PROJECT COMPLETION REPORT (PCR) - Compiled

Project Title with code: Project Title-Adaptation of newly released HYV oil seeds (Mustard, Groundnut, Soybean and Sesame) in Charland of Padma and Project Code- TF 07-C.

Project Duration: 36 Months;
From: 20 May 2013 To: 19 May 2016

CGP Project: KGF BKGET 1st Call

Submitted to:
Executive Director
Krishi Gobeshona Foundation (KGF)
AIC Building (3rd Floor), BARC Campus
Farmgate, Dhaka-1215

Submitted by:
Dr. Md. Abul Khayer Mian (PI)
Principal Scientific Officer
Agronomy Division,
Bangladesh Agricultural Research Institute
Joydebpur, Gazipur 1701

Date: 29 May 2016

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Full names of Abbreviations and Acronyms

BARC= Bangladesh Agricultural Research Council
BARI=Bangladesh Agricultural Research Institute
BINA= Bangladesh Institute of Nuclear Agriculture
BKGET=Bangladesh Krishi Gobeshona Endowment Test
BMP=Best Management Practices
CGP=Competitive Grants Program
CI= Co-Investigator
CIG=Common Interest Group
D=Dose
DA= Daily Allowance
DAE=Department of Agricultural Extensin
ha= Hectare
HYV= High Yielding Variety
Kg= Kilogram
KGF= Krishi Gobeshona Foundation
L=liter
LS=Lump Sum
LSD= Least Significant Difference
MoU= Memorandum of Understanding
No.= Number
NGO= Non Government Organization
OFRD= On Farm Research Division
PCR=Project Completion Report
PD=Person Day
PI= Principal Investigator
PIR=Project Inception Reporting
PM=Person Month
RARS= Regional Agricultural Research Station
RCB=Randomized Complete Block
R& D= Research and Development
SA= Scientific Assistant
SSA=Senior Scientific Assistant
SAAO= Sub-Assistant Agriculture Officer
t = ton
TA= Traveling Allowance
TAC= Technical Assistant Committee
VRDS= Voluntary Rural Development Society

Project Completion Report on Adaptation of newly released HYV oil seeds (Mustard, Groundnut, Soybean and Sesame) in Charland of Padma

CGP Projects: KGF BKGET 1st Call

Project Duration: 36 Months; From 20 May 2013 To 19 May 2016

A. Basic Project Information:

i. Project ID No. (FRP): TF 07-C

ii. Project Title: Adaptation of newly released HYV oil seeds (Mustard, Groundnut, Soybean and Sesame) in Charland of Padma

iii. Name of Coordinator: Not applicable

iv. Name of Principal Investigator with designation: Dr. Md. Abul Khayer Mian, Principal Scientific Officer, Agronomy Division, BARI, Joydebpur, Gazipur 1701.

v. Name of Co-investigator with designation: Md. Shamsul Alom, Senior Scientific Officer, Dr. Md. Sayedur Rahman, Senior scientific Officer and Mrs. Fakrun Nahar, Chairman of VRDS

vi. Name of applying organization with address: Bangladesh Agricultural Research Institute, Agronomy Division, BARI, Joydebpur, Gazipur 1701.
(Previous Address: Agronomy Division, RARS, Ishwardi 6620, Pabna).

vii. Name of associate organization: Voluntary Rural Development Society (VRDS),
Address: H-336/A, R-13, Tilpara, Khilgaon, Dhaka.
(Local office: Taragonia bazar, Daulatpur, Kushtia).

viii. Project duration: 36 (months); From: 20 May 2013 to 19 May 2016

ix. Project commencement date: May 2013 (20.05.2013)

x. Project Locations: Lokhikunda and BBC Bazar of Ishurdi in Pabna; and Golapnagar of Vheramera and Philipnagar of Daulatpur in Kushtia

xi. Project size: Participatory farmers/site: 60 (20 farmer/year)
Land area (ha)/farmer/site: 33-35 decimal
Total number of farmers: 240 farmers (80 farmers/year)
Total land area in hectare: 32 ha

xii. Project cost (total): Tk 38.82 lac, (Year-1: Tk 14.77 lac, Year-2: Tk 11.78 lac, Year -3: 12.27 lac)

xiii. Fund received in Tk. 3759975 and Expenditure made in Tk.3758739

B. Summary/Executive Summary:

Executive summary has been constructed here according to the demand of the supplied formant. Charland is an unfavourable ecosystem in Bangladesh. Generally charland is less productive and ever remains fallow in most of the part of the year. Crop production at charland mainly depends on rainfed and residual soil moisture. Charland is also nutrient deficit area. Generally, the farmers' of charland cultivate local variety of different crops and follow their local crop production practices. These are the main causes of low yield of crops in charland. Therefore, it is essential to improve crop productivity in charland through adaptation of new HYVs of oil seed crops along with their improved production technologies. The project objectives were (i) To select HYV oil seed crop varieties suitable for growing in charland of Padma (ii) To scale-up the best oil seed crop varieties with best management practices in the charland of padma and (iii) To improve knowledge and skill of the farmers of the project area on production technology of selected oilseed crop varieties.

