



INSTALLATION OF RAIN WATER HARVESTING SYSTEMS

**At
Nuffield School Jaffna**



Report Submitted to

Nuffield School for Deaf and Blind Jaffna

by

Lanka Rainwater Harvesting Forum

www.lankarainwater.org

April 2024



Project Completion Report
RAIN WATER HARVESTING SYSTEM
Submitted by
Lanka Rain Water Harvesting Forum

Project Locations: Nuffield School for Deaf and Blind, Kathidy, Jaffna

Project Duration: 19th January 2024 to 31st March 2024

Project Report Submission Date: 16 April 2024

Project Activity

1. Visit to sites and inspection
2. Select location for construction of rain water tanks in consultation with Nuffield School staff
3. Purchase and deliver of materials to site
4. Installation of Valence boards in buildings where it was not present.
5. Construction of 14 x 16,000 liter Rain water harvesting systems and Well water Recharge System
 - a. Phase I : Installation of 16,000 liter Rain water harvesting systems at EB10
 - b. Phase II:
 - i. Installation of 6 x 16,000 liter Rain water harvesting systems at EB02, EB06, EB09, EB12:
 - ii. Valence board fixing at EB2/6/9/12
 - iii. Gutter fixing for EB/2/6/9/12
 - c. Phase III: Installation of 7 x 16,000 liter Rain water harvesting systems at EB1/16/10 and PB
 - d. Phase IV : Fix G.I gutter (1090 ft) and valence boards (700 ft) to buildings constructed with rainwater harvesting tanks
 - i. Extra gutters and valence board for EB 8/7/2/7/9/12 (322 ft)
 - ii. Gutters and Valence board for EB1/EB16/EB10/EB3 (628 ft)
 - iii. Gutters and valence board for PB (140 ft)
 - iv. Repairs to 30,000 liter rainwater harvesting system at EB3
 - v. Well water recharge system (from roof of PB building and overflow from RWH system at PB building
6. Inspection of Rain water harvesting system for conformity to standards
7. Fixing of logo to Tank
8. Training and Instruction for Operation of Maintenance of System to households

Building where Rainwater Harvesting Systems are located

	Building	No of 16,000 liter RWH Tanks	Valence board length (ft)	Gutter length (ft)
1	EB01: Office	1		190
2	EB02: Oxfam	1	115	115
3	EB05: Senior Girls Hostel	1	75	75
4	EB 07: Principal quarter	1		75
5	EB 08: Class rooms	2	200	200
6	EB 09:Boys Hostel (junior)	1	115	115
7	EB 10 :Senior boys hostel	3	188	188
8	EB 12: Study Hall	1	92	92
9	EB 16: Main Hall	2	150	150
10	PB: Serendip	1 + WR	140	140
11	EB03: Vocational training center	Repair to 30,000 liter	100	100
	Total	14 +1	1175	1440

Output

- 14 rain water harvesting systems were installed
- 1175 ft valence board installed
- 1440 ft G.I Gutters and down pipes installed
- Well water recharge system installed
- Repairs to first flush, filter and tap system at EB3 30,000 liter RWHS
- School children Teachers and Principal of the school were trained on operation of maintenance of rain water harvesting system

Problems encountered

- Cracks formation in tanks due to inadequate curing process
- Tanks not filled with water adequately and in due course due to water shortages.
- Intense heat during construction period.
- Increase in cost of materials, labor and transport

Recommendation

- RWH systems should be monitored regularly for proper maintenance.
- Repairs of roof tiles to some to roofs buildings to get maximum run off from roofs.
- One person or group of people should be made responsible for proper operation and maintenance
- Tanks can be brightly painted with water conservation messages and pictures painted on them for promotion.
- Shading should be provided for tanks by growing trees, creepers near the tanks.
- Parents should be made aware of the rain water system and their support should be canvassed for maintenance such as cleaning of roof, tank, filters etc.

Pictures of Rain Water Harvesting Systems under Construction







Completed 14 rainwater harvestign systems





Repairs to old 30,000 liter RWHS

Well recahrgring system from PB building

Operation and maintenance training to students and staff at Nuffield School



Attendance Sheet
Rain Water Harvesting Training Program
Suffield School for the Deaf & Blind Kailhady
28.03.2024
Started about 11.45

No	Name	Occupation	
01	Ms Amara Somasundram	Principal	11.45am
02	Mr.Muthiah Priyanthan	Vice Principal	11.45am
03	Mr Thangarasa Tharsan	Teacher	11.45am
04	Mr. Sribalan Andrew Shathrak	Hostel Master	11.45am
05	Ms Ajantha Subramaniam	Project Coordinator	11.45am
06	Mas Rowan	Student	11.45am
07	Mas Alex	Student	11.45am
08	Ms Sinthusa	Student	11.45am
09	Mas Jeyantha	Student	11.45am
10	Mr Sasi	Advisor	11.45am
11	Mr.Ruthra Vijeyandran	Lanka Rain Water Harvesting	11.45am
12	LRWHF Builder	Builder	11.45am



**Nuffield school- Jaffna-installation of 14 numbers of 16000L RWHS Systems, Well Recahrge System and Repiars of old RWHS
Receipt & Payments summery-as of 31.03.2024**

Description	Total (LKR)	70%	20%	10%	Payment received (as of 29. 03.2024)LKR	Balance Payment due (31.03.2024) LKR
MoU 1: 1 x 16000 RWHS	473,000	331100	94600	47300	331,100	141,900
MoU 2: 6 x 16000 RWHS	2,526,451	1,768,516	505,290	252,645	2,128,500	397,951
MoU 3: 7 x 16000 RWHS	2,701,339	1,890,937	540,268	270,134	3,294,238.95	(592,899.95)
MoU 4: Extra gutters and valence board 11 buildings	2,328,684	1,630,079	465,737	232,868	2,275,635	53,049
Total	8,029,474				8029,473.95	0
Extra item/work						
Tent for cover	6000					6000
Tile printing	14000					14000
Gunny bags for covering the tanks	11200					11200
Extra Labour for filling the tank with water (19 hrs over 5 days)	8,312.50					8312.5
Grand total	8,068,986.50					39,512.50

Locations of Rainwater Harvesting Systems at Nuffield School for Deaf and Blind, Jaffna, Sri Lanka

