

# **IMPACT OF COMMUNITY MANAGED IRRIGATION SYSTEM**

**(A CASE STUDY OF ADHERI KHOLA IRRIGATION PROJECT OF  
MANAKAMANA VDC, NUWAKOT DISTRICT)**

**A Thesis**

**Submitted to:**

**Central Department of Rural Development  
The Faculty of Humanities and Social Sciences  
in partial fulfillment of the requirement for the  
Degree of Master of Arts  
in Rural Development**

**By**

**Rajendra Bhatta**

**Symbol No.: 2623**

**Reg. No.: 9-1-250-37-96**

**Central Department of Rural Development  
University Campus Kirtipur,  
Kathmandu, Nepal  
November - 2008**

## RECOMMENDATION LETTER

This is to certify that the Thesis submitted by Rajendra Bhatta entitled **"Impact of Community Managed Irrigation System: A Case Study of Adheri Khola Irrigation Project of Manakamana VDC, Nuwakot District"** has been prepared under my supervision and guidance as a partial fulfillment of the requirements for the Degree of Master of Arts in Rural Development. Therefore, this is recommend for final approval and evaluation.

.....

Prof. Dr. Mahendra Singh

Central Department of Rural Development

University, Campus

Kirtipur, Kathmandu

Nepal

## **APPROVAL SHEET**

This thesis entitled "Impact of Community Managed Irrigation System: A Case Study of Adheri Khola Irrigation Project of Manakamana VDC, Nuwakot District, Nepal" has been accepted in partial fulfillment of the requirements for the Degree of Master of Arts (M.A) in Rural Development.

### **Evaluation Committee**

-----  
Prof. Dr. Pradeep Kumar Khadka  
(Head of Department)

-----  
Prof. Dr. Mahendra Singh  
(Thesis Supervisor)

-----  
(External Examiner)

## **ACKNOWLEDGEMENT**

This study entitled Impact of Community Managed Irrigation System: A Case Study of Aderi Khola Irrigation Project, Manakamana VDC, Nuwakot District, Nepal is carried out by the author for the fulfillment of Master Degree of Humanities and Social Sciences at Central Department of Rural Development, Tribhuvan University, Kirtipur, Kathmandu, Nepal.

First of all, I would like to express my sincere gratitude to Prof. Dr. Pradeep Kumar Khadka, Head of Central Department of Rural Development, T.U., Kirtipur for valuable suggestion and encouragement.

Similarly, I would like to express my sincere gratitude to Prof. Dr. Mahendra Singh, of Rural Development, T.U., Kirtipur for his valuable and constant inspiration, encouragement, supervision and guidance during the study period.

I cannot resist my self without extending my gratitude to all my respected lectures and personal of CDRD, T.U. for their co-operation and assistance for this work and other suggestion to study. I would also like to appreciate to different organizations, institutions, all the respondents Manakamana VDC, Nuwakot.

I most respectfully would like to thank my wife Pushpa Bhattarai for her continuous encouragement and kind enough to support me to accomplish this dissertation in time.

I am also indebted to my brother Ram Krishna Bhatta who helped me to shake thesis in this form. I am deeply indebted to my brother Shivaram Bhatta for his kind help for data collection. Similarly, I am deeply thankful my friend Khada Nanda Bhattarai for data tabulation and various suggestions and I am also indebted friends Narayan Adhikari, Ram Chandra Adhikari, Madhav Kumar Regmi, Keshav Prasad Pokheral, Nirmal Jang Sherpa, Ram Kumar Shrestha, Bhumiswar Sharma for their help for dissertation time.

**November, 2008**

**Rajendra Bhatta**

## ***ABSTRACT***

*This study on Impact of Community Managed Irrigation System had been taken a case study of the Adheri Khola Irrigation Project, Manakamana VDC of Nuwakot district.*

*Mainly agricultural production in Nepal depends on monsoon rains while its uncertainly has made the low productivity. Hence, irrigation has proved to be one of the most importance for agricultural production.*

*Irrigation includes all open action or practices in artificially applying water to the soil for growing crops. Irrigation management system is the process of the supplying the necessary amount of water artificially for the agricultural production or plants.*

*This study through light to investigate the indigenous knowledge and practice of the local people on the process of adaptation in the local environment adopting fundamental and empirical skills, methods and technology.*

*In this study both secondary and primary sources were used for the purpose of data collection. Questionnaire and checklist were used for primary data collection. This study is a micro-level study of the Adheri Khola Irrigation Project CMIS with the emic approach and on the process of field study, sampling was used to select the respondents for the analysis of holistic aspects of the universe, old aged, knowledgeable and intellectual persons were selected for providing insights and views in to the irrigation management system. The methodologies applied to analyze various activities were interview, operational variables and indicators, household census, questionnaire, focus group discussions and data analysis.*

*The local people using empirical knowledge, skills, methods and technology for subsistence in the local environment have maintained the system. The system has been acknowledged on the socio-economic and the socio-cultural identities having objective to fulfill the food requirements for livelihood.*

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## ACRONYMS / ABBREVIATIONS

CBS	-	Central Bureau of Statistics
DIO	-	District Irrigation Office
DOI	-	Department of Irrigation
ERIP	-	East Rapti Irrigation Project
FGDs	-	Focus Group Discussions
FMIS	-	farmer Managed Irrigation System
GDP	-	Gross Domestic Products
GI	-	Group Informants
GNP	-	Gross National Products
IIMI	-	International Irrigation Management Institute
KI	-	Key Informants
MOWR	-	Ministry of Water Resources
NDP	-	Nepal District Profile
NGOs	-	Non-government Organizations
NIA	-	National Irrigation Administration
NPC	-	National Planning Commission
PRA	-	Rapid Rural Appraisal
SFMIS	-	Small Farmer Managed Irrigation System
TIP	-	Thana Irrigation Project
VDC	-	Village Development Committee
WECS	-	water and Energy Commission Secretariat
WUA	-	Water Users' Association
WUCs	-	Water Users' Committees

## **GLOSSARY OF THE LOCAL TERMS**

Ali	:	Ridge of the terraced Khet-land, which blocks the water from bogging.
Baari	:	Dry upland, where crops like maize, millet, buck wheat, potato, sweet potato, barely and soybeans etc. are grown.
Bause	:	A man whose task is to repair and build the ridges of the Khet-land.
Chhapo	:	Leaves and tree trunks that are used to grow up the seed of paddy scattering all over the terraced khet-land.
Daana	:	Donation
Gahara	:	A leveled Khet-land where the rice is grown.
Hali	:	A ploughman whose task traditionally is assigned to plough the Khet-land and Baari-land.
Halo	:	A plough made of wood that is used to plough the Khet-land and the Baari-land pulled by the oxen.
Juwa	:	A wooden instrument with the rope and leather and is used to pull the plough tying in the neck of the oxen.
Khet	:	Low land where paddy and wheat are cultivated.
Khetala	:	Labour hired on the basis of wage for paddy transplantation.
Khola	:	Small stream from where the water continuously flows.
Kodalo	:	An iron instrument like the spade and is used to dig the corner of the Khet-land and the Baari-land and is used in the works of canal operation and maintenance.
Kulo	:	The canal by which the water is flowed to the Khet-land.
Malik	:	Landowner or the Khet-land owner who has the dominant role on the mobilization of the land.
Melo	:	Plance of the Khet-land and the Baari-land where the labors do their work from 10 to 5 o'clock.
Mokshya	:	Emancipation