**PROGRAMME (KARMACHUCHI) COMPLETION REPORT**

**A. DESCRIPTION:**

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | Name of the Programme (Karmachuchi) | : | Khulna District Dakatia Beel Water Logging Reduction & Minor Irrigation Development Programme. |
| 2 | Administrative Ministry/Division | : | Ministry of Agriculture |
| 3 | Executing Agency | : | Bangladesh Agricultural Development Corporation |
| 4 | Location of the Programme (Karmachuchi) | : | Fultala & Dumuria Upazilla of Khulna District. |
| 5 | Objectives of the Programme | : |  |
| * Re-excavation of Khal to the reduction of 200 hectares of waterlogged land and optimal utilization of surface water in irrigation; * Production of 600 MT food grain by the construction of 4 nos. sub-surface irrigation channel (Buried Pipe) to enhance irrigation efficiency. | | | |

05. Estimated Cost : 458.50 Lakh.

06. Date of approval : 19.01.2020

07. Implementation Period : July/2019 to June/2022.

**B. IMPLEMENTATION:**

08. Implementation Period:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Implementation Period as per PPNB | | Actual Implementation period | Time Over-run  (% of original Implementation period) | Remarks |
| Original | Latest Revised |
| 01 | 02 | 03 | 04 | 05 |
| July/2019 to June/2022 | - | July/2019 to June/2022 | - | - |
|  |  |  |  |  |

09. Cost:

(In lakh Taka)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Description | Estimated Cost | | Actual Expenditure | Cost over-run (% of original cost) | remarks |
| Original | Latest revised |
| 01 | 02 | 03 | 04 | 05 | 06 |
| Total | 458.50 | - | 458.10055 | - | - |
| Taka | 458.50 | - | 458.10055 | - | - |
| P.A | - |  | - |  |  |

10. **Component-wise Progress:**

(In lac Taka)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Items of work (as per PPNB) | Unit | Target (as per PPNB) | | Actual Progress | | Reasons for deviation  () |
| Financial | Physical (Quantity) | Financial  (with %) | Physical (Quantity with %) |  |
| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
| **A.    Revenue** |  |  |  |  |  |  |
| **Supply and Service** |  |  |  |  |  |  |
| Publicity and advertising | LS | 3.00 | LS | 2.99700  (99.90%) | LS  (100%) |  |
| Loading, unloading, and transportation | LS | 1.00 | LS | 1.00000  (100%) | LS  (100%) |  |
| **Total A (Revenue)=** |  | **4.00** |  | 3.99700  (99.93%) |  |  |
| **B.    Capital** |  |  |  |  |  |  |
| **Procurement & supply of Irrigation Equipment** |  |  |  |  |  |  |
| Procurement of material for 1000 meter underground Irrigation channel of 02 cusec LLP | Sets | 34.00 | 4 Nos | 33.99798  (99.99%) | 4 Nos  (100%) |  |
| **Construction & Civil work** |  |  |  |  |  |  |
| Re-Excavation of Khal & associated works (survey, Design, Levelling & Turfing) | Nos. | 312.50 | 25.0 KM | 312.44400  (99.98%) | 25.0 KM  (100%) |  |
| Construction of RCC Outlet | Nos. | 24.00 | 200 Nos. | 23.78150  (99.09%) | 200 Nos.  (100%) |  |
| Construction of Buried Pipe irrigation channel (1000 Meters each) at 02-cusec Low Lift Pump scheme. | Nos. | 24.00 | 4 Nos. | 23.96510  (99.85%) | 4 Nos.  (100%) |  |
| Construction of Water Pass | KM | 50.00 | 10 Nos. | 49.94020  (99.88%) | 10 Nos.  (100%) |  |
| Construction of small Pump House | Nos. | 10.00 | 4 Nos. | 9.97480  99.75%) | 4 Nos.  (100%) |  |
| **Total B (Capital)=** |  | **454.50** |  | 454.10358  (99.91%) |  |  |
| **Grand Total (A+B)=** |  | **458.50** |  | 458.10055  (99.91%) |  |  |

