

CHAPTER - 1

INTRODUCTION

1.1 Background

1.1.1 Geographical Background of Nepal

Nepal is a landlocked country. It lies between China in the north and India in the east, west and south. The geographic location of Nepal lies between 80⁰ to 81⁰ 15' east longitude and 28⁰ 22' to 29⁰ north latitude. It has a total land area of 147181 sq.km, which is 0.03% of total world area. North to south width of the country is not uniform, however the mean width of which is 193 km, and east to west length of the country is 885 km Nepal is divided into three geographical regions. They are a) the mountain region. the hill region and the terai region. Each of the geographical region is different from one another in terms of landform, climate and soil. The mountains cover 15% of geographical area and includes. 16 district. The worlds highest peak the Mount Everest which is 8848 meter lie in this region. Because of the cold climate and snow cover this belt is not very suitable for the agriculture. The middle belt the hills cover 68% of the total are include 39 districts. It is occupied by steep hills and valleys. The climate is moderate with sandy-stony soil. The Terai land is fertile and "Food Bhandar" of the country. It covers 17% of total geographical area and consists 20 districts.

Role of Agriculture in economic development of Nepal

Nepal is an agricultural country. It's economy is predominantly agricultural. More than 80% of the people are engaged in agriculture. About 40% of the annual income of the country is derived from agriculture. It's grass domestic product (GDP) is about 40. 1% . The most part of industrial sector is based on agriculture. Due to the industrialization obstacle the average per

capital income is US \$ 242 only. In spite of huge investment in this sector, the growth rate in agriculture productivity has been unenviable.

Due to the open border with India, it is difficult to inquire complete information on agriculture trade Nepal has yet to take advantage of improved technology developed in agriculture.

In the process of economic development agricultural development is the pre-condition to provide Capital for expansion of other sectors. It provides the food requirements to meet the increase in domestic demand. An increase in the net output of agriculture represents a rise in the product of the country. Expansion of agriculture products may be one of the promising means of improving the living standard of 80% population, who engaged in agriculture. Agriculture, as the dominant sector of an under developed economy, provides raw materials and capital to develop agro-based and agro-services industries in the country. Increased agricultural production is crucial to earn additional foreign exchange by exporting surplus agricultural products. In fact, in the process of economic development of a country like Nepal, any increase in the agricultural productivity helps to step up the investment and employment in non- agricultural sector, Increase in net income of each people tends to rise in the demand for manufactured good and extend the size of the market. Thus economic development of Nepal heavily depends on improving the performance of the agricultural sector. Realizing the role of agriculture in economic development plans have placed higher priority upon agricultural program.

1.1.2 Introduction to Kailali District

Kailali is Terai district of seti one of far west region. It is known as gateway of this region. 79.8% of the people are depended on agriculture. This district cover near about 3235 sq. km. This district is bordered with India in south, Kanchanpur in west, Doti in north and Karnali in east. According to geographical condition, this district consists 40% area lies in chure and 60% land area in Terai area. The total maximum temperature reaches up to 45⁰c in may to June, but average is 30.5⁰c more and 17.5⁰c min. The annual rainfall 1840mm. It contents tropical , sub- tropical and temperate type of climate and it is situated and the attitude of 109 mtrs to 1957 mtrs.

According to 2058 , total population of Kailali is 620035 between this 3,12,524 male and 3,07,511 female. The growth rate of population is 3.93%. The population density is 190.63 people per sq. km. There 90,538 household and income per people is Rs 6824. Literacy rate is 52.06% (male 63.21% and female 40.41%)

Kailali is divided into 42 VDCs and two municipality. Dhangadhi and Tikapur are the municipality. Dhangadhi is headquarter of Kailali. Geta, Gadariya, Malakheti, Shreepur, Beladevipur, Chaumala, Urma, Pahalwanpur, Baliya, Bahuniya, Dhansingpur, Chuha, Dododhara, Pathariya, Phulbari, Hasuliya, Pabera, Ramsikharjhala, Narayanpur, Masuriya, Bhajani, Joshipur, Pratappur, Sandepani, Darak, Munwa, Durgouli, Basauti, Ratanpur, Khailad, lalbojhi, Thapapur, Janakinagar, Udasipur, Kotalusipur VDCs are lies in terai and remaining 7 VDCs, Nigali, Sahajpur, Godawari, Mohanyal , Pandaun, Khairala and Sungurkhal are hilly VDCs.

Kailali is food production area , paddy, wheat maize, oilseeds are main crops of this district. The main production area of this district is "Malwara

sector, that is Bhajani, pratappur, Ratanpur, Basauti, Joshipur, Thapapur etc. Beside of hills region, other Terai belt is also plays important role in production.

Karnali bridge, Tikapur park, Ghoda-Ghodi lake etc are the visitable place of this district. The north area of this district is hilly area, which is known as chure range.

The landing situation of kailali is as follow :

Total area of kailali district is app. about 323500 he, in which forest covered 209724 he, pasture 6268 he, agricultural land 90550he and other 16958 he approximately. Total area of cultivated land is about 90,000 he in which khet is 68976 he, Pakho 21024 he irrigated land is 39780 he and partial irrigated land is 29196 he app.

Main crops in kailali district are paddy (60600 he) and others (450 he)

Market area of Kailali District :

The main market of kailali district is "Dhangadhi". Most of the goods and product are supplied to hilly place (Doti, Dadeldhura) another part of Nepal and India from Dhangadhi. Attariya and Tikapur are also important market point. In this district there are many local market like lalpur, Bhajani, Lamki, Bauniya, Phulbari, Hasuliya , sukhhad etc. Besides them, there are 402rice, flour and oil industries which also purchase and sell the food and oil crops after refining and packaging with good quality and brand name.

1.2 Introduction of wheat

The first wheat is found in Jarmo of Iraq and Mohenjodaro of India. 5000-6000 years ago wheat was cultivated. Then, after the farming of wheat is enhanced all over the world.

Wheat was the forestry Einkorn , which was developed as cultivate Einkorn. The first parents of wheat is Diploid wheat. Wheat is belong to

Triticum genus and Gramin family. According to ratio of chromosomes, wheat is classified into three patterns:

- a) Diploid b) Tetraploid c) Hexaploid

In the world, 40% area is covered by wheat than another any crops. It is cultivated in maximum area than another any crops. The business part of this crops hold major role than any another crops in the world. More than 20% calorie provide than another crops. It can cultivate 30 to 60 north and 27 to 40 south latitude, above 5000 mtr. height from sea, and 30 to 113cm rainfall areas.

Wheat had been cultivating from several years ago in middle west and far west part of Nepal. In the other part of Nepal wheat had been cultivating after 2020Bs. The productivity of wheat in Nepal is nearly 1.3 tons per hector. But in France, Britain and Germany is 6.5, 7.7, 6.3 tons per hector. It is necessary to increase the productivity of wheat. [In Nepal different casts of wheat are certified for farming]. The productivity of wheat in Nepal is nearly 1.3tons per hector. But in Britain, France, Germany 6.2, 7.7, 6.5 tons per hector. It is necessary to increase the productivity of wheat. In Nepal different cast of wheat are certified for farming. They are as NL 297, Tribeni ,NL 297 mul , Bhashkar , Sidhartha , Binayak , Lumbini , LL 30 , Annapurna , S. 331 , W.K. 1204 mul , Larma 52 , WK 1204 , Larma rojo 64 , RR 21 , Pitak 62 , Achyut , Up 262.

Wheat is used for manufacturing and producing bread, noodles, Tanduri, roles etc for business purpose. It is the main raw material of agro based industries and fast food items.

The climate is amazingly different in accordance with the geographical structure in Nepal. The unequal temperature and topography has naturally affected the agricultural product of Nepal. But in Terai region and some hilly region we can find favorable climate condition for wheat product.

In the year 1991/92 Nepal had 599464.08 hector land under Irrigation, which comes to be roughly 25.05% out of total agricultural land (2392900

hector) of the country. In the 1994 irrigation facilities were expended to additional 49015 hectars including 42144 hectars through government projects and 6871 sector under the Agriculture Development Bank (ADB) financial schemes.

Kailali a Terai district in far western Development region is well known district for wheat production in Nepal. The suitable climate irrigation facilities and the fertile land in this region have made kailali the one of the major wheat production area.

The wheat farming has a lot of scope, mainly in Dhangadhi municipality and the area around it. Farming in these parts of kailali have been highly allured by wheat farming since the wheat farming is easy and get more advantageous.

Agricultural Development Bank plays major role by providing financial support in wheat cultivation and its marketing. The wheat cultivations say that one can take a lot of profit from each hector of land per year. The financial and technical supports from the local financial organization, nature output of irrigation , fertility and accessible markets have been additional for wheat farming.

1.3 Role and Effect of Elimination of Kamayya Pratha in Kailali **[effect to production of wheat]**

Kamayyas are those person family, who work hard whole of the year for their merchant and get little benefit for serve their own family. They are living and working for the welfare of their merchant. They haven't own land and house. Whole of the year, they had to work in farm of landlord and they got little sum of crops from landlord, which was unable to eat whole of year, whole of the family had to work in farm but their needs and wants were not fulfilled. They had to work as labour in part time (besides of farming time) to fulfill their needs and wants.

The government eliminated this system since 2058-8-01 BS. After eliminating kamayya system, it effects the whole farming landloards are very serious, how to cultivate the land , how can labour available, who work their land etc. The large types of landlord left their land as uncultivated. Elimination of kamayyas the production of all crop reduced , which effects directly the market of granary. In another hand, the government eliminates kamayya system without providing them land, employment and shelter. Due to the above reason, they have to facing the huge problems of food, shelter and employment.

According to mukt kamayya samaj kailali the current data of kamayya in kailali is as below:

Table No 1.1
Data of kamayya in kailali

SN	Particular	Numbers
1	Total family	12023
2	Land received family	2941
3	Land not received family, but red book of land received	1347
4	Flood injured family	568
5	River side (injured by river & settled in stone & sand falily)	143
6	Family occurred social place	20
7	Total numbers of kamayya	84168
8	Male	13881
9	Female	14174
10	boys	28349
11	girls	27762
12	Identity card not received kamayya's	2561

Source: Mukta Kamayya Samaj Kailali

1.4 Importance of the study

Nepal is an agricultural country. Agriculture is one of the essential part of Nepalese people. Nearly 42% people belong to the below poverty line. Increase agriculture production and its marketing system may be one of the promising means of improving the living standard of rural people. But in our country the yield rate of agricultural products have been much lower than advanced countries , although Nepal is an agricultural country. This is true in the case of wheat also.

Wheat is the important cereal crops in Nepal. It is the staple food the Nepalese people. Among cereal crops wheat occupies third position by area and production. It is importance in the terai area is very high as a staple food and in the urban area it is mostly consumed in the form of sweets and bakeries. The increased consumption of wheat and wheat production are caused by changed in consumption habit of people. Chappati, Bara, Paratha, Roti, Puri are the traditional formofeating wheat and loaf, bakeries, noodles etc are modern form of consumption wheat.

The importance of wheat production and its marketing in kailali is stressed by the growing needs of rapidly increasing population. Rapidly increasing population of Nepal demand for increasing food supply. It is necessary to balance between population growth and production and marketing of food grains. Increased production and suitable marketing of wheat can fulfill the increased demand for food in the country.

After the establishment of some major floor mills and Gall Byapari in the middle period of 1960 AD , industrial requirement of wheat increased and farmers were interested to produce wheat. Farmers were not getting high profit margin from wheat production due to its low productivity. In 1970, Nepal imported improved variety of wheat seeds from India which increased the productivity capacity of to some extent and from that period wheat cultivation has been more popular. When the "Grow more wheat campaign" was lunched in

1965/66, there were only 118000 hectares of land was used for the cultivation of wheat. HMG Nepal felt that production of wheat should be increased by any means in order to self sufficient in food grains. Many efforts have been done to increase wheat production. Because of HMG of Nepal's efforts has been a substantial changes in production and people engaged in wheat production and its marketing. As mentioned above in 1965/66 AD, the total cropland of wheat was 118 thousand hectares where as in 1970/1980 it is nearly reached at 367 thousand hectares and in the same period wheat production increased from 147 thousand mts to 440 thousand mts. In kailali district production of wheat is decreasing in year 2063 to 2065. It's main reason is due to landslide and flood in far western region in each year. Wheat production is increasing in modern trend but after few years its production is decreased only due to natural disaster. The productivity of wheat has been increasing in year 2054 to 2062. In 2054/55 wheat was cultivated in 19000 hectares and production was 42900 mts. In 2055/56, 40460 mts produced in 17000 hectares. In 2059/60, 51600 mts produced in 35000 hectares productivity of wheat is 2.20, 2.4 and 2.45 mts/hectares. Those statistical data shows the growing popularity and importance of wheat.

There is a need to increase wheat production and to expand the marketing to support industries based on wheat such as flour, mills, biscuits, bakeries and so on. Many noodle industries are established in Nepal. Some noodles are made in home and some are made in big industries. Nowadays noodles are very popular and consumption in huge amount in city and village also. Due to wheat is the raw materials of those noodles, it is the importance to study of wheat and its marketing. A farmer is really benefited when he gets price for his work. Only increased production may not do good for him. They have to get fair price of their product. It is the main problem that suffering the farmers.

The marketing system of food grain is not well developed and the producers of wheat have not been able to get proper market. That is why wheat

production is particularly depends upon the interest and mentality of the farmers. Wheat is not only suffered the problems of internal markets but also external markets for its exports potential. So must of the increased production should consume with in the country. In such circumstances, some co-ordinated approach by private as well as institutional agencies have to made to develop the channels of wheat marketing. Efforts are needed to explore the domestic and well as international market for wheat.

1.5 Statement of problem

Agriculture is one of the essential part of Nepalese economy. For the development of national economy agricultural production must be raised. But in Nepal existing agriculture sector is suffered by a low productivity many factors are responsible for this low productivity.

The increasing mass population is depending on agriculture. Although wheat production is the major crops in agriculture, it has facing various problem in its farming sector and marketing sector. Till it has traditional method of farming, lack of irrigation, lack of transportation and warehousing, and financial supporting. The another important problem is marketing facilities for producer and consumer.

Kailali is the grainy area. Wheat is produced in huge quantity. But the productivity of wheat is not adequate how much should be. There is high demand of wheat and it's other variety, but its production qualities geographical situation, technology, transportation, increasing pricing, warehousing scarcity and lack of good distribution channel creates many problem in the production and supply.

Floor industries , Maida mill and Galla Byapari/ Wholesaler and Retailer distribute wheat to remote are of far west region and another part of Nepal, but

is has facing more problem. There is a problem of transportation and systematic distribution channels. Established industries are in traditional and old technology, which can not produce fresh and qualitative variety of wheat in branding, packaging etc.

The efficiency of marketing system depend in availability of market infrastructures such as transportation storage etc. But in this region, they are not sufficient. Wheat is not only suffered from domestic market but from external market due to the low quality and high price as compared to the wheat of foreign country.

1.6 Objectives of the study

The main objectives of the study is analyzing the problem and prospects of the wheat production as well as marketing in kailali districts. Some of the objectives of this study are given below:

- ◆ To study about the historical background of wheat production in kailali.
- ◆ To overview study of wheat production in kailali.
- ◆ To study about the existing wheat marketing situation in kailali district.
- ◆ To analyze the production, promotion, price and distribution activities and situation of wheat marketing in kailali district.
- ◆ To investigate the market possibilities, opportunity and weakness of wheat marketing in kailali district.

1.7 Limitation of the study

This study is going to conduct only study purpose. This study will be limited by time and resources. This study will covers only randomly selected main crops of wheat. So it may not represents the all kind of cereal crops.

The limitation of proposed study is as follows:

1. The proposed study is based on sample study of Dhangadhi Municipality and some village development committee, wheat , flour and maida mills and Galla Byapari are available, which may or may not represent the whole districts.
2. The study is general to be confined on the production and marketing of wheat in kailali.
3. Last 12 years data and taken into consideration for the study purpose.
4. The present study is based on primary information and some information has been collected from the secondary data.
5. The study is to fulfill the requirements of M.B.S., so the study cannot cover all the dimensions of the subject matter.

1.8 Organization of the study

The contents for this study is proposed as follows:

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CHAPTER - 2

REVIEW OF LITERATURE

This chapter presents a review of literature of various related to the present study. It helps to achieve clarity in the discussion that follows and guides to adopt the precise study.

Nepal almost completely being in agricultural country. Overall development of country has been depending upon agriculture. According to Lewt's "If agriculture is stagnate it offer only a stagnate market and inhibits the growth of the economy." There fore agriculture sector is precondition the smooth development of industries of the country. In Nepal the modernization process of agriculture through government efforts can be traced back to 1971 Ad. when the first agricultural office was opened in "Charkhal Adda". The more organized efforts were made only after 1955 Ad. with the the introduction the first years plan in the country.

In agriculture development Y.P. Pant in this book, "Economic Development in Nepal" started that agricultural development is only possible through integrated approach. He stated that agriculture with an integrated approach should remain for many years to come a first priority in our national planning efforts.

Wheat is the important cereal crops in Nepal. Agriculture productivity of Nepal has been depressed over a long period due to the existence of traditional method of agriculture. In agriculture development in Nepal, "Y.P. Pant and S.C. Jain pointed out that one of the main problems of Nepalese agriculture is the low productivity. " B.P. Shrestha and S.C. Jain in "Regional Development in Nepal an exercise in Reality" draw a special attention and the problem of low productivity on small scale agriculture followed by under employment and consequence priority of masses can be tackled only by a policy of specialization

and diversification of production activity without efficient agro-ecological and agro-climate regions.

Many sectors are responsible for low productivity in agriculture sector. According to J.K. Shrestha, Ministry of food and agriculture, Economic analysis and planning Division, "Production, consumption and distribution of wheat and wheat flours in Kathmandu valley" conducted in 1960/70, the yield of improved variety of wheat with the use of chemical fertilizers was estimated to be 2378 kilograms per hector of land. But without using chemical fertilizers the yield of improved wheat was only 1258 kg. per hector. Thus there seemed a vast difference in using or with out using chemical fertilizers. The yield per hector of land of local wheat without using of chemical fertilizers 845 kgs. Only and yield increased to 1160kgs. When the chemical fertilizers was used.

According to Narendra Lal Shrestha, in his dissertation "Role of chemical fertilizer in agriculture production with special reference to wheat production in Kathmandu" The low productivity of wheat is not because of the inferiority of land and labour. Some of main factors responsible for the low productivity are the in adequate supply of various essential input fertilizers, improved varieties of seeds, lack of irrigation facilities, insecticides. On this basis hypothesis has been stated that agricultural production can be increased with judicious use of chemical fertilizers.

Dr. Hari Dahal in his article entitled, "Agriculture perspective plan and farm credit distribution pattern in Nepal." Presents contribution of agriculture perspective plan in the fird of poverty reduction and agriculture growth. Dr. Dahal mentions that agriculture is the engine of economic growth of Nepal. He expresses that APP has been undertaking the major objective to reduce the poverty percentage from 49 to 14 by the end of the plan period by creating the employment in agricultural

I. Shrestha N.L. "Role of chemical fertilizer in agricultural production with special references to wheat production in Kathmandu."

and its allied activities. Further, he highlights that fertilizer irrigation, technology, road and electricity are major inputs priorities area of APP while livestock, high value commodities, agribusiness and forestry are major output of app Dr, Dahal mentions that strong correlation upholds between adequate and timely available of farm credit and agriculture growth. Considering such prime importance of credit in agriculture growth and poverty reduction, he suggests to expand credit in technically feasible commodities in remote and poverty district.

Another literature entitled, "A survey of wheat production in Nepal," by S.P. Mankarmy mentioned light on the production and productivity problems related to wheat production in the country. The problem identified have been on the basis of gaps existing between the target of plan and achievement in respect to wheat production. The study is chiefly concerned with the examination of relationship existing between the price of wheat and price of other competing crops, between marketing for wheat and wheat production and finally the timely showing of wheat and wheat Yield.

"A study of wheat production in Nepal" by Bala Ram Narshin Joshi has concluded that wheat production in Nepal is low not because of the land in Nepal is unfertile unproductive and farmer are lazy but because they have been in hardship in every aspect of their life. He has emphasized on the improvement utilizing modern technology.

Another work by Ashok Jib Tuladhar entitled ,"A study of wheat production in Kathmandu" has tried to create a relationship between the production of wheat and inputs of cultivation of wheat. He has tried to find out whether the relationship is significant one or not. The result of the calculation reflects that the expenses increased in the cultivation of wheat would lead to an increase in the production of wheat.

"A study of wheat production in Rasuwa Nuwakot district" by Madhav Prasad Tripathi has felt that if farmers get guidance to use improved wheat

seeds, input by technicians, then wheat production will also be increased. So there is a need to assist the farmer in proper usage of inputs and techniques in plant protection.

Mr. Kenichi Ohashi in his article entitled "Irrigation in Nepal- Thinking beyond the green revolution" presents the four major components viz, irrigation, agriculture, rural electrification and rural road should follow in integrated way. On the way of presenting his idea, he suggests that ground water irrigation scheme is more suitable in terai than capital intensive surface irrigation scheme (take longer time to construct). In the mean time, he also expresses that shallow tube- wells are quite affordable to many farmers, especially if electric pumps can be used. In order to promote agriculture in hills, he further suggests to adopt small scale irrigation schemes with relatively short canals to reduce the vulnerability of landslides.

According to Meena's thesis on "Wheat production in Nepal with reference to Kathmandu valley" the main reason of low wheat productivity is due to lack of adequate improved agricultural inputs including irrigation facilities and technical assistance.

