

Socio-economic and Behavioral Assessment of Food Security in Rukum District of Nepal

RAJU SHARMA DHAKAL

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RAJU SHARMA DHAKAL

TU Reg. No: 5-1-19-670-99, Roll No: 433/063

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LETTER OF RECOMMENDATION

Mr. **RAJU SHARMA DHAKAL** has written this thesis entitled "**SOCIOECONOMIC AND BEHAVIORAL ASSESSMENT OF FOOD SECURITY IN RUKUM DISTRICT OF NEPAL**" under my supervision for partial fulfillment of the requirements for the degree of Master of Arts in Economics. I forward it with recommendation for approval.

Date:

Mr. Dadhi Ram Adhikari
Lecturer
Central Department of Economics
Tribhuvan University
Kirtipur, Kathmandu
Nepal

Date: January 17, 2010

APPROVAL LETTER

We certify that this thesis entitled "SOCIOECONOMIC AND BEHAVIORAL ASSESSMENT OF FOOD SECURITY IN RUKUM DISTRICT OF NEPAL" submitted by Mr. RAJU SHARMA DHAKAL to the Central Department of Economics, Tribhuvan University, in partial fulfillment of the requirement for the Degree of MASTER OF ARTS in ECONOMICS has been found satisfactory in scope and quality. Therefore, we accept this thesis as a part of said degree.

Thesis Committee:

Prof. Rudra Prasad Upadhyaya, Ph.D.

Head

Mr. Mani Kumar Nepal

External Examiner

Mr. Dadhi Ram Adhikari

Thesis Supervisor

Date:

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TABLE OF CONTENT

| Title | Page |
|---------------------------------------------------------------------|-------------|
| ACKNOWLEDGEMENT | v |
| TABLE OF CONTENTS | vi |
| LIST OF TABLES | viii |
| LIST OF FIGURES | ix |
| LIST OF APPENDICES | x |
| ACRONYMS AND ABBREVIATIONS | xi |
| ABSTRACT | xiv |
| 1 INTRODUCTION | 1 |
| 1.1 Background Information | 1 |
| 1.2 Statement of the problem | 4 |
| 1.3 Research Rational | 5 |
| 1.4 Research Objectives | 6 |
| 1.5 Hypothesis | 7 |
| 1.6 Scope and limitations of the study | 7 |
| 2 LITERATURE REVIEW | 8 |
| 2.1 Concepts | 8 |
| 2.1.1 Food security | 8 |
| 2.1.2 Food insecurity | 11 |
| 2.1.3 Approaches to address food security | 13 |
| 2.2 Food security situation in Nepal | 15 |
| 2.3 Policies and programs to tackle food insecurity in Nepal | 23 |
| 2.4 Empirical Studies | 26 |
| 2.5 Conceptual Framework | 31 |
| 3 RESEARCH METHODOLOGY | 36 |
| 3.1 Sources of Data and Information | 36 |
| 3.1.1 Selection of study area | 36 |
| 3.1.2 Study Population, Sampling Size and Sampling Procedure | 37 |
| 3.2 Methods of Data Collection | 38 |
| 3.3 Survey design and primary data collection procedure | 38 |
| 3.3.1 Preliminary review and field visit | 38 |
| 3.3.2 Preparation of questionnaire and pre-testing of questionnaire | 39 |
| 3.3.3 Interview Schedule | 39 |
| 3.3.4 Focus group discussion | 40 |

| | | |
|-------|-------------------------------------------------|----|
| 3.4 | Operational definitions of terms | 41 |
| 3.4.1 | Dependent variable | 41 |
| 3.4.2 | Independent variables | 41 |
| 3.5 | Statistical measurement of variables | 44 |
| 3.5.1 | Dependent variable | 44 |
| 3.5.2 | Independent variables | 44 |
| 3.6 | Methods and techniques of data analysis | 45 |
| 3.6.1 | Analysis of food insecurity | 46 |
| 4 | DESCRIPTION OF STUDY AREA | 49 |
| 4.1 | Geographical setting | 49 |
| 4.2 | Natural resources and environments. | 49 |
| 4.3 | Economic and social settings | 50 |
| 4.4 | Infrastructure facilities | 51 |
| 5 | RESULT AND DISCUSSION | 52 |
| 5.1 | Brief introduction of the study area | 52 |
| 5.2 | Major agricultural hazards | 55 |
| 5.3 | Major Constrain of food security and livelihood | 55 |
| 5.4 | Household socioeconomic characteristics | 57 |
| 5.5 | Food security analysis | 60 |
| 5.5.1 | Food Insecurity Incidence (FII) | 60 |
| 5.5.2 | Food Insecurity Gap Index (FIGI) | 62 |
| 5.5.3 | Food Insecurity Severity Index (FISI) | 64 |
| 6 | CONCLUSION AND RECOMMENDATION | 66 |
| 6.1 | Summary | 66 |
| 6.2 | Conclusion | 67 |
| 6.3 | Recommendation | 69 |
| 7 | REFERENCES | 70 |
| | APPENDICES | 79 |
| | BIOGRAPHICAL SKETCH | 90 |