Adaptive trials were conducted in farmers' field at four locations (Lokhikunda and BBC Bazar of Ishudi in Pabna, and Golapnagar of vheramara and Philipnagar of Daulatpur in Kushtia) of Charland of Padma (consecutive two years of 2013-2014 and 2014-2015). On the basis of two years results suitable varieties were selected for large block demonstration. Then large block demonstration was executed with the best management practices (2015-2016). Common Interest Group (CIG) of farmers was selected in this purpose. Training, demonstration and field days, workshop were the means of adoption of newly released HYV mustard, groundnut, soybean and sesame in the charland. Training was arranged for the capacity building of field assistants and the selected farmers. Inputs supports (seed, fertilizer pesticides etc.) were provided to the farmers. Bangladesh Agricultural Research Institute (Agronomy, RARS, Ishwardi; Agronomy Division BARI, Joydebpur, Gazipur-1701) was the leading organization. OFRD, BARI, Kushtia and NGO-Voluntary Rural Development Society (VRDS) were other two implementing units of the project. Project completion workshop was organized with the personnel DAE, OFRD-BARI, NGO and other relevant stakeholders for communication of the findings of the project.

From the previous experience, suitable oil seeds varieties of BARI and BINA were chosen for adaptive trials. Mustard varieties were viz. BARI sarisha 11, BARI sarisha 14, BARI sarisha 15, BARI Sarisha 16, BINA Sarisha 4, BARI Sarisha 8 and local. Groundnut varieties were as Dhaka 1, Jhingha badam, BARI badam 8, BINA badam 4 and local. Soybean varieties were viz. Sohag, BARI soybean 5, BARI soybean 6, BINA soybean 1 and local. Sesame varieties were as BARI Till 3, BARI Till 4, BINA Till 1, BINA Till 2 and local. These varieties were screened in farmers' fields for selection of better perfuming ones (First year of 2013-2014 and second year of 2014-2015). Trials were conducted in RCB design with five dispersed replications. Crop management was done as per recommendation of BARI and BINA (Attached in Booklet). Key data was collected and analyzed. Means were separated by $LSD_{(0.05)}$ and economic parameters were calculated. Farmer's reactions about technology were evaluated. Results were compiled and report was prepared half yearly basis. Reports were submitted to KGF authority and presented in the scheduled workshop organized by KGF. Better performing varieties (BARI Sarisha 11, BINA Sarisha 8, BARI Badam 8 and BARI Till 4) were demonstrated in large block (Third year of 2015-2016). Five to ten blocks demonstration for each crop were conducted at each location.

Total eighty farmers were involved in large block demonstration of mustard, groundnut and sesame. Key data was recorded and compiled for reporting.

Contractual staffs were appointed. Project sites (Lokhikunda and BBC bazar of Ishurdi in Pabna; and Golapnagar of Vheramera and Philipnagar of Daulatpur in Kushtia.) were selected at the beginning of the project activities. Base line information of project was collected properly. All field and office implements/equipments were purchased as per rules of the institute. All capacity building training for farmers (490 person) and SA/SSA/SAAO/Field staff (30 person) was completed. Soil samples were analyzed. Adaptive trials on mustard, soybean, groundnut and sesame were completed (2013-2014 and 2014-2015). Mustard varieties viz. BARI Sharisha-11 and BINA Sarisha-8; soybean varieties named BINA Soybean-1, and BARI soybean-5; sesame varieties named BARI Till-4; groundnut variety BARI Badam-8 exhibited better performance in respect of yield and economic parameters at four locations. Seed yield ranged 1219-1917 kg/ha in BARI Sarisha-11, 1235-1818 kg/ha in BINA Sarisha-8, 1298-1407 kg/ha in BARI Till-4, 1293-2380 kg/ha in BARI Soybean-5, 1132-1807 kg/ha in BINA Soybean-1 and nut yield 1938-2433 kg/ha in BARI Badam-8. Economic performance of the crops was given in Annexure (BARI component and VRDS component). Yield was improved about 25-50% as compared local variety. Disease and insect infestation was rare in charland. Participatory on farm production block with selected varieties like BARI Sarisha-11, BINA Sarisha-8, BARI Badam-8, BARI Till-4 were conducted. Seed yield ranged 1582-1829 kg/ha in BARI Sarisha-11, 1522-1712 kg/ha in BINA Sarisha-8, 1235-1388 kg/ha in BARI Til-4 and nut yield ranged 2210-2574 kg/ha in BARI Badam-8 in large block demonstration in four location (2015-2016). Framers were interested to cultivate HYV mustard, sesame and groundnut varieties but they are not interested to cultivate soybean due to marketing problem. Mustard varieties viz. BARI Sharisha-11 and BINA Sarisha-8; sesame variety named BARI Till-4; groundnut variety BARI Badam-8 were scaled up at the project area. Local oil seed variety has been replaced 25-80% by HYV of different oilseed. Farmer's knowledge improved through training, demonstration, field visit and group discussion and field day. Project findings/message was communicated to the personnel of DAE, OFDR BARI, NGOs and other relevant stakeholders through workshop, distribution of booklet, and publication of news. Production of oilseed crop in charland would be increased. Financial progress is about 99.97%.

