

**SOCIO-ECONOMIC IMPACT OF ORANGE  
FARMING ON FARMERS**  
(A Case Study of Kushadevi VDC of Kavre District, Nepal)

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

By  
Sunita Pariyar  
Central Department of Rural Development  
T.U. Regd. No.: 9-2-615-47-2006  
Exam Roll No.: 282250  
September, 2015

## Letter of Recommendation

This is to certify that the thesis entitled "**Socio-Economic Impact of Orange Farming on Farmers: A case study of Kushadevi VDC of Kavre District, Nepal**" submitted by Ms. Sunita Pariyar for the partial fulfillment of Master Degree in Rural Development is based on the results carried out by her under my supervision. The thesis or a part there of has not been previously submitted for award of any other degree. Therefore, I recommend this thesis.

.....

(Supervisor)

Mr. Ramesh Naupane

Lecturer

Department of Rural Development

T.U

Date: 2015-09-18

(2072-06-01)



TRIBHUVAN UNIVERSITY  
त्रिभुवन विश्वविद्यालय  
CENTRAL DEPARTMENT OF RURAL DEVELOPMENT  
ग्रामीण विकास केन्द्रीय विभाग

विभागीय प्रमुखको कार्यालय  
कीर्तिपुर, काठमाडौं, नेपाल।  
Office of the Head of Department  
Kirtipur, Kathmandu, Nepal.

Ref. No. : .....

Date मिति .....

## Letter of Approval

The thesis presented by Ms. Sunita Pariyar entitled "**Socio-Economic Impact of Orange Farming on Farmers: A case study of Kushadevi VDC of Kavre District, Nepal**" has been accepted as a partial fulfillment of requirement for the completion of Master's degree in Rural Development.

### Evaluation Committee

.....  
Prof. Dr. Chandra Lal Shrestha  
Head of the Department

.....  
Mr. Prajwol Man Pradhan  
External Examiner

.....  
Mr. Ramesh Naupane  
Supervisor

Date: 2015-09-22

(2072-06-05)

## Declaration

I hereby declare that the thesis entitled "**Socio-Economic Impact of Orange Farming on Farmers: A case study of Kushadevi VDC of Kavre District, Nepal**" submitted to the Central Department of Rural Development, Tribhuvan University, is entirely my original work prepared under the guidance and supervision of my supervisor. I have made due acknowledgements to all ideas and information borrowed from different sources in the course of writing this 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.

.....

Sunita Pariyar

T.U. Reg. No: 9-2-615-47-2006

Date: 2015-09-15

(2072-05-29)

## Acknowledgements

First of all, my appreciation goes to the Department of Rural Development, T.U., Kirtipur for providing me an opportunity of thesis.

This thesis entitled "**Socio-Economic Impact of Orange Farming on Farmers: A case study of Kushadevi VDC of Kavre District, Nepal**" has been prepared for the partial fulfillment of the requirement for Master's Degree in Rural Development.

I would like to express my sincere gratitude to my supervisor Madhab Bhusal and Ramesh Naupane Lecturer, Department of Rural Development for his continuous guidance, enlightening ideas, invaluable suggestions and encouragement throughout the research.

I would like to thank all respondents and other people of **Kushadevi VDC of Kavre District, Nepal** for providing their valuable time during interview in focused group discussion and in informal discussions.

I would like to thank all my friends and relatives for encouraging me up to this day.

I owe a special thanks go to my parents and Naresh Pariyar and Ganesh Khanal for their kind co-operation during the research work.

September, 2015

Sunita Pariyar

## Abstract

This entitled "**socio-economic impact of orange farming on farmer**" a case study of **Kushadhevi VDC of Kavre District**, Nepal has been prepared to be submitted in the partial fulfillment of requirement of Master Degree of Arts in Rural Development. The study attempts to analyze the present status of orange farming in the study area. It also attempts to assess the orange farming practices in uplifting the socio-economic condition of farmers along with the problems and prospects of orange farming in the study area.

This research is conducted in ward no. 1, 2, 3, and 4 of Kushadhevi VDC kavre district. This research design of the descriptive based on both primary and secondary data. The Primary data have been collected from Kushadhevi VDC of Kavre district by applying simple random sampling method in year 2013. The secondary data have been used in the back ground of the study to know the production and marketing situation of district and national level. Altogether survey, observation and FDG were used for data collection for which their respective tools were developed.