LIST OF TABLES

| | | |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Table 2.1 | Health indicator of food security of Nepal | 19 |
| Table 3.1 | Details of study population, sample size, and focus groups for the study | 38 |
| Table 3.2 | Selection of key informants for Focus Group Discussion (FGD) in Rukum | 41 |
| Table 4.1 | Crop production in Rukum district | 50 |
| Table 5.1 | Approximate distances from nearby market (Km), forest (Km), river (Km) and border (Days) and the transportation means of sampled VDCs at Rukum | 52 |
| Table 5.2 | Cropping intensity of Rukum District | 54 |
| Table 5.3 | Livestock holding in Rukum District | 54 |
| Table 5.4 | Major agricultural hazards/natural shocks in Rukum District | 55 |
| Table 5.5 | Descriptive analysis of the socioeconomic condition of the study area | 59 |
| Table 5.6 | FII with different socio-behavioural drivers of food security of Rukum | 61 |
| Table 5.7 | FIGI with different socio-behavioural drivers of food security of Rukum District | 63 |
| Table 5.8 | FISI with different socio-behavioural drivers of food security of Rukum District | 65 |

LIST OF FIGURES

| | | |
|-------------------|--------------------------------------------------------------------------------------------------------|----|
| Figure 1.1 | Map of Nepal showing geographical and administrative divisions | 3 |
| Figure 2.1 | Food grain production and requirement of Nepal (1987/88-2006/07*) | 17 |
| Figure 2.2 | Food Security Classification Map, Source: WFP, 2009 | 20 |
| Figure 2.3 | Map of Nepal showing sample district and development indicators for each district | 21 |
| Figure 2.4 | Food sufficiency status of districts 2008/09 | 22 |
| Figure 2.5 | Recent dynamism in the process of securing food in rural households | 33 |
| Figure 2.6 | Variables affecting the household food security | 34 |
| Figure 2.7 | Conceptual framework for the socio-behavioural assessment of household food security in Rukum district | 34 |
| Figure 3.1 | Map of Rukum District showing the sampled VDCs | 37 |
| Figure 5.1 | Roofing materials of houses in Rukum | 52 |
| Figure 5.2 | Cropping pattern of Rukum District | 53 |
| Figure 5.3 | Kitchengarden Holding in Rukum District | 54 |
| Figure 5.4 | Major Constrains of Food Security and Livelihood in Rukum District | 56 |
| Figure 5.5 | Food Insecurity Incidence of Rukum district | 60 |

LIST OF APPENDICES

| | | |
|--------------------|--------------------------------------------------------------------|----|
| Appendix 1 | Conversion factor to compute adult equivalents | 79 |
| Appendix 2 | Calorie content per 100 grams of edible portion of food | 79 |
| Appendix 3 | Livestock standard Units | 80 |
| Appendix 4 | Households using different Roofing materials in Rukum district | 80 |
| Appendix 5 | Major Cropping pattern of Rukum district | 80 |
| Appendix 6 | Staple foods in Rukum district | 80 |
| Appendix 7 | Kitchen garden holding practices in Rukum district | 80 |
| Appendix 8 | Major constrains of food security and livelihood in Rukum District | 81 |
| Appendix 9 | Reference indicators of Food security phase classification | 82 |
| Appendix 10 | Household Survey Questionnaire used for the study | 83 |

ACRONYMS AND ABBREVIATIONS

ADB/N: Agriculture Development Bank of Nepal
ADB: Asian Development Bank
AE: Adult Equivalent
AGDP: Agricultural Gross Domestic Product
AIC: Agriculture Input Corporation
amsl: Above Mean Sea Level
APP: Agriculture Perspective Plan
CBS: Central Bureau of Statistics
CGE: Computable General Equilibrium
CIMMYT Centro Internacional de Mejoramiento de Maiz Y Trigo
DANIDA: Danish International Development Agency
DDC: District Development Committee
DFID: United Kingdom's Department for International Development
DLGSP: Decentralized Local Government Support Programme
DLSO: District Livestock Service Office
FAO: Food and Agriculture Organization
FYM: Farm Yard Manure
GDP: Gross Domestic Product
GDP: Gross Domestic Production
GM: Group Member
GTZ: German Agency for Technical Cooperation
ha.: Hectare
HDI: Human Development Index
HH: Household
HHH: Household Head
HPI: Human Poverty Index
HPI: Human Poverty Index
IAAS: Institute of Agriculture and animal Science
IFPRI: International Food Policy Research Institute
ILO: International Labour Organization

