ANALYSING SUITABLITY AND SUSTAINABLITY OF RAINWATER HARVESTING SYSTEM IN SOME TSUNAMI AFFECTED AREAS OF AMPARA DISTRICT



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211

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Abstract

Water is a very important resource for entire living organisms. The demand for fresh water is increasing every day. In Sri Lanka, districts that are in dry zone have severe drought in dry season and heavy flood in rainfall times. Coastal areas face difficulties in quality of drinking water as seasonal salination due to the seapage. The east coast of Ampara district has limitations in availability of good quality water and Tsunami also creates salinity to the all water sources in coastal villages of this district. One of the way to improve their water availability is rainwater harvesting. Therefore, a study was focused on the acquiring relevant information from the rural community and sustainability of rain water harvesting in Tsunami affected areas of Ampara district. Information was gathered by a household survey using structured questionnaire. Data were analyzed using Statistical Package for Social Sciences (SPSS). It was found that water scarcity mainly depends on the family size. Lack of awareness and space availability were the main reasons for rejecting the rainwater harvesting system. The capacity of existing tanks is insufficient to store rain water to meet the water demands for domestic consumption throughout the year for the families which have more than five members. It was recommended that proper awareness should be developed in area before implementing rainwater harvesting system and the people should be trained about the operation and maintenance of rainwater harvesting after construction.

TABLE OF CONTENTS

Abstract	
Acknowledgement	ii
Table of Contents	iii
List of Tables	
List of Figures	viii
CHAPTER 01	1
1.0 INTRODUCTION	
CHAPTER 02	4
2.0 LITERATURE REVIEW	4
2.1 Styles of Roof water Harvesting	5
2.2. Subsystem Components	6
2.2.1.Catchment Subsystem	
2.2.2.Conveyance Subsystem	
2.2.3. First flush systems	
2.2.4. Filtering Subsystem	
2.2.5. Storage Subsystem	
2.2.6. Distribution	
2.3. Future role of Domestic Roof water Harvesting	
2.4. Quality of water from domestic rainwater harvesting	
2.4.1. Biological quality	

2.4.2. Chemical and Physical Quality	11
2.5. Maintenance	12
2.5.1. Prevention of mosquito breeding in the domestic rain water harves	ting
system.	12
2.6. Reasons for the current interest in domestic rainwater harvesting	13
2.7. Types of Rainwater harvesting tanks in Sri Lanka	13
2.7.1. Underground brick dome tank, Sri Lanka	13
2.7.2. 3m³ brick built storage tank, Sri Lanka	14
2.7.3. 10,000 litre partially below ground brick built tank, Sri Lanka	14
2.8. Rain water harvestingsystem in Dry zone of Srilanka	15
2.8.1. Rainwater Tanks in Use	15
2.8.2. The Impact of Rainwater Use in Dematawelihinna	15
2.9. National Rainwater policies and strategies of Sri Lanka	16
2.9.1. Strategies for Implementation of Rainwater Management	16
2.9.2. Legislative Support	19
2.10. Calculation Table of Rain water harvesting	20
CHAPTER -03	21
3.0 MATERIALS AND METHODOLOGY	21
3.1. Location of Study area	21
3.2. Research procedures	22
2.1.1. Tank shape and size	
2.1.2. First flush system	
1.3 Filter	24

3.2.2. Sampling Design
3.2.3. Method of Data collection
3.2.4. Analytical Procedure
CHAPTER 0427
4.0. Results and Discussion
4.1. Socio economic characteristics
4.1.1. Family size
4.1.2. Income
4.1.3. Type of house
4.1.4. Roof type
4.1.5. Source of water
4.1.5.1. Source of drinking water
4.1.5.2. Source of water for irrigation and other needs
4.2. Characteristic of rainwater harvesting systems in this area
4.2.1. The sustainability of harvested water
. 4.2.1.1. Quantity of the harvested water
4.2.1.2. Water quality
4.2.2. Additional methods to get clean water from rainwater harvesting 34
4.2.3. Problems encountered implementing rainwater harvesting
CHAPTER 0537
5.0 CONCLUSIONS AND RECOMMENDATIONS

3.1.1.4. Prevention of bottom water......24