## SOCIO-ECONOMIC IMPACT OF RANIJAMARA KULARIYA IRRIGATION PROJECT

(A Case Study of Pathariya VDC, Kailali, Nepal)

A Thesis

#### Submitted to:

Central Department of Rural Development Faculty of Humanities and Social Sciences in Partial Fulfillment of Requirements for the Master's Degree of Arts in Rural Development

> Submitted by: Dipak Bahadur Thapa T.U. Regd. No.:6-2-37-789-2007 Roll No.:281394

**Central Department of Rural Development** 

Tribhuvan University, Kirtipur

Kathmandu, Nepal

August, 2015

### **Recommendation Letter**

The thesis entitled Socio-Economic Impact of Ranijamara Kulariya Irrigaion Project :A case study of Pathariya VDC, Kailali, Nepal has been prepared by Mr. Dipak Bahadur Thapa under my guidance and supervision. I hereby forward this thesis to the evaluation committee for final evaluation and approval

.....

Mr. Ramesh Neupane

(Supervisor)

Date: Aug.10, 2015

(2072-04-25)

### **Approval Letter**

The thesis work entitled," Socio-Economic Impact of Rani Jamara Kulariya Irrigation **Project :** A case study of Pathariya VDC, Kailali, Nepal ." Submitted by Mr. Dipak **Bahadur Thapa** in partial fulfillment of the requirements for Degree of Master of Arts (M.A) in Rural Development has been evaluated and approved by the evaluation committee.

**Evaluation Committee** 

\_\_\_\_\_

Prof. Dr. Chandra Lal Shrestha Head of Department

••••••

Mr. Projol Man Pradhan External

.....

Mr. Ramesh Neupane Supervisor

Date: Aug.12, 2015 (2072-04-27)

#### Declaration

I hereby declare that the thesis entitled "Socio-Economic Impact of Ranijamara Kulariya Irrigaion Project :A case study of Pathariya VDC, Kailali, Nepal" submitted to the Central Department of Rural Development, Tribhuwan University, is entirely my original work prepared under the guidance and supervision of my supervisor. I have made due acknowledgement to all ideas and information borrowed from different sources in the course of writing this thesis. The result of this thesis have not been presented or submitted anywhere else for the award of any degree or for any other purposes .I assure that no part of the content of this thesis has been published in any form before.

Dipak Bahadur Thapa

T.U. Reg. No: 6-2-37-789-2007

Date: Jul.31, 2015

(2072-04-25)

#### ACKNOWLEDGEMENT

I would like to express my deep gratitude to the Central Department of Rural Development at Tribhuwan University, for allowing me to carry out this thesis in partial fulfillment of the requirements for the degree of Master of Arts in Rural Development. In this course of action, many individuals help me in direct as well as indirect way. It is not possible to keep each name in this short report though I would like to thank the following persons for their continuous support and providing intellectual comments.

I am extremely grateful and indebted to my supervisor **Mr. Ramesh Neupane** of Central Department of Rural Development, for providing me an opportunity to conduct this study under his supervision. I can't forget this kind guidance, supervision and inspiration during the preparation of this thesis. I must express my deepest respect for his perennial support of encouragement to accomplish this study.

I am very much thanks social workers of Rani Jamara Kulariya irrigation project, for their valuable suggestions and inspiration during the preparation of this thesis. I would like to recall my heartfelt reverence to the librarians of T.U, and District Development Committee. I would like to thank to all the respondents of the study area.

I have no words to express my sincere gratitude to my family members father Bhim Bahadur Thapa. I never forget of and my best friend Ishwor Bahadur Thapa who help me .At last, It would be patiently observed that this little contribution would help in filling up the gap in this sector providing as tonic to the researcher and policy maker,

> Dipak Bahadur Thapa CDRD Tribhuvan University, kirtipur

Date: Jul.31, 2015

(2072-04-25)

#### Abstract

It is no doffing Agriculture is the back bone of Nepalese economy agriculture development is possible only when all the agriculture Land will be irrigated then for, irrigation plays important role in promoting agriculture development. It can contribute by increasing production and productivity both. In the current the study was done on irrigation project. Therefore, it plays important role in promoting agriculture development. It can contribute by increasing by production. I have selected Socio economic impact of Rani Jamara Kulariya irrigation project to examine the social impact of the study area.

Some of the main objectives are to analyze the land use pattern in the study area, to examine the change in socio-economic condition due to the irrigation project and to analyze the problems and prospects of the irrigation project.

The methodology has been outlined in the following sub-sections in order to carry out the tasks and activities to meet the scope and objectives of the evaluation. The methodology is based on the analysis of qualitative, quantitative and triangulation of the data and information of the project impact on five evaluation criteria. The methodology such as household survey, Field visit and observation, Key informant interview, Focus group discussion are used.

This study is conducted in order to explore the socio-economic impact irrigation project in Pathariya VDC, so for this study different data are collected. Basically primary data is collected from the households of the study area, whereas secondary data is collected from published and non-published written documents from individuals, experts, and organization related to the irrigation and agricultural sector. For this study Universe is the people who engaged with RanijamaraKulariya Irrigation Project of Pathariya VDC, Kailali District. There are about 3652 household among them 2200 household are directly benefitted from the RJKIP. So, by the help of random sampling method choose two wards in 60 household as sample to conduct this study.

