CHAPTER-1
INTRODUCTION

1.1 Background

Nepal is and agriculture based country where 65% of the total economically active population is engaged in this sector. For the balanced development of the country we have to give prime attention towards this sector. Nepal is a small Himalaya kingdom and one of the world's poorest nations. It is land locked between the China in the North and India in the South, East and West. It has and area of 147,181 Sq. Km.

Geographically, Nepal is located between 80^0 $4^{'}$ and 88^0 $12^{'}$ East longitude and between 26^0 $22^{'}$ and 30^0 $27^{'}$ North latitude. It is divided into three physiographical belts, the terai (A plane that lies along the southern border of India between 75 meters and 300 meter above the sea level), the hill (a wide band of hills between 300 meters to 3,000 meters), the mountain (a rugged surface rising 3,000 meters to 8,848 meters). In the north, only about 21% of the land is under cultivation. Of the total country's area, 17% falls on terai, 68% in hills and 15% on mountain. Agriculture is the mainstay of nation's economy, which provi9des 75% of employment which account for about 42% of nation's Gross Domestic Product (GDP) and two-third of export earning. But it is a matter of great irony that more than 40% people are below the poverty line.

On the bass of fruits cultivation, Nepal can be divided into following 4 zones:

1. **Tropical Zone**: It has high and hot temperature through the year except some periods in winter. The annual temperature exceeds 24^0C. There is no frost. The altitude ranges form less than 100m

to 1000m. The whole terai and lower valleys in the hills fall in this zone. Fruits that can be successfully growth here are mango, banana, papaya, pineapple, litchi, jackfruits, guava, etc.

2. **Sub-Tropical Zone**: This region is cooler than the tropical area but it has distinct summer and mild frosty winter. Summer is long and humid. Generally, altitude range is 1,000 m to 1,500 m with and annual average temperature of 17^0 to 24^0C. Lower mid-hills and low hills fall in this zone. Citrus fruits are predominate and other fruits grown here are pomegranate, fig, date, guava, avocado, strawberry and low chili peach, plum and apricot. (Shrestha, 2005:20)

3. **Mild-Temperate Zone**: In this zone, the climate is moderate throughout the year and winter is not very severe. Altitude ranges form 1,500 m to 2,000 m. During winters, the higher altitude may get snow. Mid-hills, base of the high hills and lower Mahabharata lekh fall in this zone. The annual average temperature is 10^0 to 15^0C. Peach, Plum, almond, apricot, persimmon, chestnut, etc. Can be grown successfully.

4. **Temperate Zone**: This zone has a pronounced winter with frost. Snow occurs every year. It is cold throughout the year with an average annual temperature being less than 10^0C. The temperature in winter is below 0^0c. The altitude ranges from 2,000m to 3,000m. Mahabharata lekh and high hills fall in this zone. Apple, pear, walnut and other stone fruits are grown here.

Fruits are one of the most important food items. It can be defined as the matured ovary of other flowers parts associated with it. Fruits are good source of vitamins and minerals required for human growth and health. Human beings have been consuming fruits form ancient times. Consumption of fruits increased with the development of human society. Due to the increasing health consciousness and also

increasing income level of the people, consumption of fruits, now a day, has grown significantly.

In general, fruits are of three types i.e. tropical (summer), temperate and citrus. The tropical fruits include mango, banana, guava, papaya, jackfruits, pineapple, litchi and coconut, etc. The production and productive area of tropical fruits in 2004/05 was 298,715 metric tones in 29,593 hectare. The total area under tropical fruits is 449902.70 hectare. In case of temperate fruits the total area of production is 18500 hectare and the productive area of temperate fruits is 9,525 hectare. Temperate fruits include apple, pear, palm, peach, apricot, persimmon, pomegranates, almond, etc. Similarly, productive area and production of citrus fruits is 156,956 metric tones and 14,606 hectare. The total area of citrus is 25,909 hectare; the citrus fruits include orange, sweet orange, lime, lemon and others.

Kathmandu, the capital district of Nepal, is situated in the middle part of Mahabharata hilly region. It one of the three districts of Kathmandu valley. It is situated at about 1340 meters above the sea level Kathmandu District has a temperate rainy climate, but is influenced by the tropical monsoon system of weather of the South East. Annual rainfall is about 1,800mm in the North-Western and South-Eastern parts including Godavari. Elsewhere in the valley, it ranges between 1,300 mm to 1,600 mm. The land of the districts one of the most fertile lands of the country thus the Kathmandu valley is regarded green bowel.

Although fruits possess immense values in Nepal and to its people but programs on fruits development in this country appear weak. The fact may be that fruits contribute very little in national GDP, i.e. 3.4% by the fruits versus 58% by food grains in agricultural sector during 1995/96. The government has initiated fruits development programs and activities in different ecological zones. Some progress and achievements have bee seen; but they are not to a satisfactory level.

Some factors and conditions that lead to cause one or more problems, which hindered fruits development activities are generalized in this section.

The economic status of the rural mass is very low. They cannot go for planting of fruits trees that require heavy initial investment as well as it requires high level of care and management practices regularly and continuously at the initial stage. This high initial cost has distracted farmers from fruits plantations. In one hand, small framers receive inadequate loans for farming while on the other hand, they are not sure of quality of their produce, its marketing and disposal. Above all, for them, food grains (cereals and millets) are more important than the fruits to sustain their existence.

Majority of Nepalese people have fragmented and scattered land. the increasing population growth and normal family separation further decrease the land size. in this country, over 50% of the farming households own land less than 1 hectare where fruits farming that need a large spacing is rarely possible. the small land size undulated and steep topography have also under appropriated the value of fruits and hence the production as well.

The vivid geography and topography available in this country are natural boon to create climatic diversities accommodating enormous biodiversities including fruits species that require from a cool to hot and from dry to humid conditions. The side of a mountain of high hills facing north has cooler weather than the slope facing south. Even the physical characteristics of solid of the valley and surrounding hills differ. These changes pose great diversity in adaptation of fruits trees. These factors are not considered properly and adequately of fruits trees. These factors are not considered properly and adequately planning process; thus in many places where we visit, planting of fruits trees in farmers field are defective. Also, their exist difficulties in transportation of inputs and farm produce. Marketing of perishable

produce such as fruits is a real concern. As a result, fruits growing business become difficult in this country.

Fruits trees need adequate temperature, rainfalls, wind, light and atmospheric humidity for proper growth and development of trees and fruits. Often times, frost, freeze, hailstorm, speedy winds and thunderstorms are seen in various parts of Nepal. They cause problems in fruits cultivation to a variable extent. Frost and freeze are so damaging to fruits trees that they may lend to death. Hails reduce imbalance sources and sinks relationship by destroying leaf surface. Speedy winds are responsible to disturb pollination particularly in the insect pollinated crops by distracting pollinators. Such high winds aggravate premature drops of flowers and fruits heavily and may even uproot the whole tree.

Several types of soil are available in Nepal. Some are suitable for growing agricultural crops while others are not. fro fruits species; they need 2 to 3 m deep soil which sufficient available nutrients. But except in valleys, the hilly tracts and undulating yet sloppy areas with marginal land types do not contain sufficient minerals nutrients to support trees growth. Fruits trees planted in these soils do not produce a desirable harvest unless they are supplemented with adequate manure and fertilizers. In some areas there farming is done intensively with fertilizer application. Such practices have resulted into poor soil conditions due to the unbalanced use of chemical fertilizers. without proper amelioration of these soils fruits trees with not produce satisfactory yields.

