



**UNIVERSITI PUTRA MALAYSIA**

**ADOPTION OF IMPROVED WHEAT FARMING PRACTICES AMONG  
THE FARMERS OF SURKHET DISTRICT, NEPAL**

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ADOPTION OF IMPROVED WHEAT FARMING PRACTICES  
AMONG THE FARMERS OF SURKHET DISTRICT, NEPAL

by

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A thesis submitted in partial fulfilment of the  
requirements for the degree of Master of Science  
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Dedicated to my father late Sri Tika Ram Aryal



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## TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENT .....	iii
TABLE OF CONTENTS .....	v
LIST OF TABLES .....	xi
LIST OF FIGURES .....	xiv
ABSTRACT (English) .....	xv
ABSTRACT (Bahasa Malaysia) .....	xviii
CHAPTER I INTRODUCTION .....	1
Background Information .....	1
Importance of Agriculture Sector in Nepal .....	1
Efforts in the Development of the Agriculture Sector .....	2
Productivity of Agricultural Sector .....	2
Reasons for Low Productivity of Agricultural Crops .....	4
Statement of the Problem .....	5
Objectives of the Study .....	6
Significance of the Study .....	7
Limitations of the Study .....	8
Definition of Terms .....	9
Organization of Thesis .....	10



	Page
CHAPTER II REVIEW OF LITERATURE .....	11
Agriculture Development Organizations .....	11
Agricultural Research System .....	12
Agricultural Extension System .....	13
Linkage Between Research and Extension System .....	15
Agriculture Input Corporation, Agriculture Development Bank, Cooperatives and Small Farmers Development Program .....	17
Adoption Process and Factors Related to Adoption of farm Practices .....	18
Adoption Process .....	18
Factors Related to Adoption of Farm Practices .....	22
Characteristics of the Farmer .....	22
Characteristics of Innovation .....	26
Other Factors .....	28
Studies on Adoption of Farm Practices .....	33
Personal Characteristics Variables .....	33
Social Factor .....	39
Economic Factors .....	39
Communication Characteristics .....	40
Other Factors .....	42
Conceptual Framework of the Study .....	43
CHAPTER III RESEARCH METHODOLOGY .....	46
Location of the Study .....	46
Sampling Procedure .....	47



	page
Development of the Interview Schedule .....	50
Pre-testing of the Interview Schedule .....	51
Operationalization of the Dependent Variable .....	52
Operationalization of the Independent Variables .....	53
Data Collection .....	57
Statistical Analysis .....	58
 CHAPTER IV FINDINGS AND DISCUSSIONS .....	 59
Profile of the Respondents .....	59
Personal Characteristics .....	59
Age .....	59
Caste .....	60
Education .....	61
Family Size .....	62
Attitude Toward Agricultural Extension Service...	62
Attitude Toward Improved Agricultural Technology.	66
Social Factor .....	68
Organizational Membership .....	68
Economic Factor .....	69
Farm Size .....	69
Communication Behaviour .....	70
Opinion Leadership .....	70
Cosmopolitaness .....	70
Extension Contact .....	71





	Page
Adoption of Recommended Wheat Farming Practices .....	75
Improved Variety .....	75
Sowing Time .....	77
Weed Control Measure .....	77
Seed Rate .....	78
Disease Control Measure .....	78
Fertilizer Application Timing .....	79
Ploughing .....	79
Insect Control Measure .....	79
Seed Treatment .....	80
Phosphatic Fertilizer .....	80
Nitrogenous Fertilizer .....	80
Sowing Method .....	81
Green Manuring .....	81
Reasons for Not Adopting Recommended Wheat Farming practices .....	84
Improved Variety .....	84
Sowing Time .....	85
Weed Control Measure .....	86
Seed Rate .....	87
Disease Control Measure .....	89
Fertilizer Application Time .....	89
Ploughings .....	90
Insect Control Measure .....	91
Seed Treatment .....	92



	Page
Fertilizer Application .....	93
Sowing Method .....	94
Green Manuring .....	95
Relationship Between Adoption and Selected Characteristics of the Farmers .....	98
Personal Characteristics .....	98
Age and Adoption .....	98
Level of Education and Adoption .....	99
Family Size and Adoption .....	99
Attitude Toward Agricultural Extension Service and adoption .....	100
Attitude Toward Improved Agricultural Technology and Adoption .....	100
Caste and Adoption .....	100
Social Participation .....	101
Organizational Membership and Adoption .....	101
Economic Factor .....	101
Farm Size and Adoption .....	101
Communication Characteristics .....	102
Opinion Leadership and Adoption .....	102
Cosmopolitaness and Adoption .....	102
Attendance at Demonstrations and Adoption .....	102
Individual Contact with Extension Workers and Adoption .....	103
Summary and Discussion .....	104