In marketing of farm products (published by HMG of Nepal FAMSD), Dr. Puspa Ram Mathema stressed that farm products do not reach the consumers directly in absence of marketing services. This was a common belief that the marketing system will come up along with improvement in production in the developing countries. But in Nepal agriculture programmes have received a very little place. That is why the marketing system is less developed in Nepal.

2. Collins, N.R. Holton R.H. "Programming changes in marketing in planned Economic Development" Carl Eicher and Lowerance with Agriculture in Economic Development 1966.

Agricultural marketing conference proceeding 21-24 February 1972 stressed on the weakness in the Nepalese agricultural marketing system. There is no national market that effects to the increase in the size of domestic market. Marketing infrastructures such as transportation, communication system, grading and standardization and marketing laws are far from adequate.

Due to the lack of national market surplus food grain of terai has been exported to India while there is deficit production in most of hill areas. The view has been expressed in "wheat marketing in Nepal by M.R. Satyal expressed, "However, some areas in the hills during years of adverse weather conditions may be seriously in deflect of food-grain because of their inaccessibility to commercial market surplus wheat is concentrated in the terai region which as close market to India.

A study titled, "Marketing efficiency in Indian agriculture" by Jasdan Walla, Z.Y. Published in 1966 mentioned that one of important functions of price, in general, is to guide and direct production to ensure that movements in production occur in consonance with consumer demand and thud to avoid a misallocation of resources.

The demand for Nepal's wheat from abroad is very negligible to some extent India is one of the export market for Nepal. In "A preliminary study on market prospect for Nepalese wheat" by Dr. P.R. Mathema efforts have been made to estimate the expected amount of wheat surplus in important wheat growing areas of the country. There are possibilities of increasing demand in the internal market and better prospect of export of grains in the external markets. These possibilities can be brought in to actions through measure designed to improve marketing, production transportation and distributions situations as well as through changes in public policies and suitable bilateral transit agreements.

Mr. R. Haridaya in his article "Agricultural marketing problem in Nepal" states that Nepalese agriculture many problem of which marketing problem is vital one. Lack of marketing facilities hinders much the economic development of the country. In the year 1974/75 farmers of the far western terai districts could not get market outlet for their products like wheat and mustard seed. And the result is area under wheat cultivation and production decreased in 1975/76 as compared to 1974/75. Here it will be proper to quote the believe of many economists that market structure and marketing accelerates the economic development and economic development itself is a function of the size of domestic and external market. [Another literature by T.B. Shrestha entitled "Marketing of wheat" also needs to mention here. In his article he has emphasized to make effort to develop local markets in the different feasible areas where there is lack of roads and communication. The farmer should be assured of remunerative price at least for their output].

"A study of wheat production and marketing in Nepal" by Chandra Devi Bajracharya has stated that large number of farmers are not obtaining proper amount of wheat seeds and fertilizer at right time and right place. So Nepal is suffering from low quantity as well as low quality of wheat production. Unavailability of cheap credit, lack of proper market of wheat problem of pricing of wheat also affects the wheat productivity. The Nepalese marketing network is quite inefficient. The farmers have to sell wheat in low price during the harvesting season due to the absence of transportation and storage facilities. The present market situation has provided wide and alluring marketing margins to the middle man in food grains marketing. There is wide price difference between the price paid to the such wide marketing margins has alienated both producers and consumers effecting the production.

A study titled "Agricultural Marketing system in Nepal," by C.Y. Lee best point out the general and the characteristic problem of Nepal agricultural marketing. He points the problem as due to the lack of national market and

infrastructure the losses in the distribution, small volume of unit transaction, insufficient cultivation of potential demand and lack of co-ordination among the various supporting agencies. Lack of modern transportation network covering the country and lack of efficient information dissemination system has largely caused to the isolation of the marketing as per the geographical regions. Similarly losses in terms of physical quality during the distribution are associated with the lack of proper handling practices and processing methods.

The develop or developing country which produce or consumers a sizeable quantity of food grain requires a government pricing policy for food grain, because of their importance in the national economy. Basically the aims of such a policy should be similar in developed and developing countries, in that the interest of the consumer as well as the producer must be given attention. For the producer, the policy should seek to ensure that the price he obtains does not fall below a certain level for the consumers, the policy should risk to ensure that the price he pays is within his reach, such a pricing policy, however appears to be an attempt to reconcile two irreconcilable interests.

A recent PAO/ECAEE meeting³ analysed in detail effects on production of the fixing of guarantee minimum or procurement price in far east countries. Since expecting Ceylon and Japan these policies have been aimed principally at protecting the interest of non farm consumers. Their impact on farmer has been largely incidental but the incidental effect where important. On the one hand it appeared that price policies for industrial or cash crops had sometimes stimulated a shift away from food grains. On the other hand low procurement prices coupled with compulsory purchase apparently handicapped development of food grain in production in some countries.

3. "Meeting was held on "Food and agricultural policy in Asia and the East"

This scheme is implemented through a net of about 4500 multipurpose co-operative societies with operating at the village level. The societies are expected to buy the produce from bar abide, farmers at the price get by the government, which for a long time (1952-60) remained higher, then the free market price of paddy. As a result a large proportion of paddy was sold to the government.

(Symposium of Food Grain Market in Asia Rg. No. 29)

Mr. Prem Bahadur Shrestha in his article entitled "Strategic Approach to new product development" present prime role of integrated product Development (IPD) practice including strategic integration, functional integration and logistic integration. Mr. Shrestha has mentioned that the major objective of product design are intended to fulfill the customer needs, deliver the products at a competitive price and time to market to bring the products intervention earlier than the competitions. Mr. Shrestha clearly mentions about the product development process such as idea, generation, screening , developing and finalizing concept and product intervention mechanisms. In addition he highlights some major component i.e. cost, quality reliability time to marker and innovativeness need to be considered at the time of product design, finally, Mr. Shrestha emphasizes to assess strengths and weaknesses of institution by focusing on the 'gap' between present and future destination. He suggests that gap analysis must be focused to the best opportunities that would give highest returns.

An annual progress report (2059/60) by crop Diversification project, implementation unit Dedeldhura shows in its report that due to geographical variation and social cultural norms , it has depended specific cropping pattern. Though all the district has smaller area for farming, market centre are well established in terai area than in hilly area. In order to promote production and marketing system of crops, department of marketing can bring the high market opportunities both export and import of crops in the region. It also shows that

low farmers mobility, lack of using improved production technology, traditional attitude of farmer, lack of established market centre, low effectiveness of farmer group, less participation of women group in mixed farmer group are the problem of production and marketing of crops. It emphasize on training on institutional development , resource mobilization, leadership conflict management and record keeping and additional trainings on technical aspect, in courage women's participation. It also shows that due to unorganized marketing system, farmers product fetches low price. So there is need to provide supports for organized marketing system.

A Privatized Extension Service in PPA's Annual progress report (2060/61) by crop Diversification project, project implementation unit Dadeldhura shows that PSPS have to work strategically for promotion of production and marketing of lead as well as crops other crops in the PPA. The PSP and DADO need to work collectively for marketing promotion of crops as the marketing development activities implemented by PSP could not solely sufficient for the purpose. It emphasize on the ultimate aim of social mobilization in strengthening of FGs and strengthening and registration of FGCCS as CBO/ co-operatives.

A dissertation titled "A study on Banana Marketing in Kailali District" carried by Mr. D. Rawal has mentioned that in kailali District, there are some lack of knowledge to the farmers. Farmers are attracted to earn more profit from banana farming without technical knowledge. In order to get good production of bananas, regular maturing is necessary operation. Directly or indirectly provided technical knowledge to the various banana farmers, HMG has been given due attention to the banana farming in technical aspect in this area. The lack of irrigation facility. The farming of fruits depends on the seasonal irrigation by channel. Some farmers have irrigated by boring (pump set). But this method of irrigation is very costly for banana farming. Financial supporting services

program is also lacking there. Especially the Agriculture Development Bank is responsible to provide the loan for banana production. It provides the loan Rs96000 per bigha in 9per centages interest rate to the banana cultivation. ADB 60 percentage Nawajivan Bank seven percentage and Malika Development Bank three percentage investment in total banana cultivation and 20 percentage of investment in banana farming by banana farmers themselves farmers cannot achieve the expected loans easily and quickly. There is less co-ordination between banana farmers. The variety of banana is only one (Harichbal) cultivated there. The varieties of banana like, Robusta, cevies, and malbhog etc arenot cultivated. The scientific storage facilities age completely lacking here. All of the farmers use local method of storage. The channel system is very simple and not well developed. The channel for the local or near by market comprise of the growers who sell directly to the consumers by taking them to the field itself. There are not any research activities done about marketing situation by banana growers. Growers are not feeling marketing problems in present but the problem of marketing situations will come in future.

Agriculture is the largest sector and back bone with agriculture and 40% GDP is contributed by agriculture itself of Nepalese economy. Agriculture marketing is an essential part of business marketing. Agriculture credit is most important for food production and it marketing. However, ADBN plays the most important role in rural agriculture credit. Asian Development Bank appraised the fifth Agricultural Credit Project in Nepal in 1987 Ad. that leveled some conclusions. ADBN involves directly and indirectly in agricultural development by providing financial and technical support. About 90% of all institutional credit to agriculture (including agro-based industries) is provided by ADBN. During the past years, ADBN has played a pioneering and central role in encouraging development initiatives by the farming community and disseminating mew and viable technologies for farm and rural development.

Nepal has been providing more emphasis to agriculture beginning of its planning stage. In every fifth year plan, agriculture sector. Occupies first priority in its development budget. In this tenth fifth year plan, agriculture occupies first priority also.

The government developed the Agricultural perspective (APP) in 1995AD. accelerate the growth of the agriculture sector. To APP states that agricultural growth rate will increase from 3% to 5% per year.

APP aims at,

- i) Increasing crops intensity
- ii) Diversifying crops pattern
- iii) Introducing the high value crops
- iv) Improving the delivery system for irrigation fertilizer seed and pesticides

CHAPTER - 3

RESEARCH METHODOLOGY

This chapter presents the methodology of this study. The main objectives of this study is to study analyze and investigate about wheat production and its marketing in kailali. The following research methodology has been adopted for the systematic presentation of the results of the study.

3.1 Research Design:

The research has been designed according to the objective of the study. The required data are collected by conducting field survey and some data from government office and institutes. For the fulfillment of the study data are collected from wheat producers floor mills, Galla, Byapari, Maida Industries and final consumer. They are selected using random sampling technique.

3.2 Source of Data

Ongoing study is based upon primary data and secondary data. Primary data are collected from wheat producers, floor mills, Galla Byapari, Maida industries and final consumers. Secondary data is collected from District Agricultural Development office, Agriculture Development Bank, Krishi Samagri Sasthan, Domestic and small industry office of kailali district reports records, studies.

3.3 Population and Sample :

The population of the study in kailali district and the sample of the study should be choosen from maida mill, wheat merchants and Galla Byapari of Dhangadhi , Geta, Attariya , Chaumala. To fulfill the purpose some data are collected from farmers and final consumers to the support this study. In totality 100 sample are selected.

3.4 Data Collection Process:

Primary data are collected from questionnaire and interview secondary data are collected in appropriate format.

3.5 Data Processing

This study is based on primary and secondary data. Thus after the collection of data have been entracted and tabulated as per the need. To process the data necessary statistical statement and other information should be required.

3.6 Method of data Analysis:

Data, which are collected are analyzed by using statistical and non statistical tool. Descriptive method is also used. Related information are presented in the tables as well as bars and graphs. Statistical tools have been used where necessary. The percentage should be calculated according to available data.

CHAPTER - 4

PRESENTATION AND ANALYSIS OF DATA

4.1 Wheat Production

4.1.1 Historical Background of wheat cultivation

The main source about half of the population in world depend on wheat crops. Various countries in the world produce wheat. About 65 percentage wheat of the world is produced in Asian Countries. Approximately 55 crores metric tones wheat is produced in world. Also wheat production system & corresponding activities provides job about 1 arab people of developing countries.

In the world, the largest productivity of the wheat is in Germany and largest amount of wheat is produced in China.

In contest of Nepal wheat is the one of the cereals which is produced in all 75 districts. 40 years ago wheat cultivation was popular in western and far western hills and surrounding areas. Very little wheat was used to be grown in terai. The real history of wheat cultivation came into play only when the Mexican Dwarf wheat seeds introduced in 1965/66. During that period wheat area increased tremendously in terai resulting in the tripling of the area in the country within a short period. In kailali, there was locality of Tharus. They had not been cultivating wheat, they only cultivated rice. If any one cultivated, that was in very little amount. After migration of hilly people in terai, wheat cultivation had been taken a speed in huge amount. It was success to get a change in Tharus community as they learnt to cultivate wheat. Even now wheat cultivation area is increasing more than 1000's hectors annually.

To fulfill the growing needs of rapidly increasing population as well as to increase food grain export "Grow more wheat campaign" was launched in 1965/66. Such a campaign first concentrated its efforts in Bagmati Zone. Kathmandu, Bhaktapur and Lalitpur were the first to introduce improved seeds and fertilizers and were able to make a production record. Again it was also able to create a sense of consciousness among these farmers to grow more wheat. It is specially after the establishment of some major flour mills in mid period of 1960.s the majority of farmers were interested to produce more wheat. Their growing popularity in wheat cultivation could be found in 1970's specially after the import of improved variety of wheat seeds from India. In 1966/67 the total cropland of wheat was 126 thousands hectares where in 1979/80 it is nearly reached 367 thousand hectares and at the same period of time its production increased from 159 thousand mt. to 440 thousand mt. Looking at these two year figure of 15 years gap period relating to wheat it can be safely agreed that area under wheat cultivation and its production are smoothly expanding. This is inflect the result of the efforts of "Grow more wheat campaign." Although the wheat area and production are expanding every year productivity per unit has not increased in remarkable way. The national yield rate per hectare increased from 1.11 mt. to 1.25 mt.

If we evaluate the production data of kailali. In 2054/55 Bs, the total cropland of wheat was 19 thousand hectares where as in 2065/66 it is nearly reached 35 thousands hectares and at the same period of time its production increased from 42900 mt to 70000 mt.

4.1.2 Total cropland of wheat and production in kailali

In Nepal app 702664 hector land is used for wheat crops. Wheat is the most important cereals which fulfill the increasing demand of food in the country. Cropland and production are closely interrelated. If the cultivation is in small area, production will be little and vice versa. Area of cultivation is one of the topmost factor that governs the amount of production. The above view can prove the given table of wheat production and its incremental situation in kailali district.

Table No 4.1

Wheat cultivated area and wheat production situation in kailali

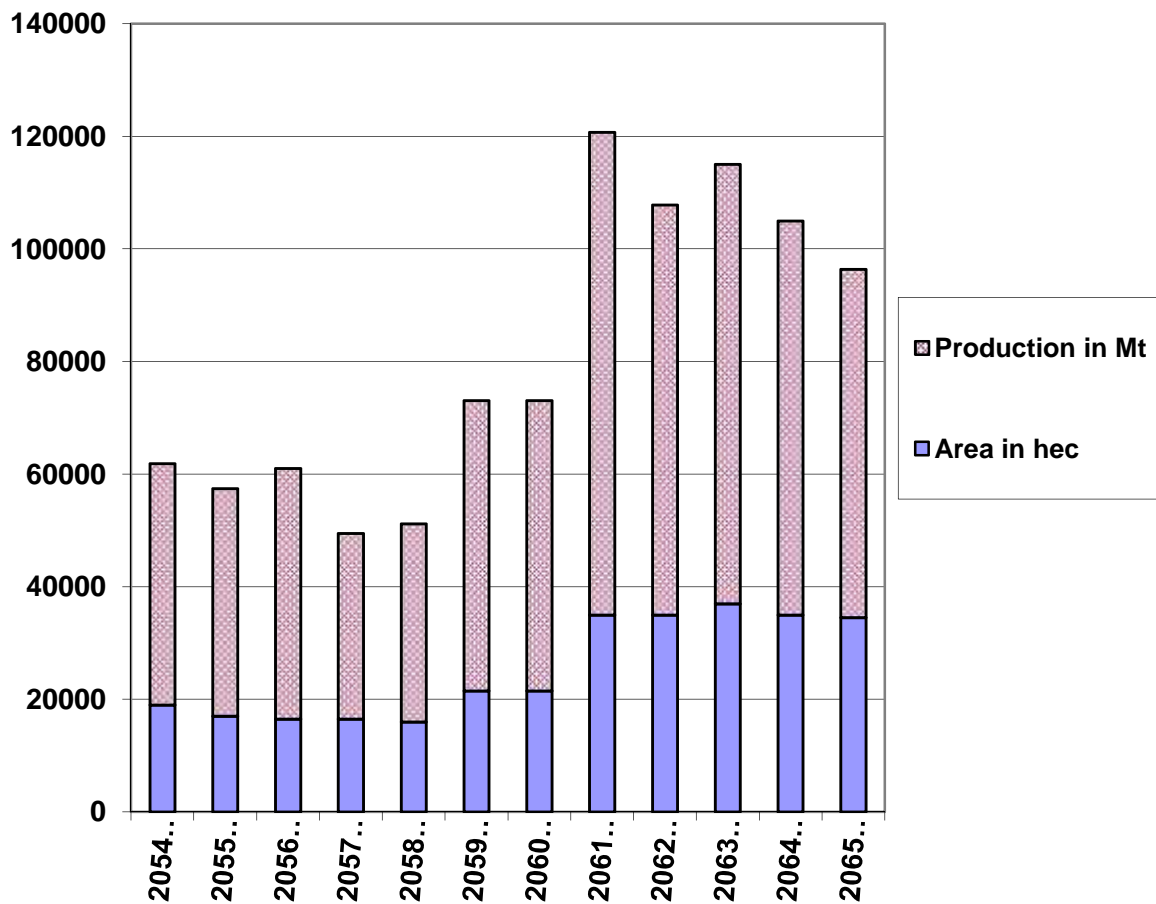
Fiscal year (BS)	Area in hector	Change in size	change in %	production in mt.	change in size	change in %
2054/55	19000			42900		
2055/56	17000	-2000	-11	40460	-2440	-5.7
2056/57	16500	-500	-2.9	44550	4090	10.1
2057/58	16500	0	0	33000	-11550	-26
2058/59	16000	-500	-3	35200	2200	6.67
2059/60	21500	5500	34.4	51600	16400	46.6
2060/61	21500	0	0	51600	0	0
2061/62	35000	13500	62.8	85750	34150	66.2
2062/63	35000	0	0	72800	-12950	-15.1
2063/64	37000	2000	5.7	78070	5270	7.2
2064/65	35000	-2000	-5.4	70000	-8070	-10.34
2065/66	34500	-500	-1.4	61900	-8100	-11.6

Source: District Agriculture Development office kailali

The table no 4.1 indicates that the production trend for the last 12 years presents sufficient idea to assess that wheat production in the district is in

increasing trend with some irregularities. The change in percentage for both production as well as area cultivated do not proportionate. In majority in above table reflects that the change in production of wheat ultimately followed by the change in area. In 2055/56 cropland and production both are decreased. But in 2056/57 the cropland is decreased but production is increased. In 2058/59, 3% decrease in wheat cropland but production is increased by 6.67%. Beginning of the years, shown in the table, the production and cropland area is like in similar 2061/62 the ratio of cropland and production is more than double. In the year 2063/64 area is increased by 5.7% and production is increased by 7.2%. In 2064/65 area of cropland and production both are decreased. It's main reason is due to landslide and flood on far western region in each year.

Figure No 4.1
Wheat production situation in kailali



4.1.3 Average yield rate of wheat in kailali

There is no uniformity of average yield rate of wheat in kailali. The yield varies from year to year and from one place to another. It is due to the climate, method of farming, seeds and use of fertilizer. In kailali, the average yield rate of wheat production is 2.5 mt/he where the technology is improved, the productivity is available up to 4 mt/he. The productivity can be increased by irrigation development, credit and inputs supply, training, market development and advanced technology. Till now, the wheat cultivation is known as only for food. It is necessary to develop it as entrepreneurship.