Some cultural and attitudes towards social and economic activities has got changed. The products can be sold at the nearest marketing centers for more remunerative price resulting in faster economic growth and decreased wastage. With improved facilities for education, health care and other social needs in the VDC.

This study has been done to find out the production and marketing situation, price situation of orange, and to identify the problems faced by orange producers. The DADO Kavre is suggested to identify the diseases and treat them, to soil, to provide training to the farmers. The ADB is suggested to provide cheap loan facility. The government is suggested to ban the import of fruits from India, to control broker's activities, to manage fruits insurance facility through ADB to promote private public.

The development of scientific technique in the farmers is rather slow. Orange farming success to provide the proper environment for effective farmers. Though the study area is suitable for orange cultivation in all aspects, there are a number of problems that the farmers are facing. If such problem could be come out then more

and more benefits can be taken by farmers and finally it would become the weapon to upgrade the socio-economic life of the people of the study area.

## Table of Contents

	<b>Page No.</b>
<b>Declaration</b>	<b>i</b>
<b>Letter of Recommendation</b>	<b>ii</b>
<b>Approval Sheet</b>	<b>iii</b>
<b>Acknowledgments</b>	<b>iv</b>
<b>Abstract</b>	<b>v</b>
<b>Table of Contents</b>	<b>vii-ix</b>
<b>List of Tables</b>	<b>x</b>
<b>List of Figures</b>	<b>xii</b>
<b>Acronyms/Abbreviations</b>	<b>xiii</b>
<b>CHAPETER – ONE: INTRODUCTION</b>	<b>1-8</b>
1.1 Background	1
1.2 Statement of the Problem	4
1.3 Objective of the Study	5
1.4 Significance / Rationale of the Study	6
1.5 Limitation of the Study	7
1.6 Organization of the Study	7
<b>CHAPTER – TWO: REVIEW OF LITERATURE</b>	<b>9-17</b>
2.1 Citrus and Orange Cultivation	9
2.2 Review on previous studies	12
<b>CHAPTER – THREE: RESEARCH METHODOLOGY</b>	<b>18-20</b>
3.1 Research Design	18
3.2 Nature and Sources of Data	18
3.3 Selection of the Study Area	18
3.4 Population Sample and Sampling Procedure	19
3.5 Techniques and Tools of Data Collection	
3.5.1 Household survey	19
3.5.2 Observation	19
3.5.3 Focus Group Discussions	20
3.6 Method of Data Processing and Analysis	20



<b>CHAPTER – FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION</b>	<b>21-54</b>
4.1 Introduction of the Study Area	21
4.1.1 Geographical Setting	21
4.1.2 Climate	21
4.1.3 Population	22
4.1.4 Ethnic Composition	22
4.1.5 Religion and Language	23
4.1.6 Transportation and Communication	23
4.1.7 Electricity	24
4.1.8 Education	24
4.1.9 Land Use	25
4.2 Socio-economic status of household population	26
4.2.1 Sex structure	27
4.2.2 Occupational structure	27
4.2.3 Educational structure	28
4.2.4 Caste and Ethnic structure	29
4.2.5 Family structure	29
4.3 Status orange Farming	30
4.3.1 Land Holding Size	30
4.3.1 Land Under Orange Farming	31
4.3.2 Land Under Orange Farming on the Basis of Caste Ethnicity	32
4.3.3 Types of Land Used for Orange Farming	32
4.3.4 Intercropping	33
4.3.5 Major Crops Before Orange Farming	34
4.3.6 Starting Years of Orange Farming	35
4.3.7 Availability of Other Facility Related to Orange Farming	36
4.3.8 Transportation and Marketing of Orange	36
4.3.9 Technical Know How	37
4.3.10 Loan	38
4.3.11 Cold Storage Facility	38
4.3.12 Insecticides, Pesticides, and Chemical Fertilizers	39
4.3.13 Source of Orange Saplings in the Beginning and at Present	40
4.4 Role of orange farming in changing in Socio- Economic status	41