	Page
CHAPTER V SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .....	107
Summary .....	107
The Problem .....	107
Objectives of the Study .....	108
Methodology .....	108
Findings .....	109
General Characteristics of the Respondents .....	109
Level of Adoption and the Reasons for Not Adopting the Recommended Wheat Farming Practices.	112
Relationship Between Adoption and Selected Characteristics of the Farmers .....	117
Conclusions .....	118
Recommendations .....	120
Suggestions for Future Research .....	123
BIBLIOGRAPHY .....	124
Appendix A Interview Schedule .....	129
Appendix B Adoption Criteria of Recommended Wheat Farming Practices .....	142
Appendix C Surkhet .....	143
Appendix D Area, Production and Average Yield of Wheat from 1967/68 to 1984/85 .....	148
Appendix E Area, Production and Average Yield of Paddy from 1967/68 to 1984/85 .....	149
Appendix F Area, Production and Average Yield of maize from 1967/68 to 1984/85 .....	150
Appendix G Different Research and Extension Units in Department of Agriculture .....	151



## LIST OF TABLES

Table		Page
1	Average Yield of Rice, Wheat and Maize During Different Plan Periods .....	3
2	Distribution of Respondents by Panchayat (Ward) ..	49
3	Distribution of Respondents by Age .....	60
4	Distribution of Respondents by Caste .....	61
5	Distribution of Respondents by Years of Schooling.	61
6	Distribution of Respondents by Family Size .....	62
7	Distribution of Respondents by Attitude Toward Statements Related to the Agricultural Extension Service .....	63
8	Distribution of Respondents by Score on Attitude Toward the Agricultural Extension Service .....	65
9	Distribution of Respondents by Attitude Toward Statements Related to the Improved Agricultural Technology .....	66
10	Distribution of Respondents by Score on Attitude Toward the Improved Agricultural Technology .....	67
11	Distribution of Respondents by Organizational Membership .....	68
12	Distribution of Respondents by Farm Size .....	69
13	Distribution of Respondents by Number of Advices Offered to Others on Farming Matters .....	70
14	Distribution of Respondents by Frequency of Visits to Important Towns/Cities .....	71
15	Distribution of Respondents by Types of Extension Contact .....	72
16	Distribution of Respondents by Attendance at Demonstrations and Individual Contact with the Extension Workers .....	74



	Page
17	Distribution of Respondents by Adoption of Recommended Wheat Farming Practices ..... 76
18	Distribution of Respondents by Types of Wheat Variety Grown ..... 77
19	Distribution of Respondents by Amount of Seed Used 78
20	Distribution of Respondents by Number of Ploughings for Field Preparation ..... 79
21	Distribution of Respondents by Types of Fertilizer Adopted ..... 81
22	Distribution of Respondents by Adoption Score .... 83
23	Reasons for Not Adopting Improved Variety as Expressed by the Respondents ..... 84
24	Reasons for Not Adopting Sowing Time as Expressed by the Respondents ..... 85
25	Reasons for Not Adopting Weed Control Measure as Expressed by the Respondents ..... 86
26	Reasons for Not Adopting Seed Rate as Expressed by the Respondents ..... 88
27	Reasons for Not Adopting Disease Control Measure as expressed by the Respondents ..... 89
28	Reasons for Not Adopting Ploughings as Expressed by the Respondents ..... 90
29	Reasons for Not Adopting Insect Control Measure as Expressed by the Respondents ..... 91
30	Reasons for Not Adopting Seed Treatment as Expressed by the Respondents ..... 92
31	Reasons for Not Adopting Fertilizers as Expressed by the Respondents ..... 93
32	Reasons for Not Adopting Sowing Method as Expressed by the Respondents ..... 95
33	Reasons for Not Adopting Green Manuring as Expressed by the Respondents ..... 96



	Page
34 Correlation Between Adoption and Personal Characteristics of the Respondents .....	99
35 A Comparison of High and Low Adopters as to Their Caste Structure .....	101
36 Correlation Between Adoption and Farm Size, Social Participation and Communication Characteristics of the Respondents .....	103



## LIST OF FIGURES

Figure		Page
1	Conceptual Framework of farmers' Adoption Behaviour Regarding the Improved Wheat Farming Practices .....	45
2	Map of Surkhet District Showing the Location of Sampled Panchayats .....	48



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May 1987

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The main purpose of the study was to determine the adoption of improved wheat farming practices among the farmers of Surkhet district, Nepal. The study also attempted to identify the farmers' reasons for not adopting these practices as well as to determine the relationship between adoption and their selected personal characteristics.

The respondents of the study consisted of 120 farmers which were randomly selected from nine wards of the district. The data were collected by means of personal interview.





The findings of the study showed that adoption of the improved wheat farming practices was low. Less expensive and simpler practices such as improved varieties, sowing time and weeding were adopted widely. Only less than one half of the farmers had adopted recommended seed rate, disease control measures, fertilizer application timing, ploughing, insecticides and seed treatment. Almost all did not adopt fertilizers and sowing method. None of the farmers had ever adopted green manuring.

Lack of knowledge was found to be the main reason for non-adoption of seed treatment, seed rate, chemical fertilizers and fertilizer application timing, insecticides, disease control measures and green manuring. It also markedly influenced the adoption of ploughings, sowing method and weedicide use. Lack of irrigation facility, late maturing paddy, impracticability and high cost of the practice were the main reasons for not adopting ploughings and improved varieties, sowing time, manual weeding and sowing method respectively. Neighbourhood effect, unavailability of input, lack of money and non-profitability in adopting the practice were some other important reasons for non-adoption of few practices.

