

Project Completion Report

on

“Arsenic Mitigation through Promotion of Rainwater Utilization Practices Project”

Under Direct Aid Program

Funded By: Australian High Commissio



The Project Implementation areas “Hadda villages Very Near in Sundorbon”, Picture-1



Submitted by:

Integrated Development Organization (IDO)

Head Office, Sagardari, Keshabpur,
Jessore. Bangladesh.



Submitted to:

Australian High Commission

184, Gulshan Avenue,
Dhaka-1212, Bangladesh.

A. PROJECT PARAMETERS

Name of the Project: Arsenic Mitigation through Promotion of Rainwater Utilization Practices

Recipient Country : Bangladesh

Location (eg town/province): Hadda village of Mohessoripur Union under Koyra Upazilla of Khulna District.

Brief Description :

The “Arsenic Mitigation through Promotion of Rainwater Utilization Practices” project area is fully backward southern Mangroves Forest of Sundorbon part of Bangladesh, remote and scarcities of pure drinking water for the available Salinity/arsenic contaminated areas. So, to decrease the negative impact of the water borne diseases and mitigate the salinity/arsenics of the project area, The Salinity/arsenic mitigation project has been under taken and have been installed 100 Rain Water Harvest System RWHS tanks at 100 community house holds i.e. HH levels so, that the people of the project area are collecting and getting salinity/arsenic free water from their reserves. Many diversification activities have been introduced and taken to implement at the community level to motivate and aware the local unconscious and un-sensitized people about the negative impact and the tremendous effect of salinity/arsenic, which hit the human bodies and use of salinity/arsenic contaminated water. For that reason, the project has been emphasizing the surface water of the earth like rainwater for drinking and cooking purposes. IDO has been motivated and raised awareness about the benefits and positive affect of Rain water use and drinking in daily affairs. It has been trying to establish the project as a model, by which the project will be replicated among other communities of other villages.



Local Collection of Rainwater and preservation System, Picture-2

The main goal of the project is to make the lives of the people safe from Salinity/arsenic affects and ensure safe drinking water, Salinity/arsenic free drinking water. The main outputs will be developed a system of rainwater collection and preservation, habituated people with rain water harvesting and preservation, available Salinity/arsenic free water, prevented Salinity/arsenic contamination and prevented Salinity/arsenic contaminated water use in the project areas community people will be aware and not use Salinity/ arsenic contaminated water.

The beneficiaries are the arsenic contamination affected area people, who are at risks of arsenic and salinity. They have been made aware and involved in RWHS by motivation. They have been involved project design, implementation, and monitoring and evaluation directly through group meetings, discussions etc. and for mass awareness raising regular group meetings, house visits, motivation work has been continued to motivate the people for taking and preserving the rain water which is Salinity/arsenic free. In this regard, sharing meetings, sit visit by other families etc. have been maintain. Already, they have realized the need and importance of surface water use and many of them have involved rain water harvesting by own initiatives. Regular monitoring of the project activities to run at the HH level spontaneously because after implementing the project total **100 poor families will be benefited directly and total community people e.g. 500 families of 3,000 people will be benefited indirectly**. They will gain from the project that they will be aware about the effect and harmfulness of Salinity/arsenic and benefit of rainwater use and drinking. Save lives of the people from Salinity/arsenic reduced Salinity/arsenic involved diseases. Most interventions are implementing in the reporting period partially because the activities are on going now.

Objectives of the project:

1. To create adequate awareness among the villagers for hygienically collecting, preserving and using rainwater for drinking and cooking purposes;
2. To create access to safe water through installation of rainwater tanks at poor people's houses;
3. To ensure proper use, operation, maintenance and management of the installed rainwater tanks.

Background:

The hadda village of Mohessoripur Union under Koyra Upazilla of Khulna District is situated in southern Mangrove Forest of Sundarban part of Bangladesh. Due to the effect of unplanned embankment system in the East and West coastal region, another part of the living peoples the proposed areas are almost fallen Riverine flood water & under water logging, which has devastatingly affected life and livelihood of the inhabitants very very risk living in this area. The poor people, especially the women and children are the victims of this unexpected situation.



