

**PRODUCTION AND PROFITABILITY OF COFFEE  
FARMING IN LEKHNATH,  
KASKI**

A Thesis submitted to

**Department of Economics,**

**Faculty of Humanities and Social Sciences**

In partial fulfillment of the requirement

For the Degree of Master of Arts in Economics

Tribhuvan University

Submitted by

**Arun Adhikari**

Roll No. 57/065

**Prithvi Narayan Multiple Campus**

Pokhara, Nepal

**March, 2015**

**TRIBHUVAN UNIVERSITY**  
**PRITHVI NARAYAN CAMPUS**

**Department of Economics**

**LETTER OF RECOMMENDATION**

This thesis entitled “An Analysis on Production and Profitability of Coffee Farming in Lekhnath, Kaski has been prepared by Arun Adhikari under my supervision in the partial fulfillment of the requirement for the Degree of Master of Arts in Economics. I forward it with recommendation for its approval.

.....

Dr. Lekha Nath Bhattarai

Professor

Department of Economics

Thesis Supervisor

Date: 22<sup>th</sup> March, 2015

**TRIBHUVAN UNIVERSITY**  
**PRITHVI NARAYAN CAMPUS**

**Department of Economics**

**(APPROVAL SHEET)**

This thesis entitled “AN ANALYSIS ON PRODUCTION AND PROFITABILITY OF COFFEE FARMING IN LEKHNATH, KASKI” submitted by Arun Adhikari has been accepted as a partial fulfillment of the requirements 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 the said Degree.

**Thesis committee**

.....  
Dr. Yadav Sharma Gaudel  
Professor & Head  
Department of Economics

.....  
Dr. Bikash K.C.  
Professor  
Department of Statistics  
External Examiner

.....  
Dr. Lekha Nath Bhattra  
Professor  
Department of Economics  
Research Supervisor

Date: 29<sup>th</sup> March, 2015

## ACKNOWLEDGEMENT

I would like to express my cordial gratitude to my respected advisor Dr. Lekha Nath Bhattarai, Associate Professor, Department of Economics, Prithvi Narayan Campus, Pokhara, for his continuous guidance, advice and encouragement since the proposal preparation to report finalization. His helpful attitude, constructive comments, untiring help, guidance and practical suggestions inspired me to accomplish this work successfully.

I also express my sincere gratitude to Prof. Dr. Yadav Sharma Gaudal, Head of the Department of Economics, Prithvi Narayan Campus for providing invaluable suggestions and comments. I also like to express my sincere thanks to the coffee growers of the study area for providing the data and information required for the study.

I am very thankful to my brother in law Mr. Bijaya Prasad Pokhrel, brother Binod Raj Poudel and friend Devi Raman Tiwari who encouraged and assisted me in many ways during the long hour of work. I would also like to express my thanks to Mr. Prakash Adhikari for the grammatical corrections and language in thesis and Mr. Rabindra Chhetri and Mr. Pradip Adhikari for supporting me in solving technical problems during the preparation of thesis.

Lastly, I am very grateful to my father Shalikram, mother Shanti, spouse Sharada, daughter Prapti, brother Amrit and family members who encouraged and assist me in many ways during the research work.

Arun Adhikari

Roll No. 57/065

Exam Roll No. 480172

T.U. Regd. No. 5-1-48-149-99

March, 2015

## **ABSTRACT**

The study attempts to analyze the production and profitability of coffee farming in Lekhnath Municipality, Kaski and use means and resources applied in the study area.

Lekhnath Municipality of Kaski district has been taken as the study area to study the production and analyze the profitability. There are 298 households which are directly involved in coffee production in the study area. These are divided into four different strata (very low, low, medium and high) on the basis of their production and sixty five households were selected as respondents randomly in the condition to represent the strata. This study was mainly based upon primary data which were collected through the direct personal interview taken by researcher himself. Collected raw data has been analyzed through scientific standard unit then process in Excel and SPSS program. This study has been organized into five chapters. The first chapter is an introduction to the study, which includes background, statement of the problem, objectives of the study, significance of the study, limitations of the study, justification of the study and organization of the study. The second chapter includes theoretical review, reviews of the related studies and research gap are presented. Third chapter is related to research methodology, fourth chapter is related to analysis and interpretation of data. Finally, conclusion and suggestions have been presented in chapter five.

The study showed that there is positive linear relationship between input and output. Coffee growers are seen more profitable from coffee farming but while observing from economic point of view economic efficiency is not attractive because decreasing rate of AVC is too less. It indicates the traditional theory of cost but the result is not seen economically significant. The cost function for linear model and quadratic model seem to be good while observing the regression values in this model. But the cubic model does not become fit for the collected data because the value of optimum level of output is very low even if they seem more profitable. From this it can be concluded that farmers have the profit but they have no any economic analysis.

The profit analysis of coffee farming concludes that the coffee growers have been seen profitable in the study area. The farmers who grow coffee in very low scale have only 11.97 percent average profit, low scale have average profit 45.22 percent, medium scale have 59.57 percent and the farmers that grow in large scale have 78.49 percent average profit. The farmers who grow coffee in large scale have been seen

more profitable than in small scale. Accordance with the regression result there is high and significant effect of labour and manure on coffee output. No people use the chemical fertilizers, insecticides and pesticides during coffee production were found which is more positive and best way to prevent people from health hazard.