When the host, pathogen (pest), and a suitable environment coin together may pests and diseases damage fruits crops with varying degree of yield loss. In Nepal, pests and diseases attack fruits trees severely. Proper care and management procedures before or after the incidence must be a regular schedule in orchards. Based on scientific

procedures, proper plant protection techniques and methodology for controlling pest and diseases of fruits trees are not yet developed.

With extension services agricultural activities and scientific technologies can not be disseminated to the local farmers. The present extension activities and outreach programs are largely based to cereals. Personnel who work for cereals cannot or will never are experts on fruits. Therefore, objective fruits extension programs are not available. Although one Assistant Horticulturist is available at the District Agriculture Office, the officer is not extension specialist trained on fruits extension program, policies and activities; thus, extension and expansion of fruits cultivation are not up to a desirable level in Nepal.

In horticulture, fruits growing and production systems require appropriate technologies based on scientific details. But today, most farmers in Nepal use traditional ideas or concepts and adopt decades old methodologies. For and example, fruits trees are still grown in places where cereals cannot. Farmers feel that fruits trees do not require manure and fertilization, that irrigation is not essential for fruits trees, that once fruits trees planted they fruits automatically without care, etc. unless the farmers are will convinced and motivated for growing fruits trees by using scientific techniques, fruits growing as a businesses likely to occur.

Most horticultural produce including frits are perishable and fleshy fruits loses their quality within a few days. In the market, quality aspects are neglected. Consume4rs and buyers are not impressed with fruits, which possess little quality. The control over both the quality and price of fruits should not be overlooked if frits growing are to be enhanced.

Tall and vigorous fruits trees with long juvenility and irregular bearing behavior as well as plant protection complexities were perennial problems to get sound fruiting. True to type fruits varieties are difficult to find in Nepal. Improvements on fruits varieties through proper

selection, crossing, and mutation could be effective for solving many of the problems that exist with fruits trees. But these breeding techniques have not been practiced. Introduction of good varieties in commonly done in this country. However, this alone does not support for permanent and healthy fruits improvement program when proper evaluation and maintenance of these introduced genotypes are lacking.

Most of the technical known how to plant frits trees to manure fields, to provide best cultural operations, to control weeds, pests and diseases harvest fruits form the trees, etc. are borrowed form the other countries. Most horticulture experts working on fruits production technology do tot have adequate in-country information. These experts can not face farmers and stay much behind to answer questions pertinent to specific operation a given variety at particular location.

The National Planning Commission has paid due respect to agriculture development. However, only a little attention is given to fruits trees and fruits cultivation and marketing while preparing short or long term programs different organizations/agencies must work cooperate and coordinate one another in formulating plans, making budgets and evaluating the efficiencies. In fact this could not happen at execution level in terms of supplying inputs providing financial supports and sending technical experts. Sometimes recommendations of one organization become futile with programs and policies of other line agencies. Because of this situation, frits growers get frustrated.

1.2 Statement of the problem

Since Kathmandu district is rapidly urbanizing region of the country, its marketing problem is much more complicated than in other parts of the country. Thus, we can conclude that there is the scarcity in plenty seasonal production of fruits results in artificial scarcity as well as excess. The formers do not get remunerative prices and the consumers do not get fruits of their choices. The periling trend may

lead to dissociation to the farmer and for the health to society. The prominent problem is therefore marketing of fruits in systematic manner. (Wolf and Pant, 2007: 25)

Science fruits are produced in the different ecological centers of the country. Firs of all, we are locking the proper transportation facility. Like wise the best quality of apple is grown in the Jumla and Marpha but we are still importing them form China and India. It is due to the problem of road and transportation. Similarly the fruits buying capacity of Nepalese is very low. The average consumption rate per person is only 60gm/per day which is very low as compare to the other countries. Similarly the supply of fruits is very irregular due to bandhas and chakka jams. At first, there is still lack of proper knowledge to produce fruits. Farmers are still engaged on the cereal production. They are not expert in the production of fruits. There is lack of proper production technology. At last there is no systematic marketing, lack of storage structures. Thus post harvest losses are very high in our country's context. This study would concentrate around the problems as stated in the following points:

1. Is the quality and quantity of fruits available in Kathmandu satisfactory?
2. Is the price of fruits reasonable?
3. Are the consumers aware of fruits consumption?
4. What is the trend of fruits farming and marketing in KTM?
5. Are the fruits within the affordable price level of general consumer?

1.3 Features of this Study

The thesis on the "Problem and Prospects of Fruits Marketing in Kathmandu District" is prepared within the time bound of six months. The research on the marketing of fruits in Kathmandu district is very rare. As, it encompasses in the basis problem like supply, lack of

storage structures, lack of habit to buy fruits, lack of knowledge to consume fruits as health point of view.

Similarly, the prospects side is very widening day to day. As the health consciousness is increasing now a day marketing not only covers the whole chapter so the questionnaire for shopkeeper as well as consumer is distributed. As compared to other survey it is more scientific analytical and valid. That is why, it has performed in the real field situation and all the data are primary. Thus, it has total truthness. It has no false and imaginary data. Hence, the study is purely field oriented and reliable of proof. Thus, it is really helpful for the problem solving in the sector of marketing.

1.4 Objectives of the Study

The study will proceed with the following major objectives:

1. To review the situation of production and consumption of fruits in Kathmandu district.
2. To examine the demand for and supply of fruits in Kathmandu district.
3. To analyze the problems and prospects of fruits marketing in Kathmandu districts.
4. To suggest and recommend on the basis of major findings

1.5 Need of the Study

In Nepal, a great percentage of population is under nourishment. They are suffering form various diseases and such problems can be removed by consumption of more and more fruits in daily diet. Since Kathmandu district is rapidly urbanizing, its marketing problem is more complicated then in the country as a whole. The fruits market in the valley is suffering form various marketing problems due to which a significant level of fruits goes waste. Appropriate provision of marketing

facilities help to minimize the imbalance between season and off-session. It helps to smooth supply of fruits throughout the year and help to establish fixed price. Hence, some concrete steps have to be taken to improve production, distribution and marketing of fruits. (Thapa, 1998: 20)

1.6 Limitations of the Study

Every study has to be conducted taking certain constraints into considerations. The study will have the following limitations:-

1. The study will be based on the secondary as well as primary data.
2. The study will be based on the annual publication of fruits development directorate, agro enterprises centre (AEC) and Kuleshwor fruits market.
3. The study mainly focuses on the problem on marketing in theoretical way and the analysis of price of fruits in statistical method.
4. This study is limited only with in Kathmandu district.
5. This study has been completed with in the time period of six months.

1.7 Organization of the Study

The study on trade off between liquidity and profitability of JVBs has been dividend into five chapters viz. Introduction, Review of Literature, Research Methodology, Presentation, and Analysis of Data and Summary, Conclusion and Recommendation.

Chapter-I Introduction

The introduction chapter deals with the general background and the subject matter of the study. It consists of introduction of research study, which explains the focus of the study, statement of the problem, objectives of the study, significance of the study and limitations of the study.