The project was successfully completed with fulfilling the objectives. The finding of the project would be utilized by the end user and other relevant stakeholders including planners. Pilot production program should be under taken for increasing oilseed production in charland and utilization of fallow land. This may contribute to increase oilseed production in Bangladesh and save foreign currency of importing oil. Selected the best varieties like BARI Sarisha-11, BINA Sarisha-8, BARI Badam-8, and BARI Till-4 can be scaled up through pilot production program in charland. If the technologies are disseminated in more areas of charland, oil seed production would be increased to some extent. There is little scope of increasing oilseed area in plain land but a grater scope of increasing oilseed area in charland. Hence, the findings of the project can be utilized though a pilot production program in charland. Relevant authority and planners can consider the matter properly.

C. Introduction.

Charland of river system is an unfavourable ecosystem covering an area of 0.82 million hectares in Bangladesh. Generally charland is less productive and ever remains fallow in most of the part of the year. But there is a grater possibility of growing crops in this adverse ecosystem of charland. HYV oilseeds can be introduced in charland for improving crop productivity. Crop production techniques in charland are different from plain land. Crop production at charland mainly depends on rainfed and residual soil moisture. Charland is also nutrient deficit area. So, suitable crop varieties which are tolerant to moisture stress are to be screened out. Although the farmers' of charland grow some crops but they do not use improve crop varieties and production technologies. Generally, the farmers' of charland cultivate local variety of different crops and follow their local crop production practices. These are the main causes of low yield of crops in charland. Therefore, it is essential to improve crop productivity in charland through adaptation of new HYVs of oil seed crops along with their improved production technologies.

D. Specific project objective(s): (As per FRP/PIR)

1.To select HYV oil seed crop varieties suitable for growing in charland of Padma.

2. To scale-up the best oil seed crop varieties with best management practices in the charland of padma.

3. To improve knowledge and skill of the farmers of the project area on production technology of selected oilseed crop varieties.

E. Detailed Technical Report:

a. Statement of the Researchable Problem:

Charland is an unfavourable ecosystem in Bangladesh. Generally charland is less productive and ever remains fallow in most of the part of the year. Crop production techniques in charland are different from plain land. Crop production at charland mainly depends on rainfed and residual soil moisture. Sometimes crop suffers from soil moisture and gets stress. Charland is also nutrient deficit area. But there is a grater possibility of growing crops in this adverse ecosystem of charland. HYV oilseeds can be introduced in charland for improving crop productivity. So, suitable crop varieties which are tolerant to moisture stress are to be screened out. Although the farmers' of charland grow some crops but they do not use improve crop varieties and production technologies. Generally, the farmers' of charland cultivate local variety of different crops and follow their local crop production practices. These are the main causes of low yield of crops in charland. Therefore, it is essential to improve crop productivity in charland through adaptation of new HYVs of oil seed crops along with their improved production technologies.

b. Research Approaches and Methodologies:

i. Approaches:

Adaptive trials were conducted in farmers' field at four locations (Lokhikunda and BBC Bazar of Ishudi in Pabna, and Golapnagar of vheramara and Philipnagar of Daulatpur in Kushtia) of Charland of Padma (consecutive two years of 2013-2014 and 2014-2015). On the basis of two years results suitable varieties were selected for large block demonstration. Then large block demonstration was executed with best management practices (2015-2016). Common Interest Group (CIG) of farmers was selected in this purpose. Training, demonstration, field visit, group discussion and field days, workshop were the means of adoption of newly released HYV mustard, groundnut, soybean and sesame in the charland. Training was arranged for the capacity building of field assistants and the selected farmers. Inputs supports (seed, fertilizer pesticides etc.) were provided to the farmers. Bangladesh Agricultural Research Institute (Agronomy, RARS, Ishwardi; Agronomy Division, BARI, Joydebpur, Gazipur 1701) was the leading organization. OFRD, BARI, Kushtia and NGO-Voluntary Rural Development Society (VRDS) were other two implementing units of the project. Project completion workshop was organized with the personells of argricultural extension department, OFRD, NGO and other relevant stekholders for informing the findings of the project.

ii. Methodologies:

Adaptive trials were conducted with newly developed HYV mustard, groundnut, soybean and sesame at four locations of charland of Padma to fulfill the objectives of the project. From the previous experience, suitable oil seeds varieties of BARI and BINA were chosen for this purpose. Mustard varieties were viz. BARI sarisha 11, BARI sarisha 14, BARI sarisha 15, BARI sarisha 16, BINA sarisha 4, BARI sarisha 8 and local. Groundnut varieties were as Dhaka 1, BARI badam 8, BARI badam 9, BINA badam 4 and local. Soybean varieties were viz. Sohag, Bangladesh soybean 4, BARI soybean 5, BINA soybean 1 and local. Sesame varieties were named BARI Till 3, BARI Till 4, BINA Till 1, BINA Till 2 and local. These varieties were screened in farmers' fields for selection of better perfuming ones (First year of 2013-2014 and second year of 2014-2015). Trials were conducted in RCB design with five dispersed replications. Crop management was done as per recommendation of BARI and BINA 9Attached in Booklet). Key data was collected and analyzed. Means were separated by $LSD_{(0.05)}$ and economic parameters were calculated. Farmer's reactions about technology were evaluated. Results were compiled and report was prepared half yearly basis. Reports were submitted to KGF authority and presented in the schedule workshop organized by KGF. Better performing varieties (BARI Sarisha 11, BINA Sarisha 8, BARI Badam 8 and BARI Till 4) were demonstrated in large block (Third year of 2015-2016). Twenty blocks demonstration were conducted at each location. Total eighty farmers were involved in large block demonstration of mustard, groundnut and sesame. Key data was recorded and reported.

c. Results and Benefits:

(i). List objective-wise activities clearly, resulting in specific output(s), such as

Specific Project Objective(s)	Planned activities performed against each objective	State progress made clearly during the reporting period against each activity	Outputs/results achieved during this period
1. To select/identify HYV oilseed crop varieties suitable for growing in the Charand of Padma.	1.1. Farm adaptive trials with mustard, soybean, sesame and groundnut. 1.2. Collection of key data. 1.3. Analysis and reporting.	1.1. Adaptive trials on mustard, soybean, groundnut and sesame were conducted (2013-2014 and 2014-2015). 1.2. Collected data was analyzed and reported. 1.3. Total 160 farmers were involved in adaptive trials with four crops at four locations.	BARI Sarisha-11, BINA Sarisha-8, BARI Badam-8, BARI Till-4, BARI Soybean-5 and BINA Soybean-1 were found suitable for growing in the charland of Padma. Seed yield ranged 1219-1917 kg/ha in BARI Sarisha-11, 1235-1818 kg/ha in BINA Sarisha-8, 1298-1407 kg/ha in BARI Till-4, 1293-2380 kg/ha in BARI Soybean-5, 1132-1807 kg/ha in BINA Soybean-1 and nut yield 1938-2433 kg/ha in BARI Badam-8. Yield was improved about 25-50% as compared local Varity.
2 .To scale-up best oilseed crop varieties with BMP in the Charland of Padma	2.1. Participatory on farm production block with selected varieties	2.1. • Total 80 farmers (1 bigha/farmer) for mustard, groundnut and sesame at four locations. • Data on mustard at four locations has been presented. • Groundnut and sesame are in the field at four locations. (crop will be harvested in June-July 2016).	Participatory on farm production block with selected varieties like BARI Sarisha-11, BINA Sarisha-8, BARI Badam-8, BARI Till-4 have been conducted. These varieties scaled up at the project area. Local variety has been replaced by these HYV oil seed varieties (25-80%) at different project areas. Average seed yield ranged 1582-1829 kg/ha in BARI Sarisha-11 and 1522-1712 kg/ha in BINA Sarisha-8 in large block demonstration.
3. To improve knowledge and skill of the farmers/research assistant of project area on production technology of selected oilseed crop varieties.	3.1 Organizing training of the participatory and associate farmers. 3.2. Distribution of leaflets/ handout/booklets among the farmers and relevant stakeholders. 3.3. Organization of field days and workshop. 3.4. Publication in newspaper and website 3.5. Publication of Booklet.	3.1. • 490 farmers and 30 SA/SSA/SSAO/Field staff have been trained up. • About 660 leaflets/handouts/booklets have been distributed. • Six field day was organized with total 360 farmers. • One workshop was organized with 30 participants. •Published booklet and news in newspaper and website.	Improved Knowledge of farmers and research assistant. Technologies were disseminated. Local variety has replaced by HYVs of selected oilseed crops. Information was communicated to farmers/DAE/NGO/other relevant personnel and mass people. Published booklet and news in newspaper and website (www.researchgate. Dr. Md. Abul Kahyer Mian and http://makhayermian.blogspot.com). Information is documented.

(ii). Outputs/Results:
BARI Sarisha-11, BINA Sarisha-8, BARI Badam-8, BARI Till-4, BARI Soybean-5 and BINA Soybean-1 were found suitable for growing in the charland of Padma. Seed yield ranged 1219-1917 kg/ha in BARI Sarisha-11, 1235-1818 kg/ha in BINA Sarisha-8, 1298-1407 kg/ha in BARI Till-4, 1293-2380 kg/ha in BARI Soybean-5, 1132-1807 kg/ha in BINA Soybean-1 and nut yield 1938-2433 kg/ha in BARI Badam-8. Improved production package of selected oil seed crops in charland was validated (Attached in Booklet).Yield was improved about 25-50% as compared local variety. Disease and insect infestation was rare in charland. Local oil seed variety has been replaced 25-80% by selected HYV of different oilseed. Farmer's knowledge was improved. Project findings/message was communicated to the farmers and other relevant stakeholders.