The average yield rate of wheat during various years are presented in table no.2

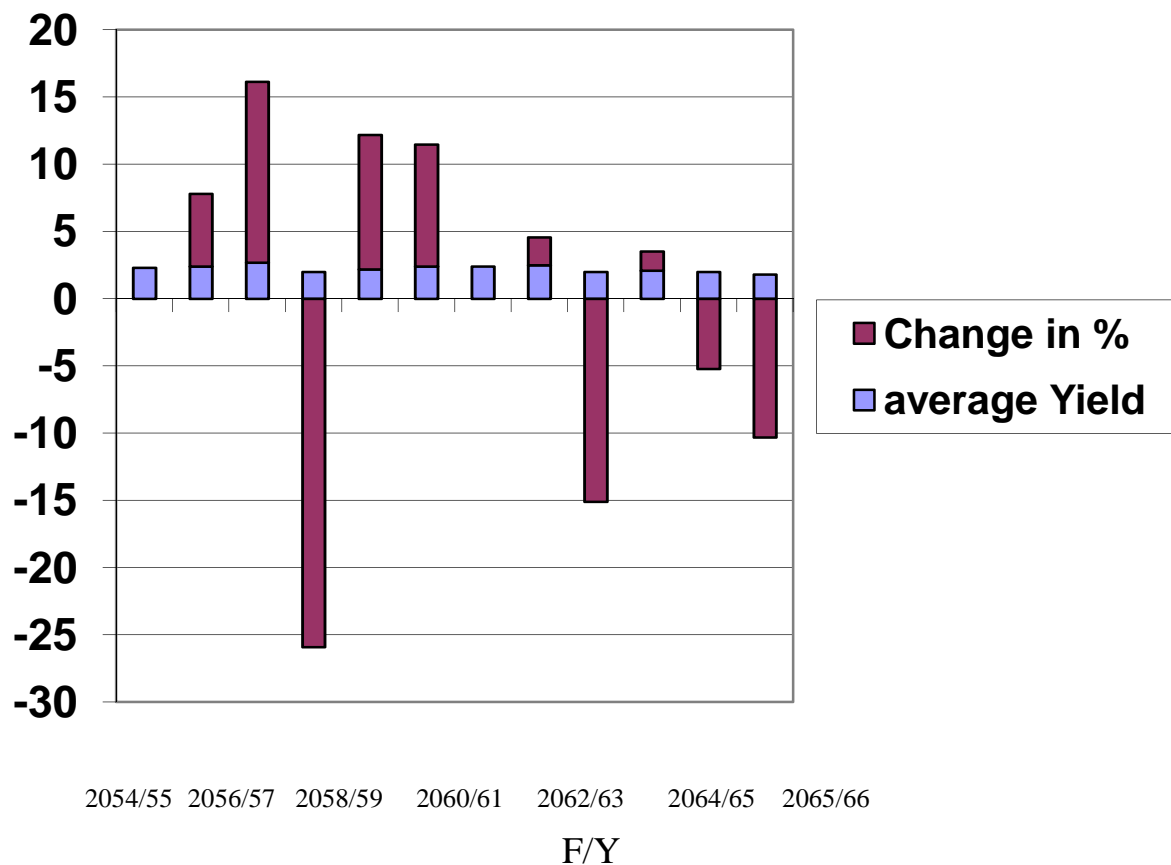
Table No. 4.2
Average Yield rate of wheat in kailali

Fiscal year (BS)	Area in hector	production in mt.	average yield	Change in size	change in %
2054/55	19000	42900	2.3	-	-
2055/56	17000	40460	2.4	0.112	5.403
2056/57	16500	44550	2.7	0.32	13.45
2057/58	16500	33000	2	-0.7	-25.9
2058/59	16000	35200	2.2	0.2	10
2059/60	21500	51600	2.4	0.2	9.091
2060/61	21500	51600	2.4	0	0
2061/62	35000	85750	2.5	0.05	2.083
2062/63	35000	72800	2.0	-0.37	-15.10
2063/64	37000	78070	2.1	0.03	1.43
2064/65	35000	70000	2	-0.11	-5.21
2065/66	34500	61900	1.8	-0.206	-10.3

Source: District Agriculture Development office kailali

The above table show the average productivity and it's changes year by year. The table clearly show that the productivity of wheat in kailali has been increasing from the above 12 years. In the year 2057/58, 2062/63, 2064/65 , 2065/66 it decreased. In 2056/57 the productivity is increased highly by 2.7 mt/he, which is increased by 13.75%.

Figure 4.2



4.1.4 Cost Return Analysis of Wheat

This section attempts have been made to analyze the product cost and return of wheat grown in kailali district. Cost of production contains all the addition expenses like labor, agriculture, tools, fertilizer, irrigation, seeds etc total income includes the total sale or production of wheat. Here we have to know that the total sale or production is not return. Net return is that part of surplus which received from the sales of output. Only net return is the profit for

the farmer. Net return is the difference between total production value and total cost. Total cost contains fixed cost and variable cost.

$$\text{Net return} = \text{total income} - \text{total cost}$$

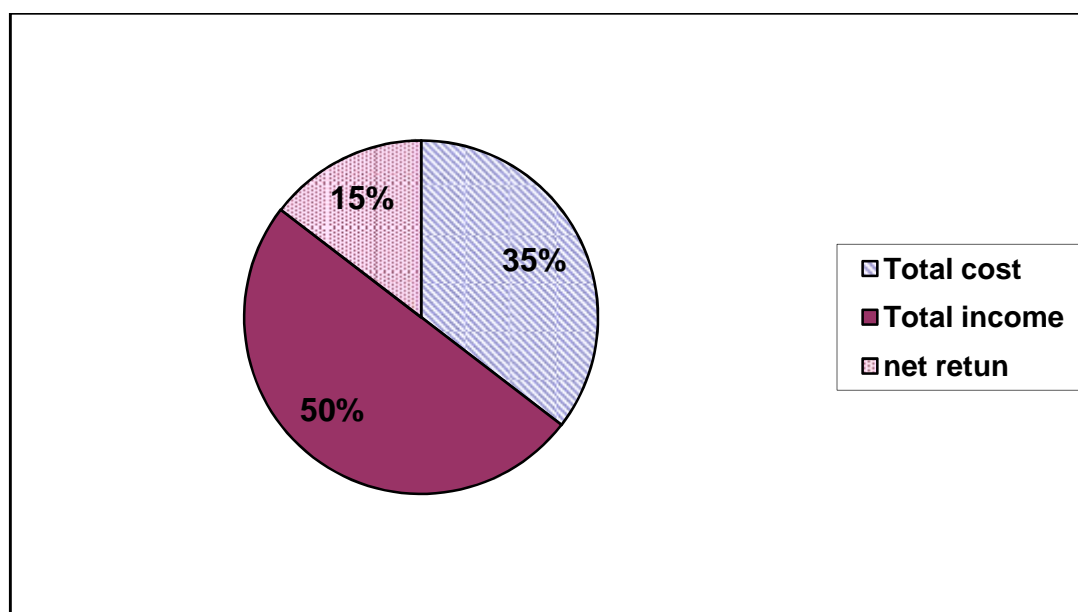
District Agricultural Development Office has made a study about "The cost or production and return in 2057/58" in its pocket area of improved seed in irrigated and no irrigated land. The survey shows that the productivity and return is high in the irrigated land improved seed than local seeds.

Cost and return of wheat in kailali is presented as below:

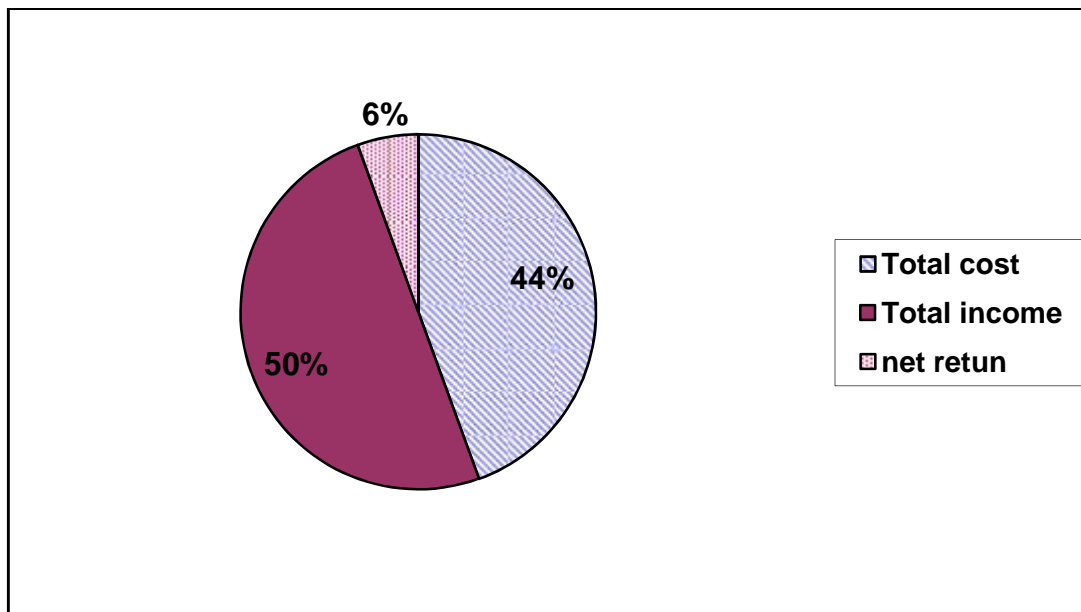
Table No: 4.3
Cost and return of wheat in kailali

Situation of farming	Total cost	Total income	Net return (Rs. 000/hect.)
Improved Irrigated	17	24	7
Improved un-Irrigated	16	18	2

Figure No 4.3
Improved Irrigated



Improved Un-Irrigated



The above presentation shows that the total cost per hectare is Rs. 17 thousand, income is 24 thousand and the net return is 7 thousand which is 35%, 50% and 15% respectively in irrigated land for improved seed. So on total cost is 16 thousand, total income is 18 thousand and net return is 2 thousand which is 44%, 50% and 6% respectively in non-irrigated land for improved seed. The study shows that the production cost of wheat per kg is Rs 6.92 and Rs. 5.20 in irrigated and Irrigated land respectively.

Net return from wheat production also depends upon the inputs and tools used in the farm, large size group farmers can offer, better inputs and used modern tools. So large size group farmers can gain higher return from wheat cultivation using improved variety as compared to medium and small size group. In case of local variety, large size group also unable to gain suitable return.

4.1.5 Production Trend

The key role played by agriculture in Nepalese economy necessitates a rapid increase in agricultural production in order to achieve as accelerated pace of economic development. The special important of food grains in this connection cannot be derived. Production of wheat is increasing rapidly in kailali due to its growing popularity among the farmers and the increased use of improved seeds and fertilizers. Though the wheat production is increasing, it is not favorable in course of time as the sense of comparison to other food grains productions.

Following table reflects the wheat production and its trend in kailali

Table No. 4.4

Wheat production and its production trend kailali

Unit: Production in 000mt

F/y BS	Actual production (y)	Deviation from 59/60 (x)	sq. of deviation (x^2)	Product of x and y	Trend value y
2054/55	43	-5	25	-215	
2055/56	40	-4	16	-160	
2056/57	45	-3	9	-135	
2057/58	33	-2	4	-66	
2058/59	35	-1	1	-35	
2059/60	52	0	0	0	
2060/61	52	1	1	52	
2061/62	86	2	4	175	
2062/63	73	3	9	219	
2063/64	78	4	16	312	
2064/65	70	5	25	350	
11	$\Sigma y=607$	$\Sigma x=0$	$\Sigma x^2=110$	$\Sigma fx=494$	

The above table reflects that wheat production over the years is increasing smoothly, with some irregularities in 2057/58 and 2062. Total production of 2061/62 is 86 thousand mt, which is higher than all of the year. But the production is decreasing 2057/58. Some time it is increasing and sometime it is decreasing. Though the trend of wheat production is not favorable.

The calculation of wheat production and its production trend shown in the above table with the help of the statistical formula which is given below:
In order to show trend of wheat production in kailali the formula used is

$$y = a + bx \text{ ----- (i)}$$

since $\sum x = 0$ $a = \frac{\sum y}{n} = \frac{607}{11} = 55.18$, $b = \frac{\sum xy}{\sum x^2} = \frac{494}{110} = 4.49$

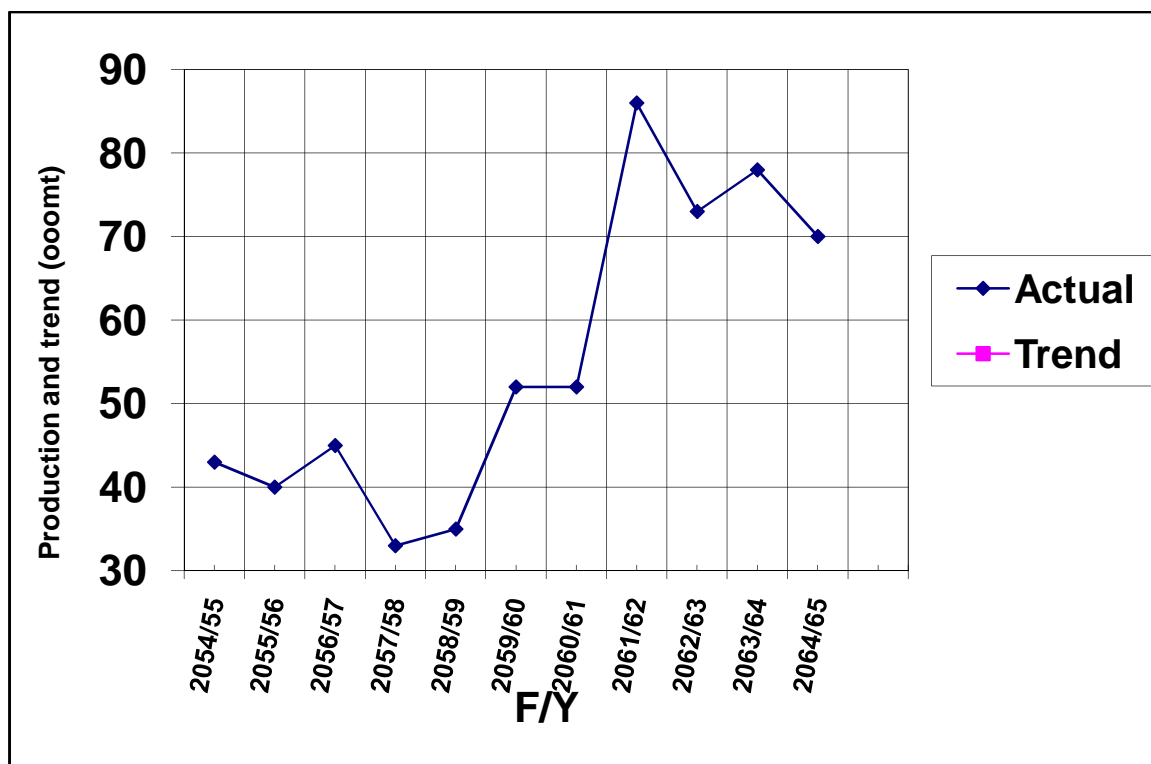
Putting the value of a and b in (i), the fitted trend line as

$$y = 55.18 + 4.49x \text{ ----- (ii)}$$

Trend values from (iii) are

when $x = -5$,	$y_c = 55.18 + 4.49(-5) = 32.73$
$x = 4$,	$y_c = 55.18 + 4.49(-4) = 37.22$
$x = -3$,	$y_c = 55.18 + 4.49(-3) = 41.11$
$x = -2$,	$y_c = 55.18 + 4.49(-2) = 46.2$
$x = -1$,	$y_c = 55.18 + 4.49(-1) = 50.69$
$x = 0$,	$y_c = 55.18 + 4.49(0) = 55.18$
$x = 1$,	$y_c = 55.18 + 4.49(1) = 59.67$
$x = 2$,	$y_c = 55.18 + 4.49(2) = 64.16$
$x = 3$,	$y_c = 55.18 + 4.49(3) = 68.65$
$x = 4$,	$y_c = 55.18 + 4.49(4) = 73.14$
$x = 5$,	$y_c = 55.18 + 4.49(5) = 77.63$

Figure No.
Wheat production trend in kailali



In the above graph there are two lines , one represents the trend production of wheat and another represent the actual production of wheat trend product line is a straight line and more toward to right with higher direction. Actual production line also increasing from left to right But zig zag in the nature.

The actual wheat production line is sometime lower and some time higher as that of straight line of production trend. The year 2054/55, 055/56, 056/57, 2061/62, 2062/63, 063/64, the actual production is higher than that of its trend and in other year actual production is lower that of its trend.

4.1.6 Food Balance in kailali

Kailali is the grainy area. It is the main area of production of far west region. The hilly area is also depend on it for cereals. Most of the balancing food is served hilly area and other part of Nepal and also exported to India. Food balance of kailali district has been decreasing year by year due to increase

in population, migration system in current system in current situation of conflict. Also, It has been decreasing natural disaster.

The following table shows that the food balance of kailali district

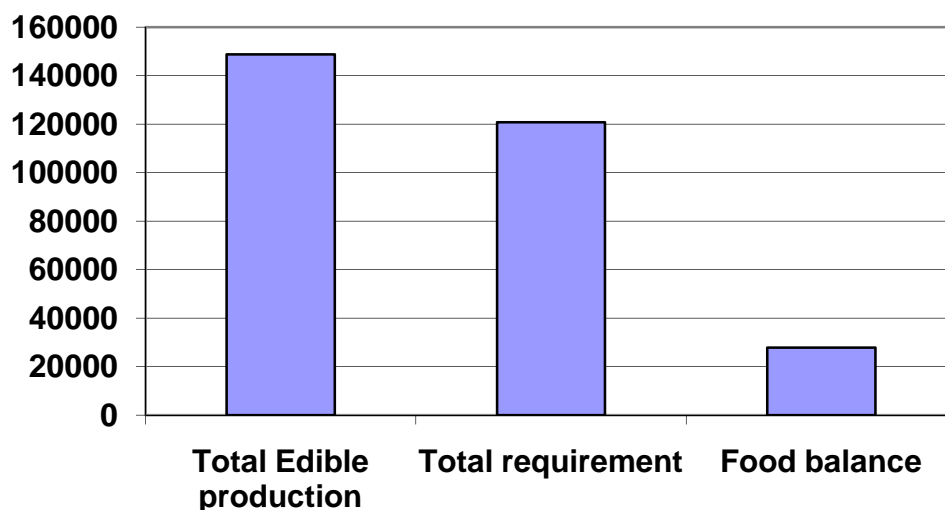
Table No: 4.5
Food balance in kailali District

Description	Cereals in mt.
Total Edible productin	148762
Total Requirement	120848
Food Balance	27914
Food Balance in %	18.76

Source: District Agriculture Development office kailali

From the above table, the total production of cereals of kailali district is 148762 mt. Total requirement to total population for eating is 120848 mt. The food balance of cereals is 27914 mt, which is only 18.76%. The balancing cereals is delivered out of the district. The above position of food balancing of kailali can be seen in the bar diagrams , which is given below:

Figure No. 4.5
Food Balance in kailali



4.1.7 Varieties of Wheat

Wheat is the crop in our agronomy programme, which is most advanced for the extension. Varieties play an important role in the expansion of wheat production in the country. Varieties in general can show their maximum possible potential when planted in optimum time. In Nepal due to declining yields and increasing disease problems associated with local varieties, a need for high yielding and disease resistant varieties has become more apparent in order to meet the farmers' increasing need for food grain. With growing popularity of wheat as a winter crop, the demand for technically superior varieties of wheat is also increasing every year.

Table No 4.6

The varieties of wheat recommended for Kailali district

SN	Wheat varieties	S.N.	Wheat varieties
1	NL 30	7	Nepal 251
2	UP 262	8	Lumbini
3	Siddhartha	9	BL 1022
4	Binayak	10	RR 21
5	Tribeni	11	Brikuti
6	Nepal 297	12	L - 1135

Source : DADO , Kailali

Table No 4.7

Wheat varieties and their features

Wheat varieties	Recommended year, BS	height of plant cm	duration days	productivity mt/hect	size of wheat	colour
RR 21	2027	98	116	4.0	big	grey
UP 262	2035	92	112	4.0	big	white
Tribeni	2039	110	124	4.0	big	white
Nepal 297	2042	90	117	5.0	big	white
Nepal 251	2045	89	118	5.0	medium	white
BL 122	2048	91	120	5.0	big	white
Bhrikuti	2051	85	120	4.5	medium	white
BL 1135	2051	92	115	4.0	medium	white

Source : A hand book of "Wheat production technology by Bhatta, M.R. senior scientist

Farmers must be provided with an economical , high yielding early maturing and disease insect pest resistant varieties. Farmers are very hard to convince and do not want to grow new varieties which have already been doing well in different research situation and the farms. Before they adopt new varieties of wheat they want to taste all the new varieties. They will choose only those high yielding varieties as they have a habit of observing plant from different angles. Considering all these aspects farmers yield trails are being conducted all over the district every year.

4.1.8 Factors necessary for wheat cultivation and their effect

a) Climate: Wheat is the winter crop. It is best grown under cool climate as can be seen from the fact that more than 75% of worlds. A cool moist climate with temperature in neighborhood of 24⁰ to 27⁰c provides the best growing period for wheat determines ultimately the yield of crops. Numerous interacting

atmospheric factors like rainfall, temperature sunshine etc effect the wheat growth and production directly and indirectly. There is close relationship between rainfall and wheat field , since rainfall is a major climatic factor effecting crops in kailali. It is also likely that the other climatic factors , like temperature, humidity etc are important both directly in determining the growth and maturity of the crop and indirectly by affection the spread of disease and pests like rust, item border etc on the crop.

b) Irrigation : Effective development of irrigation is a prerequisite for increased agricultural production. Extension of irrigation can bring about a substantial increase in agriculture. Production in the district , per hector yield of irrigation wheat was higher than that of unirrigated wheat and this is true for both improved and local varieties. If irrigated land is accompanied by chemical fertilizer , farmers can obtain maximum yield.