Chapter – II Review of Literature

In the second chapter, the relevant and pertinent literature and various studies have been reviewed. The review has been made in terms of the theoretical background of banking principles that are relevant to this research work.

Chapter – III Research Methodology

The third chapter briefly explains about the research methodology, which has been used to evaluate the liquidity and profitability position of banks under consideration. This chapter consists of research design, sample and population, sources of data, and statistical and financial tools and techniques to measure the liquidity and profitability position of JVBs.

Chapter – IV Presentation and Analysis of Data

In this fourth chapter, the data required for the study has been presented, analyzed and interpreted by using various tools and techniques of financial management and statistics to present the result relating to the study.

Chapter – V Summary, Conclusion and Recommendations

The fifth chapter is the final chapter of the study, which consists of the summary of the four earlier chapters. This chapter tries to draw out a conclusion of the study and attempts to offer various suggestions and recommendations for the improvement of the future performance of the banks under review.

CHAPTER-II
REVIEW OF LITERATURE

The attention of Nepal Government to the development of fruits cultivation was given form 1959/60 AD (2016 B.S) when the Indian Aid Mission Submitted a preliminary report for horticulture development in Nepal. Following the recommendation of the report, 14 horticultural farms were established throughout the country. The main objectives of these farms were to demonstrate the use of scientific practices of cultivation to produce fruits.

2.1 Theoretical Review

2.1.1 Brief Introduction about Kathmandu

In the ancient period, Kathmandu was called Nepal. But after the Pashupatinath temple was built, people named this place as Pashupatinath region. The stone carving of Lichhivi period proves this fact. The name Kathmandu was given by the Sanskrit world Kasthamandap because a temple made from wood only, is constructed in this place. This district is one of the districts among the eight districts of central development region and is the capital of Bagmati Zone and Nepal.

King Guna Kamdev built the city of Kathmandu in 723 AD. It is widely believed that Kathmandu was big lake and was made habitable when Manjushree cut the hill open at Chovar to drain out the water.

Kathmandu is named after “Kastha-Mandap” meaning the temple made of wood in Sanskrit, and imposing pagoda near Hanuman Dhoka Place.

Kathmandu is the capita of Nepal. The population of Kathmandu city is 10,81,845 according to the census 2058. In which male are 5,76,010 (53.17) and female are 5,05835 (46.83%). The higher population density is 1800 persons/square ft. it is situated at an altitude of 1350 meters.

Kathmandu, by virtue of being the capita city, is the nation's first political, administrative, commercial, tourist, educational and cultural center. The city has rich cultural heritage. In the 17th century the valley consisted of the three city states of Kathmandu, Patan, and Bhaktapur. During this time the valley was important link on the route between Tibet and Northern India. During the reign of the Malla the places and many of the temples were built in the 16th and 17th centuries.

When king Prithvi Narayan Shah united Nepal this was the end of the city-states in the Kathmandu Valley. Kathmandu became the capital of Nepal. The language spoken by the Khas of western Nepal became the official language of Nepal replacing Newari. Because of the growing number of people and vehicles in the valley, specially in Kathmandu, air and ware population are becoming a real problem.

The valley is fertile and rice, wheat, corn, vegetables and a variety of fruits (bananas, oranges0 are grown. Several rivers flow to the center of the valley and meet the holy Bagmati River, which then flows to the south pass through the Chobar Gorge and eventually meets the Ganges in India.

a) Geographical

The district lies in the 73th position on the basis of area but lies in the first position on the basis of population density. The total are of Kathmandu is 41,202 hectors. Geographically, eastern, northern & western side is covered by mountains region. And a t the southern side, plain agricultural lands are found. This district is at the altitude of 1262 to 2032. From the sea level the shape of this district seems to be

'L' since it is expanded form east to west & turned towards south. The boarder of Kathmandu district touches the seven districts. Bhaktaput, Lalitpur, Kavrepalanchowk, Shindhupalanchowk lies in the East; Nuwakot , Dhading and Makawanpur lies in the West; Nuwakot and Shindupalanchowk in the north and Bhaktapur, Lalitpur and Makawanpur in the south. The three high mountains, Chandragiri, Shivapuri and Nagarjung lies in this district. The area of this district is spreads over $27^0 27'$ to $20^0 49'$ northern longitude and $85^0 10'$ to $85^0 32'$ eastern latitude. Kathmandu district, the capital of the country has one Metropolitan city, one municipality and 57 village development committees'. This district is divided into 7 election sites and 17 sub zones for the election of district development committee.

Use of land in Kathmandu		
Particular	Area (in hector0	Percentage
Cultivated Land	24605	59.8
Agricultural land	19205	46.65
Field	11523	
Slope land	7682	
Forest	9468	23.41
Grass land	4470	10.69
Other	2479	6.25

Source: Community Forest Development Programme, 2064

Irrigated Are

Irrigation during whole year : 5012 hectors

Irrigation during rainy season : 6500 hectors

b) Population Status

Since, the people form other districts come to settle in this district, racial and religious diversity is seen here. The man cast settling here is Newar, Gurung and many others. Most of the people are Hindu (75%) and Buddhist (23%). The other religious too are found here (2%).

If the population growth rate goes on increasing in the same may then it will be doubled with in coming 14 years. According to the data of 2038 average size of single family was 6.2 but now it has become 4.5. it proves the now a day, mostly there are single families than the joint. Most of the people settle in the city area of this district. But in the present context, due to scarcity of drinking ware environmental pollution dust garbage's etc, people are migrating towards 'Village Development Committees'. Because of this region, the cultivable land is changing into housing land.

The Newars are considered to be the original inhabitants of the valley. They speak a Tibetan-Burmese language but their physical features are both similar to Mongolian, which indicated the original form the east and Indo-Aryan features, which indicates coming form India.

c) Climate

Kathmandu has a pleasant sub-tropical cool climate. Summer (June August) is warm to hot (March-May and autumn (Sept. – Nov.) is warm during the day and cool in the night. Winter (Dec.- Feb.) is cold with minimum temperature of about ^{00}c but mostly sunny during the days. The annual rainfall is about 1,300mm.

The temperature and status of rainfall of any reason symbolize the condition of crop farming and its consciences. Kathmandu district lies in the central mountains region, near the Himalayas. So, in the winter season the climate becomes very cold. In the summer season climate is warm but not too hot.

The maximum temperature is 32^0c in the month of Ashad and Minimum temperature is -2^0c in Magh. The average rainfall in 1764.5ml.

d) Condition of Road

Road of Kathmandu District touch most National roads. But in some of the Village Development Committee transportation facilities are available only on winter. However, most of the village development committees of this district have graveled road and concrete roads. Because of the transportation facility, the sector of agriculture is too developed, commercially. Total Road Length is 804km. (including concrete, Graveled and Non-Graveled Road).

e) Major Irrigation project

Forty percent of the total agriculture land is irrigated in Kathmandu, for the irrigation facility District irrigation Office and local people have joint effort. Some of the Irrigation projects are listed below:

Major Irrigation Project			
S.N.	**Name of Project**	**Source of Water**	**Irrigated Area (In Hector)**
1	Hasanatar Irrigation Project	Satamual Muhan	11 hectors
2	Mahankal Bhairab Irrigation project	Monahara	25 hectors
3	Panchainyan Irrigation Project	Pump, Pipe	22 hectors
4	Mahankal Irrigation Project	Sunderijal	45 hectors
5	Chunikhel Irrigation Project	River	12 hectors
6	Puradol Phat Irrigation Project	Kolmati	10 hectors
7	Indarani Irrigation project	Molmati	12 hectors
8	Hunamun Ghaire Irrigation Project	Hunamun river	11 hectors

Source: District Agriculture Development Office, 2064

2.1.2 The Pilot Study Area

The different fruits markets inside the Kathmandu are taken as the pilot study area. Most of the people from the peripheral village and the almost all the people of the urban area buy and sell the fruits within this area. It is the main market place for city dwellers, villagers and even for the jobholders of the other districts than Kathmandu.

