> phase of the project by which additional 1,400 hectares of land will be brought under which will produce 3,500 MT of food grain every year.
- To produce 13,610 MT of food grain per year 5,444 hectares of irrigation land through utilization of irrigation equipment & infrastructures constructed and to constructed up to the 2<sup>nd</sup> phase of the project.
- To create self employment opportunity and alleviate poverty of 1,500 owner/ manager/ operator/fieldsmen of irrigation equipment and 2,100 farmers by upgrading their skillness through training 17100 farmer families 68400 labors (men 38,000 and women 30,400) through engaging themselves in all activities of irrigation, food grain production and processing under the project.

**b. Location of the project:**

| Division | District     | Upazila   |
|----------|--------------|---|
| Khulna   | Khulna       | Dighulia ,Rupsha, Thorokhada, Phultala  |
|          | Bagherhat    | Bagherhat Sadar, kachoa, Rampal, Fakirhat, Mollahat, Chitolmari, Moreigonj                  |
|          | Satkhira     | Satkhira Sadar, Kolaroa   |
|          | Jessore      | Jessore Sadar, Chowgacha, Bagarpara, Abhoynagar, Sharsa, jhikorgacha, Manirampur, Keshobpur |
|          | Jhenaidah    | Jhenaidah, Sailakupa, Hatinakunda, Kaligonj, Kotchandpur, Moheshpur.                        |
|          | Magura       | Magura, Sreepur, Shalikka, Mohammadpur.   |
|          | Kushtia      | Daulatpur, Vheramara, Kumarkhali, khoksha,  |
|          | Meherpur     | Meherpur, Gangni,   |
|          | Chuadanga    | Chuadanga Sadar.  |
| Narail   | Narail Sadar |   |

- c. Project period : January/2010 to June/2014
- d. Estimated cost of the project : 2405.05 Lac
- e. Allocation of the year 2009-2010 : 400.00 Lac
- f. Expenditure of the project in the year 2009-2010 : 392.68 Lac
- g. Physical progress of the project in the year 2009-2010 : 100%

**h. Target and achievement of the main component of the project during 2009-2010**

| Item                            | Unit | DPP Target | 2009-2010 |             | Achieved in percentage |
|---------------------------------|------|------------|-----------|-------------|------------------------|
|                                 |      |            | Target    | Achievement |                        |
| Construction of surface channel | Km   | 24         | 3         | 3           | 100                    |
| Construction of buried pipe     | Km   | 24         | 10.20     | 8.40        | 82                     |

|                              |      |       |      |      |     |
|------------------------------|------|-------|------|------|-----|
| Procurement of 5- cusec pump | Nos. | 40    | 20   | 10   | 50  |
| Construction of pump shed    | Nos. | 60    | 15   | 11   | 73  |
| Afforestation                | Nos. | 20000 | 3000 | 3000 | 100 |

## 8. EXPANSION OF IRRIGATION THROUGH UTILIZATION OF SURFACE WATER BY DOUBLE LIFTING

### a. Objectives of the project:

- To operate 420 nos. of 5 cusec land based pump and 115 nos. of floating pumps using surface water of the perennial rivers/ natural water body by applying Double Lifting Techniques for providing irrigation facilities to 55, 125 hectares of land for producing additional 137812.50 MT of food grain per year.
- To increase irrigation efficiency and to reduce yield gap by applying “On Farm Water Management Technology “by constructing 279 nos. of discharge boxes, 96260 meters of pucca Irrigation channel, 360 nos. out of turn out, 52 nos. of flume, 15 nos. of cross dam/ submerged weir & 290 nos. of pipe culvert.
- To create self –employment opportunity and alleviate poverty of the project area and to develop skillnessed manpower for 3,500 nos. of managers/ operators/ fields man of irrigation equipment and farmers by upgrading their attitude through effective training.