The situation of irrigation of kailali district is as below:

Table No 4.8
Irrigation situation of kailali

SN	Situation	Land (he)	In %
1	Total cultivated area	90000	100
2	Irrigated area	68976	77
3	Full irrigated	39780	58
4	Partially irrigated	29196	42
5	Un-irrigated area	21024	23

Source: District Agricultural Development Office , Kailali

Figure No. 4.6
Irrigation situation of kailali

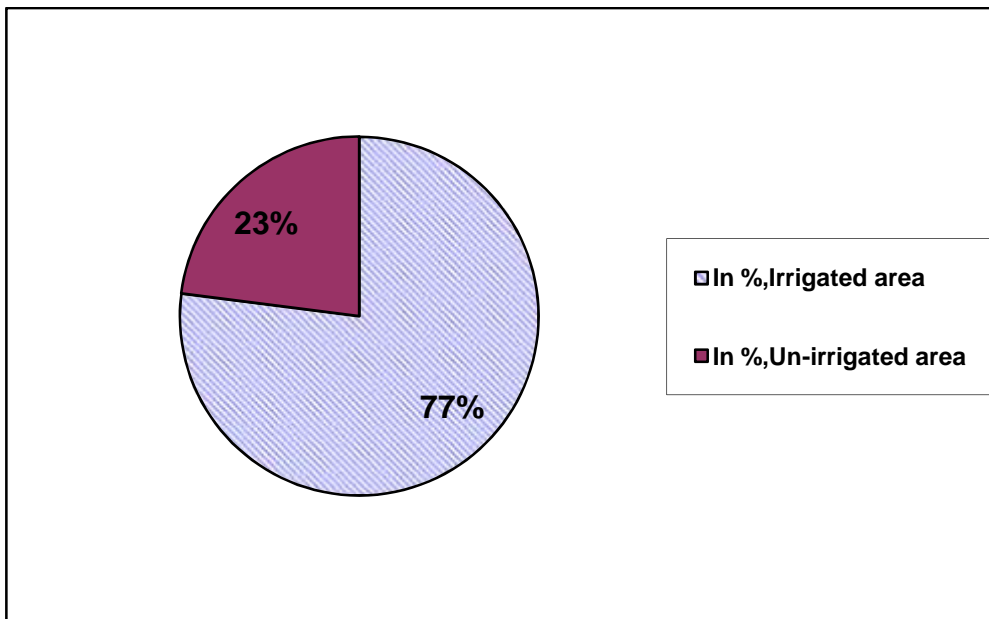
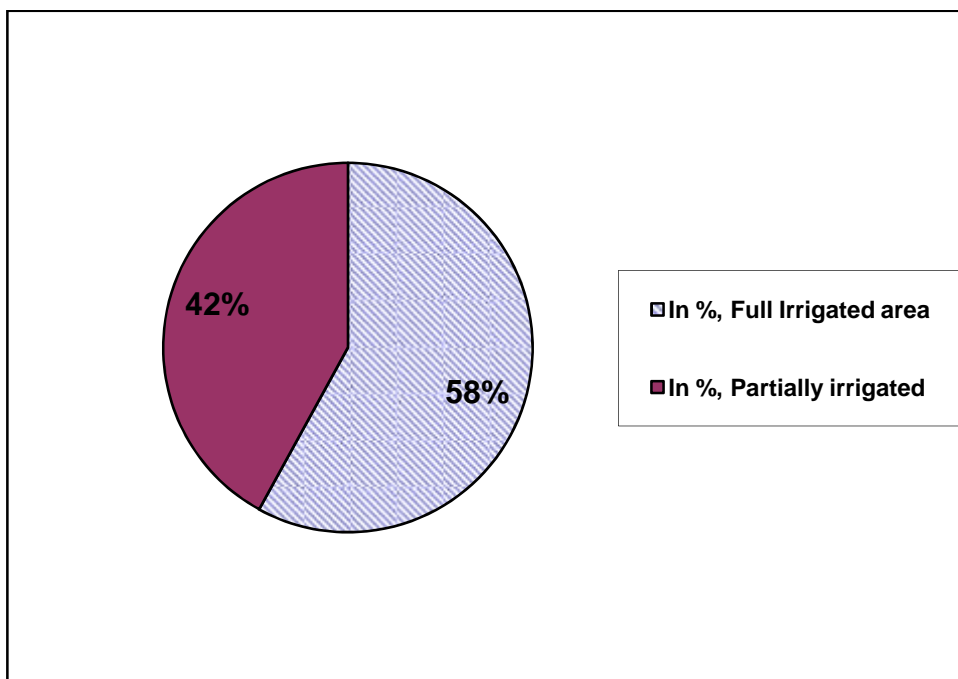


Figure No. 4.7
Irrigation situation of kailali



The survey was held by DADO , kailali in 057/58 Bs. The survey shows that the production of irrigated land is higher than un-irrigated land.

Table No. 4.9

Production in Mt.

Wheat yield per hector on IR and UNIR land

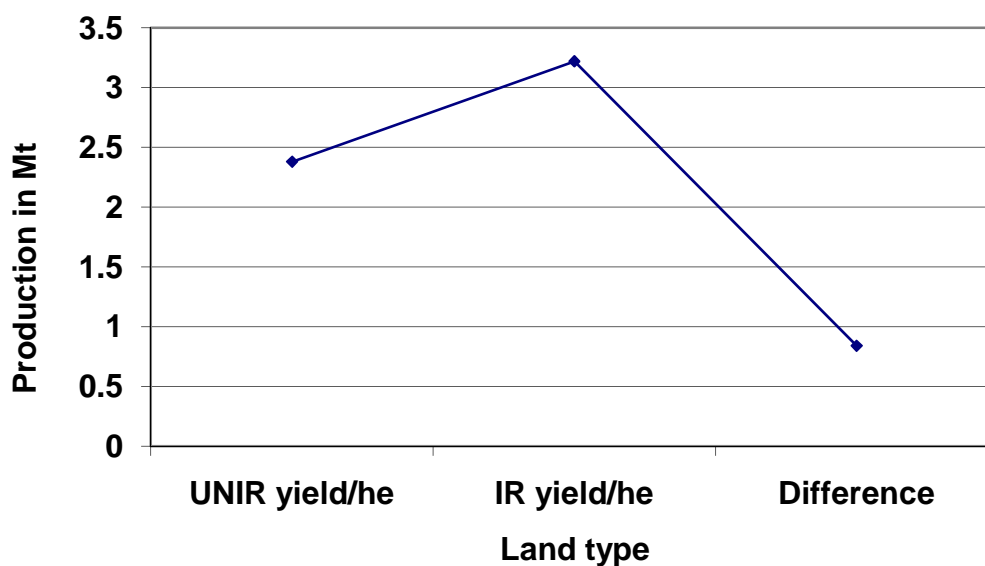
SN	UNIR yield/ hec	IR yield /hec	Difference
1	2.38	3.22	0.84

Source: District Agricultural Development Office , kailali

The above table indicates the productivity difference between irrigated and un-irrigated land. Average yield per hector on irrigated land is 0.8 mt. than on unirrigated land.

Figure No 4.8

Wheat yield of IR and UNIR land



Wheat needs more water after sowing and in time of flowering. But situation of irrigation in kailali is only cultivated land is fully irrigated. It is necessary to apply irrigation according to following dosage.

1. First irrigation 20-25 days after sowing the wheat
2. Second irrigation 40-50 days after sowing the wheat
3. Third irrigation 70-80 days after sowing the wheat
4. Forth irrigation 90-100 days after sowing the wheat

5. Fifth irrigation 100-120 days after sowing the wheat

If there is some problem of irrigation , it must be irrigated three times.

1. First irrigation 25-30 days after sowing the wheat

2. Second irrigation 60-85 days after sowing the wheat

3. Third irrigation 90-100 days after sowing the wheat

c) Improved seeds: Improved seeds mean quality seeds of high yielding varieties of wheat. It have been an important factor in the tremendous expansion of wheat production. In kailali the cultivations usually get their supplies of seed either from their own grain stock saved from previous year or from their fellow cultivators which is not productive. Now with the growing popularity of wheat as winter crop, the demand for quality wheat seeds is also increasing every year.

Quality seeds are made available by the agriculture input corporation. Now days this office changed into National seed company Ltd. Basic objectives of NSC is supplying the farmers with quality seeds of high yielding varieties of wheat. In kaiali this company has been working from few year. The table no. present the amount of quality of wheat seeds purchased and sold by NSC, Branch office Dhangadhi.

Table No. 4.10

Purchase and sale of Improved of wheat by NSC/BR/DHN

F/y	Purchased in mt	annual change in %	sale in mt	annual change in %
2063/64	50		47	
2064/65	123	73	89	42
2065/66	119	-4	89	0

Source: National seeds company, Dhangadhi

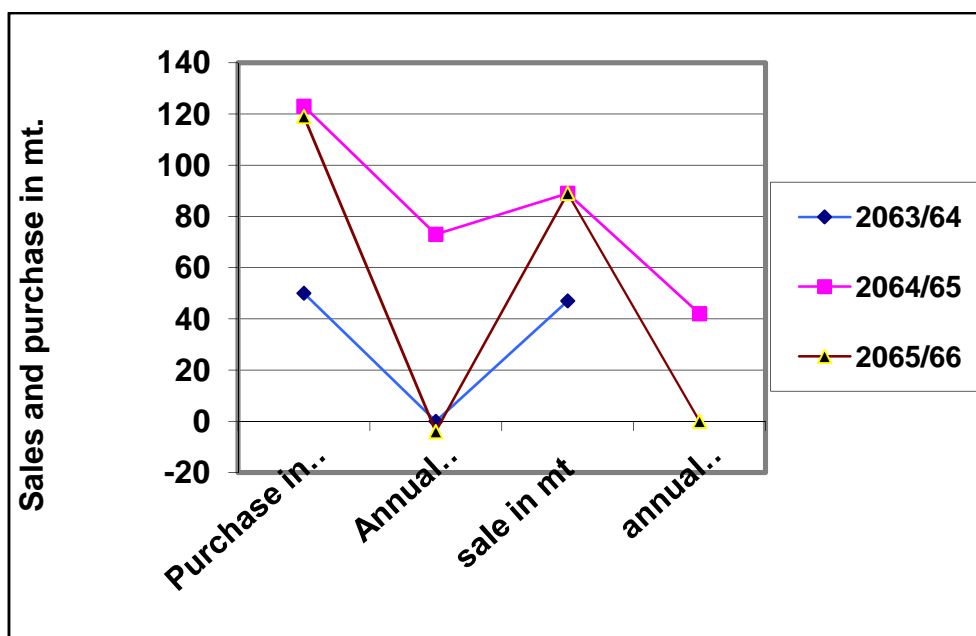
The table indicates that the improved varieties of seeds are in stock. But sales of improved seed in increasing with irregularities and purchase of seeds quantity by NSC is decreasing. That means demand of improved seeds in lower.

Demand of improved seeds and the production has great value. It has direct impact upon production. The demand of improved seeds is not increasing.

We can see the trend of sales and purchase of improved seeds by RSC , Dhangadhi in the following graph.

Figure No. 4.9

Wheat seed purchase and sale by RSC



Thus in order to increase wheat production, DADO and NSC must conduct same activities to make insure the farmers about the improved seed and its benefit to make insure improved seeds. They have to make quality seed available to farmers in time.

d) Use of Fertilizer:

It is universally accepted that the more efficient way to supply nutrient requirement is the use of organic fertilizer. Use of fertilizer has the capacity to nourish the soil and raise the yield level of different crops. However the use of this input by farmers very limited. The present national consumption level of fertilizer by farmers is 35 kg per hector in kailali Nitrogen is often the most

limited element in soil which effects crops production. Thus fertilizer in general and nitrogen in particular are important factor which helps to produce high yield of crops. There has been a high tendency to use more fertilizer to obtain high yield of wheat. However indiscriminate use of fertilizer many result in its waste.

In order to get high yield of wheat, cultivations must use appropriated dose of chemical fertilizer. Recommended dose of chemical fertilizer is given below:

Table No 4.11

Dose of Chemical nutrient for irrigated and un-irrigated land

Nutrient	kg/hect for irrigated land	kg/hect for unirrigated land
Nitrogen	100	60
Phosphorus	50	40
Potassium	50	25

Source: A hand book of wheat crops production technology by Agriculture information main branch

Figure No 4.10

Dose of nutrient for un-irrigated land

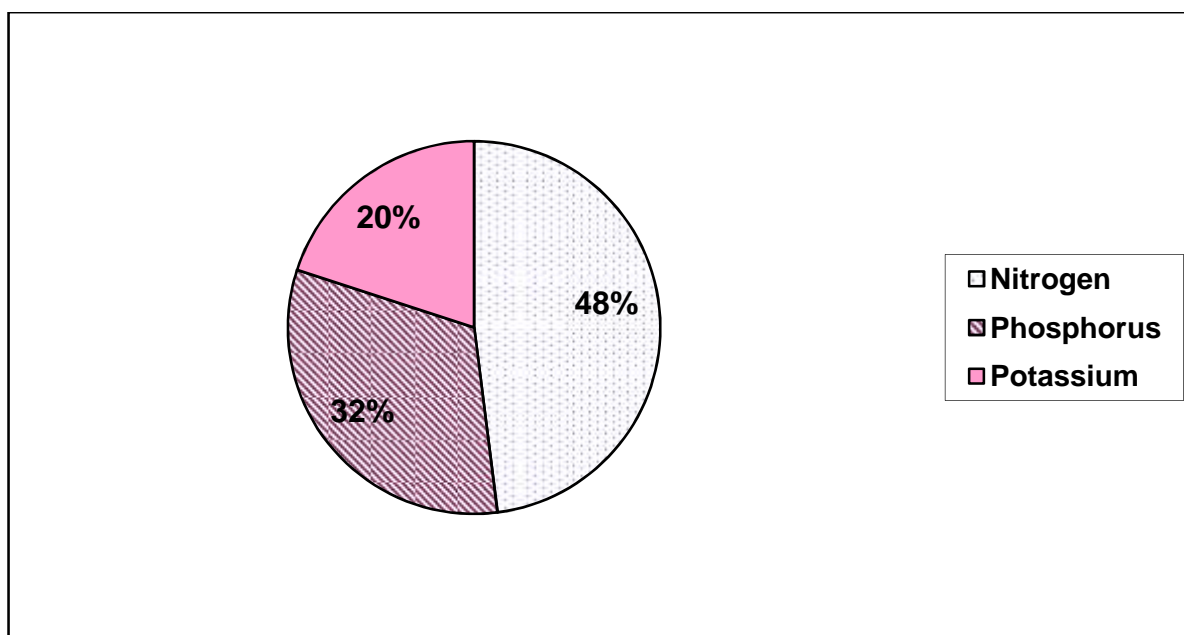


Figure No 4.11
Dose of nutrient for irrigated land

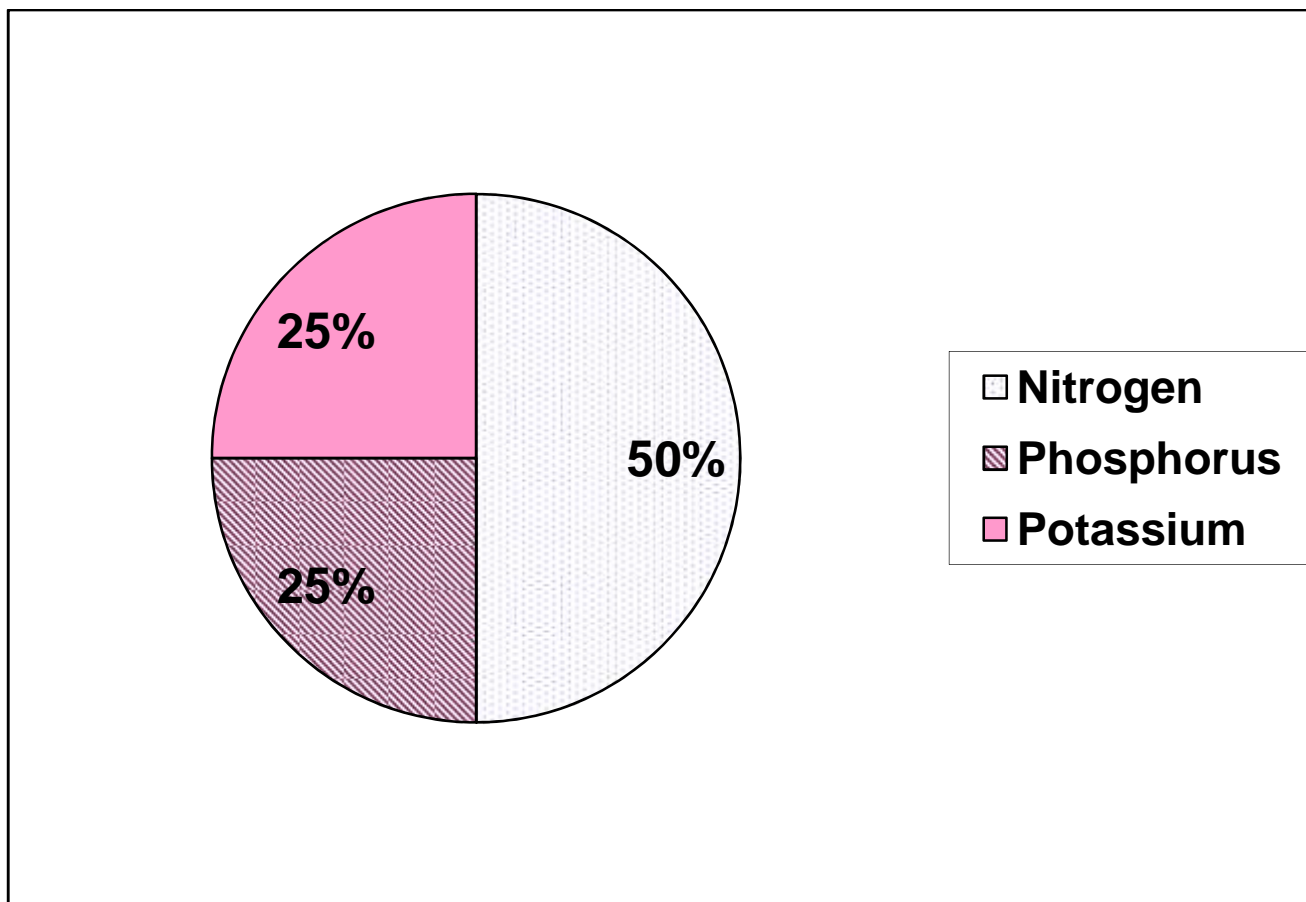
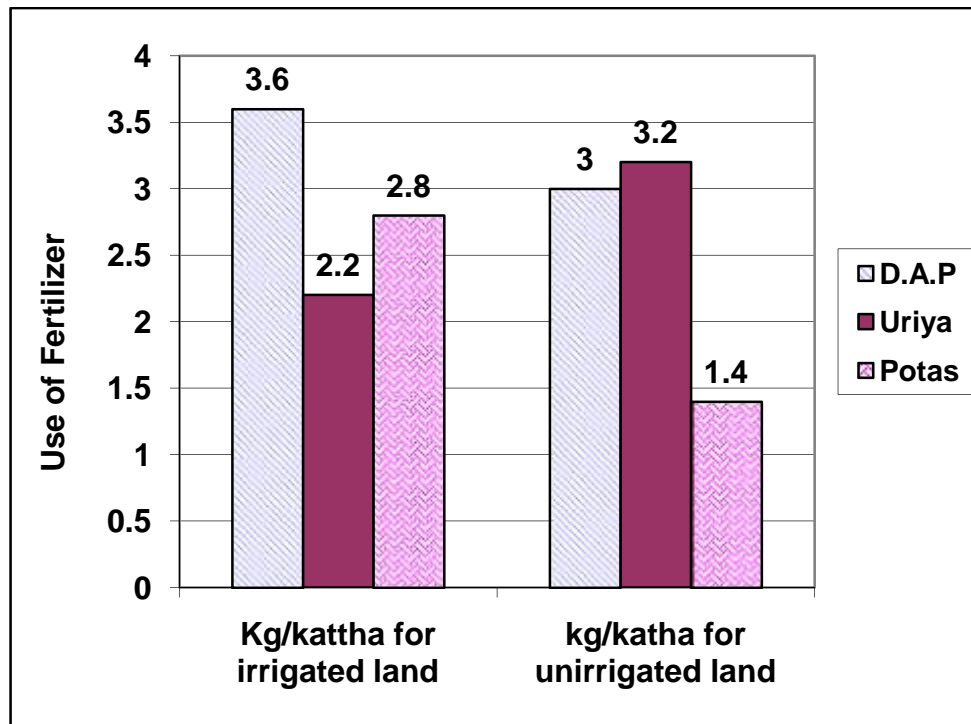


Table No 4.12
Use of fertilizer for irrigated and un-irrigated land

Fertilizer	kg/katha for irrigated land	kg/katha for unirrigated land
D.A.P.	3.6	3
Uriya	2.2	3.2
Potas	2.8	1.4

Source: A hand book of wheat crops production technology by Agriculture information main branch

Figure No 4.12
Use of Fertilizer



One can use more or less fertilizer than given dose to adjust a particular situation. It would be better to use more nitrogen where irrigation facility is available and soils have been under cultivation for a longer period. It was also noticed that more use of chemical fertilizer was better to irrigated land as compared to unirrigated land.

Thus , the fertilizer plays important role in production of wheat. But farmers are not trained for using its dose. This is their argument that they are avoid from this training and the government does not help them.

e) Capital: Capital is necessary for the farmers just as it is for other entrepreneurs, to increase expenses in producing goods in advance of receiving payments for the finished products. That is to say farming requires capital. But in Nepal the income in agriculture sector is quite low as the amount of sales of agriculture products is nor very high. The product in the farm economy is spend for home consumption, what ever amount received from sales of agricultural

products is spend generally on necessary goods e.g. matches kerosene cloths, medicine etc. In the rural areas, surplus left after meeting daily necessary things is very low or sometimes no surplus at all. Under this situation farmers cannot adopt any improved method of production and it leads to progressive decline in yield of agriculture products. This particular situation prevails is in the case of wheat also.

The question of borrowing arises when the farmers will not have much saving it. It is necessary of borrowing for farming. I conduct a survey among the farmers. In their version, it is very difficult to get surplus from the production of wheat. They have to get borrow from local mahajans, financial institution etc. The survey shows that farmers are getting production loan easily from financial institution. They take a name of agricultural Development Bank Ltd. in first priority.

There are many financial institutions in kailali e.g. ADB, RBB, NBL, MBB, Everest Bank , Bangalades Bank, Bank of Kathmandu, Nabajivan Bank etc. Besides them, more than 95% agriculture credit is served by ADB/N. Thus , it has its best image in the public for its service.

4.1.9 Wheat Disease

In Nepal loss of crops from insects and pests in enormous. "According to one estimate presented in the national seminar on Agricultural marketing, 15% of the total production is destroyed by plant disease and insects."

