CONSTRUCTION OF RAIN WATER HARVESTING TANKS AND TRAINING IN PANDIRUPPU, AMPARA



Final Report

Submitted to

Food and Agriculture Organization of the United Nations

July 2007



Lanka Rain Water Harvesting Forum

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NARRATIVE FINAL REPORT

1. <u>GENERAL INFORMATION</u>

1.1 Recipient Organization name : Lanka Rain Water Harvesting Forum

- 1.2 Date of signature of the LoA : 25/04/2007
- 1.3 Location of the operation : Pandiruppu, Kalmunai
- 1.4 Amount of the LoA : Rs. 837,540.00
- **1.5** Duration of the LoA : **2 months** (**extended by 2 weeks**)
- **1.6** Period covered by this report : 25/04/2007 25/07/2007
- **1.7** Date of presentation of the present report : 25/07/2007

2. <u>OPERATIONAL FRAMEWORK</u>

2.1 Number and status of beneficiaries targeted up to now: 22 above ground 8 m^3 ferrocement rainwater systems have been installed in 22 households in Pandiruppu in Ampara district. All beneficiary householders have been trained on rain water harvesting technology and operation and maintenance of rain water harvesting system.

2.2 Type of intervention

A. Installation and operation of water harvesting units

- Reception and distribution to the final beneficiaries of 22 kits for the construction of 8m³ rain water tanks.
- Coordination, support and supervision to the establishment, construction and running of the water harvesting units
- Provision of 7 skilled labours and 6 unskilled labours for the implementation of the construction works

B. Training course and training materials on water harvesting

- Plan, implement and monitor the training courses
- Provide the beneficiaries with the necessary training materials, including raw materials, and stationary
- Monitor and certify the attendance of project beneficiaries to the training classes.

3. <u>IMPLEMENTATION</u>

3.1 Main results obtained: 8 m³ above ground rain water harvesting systems are installed in each of the 22 households. The rain water harvesting system consists of 8 m³ (8000 litre) above ground Ferro cement tank, 2 length gutter (26 ft.) on one side of the building connected through PVC piping to tank, inlet filter, first flush filter, pipes and tap for outlet. All households were trained on the rain water harvesting technology and benefits.

3.2 Status of activities

- **3.2.1** Implementation of a course on rain water harvesting technology and its benefits to the selected householders: 16 beneficiaries attended the training course held on the 14th May 2007.
- **3.2.2** Implementation of practical sessions on how to maintain and operate the rain water harvesting was conducted on the 14th July 2007 and 22 representative from all households participated.
- **3.2.3** Monitoring of the impact and reporting of activities. Households are regularly visited by field staff in co-ordination with FAO Ampara staff. Interim report submitted to FAO on the 25th June 2007
- **3.3** Difficulties encountered during the implementation There were delays arranging to obtain the materials from FAO stores and suppliers. The quality of some materials (Sand) was not to our specification, the sand was too coarse and had to be sieved, and therefore it caused delays.
- **3.3.1** Delivery problems Since materials were obtained from several places (FAO stores, suppliers ect,) delays as well as expenses occurred.
- **3.3.2** Others, please specify: More beneficiary contribution and involvement to the project activity would make it more sustainable. Four of the initial households rejected the tanks due to unavailability of space. Four more beneficiaries were selected to replace them.

4. <u>DETAILS OF THE OPERATION</u>

4.1 Monitoring

- **4.1.1.** All selected sites were inspected for selection of location for construction of rain water harvesting tank with FAO staff.
- **4.1.2.** All locations were selected in consultation with householder.
- **4.1.3.** Tank construction is monitored daily by LRWHF project staff.

4.2 Visibility

FAO logo and LRWHF logo will be painted on the surface of the rain water tank.

5. <u>FINANCIAL ASPECTS</u>

- **5.1** Rate of expenditure of the budget During the first month (May 2007) of the project activities 34% of the total incurred expenditure was spend and the balanced 66% was spend during the 2nd and 3rd months (June/July) of the project activities.
- 5.2 State any eventual changes made compared with initial and/or modified budget:
 Following budget lines were under spent:
 Skilled and unskilled labour

Following budget lines were over spent:

Project Co-ordination: Due to delays and extension

Other materials for construction: Since some materials provided by FAO were not to LRWHF material specification, they had to be purchased

Travel and Subsistence: Increase in fuel and other communication cost.

6. <u>CONCLUSIONS</u>

All activities of the project were successfully completed. Initial agreement was to construct 5 m^3 Ferro cement tank, however, due to availability of materials and other resource the capacity of the tank was increased to 8 m^3 (8000 litres) without any additional costs, in consultation with FAO. Increase capacity of the tank is expected to serve the householders better.

Since there has not been any rains in the area since the construction of tanks the householders have no practical experience yet of the benefits of the system. It is requested by the householders and recommended by LRWHF to fill the tanks gradually with water brought from outside till the rain season. This will help to protect the tank from drying up and developing cracks, clean the tanks of cement dust and also get the householders to use the tanks.

7. <u>ANNEXES</u>

Annex 1: Completed Rain water harvesting tanks at Ampurallipuram, Pandiruppu



Annex 2: Participant List of Operation and Maintenance Training of Beneficiaries of Rain Water harvesting System

AWARENESS PROGRAM ON RAIN WATER HARVESTING AMPARA DISTRICT

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