### b. Location of the project:

| Division   | District                                | Upazila  |
|------------|---|--|
| Dhaka      | Manikganj                               | Singair, Manikganj, Sadar.   |
|            | Narayanganj                             | Rupganj, Araiহার, Bandor.  |
|            | Munshiganj                              | Gazaria, Lowhajang, Serajdikhan.   |
|            | Narsingdi                               | Narsingdi, Raipura, Palash.  |
|            | Kishorgang                              | kuliarchar, Austogram, Bajitpur, Nikli, Itna, Mithamoin, Pakundia, Tarail, |
|            | Jamalpur                                | Jamalpur Sadar, Melandah.  |
|            | Mymensingh                              | Gafargaon, Trishal, Bhaluka,   |
|            | Netrokona                               | Madan, Atpara, of khaliajuri.  |
|            | Gazipur                                 | Kaligonj.  |
|            | Sherpur                                 | Jhenaigati, Nalitabari.  |
|            | Madaripur                               | Rajoir, kalkini.   |
|            | Shariatpur                              | Shariatpur Sadar, Goshairhat, Vedorganj,                                   |
| Gopalganj  | Gopalganj Sadar, Tungipara, Maksudpurk. |  |
| Rajshahi   | Sirajganj                               | Shahjadpur.  |
| Sylhet     | Gaibandha                               | Gaibandha, Gobindoganj.  |
|            | Habiganj                                | Baniachong, Ajmeriganj, Lakhai, Habiganj Sadar.                            |
|            | Sunamganj                               | Sunamganj, jamalganj, Derai, Bishamvapur, Sulla.                           |
| Chittagong | Comilla                                 | Muradnagar, Monoharganj,   |
|            | Chandpur                                | Haziganj, chandpur, shahrasti, Matlab.                                     |
|            | Lakshmipur                              | Lakshmipur Sadar.  |
|            | Brahmanbaria                            | Nabinagar, Brahmanbaria Sadar, Nasirnagar,                                 |
|            | Chittagong                              | Rowjan, Fatikchari. Chandanaish.   |
|            | Cox' SBazar                             | Ramu.  |



|         |            |   |
|---------|------------|---|
| Kulna   | Narail     | Narail Sadar, Lohagara, Kalia.                          |
|         | Bagerhat   | Chitalmari, Fakirhat.                                   |
| Barisal | Barisal    | Gowrnadi, Muladee, Wazirpur, Hejla.                     |
|         | Perojpur   | Perojpur Sadar, Nazirpur, Mothbaria.                    |
|         | Bhola      | Borhanuddin, Lalmohan, Daulatkhan, Bhola, Char Fashion. |
|         | Patuakhali | Golachipa.  |
|         | Barguna    | Bamna, Amtali.  |
|         | Jhalakati  | Jhalakati Sadar, Nolchity, Rajapur.                     |

- c. Project period : July/2009 to June/2014
- d. Estimated cost of the project : 9200.00 Lac
- e. Allocation of the year 2009-2010 : 1917.00 Lac
- f. Expenditure of the project in the year 2009-2010 : 1895.18 Lac
- g. Physical progress of the project in the year 2009-2010 : 100%

h. Target and achievement of the main component of the project during 2009-2010

| Item  | Unit | DPP<br>Target | 2010-2011 |             | Achieved in<br>percentage |
|---|------|---------------|-----------|-------------|---------------------------|
|   |      |               | Target    | Achievement |                           |
| Re-excavation of canal  | Km   | 45            | 7         | 7           | 100                       |
| Construction of pacca channel   | Km   | 96.26         | 19.25     | 19.25       | 100                       |
| Construction of discharge box   | Nos. | 279           | 59        | 59          | 100                       |
| Construction of electric lines with supply of transformer and other accessories | Nos. | 185           | 32        | 32          | 100                       |
| Procurement of electric motor   | Nos. | 142           | 71        | 71          | 100                       |
| Procurement of diesel engine  | Nos. | 142           | 71        | 71          | 100                       |
| Procurement of 30 hp capacity electric motor                                    | Nos. | 142           | 71        | 71          | 100                       |

## CHAPTER – V

### FERTILIZER

5.01 During the year 1992-93 as per Government decision fertilizer procurement cum distribution activities were stopped. But from 2006-2007, was again entrusted with the responsibility of distribution of non-urea fertilizer i.e. Triple Super Phosphate (TSP) and Muriate of Potash (MOP) in a limited scale. It may be mentioned here that measures have been taken for distribution of fertilizer through 25 sale centers under 21 regions of BADC. Procurement and distribution position of non urea fertilizer during 2009-2010 is given below:-

**Table 4.1**

#### Fertilizer Import and Distribution during 2009-2010

| Item of fertilizer  | 2009-2010 |             | Figure in MT  |
|---------------------|-----------|-------------|---------------|
|                     | Target    | Achievement | % Achievement |
| <b>Procurement</b>  |           |             |               |
| TSP                 | 100,000   | 151,799     | 151.80        |
| MOP                 | 75,000    | 154,325     | 205.77        |
| Total               | 175,000   | 306,124     | 174.93        |
| <b>Distribution</b> |           |             |               |
| TSP                 | 100,000   | 169,205     | 169.21        |
| MOP                 | 75,000    | 92,680      | 123.57        |
| Total               | 175,000   | 261,885     | 149.65        |

#### Price of Fertilizer at dealer level during 2009-2010

5.2 As per decision of government the sale price of imported non urea i.e. TSP and MOP fertilizer fixed up by Minister of Agriculture. The sale price of Imported TSP and MOP fertilizer of BADC during 2009-2010 is given below in the following table.

