

**IMPACT OF CLIMATE CHANGE ON RURAL LIVELIHOOD:  
A Case Study of Atichaur VDC, Bajura District**

**A Thesis Submitted to  
Central Department of Rural Development  
Tribhuvan University  
in the partial Fulfillment of Requirements for  
Degree of the Master of Arts (M.A)  
in  
Rural Development**

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## DECLARATION

I hereby declare that the thesis entitled **Impact of Climate Change on Rural Livelihood: A Case Study of AtichaurVDC , Bajura District** submitted to 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 acknowledgements to all the ideas and information borrowed from different sources in the course of preparing the thesis. The results 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.

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## RECOMMENDATION LETTER

The thesis entitled **Impact of Climate Change on Rural Livelihood: A Case Study of AtichaurVDC , Bajura District** has been prepared by **Durga Dhakal** under my guidance and supervision. I hereby forward this thesis to the evaluation committee for final evaluation and approval.

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## **APPROVAL SHEET**

The thesis entitled **Impact of Climate Change on Rural Livelihood: A Case Study of AtichaurVDC , Bajura District** submitted by Durga Dhakal in partial fulfillment of the requirements for the Master's Degree (MA) in Rural Development has been approved by the evaluation committee.

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## ABSTRACT

Climate change is in the center of contemporary environmental discussions. The negative consequences of climate change have already been realized in many places around the world, and it is predicted that the consequences will be more severe in the future. Most of the indigenous communities living in fragile ecosystem of Nepal are natural-resource dependent and contribute to less emission of Greenhouse Gases but are severely affected by climate change. Hence, this research entitled “

**Impact of Climate Change on Rural Livelihood: A Case Study of Atichaur VDC, Bajura District** with the aim of determining the vulnerability of climate change in livelihood of the rural people.

Primary data were collected through questionnaire survey (30), key informant interviews, focus group discussions and direct field observations. Secondary data regarding climate variables were collected from Metrology department. Both primary and secondary data were analyzed using MS Excel 2011.

Meteorological data of rainfall and temperature showed that the amount of rainfall was decreasing while temperature of the area was rising.

Regarding the impact of climate change, 58% of the respondent said that agricultural production was decreased due to increase in temperature, erratic rainfall and drought. Likewise, 63% of the respondent said that natural spring has dried in recent 15 years as a result of less rainfall and deforestation. Diarrhea and eye pain were seen as a major health problem of the study area. Similarly, 65% of the respondent said that composition of forest has been changed. The excessive spreads of invasive species have replaced local species, which were once abundance in the area.

Local adaptive capacity was poor. Knowingly or unknowingly some coping strategies like use of piped drinking water and community forest concept for forest n landslide control were adopted within the community. There is an urgent need to formulate adaptive strategies for food security and for dealing with drinking water scarcity and climate change induced disasters in the area with dissemination of information about climate change. The study concluded that impacts of climate change on community are serious as they are directly related to livelihoods.

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## **ABBREVIATIONS / ACRONYMS**

CC	:	Climate Change CDM: Clean Development Mechanism
CEN	:	Clean Energy Nepal
COP	:	Conference of Parties
ERU	:	Emission Reduction Unit
ET	:	Emission Trading
FAO	:	Food and Agriculture Organization
GHG	:	Greenhouse Gas
GLOF	:	Glacier Lake Outburst Flood
IFAD	:	International Fund for Agriculture Development
IPCC	:	Intergovernmental Panel on Climate Change
JT	:	Joint Implementation
LAPA	:	Local Adaptation Plan of Action
LFP	:	Livelihood Forestry Programme
MoSTE	:	Ministry of Science Technology and Environment
NAPA	:	National Adaptation Plan of Action
NPC	:	National Planning Commission
REDD	:	Reducing Emission from Deforestation and Forest Degradation
UKAID	:	United Kingdom AID
UNDP	:	United Nation Development Programme
UNEP	:	United Nation Environment Programme
UNFCCC	:	United Nation Framework on Climate Change
USCSP	:	United States Country Studies Program
WMO	:	World Meteorological Organization