

RAINWATER HARVESTING FOR RURAL WATER DEMAND

THE SUSTAINABLE DEVELOPMENT IN RURAL LIVELIHOOD

(A Case Study of Kanyam VDC ,Ilam)

A Thesis

**Submitted to Central Department of Rural
Development of Humanities and Social Sciences
Tribhuvan University in Partial fulfillment of the
requirements for the award of the degree of
Masters in Rural Development**

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LETTER OF RECOMMENDATION

This thesis entitled “**RAINWATER HARVESTING FOR RURAL WATER DEMAND**” (A Case Study of Kanyam VDC ,Ilam) has been prepared by Ms. Roma Amatya under my supervision. I hereby recommend this thesis for examination by the Thesis Committee as a partial fulfillment of the requirements for the Degree of Master of Arts in RURAL DEVELOPMENT.

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LETTER OF APPROVAL

We certify that this thesis entitled ““**RAINWATER HARVESTING FOR RURAL WATER DEMAND**” (A Case Study of Kanyam VDC ,Ilam) submitted by Ms. Roma Amatya to the central department of Rural Department, Faculty of Humanities and Social science, Tribhuwan University, is partial and fulfillment of the requirement for the Degree of MASTER in RURAL DEVELOPMENT has been approved by evaluation committee .

Evaluation Committee

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ABSTRACT

Rain Water Harvesting, a traditional practice started many centuries ago, has received very little attention in recent times. This thesis describes the adaptation and development of affordable technology for collecting rainwater including that from roof tops; and using this as a valuable source of water to supplement the water need of households in dry seasons and round the year in institution. It also illustrates the effective capturing, retention and controlled release of rainwater.

The thesis will substantiate the extent to which adoption of the technology could help greatly in conserving water resources and at the same time help to alleviate poverty by improving the quality of life of women and children in under developed parts of Nepal.

It is envisaged that the systems would enable poor households in the community to supplement their water supply as well as engage them in kitchen gardening; extend their cropping seasons through availability of water resources, ultimately enhancing food security and contributing to poverty alleviation.

This survey is mainly focused on evaluating the existing condition of the rainwater harvesting system whether the system fulfills the required demand. It is also concerned towards finding water consumption pattern for drinking, cooking, washing/cleaning, farming and other purposes. Study of water collection habit is the other aspect of the survey. It includes frequency of water collection from source, time required to collect water and use of saved time by women. Illam, representing an ecological region is selected as the study area. The district is expected to give the succinct picture of water consumption pattern of the country, as the survey has been conducted in different economic classes and different ethnic groups. The survey also includes the information regarding benefits of RWH system. Primary interest has been given to the safety of water for drinking purpose.

LIST OF ABBREVIATION

RHCC	Rain Water Harvesting Capacity Center
NEWHA	Nepal Water and Health
BSP-N	Biogas Sector Partnership -Nepal
RWHs	Rain Water Harvesting system
GPS	Global Positioning System
HHs	House Hold system
HDPE	High Density Polyethylene
CGI	Corrugated Galvanized Iron
IG	Income Generation
%	Percentage
°C	Degree Celsius
c.m.	Centimeter
m³	Cubic meter
V. High	Very High
V. Low	Very Low

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