2.1.3 Members in Distribution Channel of Fruits in Kathmandu

Distribution is concerned with the physical distribution of goods and services to market and transfer of ownership from marketer to buyers. Distribution can be done either directly or through the independent middlemen or agencies, who have significant role in distribution system. The general principle is that a right product having right price should be distributed to the right place through appropriate distribution system.

The distribution channel refers to the institutions who are involved in the process of supplying the goods form the producers to the consumers. Channels of distribution don't contain only producers and customers but also include others like agent, contractors, etc. the channel of distribution consists of different marketing institutions. Some of the marketing institutions in case if fruits marketing are follow:

1. **Producers**: A producer in case of fruit marketing means the farmers. They produce different types of fruits. They may involve themselves in selling the fruits directly to the market or sell them to the retailers, wholesalers or commission agents, etc.

2. **Wholesaler**: This institution does not have the role in production of fruits but has a great role in the supply of fruits in the market. Wholesalers buy fruits from the framers or through the commission agent and sell it to the retailers. Most of the wholesalers in Kathmandu buy fruits form out of the valley. The wholesalers fix the profit margin.

3. **Pre-harvest Contractor**: Pre-harvest contractors are those people who make arrangement to buy the fruits before harvesting it. Wholesalers and the retailers also act as pre-harvest contractor. Nowadays the preharvest contractors are increasing and the farmers who do not have means of transport of whose farm is really at a far distance form the market prefer to sell their products to the pr-harvest contractors. In the study area only few pre-harvest contractors were found.

4. **Commission Agents**: An agent who works for commission is called commission Agents. Commission agents collects fruits either form the field or in the assembly market and sell them on commission. Commission Agent received money for selling fruits, which increases the quantity of fruits.

5. **Retailers**: Retailers are the parts of the fruits marketing through which most of the consumers get the fruits. Retailers buy fruits form farmers, wholesalers, commission agents or pre-harvest contractors and fix some margin and sell it to the market. In case of the city are like Kathmandu retailers are two type. They are shopkeepers and hawkers.

a) **Shopkeeper**: Shopkeepers are those types of the retailer who have their own fix shop and sell fruits there. Here some shopkeepers has got permanent shop but some of them sell on the side of the road. Most of them have their own price, which is generally, fix for a day but they may change the price selling their neighbors shopkeepers.

b) **Hawkers**: They are the sellers of fruits who sell it form place to place. In the beginning most of the hawkers were form the Tarai region but nowadays the people of the valley and other places are also working as hawkers. They do not have fix price. They change

the price form place to place and fix the price according to their convenience.

2.1.4 Existing Distribution Channels of Fruits

Marketing system has got great role for the consumption of the fruits produced by the farmers. If there are good marketing systems all the farmers and the consumers along with the other parts of the markets are benefited. The marketing system of Kathmandu is not well organized and it needs improvement. The main ways of fruits distribution in Kathmandu are as follows:

1. Producer - Consumer
2. Producer - Consumer
3. Producer-Retailer - Consumer
4. Producer-Whole seller-Hawkers - Consumer

1. Producer-Whole Seller-Retailer-Consumer

In this type of marketing system the time taken by the fruits to reach to the consumers is long. The producers produce fruits and sell it to the Wholesalers take some profit and sell it to te retails. Retailers take some profit and sell that the fruits to consumers. Generally the fruits banana and orange are sold in this way.

2. Producer-Consumer

In this type of marketing system the producer (farmers) himself or herself are involved in selling of the fruits in market. Generally the producers of the leafy fruits sell their products to the market. In this case the selling is and mentioned below:

I. The producers themselves send sales force to the market to and sell it to the consumers.

II. Fruits producers sell fruits on the road side market or stated wholesale or retail market directly to consumers/customers.

III. They may sell it as a vendor.

IV. The consumers also go to the producers to buy the fruits.

3. Producer-Retailer-Consumer

In this system the producers sell their products to the whole seller. Whole sellers take some profit and sell to Hawker. Hawker takes some profit and sells to customer. In this system the time taken by the fruits to reach the consumer is long and consumer pay high Price for fruits. Different types of fruits are sols in this way.

2.1.5 Facilities Available for the Fruits Marketing

Kathmandu has got not bad production of fruits and due to lack of knowledge and may more other available circumstances people do not have knowledge about the fruits marketing as a result the managed fruits market has yet not been well established and developed properly Farmers are bound to sell their products in low price whereas the middleman makes more profit. On the other hand the customers are also not getting the good fruits though they pay good sum of money for that purpose. There are many reasons responsible for that. Some of them are lack of proper storage, lack of good seeds, lack of right information, lack of capital, lack of cultivating, caring, harvesting, storing, grading technology and technique etc.

The farmers and the consumers have got only little facilities. The main facilities available for the farmers are storage facility and seed selling shop.

Storage Facility

Good and quality seeds can only yield good production but the availability of good seed is the great anxiety for the farmers. In Kathmandu there are two cold stores established for the storage facility where the farmers can store the fruits mainly banana and oranges. The

two cold stores are: Dugad Cold Store and Budathoki Cold Store. Himshekhar Cold Store is on construction Process.

a. Dugad Cold Store

The oldest cold store in Kathmandu is dugad Cold store. This cold store lies at Balaju Industrial area. This cold store has the capacity of 1200 Metric tones. Here different types of food, vegetables and fruits are stored.

b. Budathoki Cold Store

This cold store lies in the Sitapaila VDC. This cold store has the capacity of 3000 Metric tons. Here different types of food and fruits and vegetables are stored.

2.1.6 Government, Support for Fruits Promotion

There are different local and government agencies, which are involved in the promotion of the fruits production and marketing, but their effort has not given the good and significant result yet. District Agricultural Office has contributed to increase the production of fruits. Nepal Agriculture Research Council (NARC) is also conducting research in different fruits like citrus and other fruits varieties.

2.1.7 Promotion of the Fruits Marketing

The improvement in marketing is beneficial to the producer and the consumers both. The fruits markets in Kathmandu are not well managed not only the consumer but also the produces are affected. Due to the lack of proper market some of the farmers even take their products to neighboring districts Lalitpur and Bhaktapur early in the morning. Following arrangement are regarded necessary for the promotion of the fruits marketing.

1. Proper Management of the Marketing

Most of the fruits markets are in the open place on the side of the read, so when it rains of there are other climatic conditions like wide the

seller get problem and also the consumers. So there should be shed or other proper management for them.

2. Proper Market Information System

For the benefits of the producers, retailers and consumers marketing information system may be implemented so that they will get all information including price. If the producers, retailers and consumers have proper market information thy should know about demand and supply of market it helps them for making further strategy.