Collection of (Long Distance) Pond Water & Local Preservation System for Pure Drinking Water purpose. Picture-3

In addition to the problems of Riverin flesh water & under water logging, the villagers are severely suffering from the crisis of drinking water due to Salinity/arsenic contamination of groundwater. It is evident that excessive level Salinity/arsenic has been detected in almost 100% shallow tube wells. So, Salinity/arsenic has become very alarming in the project area and surrounding areas. There is no Salinity/arsenic free water in the projected and surrounding villages. Finding no other alternatives, the women and girl children are bound to collect water from a long distance when they have to face different types of social problems. Most of the time, they drink and use the contaminated water for cooking for avoiding water collection from the long distance. Many people, especially the women and girl children have been identified as Salinity/arsenic patients in the projected village. Under these circumstances, the government and the NGOs have been alarming the people through motivation and awareness raising but the people are using Salinity/arsenic contaminated water seeing no other ways. Due to different interventions of NGOs, some people are collecting rainwater and preserving to use for drinking. The poor people are still using and drinking open sky water and tube well water, which is completely Salinity/arsenic contaminated. If these people are made aware and provided rain water harvesters and make the habituated, then they will use and drink rain water and will be safe from Salinity/arsenic. So, IDO has planned this project proposal to aware the poor people, provide rainwater harvesters and make the habituated as model as a system. If these poor people, install rainwater harvesters and get benefits, other people will follow these poor people and they will harvest rainwater and gradually it will spread among other people and other villages. So, the project is very much important and has crying needs in the project area and surrounding Near Mangoes Forest of Sundorbon areas.

Amount of Funding : BDT 16,52,600.00

When was Funding received?

The total amount of fund has been received dated at 25/10//2016

B. PROGRESS REPORT: (to be completed by applicant)

Date of Report: 25/11/2017

Percentage Completed: 100% of Total activities

What date was project started on?

The Project was actual starting is 25/10/2016, (According to Project agreement signing date)

What was the anticipated finish date?

The anticipated finishing date was **24 October, 2017.**

What date did the project finish on?

During the project period (01st-November,2016 from 24- November, 2017.) the interventions like Conduct Baseline Survey, Dissemination Workshop, , Motivation & Awareness raising activities after developing communication materials (poster & leaflet), Masson Training, Installation of rainwater tank, Caretaker's Training, Water Resource Development Committee WRDC Formation on O & M, follow up and Monitoring, spot visiting, reporting, collecting rainwater and preservation for drinking and using for cooking purpose etc are already been finished in dated 24/11/2017 except auditing.

If the project has not yet been finished, on what date do you expect to finish:

The project activities have been finished yet. It is completed now, so, it is our expectation that the project activities will be completed by 24 October, 2017. except auditing.

If you expect to finish later than originally anticipated, explain why?

We hope, the project activities will be completed in due time, The project activities are completed smoothly and effectively.

What has been completed so far, or since your last progress report?

During the project period (01st-November,2016 from 24- November, 2017) the all activities of the project are already been finished except auditing such as Dissemination Workshop, Conduct Baseline Survey, Motivation & Awareness raising activities after developing communication materials (poster & leaflet), Masson Training, Installation of rainwater tank, Caretaker's Training on O & M, follow up and Monitoring, spot visiting, reporting, collecting rainwater and preservation for drinking and using for cooking purpose etc with the active participation of the project beneficiaries and Water Resource Development Committee (WRDC) to access available Salinity & arsenic free water. In that case, the total 100 House Hold HH level rainwater tanks out of 100 Rain Water Harvester System RWHS are constructed during project period. The total activities are shown in bellow:

Sl	Activities	Target (Unit)	Achievement (Unit)	Remarks
1	Dissemination Workshop	01	01	
2	Conduct Baseline Survey	01	01	
3	Conduct awareness and develop communication materials (poster, leaflet, stickers)	30	30	
4	Masson training	01	01	
5	Install Rainwater Tanks	100	100	
6	Care taker's training on O & M	04	04	
7	Follow up & Monitoring	Needed	March to October	
8	Reporting	03	03	
9	Final Report	01	01	
10	Auditing	01	01	

1. Baseline Survey:

In the inception of “Arsenic Mitigation through promotion of Rainwater Utilization Practices” Project - under Direct Aid Program, funded by – Australian High Commission, base-line survey at village level was conducted. In this regard the project and IDO staffs are successfully completed the survey in the selected project area. Total 640 families of the village of Hadda are interviewed. Through the baseline survey the project staffs are tried to identify mostly household level drinking and using the water condition of the village peoples and their awareness about the adverse effect of