It is also true in the case of wheat disease is one of the main problem of wheat production in Nepal. The main disease are as below:

a) Leaf rust:

It is a disease which can develop in a wide range of temperature. For the development of this disease at alarming scale, pathogen requires a little bit higher temperature (above 15⁰c). According to wheat disease experiment in kailali and Banke districts, the incidence of this diseases was as much as 80 % with susceptible reaction in many of localities. Leaf rust not only decreases the productivity but also decreases the quality of products. Most of the high yielding and popular varieties like kalyansona has been stopped from cultivation because of shriveled grain due to leaf rust severity.

b) Yellow rust:

Cultivation of local wheat is still a common practice. It was felt that yellow rust is a major disease on local wheat. The incidence of the disease was comparatively, more in the higher hills than in the mid hills. But many improved varieties were observed free from yellow rust in most of the localities. No trace of the disease was detected on wheat in terai areas.

c) Loose smut:

Both local and improved varieties were found infected by loose smut in almost all localities. However, the incidence was must more on local wheat than on improved one. The infection of the disease was noticed on recommended varieties like RR21 , NL 30, LR 64 and on some other improved wheat but not on kalyansona.

d) Kernel Bunt:

It was first recorded on RR 21 and NL 30 collected from farmers, field and agricultural farm Doti. Incidence of the bunt on NL 30 , seeds collected from farmer's field, was up to 50% while the some variety from Agricultural farm Doti, had and incidence of 15% , similarly , RR 21 has an infection up to 10%.

This is the first survey report of disease from that area which shows quite high incidence on RR 21 and NL 30. Thus kernel bunt is very dangerous disease and a careful watch should be made to prevent it.

e) Powdery Mildew:

Incidence of powdery mildew was observed on local varieties in almost all. Its incidence was also noticed on improved varieties like WL 711, kalyansona, UP 131 etc.

f) Leaf blight:

It is a serious problem in terai belt of the kingdom. In terai, no variety is freeform blight. However the incidence of the blight was lower in the hills than in the terai. "At Dhangadhi and Nepalgunj area, the incidence was up to 80-90% on RR21 and it was only 40-50% in the hills on same variety.

4.1.10 Wheat Crops Disease Control:

The methods that farmers can use in order to control the wheat crops from various kinds of diseases are as follows:

5. Karki, C.B. "Wheat disease investigation in Nepal."

Table No. 4.13**Wheat diseases and chemical medicine**

SN	Disease	Chemical medicine
1	Brunt rust or leaf rust	* Dythen m-45 can use 150g in 40-50L water per ropani, spray 3-4 times. * Byletyn can use 20g in 40-50L water per ropani, spray 1-2 times
2	Yellow or stripe rust	* byletyn can use 25g in 30-40L water per ropani spray 1-2 times * plantavyaxa -20 can use 100 cc in 30-40L water per ropani spray 1-2 time
3	Loose smut	* plantavyaxa -75 can use 3g in per kg seed and shake till 4-5 minutes * Byvisten or derosal can use 2g in per kg seed and shake it
4	Powdery Mildew	* cyarathen can use 100-150g in 50l water per ropani spray 2-3 times in difference of 10-15 days
5	Foliar Blight	* Thiram can use 2-3g in per kg seed and shake it and sowing it * Dythen m-45 can use 2-25 kg in 800l water per hector , spray 1-2 times in the difference of 10-15 days

Source: A hand book of wheat crops production technology by Agriculture information Main branch.

4.1.11 Wheat Farming System adopt by the Farmer in Kailali

For this study, 100 farmers were selected for questionnaire , discussion and interview. It was found the following system adopting by the farmers in wheat farming.

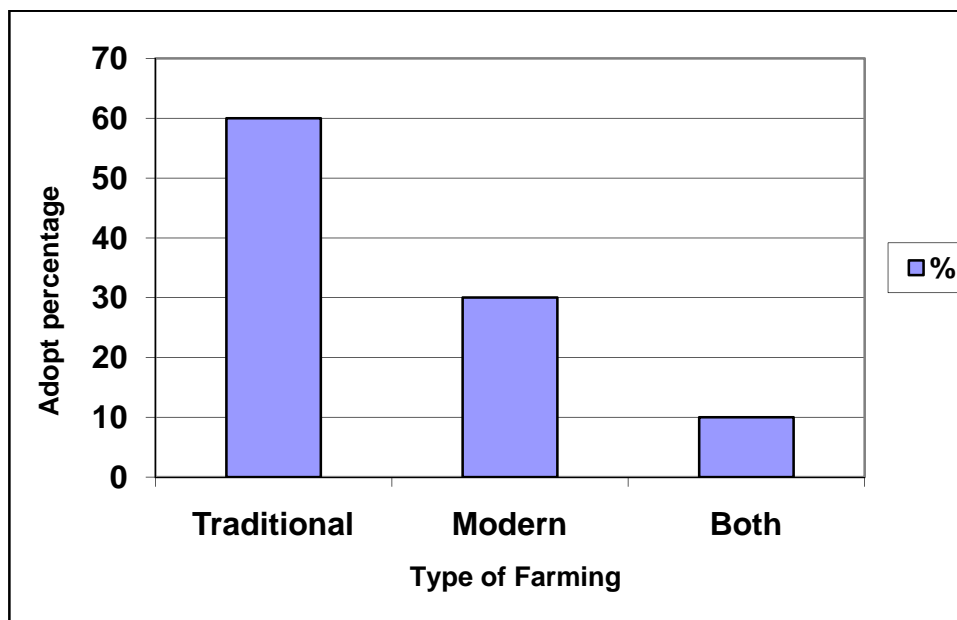
Farming technology:

The farmers has been adopting both traditional and modern farming system. The farmers who are living at remote area are farming with traditional technology. Other are farming in both traditional and modern technology. In duration of survey, it is found that the landlord who are in few numbers and a little few who are known about the farming system are adopting the modern technology.

Table No 4.14
Farming technology adopting by the farmers

Traditional	Modern	Both	Total
60%	30%	10%	100%

Figure No 4.13
Farming system in Kailali



The above table and bar diagram indicates that 60% people has been adopting tradition farming, 40% modern and 10% has been adopting both methods in kailali district.

To say them for the modern farming method they are unknown about it. If they want to adopt it, they have lack of training. They have to use traditional method.

Use of Wheat Varieties:

Agricultural Department recommended various varieties for terai. But the study shows that some improved varieties are using heavily in kailali. These varieties are:

⇒NL 297 ⇒ BL1022 ⇒ BL 1135 ⇒Bhrikuti

The farmers are also using Achyat, UP 62, NL 197, BL 283 etc. They say the productivity of improved variety is higher than local variety. But they say they have problem of receiving of improved variety in time and so far from remote are to buy. The small farmer shows their problem. They have a few land if they go to purchase it to Dhangadhi from their remote area, they have to pay other cost i.e. transportation, hotel charge etc for buying few improved seeds. So they have to use local variety. It is our unlucky, 80percentages people are depended on agriculture. But 70 percentage out of them are small farmer and their production unable for their home use.

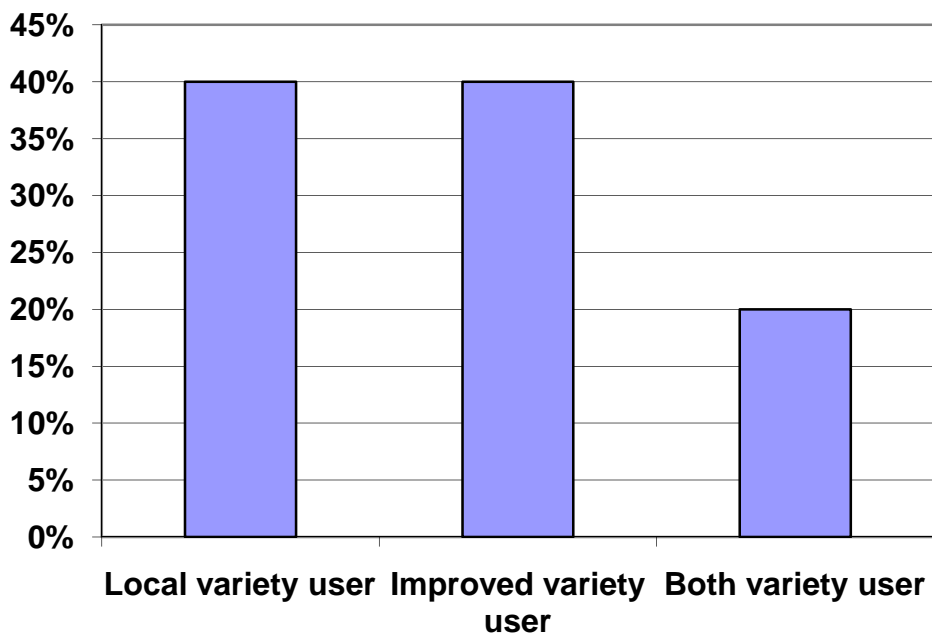
More than 60 percentage farmers, near to Dhangadhi are used improved variety, but in remote are only 30 percentage people used improved variety. In totality, following table shows the use of seeds varieties,

Table No 4.15

Use of wheat seeds varieties by farmers in Kailali

Local variety user	Improved variety user	Both varieties user	Total
40%	40%	20%	100%

Figure No 4.14
Use of wheat seed in kailali



The table and figure shows that only 40% farmers use improved seed only and 40% use local variety and 20% use both variety.

Use of Fertilizer

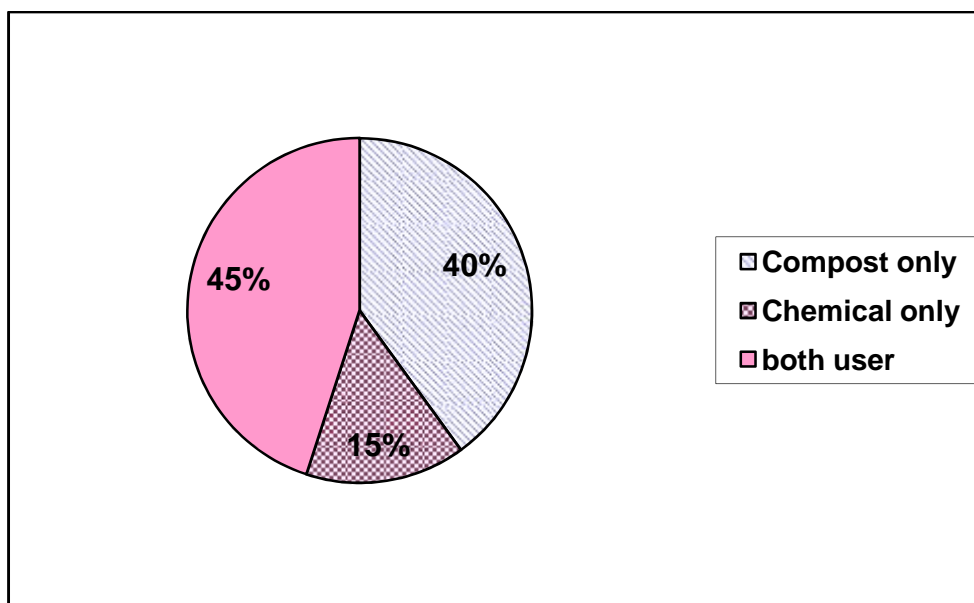
In the case of using fertilizer, most of small farmers have been using compost, Middle farmers have been using chemical and compost and landlord have been using chemical fertilizer. The survey shows the following data of using fertilizer:

Table No 4.16
Using of fertilizer by the farmers in kailali

compost only	chemical only	both user	Total
40%	15%	45%	100%

Figure No 4.15

Using of fertilizer in kailali by farmers



The table indicates that 40% farmers of kailali are used compost fertilizer, 15% farmers are used chemical fertilizer and 45% are used both fertilizers.

The farmers indicate the problem of receiving of fertilizer in time and have to go so far for purchasing. In average 20% farmers kailali can receive it easily and remaining can't receive it easily. They have to walk so far, which make's it very costly.

Irrigation facility:

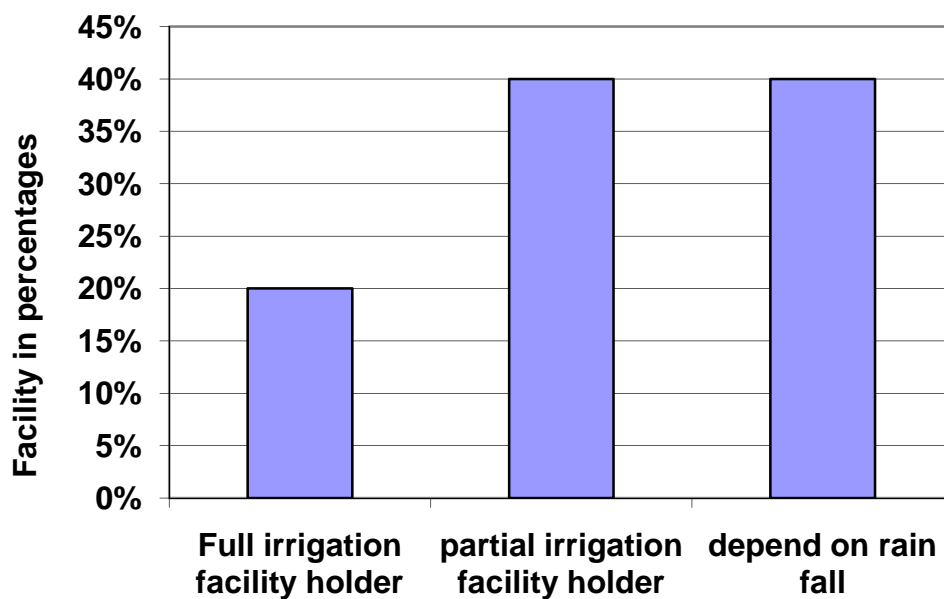
Irrigation is the main thing for farming. But the situation of irrigation facility is not viable to all farmer. In totality the situation of irrigation is as follow in kailali.

Table No 4.17

Irrigation facility among the farmer in kailali

Full irrigation facility holder	partial irrigation facility holder	Depend on rain fall	Total
20%	40%	40%	100%

Figure No 4.16
Irrigation facility in kailali



The table and figure indicate that 20% farmers of kailali have full irrigation facility, 40% have partially and 40% depend on rainfall or have not irrigation facility. Besides of them, below than 5% people consume government irrigation facility fully and partially.

Source of Capital:

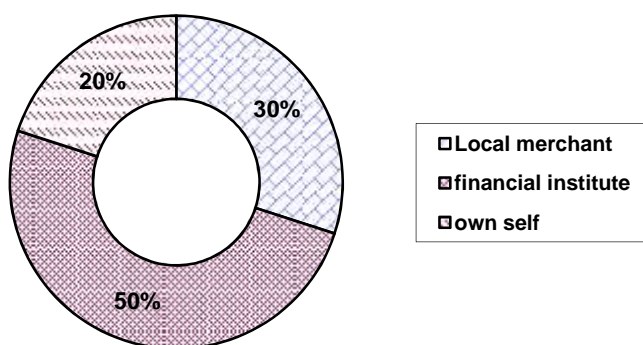
The main sources of capital in kalali is loan facility available by the financial institute, local merchant and surplus after sales of production. In their view, the farming cost per Bigha in irrigation land is Rs. 11000/ and in un-irrigated land Rs 95000/.

The table shows that the farmer of kailali how to fulfill their capital necessity.

Table No 4.18
Source of capital of farmer in kailali

local merchant	financial institute	own self	Total
30%	50%	20%	100%

Figure No. 4.17
Source of capital of farmer in kailali



The table and figure indicate that 20% farmers use their own capital in farming. 50% take loan from financial institute and 30% take loan from local merchants. In the case of financial institute above 95% farmers take loans from Agricultural Development Bank Ltd. In their views, the interest rate is very high from the local merchant. But the lack of financial institute in remote area, they have to depend on merchant.

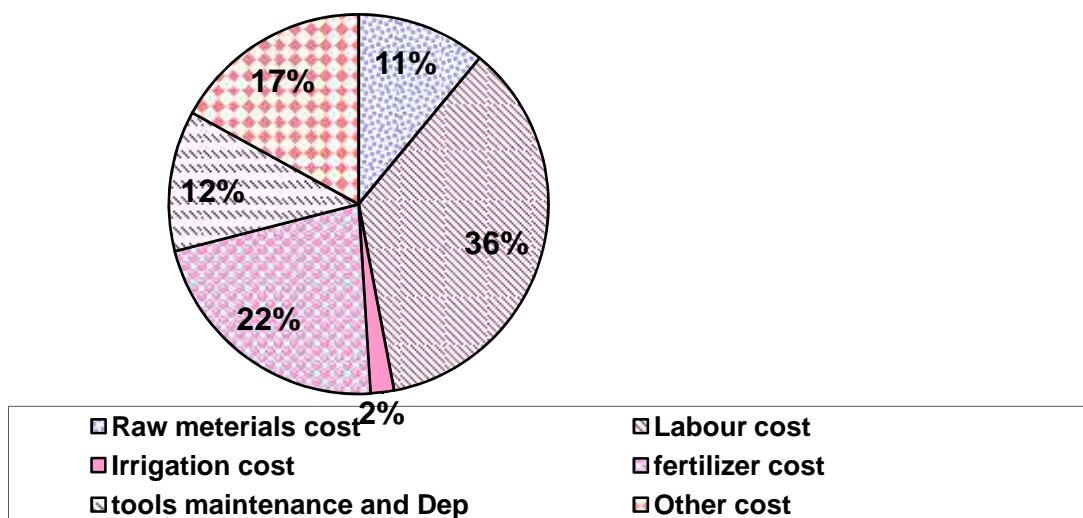
Production cost of Wheat

Production cost means these costs which are paid by farmer i.e. seed cost , fertilizer cost, tools cost, transportation cost etc. According to farmers, they are paying following costs for production of wheat :

Table No 4.19
Estimated cost production of wheat

SN	Cost heads	Estimated cost (%) hec
1	Raw materials cost	11
2	Labour cost	36
3	Irrigation cost	2
4	Fertilizer cost	22
5	Tools maintenance and Dep	12
6	Other cost	17

Figure No 4.18
Estimated cost production of wheat



Above table and Pie chart indicate that farmers are paying raw materials cost irrigation cost, tools maintenance, labour cost, fertilizer cost and other cost includes govt. tax transportation , warehousing , packaging cost refining cost etc.

4.2 Wheat Marketing System

Generally the market is understood as the place or geographical area where buyers and sellers meet and enter into transaction involving transfer of ownership of goods and services. In simply we know that the marketing is the process of buying and selling goods and services. But in the sense, the marketing has broad view. it involves all the activities like activities before the production of goods, production, promotion pricing, advertising, distribution etc.

4.2.1 Role of agricultural marketing in economic development

In an agricultural country like Nepal, marketing is the combination of activities by which agricultural produce and raw materials are made ready for, or capable of consumption and reach the final consumer in a suitable at time and in the place he wants them.

Efficient marketing of farm produces has been realized as a must in the process of economic development of an agricultural country like Nepal. Majority of Nepalese people belong to the subsistence level. In such a subsistence economy the expansion and development of marketing is desired for the sake of better standard of living of the masses. However a subsistence farmer may have to sell greater volume of its farm products to meet daily necessities produced in the non-farm sector, whenever prices of his farm products are low.

Agricultural marketing is a far more embracing term than industrial marketing. "In providing an efficient link between consumer and producer, the marketing system must function to faithfully reflect back to the producer the demand of the consumer, to provide the facilities organization and practices required, to provide the incentives necessary to get the farmer to produce for the market to undertake the physical movement of produce from the point of production to the point of consumption to transform the product so as to conform to consumer demand , and finally to undertake the holding of the product from the time it is produced until it is sold on market, " (marketing and economic development" agricultural producers and their markets." edited by warley, PP75)

In our situation, marketing particularly in the agriculture sectors has dual role to play. In the beginning it has to activate the use of inputs to make them more popular together with dissemination of knowledge and later on it has to work as sales agent to facilitate farmers by getting their commodities sold. Thus procurement and distribution aspect to support the preceding discussion.

Through the development of planning , improvement of agricultural marketing system may be utilized to induce faster rate of economic development of the country.

The agricultural production activities carried on in commercial scale heavily depend upon markets for inputs as well as disposing of output. At this stage farmers has to look not only production efficiency but also have to watch and seek for markets for their product. They should be able to take their products to the market at the least cost so that they can continue the farm business and secure responsible rate of return from investment. More encouragement of increase in production without organizing marketing system will have harmful effect. Marketing adjusts production to demand and marketing reduced risks in demand and price and reduce distribution loss which will contribute in increasing demand which in turn encourage increase production. Thus here it will be proper to quote the believes that market structure and marketing accelerates the economic development in the country.

Marketing consists of series of related activities starting from distribution of agricultural inputs and credits to assembling grading, storing, transporting processing and selling to the final consumers through several channels of the middlemen. When we talk of the integrated marketing system we should consider all these aspects. But in our situation, such system is not yet properly developed. That's why proper distribution system is lacking. In order to assure efficient and proper distribution of the production marketing infrastructure and such network should established in time. In the present of organized market , farmers can dispose their product in time at fair price. In such situation, farmers will be interested to produce more leading to the economic development. Thus efficient operation of agricultural marketing plays an active role in developing our agricultural economy and as a result in overall economic development.

4.2.2 Present Situation of Market in Kailali

The marketing of agricultural commodities is not well developed. The role as well as technique of marketing in its totality has been traditional. After 1960, the change is found to have appeared the opening of public sector corporation to lend the helping hand in growth of national economy. Agricultural input corporation, National trading. Limited Jute development and Trade corporation, Agriculture lime stone Industry, Nepal Transport corporation etc. were established. The opening these corporations have led to expand the product market as well as the demand potential, to further influence the supply factor.

In Kailali , there are some public corporation. They are helping to enhance the agricultural market. These public corporation in kailali are;

- National Trading Ltd.
- Salt Trading Ltd.
- National seed company
- District Agricultural Development Office
- Agricultural Development Bank Limited
- Irrigation office
- Nepal Khadya Sastan
- Agriculture input corporation Ltd.