(iii). Benefit/Outcome:

Participatory on farm production block with selected varieties like BARI Sarisha-11, BINA Sarisha-8, BARI Badam-8, BARI Till-4 were conducted. Framers were interested to cultivate HYV mustard, sesame and groundnut varieties but they were not interested to cultivate soybean due to marketing problem. Mustard varieties viz. BARI Sharisha-11 and BINA Sarisha-8; sesame variety named BARI Till-4; groundnut variety BARI Badam-8 were scaled up at the project area. Yield was improved about 25-50% as compared local variety. Local oil seed variety has been replaced 25-80% by HYV of different oilseed at project area. Farmer's knowledge improved through training, demonstration, field visit and group discussion and field day. Project findings/message was communicated to the personnel of DAE, OFDR-BARI, NGOs and other relevant stakeholders through workshop, distribution of booklet, and publication of news. Fallow land would be utilized in charland through adoption of improved selected varieties of oilseed along with their production technologies. Production of oilseed crop in charland would be increased. Farmers of charland would be benefited.

d. Technology Developed:
Mustard varieties viz. BARI Sharisha-11 and BINA Sarisha-8; soybean varieties named BINA Soybean-1, and BARI soybean-5; sesame variety named BARI Till-4; groundnut variety BARI Badam-8 are suitable in charland for improving oilseed yield and production. Production technologies of these varieties were validated (Attached in Booklet).

e. Publications made/under process:

i. Handout- copy attached
ii. Booklet-copy attached.
iii. Article-copy attached
iv. Message published- copy attached
v. Article published-http://makhayermian.blogspot.com
vi. Article published-www.researchgate. Dr. Md. Abul Kahyer Mian
vii. Submitted: Report to KGF
viii. Submitted: Paper to BJAR

f. Training/workshop organized:

Date	Subject	Target group	Objective	Participant
08.10.2013	Capacity building training	Farmer	Capacity building	35
9.10.2013	Capacity building training	Farmer	Capacity building	35
19.10.2013	Capacity building training	Farmer	Capacity building	35
07.11.2013	Capacity building training	Farmer	Capacity building	35
19.11.2013	Capacity building training	Field Assistant	Capacity building	30
10.2.2014	Field day on mustard and soybean	Farmers	Communication of information	60
19.6.2014	Field day on groundnut and sesame	Farmers	Communication of information	60
14.10.2014	Capacity building training	Farmer	Capacity building	35
14.10.2014	Capacity building training	Farmer	Capacity building	35
16.10.2014	Capacity building training	Farmer	Capacity building	35
19.10.2014	Capacity building training	Farmer	Capacity building	35
29.01.2015	Field day on mustard and soybean	Farmers	Communication of information	60
26.6.2015	Field day on groundnut and sesame	Farmers	Communication of information	60
22.10.2015	Capacity building training	Farmer	Capacity building	35
22.10.2015	Capacity building training	Farmer	Capacity building	35
23.10.2015	Capacity building training	Farmer	Capacity building	35
23.10.2015	Capacity building training	Farmer	Capacity building	35
24.10.2015	Capacity building training	Farmer	Capacity building	35
05.11.2015	Capacity building training	Farmer	Capacity building	35
03.2.2016	Field day on mustard	Farmers	Communication of information	60
04.2.2016	Field day on mustard and groundnut	Farmers	Communication of information	60
25.3.2016	Project completion workshop	DAE, OFRD, NGO	Communication of information	30

g. Graduate Studies:
Not Applicable

h. Linkages Developed:
Communication channel was made between farmers and researcher during execution of the project in charland. Knowledge was shared with farmers during field visit, group discussion, field day and training and mobile phones. Linkage was developed with KGF, BARI, DAE, NGO, OFRD, and Farmers.

i. Equipment/Appliances Purchased: [Give a list of equipment/appliances purchased with item-wise cost, if any during the reporting period.]