Base-line survey at village level, Picture-4

the Salinity and also tries to identify the socio-economic & water with Salinity/arsenic affected condition of the overall population of that village and categories the total households according to the housing patterns. The volunteers also identify the water sources of the community and other social facilities they can avail from their locality. Staffs of the organizations are prioritized and ranked the villagers according to the demands. Finally, 100 rainwater harvesters will be installed in the project area. Criteria of 100 rainwater harvesters will be installed under the project area as follows:

- ❖ Most of the areas of the village are contaminated by Salinity/arsenic.
- ❖ Most vulnerable and poor people are living in this village.
- ❖ Water options like tube well & open (river, pond, bill etc.) water are contaminated with Salinity/arsenic.
- ❖ Less aware about the adverse effect of Salinity/arsenic.
- ❖ There is no available Salinity/arsenic free water in the projected area.

2. Dissemination Workshop:

The effective workshop is conducted at the venue of Hadda Monirul Islam houses with the presence of the Hadda Mosque Imam Munchi Amirul Islam. Political leader munzurul islam UP members, teachers, local elite persons and the community people of the Hadda village. The Executive Director and staffs of IDO is also present in the workshop. There are 42 participants are participated in the workshop where out of them 07 participants are male and 35 participants are female. With the presided over in the chair Mr. Mizanur Rahman, ED of IDO and Munchi Amirul Islam as a chief guest are present and as an especial guest Mrs.Monju Rani banarji, women



Dissemination Workshop Group ways, Picture-5

UP member is present also. After reciting Quran and Geeta, the main functions of the workshop is started and the chief guest says that Hadda village is one of the remote, backward and negligible Near Mangoes Forest of Sundorbon areas of the Mohessoripur Union. There is no available Salinity/arsenic free water for the community to drink and using but it is being solved in an alternative way like rainwater harvesting system because the rainwater is free

from arsenic, salinity and its making cost is not so high. So, this project will be fruitful after completing the project. He also says that Mohessoripur Union Parishad will support IDO all facilities to implement the project in the Hadda village for Salinity & arsenic mitigation purpose.

The especial guest expresses her expressions that Salinity & arsenic is the most dangerous diseases of the world and so it has no cured policy. The maximum tube well and open (river, pond, bill etc.) water is contaminated with Salinity and arsenic. In this regard, we will depend on the rain water. So, this Salinity/arsenic mitigation project is much needed for us to access the available Salinity/arsenic free water for drinking and using.

There three groups are presented their discussions with the poster, brown paper and vip card about the present situations of water options of this village and its uses that is very harmful for the environment of this area. The group discussions are described in bellow:

Group-A

In the group-A, the community finds out the problems of drinking water of this area. They are as follows:

- ❖ There is no alternative way to drinking water which is free from arsenic/Salinity.
- ❖ No way to remove the arsenic/Salinity water in this area.
- ❖ The lack of arsenic/Salinity free tube well.
- ❖ No satisfied and sustainable way to preserve and retain the rain water.
- ❖ This area is flood and water logged Near Mangoes Forest of Sundorbon area. So, the lack of access to available pure drinking water.

Group-B

The group-B presents the way for pure drinking water options which is in the following:

- ❖ For pure drinking water they suggest to install the rainwater harvester system at House hold or community level.
- ❖ It may be accepted to supply the river water as purified way.
- ❖ It may be accepted to dig the big pond in high depth and install Pond Sand Filter (PSF) on the embankment of the digging new pond.

Group-C

Group-C presents the right sources of pure drinking water and why. They describe in bellow:

- ❖ For the arsenic/Salinity contaminated area rainwater is one of the main sources for pure drinking water because this water is free from arsenic, salinity and safe and it is collected easily at the time of raining.
- ❖ They also suggest in an alternative way that PSF may be installed after digging the big new pond.

All participants are present in active and play a positive role in the workshop. The community finds out the total atmosphere of water options in this village. They say that this village is backward and remote in Mohessoripur Union because it is the corner part of Bangladesh this union. So the UP does not accept as an important part of this area. Now, IDO has taken

initiative to implement the water options activities like rainwater harvesters to ensure the available pure drinking water for arsenic/Salinity mitigation of this area. After knowing that they are very happy and energize themselves to help the implementation of the project. As a result, the project will be implemented in fruitful way with the active participation of the community.