11. **Information regarding Programme (Karmasuchi) Director:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name & Designation with pay Scale | Full time | Part-time | Responsible for more than one project/programme | Date of | | Remarks |
| From | To |
| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
| Mohammad Musharraf Hossain Bhuiyan  Executive Engineer  BADC, Khulna Region  Pay Scale: 29,000-63,410/- | Full time | - | Responsible for more than one programme | 30-07-2019 | 04-10-2020 |  |
| Md. Jamal Faruque.  Executive Engineer  BADC, Khulna Region  Pay Scale: 43,000-59850/- | Full time | - | Responsible for more than one programme | 04-10-2020 | 30-06-2022 |  |

**12. Procurement of major Goods, Works, and Consultancy Services:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Description of procurement (goods/ works/ consultancy)  as per the bid document | Tender/ Proposal Cost  (in Lakh Taka) | | Tender/ Bid/ Proposal | | Date of Completion of works/ services and supply of goods | |
| As per PPNB | Contracted value | Invitation date | Contract signing/ LC opening date | As per contract | Actual |
| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
| Procurement of materials for 1000 meter underground Irrigation channel of 02 cusec LLP | 4 Nos | 34.00 | 01.09.20 | 29.09.20 | 29.10.20 | 30.06.20 |
| 14.09.21 | 12.10.21 | 11.11.21 | 30.06.22 |
| Re-Excavation of Khal & associated works (survey, Design, Levelling & Turfing) | 15.0 KM | 312.50 | 20-02-20 | 09-03-20 | 19-04-20 | 30-06-20 |
| 01.09.20 | 29.09.20 | 29.10.20 | 30.06.20 |
| 14.09.21 | 12.10.21 | 11.11.21 | 30.06.22 |
| Construction of RCC Outlet | 200 Nos | 24.00 | 20-02-20 | 09-03-20 | 19-04-20 | 30-06-20 |
| 01.09.20 | 29.09.20 | 29.10.20 | 30.06.20 |
| 14.09.21 | 12.10.21 | 11.11.21 | 30.06.22 |
| Construction of sub-surface (Buried Pipe) irrigation channel (1000 Meters each) at 02-cusec Low Lift Pump scheme. | 4 Nos | 24.00 | 01.09.20 | 29.09.20 | 29.10.20 | 30.06.20 |
| 14.09.21 | 12.10.21 | 11.11.21 | 30.06.22 |
| Construction of Water Passes | 10 Nos | 50.00 | 20-02-20 | 09-03-20 | 19-04-20 | 30-06-20 |
| 01.09.20 | 29.09.20 | 29.10.20 | 30.06.20 |
| 14.09.21 | 12.10.21 | 11.11.21 | 30.06.22 |
| Construction of Pump House | 4 Nos | 10.00 | 01.09.20 | 29.09.20 | 29.10.20 | 30.06.20 |
| 14.09.21 | 12.10.21 | 11.11.21 | 30.06.22 |

**13. D. ACHIEVEMENT OF OBJECTIVES OF THE PROJECT:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Objectives as per PPNB | Actual achievement | Reasons for the shortfall, if any |
| (a) | Production of 600 Metric Ton food grain from a reduction of 200 hectares of waterlogged land through re-excavation of Khal, irrigation area expansion through the development of modern irrigation system. | Re-excavating 15 KM Khal at the program area to reduce waterlogged surface water irrigation expansion. 200 hectares of cultivated waterlogged land have been brought under proper drainage facility and surface water irrigation and generated to produce 600 Metric tons of food grain per year. | - |
| (b) | Enhancement of controlled irrigation system by the construction of 4 KM sub-surface irrigation channel; | 4000 meters of sub-surface irrigation channel constructed in the Programme area results in 100 hectares of cultivable land under a controlled irrigation system. | - |