There are many market point in kailali Due to transportation and other facility available than other district of FWDR, many small businessmen (Galla Byapari) are working in wheat and other agricultural marketing. Dhangadhi is the main marketing of kailali. All the agriculture product collected in this market from the local market. Local market of kailali are as follows:

Table No 4.20
Main Local Markets in Kailali

SN	Market name	Distance from Dhangadhi (km)	Transportation facility
1	Tikapur		Bus
2	Satti		Bus
3	Chisapani		Bus
4	Lamki		Bus
5	Chuha		Bus
6	Pahalwanpur		Bus
7	Masuriya		Bus
8	Chaumala		Bus
9	Sukhad		Bus
10	Attariya		Bus
11	Malakheti		Bus
12	Bhajani		Bus
13	Phulbari		Bus
14	Joshiapur		Bus
15	Hasuliya		Bus
16	Khandada		Bus
17	Phaltude		Bus
18	Sadekpur Bauniya		Bus

Besides of them there are other many small local market in the district where wheat and other agriculture products are selling and buying. The above table shows that every market have transportation facility. Every one can reach there by vehicles like bus, truck, tractor and other small vehicles. The transportation facility helps to enhance and encourage the farmers, businessmen for development of marketing.

In this district, there are operating the Agricultural product Hat Bazaar. They are:

Table No 4.21
Agricultural product Hat Bazaar in kailali

SN	Market Place	Market Day
1	Tikapur 1	Saturday, Wednesday
2	Dhangadhi 1	Sunday, Tuesday, Friday
3	Dhangadhi 3	Saturday, Monday, Wednesday,
4	Attariya	Saturday, Wednesday
5	Lamki	Saturday
6	Banbehada	Thursday
7	Chaumala- 3	Saturday
8	Joshiपुर	Monday
9	Chuha	Friday
10	Masuriya	Saturday
11	Bhajani	Sunday, Thursday
12	Tikapur	Friday

Source: DADO , Kailali

North side of kailali is lies India, which is more developed and available more facilities than it. So markets for the most of the important farm products is till concentrated in India. The change in India, markets affect the performances of the markets in Kailali.

Agriculture tools , fertilizer, capital are most essential things for wheat and other agriculture cultivation. Many agro vets, cooperative institute, dialers are working in the kailali, that have been providing agricultural and marketing loan, agricultural tools, fertilizer and technical support. The following table shows the number of institution working in field of agriculture to support them in kailali.

Table No 4.22**Agriculture support Organization in kailali**

SN	Organization Category	Number of organization
1	Agro vets	79
2	Fertilizer sellers	187
3	Cooperatives	283

The above organization are working for the support of farmers. Besides of various Galla Byapari in kailali. There are big Agro-industries. They has been also purchasing and selling wheat from a longtime. The following table shows the name and located area of agro-industries that are related to wheat marketing;

Table No 4.23**Argo-Industires related to wheat marketing in kailali**

SN	Name of Industries	Name of Proprietor	Address
1	Gyan Industries (P) Ltd	Tolaram Dugad	Geta 5
2	Nepal food products	Tolaram Dugad	Geta 5
3	Hukam Food Ptv.	Huxum chand Dugad	Dhangadhi 9
4	Sarada rice & oil mill	Puran lal Gupta	Geta 9
5	Rajshree food product	Om Prakas Agrawal	Geta 9
6	RP modern industries	Om prakas Agrawal	Geta 4
7	Kohanoor Agro. Ind.	Bhal chanre Dugad	Geta 7
8	Chandan Nath mill	Nar narayan shah	Dhangadhi 2
9	Lok Taj Rice & oil mill	Laxman shreshtha	Dhanssingpur
10	Bhumiraj rice mill	Ghanshyam Bhatt	Geta
11	Bijay industries	Humum Chand Dugad	Geta
12	Jia Prakas industries	Jai Prakas Mohapal	Attariya

13	Mohapal modern Ind.	Satya Parkas Mohapal	Attariya
14	BR food products	Bhuwan Prakas shah	Dhangadhi 1
15	Sangrila food Ind.	Hem Lal Upreti	Chuha 1
16	Nov Durga food Ind	Bishnu Prasad Arjel	Dhangadhi 2
17	Nav Durga Ro & F mill	Sidda Raj Pant	Geta 2
18	Dinesh agro industries	Gopal Hamal	Geta 7
19	Godawari flour mill	Rajendra k. Agrawal	Dhangadhi 13
20	Shree ram Rice mill		Geta 4

Most of industries and wheat seller (Galla Byapari) of kailali are operating their business with the credit help of financial institute. Most of Big Businessmen have a credit from joint venture bank and middle and small businessmen have a credit from govt. bank and other Bank. In the case of loan disbursement , according to quantity, ADB has covered more area and businessmen. The following table shows the name of bank , are increasing and enhancing the marketing of kailali district with the help of credit.

Table No 4.24
List of Bank in Kailali

SN	Name of the Bank	Address
1	Agriculture Development Bank Ltd	Branch Dhangadhi
2	Agriculture Development Bank Ltd	Banking , Dhangadhi
3	Agriculture Development Bank Ltd	Tikapur
4	Agriculture Development Bank Ltd	Bhajani
5	Agriculture Development Bank Ltd	Hasuliya
6	Agriculture Development Bank Ltd	Sukhad / Attariya
7	Nepal Bank Ltd	Dhangadhi

8	Nepal Bank Ltd	Tikapur
9	Rastriya Banijya Bank	Dhangadhi
10	Rastriya Banijya Bank	Attariya
11	Rastriya Banijya Bank	Bhajani
12	Malika Bikas Bank	Dhangadhi
13	Malika Bikas Bank	Tikapur
14	Everest Bank Ltd	Dhangadhi
15	Bangalades Bank	Dhangadhi
16	Bank of Kathmandu	Dhangadhi
17	Bank of Kathmandu	Attariya
18	Nav Jeevan Co-operative Bank	Dhangadhi/Attariya/ Tikapur
19	Kanchan Development Bank	Dhangadhi/ Attariya
20	Global Bank	Dhangadhi
21	Sunrise Bank	Dhangadhi
22	Krist Bank	Dhangadhi
23	Arian Development Bank	Dhangadhi

The consumer's demand for grain is spread over the whole year. Thus farmers have to store the harvested food grain to make the grains available at the desired time. But in the lack of storage facility farmers are forced to sell off their product soon after the harvest is over and middlemen takeaway a huge portion of their profit.

A farmer and seller in village in generally poor and the unit volume of transaction is very small. Individually they can't have bargaining capacity. Under the such condition they can't sell the products at better price. So they have to introduce their business on the behalf of big seller or businessmen of agricultural products.

Though there are some institutions for marketing governments efforts are unbalanced between production and marketing. Many efforts have been done and are still being done in production side such as irrigation and extension but not enough attention has been given to market side. That is why present marketing services are as traditional as there were before the outcome of co-operatives and other institutions in the public sector. Problem of inadequate market information still exist, which hampers the development of organized market. It may there for be concluded that in present situation also the problem of infrastructure information, innovation and management disturbed the development of organized market and cultivations are always unable to obtain a fair price for their produce.

4.2.3 Existing Wheat Marketing Situation in Kailali

Generally, we think that selling and buying of goods and services is marketing. But in actually, marketing has broad concept.

Marketing is the process of planning and exchanging. The conception, pricing, promotion and distribution of ideas , goods and services to create exchanges that satisfy individual and organizational goals. Marketing encompasses all the activities aimed at satisfying the needs of the customers through the exchange relationships to achieve organizational objectives with social responsibility in a dynamic environment.

In this chapter, I will try to express about the various activities adopt in marketing system of kailali which is concern to wheat marketing.

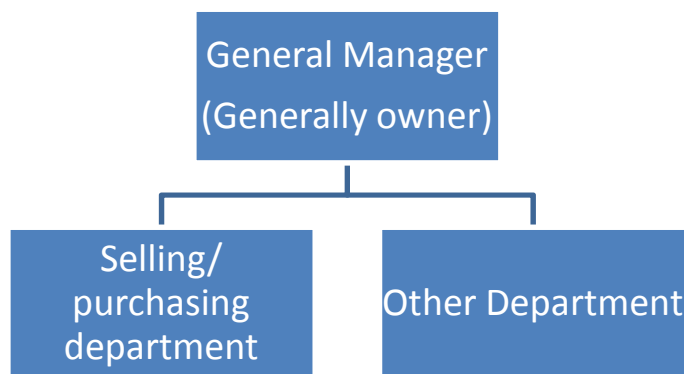
4.2.3.1 Marketing Department:

Generally, if we see selling and purchasing activities of wheat in kailali, we can define the marketing department in two way. The big types of wheat

seller and purchase has adopt some department system in their business like selling/ purchasing account, administration department. That is in a few and few business. In majority, all the small business concern and in maximum big business concern has been adopted only one department, that is selling and purchasing department that all the marketing functions are ruling by it.

So I can say that is the simple sales department organization we can see it in the figure.

Figure No 4.19



In Kailali , marketing department are not organizing as the concept. But it can say they have been adopting functional organization.

4.2.3.2 Marketing Environment:

Marketing can be effected by internal and external environment. viz. product, price, place, promotion, organizational objectives, policies, resources structure and political , economic, social cultural and technological factors.

The wheat marketing of kailali is also effected by several factors. Farmers of remote area has low source of income, so they have to sell their product in low price which is available for maintaining home expenses. There is no participation of farmers in determining the price. They have to sell their product in the price of big wheat purchaser and seller which are known as Galla-Byapari. The market of wheat is also effected by the market of India.

4.2.3.3 Market Segmentation and Market Coverage

The wheat market segments of kailali are defined in two type that is:

- a) Consumer market
- b) Industrial market

The marketers or sellers purchase wheat from farmer and then they sell it into final consumers. This type of seller are located at high population density where the wheat and wheat flour user. This type of market segment is effect by geographical and behavioral variables.

Those seller who purchase wheat for resale or Maida industries are located in main market point where they can easily connect and conduct their marketing function. This type of wheat marketing of kailali is effected by geographic and demographic variables.

If we want to know about the wheat marketing coverage of kailali, it can be divided into three parts:

- a) Local market coverage
- b) District market coverage
- c) National market coverage

There are many small size of wheat seller and purchaser in remote , rural area and production area. They collect wheat from farmers directly and sell it to big wheat seller and purchaser.

The big type of wheat merchant, located in Dhangadhi , Attariya, Tikapur are collected wheat from small wheat seller and purchaser. Some big wheat merchants located in Dhangadhi are Om Prakas Gupta, Rajendra Prakas Gupta, Jyoti Prakas Mahapal, Tola Ram Dugad, Bal Chandra Dugad, Gopal Hamal. They distribute wheat to maida mills of different parts of Nepal. Mainly, wheat of kailali is distributed to Bhairahawa , Biraganj, Kathmandu, Biratnagar and Hilly area of far west region.

4.2.3.4 Marketing Channel

According to Prof. Williom Stantan, "Distribution channels consist of the set of people and firms involved in the transfer of title to a product as it moves from producer to ultimate consumer or business user.

Generally speaking, channels of distribution mean middlemen or intermediaries who distribute goods and services from a manufacturer to the final consumers or users. The main purpose of the channel of distribution is to deliver goods and services of a manufacturer to the target market through exchange processes. In this process title to the goods or ownership is transferred from manufacturer to the ultimate consumer or industrial users. A channel may be a group of people and /or firms through which the goods are transferred.

In the wheat market operation of Nepal there are large sequence of intermediaries. A majority of the farmers are not aware of the prevailing malpractices in the market, which help middlemen to obtain more benefit in wheat trade.

The wheat marketing channels of kailali are divided into following part:

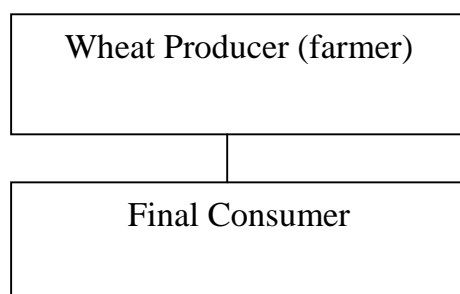
a) Channel structure of wheat marketing in kailali for consumer products:

i) Zero Level Channel:

In this level, the wheat producers or farmers sll their product (wheat) to final consumers directly. This can be seen in following figure:

Figure of the zero level channel for consumer market wheat

Figure No 4.20

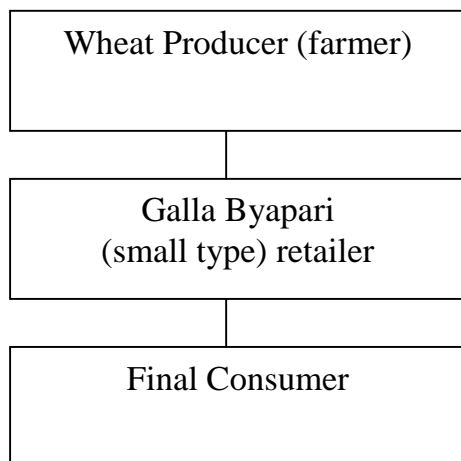


ii) One level Channel

In this channel structure, small types of wheat sellers (Galla Byapari) retailer has been working between wheat producer and final consumer. They are small type of wheat collector, who purchase wheat from farmer all sell it to final consumers. It can be seen in following figure:

Figure of one level channel for consumer market of wheat

Figure No 4.21

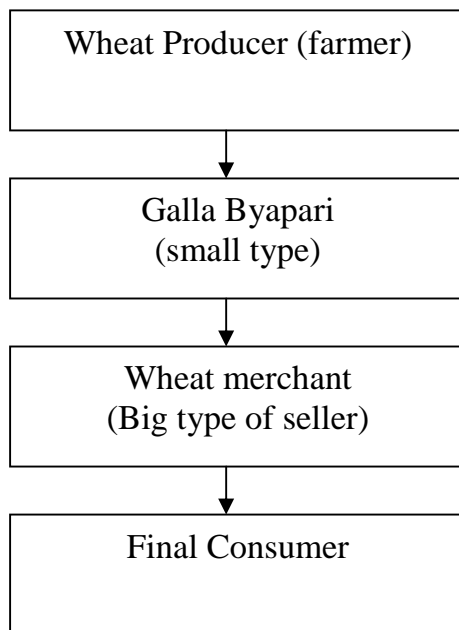


iii) Two level channel

In this channel structure , two level of channel middlemen are used they are wholesalers and retailers. Small wheat purchaser and big wheat purchaser (wheat merchant) and working as marketer between wheat producer and final consumer. It can be seen in following figure:

Figure of two level channel for consumer market of wheat

Figure No 4.22

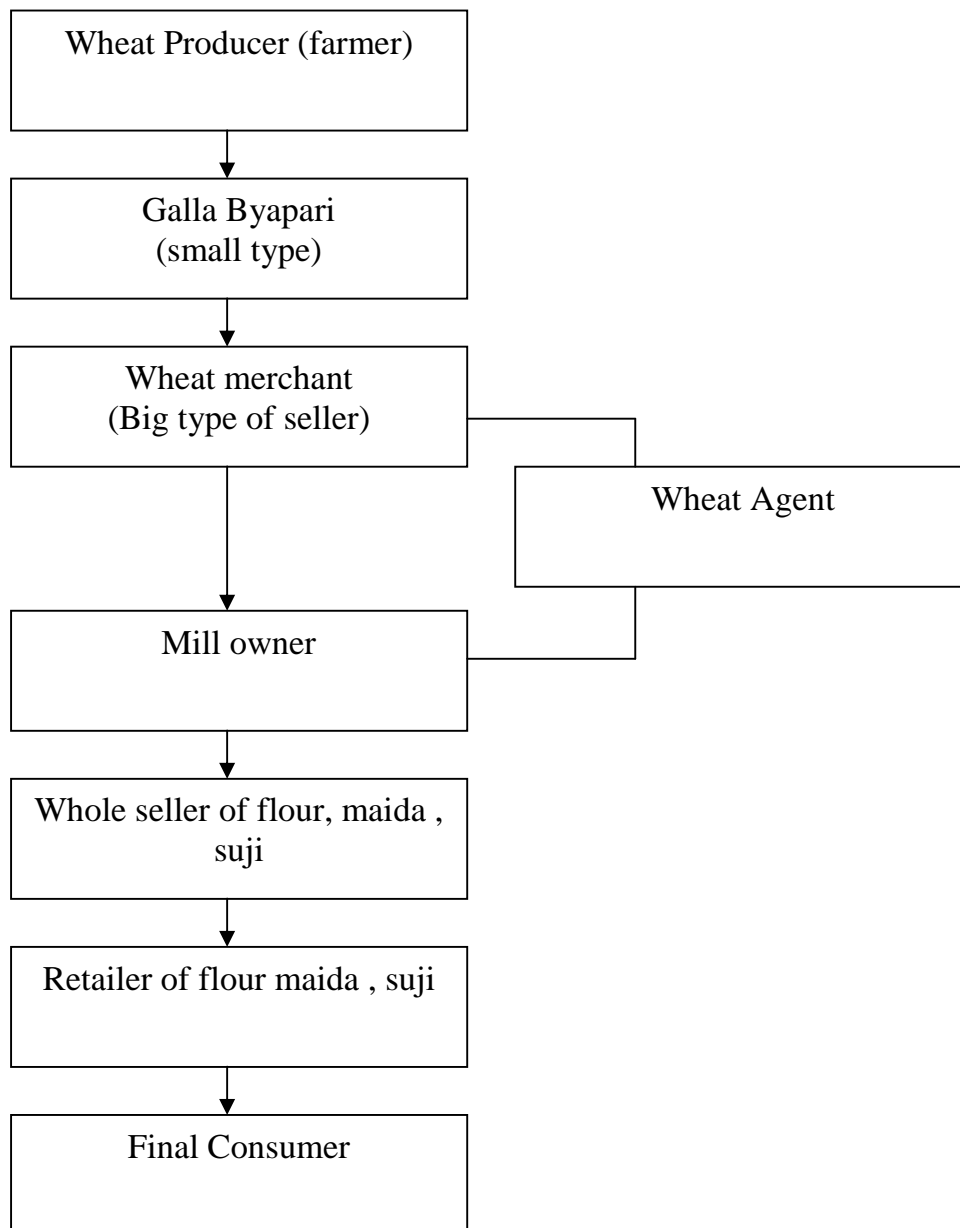


b) Channel structure of wheat marketing in kailali for industrial products

Most part of wheat is collected by wheat merchant for industries. They sell wheat to maida mills lies in kailali and other part of Nepal. In this process the wheat producer, small Galla-Byapari, big wheat merchant, mill owners, whole seller, retailer and final consumer have been involving. According to wheat merchant , some times the wheat agents play their role in wheat marketing. It can be seen this channel in following figure:

Figure of marketing channel of industrial marker of wheat in kailali

Figure no 4.23



4.2.3.5 Wheat Pricing

The main function of agricultural marketing is to determine the price of every agricultural product from its farm gate to its consumption stage. Fair and reasonable pricing system of agricultural production is one of the most effectively encouraging criteria to the producers and consumer as well.

Price stability is an important thing. But in our county , price of food grains are moving ups and downs over the periods. It is the same problem of kailali district. There is not strict rule and pricing policies that compel the people to follow the price rates exercised by the businessman or traders. In general agricultural producers often receive low prices for their products because they are obliged to sell them in the market at a time when supply exceeds demand. Moreover , storage facilities are inadequate both in number and capacity. The working capital of producers and merchants is limited. Thus the bulk of marketable surplus moves to the market within 2 or 4 months of the harvest period. Price trends to be the lowest during this period and reach their peak during the planting and before the monsoon. The traders or middlemen who stock the wheat in what in what so ever limited quantity earn rather unreasonable profit from their trade.

The main problem of pricing in kailali the farmer or producer, who are actual owner or first marketer, have not effective role in price determination. They have to sell their product in the price that determined by wheat merchant or traders. They are not getting reasonable price in the ratio of profit obtain by wheat merchant whole the marketer of wheat is effected on behalf of merchants or traders.

I can say that wheat merchants have monopoly in wheat pricing. He determines the purchase price and sells price of wheat. In what prices he purchase, he add his profit and sell in to flour, maida mills. It can say that it is the method of cost oriented pricing and it is widely used flexible pricing policy. It is the single pricing policy.

The following data are collected from different farmer, wheat collector and wheat merchant that shows the purchasing and selling pricing situation of wheat in kailali in season and off season.

Table No 4.25

Average PP and SP of wheat in kailali in season

F/Y	Purchase price Rs/qt	selling price Rs/qt	Variation in SP and PP	PP increase in %	SP increase in %
2061/62	1500	1550	50		
2062/63	1550	1650	100	3	6
2063/64	1575	1700	125	2	3
2064/65	1600	1725	125	2	1
2065/66	1650	1800	150	3	4

The above table shows that the purchase price and sell price of wheat in season in kailali district is in increasing trend every year. The variation of PP/SP is also increasing. Increasing data of PP in the year 2062/63, 2065/66 is 3% and 2063/64, 2064/65 is 2% in the year 2062/63 SP increasing rate is 6% then it is decreasing rate in 2063 to 2064 but increased in year 2065/66.