3. **Motivation and awareness raising activities at the community level:**

To motivate and awareness raising for the arsenic/Salinity mitigation purpose, the project has taken initiative to conduct a awareness session at the community level. The total of 30 sessions are completed during the project final reporting period where $646+234=880$ people are participated in out of them male are 183 and female are 697. What is the purpose of RWHS and how we can get pure drinking water from it? IDO has supported the materials which had been developed recently. The project supports these materials which have been provided through message about Salinity/arsenic. In that cases, the project staffs provides the different messages like:



Motivation and Awareness Raising Activities, Picture-6

from arsenic/Salinity through rainwater harvesters. What is the purpose of rainwater harvester and how we can get pure drinking water from it? IDO has supported the materials which had been developed by CDMP-UNDP and Top-Watsan project-OXFAM-GB. The project primarily supports these materials which have been provided through message about arsenic/Salinity. In that cases, the project staffs provides the different messages like:

- ❖ What is arsenic/Salinity
- ❖ The sources of arsenic/Salinity
- ❖ What is arsenic/Salinity contamination,
- ❖ The way of living from arsenic/Salinity
- ❖ The adverse effect of arsenic/Salinity
- ❖ How we can get pure drinking water which is free from arsenic/Salinity.

- ❖ The way of collection and preservation of rainwater
- ❖ Why we used the rain water
- ❖ What are the advantages of rainwater for drinking/Cooking purpose etc.

These messages of the advantage and drawbacks are provided towards the community so that they can aware and sensitize about the result and impact of the arsenic/Salinity water and can habituate themselves to get pure drinking water from rain through rainwater harvesters. This activity is on going now.

4. Mason Training:

To install the water tanks for rain water preserving properly at the community level a mason training is conducted at IDO head office by the technical staff and field facilitator with the active participation of few mason trainee. In this session, the technical officer shows them how to prepare the basement, rings, cap and set the pipe etc. In this case, practically 08 masons are joined into the training and they are engaged to construct the rainwater basement and tanks through the experience of training at the community level.



community level a mason training, Picture-7

They also set up the pipe for the utilization of the rainwater tanks. In this training, there are 20 persons are presented and they support the training for the installation of the rain water tanks for preserving water in the rainy season and raining period and



Community level a mason training, Picture-8

may use for cooking and drinking with Salinity/arsenic free water. The local elite persons e.g. imam, teacher, UP members, rural doctor are presented in the mason training. IDO staff was also present in the training.

5. Formation of Water Resource Development Committee (WRDC):

Implementation of the project at the community level smoothly a colorful Man-women committee is formed at the community level so, that they may supervise and monitor the many dimensional activities as per project plan. In this case, there are 16 WRDC committee is formed with the active participation of the 11 members. of each group where the rain water harvesters are made. This is the rainwater harvesting place based committee so that the one family members are taken the Salinity/arsenic free water for drinking and cooking, each family are 4-6 members.



Water Resource Development Committee (WRDC)Picture-9

Here noted that the members of the committee are mane-women who are the guardian of the family. Thus the 16 WRDC will be formed in 100 rain-water harvesters system RWHS for maintenance and preserving to use through the own contribution after completion of the project. The functions can sustain in future this project.

6. Installation of Rainwater Tank:

The project area Hadda village of Mohessoripur Union under Koyra Upazilla of Khulna District is the very most Salinity/arsenic contaminated zone. The most of the people like 100% are drinking the Salinity/arsenic contaminated water and so many numbers tube wells are full of Salinity/arsenic and here the most of the ponds water are Salinity, not been capable to use water. Besides, in the summer and dry season, most of the ponds are dry and doesn't contain a single drop of water for cooking.



Installation of rain water tanks, Picture-10

So, the people of this village take the Salinity/arsenic contaminated water and as a result, the water borne diseases are increasing day by day. In this context, the project has taken in the just time initiative to ensure the available Salinity/arsenic free water towards the vulnerable people of the community. The project also emphasizes the surface water but not contaminated ground, pond, bill & river water like rain water for drinking and cooking purpose. During the project period the total 100 rain water tanks are complete. IDO and make the RWHS tank mason-contract with the active supervision and monitoring of IDO staffs and WRDC IDO and make the RWHS tank mason-contract with the active supervision and monitoring of IDO staffs and WRDC. Water Resources Development Committee WRDC takes a positive role to install the rainwater harvesters at the community level. The beneficiaries take also the positive role to set up the tanks for their own financial and physical contribution.