For its betterment some suggestions are put forward like, providing proper irrigation facility and providing with latest tools and equipments for more production. There should be monitoring and evaluation mechanism for the resources used in particular purposive as well as getting benefit from it. Most importantly the farmers should be provided with trainings to increase the production.

During the study time some problems were also found in the study area. Tourism centre is also not established for the tourists. Some other problems were also seen like absence of irrigation facility, trainings and well infrastructures are lacking in some extent. For the promotion of the agriculture local NGO's DDC and some other organization are also working but the effort is not so enough. So, I think that my thesis work will also support to some extent for the agriculture development. A set of recommendations, conclusion and suggestion have been made at the end of study.

# List of content

## Page no.

Declaration	i
Letter of Recommendation	ii
Approval Sheet	iii
Acknowledgement	iv
Abstract	v
List of Tables	x
List of Figures	xi
Acronyms/ Abbreviation	xii

CHAPTER ONE: INTRODUCTION	
1.1 Background of the study	1
1.2 Statement of the problem	3
1.3 Objective of the study	4
1.4 Importance of the study	5
1.5 Organization of the study	5
1.6 Limitation of the study	6
CHAPTER TWO: REVEW OF THE LITERATURE	7 -23
2.1 International context	7
2.2 National context	8
2.3 Impact of irrigation	9
CHAPTER THREE: RESEARCH METHODOLOGY	24-26
3.1 Research design	24
3.2 Rational of selection of the study area	24
3.3 Nature and source of data	
3.4 Universe sample and sampling procedure	
3.5 Data collection Techniques and Tools	

3.5	.1 House hold survey	25
3.5	.2 Focus group discussion	26
3.5	.3 Observation	26
3.5	.4 Key informant interview	26
3.6 Data analys	sis	26
CHAPTER F	OUR: DATA ANALYSIS AND INTERPRETATION	27-43
4.1 Profile of the	e irrigation project	27
4.2 Land use pa	attern	30
4.2.1	Cropping pattern and Production status	30
4.2.2	Land location	
31		
4.2.3	Major factors responsible for the increment of land value	32
4.2.4	Status of crop production after the construction of RJKIP	32
4.2.5	Irrigated land through the project	33
4.2.6	Irrigation facilities available before the irrigation project	33
4.2.7	Situation of food grain of in households	34
4.3 Socio eco	nomic impact of the irrigation project	34-41
4.3.1 Imp	act in education	36
4.3.2 Imp	act in income	37
4.3.3 Impa	act in expenditure	38
4.3.4 Chai	nge in development	38
4.3.5 Change in occupation		39
4.3.6 Produ	uction	40
4.3.7 Food	sufficiency	41
4.3.8 Impa	act on workload	41
	ix	

4.4 Problems and prospects	
4.4.1 Rise in conflict	42
4.4.2 Damage Canal	43
4.4.3 Users committee	43
4.4.4 Distribution of water	43

# CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary	45
5.2 Conclusions	47
5.3 Recommendations	47

45-48

<b>REFERENCES/ BIBLIOGRAPHY</b>	
ANNEX- I: Questionnaire	52
<b>ANNEX-II:</b> Focus Group Dissociation	59
ANNEX-III: Key Informant Interview	60
<b>ANNEX-IV:</b> <i>irrigation related photos</i>	61

# List of Tables

Title	Page
No.	
Table no 4.2.1: Cropping pattern and Production status	30
Table no 4.2.2: Land location and land value	31
Table no 4.2.3: Major factors responsible for the increment of land value	32
Table no 4.2.4: Status of crop production after the construction of RJKIP	32
Table no 4.2.5: Irrigated land through the project	33
Table No 4.2.6: Irrigation facilities available before irrigation project	33
Table No 4.2.7: Situation of food grain of in households	34
Table No 4.3.1: Impact in education	36
Table No 4.3.2: impact in income of the study area	37
Table No 4.3.3: Impact in expenditure	38
Table No 4.3.4: Change in development	38
Table No 4.3.5: Change in Occupation	39
Table No 4.3.6: Production in agriculture	40
Table No 4.3.7: Food sufficiency	41
Table No 4.4.1: Conflict among local people or with project	42
Table No 4.4.2: Damage in canal	43
Table No 4.4.3: User committee	43
Table No 4.4.3: Distribution water	43

# List of Figures

	Title	Page No.
Figure No- 4.3.1	Impact in Income of the study area	37
Figure No- 4.3.5	Change in Occupational Structure	40

## **ABBREVIATIONS**

ADB	:	Asian Development Bank
APROS	C :	Agriculture Project Service Center
BC	:	Before Christ
CBS	:	Central Bureau of Statics
CDC	:	Curriculum Development Centre
DOI	:	Depart of Irrigation
DIO	:	District Irrigation Office
FAO	:	Food and Agricultural Organization
GDP	:	Gross Domestic Product
GON	:	Government of Nepal
INGO	:	International Governmental Organization
MOF	:	Ministry of Finance
NCA	:	Net Command Area
NPC	:	National Planning Commission
NRB	:	Nepal Rastra Bank
RJKIP	:	Rani jamara kulmariya irrigation project
SLC	:	School Leaving Certificate
TU	:	Tribhuvan University
UN	:	United nation
VDC	:	Village Development Committee
WUA	:	Water Users Association
WB	:	World Bank