INGO: International Non Governmental Organization
JT: Junior Technician
JTA: Junior Technical Assistant
KBS: Knowledge Based System
kcal: Kilocalories
Kg: Kilograms
Km: Kilometers
Km²: Square Kilometers
LI- BIRD: Local Initiatives for Biodiversity Research and Development
LSU: Livestock Standard Unit
m: Meters
MDG: Millennium Development Goal
MII: Macro International Incorporated
MOAC: Ministry of Agriculture and Cooperatives
MOF: Ministry of Finance
MOHP: Ministry of Health and Population
MPHBS: Multipurpose Household Baseline Survey
MRDEC: Minimum Requirement of Dietary Energy Consumption
NARC: Nepal Agriculture Research Council
NFC: Nepal Food Corporation
NGO: Non Governmental Organization
NLSS: Nepal Living Standard Survey
NPC: National Planning Commission
OVOP: One Village One Product
PA: Participatory Approach
RCC: Relative Concentration Coefficient
RCIW: Rural Community Infrastructure Work
SAAPE: South Asia Alliance for Poverty Eradication
SAP: Structural Adjustment Program
SEIDCP: Survey on Employment, Income Distribution, and Consumption Pattern
SPSS: Statistical Package for Social Science
SSMP: Sustainable Soil Management Program
STW: Shallow Tube Well

SWOT: Strength, Weakness, Opportunities and Challenges

T/D: Training and or Demonstration

t/ha: Ton per hectare

TU: Tribhuvan University

UNDP: United Nations Development Programme

UNICEF: United Nations Children's Fund

VDC: Village Development Committee

WB: The World Bank

WFP: World Food Program

WFS: World Food Summit

WHO: World Health Organization

WTO: World Trade Organization

EQUIVALENTS

Months

Nepali Calendar

Baisakh

Jestha

Ashad

Shrawan

Bhadra

Aswin

Kartik

Mangsir

Poush

Magh

Falgun

Chaitra

Gregorian Calendar

Mid April – Mid May

Mid May – Mid June

Mid June – Mid July

Mid July – Mid August

Mid August – Mid September

Mid September – Mid October

Mid October – Mid November

Mid November – Mid December

Mid December – Mid January

Mid January – Mid February

Mid February – Mid March

Mid March – Mid April

Area

1 Kattha = 20 Dhur

1 Bigha = 20 Kattha = 13.31 Ropani = 0.68 Hectares

1 Hectare = 30 Kattha = 19.66 Ropani

Weight

1 Ton = 10 Quintals = 1000 kg

ABSTRACT

The socioeconomic and behavioural drivers of food security in six Village Development Committees (VDCs) in Rukum District in Nepal is presented. Each VDC was divided into clusters based on ethnicity, food sufficiency, family income, land holding, livestock holding, crop production, and access to food and market. The clusters were selected randomly, and proportional households inside the sampled cluster were selected using Equal Probability of Selection Method (EPSEM).

The study sample comprises of 1000 households. The data were collected by interviewing a representative of each household using structured and semi structured questionnaire, and a phone survey was conducted with selected households based phone availability. Seven focus group discussions were held, and three institutions working in food security were consulted.

The different socio-economics and behavioral factors for food supply, demand and food security were analysed using three indices of food insecurity namely: (1) Food Insecurity Incidence (FII), (2) Food Insecurity Gap Incidence (FIGI), and (3) Food Security Severity Index (FISI). The findings reveals that the most significant drivers influencing food insecurity were land holding, source of family income and the educational level. The poorest and the landless female-headed households were the hardest hit.

Lack of basic infrastructures (road and irrigation) high prices of food products, marginality of productivity, lower and ever decreasing production of agricultural commodities were key factors for food insecurity incidence. Very traditional cropping pattern and lower intensity have decreased self reliance and resilience of the food security. The ethnicity, family size and social participation were found weakly associated with food insecurity

Food security being a multidimensional problem that is linked with different social, economical and behavioural factors, need to be addressed through an integrated approach. The findings of this study would provide a guide for addressing food security issues and planning at District, Local and Household levels.