AN IMPACT STUDY OF RATIKHOLA IRRIGATION PROJECT ON TILAHAR, PARBAT

A Thesis

Submitted to the Faculty of Humanities and Social Sciences Department of Sociology/Anthropology for the Partial Fulfillment of Master Degree in Sociology

> By Jhalak Raj Poudel Roll No: 34/063 Symbol No.: 480223 Registered No: 6-1-48-614-98

Tribhuvan University Prithvi Narayan Campus Pokhara 2014

AN IMPACT STUDY OF RATIKHOLA IRRIGATION PROJECT ON TILAHAR, PARBAT

A Thesis

Submitted to the Faculty of Humanities and Social Sciences Department of Sociology/Anthropology for the Partial Fulfillment of Master Degree in Sociology

> By Jhalak Raj Poudel Roll No: 34/063 Symbol No.: 480223 Registered No: 6-1-48-614-98

Tribhuvan University Prithvi Narayan Campus Pokhara 2014

LETTER OF RECOMMENDATION

This is to certify that Mr. Jhalak Raj Poudel has worked for the full period time prescribed by the department t of Sociology/Anthropology for the completion of this dissertation under my supervision. It is recommended that his MA. thesis entitled "An Impact Study of Ratikhola Irrigation Project on Tilahar, Parbat", which symbolizes the results of his investigations, submitted for evaluation.

(Netra Narayan Poudel) Research Supervisor Department of Sociology/Anthropology Prithvi Narayan Campus Pokhara

LETTER OF APPROVAL

The evaluation committee has evaluated and accepted this dissertation entitled "An Impact Study of Ratikhola Irrigation Project on Tilahar, Parbat" submitted by Mr. Jhalak Raj Poudel for the partial fulfillment of the requirement for masters of Arts in Sociology.

Members of Thesis Evaluation Committee

Netra Narayan Poudel

Research Supervisor Department of Sociology/Anthropology

•

(**Prof. Dr. Lekhnath Bhattari**) External Supervisor Department of Economics, TU, PNC, Pokhara

Mrs. Shanti Bhusal

Head of Department of Sociology/Anthropology TU, PNC, Pokhara

Date: February, 2014

ACKNOWLEDGEMENTS

I am very grateful to the Department of Sociology/Anthropology, P.N. Campus for providing me an opportunity to study on the topic "An Impact Study of Ratikhola Irrigation Project on Tilahar, Parbat". I am equally grateful to my supervisor Mr. Netra Narayan Poudel, lecturer, Department of Sociology/Anthropology, PN Campus, Pokhara for his constant guidance and inspiring suggestions made during my research work. Besides, I would like to express my gratefulness to the Department Head Shanti Bhusal and to all the respected teacher of the department for inspiration and encouragement for the study. I am also very thankful to Mr. Bhuwan Subedi as a language editor and made necessary correction and improvement of this dissertation. My grateful thanks go to District Irrigation office, Kusma, Parbat and Indra Bahadur Malla, Gigyan, Parbat for providing materials and proper help for the study. Likewise, my thanks goes to Mr. Rabindra Nath Bhattarai and Gumanath Lamichhane for their help in my research. Besides, I also acknowledge the help received from head of the users group of Ratikhola irrigation project.

At last, I would like to express a deep sense of gratitude to the people of the study area who helped me in collecting data.

I would also like to thank my spouse Mrs. Saraswoti Sharma of the Om Kamana Computer & Cyber, Lekhnath-8, Shishuwa for her excellent performance in computer typing and thanks to "Quick Computer Service and Photocopy House, Pokhara -1, Bagar for final computer setting.

Date:

Jhalak Raj Poudel

TABLE OF CONTENTS

		Page
LET	i	
LETTER OF APPROVAL		ii
ACKNOWLEDGEMENT		iii
TAB	LES OF CONTENTS	iv
LIST	OF TABLES	vii
LIST	OF FIGURE	viii
CHA	APTER-I: INTRODUCTION	1-5
1.1	Background	1
1.2	Statement of the Problem	3
1.3	Objectives of the Study	4
1.4	Significance of the Study	4
1.5	Limitation of the Study	5
1.6	Organization of the Study	5
СПА		(12
	APTER- II: LITERATURE REVIEW	6-13
2.1	Historical Review	6
2.2	Irrigation in Nepal	7
2.3	Review of Previous Studies	9
2.4	Conceptual Framework	12
CHA	APTER –III: RESEARCH METHODOLOGY	14-16
3.1	Research Design	14
3.2	Nature and Sources of Data	14
3.3	Sampling Procedure	14
3.4	Data Collection Tools and Techniques	15
	3.4.1 Interview	15
	3.4.2 Questionnaire Schedule	15