Figure No 4.24

PP & SP of wheat in season in kailali

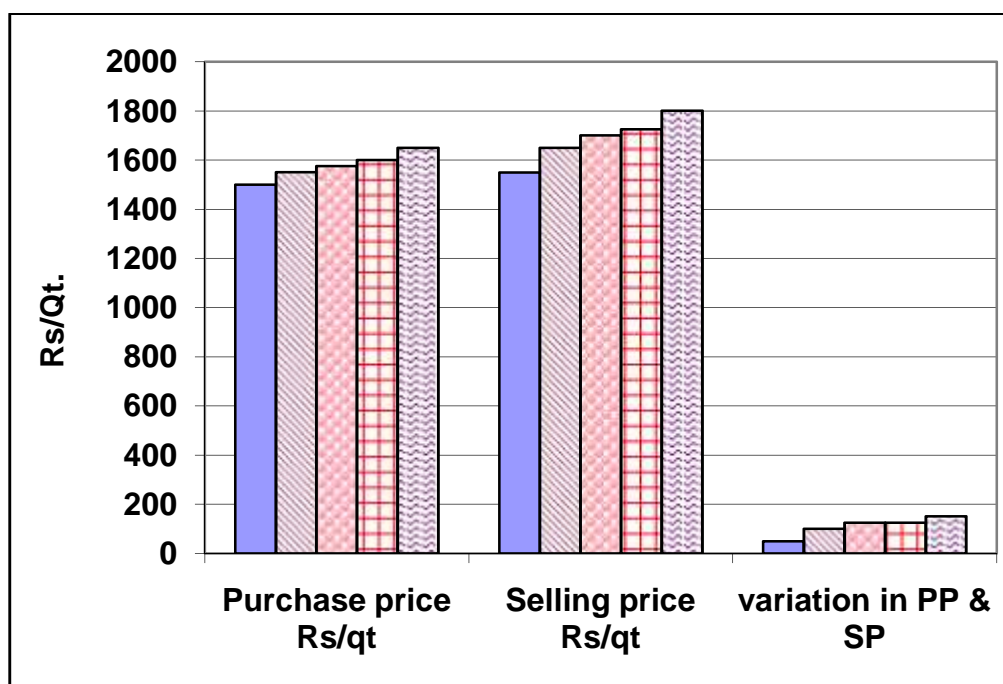
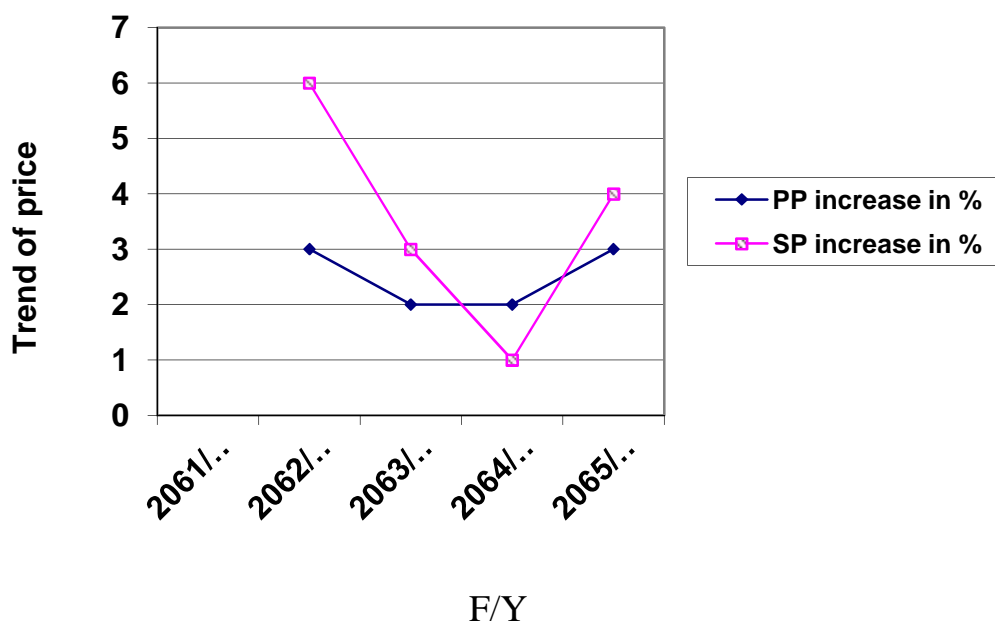


Figure No 4.25
Trend of PP and SP of wheat in kailali



The above figures clearly show the PP , SP and its trend in kailali of past wheat five year. The price is decreasing order in 2062/63 to 2064/65 but increased in the year of 2065/66.

Table no 4.26
Average PP and SP of wheat in kailali in off season

F/Y	Purchase price Rs/qt	selling price Rs/qt	Variation in SP and PP	PP increase in %	SP increase in %
2061/62	1600	1750	150		
2062/63	1700	1850	150	6	6
2063/64	1750	1875	125	3	1
2064/65	1775	1900	125	1	1
2065/66	1800	2000	200	1	5

The above table shows that the purchase and sell price of wheat in off season in kailali district is increasing trend every year. The variation of PP and SP is net stable. The PP and SP in highly increased in the year of 2062/63 that is increased by 6%.

Figure No 4.26
PP & SP of wheat in Off -season

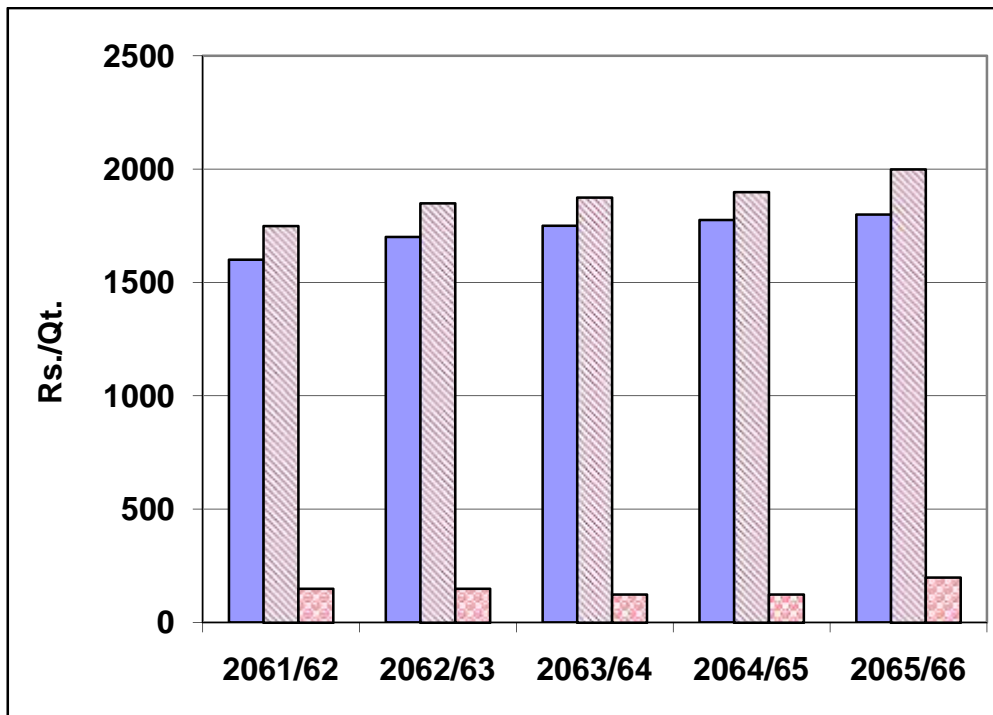
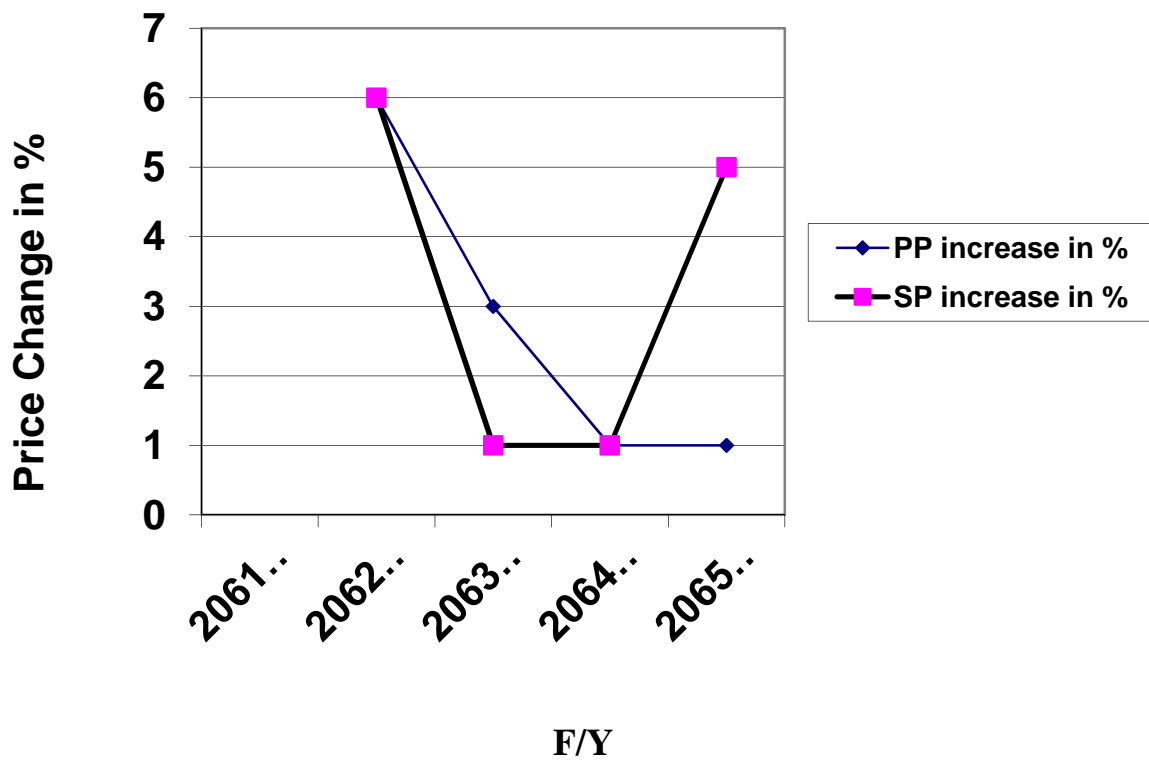


Figure No 4.27
Trend of PP and SP of wheat in off season



The above figures clearly show the PP, SP and its trend in kailali of wheat past five years. The purchase price is stable in 2063/64 to 2065/66. The selling price ins decreasing 2063/64 to 2064/65 but increased in the year of 2065/66.

The price behaviour has much impact on efficiency in marketing. The sharp ups and down in prices as shown in above table is belived to be one of the factor of risk and in certainly of wheat market which as responsible in low production in spite of its potential.

4.2.3.6 Profit Margin

The data are collected by questioner and discussion to the farmer , small Galla-Byapali , wheat merchant. According to them, farmers are not getting proper profit. They only getting profit to recover the production cost and sometime they have to loss. The small Galla-Byapari, are getting little profit. They collect wheat directly from farmers and sell it to wheat merchant in little profit (near 5 to 10%). The big wheat merchants, they have storage facility and they determine the price of wheat. They get more profit margin near about 10 to 40%. They purchase in season and storage it, sell it in off-season to get profit margin.

For this study, the data are collected to know the profit margin situation of wheat in kailali. The data are collected in three category like wheat trade is profitable, deficit and expenses coverage. The following table shows the profit situation provided from survey.

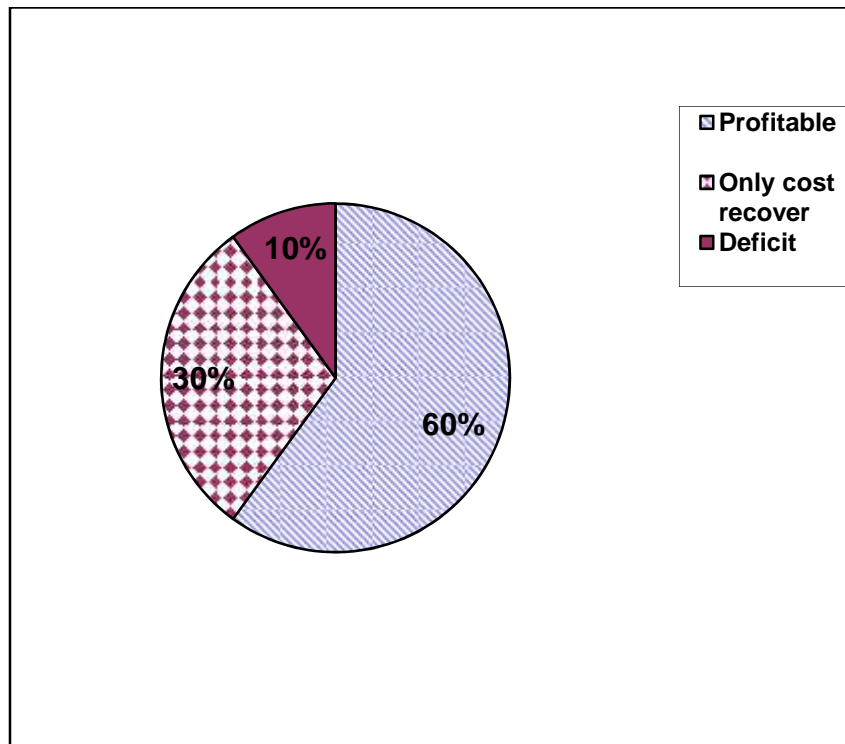
Table No 4.27

Profit margin in wheat trade

Profitable	Only cost recover	deficit	Total
60%	30%	10%	100%

From above table, 60% of wheat seller express that wheat trade is profitable, 30% express that wheat trade is no profitable. It is only cost recover 10% wheat traders or seller express that wheat trade has no profit, it has deficit.

Figure No 4.28
Profit margin in wheat trade



4.2.3.7 Transportation:

Transportation is one of the important factor of marketing. The development of the country is also depend on transportation facilities. Without the transportation facilities, producers can not carry their products from production centers to marketing centers. Thus transportation has its own importance in the function of physical supply of commodity.

Kailali is a Terai district. So , it can be easily carried products one placed to another place with any means of transport. The graveled and temporary roads are linked one corner to another corner of the district. The government has also forecast and going the build the agricultural roads in different area of district. Some defined agricultural roads are as follows,

S.N.	Name of the road	Length of the road
1.	Joshipur to lalbojhi	15km
2.	Sukhad to Khairala	18 km
3.	Gulara to Gadariya	10km
4.	Rajipur to Gadariya	9km

The black top road is also connected to the different parts of the district. Mahendra highway which links the whole nation, Bhim Datta Marg, Tikapur Marga, Dhangadhi, Attariya marga are located in this district. Thus Kailali is established as the market centre of far west region and success to take a place as one of the marketing points of the country.

4.2.3.7.1 Transportation System

The transportation system, used by the wholesalers, retailers and consumers, is defined in three types. Transportation tools are used in local market of remote area, local market of city area and export to another area.

The nearest market of remote and village of Terai area, the wholesalers, retailers usually use to carry wheat by bull cart, tractor, bus and truck. From the data collection, it is found the use of vehicle for carrying of wheat is as follows:

Table No 4.28

Use of vehicles in remote area of Kailali for wheat marketing

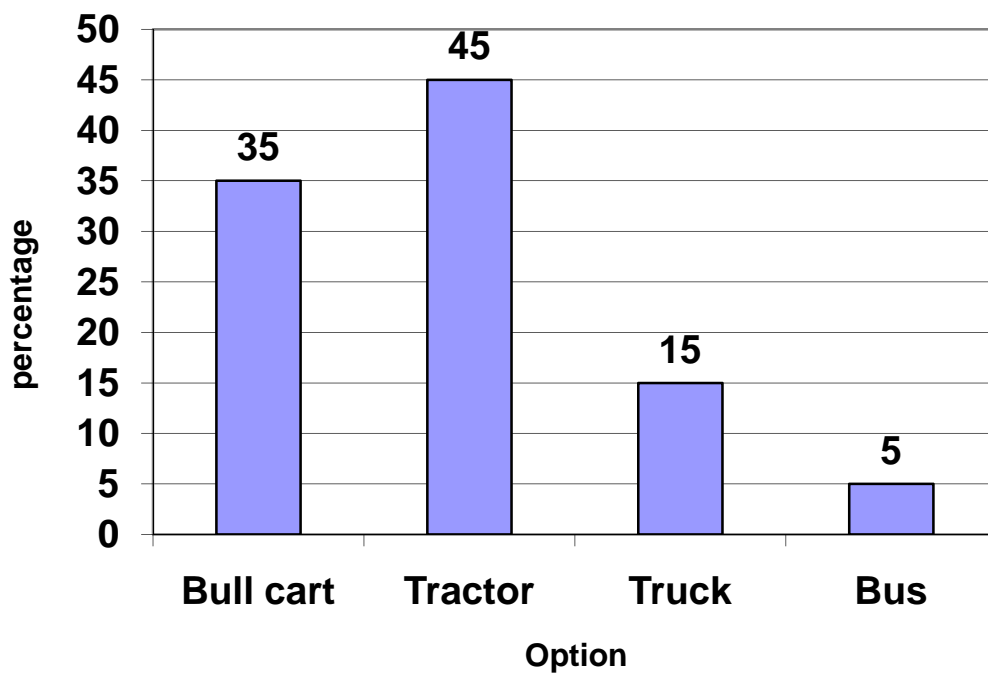
SN	Option	Percentages (%)
1	Bull cart	35
2	Tractor	45
3	Truck	15
4	Bus	5
	Total	100

In the above table we find that 45 percentage of the wheat is supplied from the remote of this district by tractors, 35 percentage by bull carts, 15% by truck and 5% by bus. By this we can know that mostly off the wheat is supplied to the remote by tractors and bull carts.

The above table can see in the following diagram

Figure No 4.29

Use of vehicles in remote area for wheat trade



The nearest market of city area of terai area like Dhangadhi , Tikapur, Attariya the whole sellers retailers usually use to carry wheat Bull cats, rickshaw, tractor, jeep, tempo and truck. From the data collection, it is found the use of vehicle for carrying of wheat is as follow;

Table No 4.29

Use of vehicles in city area of kailali for wheat marketing

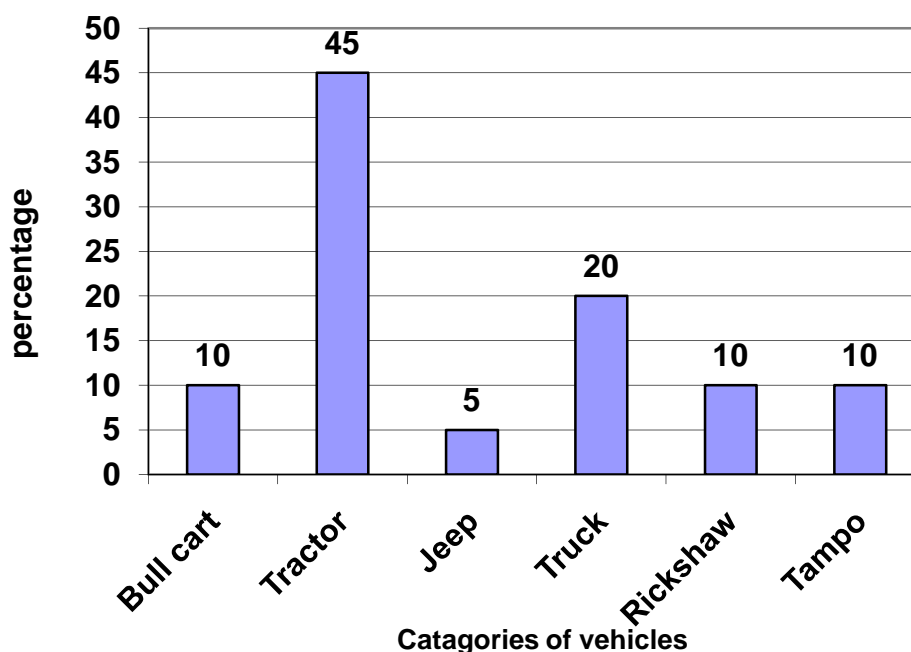
SN	Option	Percentages (%)
1	Bull cart	10
2	Tractor	45
3	Jeep	5
4	Truck	20
5	Rickshaw	10
6	Tempo	10
	Total	100

In the above table we find that 45% of the wheat is supplied in city area of this district by tractor, 20% by truck, 10% by rickshaw, tampo and bull cart and 5% of jeep. By this we can know that mostly of the wheat is supplied in city area by tractors and truck.

The above table can see in the following diagram

Figure No 4.30

Use of vehicles in city area of kailali for wheat marketing



But , in the hilly area of this districts, bus, horses and men are used as transportation tools.

4.2.3.7.2 Transportation Cost

According to survey, the transportation cost of different vehicles in kailali district is as follow:

Table No 4.30

Average transportation cost of wheat in local area

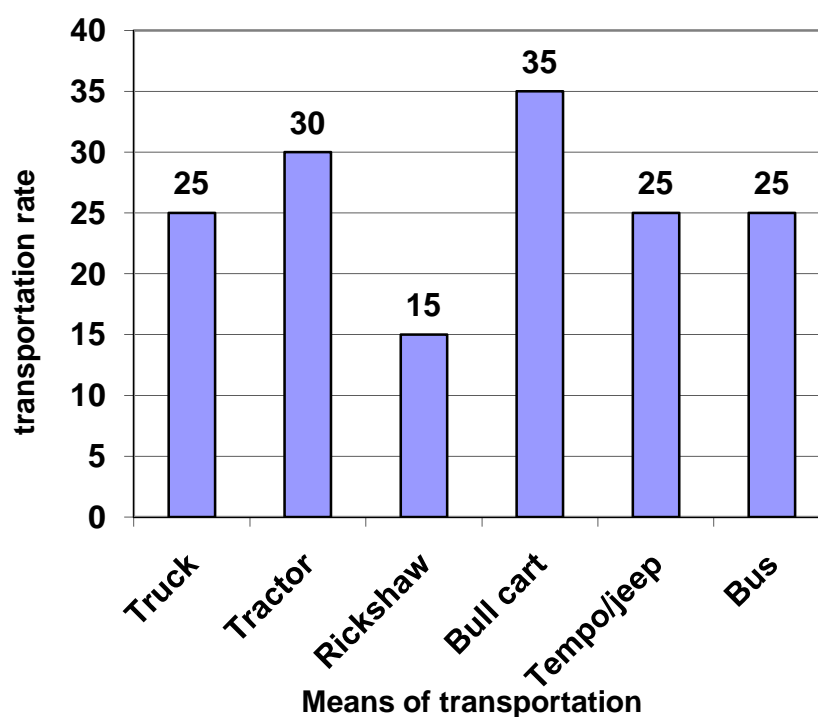
SN	Means of transportation	Transportation cost Rs/qt
1	Truck	25
2	Tractor	30
3	Rickshaw	15
4	Bull cart	35
5	Tempo / Jeep	25
6	Bus	25

The above table shows that the transportation cost per quintal of wheat. The rate of truck, tractor, tempo/jeep and bus have same rate. But the tempo, jeep and bus are rarely used for transport. Into the market area, like Dhangadhi , Tikapur Rickshaw is used by customer, some businessman for a few goods. Other wise truck, tractor and Bull cart are used. The farmers are used bull cart for transportation of wheat. In the village area the main transportation means is the bull cart. The businessmen and villagers say that it is very useful to us because it can easily available and it can drive every where and any kinds of road.

