



UNIVERSITI PUTRA MALAYSIA

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

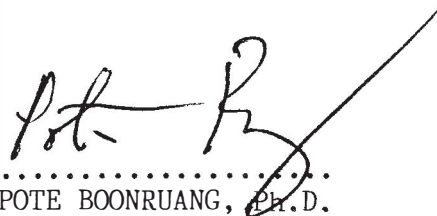
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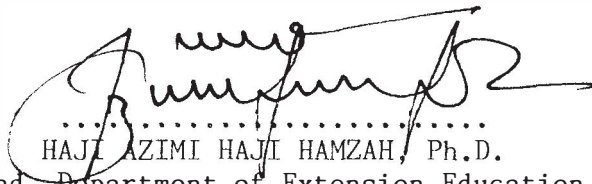
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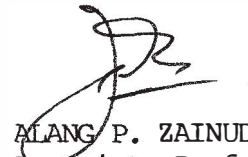


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ADOPTION OF IMPROVED WHEAT FARMING PRACTICES
AMONG THE FARMERS OF SURKHET DISTRICT, NEPAL

by

Bishnu Prasad Aryal

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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An abstract of the thesis presented to the senate of Universiti Pertanian Malaysia in partial fulfilment of the requirements for the degree of master of science.

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

By

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May 1987

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Co-supervisor : Dr. Napsiah Mahfoz
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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

Bishnu Prasad Aryal

Mei 1987

Penyelia-penyelia: Dr. Haji Azimi Haji Hamzah

: Dr. Napsiah Mahfoz

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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 variasi-variasi 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.