3. Proper Transportation

The farmers also face problems due to the lack of the proper transportation system. The perishable fruits get rotten due to lack of the transportation. Proper facilities of buses or other vehicles can be arranged. In Kathmandu most of the places have transportation facility ad some places have to improve.

2.1.8 History of Production of Fruits in Nepal

Growing of fruits in Nepal is not of a recent origin. There are indigenous, yet wild and cultivated fruits species in this country; they are reported to be observed form almost two centuries. More specially, some of the important fruits species (mango, litchi, papaya, guava, mandarin, etc.) were introduced and planted in orchards prior to the Rana Regime. During the Rana period, many fruits orchards were established and fruits varieties introduced. Nepal government initiated activities on fruits crop development in few districts during the 1950s. However, country-wise fruits development activities, including research, training, sapling production and distribution took a rapid momentum from the 1960s after the establishment of 14 horticultural farms/stations at various districts with the support of Indian Aid. Many agricultural and horticultural projects started in Nepal after 1970 with the financial and technical assistance of donor agencies and of different countries mad fruits development programs even stronger, need-based and extensive. During the pre-Rana Regime, i.e. before

1848 AD, fruits growing activities were limited to homestead gardens with a few trees scattered here and there. Malla kings planted fruits trees in their place compounds. King Rana Bhadur Shah, Prime Minister Bhim Sen Thapa and General Rana Birak Thapa established various fruits gardens like Sera Bagaicha in Nuwakot, Kakaitar Bagaincha in Kavre and fruits orchard located at Jalbire, Kavre. During Rana Regime, various Rana Prime Ministered Established various orchards in Nuwakot, Kavre and Trishuli. Some well-off residents of Kathmandu also planted fruits trees in their gardens located at Kathmandu and outside the Kathmandu valley. Slowly, fruits tree plantations spread to terai regions to grow various types of fruits in tropical climate. Foundation for commercial fruits farming was established during the Rana Regime. First B.Sc Ag Graduate, late Diby Bahadur Basnyat brought fruits species of apple, mosambi, mandarin, pineapple banana and persimmon, etc. for foreign countries and planted in Balaju and Godavari areas. Rana Prime Minister, Juddha Shamsher appointed Satya Lal Ranjitkar as a fruits culture specialist in 1941. After demonstration by Shri H.C.D. Pal, expert sent by Indian Government, Mr. S.L. Ranjitkar established first commercial fruits garden at Thulogairhe of Godavari. Gradually, commercial and household fruits production started to grow in Nepal.

Major development in fruits production and marketing was started especially after the end of Rana Regime i.e. after 1950. Department of Agriculture was created in 1950/51 which initiated fruits development activities in Nepal by establishing trial fruits orchards at Godavari and Kakani. Horticulture section was established in 1956 under the Department of Agriculture and a horticulture unit was established at Parawanipur in 1959 where several frits varieties were introduced into the farm from India. Another milestone was achieved when Indian Cooperative Mission studied feasibility for horticulture development in Nepal and submitted its report in 1960. Based on the recommendation in the report, a total of 14 horticultural units were established all over

the country with assistance of Indian aid. The locations of the farms and the year of establishment are listed below:

Kirtipur (1961), Daman (1962), Helambu (1962), Mustang (1966), Jumla (1967), Tararahara (1967), Dhankuta (1962), Satbanj (1963), Janakpur (1963), Trishuli (1963), Dhunibesi (1961), Yagyapuri (1964), and Pokhara (1961).

In 1961, one fruits preservation unit was also established at Kirtipur farm but this unit was amalgamated with the central Food Research lab. Later in the year 1973.

In the fruits development programs, HMG/N has emphasized to grow more tree fruits in the area where the climatic conditions favor their growth for optimum production so that farmers get maximum benefit from their produce. Considering such a perspective for improving fruits production in the country, many districts have been identified as a suitable area for specific fruits production. Some of the potential districts for different fruits crops are listed here:

Nepal has a great boon by its topography and vivid geographical altitudes. So, it has many potentialities to grow many types of fruits which is very profitable to earn foreign currency.

Citrus: The citrus type of fruits are grow in Dhankuta, Bhojpur, Terhathum, Sankhuwasabha, Khotang, Panchthar, Illam, Taplejung, Sindhuli, Ramechhap, Dhading, Dolkha, Kavre, Okhaldhunga, Gorkha , Lamjung, Tanahu, Syangha, Parbat, Kaski, Palap, Gulmi, Dailekh, Accham, Salyan, Pyuthan, Rolpa, Dadeldhura, Baitadi.

Apple: The temperate type of fruits are grow in Solukhumbu, Sindhupalchok, Rasuwa, Mustang, Manang, Jumla, Humla, Kalikot, Rukum, Baitadi, Darchula, Dolpa, Mugu, Rolpa, Bajhang, Bajura.

Mango: The tropical type of fruits are grow in Bara, Parsa, Rautahat, Sarlahi, Mahottari, Dhanusha, Sunsari, Morang, Banke, Bardia, Kaliali, Siraha, Saptari, Chitwan, Dhading, Kavre, Nuwakot, Kapilbastu, Nawalparasi, Rupendehi, Surkhet, Dang, Kanchanpur.

Pineapple: The topical as well as sub-topical type of fruits are grown in Kavre, Dhading, Nuwakot, Sarlahi, Dhanusha, Mahottari, Chitwan, Parsa, Rautahat, Makwanpur, Saptari, Morang, Sunsari, Jhapa, Siraha, Udayapur, Tanahu, Kapilbastu, Rupendehi, Nawalparasi, Gorkha, Banke, Bardia, Surkhet, Dang.

Walnut: The cool temperature type of fruits are grow in Jumla, Kalikot, Bajhang, Mustang, Manang, Doti, Rolpa, Humla, Mugu, Darchula, Baitadi, Dolpa, Rukum, Dadeldhura, Achham, Bajura.

Pear: The sub-tropical type of fruits are grow in Dhankuta, Taplejung, Panchthar, Bhaktapur, Lalitpur, Kathmandu, Kavre, Dhading, Makawanpur, Sindhupalchok, Nuwakot, Rasuwa, Palpa.

Papaya: The tropical as well as sub-tropical type of fruits are grow in Chitwan, Bara, Dhading, Nuwakot, Nawalparasi, Nawalpur, Dang, Banke, Bardia, Kailali.

Grapes: The dry temperate types of fruits are grow in Banke, Bardia, Manang, Mustang, Kathmandu, Bhaktapur, Lalitpur.

Coconut: The hot and humid types of fruits are grown in Jhapa, Sunsari, Morang.

Although the above-mentioned districts are potential for growing various fruits species the government has a long-term vision for sustainable development in terms of fruits production. The fruits development program as laid out by the Ninth Five-year Plan will cover 11 districts of high hill for apple, 34 districts of mid-hill region for citrus,

and 21 district of Terai and inner Terai for evergreen fruits as pocket area. Among the evergreen fruits mango will have its developmental activities in 18 districts, banana in 10 districts, papaya in 7 districts and pineapple in 5 districts.

