

CONSTRUCTION OF CONSTRUCTION OF RAIN WATER HARVESTING TANKS AT KOTTIMALE, BERUWALA

Project Completion Report

Submitted to

Belgian-Fr RED CROSS

January 2009

Lanka Rain Water Harvesting Forum

28/3 A, Subadrarama Road, Nugegoda, Sri Lanka.

Tel: 94-0115-524612, Fax: 94-11-2768520

E Mail :lrwhf@sltnet.lk, www.lankarainwater.org



PROJECT COMPLETION REPORT

Project name: **Construction of Rain Water Harvesting System at
Kottimale, Beruwala**

Duration: **3 months (22nd October 2008- 22nd December 2008)**

Date of report: **22nd January 2009**

Reporting period: **22nd October 2008- 3rd January 2009**

Table of Content

CONTEXT	4
ACTIVITY PLANNED UNTIL AND DURING THIS PERIOD	4
List of planned activities	4
RESULTS ACHIEVED	4
PROBLEMS AND CONSTRAINTS	5
ANNEX 1: LIST OF BENEFICIARIES OF 2 X 3000 LITER PLASTIC TANK RWH SYSTEMS AT KOTTIMALE, BERUWALA	6
PICTURES FROM THE PROJECT	7
STATEMENT OF EXPENSES FOR CONSTRUCTION OF RAIN WATER HARVESTING TANKS AT KOTTIMALE, BERUWALA	8

Context

The project aimed to construct 2 above ground 3 m³ plastic tank rain water harvesting system for each of the 14 households at Kottimale.

Activity planned until and during this period

Planned activity for the period covers activities

List of planned activities

- a. Awareness program on rain water harvesting to community
- b. Construction of rain water harvesting system in each household with the support of unskilled labour from the community. Two persons from each household are expected to help the skilled mason during 5 days of construction.
- c. Training on operation and maintenance to community

Results achieved

1. Feasibility Study

LRWHF staff with Belgium Red Cross staff in Kalutara conducted a feasibility study of the location for implementation of the project activities on the 13th May 2008. During this visit discussion were had with the community about the water situation and on rain water harvesting. The community was made aware of the concept of roof rain water harvesting, the method and its uses. Most of the members have seen rain water collection tank elsewhere in the district. Many of the households were seen to collect rain water into open barrels and vessels. Many questions were raised by the community on quality and quantity of water collected from the roof and space need for the tank. After clarification, the communities agreed to support construction of rainwater tank in their premises.

2. Designing of system

Following the above visit and discussion with community it was proposed to have 2, 300 liter plastic tanks on either side of the house. The tanks will be placed in a rubble platform of 2 ½ ft height. Each tank will provide connection to inside of the house, one to the kitchen and other to the toilet.

3. Awareness programs

LRWHF staff conducted an awareness programs at the location on the on the 22nd October 2008. 10 households participated in this program. Leaflets and brochures were distributed to all participants. A video on rain water harvesting in Sri Lanka, "Gift from the Sky "was shown to the participants.

However, only 7 householders requested to have a rain water harvesting system build in their premises at this stage.

4. Construct RWH systems in individual households

The RWH system in the first 7 households were initially constructed. Later the other households also consented to have the RWH system build. However, 2 of the households did not give the necessary labour support for construction, M.F.M. Isham (House no. 11) and M.H.M. Najeem (house no. 15), therefore all materials needed (except for the filter basins) was handed over to them (see attached letter). The pipe connection to 2 other households were not fixed since there was nobody in the households for the mason to get access.

However, on the 29th December 2008, mason came back to the site to complete the balance systems. By the 3rd of January 2009, the 2 x 300 liter plastic tanks with rubble platform was build at Mr M.F.M. Isham (House no. 11) and connected to his toilet and kitchen. Only one of the RWH systems were build at Mr M.H.M. Najeem (house no. 15), as he has build the other system on his own.

In total 27 x 3000 liter RWH system was completed at 14 households in the location (list of beneficiaries).

5. Operation and maintenance training for households

Instruction for Operation and maintenance of the system were given to each households by the LRWHF field officer.

Problems and constraints

- Resistance and non cooperation from the community, only few households provided the promised labour support
- Resistance and non cooperation from some site staff.
- Some houses were closed most of the time and residents only come occasionally, therefore the access to the household was difficult, which delayed construction activities.
- It was noticed that some residents remove the wash out connection and take water out while the households are absent. Constant opening and closing of this connection while the tank is full is causing leaking.
- All materials were handed over to the householders at No. 11 and 15, however, when the mason came back to site to construct the RWH system at these 2 sites, some materials such as sand and cement was found to have been used by the householders. Therefore had to be purchased again.
- Finding accommodation and food for the mason was very difficult at the site.
- There was a problem with the taps fitted, therefore a replacement was made, where it was possible to remove the earlier tap. Some households have glued on the tap therefore could not be replaced.
- Four filter basin were out of stock, was delivered to house no. 11 and no. 15 on the 30th January 2009. Instruction and the mesh for setting up of the filters were given to households.

Annex 1: List of Beneficiaries of 2 x 3000 liter Plastic tank RWH systems at Kottimale, Beruwala

No.	House no.	Name	RWH system completed			
			2 x Rubble platform	2 x 3000 liter plastic tank	2 x First flush system	Pipe connection to toilet and Kitchen
01	04	A.C.P. Mohamed	√	√	√	√
02	10	A.M. Nasim	√	√	√	√
03	16	M.F.F. Farsana	√	√	√	√
04	13	M.N.F. Nifla	√	√	√	√
05	12	Pathima Rivura	√	√	√	√
06	02	M.H.P. Naseeya	√	√	√	√
07	06	A.A.F. Haleema	√	√	√	√
08	08	Umma Raffica	√	√	√	√
09	14	A G. F. Ferosa	√	√	√	√
10	07	A.H.M. Farooth	√	√	√	√
11	01	M.R.M. Rishwan	√	√	√	√
12	09	M.A. Mumtaj	√	√	√	√
13	11	Mr M.F.M. Isham	√	√	√	√
14	15	M.H.M. Najeem	Only one	Only one	Only one	Only one

Pictures from the Project



Awareness program to beneficiaries



Households fitted with 3000 liter plastic tanks



RWH system at Kottimale

Statement of Expenses for Construction of Rain Water Harvesting Tanks at Kottimale, Beruwala

Activity	Cost for 3m3 plastic tank RWH systems (Rs,)	Expenses
1. Awareness program to community	5,000	5,000
2. Construction of 14 rainwater harvesting systems (14 @ Rs. 72,000) of 2 x 3000 liter tanks per household)	1, 008,000	98,7116
3. Training on operation and maintenance to community	5,000	
4. Co-ordination, Supervision and travel	40,000	40,000
5. Administration and communication (10%)	58,200	58,200
6. Total	1,116,200	1,090,315.86

Total Project Budget	Rs.	1, 116, 200.00
Expenses claimed	Rs.	1, 090, 315.86
Initial Installment	Rs.	558,100.00
Balance due	Rs.	532,215.86