

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
ABSTRACT (English)	v
ABSTRACT (Thai)	viii
LIST OF TABLES	xvii
LIST OF FIGURES	xix
ABBREVIATIONS AND SYMBOLS	xx
CHAPTER I INTRODUCTION	1
1.1 Background	1
1.2 Statement of the problem	2
1.3 Rationale	5
1.4 Objectives of the study	6
CHAPTER II LITERATURE REVIEW	7
2.1 Use of Livelihood approach in poverty assessment	7
2.2 Definition and dimensions of rural livelihood	12
2.3 Livelihood assets and its importance	13
2.3.1 Human capital	13
2.3.2 Social capital	14
2.3.3 Physical capital	14
2.3.4 Financial capital	15
2.4 Vulnerability context	15
2.4.1 Vulnerability concept	15

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

Copyright © by Chiang Mai University

All rights reserved

TABLE OF CONTENTS (CONT.)

	Page
2.4.2 Determinants of livelihood diversification	18
2.4.3 Natural hazards in Sri Lanka's context	18
2.5 Definition and dimension of food sufficiency	19
2.6 Concept of income security	20
2.6.1 Poverty line	20
a. Adjusting for household size and comparison	22
b. Reference poverty line	22
c. Income distribution	22
2.6.2 Inflation and its impact on the poor	23
2.7 Gender dimension of livelihood	24
CHAPTER III RESEARCH METHODS	25
3.1 Conceptual framework	25
3.2 Selection of study area	27
3.3 Sampling technique	27
3.4 Sample size determination	28
3.5 Data collection	28
3.5.1 Household survey	29
3.5.2 Key informant survey	29
3.6 Economic security assessment	29
3.6.1 Economic security situations	30
a. Gini index	31

TABLE OF CONTENTS (CONT.)

	Page
b. Income security line	32
c. Frequency analysis	32
d. Cluster analysis	33
e. Income diversity index	33
3.6.2 Economic security model	34
a. Regression models	34
b. Specification of the models	35
CHAPTER IV DESCRIPTION OF THE STUDY SITE	39
4. Study area and its resource base	38
4.1 location of study area	40
4.1.1 Boundary of the study area/sampling site	40
4.2 Climate of district	40
4.3 Resources	41
4.3.1 Land and land holding	41
4.3.2 Case/ethnicity	42
4.3.3 Demographic resources	42
a. Population	42
b. Age based distribution of population	43
c. Population based on gender	44
d. Cultural characteristics of the population	45
e. Educational condition of the population	45

TABLE OF CONTENTS (CONT.)

	Page
f. Employments and income of the population	46
4.3.4 Livestock resources	46
4.3.5 Water resources	47
4.3.6 Market	47
4.3.7 Institutions	47
4.3.8 Characteristics of agriculture	47
a. Identified problems in agriculture in this area	49
CHAPTER V Assessment of economic characteristics of studied sample	51
5.1 The livelihood pattern	51
5.1.1 Contribution of each major livelihood strategy to the studied sample	53
5.2 Resource profile: surveyed sample characteristics on selected asset components	54
5.2.1 Human assets	54
5.2.2 Physical assets	55
5.2.3 Natural assets	55
5.2.4 Financial assets	55
5.2.5 Social assets	56
a. Participation in social organization	57
b. Peoples vignettes on their kinship	57

TABLE OF CONTENTS (CONT.)

	Page
5.3 Vulnerability context of the studied sample	58
5.3.1 Observed vulnerabilities faced by the households under each category/sub categories of livelihood	59
a. Paddy farming	59
b. Livestock production	59
c. Fishing	59
d. Masonry and carpentry	60
5.3.2 People's different experiences/tactics related to their livelihood strategies	60
5.3.3 Commonly identified shocks faced by the people at household level	61
5.3.4 Peoples' vignettes on their own coping strategies	61
a. Expenditure related coping strategies	61
b. Searching for income generating strategies	62
c. Future plans and ideas	62
5.4 Other economic characteristics of Surveyed sample	64
5.4.1 Household categories based on the money value of job related Equipments	66
5.4.2 Household types	67
5.5 Mean value of selected variables by household types	68

TABLE OF CONTENTS (CONT.)