**E. BENEFIT ANALYSIS:**

**14. Annual Output:**

|  |  |  |  |
| --- | --- | --- | --- |
| Items of output | Unit | Estimated quantity expected  at full capacity | The actual quantity of output during the 1st year or operation at full capacity  (or during real production for newly completed project). |
| (a) Re-excavation of Khal. | 15 KM | Re-excavating 15 KM Khal at the program area to reduce waterlogged surface water irrigation expansion. | 200 hectares of cultivated waterlogged land have been brought under proper drainage facility and surface water irrigation and generated to produce 600 Metric tons of food grain pricing Tk. 156 Lac per year. |
| (b) Installation of 4.0 no’s (1000 meter each) sub-surface irrigation channel. | 4.0 nos. | 4.0 no’s (1000 meter each) sub-surface irrigation channel has been constructed to expand surface water irrigated area and enhance the controlled irrigation system. | 100 hectares of land have been brought under controlled irrigation by surface water, producing 500 Metric tons of food grain pricing Tk. 130 Lac per year. |
| (c) Construction of water passes. | 10 nos. | 10 no’s water passes have been constructed to enhance the drainage facility for crop production. | Construction of water passes improved drainage facilities of around 80 hectares of cropland to produce 320 Metric tons of food grain. |
| (d) Construction of pump house. | 4.0 nos. | 4 no’s pump house has been constructed for the smooth and safe operation of the irrigation pump. | Helps for the smooth and safe operation of irrigation pump to irrigate 100 hectares of land under control. |

15. Cost/ Benefit:

|  |  |  |
| --- | --- | --- |
| Item | Estimated | Actual |
| (1) Benefit-cost ratio of the project |  |  |
| (i) Financial | 1.24 | 1.24 |
| (ii) Economic | 1.25 | 1.25 |
|  |  |  |
| (2) Internal Rate of Return |  |  |
| (i) Financial | 63.18% | 63.18% |
| (ii) Economic | 48.41% | 48.41% |

16. Please give reasons for the shortfall, if any, between the estimated and actual benefit:

The program was designed and implemented per plan, so no shortfall impact estimated and actual benefit.

**F. MONITORING AND AUDITING:**

1. Monitoring:

|  |  |  |  |
| --- | --- | --- | --- |
| **Name & Designation of the inspecting official** | **Date of Inspection** | **Identified Problems** | **Recommendations** |
| 01 | 02 | 03 | 04 |
| **Ministry of Agriculture (MOA)** |  |  |  |
| Mr. Sona Moni Chakma,  Deputy Secretary, Extension-2, Ministry of Agriculture, Dhaka. | 14.01.2021 | - | Satisfactory; |
| Maksuda Yasmin  Deputy Secretary, Plan-5,  Ministry of Agriculture, Dhaka. | 27.04.2022 | - | Satisfactory;  This type of programme needs to be continued. |
| **BADC** |  |  |  |
|  |  |  |  |
| Md. Abdus Sattar Gazi  Chief (Monitoring) | 25-28.07.2020 | - | Satisfactory |
| Dr. Mohammad Isbat  Manager (ASC), Agro-Service Center, BADC, Dhaka. | 14-15.12.2021 | - | Satisfactory;  This type of programme needs to be continued. |
| Md. Shawkat Ali Akand | 17.05.2022 | - | Satisfactory;  This type of programme needs to be continued. |

**18. Auditing during and after Implementation:**

**18.1. Internal Audit:**

|  |  |  |  |
| --- | --- | --- | --- |
| Period of Audit | Date of submission of Audit Report | Major findings/objection | Whether the objection is resolved or not |
| 01 | 02 | 03 | 04 |
| Not yet done | | | |

**18.2. External Audit:**

|  |  |  |  |
| --- | --- | --- | --- |
| Period of Audit | Date of submission  of Audit Report | Major findings/objection | Whether the objection is resolved or not |
| 01 | 02 | 03 | 04 |
| 2019-2020 | - | 01 | Not yet |
| 2020-2021 | - | - | - |

**G. DESCRIPTIVE REPORT:**

19. Analysis of the Post-Implementation situation and result of the programme:

**19.1. Impact of the programme:**

**Direct:**

* Re-excavation of Khal, Construction of hydraulic structures directly impacts reducing waterlogged areas.
* The construction of a sub-surface irrigation channel (Buried Pipe) improves irrigation water use efficiency at the farm level.
* Stored water in the re-excavated Khal is used as a source of irrigation water by the rural farmers.

**Indirect:**

* Improve drainage & irrigation facilities due to re-excavation of Khal. In re-excavated Khal’s farmers can decompose jute which that improves the quality of jute;
* Farmers used re-excavated Khal as a way to carry their agricultural products.
* Re-excavated Khal also acts as a breeding source for local fish habitats.
* The program's implementation has improved the socio-economic condition of the landowners, marginal farmers, and laborers.