List of Equipments
1. Computer-1
2. Camera-1

F. Highlight of Research Findings:

Mustard varieties viz. BARI Sharisha-11 and BINA Sarisha-8, sesame varieties named BARI Till-4; groundnut varieties BARI Badam-8, soybean varieties like BARI Soybean-5 and BINA Soybean-1 were found suitable in charland in respect of yield and economic returns. Seed yield ranged 1219-1917 kg/ha in BARI Sarisha-11, 1235-1818 kg/ha in BINA Sarisha-8, 1298-1407 kg/ha in BARI Till-4, 1293-2380 kg/ha in BARI Soybean-5, 1132-1807 kg/ha in BINA Soybean-1 and nut yield 1938-2433 kg/ha in BARI Badam-8. Yield was improved about 25-50% as compared to local variety. Economic performance of oilseed crops was given in Annexure (BARI Component and VRDS Component). These varieties can be cultivated successfully in charland for improving oilseed yield and production. Production package should be followed (Attached in booklet). Framers were interested to cultivate HYV mustard, sesame and groundnut varieties but they were not interested to cultivate soybean due to marketing problem. Mustard varieties viz. BARI Sharisha-11 and BINA Sarisha-8; sesame variety named BARI Till-4; groundnut variety BARI Badam-8 were scaled up at the project area. Average seed yield ranged 1616-1829 kg/ha in BARI Sarisha-11 and 1582-1712 kg/ha in BINA Sarisha-8 in large block demonstration. Local oil seed variety has been replaced 25-80% by selected HYV of different oilseed. Farmer's knowledge improved through training, demonstration, field visit and group discussion and field day. Project findings/message was communicated to the personnel of DAE, OFDR BARI, NGOs and other relevant stakeholders through workshop, distribution of booklet, and publication of news. Disease and insect infestation was lower in charland.

G. Conclusion:
The project was successfully completed with fulfilling the objectives. The finding of the project would be utilized by the end user and other relevant stakeholders including planners. Pilot production program should be under taken for increasing oilseed production in charland and

utilization of fallow land. This may contribute to increase oilseed production in Bangladesh and save foreign currency of importing oil.

H. Recommendation:
Selected best varieties like BARI Sarisha-11, BINA Sarisha-8, BARI Badam-8, and BARI Till-4 can be scaled up through pilot production program in charland. If the technologies are disseminated in more areas of charland, oil seed production would be increased to some extent. There is little scope of increasing oilseed area in plain land but a grater scope of increasing oilseed area in charland. Hence, the findings of the project can be utilized though a pilot production program in charland. Relevant authority and planners can consider the matter properly.

I. Financial Statement: Fund received and Expenditure made during the project period.

Particulars/line Items							Actual Fig. In Tk.		
A. Fund Received in Installment									
1st install.	2nd install.	3rd install.	4th install.	5th install.	6th install.	7th install.	8th install.	9th install.	Total
295400	443100	708500	589000	353400	235600	490800	490800	153375	3759975