	Page
5.6 Characteristics of partially commercialized and subsistence household types	70
the type of primary occupation	70
5.7 Primary livelihood strategies by household types	71
5.8 Mean value of selected variables distributed among the type of primary occupation	72
5.9 Gender based distribution of livelihood strategies	74
5.9.1 Mean value of selected variables among gender	75
5.10 An overview on the vulnerability context of the studied sample	76
5.11 Summary of this chapter	78
Chapter VI Factors determining economic security	79
6.1 Descriptive statistics	80
6.2 Testing OLS regression assumptions	80
6.2.1 Normal distribution and data transformation to achieve normality	81
6.2.2 Multicollinearity	85
6.2.3 Heteroscedasticity	86
6.3 Dummy variables recoding for multiple regression analysis	87
6.4 Multiple regression model results	89
6.5 Binary logistic regression model	91
6.5.1 Food sufficiency binary logistic regression model results	93
6.5.2 Results of income sufficiency binary logistic regression model	95

TABLE OF CONTENTS (CONT.)

	Page
6.6 Summary of this chapter	99
CHAPTER VII: CONCLUSIONS AND RECOMMENDATIONS	100
7.1 Conclusions	100
7.2 Recommendations	103
7.3 Future possible researches	105
REFERENCES	106
APPENDICES	111
APPENDIX A	112
APPENDIX B	113
APPENDIX C	114
APPENDIX D	115
CURRICULUM VITAE	116

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
 Copyright© by Chiang Mai University
 All rights reserved

LIST OF TABLES

Table	Page
2.1 Trend in national official poverty line for Sri Lanka for the year of 2008	22
3.1 Sample size distribution by division	28
3.2 Details of independent variable related to dependent variable at household Level	37
4.1 Age based distribution of population among 12 Girama Niladari divisions of KDS	44
4.2 Sex distribution of population among selected 12 G.N divisions	45
5.1 Details on type of livelihood strategies	52
5.2 Average income and percentage of contribution in each strategy	53
5.3 Surveyed sample characteristics on selected asset components	58
5.4 Surveyed sample characteristics on selected indicators on the basis of economic security	65
5.5 Characteristics of household types resulted from two step cluster analysis	68
5.6 Mean value of selected variables distributed among the type of primary livelihood strategies	69
5.7 Household type based distribution of livelihood activities	71
5.8 Mean value of selected variables distributed among the type of primary livelihood strategies	73
5.9 Gender-based distribution of livelihood activities	74
5.10 Mean value of selected variables among gender	76
6.1 Household characteristics of sample used in the regression analysis	80

LIST OF TABLES (CONT.)

Table	Page
6.2 Coefficient of correlations among variables	86
6.3 Determinants of household income (economic security) in study population: OLS regression results (with constant)	90
6.4 Hosmer and Lemeshow Test	94
6.5 Determinants of household food sufficiency (economic security) in study population: binary logistic regression results	95
6.6 Hosmer and Lemeshow test of income sufficiency binary logistic regression model	97
6.7 Determinants of Household income sufficiency (economic security) in study population: Binary Logistic regression results	97

LIST OF FIGURES

Figure	Page
2.1 Sustainable livelihoods framework (Department for International Development, 1999)	11
3.1 A conceptual framework for household livelihood/welfare /economic security analysis	27
4.1 Age based distribution of population among 12 Girama Niladari divisions of KDS	50
5.1 Proportions in income contribution vs number of households adopted such strategy	54
5.2 Lorenz curve on income distribution for the studied sample	66
5.3 Household types based on money value of job related equipments in the sample	67
6.1 Sample households' income distribution before transforming data	82
6.2 Sample households' income (log of household income) distribution after transforming data	83
6.3 Normal distribution of regression standardized residual	84
6.4 Normal probability plot of standardized residual	85
6.5 Scatter plot showing random array of dots evenly dispersed around zero	87