The above table can see in following diagram

Figure No 4.31

Wheat transportation cost in local area of kailali



The wheat merchants supply that collected wheat to the different part of Nepal. According to wheat merchants the following table shows that the transportation cost of wheat for supplying by the truck.

Table No 4.31

External wheat transportation cost

SN	From - To	Cost Rs/Quintal
1	Dhangadhi - Nepalgunj	50
2	Dhangadhi - Kathmandu	220
3	Dhangadhi - Bhairahawa	85
4	Dhangadhi - Biratnagar	230
5	Dhangadhi - Birgunj	190

4.2.3.8 Storage Facilities of Wheat

Wheat is produced at certain season and consumed throughout the year. So, it is necessary must be stored properly until not been consumed

Wheat storage practices is divided into following sector:

a) Farmer sector:

They have not sufficient storage facilities. Most of farmers are stored their product in traditional ways. Most of them use Bhakari (made of wood and bamboo plastered with mud). Some use drums. Most of them are stored for only home use purpose. Our of home use product, they sell just after harvest.

b) Mill owner sector:

In kailali , there are several small types of flour mill. But they have not enough storage facilities. They take wheat and change it into flour, and supply their consumer recently. In kailali , there are several flour mill which accumulate wheat at harvesting time and store it until it is not needed.

c) Wheat merchants sectors:

There are several wheat collectors in different part of district. They purchase wheat from farmers directly and sell it to wheat merchants. The wheat collectors have not enough facilities to store the wheat. But the wheat merchants have facilities of storage. So they store it until price increasing and get better profit. In this district, Dugad Group have largest storage facility about capacity of 100000 Quintal.

d) Co-Operative sector:

In kailali , there are many co-operatives. The newly established co-operatives have not Godam facilities. But the old co-operatives, which were ruled by government in past, have Godam facility. Some of them of Gilla

Shajha sastha, Masuriya Sajha sastha etc. Some those types of Godam are destroyed by past conflict situation of Nepal.

4.2.3.9 Wheat product decision and promotion strategy

Wheat product decision contents the difference varieties of wheat product. That is the processing of wheat packaging, branding, new product development, product differentiation , labeling etc and channels of giving information to consumer about the product viz, advertisement , public relations, personal selling , sales promotion and direct marketing.

In kailali, there are very flour mills but they are small scale and only product flour from wheat. They are in traditional type and wheat flour produced by those mills are not fine quality. Wheat type of wheat they found and produce flour at it is. They are limited in local area. So they have not use promotion strategy but it is effected by personal relation.

In the case of wheat merchant, that type of wheat they purchase, sell to the flour mills at it is. They do not use branding labeling. The survey shows that they do not have or if have do not use the concept of product positioning, product differentiation , new product development. For packaging , they use simple jute bags. They do not use label. For the promotion of product, they do not use expensive promotion objectives. They sell their product by the only public relation and similarly use phone media. Because big maida mill are the consumer of wheat merchant which are in few quantity.

Now a newly established big flour mill named "RP flour mill" lies in this district. This mills lies between the border of Dhangadhi munipality Geta VDC ward no 4 Rampal Agrawal , who is the owner of the mill is also known as big

wheat merchant in kailali. There is another big flour mill named Godawari flour mill." In far west region there are several flour mill that lies in Mahendranagar kanchanpur. But it is very smaller than it.

4.2.3.10 A short description about RP flour mill

Name : R.P. flour mill

Address: Geta VDC ward No 4 kailali

Owner: Ram Pal Agrawal

Establishedon : 2064

No off working staff (including labour) : About 80

Brand name of product: Ramailo , Bigul

Product varieties:

Table No 4.32

SN	Product	Packaging	Average rat
1	Maida	Available in 20&50 kg pack	Rs. 26
2	Suji	Available in half kg. 20kg pack	Rs 28
3	Flour	Available in 5,20 & 50kg pack	Rs 24
4	Chokar	Available in 40 kg pack	Rs 15

4.3 Wheat marketing strength, weakness , opportunity and Threats

Strength: Advanced technology, skilled staff and labour, owner is experienced with trade. Easily provide raw materials (wheat)

Weakness: Skilled labour are not available in local market. They have to obtain from India

Opportunity: It is the one of biggest mill in far west Region. All the people of this region are its consumer and it can export the product India and other part of Nepal. Big market coverage and market growth.

Threats: Indian market and their product competition to other flour mills located other part of Nepal and their market coverage and growth.

4.4 Promotion System:

Advertisement : In newspaper , visual and audio

personal selling: By wholesaler

Public relation: Deep relation with wholesaler

4.5 Market Coverage and Growth :

According to survey and mill administration, 80 to 100% market has covered by this product in local area and far west region. It market growth is speedly enhanced other parts of Nepal. It is possible to export India in near future.

CHAPTER - 5

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

Nepal, where 80% people engage in agriculture, is an agricultural country. 15% area of country contains 16 districts cover terai area. Within terai kailali is the most important district in the view of production and agricultural market where 80.4% people engaged in agricultural.

All the rural area of this district take importance place for production and Dhangadhi. Tikapur, Bhajni, Phulbari, Attariya, Lamki etc are main markets point and several small market are located in this district.

All the primary data are randomly collected from farmers small Galla Byapari , wheat merchants, small mill owners, R.P. flour mill and final consumers. In totality 100 sample are selected secondary data are selected from different institution most of the presentation and analysis are made on primary data and some are used secondary data.

5.2 Findings of the Study

The major findings of the study are as follows:

- About 80% people are depended on Agriculture in kailali district.
- Besides of hilly area, terai area is suitable for wheat production, Malwara sector is the main production area of this district.
- Elimination of kamayya Pratha effects production and productivity of agriculture.
- 16 different bank branches are located in different part of this district. Besides of then 5 loan Branches of Agricultural Development Bank Ltd. are located in rural area also. It is found from survey that 95% of total

institution loan is served by ADB, Big wheat merchant has been taking loan from joint venture bank that are below 5% in quantity.

- In the year 2054/55 to 2065/66 the yield rate of wheat in kailali increased and decreased from 2.3mt/he. to 1.8 mt/he.
- The production trend is increased in straight line and production is increasing and decreasing in Zigzag but the changes in both production and as well as are cultivated do not proportionate. Some year production is increased but decreased in cropland. But can't be proved that relationship between cultivated area and production is negative.
- The farmer gets 6% net return in un-irrigated land and 15% in irrigated land on improved seed of wheat in kailali district.
- The food balance of this district is 18.76% but it has been decreasing every year due to the migration and increasing in population.
- DADO has recommended 12 wheat variety for kailali district of wheat but it is bound that the wheat improved seed varieties sick NL 297, BL1022 bl1135 and Brikuti are heavily noed by farmers.
- As well as the climate of this district is so appropriate for wheat cultivation but there is lack of irrigation facility. Only 22% land has fully irrigation facility that is only 36% of total irrigated land. Besides it, that is partially irrigated.
- The yield rate of wheat in irrigated land is 3.22 mt/he. and 2.38 mt.he in un-irrigated land.
- Quality improved seeds are made available by NSC kailali. It is not sufficient to make reachable to the rural farmers.
- Farmers are not trained about using the dose of fertilizer, modern agriculture cultivation system, and their argument is, "They are left away from the help of government service, " from survey, it is found that 15% use chemical, 45% use both and remaining use compost.

- Due to low saving because of little sources of income farmers can't adopt improved method of farming, 60% farmers are adopting traditional farming system 30% farmers are adopting modern farming system and 10% adopting both farming system. The study also shows that farmers are adopting modern farming system and improved seed varieties of wheat. Medium and small farmers are adopting traditional farming system and local varieties of wheat seeds.
- 30% farmer take borrowing from local merchant, 50% from financial institution and 20% use own capital.
- 15% of total production is destroyed by plant disease and insects.
- In kailali, 12 Hat Bazaar are started in different part of district.
- In this district big Agro-industries are located. Besides of them. Besides of them 20 industries are related wheat trade too. And several wheat collector or Galla Byapari and small flour mills are located in the different part of the district. There also newly established modern flour mill named "R.P. flour mill."
- Dhangadhi, Attariya, Tikapur, Lamki, Pahalwanpur, Chamala, Narayanur etc are main market point of wheat trade.
- The price of wheat is higher in off season than season. The price of wheat is increasing every year. The trend of wheat price is increasing order.
- Farmers are not getting proper profit, small wheat collector (Galla Byapari) are getting little profit, but wheat merchant and getting more profit because the wheat merchants determine the price of wheat.
- Mahendra Highway and other Highway and other several graveled and temporary road are located in kailali.
- Tractor is heavily used as the means of transportation of wheat all over the district. In local bull carts and rickshaw are also using. But truck is used for supplying other district.

- Maximum transportation cost/quintal is Rs 35 in local market but in external market like kathmandu, Birganj, Bhairahawa is up to Rs230 per-quintal.
- The marketing department of wheat market in kailali is selling and purchasing department.
- Marketing environment of kailali is mainly effected by low income sources , monopoly of wheat merchant ad Indian market.
- The wheat market coverage of kailali is defined as local market coverage , district market coverage and national market coverage.
- The channel of wheat market is zero to two level in consumer product and five level channel is industrial product.
- Wheat is supplied into different part of Nepal viz, kathmandu, Birganj, Biratnagar, Bhairahawa etc.
- Storage facility is low in farmer sector. If they have that is traditional style so they are obliged to sell wheat in the market in low price. Only that wheat merchant has storage facility. They have godam houses but that is not sufficient.
- No modern concept is used for product decisions and promotions. They sell with their direct relation simply telephone is used.
- R.P. flour mill seems to use all types of marketing activities. It is very popular and earn to success its image due to its quality product.

5.3 Conclusion:

In spite of the government efforts to increase wheat production in kailali , production could not increased satisfactory. The productivity of wheat per hector has remained considerably low.

The finding of the study also shown that the inputs like chemical, fertilizers, improved seeds, irrigation, technical assistance etc increased the

wheat yield per hector. But still a large number of farmers are not obtaining proper amount of wheat seeds fertilizers at right time and right place. Most of farming are depending on rainfall for farming wheat. Government has more expenditure on agriculture. But farmers are away from government services. Due to the lack of controlling system of government and above causes, Nepal is suffering from low quantity as well as low quality of wheat production.

Although the total yield per hector is progressing yet, it is far below the target. Besides the unavailability of chemical, fertilizers and improved seeds, there are some other serious handicaps which affects the productivity of wheat cultivated area. Unavailability of cheap credit , lack of proper market of wheat problem of pricing , storage facility also effect the wheat productivity and wheat market. ADB ad other bank has invested huge amount in wheat production and wheat marketing. Food and agricultural marketing service department and RSC, RSL, AMDP, other NGO and INGO has been contributing a lot for wheat production and marketing. But still there is need of improvement in the functioning of this institutions.

Incremental production of wheat closely follows by an in incremental marketing system. But existing marketing network is quite inadequate and inefficient. In the absences of transportation and storage facilities, majority of wheat is marketed to village markets during the harvesting season at low price than they could receive some months later the season.

The present market structure has provided wide and alluring marketing margins to the middleman in food grains marketing. There is wide price difference between the price paid to the producers and the price paid by the final consumers. Such wide marketing margins has effected the wheat production and marketing.

Lastly, kailali district is the potential area of wheat production and there can be so much opportunity and strength in wheat marketing in kailali. But there are so much circumstances in wheat production and marketing. The government

and public sector must be tried to omit those circumstances and problems lies in wheat production and marketing.

5.4 Recommendations

On the basis of this study, some recommendations can be suggested to improve wheat production and marketing in kailali. They are follows:

- Most of farmers are cultivating wheat for hand to mouth. They are unknown about the wheat marketing. So farmers should be empowered and given to knowledge about benefit of wheat marketing and modern agricultural technology. So, education must be given to the farmers by the occasional training or by rendering information.
- It is necessary to manage "Grow more wheat campaign in different part of remote area of this district by the DADO. Also "Use better wheat seed" campaign should be done by DADO. In wheat development program emphasis should be given to raise the quality of wheat.
- Farmers have to establish their reference group for the welfare of the farmers.
- Farmers have to provide training about use of fertilizer, improved seeds.
- Farmers have low income and they always suffering from the capital. Thus cheap credit and technical assistance should be provided with easy terms and conditions.
- The construction of irrigation schemes should be speed up so that farmers can not depend on rainfall. In this work District Irrigation Office and group of the farmers should be activated.
- The government has been investing more budget for the agriculture development. But work is completed so little than the ratio of expenditure. The government has to manage a good controlling system of technical staffs and other variance of its subordinate offices like DADO etc.

- There is need to improve marketing by providing adequate transportation facilities by government and other sub ordinates institutions so that the small farmers can cultivate wheat for business purpose.
- Storage houses should be constructed to facilitate the farmers storing their wheat and provision should be made to extend credit against their product. In this work, social groups and government can effort.
- It is necessary to establish a good networking system of wheat market and it should be controlled through the market inspections.
- Price uncertainty of wheat has to be reduced through appropriate stabilization measures. So that farmers and consumer can sell and purchase their product in reiganeable price.
- Every consumer want to consume best quality in reliable price. So, grading and standardization system should be development.

In totality effort and support of government, motivation, curiosity and vision and change of social reference group like consumer group, business group farmers group etc and help of other institution related to agriculture is so necessary to achieve all the above recommendation.

ABBREVIATIONS

AD = Iswi Sambat

ADB = Agricultural Development Bank

ADBN = Agricultural Development Bank of Nepal

AMDP = Agricultural Marketing Development Program

ADBAM = Agricultural Development Bank Mamilala

BASE = Backward Society Education

BS = Bikram Sambat

BR = Brach

CATC = Central Agricultural Training Center

CBO = Community Based Organization

CDP = Crops Diversification Project

DADO = District Agricultural Development Office

DHN = Dhangadhi

DDC = District Development Committee

FAMSD = Food and Agricultural Marketing Service Department

FAO = Food and Organization

FG = Farmers group

FGCC = Farmers Group Co-ordination Committee

FWDR = Far western Development Region

Ha = Hectar

INGO = International Non-Government Organization

MA = Ministry of Agriculture

MBB = Malika Bikas Bank

MT = Metric ton

NGO = Non- Government Organization

NSC = National seeds Company Ltd.

NRB = Nepal Rastriya Bank

PPA = Production Packet Area

PICT = Project Implementation Consultancy Team

PIU = Project Implementation Unit

PSP = Private Sector Provider

PP = Purchase Price

Rs = Rupees

RSC = Regional seed company

RBB = Rastriya Banijya Bank

RSL = Regional Seed lab

RSL = Regional Soil Lab

SDCSM = Seeds Development & Control Service Main-Branch

SP = Selling Price

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Appendix - A
Questionnaire for Farmer

Name : _____ Address : _____
Age : _____ Sex : _____ Date : _____

1. What types of crops have you been farming?

Ans :

2. What types of wheat seeds do you use for farming?

a) Local seed b) Improved seeds c) both

3. What types of wheat cost is getting more production?

Ans :

4. What types of fertilizer have you been using?

a) Compost b) Chemical c) Both

5. Which technology do you use for wheat farming?

a) Traditional b) Modern c) Both

6. Are agricultural tools available in your local market?

a) Yes available b) No available

7. What types of irrigation facilities in your land?

a) Private b) Group c) Government c) Bank loan

8. Is there any irrigation facility in your wheat land?

Ans :

9. Where from you collected the production cost?

a) Own b) Local merchant c) Bank loan

10. Where do you sell the wheat?

a) Local Market b) market

11. In what rate do you sell wheat in season and off season?

a) Rs quintal in season b) Rs in off season

12. Who determine the rate of wheat?

a) Farmer b) wheat merchant c) Government

13. Have you any storage facility of wheat?

- a) Yes b) No

14. What types of vehicles have you use for selling wheat?

Ans :

15. How much pay the transportation cost for per quintal?

Ans :

16. How much you got profit from the wheat?

Ans :

Appendix - B

Questionnaire for Consumer

Name :

Address :

Age :

Sex :

Date :

1. What types of food do you like mostly?

Ans :

2. For what you use the wheat?

Ans :

3. Which variety of wheat you want to use?

Ans :

4. Where do you use wheat?

- a) Home b) Hotel c) Others

5. Why do you use wheat?

- a) Easy to consume b) For enjoy c) It is healthy

6. What type of wheat do you purchase?

- a) Wheat b) Wheat flour c) Own production

7. What type of wheat packaging do you want to purchase?

a) 5 kg pack b) 10 kg pack c) other

8. What type of quality do you want to purchase?

a) very good b) good c) medium d) low quality

9. Do you believe in advertising for the purchase the wheat?

Ans :

10. In what rate have you been purchasing wheat?

Ans :

11. How much do you use maida , Suji?

a) More b) Medium c) simply d) No use

12. Have you use choker?

a) Yes b) No

13. Which brand of wheat product item do you use?

Ans :

14. Have you any complain for your wheat brand which you use?

Ans :

15. Have you any suggestions for the wheat brands you use?

Ans :

Appendix - C

Questionnaire for wheat merchants

Name :

Address :

Age :

Sex :

Date :

1. When do you establish your shops?

Ans :

2. What types of crops do you purchase?

Ans :

3. Which varieties of wheat do you purchase more and sells more?

varieties of wheat	PP/qt	SP/qt

4. Where from you purchase the wheat?

- a) local market b) all district c) from border of India

5. From whom you purchase the wheat?

Ans :

6. Where do you sell the wheat?

- a) local market b) All district c) Export to India d) Other

7. Who are the your main consumer?

- a) wheat flour mill b) final consumer c) other

8. Who determine the purchase price of wheat?

- a) wheat merchant b) farmers c) Government d) other

9. Who determine the selling price of wheat?

- a) wheat merchant b) farmers c) Government d) other

10. What types of transportation means do you use?

- a) Bus c) Truck c) Tractor d) Bull cart

11. What types of profit / loss do you bear while selling wheat?

Ans :

12. What is your main problem while selling wheat in the market?

Ans :

13. Any problem and suggestion about the wheat marketing?

Ans:

14. How much do you pay the transportation cost?

Ans:

15. What is your options and regarding for the wheat selling and marketing?

Ans:

Appendix - D
Questionnaire for wheat flour mill

Name : _____ Address : _____
Age : _____ Sex : _____ Date : _____

1. Where from you start your Business?

Ans:

2. Which types of wheat varieties is purchased?

Ans:

3. What types of band have you produced?

Ans:

4. How much do you take cost for producing flour per kg?

Ans:

5. Have you and brand name?

Ans:

6. What types of packaging have your product?

Ans:

7. How much producing capacity of your wheat flour mill?

Ans:

8. How many product item do you produced in your flour mill?

Ans:

9. Where do you supply your product?

Ans:

10. How much do you get profit?

Ans:

11. Do you have loan taken to operate your firm?

a) Own investment b) Local creditors c) Bank

12. Average PP and SP in season/ Rs. quintal

Year	PP	SP

13. Average PP and SP in off season / Rs quintal

Year	PP	SP

14. Any problem and suggestion about wheat trade?

Ans

15. Any kinds of business training have you got? If get where from and what types of training?

Ans :

Appendix E

Total area of district :

Total area - 323500 he

forest - 209724 he

pasture - 6268 he

agriculture - 90550 he

other - 16958 he

Cultivated land - 90000 he

Khet - 68976 he

Pakho- 21024 he

Irrigated - 39780 he

Partially Irrigated - 29196 he

Food Crops

Paddy : 60600 he

Wheat : 34500 he

Maize : 5600 he

others : 450 he

Case Crops :

Sugarcane : 205 he

other cash crops : 125 he

fruit : 1600 he

vegetables : 9000 he

Potato : 6000 he

Spices : 5420 he

Pulse : 23180 he

oilseed : 20950 he

(Source: DADO, Kailali)

Situation of Domestic and small industries in Kailali :

Total industries

Besides of them Rice flour and oil mills and industries

Appendix F

Wheat cast which are certified for farming

- | | |
|------------------|-------------------|
| 1. NL 297 | 10. Tribeni |
| 2. NL 297 mul | 11. Bhashkar |
| 3. Sidhartha | 12. Binayak |
| 4. Lumbini | 13. LL 30 |
| 5. Annapurna | 14. S. 331 |
| 6. W.K. 1204 mul | 15. Larma 52 |
| 7. WK 1204 | 16. Larma rojo 64 |
| 8. RR 21 | 17. Pitak 62 |
| 9. Achyut | 18. Up 262 |