**Table 4.2**

#### Subsidized Sale Price of Fertilizer at dealer level during 2009-2010

| Period   | Subsidized Sale Price (Taka / MT) |           |
|--|-----------------------------------|-----------|
|  | TSP                               | MOP       |
| 1 <sup>st</sup> July 2007 to 27 <sup>th</sup> January 2008       | 17,437.00                         | 15,491.00 |
| 28 <sup>th</sup> January 2008 to 15 <sup>th</sup> November 2008  | 34,187.94                         | -         |
| 16 <sup>th</sup> November 2008 to 26 <sup>th</sup> November 2008 | 82,307.05                         | 66,530.67 |
| 27 <sup>th</sup> November 2008 to 14 <sup>th</sup> January 2009  | 76,634.37                         | 69,225.59 |
| 15 <sup>th</sup> January 2009 to 1 <sup>st</sup> November 2009   | 38,000.00                         | 33,000.00 |
| 2 <sup>nd</sup> November 2009 to 30 <sup>th</sup> June 2010      | 20,000.00                         | 23,000.00 |

#### Fertilizer Dealer:

5.3 BADC has given registration as fertilizer dealer from BCIC dealer and BADC seed dealer:-

Table 4.2

| Sl. Nos. | Categories of dealer  | Nos. of dealer registration |
|----------|-----------------------|-----------------------------|
| 1.       | From BCIC dealer      | 2203 Nos.                   |
| 2.       | From BADC seed dealer | 1516 Nos.                   |
| Total:   |                       | 3719 Nos.                   |

## CHAPTER – VI

### TRAINING

BADC organizes two types of Training. These are:

1. Local Training and
2. Foreign Training.

#### **1) Local Training:**

##### **a) BADC Training Institute, Madhupur, Tangail**

6.01 BADC has own taining Institute at Madhupur, Tangail to impart both induction and in-service training to its employees working in different places of the country. Established in 1968, the institute is located in the vicinity of Madhupur Seed Multiplication Farm, Tangail that is about 150 Km' drive towards northwest of the capital city of Dhaka. The institute is situated on an area of 10 acres of land. Over the years, the institute was developed as the most modern taining Institute with all facilities including sufficient classroom, library facilities and suitable accommodation for the trainees and speakers. Since its establishment in 1968, the institute has been serving the purpose of developing professional skillnesss of BADC personel through appropriate training. The overall management of the institute lies with the Principal who is assisted by a team of instructors in matters of designing and conducting various taining courses.

#### **Program Contents:**

6.02 Generally, three types of taining are organized in the institute. These are:

- > Induction taining for newly recruited employees
- > In-service taining of the officers and staff working in the corporation and
- > Refreshers' course of short duration.

The curriculum of taining includes mainly courses on specialized subjects like intensive crop production, pest control, farm management, water management, repair and maintenance of irrigation equipment and farm machinery, seed processing, administration and office management, purchase procedure, budgeting, accounting, auditing etc. The duration of courses varies depending on the nature of taining. The induction taining is basically meant for the newly recruited employees and the in-service taining for the various categories of existing BADC personel. Besides the normal training Program, workshops and seminars on important issues relating to agriculture are also organized at the institute. Guest speakers and lecturers from different universities/institutes are sometimes invited to keep pace with the demand or importance of the training courses during 2008-2009 officers and staff 182 nos.

#### **Library and Reference Service:**

- 6.03 The BADC training institute maintains a big library to meet the needs of the trainees and the trainers. The library has a fairly good collection of books, periodicals, magazines, and journals etc. on various aspects of agriculture, irrigation management, finance, administration and other subjects of interest. About 6000 books on different subjects are preserved in the library of the Institute.
- 6.04 The BADC training institute also provides infrastructural facilities to different organizations including NGO's on rental basis for training of their Nos.nel.

**b. Training by other organizations**

- 6.05 During the year 2009-2010 a total number of 81 officer and staffs were attended in different courses organized by Academy for Planning and Development (APD), Financial Management Academy (FIMA), MOA, BARI etc. and also in house training organized by BADC. On the other hand 50 officers and staffs attended in-house training program organized by BADC.