Installation of rain water tanks, Picture-11

Each tank is made with five rings, one cap and a strong basement with the iron and plastic pipe and a reducer for removing the waste water. Each tank will contain 2500-3000 liters water for drinking and cooking. If the 100 rainwater tanks install, the vulnerable beneficiaries 712 people from 100 families will be direct benefited having access to Salinity/arsenic free safe water and during the constructing time the 8 masons will have employment for 9 months.

7. O & M and Management Training to users:

Due to access available Salinity/arsenic free water for the community people who are mostly habituated for taking Salinity/arsenic contaminated water, The total 100 rain water harvesters are installed in the project area, Hadda village of Mohessoripur Union under Koyra Upazilla of Khulna district. From this project about 7,000 people are benefited for the 100 HH environment friendly rain water harvesters but rain water harvester is the new dimensional part of their life. So, in the



O & M and Management & Caretaker Training to users-12

preliminary stage they do not know how to use it. In this regard, total 8 colorful and active caretakers training are conducted for them at the venue of Hadda Primary School, Mosque field, Houses etc with the active presence of rain water harvesters' beneficiaries. Total 200 only female beneficiaries from 100 HH rain water harvesters (5 beneficiaries from each rain water harvesters) have received the

caretakers' training. In the training session, the facilitator has described the objectives of the training, the adverse effect of arsenic, what are the functions will be taken for the rain water harvesters, what are the rules for maintaining, operating and management of rain water harvesters, how will you operate, maintain and manage the rain water harvesters etc. For this purpose a training hand manual and communication materials are displayed in the training sessions. Rina Holder rain water



O & M and Management & Caretaker Training to users-13

harvesters' beneficiary says that she does not know how to drink the rain water but now she is confident to take this water and she promises that she will never take the arsenic contaminated water. Bijoy Kumer Mondol Political leader, was present in this training and he said that rain water is the wonderful creation by all mighty Allah because it contains vitamin B. It is acceptable to take drinking and cooking no doubt. He also thanks to IDO and Australian High Commission for taking the time necessity part for the poor people. Executive Director-IDO and all staffs attend in the four O & M and Management training.

8. Follow up and monitoring:

To get rid of the adverse effect of Salinity/arsenic and implement the project activities smoothly Water Resource Development Committee (WRDC) follows and monitoring the project activities continuously because the beneficiaries can get established and permanent rainwater tanks which are able to remove the water born diseases. The project beneficiaries also visit the project cited and ensure their participation in implementing and monitoring through forming different committees where their participation is expected at maximum level. Enthusiastically the beneficiaries take the rainwater for drinking and cooking purpose after visiting and motoring by the beneficiaries. The beneficiaries are now sensitized about the negative effect and harmfulness of Salinity/arsenic. The people of the project are very sensitized than that of before. During the project period from 25 October -2016 to 24 September -2017. IDO staffs and WRDC are activate with monitoring and follow up purpose so that the activities may be sustained in future. In this regard, the monitoring team of IDO as well as the WRDC is active to perform the project activities.

What is left to do?

Many magnificent activities are implemented in the project period with the active participation of the community who follow up and monitoring activities nicely. The activities are dissemination workshop, conduct baseline survey, mason training, development of communication materials and motivation and awareness raising activities, install rainwater tanks, O & M and management training, reporting, spot visiting, follow up and monitoring are already finished. Now no activities are left for the extra months. Total activities are completed except auditing but follow activities from IDO is being continued even if the project has already been finished.

How much money has been spent so far?

Total activities are completed except auditing but follow activities from IDO is being continued even if the project has already been finished. So, the itemized accounting is attached with the financial report.