4.4.1	Changing Housing Condition	41
4.4.2	Change in Sanitary Condition	42
4.4.3	Change in food habits and Balance Diet	42
4.4.4	Condition of Breakfast Before and After Orange Farming	43
4.4.5	Health Condition	43
4.4.6	Place of Health Check Up	44
4.4.7	Change in literacy status	44
4.4.7.1	Literacy Condition Before and After Orange Farming	45
4.4.8	Change in Income and Expenditure	45
4.4.8.1	Expenditure Pattern in Different Items	46
4.4.9	Change in income structure	47
4.4.9.1	Income on the Basis of Caste/ Ethnicity	48
4.4.9.2	Area Production and Income Pattern of Last Five Years	49
4.4.9.3	Production of Food Grains and Annual Income Households	49
4.4.9.4	Saving Before and After Orange Farming	50
4.5	Problems of Orange Farming	50
4.5.1	Lack of Cold Storage	51
4.5.2	Lack of Technical Support	51
4.5.3	Lack of Organized Market	51
4.5.4	Lack of Processing Industries	52
4.5.5	Natural Calamities	52
4.5.6	Problem of Diseases and Pets	52
4.6	Prospects of Orange Farming	53
<b>CHAPTER – V: SUMMARY, CONCLUSION AND SUGGESTIONS</b>		<b>55-59</b>
5.1	Summary	55
5.2	Conclusion	57
5.3	Recommendations	58
<b>REFERENCES</b>		
<b>ANNEX I – Questionnaire for household survey</b>		
<b>ANNEX II – FDG guideline</b>		
<b>ANNEX III –Observation checklist</b>		
<b>ANNEX IV – Map of Study Area</b>		

## List of Tables

	<b>Page No.</b>
Table 4.1: Ward wise Distribution of Households Population 2067	22
Table 4.2: Population by Caste / Ethnic Group in Kushadhevi VDC from 2011 Census	23
Table 4.3: Status of Electricity, 2067/68	24
Table 4.4: Educational Institutes in Kavre District	25
Table 4.5: Agriculture Area of Based in Utility	25
Table 4.6: Types of Land in Kushadhevi VDC	26
Table 4.7: Composition of Population by Age	26
Table 4.8: Composition of Population by Sex	27
Table 4.9: Distribution of Population	27
Table 4.10: Distribution of Popula	28
Table 4.11: Composition of Population by Age	29
Table 4.12: Composition of Family by Age	30
Table 4.13: Land under Orange Farming	31
Table 4.14: Land under Orange Farming	32
Table 4.15: Types of Land Used for Orange Farming	33
Table 4.16: Intercropping	34
Table 4.17: Major Crops Before Orange Farming Intercropping	34
Table 4.18: Starting Year of Orange Farming	35
Table 4.19: Land under Orange Farming	36
Table 4.20: Transportation and Marketing of Orange	36
Table 4.21: Status of Support by Government and Non-Government Institutions	37
Table 4.22: Source of Loan	38
Table 4.23: Necessity of Cold Storage	39
Table 4.24: Insecticides, Pesticides and Chemical Fertilizers	39
Table 4.25: Source of Orange Saplings in the Beginning and at Present	40
Table 4.26: Sanitary Condition Before and After Orange Farming	42
Table 4.27: Condition of Breakfast Before and After Orange Farming	43
Table 4.28: Place of Health Check Up	44
Table 4.29: Literacy Condition Before and After Orange Farming	45
Table 4.30: Expenditure Patterns in Different Items after Orange Farming	46
Table 4.31: Expenditure Pattern in Different Items Before Orange Farming	47

Table 4.32: Annual Incomes from Orange Farming	47
Table 4.33: Income on the Basis of Caste/Ethnicity	48
Table 4.34: Area Production and Income Pattern of Last Five Years	49
Table 4.35: Saving Before and After Orange Farming	50
Table 4.36: Problem Associated to Orange Farming	50

## List of Figures

	<b>Page No.</b>
Figure 4.1: Land Holding Size	31
Figure 4.2: Housing Condition Before and After Orange Farming	41
Figure 4.3: Annual Income from Orange Farming	48

## ABBREVIATION/ ACRONYMS

ADB	:	Agriculture Development Bank
APROSC	:	Agriculture Project Service Center
AGDP	:	Agriculture Gross Domestic Product
CBS	:	Centre Bureau of Statistics
DNA	:	Data not Available
DDC	:	District Development Committee
DADO	:	District Agriculture Development Office
DFAM	:	Department of Food Agriculture and Market Service
FY	:	Fiscal year
FAO	:	Food and Agriculture organization
GDP	:	Gross Domestic Product
HHs	:	Households
INGOs	:	International Non- Government Organization
Jl/JTA	:	Junior Technician / Junior Technical Assistant
Km	:	Kilometer
Kg	:	Kilogram
M	:	Meter
NARC	:	National Agriculture Research Centre
Rs	:	Rupees
Sq. Km	:	Square Kilometer
UNDP	:	United Nation Development Program
VDC	:	Village Development Committee
WHO	:	World Health Organization