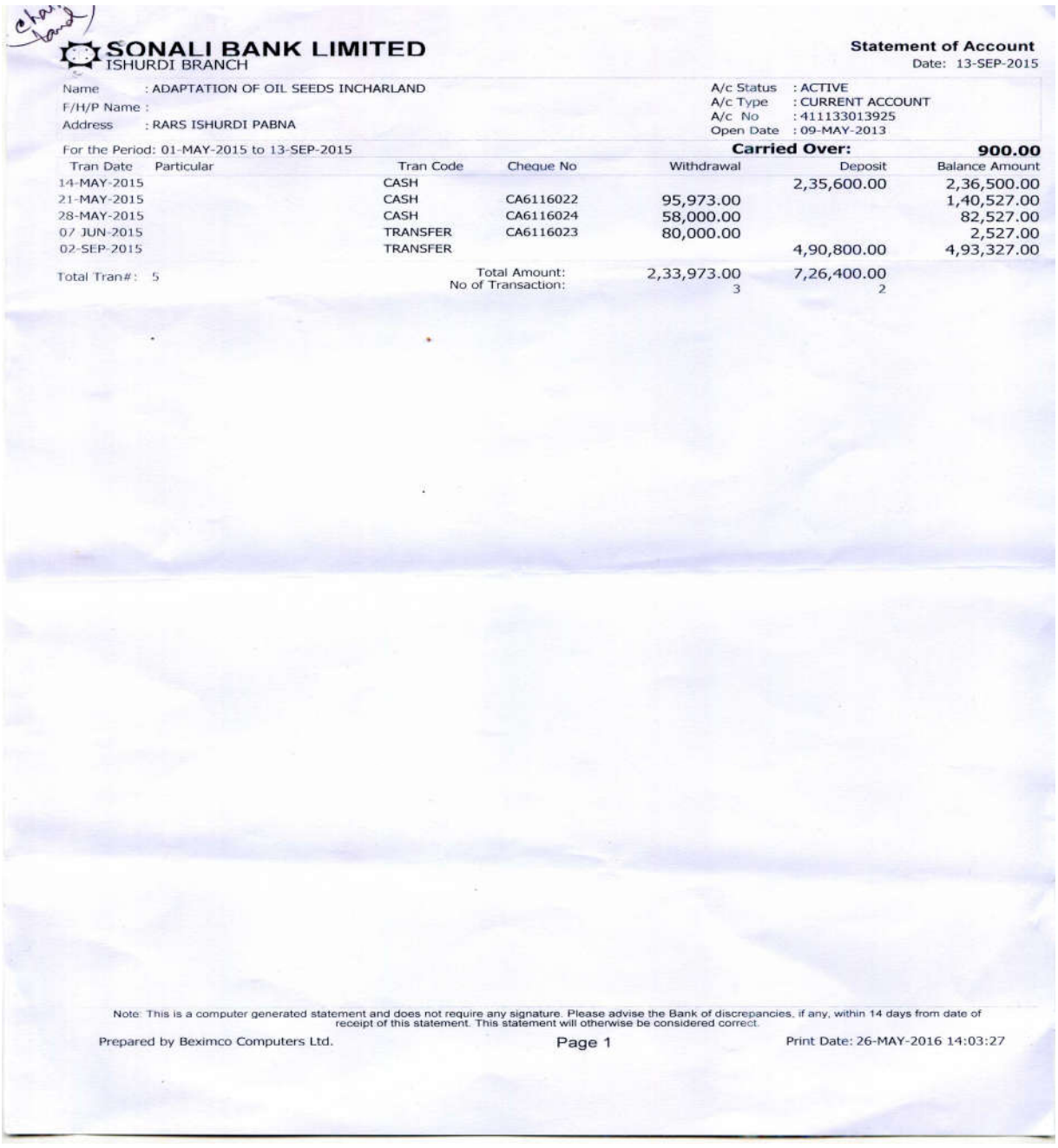
Particulars/Line Items		Approved Total Budget	Exp. Upto previous Report (From May 2013 to November 2015)	Current Exp. (Reporting period) From November 2015 to May 2016	Cumulative Exp.	Rest of Budgeted Amount
Sl. No.	**B.I: Expenditure: Recurring (Operational cost)**	1	2	3	4=(2+3)	5=(1-4)
1.	1.1. Remuneration for Contractual staff (Expert professionals; Research fellow/Res. Associate, Res. Asstt./ Field Asstt; if justified- consolidated)	162000	90000	72000	162000	0
	1.2. Remuneration of accounting/Typing support service, if any (part time basis-consolidated)	81000	46000	35000	81000	0
2.	2.1. Research & Development (R&D) related cost i.e. all inputs, lab/farm chemicals & other necessary supplies etc.	2261000	1905725	324759	2230484	30516
	2.2. Contractual services (special nature, if any, i.e. soil, plant & fertilizer analysis; pesticide residue analysis etc.)	4000	4000	0	4000	0
3.	Maintenance and repairing of lab./field equipment, etc.	10500	4500	6000	10500	0
4.	Training	302000	302000	0	302000	0
5.	Workshop/seminar/Field day etc.	240000	120000	90000	210000	30000
6.	6.1. Travel expenses (TA/DA) as per own organizational rules (Public sector) or as per KGF Rules (Non-govt. Org).	262000	160935	60000	220935	41065
	6.2. Vehicle hiring/oil & fuel for organization's vehicle for travel, if justified.	260000	217000	30000	247000	13000
7.	Office supplies and contingency (not exceeding 15% of the total cost for stationeries, publications, printing of reports, internet, service, mailing etc.)	178000	146320	24000	170320	7680
8.	Any other items (please specify with justification)	17000	17000	0	17000	0
9.	Institutional overhead charge (if any, max 10% of total operation cost)	10000	9000	0	9000	1000
B.I: Sub-total B.I (1-9)		3787500	3022480	641759	3664239	123261
B.II: Non-recurring (Capital cost)						
10.	Equipment & appliances (upon approval of KGF)					
	10.1. Lab and field equipment	38500	33500	5000	38500	0
	10.2. Office equipment.	56000	56000	0	56000	0
B.II: Sub-total (10)		94500	89500	5000	94500	0
Grand Total Expenditure: GT(B.I+B.II)		3882000	3111980	646759	3758739	123261

Balance (A-GT) =1236 **as per Bank Statement =1236**

Bank Reconciliation (1236=1236+0)

Financial Progress: b(Fund utilized)/a(Fund received) ×100=99.97%

Signature of PI with seal (29.05.2016)



SONALI BANK LIMITED
ISHURDI BRANCH

Statement of Account
Date: 13-SEP-2015

Name : ADAPTATION OF OIL SEEDS INCHARLAND
F/H/P Name :
Address : RARS ISHURDI PABNA

A/c Status : ACTIVE
A/c Type : CURRENT ACCOUNT
A/c No : 411133013925
Open Date : 09-MAY-2013

For the Period: 01-MAY-2015 to 13-SEP-2015

Carried Over: 900.00

Tran Date	Particular	Tran Code	Cheque No	Withdrawal	Deposit	Balance Amount
14-MAY-2015		CASH			2,35,600.00	2,36,500.00
21-MAY-2015		CASH	CA6116022	95,973.00		1,40,527.00
28-MAY-2015		CASH	CA6116024	58,000.00		82,527.00
07 JUN-2015		TRANSFER	CA6116023	80,000.00		2,527.00
02-SEP-2015		TRANSFER			4,90,800.00	4,93,327.00
Total Tran#: 5			Total Amount:	2,33,973.00	7,26,400.00	
			No of Transaction:	3	2	

Note: This is a computer generated statement and does not require any signature. Please advise the Bank of discrepancies, if any, within 14 days from date of receipt of this statement. This statement will otherwise be considered correct.