The total expenditures as per activity wise are explained in brief:

Sl no	Head of Activity	No of Unit	Unit Cost	Total Cost	Actual Cost	Balance	% of Cost Sharing		
							AHC	IDO	Users
1.	Baseline Survey:	1	20,000	20,000	20,000	00	20,000	0	0
2.	Dissemination Workshop	1	21,600	21,600	21,591	09	21,591	0	0
3.	Motivation & Awareness Raising Activities: (30 no)	30	1,000	30,000	30,000	00	30,000	0	0
4.	Transport cost for field work.	12 months	3,000	36,000	36,000	00	36,000	0	0
5.	O&M and Management training to users	4	6,000	24,000	24,000	00	24,000	0	0
6.	Operation cost	12 months	2,500	30,000	30,009	00	30,009	0	0
7.	Installation of rainwater tank.(3000 litres)	100	14,250	14,25,000	14,25,000	00	14,25,000	0	0
8.	Stationeries/others	12 months	500	6,000	6,000	00	6,000	0	0
9.	Development of communication Materials (Poster, stickers, leaflets)	3	20,000	60,000	60,000	00	60,000	0	0

Insert an itemised accounting of what the money has been spent on and attach the receipts.

(if this is not the first Progress Report submitted, then the itemised accounting should cover only what you have spent money on since your last report Receipts must be attached.)

Sl no	Head of Activity	No of Unit	Unit Cost	Total Cost	Actual Cost	Balance	% of Cost Sharing		
							AHC	IDO	Users
1.	Baseline Survey:	1	20,000	20,000	20,000	00	20,000	0	0
2.	Dissemination Workshop	1	21,600	21,600	21,591	-(09)	21,591	0	0
3.	Motivation & Awareness Raising Activities: (30 no)	30	1,000	30,000	30,000	00	30,000	0	0
4.	Transport cost for field work.	12 months	3,000	36,000	36,000	00	36,000	0	0
5.	O&M and Management training to users	4	6,000	24,000	24,000	00	24,000	0	0
6.	Operation cost	12 months	2,500	30,000	30,009	00	30,009	0	0
7.	Installation of rainwater	100	14,250	14,25,000	14,25,000	00	14,25,000	0	0

	tank.(3000 litres)								
8.	Stationeries/others	12 months	500	6,000	6,000	00	6,000	0	0
9.	Development of communication Materials (Poster, stickers, leaflets)	3	20,000	60,000	60,000	00	60,000	0	0
	Total-9			16,52,600	16,52,600	09	16,52,600		

How do you expect to spend the remaining funds?

The remaining funds will be spent according to the project budget and activities, which have been narrated in the project implementation.

Conclusion:

During this project period, progress of the Arsenic Mitigation through promotion of Rainwater Utilization Practices project of IDO is completed. The activities, which have been completed, are described above. The project signing date is 25/10/2016. So, thank you very much for the implementation of the project at the community level with the helping us.



Signature
Date: 25.11.2017.

Md. Mizanur Rahman

Name

Executive Director

Title

Name of the Organization: Integrated Development Organization (IDO)

Financial Statement for the period from: 25 October, 2016.to 25 November, 2017 (Project Completion Report).

Sl.	Budgeted Head as per approved line item	Approved budget for this project	Actual Expenditure		Balance	Remarks.
			Cumulative expenditure till this quarter	Current quarter Expenditure		
			BDT	BDT	BDT	
		A	B	C	D=A-B	
1.	Baseline Survey:	20,000	20,000	-	00	
2.	Dissemination Workshop	21,600	21,591	-	-(09)	
3.	Motivation & Awareness Raising Activities: (22 no)	30,000	30,000	-	00	
4.	Transport cost for field work.	36,000	36,000	6,000	00	
5.	Operation cost	30,000	30,009	1,525	00	
6.	O&M and Management training to users	24,000	24,000	6,000	00	
7.	Installation of rainwater tank.(3000 litres)	14,25,000	14,25,000	60,000	00	
8.	Stationeries/others	6,000	6,000	-	00	
9.	Development of communication Materials (Poster, stickers, leaflets)	60,000	60,000	-	00	
	Total: 09	16,52,600	16,52,600	73.525	00	

Fund Reconciliation: Up to 3rd Quarter)

BDT:

Total fund received from AHC	16,52,600
Less: Total Expenditure made till this quarter	16,52,600
Balance remaining	00
Cash in Hand:	00
Cash at Bank:	00

Certified by: 

Name: Md. Mizanur Rahman, Executive Director.

Position: Executive Director/CEO/Head of Organization

Organization: Integrated Development Organization (IDO)