2.1.9 Present Status of Fruits Cultivation

Extreme variation in altitude provides a wide range of climatic conditions, i.e. tropical, sub-tropical, temperate, alpine, and tundra in this country. Except the alpine and tundra regions, the climatic condition of other regions favors the cultivation of different kinds of fruits and their varieties. In the tropical areas (below 650 m), fruits like mango, banana, pineapple, papaya, litchi, jack fruits, guava, etc. grow successfully. The sub-tropical areas (650-1,800 m) are largely suitable fore growing different kinds of citrus and warm temperate fruits like pear, peach, plum, and persimmon. Temperate fruits such as apple, walnut, almond etc. can be grown in the temperate region (1800-2800m) especially in low rain fall areas (Shrestha, 1993).

2.1.10 Area and production of Fruits

In the earlier days of fruits development program, cultivation of fruits was largely limited to backyard home gardens. However from the seventh Five-year Plan, emphasis is given for the establishment of commercial orchard in different parts of the country. As a result, commercial orchards of mango, banana, and pineapple in Terai, of mandarin, sweet oranges and acid lime (Kagati) in mid-hills and of apple and walnut in high hills of western and mid-western regions are gradually coming up. (Nepal Government, Ministry of Agriculture and Co-operative, 2007-2008: 50-69)

Nepal is a country of vivid geographical status which has many more microclimatic zones. But utilizing this microclimatic boon, her every types of fruits can be cultivated in the various parts of the country. In overall situation, citrus can be cultivated more parts of Nepal. The total area as well as the production area and the production and yield is

increasing with total area of 25909 ha and the production is 156956mt. and the yield is 10.7mt/ha.

Similarly, in case of winter (Deciduous) the total area is up to now, i.e. 2004/2005 is 18500 ha and the toil production is 97208mt. and the yield is 8.72 mt/ha. The winter deciduous includes apple, pear, peach, plum etc. which has high market accesses as well as it can be done in commercial production to generate foreign income.

Similarly, in case of summer (tropical) this includes the different fruits like mango, banana, litchi, guava etc. which has the high market demand, large scale production in the terai region which is the best source of income for the whole country. There are, production and productivity is increasing in the satisfied manner. Thus future of these types of fruits is bright.

2.1.11 Fruits Genetic Resources

There are many cultivated and wild types of fruits corps in Nepal. In fact, Nepal is rich in bio-diversity of plant resources. About 6500 species of flowering plants exist in this country (Chalise et al. 1993). In spite of many fruits species, such as Annona, Phyllanthus, Aegel, Phoenix, Castanopsis, Morus, Pyrus, Prunus, Myrica, Berbreris, Vitis, Rubus, Fragaria, Actinidia, etc. which are growing wild in forest areas there is a little documentation described about these fruits (Kaini, 1995). Notwithstanding, many fruits species and their varieties of cultivated types have been introduced to Nepal form other countries during the Rana Regime as well as in later years when fruits development activities began form last three and a half decades.

2.1.12 Imported Fruits Species and their Varieties

The main idea was to improve fruits farming through domestication of new crops and development of new varieties. The government since 1952 undertook the works on collection, evaluation and utilization of these different exotic fruits species and varieties. The emphasis on fruits variety work was more after 1962 at various ecological belts of

Nepal. Since then, many fruits species and their varieties have been introduced. For instance, more than 40 cultivars of apple were introduced in to Nepal; some of these varieties/cultivars ere adapted for local production and now apple is one of the major fruits crops of Nepal. Similarly, many cultivars of different fruits species such as peach, pear, plum, chestnut, mango, banana, almond, grape, citrus, guava, etc have been introduced and their performance studied at different horticulture centers/farms/stations. Some of these fruits are successful while others need to be evaluated critically in terms of production, fruits quality and market driven demand. Some indigenous germplasms of citrus and pear were collected and evaluated. Some of the selections such as 'Junar' sweet orange, 'Suntala' Mandarin, 'Pharping' Asian pear, etc. have been popular varieties. Some other indigenous germplasm of apple, pear, walnut, peach, citrus have been evaluated and found promising for rootstock purposes. Table 10 shows important fruits crops and their introduced varieties available in Nepal, but these fruits are scattered in different HMG Horticulture Centers, NARC Research Stations, IAAS Farms, NGO and INGOs Demonstration plots, and private farms.

Various fruits species and their introduced varieties in Nepal	
Fruits Crops	**Varieties**
Apple	Golden Delicious. Red Delicious, Mclntosh, Red Jue, Jonathan, Granny Smith, Rome Beauty, Benony, Fuji Anna, Vered, Katja, Crispin, Tropic Beauty, Winter Delicious, Worcester Foreman, Tydeman Early, Tydeman Late, Red Gold, Stark Crimson, Rich-A-Red, Yellow Newtown, King Of Pippin, Kashmiri Ambri, Idared, Mutzu, Brahmley's Sedling, Starking Delicious, Winter Banana, Russet, Cox's Orange Pippin, Stengenburg, Topred, Galia Beauty, Ruby Spur, Goldjune, Hi-Early, Lutz-Golden, Red Roem Beauty, Ed Gould Golden,

	And Rootstock Series Of M, Mm, And Emla.
Pear	Bartlett, Pharping, Chojuro, Kosui, Hosui, Shinko, Anjou, Oksankichi, Williams, Bon, Chretion, Shinsui, Kirsuci, Winter Nelice, Bomri, Williams, Conference, Packhams, Comice, Patal, Havana.
Peach	Peregrine, Orion, Spring Time, Elberta, Florida Sun, Hakuto, J.H.Hale, Cardinal, Red Gaven, French Early, Sharbati, Juna Gold, Spring Crest, Sun Crest, Triumph, C.O. Smith, Rhodes, Culemberg, Kakamus, Keimoes, Ingwe, Safari, Florida Red, Texas, Baby Gold, Early Red Haven, Voronet, Roza, Andross, Arm Gold, Stark Early Glow, July Elberta, Red Peach, Texas Yellow.
Nectarine	Fantasia, Nectaret-2, New Yorker, Sho-Hoh, Arm King, Ruby Gold Independent, Panamint,
Cherry	Napoleon, Satomishiki, Takasago, Bigara Joborey, Colt, Bigarreau Noreau, Vittoria.
Plum	Green Gaze, Meriosa, Santa Rosa, Methley, Formosa, Stanley, Burbank, Shiro, Florentia, Oishi Wase, Satsuma.
Apricot	Suckerpara, Kaisa, Tilton, Blenheim, Bulida, Reale D'Imola, Preate Caninon.
Hazelnut	Tonda Gentile Dette Langhe, Cob Not, Red Skinned, White Skinned, Tonga Dela Reomanesca.
Walnut	Hartely, Payne, Thin Shell, Ashley, Franquette, Black Walnut, Northern Californian.
Almond	Ne-Plus-Ultra, Non Pareil, Mission, Thin Shell (Kagzi).
Grape	Khoho, Olympai, Steuben, Tano Red, Himrod, Perlette, Thompson Seddless, Pusa Seddless, Delaware, Muscat Bailey-A, Delight Beauty Seedless, Benizuiho, Champion, Jacaranda, Pirobella,