**2. Foreign Training:**

- 6.06 BADC utilizes overseas training facilities to acquaint its officials with the latest technical know-how in the field of agriculture and mechanization. During 2009-2010, BADC sent 6 officers abroad to participate in the training Program on different subjects as against the facilities and financial assistance offered by the donor countries /agencies. Table 5.01 shows the details of foreign training undertaken by the officers during the year under report.

**Table 6.01**

**Foreign Training availed during 2009-2010**

| Sl. Nos. | Field of Training   | Country   | Nos. Of Participants |
|----------|---|-----------|----------------------|
| 1        | Seed Industries Course  | India     | 02                   |
| 2        | Workshop on the Participatory Approach to Water Resources Management in Agriculture | Iran      | 01                   |
| 3        | SDC/IC-AFIP-DAE- Collaborative Program  | Malaysia  | 01                   |
| 4        | Bio-Diesel Technology   | Thailand  | 01                   |
| 5        | Horticulture Agro-Business Technology   | Indonesia | 01                   |

## CHAPTER – VII

### FINANCE

7.01 During 2009-2010 there were 15 projects under Annual Development Program (ADP) and 45 programs under revenue implemented by BADC. Out of 15 projects 7 were under crop sub-sectors and 8 projects under irrigation sub-sectors. Out of 45 programs 9 were under crop sub-sectors and 36 were under irrigation sub-sectors.

7.02 Provision for 45 Program under revenue (In Lakh Taka)

| Sector                  | GOB       | RPA/ DPA | DPA | Total     |
|-------------------------|-----------|----------|-----|-----------|
| Crop (9 program)        | 10,237.30 | -        | -   | 10,237.30 |
| Irrigation (36 program) | 20,488.91 | -        | -   | 20,488.91 |
| Total (45 Programs)     | 30,726.21 | -        | -   | 30,726.21 |

7.03 Total fund actually available under revenue (In Lakh Taka)

| Sector                  | GOB       | RPA/ DPA | Own Receipt | Total     |
|-------------------------|-----------|----------|-------------|-----------|
| Crop (9 program)        | 10,237.30 | -        | 23,297.09   | 33,534.39 |
| Irrigation (36 program) | 20,357.17 | -        | -           | 20,357.17 |
| Total (45 Programs)     | 30,594.47 | -        | 23,297.09   | 53,891.56 |

7.04 Gross and Net Expenditure under revenue (In Lakh Taka):

| Sector                  | Gross Expenditure | Own Receipt | Net Expenditure |
|-------------------------|-------------------|-------------|-----------------|
| Crop (9 program)        | 33,302.17         | 23,295.43   | 10,006.74       |
| Irrigation (36 program) | 17,796.19         | -           | 17,796.19       |
| Total (45 Programs)     | 51098.36          | 23,295.43   | 27,802.93       |

7.05 Provision for 15 Projects under ADP/ RADP (In Lakh Taka)

| Sector                  | GOB       | RPA | DPA | Total     |
|-------------------------|-----------|-----|-----|-----------|
| Crop (7 projects)       | 16,380.00 | -   | -   | 16,380.00 |
| Irrigation (8 projects) | 6,055.00  | -   | -   | 6,055.00  |
| Total (15 projects)     | 22,435.00 | -   | -   | 22,435.00 |

7.06 Total fund actually available for 15 Projects under ADP (In Lakh Taka)

| Sector                  | GOB       | RPA | DPA | Own Receipt | Total     |
|-------------------------|-----------|-----|-----|-------------|-----------|
| Crop (7 projects)       | 16,370.21 | -   | -   | -           | 16,370.21 |
| Irrigation (8 projects) | 6,055.00  | -   | -   | -           | 6,055.00  |
| Total (15 projects)     | 22,425.21 | -   | -   | -           | 22,425.21 |

7.07 Gross and Net Expenditure for 15 Projects under ADP (In Lakh Taka):

| Sector                  | Gross Expenditure | Own Receipt | Net Expenditure | Achievement in percentage (%) |
|-------------------------|-------------------|-------------|-----------------|-------------------------------|
| Crop (7 projects)       | 16,352.13         | -           | 16,352.13       | 100                           |
| Irrigation (8 projects) | 5,858.98          | -           | 5,858.98        | 97                            |
| Total (15 projects)     | 22,211.11         | -           | 22,211.11       | 99                            |

Note: All financial statements are shown in Appendix- A to G