This study suggests the farmers for motivating them to higher productivity of coffee for their more profit. The study has found that the growers are involving in traditional multi-farming activities and they have not given the priority in commercial coffee farming though it is profitable and easy economic activity. It is therefore suggested to all the concerned that coffee farming is reliable geographically and climatically suitable to Nepal, it can uplift the economic standard of people fast, so farmers should be provided with training and knowledge.

# TABLE OF CONTENTS

	<b>Page No.</b>
LETTER OF RECOMMENDATION	ii
APPROVAL SHEET	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
TABLE OF CONTENTS	vii
LIST OF TABLES	ix
LIST OF FIGURES	x
ABBREVIATIONS AND ACRONYMS	xi
<b>CHAPTER I: INTRODUCTION</b>	<b>1-7</b>
1.1 Background	1
1.2 Statement of the Problem	5
1.3 Objectives of the Study	6
1.4 Significance of the Study	6
1.5 Limitations of the Study	7
1.6 Organization of the Study	7
<b>CHAPTER II: REVIEW OF THE LITRATURE</b>	<b>8-20</b>
2.1 Theoretical Overview	8
2.2 Review of Related Studies	15
2.3 Research Gap	20
<b>CHAPTER III: RESEARCH METHODOLOGY</b>	<b>21-27</b>
3.1 Introduction	21
3.2 Rational for the Selection of the Study Area	21

3.3 Research Design	22
3.4 Nature of Sources of Data	23
3.5 Population and Sampling	23
3.6 Method of Data Collection	23
3.7 Specification of the Model	24
3.8 Method of Data Analysis	26

#### **CHAPTER IV: ANALYSIS AND INTERPRETATION OF DATA 28-46**

4.1 Introduction	28
4.2 Background Characteristics of Respondents	28
4.3 Coffee Farm Size and Production Trend	30
4.4 Analysis of Cost of Production	35
4.5 Revenue Analysis	39
4.6 Profit Analysis	40
4.7 Economic Analysis of Production Function	42
4.8 Major Findings	45
4.9 Prospects	46

#### **CHAPTER V: SUMMARY, CONCLUSION AND SUGGESTIONS 47-50**

5.1 Summary	47
5.2 Conclusion	48
5.3 Suggestions	49

#### **APPENDIX 51-62**

A. Interview Schedule	51
B. Area and Production of Coffee in Nepal	55
C. Production and Trade of Coffee in Nepal	56
D. Data Sheet	58
E. Regression Result	62

#### **BIBLIOGRAPHY**



## LIST OF TABLES

		<b>Page No.</b>
Table 4.1	Frequency Table of Respondents by Their Characteristics	29
Table 4.2	Annual Coffee Production by Caste and Ethnicity (in Kg)	31
Table 4.3	Annual Coffee Production by Landholding Size	32
Table 4.4	Annual Coffee Production by Income Level	33
Table 4.5	Utilization and Wastage of Coffee	35
Table 4.6	Descriptive Statistics of Different Items of Input per Year	36
Table 4.7	Statistical Result for Linear, Quadratic & Cubic Regression Analysis	37
Table 4.8	Descriptive Statistics of Revenue from Coffee Farming per Year	40
Table 4.9	Descriptive Statistics of Profit from Coffee Farming per Year	40
Table 4.10	Average Profit of Respondents with their Classes	41
Table 4.11	Descriptive Statistics	42
Table 4.12	Estimate Value of Regression Constant, Coefficient, t-ratio, R, R <sup>2</sup> and R <sup>-2</sup> for Model 1	43

## LIST OF FIGURES

		<b>Page No.</b>
Figure 1	Sketch Map of Study Area	22
Figure 2	Major Coffee Producing District of Nepal	55
Figure 3	Trend of Coffee Export from Nepal	57

## ABBREVIATIONS AND ACRONYMS

AC	Average Cost
ADB/N	Agriculture Development Bank, Nepal
ADO	Agriculture Development Office
AEC	Agro Enterprise Center
AFC	Average Fixed Cost
AR	Average Revenue
ATC	Average Total Cost
AVC	Average Variable Cost
CBS	Central Bureau of Statistics
CDC	Coffee Development Center
COPP	Coffee Promotion Program, HELVETAS
DADO	District Agriculture Development Office
DCPA	District Coffee Producers' Association
DFTQC	Department of Food Technology and Quality Control
DOA	Department of Agriculture
FNCCI	Federation on Nepalese Chamber of Commerce and Industry
Ha	Hectare
ICO	International Coffee Organization
LCC	Lekhnath Chamber of Commerce
MR	Marginal Revenue
MOA	Ministry of Agriculture
MOF	Ministry of Finance
NARC	Nepal Agriculture Research Center
NCC	National Coffee Company

NCP	National Coffee Policy
NCPA	Nepal Coffee Producer Association
NECCO	Nepal Coffee Company
NTCDB	National Tea and Coffee Development Board
PACT	Project for Agriculture Commercialization and Trade
TR	Total Revenue
VDC	Village Development Committee