Prepared by Beximco Computers Ltd. Page 1 Print Date: 26-MAY-2016 14:03:27

সোনালী ব্যাংক লিমিটেড
Sonali Bank Limited

Generated By
ISHWARDI
41111 - ISHWARDI PABNA

Print Date 26-May-2016
Print Time 1:25 PM
User ID. 40107

STATEMENT OF ACCOUNT

ADAPTATION OF OIL SEEDS INCHARLAND RARS ISHURDI PABNA	**Branch :** 41111 - ISHWARDI PABNA **Currency :** BDT **Opening Date :** 09-May-2013 **Account Number :** 4111133013925 **Interest Rate :** 0 **Account Type : CAGOV** - Current Account (Government) **Period :** 10-Sep-2015 - 25-May-2016 **Status :** Active

Date	Value Date	Transaction	Debit	Credit	Balance
		Opening Balance			**0.00**
10-Sep-2015	10-Sep-2015	MIGRATION		4,93,327.00	4,93,327.00 CR
20-Oct-2015	20-Oct-2015	Cash Withdrawal INST NUM CA6116025	2,49,552.00		2,43,775.00 CR
21-Oct-2015	21-Oct-2015	Tr INST NUM CA6116026	1,00,000.00		1,43,775.00 CR
01-Nov-2015	01-Nov-2015	Cash Withdrawal INST NUM CA6116027	1,39,955.00		3,820.00 CR
24-Jan-2016	24-Jan-2016	Tr		4,90,800.00	4,94,620.00 CR
02-Feb-2016	02-Feb-2016	Cash Withdrawal INST NUM CA6116028	2,58,975.00		2,35,645.00 CR
02-Feb-2016	02-Feb-2016	Cash Withdrawal INST NUM CA6116029	2,31,005.00		4,640.00 CR
26-Apr-2016	26-Apr-2016	Sc 392,396-400		1,53,375.00	1,58,015.00 CR
09-May-2016	09-May-2016	Transfer INST NUM CA6116030	80,000.00		78,015.00 CR
25-May-2016	25-May-2016	Cash Withdrawal INST NUM CA6116031	76,779.00		1,236.00 CR
		Grand Total	**11,36,266.00**	**11,37,502.00**	
		Closing Balance			**1,236.00 CR**
		Balance C/F			**1,236.00 CR**

******* End of Report *******

Page 1 of 1

J. Self Assessment of the Project: [Please answer the following questions precisely and clearly.]

1. Have you been able to achieve all specific objectives of your project? Yes/No; If no, please explain the reasons.

   Ans. Yes.

2. Who is/are the target beneficiary group/s of your project output/result? Farmers/Policy makers/Agri. Business men/ Agro. Processors etc.

Ans. Farmers. Also will be helpful to policy maker.

3. How the project outputs/results obtained would benefit the target beneficiary group/s? and how these could be transferred to the that/those target group/s?

BARI Sarisha-11, BINA Sarisha-8, BARI Badam-8, and BARI Till-4 can be grown successfully in charland for increasing oil production and utilization of fallow land. Selected best varieties like BARI Sarisha-11, BINA Sarisha-8, BARI Badam-8, and BARI Till-4 can be scaled up through pilot production program in charland. If the technologies are disseminated in more areas of charland of Bangladesh, oil seed production would be increased to some extent. Relevant authority and planners can consider the matter properly.

4. Do you think that you have successfully completed the project? Yes/No; If yes, please provide one page success story/communication brief of your project in simple language with relevant pictures where applicable.

Ans. Yes. (Attached in Technical Bulletin).

5. Please describe briefly the outcome/benefit and likely impact of your project on the productivity, policy, society, economy and environment.

Ans. Impact:

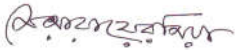
Framers were interested to cultivate mustard varieties viz. BARI Sharisha-11 and BINA Sarisha-8; sesame variety named BARI Till-4 and groundnut variety BARI Badam-8. These varieties were scaled up at the project area. Yield was improved about 25-50% as compared local variety. Local oil seed variety has been replaced 25-80% by selected HYV of different oilseed at project area. Farmer's knowledge was improved and they can utilize it in future. Project findings/message was communicated to the personnel of DAE, OFDR-BARI, NGOs and other relevant stakeholders. Fallow land can be utilized in charland through adoption of technologies. Production of oilseed crop in charland would be increased. Income of the farmers in charland would be increased. Livelihood of the farmers would be improved.

K. Acknowledgement:

Acknowledge to KGF authority and their associates. Also acknowledge to BARI authority and my colleagues for their help. Moreover, acknowledge to worker of the project and associated farmers of the project.

L. Endorsement:

Principal Investigator (PI)
Name: Dr. Md. Abul Khayer Mian

Signature: 
Seal:
Date: 29.05.2016

Head of Organization/Authorized Person
Name:
Signature:
Seal:
Date:

[Note: Statements within [ ] are the guidelines/instructions which should be ignored during report preparation. Detailed results/data and references should given as annexure.