SOCIO-ECONOMIC AND **ENVIRONMENTAL IMPACT OF MICRO-HYDRO POWER PROJECT**

(A Case study of Manpang-I Micro Hydro Power Project, **Budhathum – VDC of Dhading District, Nepal**)



A Thesis **Submitted in Partial Fulfillment of the Requirements** for the Award of the Degree of Master of Arts **In Rural Development**

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LETTER OF RECOMMENDATION

I hereby, certify that the thesis entitled **Socio-Economic and Environmental Impact of Micro-Hydro-Power Project: A Case Study of Manpang-I VDC, Dhading District** submitted by Mr. Kamal Bahadur Adhikari to the Central Department of Rural Development, Tribhuvan University, Master of Arts in Rural Development is carried out under my guidance and supervision. I recommend this for the final evaluation.

Dr. Uma Kant Silwal Supervisor

APPROVAL SHEET

This is to certify that the thesis submitted by Mr. Kamal Bahadur Adhikari entitled Socio-Economic and Environmental Impact of Micro-Hydro-Power Project: A Case Study of Manpang-I Budhathum VDC of Dhading District has been approved by this department in the prescribed format of the Faculty of the Humanities and Social Sciences.

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Abstract

The thesis work is entitled as "Socio-Economic and Environmental Impact of Micro-Hydro-Power Project: A Case Study of Manpang-I Budhathum VDC of Dhading District". The study has attempted to display the socio-economic and environmental impact of MHP in rural areas. It is a descriptive type of study based on primary data.

The 56 respondents were selected from 200 household. It was selected random sampling method for this study.

The main objective of this study is to examine the socio-economic and environmental impact of Manpang-I MHP plant, to find out the attitude of community and sustainability of micro-hydro project in rural area.

Among the total 56 respondents Brahmin and Chhetri (60.71%) has dominated other caste. All of the respondents (56) reported that their life standard has been changed after electrical facility.

Majority of respondent's (75%) family income has been increased after MHP. Most of the respondents (64.29%) have unable to meet their annual food demand by crops and livestock.

The status of forest has been improved after establishment of MHP in the study area. More than 53 percent respondents reported that the sanitation is improved after MHP. Positive impact has seen in human health.

One rice mill and Sah- mill is established in study area after electricity. More than 85 percent respondents reported that there is positive effect in social cultural properties like change in behaviour and change in thinking.

There is operation schedule in powerhouse and maintenance responsibility has gone to user committee in terms of maintenance, women's participation is low. From the study report, more than 75 percent respondents are satisfied by electricity.

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LIST OF ABBREVIATIONS AND ACRONYMS

ADBN : Asian Development Bank Nepal

AEPC : Alternative Energy Promotion Centre

BSP : Biogas Support Program

CADEC : Community Awareness Development Energy Centre

CBO : Community Based Organization

CBS : Central Bureau of Statistics

DDC : District Development Committee

ESAP : Energy Sector Assistance Programme

FY : Fiscal Year

GN : Government of Nepal

KW : Kilowatt

MHP : Micro Hydro-Power

MW : Megawatte

MWE : Megawatt Energy

NGO : Non-Governmental Organization

P. Ltd. : Private Limited

PRA : Participatory Rural Appraisal

RD : Rural Development

RE: Rural Energy

REDP : Renewable Energy Development Program

SHP : Small Hydro-Power

UNDP : United Nations Development Program

VDC : Village Development Committee

WECS : Water Energy Commission Secretariat

WTO : World Trade Organization