	3.4.3	Observation	15
	3.4.4	Focus Group Discussion (FGD)	16
3.5	Metho	ods of Data Analysis	16
СНА	PTER-	IV: SOCIO-ECONOMIC AND NATUREL	
		ENVIRONMENT OF THE STUDY AREA	17-22
4.1	Socio	-economic Profile	17
	4.1.1	Population Structure	17
	4.1.2	Ethnic Composition	18
	4.1.3	Literacy and Education	19
	4.1.4	Occupational Structure	20
	4.1.5	Cultivated Land in Own Family	21
4.2	Natur	al Environment of Ratikhola Irrigation Command Area	22
CHA	PTER-	V: IMPACT OF IRRIGATION PROJECT IN	
		THE STUDY AREA	23-39
5.1	Cultiv	vated Land before the Irrigation	23
5.2	Produ	ction of Crops before Irrigation Facility	24
5.3	Produ	ctivity of Crops	25
5.4	Cultiv	vated Area before and after Irrigation	26
5.5	Produ	ction of Crops	27
5.6	Chang	ges in Crops Production	28
5.7	Produ	ctivity of Crops after Irrigation Facility	30
5.8	Chang	ges in Agricultural Productivity	31
5.9	Cropp	bing Pattern	32
	5.9.1	Cropping Pattern before the Irrigation Project	32
	5.9.2	Changes Cropping Pattern after the Irrigation Project	32
	5.9.3	Changes in Cropping Pattern after the Irrigation Project	t 33
	5.9.4	Cropping Calendar	33
5.10	Use of	f Chemical Fertilizer	34
5.11	Chang	ges in the Occupational Structure	35
	5.11.1	Food Grain Sufficiently in Ratikhola Irrigation Project	36

	5.11.2	Income after Selling Agricultural Product in Ratikhola	
		Irrigation Command Area	36
	5.11.3	Expenses of People Ratikhola Command Area	37
	5.11.4	Expenses Rate in Agriculture Sectors in Ratikhola	
		Irrigation Command Area	38
5.11	Change	es in the Occupational Structure	39
5.12	Proble	ems of Ratikhola Irrigation	39
СНА	PTER-	VI: SUMMARY, FINDINGS AND	
		RECOMMENDATION	40-45
6.1	Summ	nary and Findings	40
6.2	Concl	usion	43
6.3	Recor	nmendation	43

REFERENCES

APPENDIX

LIST OF TABLE

Table	Tables	
4.1	Economically Active and Dependent Population	17
4.2	Ethnic Composition	19
4.3	Literacy Composition by Sex	19
4.4	Academic Status of Literate Population	20
4.5	Occupational Structure	20
4.6	Cultivated Land	21
5.1	Cultivated Area before the Irrigation	23
5.2	Crop Production before the Irrigation	24
5.3	Productivity of Crops before the Irrigation	25
5.4	Cultivated Area before and after Irrigation	26
5.5	Production of Different Crops after Irrigation Facility	28
5.6	Production of Crops before and after Irrigation	29
5.7	Productivity of Crops after Irrigation	30
5.8	Productivity of Crops before and after Irrigation	31
5.9	Cropping Pattern before the Irrigation	32
5.10	Cropping Pattern after the Irrigation	33
5.11	Cropping Calendar	33
5.12	Use of Chemical Fertilizer before and after Irrigation	34
5.13	Food Grain Sufficiently in Ratikhola Irrigation	36
	Command Area in 2012	
5.14	Income after Selling Agricultural Product in 2012	37
5.15	Expenses of People in 2012	37
5.16	Expenses Rate in Agriculture Sector in the Command Area	38
5.17	Problems of Ratikhola Irrigation Project	39

LIST OF FIGURE

Figures		Page	
2.1	Conceptual Framework	13	
4.1	Economically Active and Dependent Population	18	
4.2	Occupational Structure	21	
5.1	Cultivated Area before and after Irrigation	26	
5.2	Production of Crops before and after Irrigation	29	