19.2. **Transfer of Technology and Institutional Building through the project:**

**Transfer of Technology:** Modern and efficient irrigation techniques, i.e., sub-surface irrigation channel (Buried Pipe system), are a new and highly acceptable technology for the farmers. Sub-surface irrigation channel (Buried Pipe system) technology has been transferred to the farmers.

**Institutional building:** Irrigation water user associations among the farmers are organized in all schemes for the smooth operation of the scheme. These committees are institutions that have been organized during the program period.

19.3. **Employment generation through the project:**

* Implementation of the project reduces waterlogged cultivable land in the program area. Local rural farmers were previously involved in farming activities on their agricultural land, which was inundated.
* Construction and maintenance of irrigation infrastructure, repair & maintenance of pumping units, and intensive cultivation of HYV crops generated employment facilities.
* Moreover, renovation/re-excavation of Khal, construction of water control structures, postharvest, processing, preservation & marketing of the crops & have generated employment opportunities for the laborers.

19.4. **Sustainability of the programme:**

Beel Dakatia, the program area, remained waterlogged for a long time, so farmers in those areas were unable to cultivate their lands. The interventions taken under the program reduce waterlogged areas, and farmers can now cultivate their lands. Modern irrigation technology(Buried Pipe) plays an important role in the survival of the irrigation system of our country. Moreover, the irrigation infrastructure constructed during the program is currently used for efficient and judicial irrigation applications. The irrigation infrastructure constructed during the program period is highly acceptable to the farmers for its easy operation and maintenance, long durability, energy efficiency, etc.

19.5. **Contribution to poverty alleviation/ reduction:**

Farmers have got the opportunity to grow crops on their waterlogged cultivable land after a long time. As the agricultural area, production, and activities have increased substantially, the labor demand becomes higher, and they are being paid much more than earlier. So this program has contributed much to poverty alleviation for the poor rural farmers of the area, and the poverty level has already been reduced.

19.6. **Opinion of the public representatives, local elite, local administration, teachers, religious leaders, women's representatives, etc.:**

The monitoring team from BADC and the Ministry of Agriculture have already visited the program area several times during the implementation period. They took opinions from the local public representatives, local elites, teachers, religious leaders, and women representatives. As per their statement, the programme is very useful and should be continued for further enhancement.

20. **Problems encountered during implementation (with duration & steps taken to remove those):**

There were some problems of project management encountered during the project implementation. The problems were related to a lack of logistic support like workforce, procurement, etc. Shortage of adequate workforce was a problem in implementing the program. An adequate workforce is crucial for smooth and proper supervision that results in quality work. Delay in fund release is also a drawback for the smooth completion of the program.

**Remarks & Recommendation of the Programme (Karmasuchi) Director :**

Programme for Enhancement of Surface Water Utilization in Irrigation at Gopalganj Sadar Upazila in Gopalganj District has a very positive impact on food grain production and socio-economic changes in the programme area. Improved and highly acceptable sub-surface irrigation channels and other activities greatly impact potential crop production and effectively minimize production costs. So the implementation of such type of program needs to be continued. Field level adaption of modern activities through this Karmasuchi by all farmers/beneficiaries increases the total agricultural production and leads to self-sufficiency in food production.

Date: ...................................... Signature and seal

**Remarks/Comments of Agency Head:**

Khulna District Dakatia Beel Water Logging Reduction & Minor Irrigation Development Programme was successfully completed within the specified period (July/2018-June/2022). One of the most important strategic goals is to reduce waterlogged areas and minor irrigation area expansion to increase food production in the program area. To achieve this goal, the Ministry of Agriculture has undertaken a program for the reduction of waterlogged areas and minor irrigation area expansion through re-excavation of Khal, sub-surface irrigation channel (buried pipe), and construction of hydraulic structures to increase food production that will help to maintain food security in the country. Hence, the continuation of this type of program is very much vital for the greater interest of the country.

**Date:.................................... Signature and seal**

**Remarks/Comments of the officer-in-charge of the Ministry/Division:**

**Date:.................................... Signature and seal**