	Campbell Early.
Persimmon	Fuyu, Hiratane Nashi, Zero, Hachiya.
Chestnut	Moriwase, Tanzawa, Yamatowase, Tsukuba, Chinese Type, Krlunba.
Pecan	Wichita, Mahan, Choctaw, Mohawk, Apache, Cheyenne, Western Shalay.
Strawberry	Cambbridge Virour, Cambridge Favorite, Red Gauntlet.
Kiwi fruits	Hayward, Allisiion, Abott, Tomri, Matsuwa.
Mandarin	Kinnow, Fewtrell's Early.
Sweet	Mosambi, Malta Blood Red, Ruby, Shamauti, Washington Navel, Pineapple, Hamlin, Jafa, Satgudhi.
Orange	Valencia Late.
Lemon	Eureka, Lisbon, Pant-1
Pomegranate	Bedana, Kandari,Ganesh/
Guava	Lucknow-49, Allahabadi Safeda, Local, Van Retiof, Jiwanpuri.
Banana	William Hybrid, Dwarf Cavendish, Malbhog, Harichhal, Chinia Champa, Robusta, Basrai Dwarf, Dhusre, Nungre, Beaula Kera, Jhapare, Manghan, Mortaman, Cyathia, Alpan, Ballah-Ballaha, Kothia.
Grape fruits	Hamlin
Guava	Allahabad Safeda, Lucknow-49, Red Fleshed, Apple Guava Seedless, Chittidar.
Mango	Bombay Green, Bombay Yellow, Maldah, Dasheri, Langra, Calcuttia, Krishnabhog, Fazli, Jardalu, Chausa, Alphanso, Sabre, Mallika, Neelam, Amrapali.
Papaya	Washington, Honey Dew, Combatore-1, Ranchi Dwarf, Psa Dwarf, Pus Delicious, Pusa Nanha.
Litchi	Early Seedless, Early Large Red, Rose Scented, Calcutta, Late Large Red, Muzaffarpur.

Loquat	Golden Red Matchless.
Pineapple	Giant Kew, Queen, Local.
Sapata	Baramasi, Large Calcuttia, Cricket Ball.
Jack Fruits	Rudrakshi.
Aonla	Banarasi.
Macadamia	Keauhou, Ikaika, Kakea, Keaau, Keqor, Bond 23, Kona 333, Boumont.
Avocado	Feurte, Hass Ethinger, Reod, West India, Mexican, Gautemalan, Topa Topa, Rahan-1
Coconut	Kerala Dwarf, Singapuri, Hajari.
Arecanut	Hazari, Asami, Singapure.
Jujube	Banarasi.
Olive*	Nabali, Nuovo, Manzanillo, Rakka, Mission, Hamed, Toffahi, Picual, Leccino, Pendolino, Coratina, Cipression, Nocllara, Tonda Ibleca, Aglandaou, Bouteillan, Cayaon, L'herault, Picholine Du Gard.
Raspberry	Heritage, Redwing, Malling Promise, Dhana, Robinson, Hokowase, Catstail. Shasta.
Blackberry	Chokta, Rosboro, Brozos, Ollali, Swanee, Womac.
Fig	Brown Turkey, Brumswick, White Ischia, White Genoa, Blaxk Ischia.
Black carrant	Scabrooks, Boosh Up.

* Source: Dhakala and Bartolucci, 2007

Because of the differences in taste, quality, shape, color, perishable nature, adaptability, and yield per unit are some fruits corps or their varieties are more popular and given better income than other.

The works on collection, evaluation and selection of fruits species among the superior and indigenous types are in progress at various farms of horticultural centers ands stations, but the documentation of their specific utilization and characterization on a scientific basis are poor in Nepal. The main purpose of these works should be focused on how to use these fruits genetic resources for specific purpose based on

a proper utilization of climatic and edaphic conditions available in Nepal reflecting quality, production per unit area as well as rootstock compatibility to suit macro and microclimatic ranges that exist in various parts of the country. The wild gene pools of many existing indigenous fruits species could have been used to incorporate genes in fruits breeding programs, which help to develop specific fruits varieties for combating several production and adaptation problems. In order to utilize the introduced and existing fruits genetic resources in fruits development activities, a national plant Genetic Resources Center including fruits garmplasm repository should be established and maintained with a provision of freeze preservation and cry preservation, in vitro as well as field gene banks in tropical to temperate zones. For this, a proper yet timely collaboration, cooperation and coordination should exist among the national and international centers and their curators, breeders, and horticulturists.

2.2 Previous Research

Research on fruits is conducted with a view of providing information on fruits that have suitability and scope of cultivation in a particular area. Research and development work in horticulture is being carried out by (NARC) (Nepal Agriculture Research Council) and Ministry of Agriculture and Cooperative through Department of Agriculture (DOA). NARC is solely responsible for conducting the need based research which is directly related to farmer's problem and creation of new intervention by which poverty could be reduced by the production of hybrid crops, seeds, animal products and others. NARC has following organizational setup for horticultural research and technology generation. At present Horticulture Research division is the apex body under NARC system to formulate policy and strategies in horticulture research. There are three commodities programs- citrus and ginger in fruits sector. Similarly, there are 3 horticulture researches stations located at Jumla, Dailekh, and Pokhara. Likewise ARS (Agriculture Research Station) Jarahara, RARS Parwanpur, RARS Lumle, ARS

Nepalgunj, Srukhet and Doti has horticulture units each. At yearly workshops with different stakeholders are held and announcements and sharing of outcome of horticulture research are done.

2.2.1 Review of Previous Literature Studies

While studying the fruits marketing, it is felt necessary to review the research studies conducted in this field therefore, in this chapter an attempt is made to review the research works on marketing of fruits as well as vegetables in Kathmandu valley.

1. **The report on vegetable marketing in Kathmandu valley** was published in June 2004 by Ishwori Bhattari. The overall situation of vegetable marketing in Kathmandu valley is still under developed and inefficient. Moreover there is in adequate information relating to area, production, prices marketing facilities movement of vegetables within the country. The study is also in limited scale for the adequate supply of vegetables there will be the proper technology, pricing, supply and research will be needed.

2. **A thesis on 'A study of floriculture enterprises in Kathmandu valley'** is published in 2006 the main finding of this study is less production of florid product. Similarly, there is more demand increasing day to day similarly, there is lack of study, research and proper systematic marketing of florid product.

3. **"A Study on production and Marketing Practices in Kathmandu Valley"** is the survey study conducted by the Food and Agriculture Marketing Service Department in 2007. The Survey was conducted with the objective of analyzing the problems related to vegetable production, marketing and institutional reforms. To know the existing cost of production of different types of vegetables in the Valley was another objective of the survey.

4. **The second survey report on "Vegetable and Fruits Market Survey in Kathmandu Area"** was published in 2007. The study shows the monthly mean prices, availability and the places of origin of different types of vegetables and fruits available in Kathmandu valley. The report indicates that the quality and quantity of vegetables and fruits available in the market has improved considerably for that last few years. Popular vegetables such as tomato, carrot, brinjal, cabbage, etc. are available regularly throughout the year. However, there were no remarkable price changes during the surveyed period.

5. **The third survey "Vegetable Marketing in Kathmandu Valley"** report was published in January 2005. The price levels of three markets, namely, Mangal Bazar of Patan District, and Ason and Purano Bhansar (both in Kathmandu District) were compared on the basis of monthly average prices per product per market. The report reveals that Mangal Bazar is the dearest market for vegetables.