The study indicated that farmer's adoption behaviour was significantly associated with his caste, years of schooling, farm size, opinion leadership and attitude toward agricultural extension service.



The findings of the study suggest a need to organize the extension efforts systematically in order to enhance the adoption of the improved wheat farming practices. Availability of short duration paddy variety, proper supply of vitavax-200, supply of insecticides at reasonable price as well as availability of credit to the farmers could bring more satisfactory result in this direction.



Abstrak tesis yang dikemukakan kepada Senat Universiti Pertanian Malaysia sebagai memenuhi sebahagian daripada keperluan untuk ijazah Master Sains.

PENERIMAANGUNA AMALAN-AMALAN BARU PENANAMAN GANDUM DI KALANGAN  
PETANI-PETANI DI DAERAH SURKHET, NEPAL.

Oleh

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Tujuan utama kajian ini adalah untuk menentukan penerimaanguna amalan-amalan baru penanaman gandum di kalangan petani-petani di daerah Surkhet, Nepal. Kajian ini juga cuba mengenalpasti sebab-sebab mengapa petani-petani tidak menerima guna amalan tersebut dan untuk menentukan kaitan di antara penerimaanguna dan beberapa ciri peribadi petani.

Responden yang terlibat dalam kajian ini terdiri daripada 120 orang petani yang telah dipilih secara rawak dari sembilan buah kawasan (ward) dalam daerah Surkhet. Data-data dikumpulkan dengan menemuramah individu-individu secara peribadi.



Hasil kajian ini menunjukkan, penerimaanguna amalan-amalan penanaman gandum baru dikalangan petani adalah rendah. Amalan-amalan yang murah dan mudah seperti penggunaan variati-variati yang lebih baik, jangkamasa menabur benih dan merumpai diamalkan secara meluas. Kajian juga menunjukkan kurang daripada setengah petani-petani mengamalkan kadar benih seperti yang disyorkan, cara pengawalan penyakit, jangkamasa pembajaan, pembajakan, penggunaan racun serangga dan rawatan benih. Hampir kesemua petani tidak menggunakan baja dan cara menabur benih seperti yang disyorkan. Setakat ini, tidak ada seorang pun petani yang cuba mengamalkan penggunaan baja hijau.

Sebab utama petani tidak menerimaguna rawatan benih, kadar benih, pembajaan kimia dan jangkamasa pembajaan, racun serangga, cara pengawalan penyakit dan baja hijau adalah kerana kurangnya pengetahuan tentang amalan tersebut. Kekurangan ini juga telah mempengaruhi pengamalan pembajakan, cara menabur benih dan penggunaan racun rumput. Kekurangan kemudahan sistem pengairan, tempoh kematangan padi yang lewat, amalan yang kurang praktikal serta kos penggunaan yang tinggi merupakan sebab-sebab utama petani tidak menerimaguna amalan pembajakan, penggunaan baka yang lebih baik, jangkamasa menabur benih, merumpai secara manual dan cara menabur benih yang betul. Kesan kejiranan, ketiadaan input, kekurangan wang dan ketiadaan keuntungan dalam mengamalkan cara penanaman tersebut juga merupakan sebab-sebab lain yang mempengaruhi petani supaya tidak menggunakan beberapa amalan



tersebut.

Kajian ini menunjukkan bahawa tingkahlaku petani mempunyai kaitan yang rapat dengan kastanya, taraf persekolahan, saiz tanah, pendapat pemimpin, dan sikapnya terhadap perkhidmatan pembangunan pertanian.

Penemuan kajian ini menunjukkan perlunya usaha untuk meninggikan kerja-kerja pembangunan yang lebih sistematik supaya dapat meningkatkan taraf penerimaanguna amalan-amalan dikalangan petani untuk menghasilkan penanaman gandum yang lebih baik. Keputusan yang lebih memuaskan akan dapat dicapai dengan adanya baka padi jangkamasa yang pendek, pembekalan vitarax-200 dan racun serangga pada harga yang berpatutan dan kemudahan kredit untuk petani-petani.

## CHAPTER I

### INTRODUCTION

#### Background Information

##### Importance of Agriculture Sector in Nepal

Nepal is a small country situated between China and India. It has a total area of about 15 million hectares divided into five development regions. Ecologically, the country can be divided into three main regions, namely The Plain Tarai, The Hills and The Mountains. The total population of the country is about 15.1 million (1981 census). Nepal is predominantly an agricultural country. About 93 percent of the total population is dependent on agriculture. The agriculture sector accounts for 80 percent of the country's export earnings and about 60 percent of the total Gross Domestic Product (Khadka and Gautam, 1981:29). The development of the country, therefore, depends largely on the development of its agricultural sector. Specifically, it is dependent on the performance of the cereal crops as they alone occupy about 85 percent of the total cultivated area. The major cereal crops include paddy, wheat and maize. Non-food crops such as tobacco, oilseeds and jute are cultivated in a small scale.