6. **Another survey on "Vegetable Market Survey at Kathmandu and Pokhara"** was conducted by Mr.Junji Takahashi in 2007. The objective of the survey was to study the prices of vegetables in Pokhara and two markets of Kathmandu. The report reveals that there are no significant differences between the prices of vegetables in Ason and Ranamukteswor market while the prices of almost all vegetables are higher in Pokhara. However, the number of vegetable crops and quantity of vegetables found in pokhara market are far less than in Kathmandu. More than 50 kinds of vegetables are found in Ranamukteswor throughout the year while it is less than 50 in Ason.

7. **A Study on Vegetable Production and Marketing** (with special reference to the winter vegetable production in Kathmandu Valley)" is dissertation paper prepared by Mr. Y.R. Joshi in 2005. The objective of the study was to analyze the existing problems relating to vegetable production and marketing. According to him, area under vegetable cultivation in the valley is decreasing. As a result, there has been significant rise in the price of vegetables. Cost-benefit analysis reveals that cauliflower cultivation requires highest cost i.e. Rs. 5,270 per hectare followed by onion, radish, spinach, garlic and carrot. While highest revenue comes form onion amounting Rs. 8,042 per hectare. It also provides the highest profit of Rs. 3,858 per hectare. The study concludes that the vegetables cultivation is highly profitable. However, it has not yet been popular due to greater care needed and the traditional habit of cultivating wheat and paddy.

8. **The study of vegetable marketing in Bhaktapur district** is conducted in 2005 by Mohan Krishna Shrestha it conducts to find out real condition of vegetable market as the demand of vegetable is higher than production but there is lack of storage structure as well as not proper organizational support by municipality and the main problem is towards farmers by untimely price fluctuation.

9. The report on vegetable was published by Agricultural Projects Services Centre in 2004. The report reveals that vegetable farming on a commercial scale, which is only a recent development, is confined largely to the Terai region. In genera, kitchen garden accounts for most of the vegetable output in Nepal. The report reveals that reliable data regarding vegetable production, consumption and imports are not available.

CHAPTER-III

RESEARCH METHODOLOGY

Research Methodology is a systematic way to solve the research problems. It describes the methods and process applied in the overall presentation of the study. This research design is based on scientific method.

3.1 Research Design

This dissertation is concerned in the fruits marketing in Kathmandu district. This research design consists of combination of structured and unstructured interview, schedule for primary data and a wide research for secondary sources which help to analyze the relationship between selected variables. The present study is based upon descriptive research design to find out actual condition of fruits marketing and to provide necessary possible suggestion for it. (Ibid)

3.2 Types and Source of Data

Both types of primary and secondary data have been used for the present study. The primary data and information were collected through the field survey; primary data is collected form different sources. Such as different samples respondents of the shopkeeper, producer and consumers were collected form the study area. Different caste sample respondents and kalimati fruits and vegetable's market data were selected for collecting the primary data and secondary data were collected form AEC Agro enterprises centre, District Agriculture Office, booklets unpublished dissertations and published articles. Main focus is given to primary data. Both quantitative and qualitative data have been used.

3.2.1 Primary Data

Primary data are collected through survey of kulehswor fruits market, form the interview with the consumers, retailers and farmers of different age, cast and with different social status.

Questionnaire

Structured and unstructured questionnaire were prepared for the collection of data. Different sets of questionnaire were specially prepared for retailers and consumers.

Observation

While collecting data and studying the fruits market, direct observation was done. Specially such kind of observation was in the different fruits market in the district during which the behavior of both the consumers and retailers were also noticed.

Interview

At the market place consumers were interviewed. Selection of the consumers was random. Similarly the farmers were interviewed in their field while some were on the way to the market. On the other hand the cold store and seed shopkeepers were also interviewed.

3.2.2 Secondary Data

Secondary data are collected form the different sources. The sources includes different types of magazine, different bulletin, AEC 9reports), kalimati fruits and vegetable market data, kulehswor fruits wholesaler market and District Agriculture Office data.

Fruits Data of Kathmandu District

2063/064

Area-ha, Production-mt

Deciduous Fruits	2059/060 Total	2060/061 Total	2061/062 Total	2062/063 Addition only	2063/064 Total Up to Now	Commercial	Kitchen Garden	Productive Area	Production	Remark
Apple	30.5	30.5	15.5	0	12	-	12	5	31	
Pear	121.27	121.3	122.8	5	120.8	62.6	60.2	111	1337	
Walnut	18.42	18.4	9.2	0	7.2	-	7.2	2.5	7	
Peach	75.88	75.9	76.9	3	89.9	-	89.9	67	485	
Plum	85.24	85.2	86.2	3	89.2	-	89.2	75	557	
Apricot	5	5	5	0	5	-	5	4	26	
Persimmon	19.71	19.7	23.2	4	27.2	14	15.2	17	115	
Lapsi	53.5	63.5	75.3	15	88.5	20	68.5	50	359	
				Total	**445.8**	**96.6**	**349.2**	**330.5**	**2917**	
Ever Green Fruits										
Guava	32	32	16.5	2	15	-	15	9	67	
Citrus										
Orange	188.8	19.8	192.1	3	195.1	-	195.1	126	1245	
Sweet lime	18.08	18.1	18.53	0	18.3	-	18.53	15	165	
Lime	82.17	83.2	84.88	2	86.88	-	86.88	66	525	
Lemon	9.3	9.3	9.33	1	1.23	-	10.23	8.5	601	
Others	5.7	5.71	7.71	5	12.71	-	12.71	5	260	
Total					**323.55**		**323.55**	**220.5**	**2796**	
Grand Total					**784.35**			**560**	**5021**	

Source: District Agriculture Office Kathman

3.3 Population and Sample

For the detail study of the fruits marketing the fruits markets in the municipality were taken as sample and in the same way the farm in the Kirtipur was taken as the sample for the study of the area used for the production of the fruits. All together 200 questionnaire are distributed to opinion survey for consumers of fruits where as 110 retail and wholesale business men have been asked questionnaire.

3.4 Methods for Data Collection

This study, both structured and unstructured questionnaires as well as interview methods were used for quantitative and qualitative data. Structured questionnaires and interview were used to collect the basic information about the production and marketing of fruits. Both types of data were collected with help of the methods like direct observation methods, interview, schedule were used to study.

3.5 Methods of Data Analysis and Presentation

The data had collected form different castes and society, using various instruments and found sources has been analyzed. Each part of information classified, analyzed and described mathematically and statistically. Classifying with tabulating then in different categories into sub headings. The data have been analyzed using a various statistical and mathematical tools and techniques such as percentage, graph, bar diagram, pie chart, maps etc. different charts have been used to classify the quantitative as well as qualitative data.

3.6 Data Collection Methods and Sources

The stated objectives of this study have been achieved by collecting data and information primarily from the secondary sources. The data has been collected form published as well as unpublished reports, research studies, and other publications. The data which is not available in the reports and publications were gathered by the personal contacts with the respective authorities. In addition, information has

been collected from the primary sources through the use of informal interview, observation and questionnaire methods. The following secondary sources have been tapped for the collection of the required data and information:

1. Vegetable Development Division, Khumaltar.
2. National Potato Development Programme, Khumaltar.
3. Food and Agriculture Marketing Services Department.
4. Statistic Division of Customs Department.
5. Other sources including the books, articles, reports, research studies, and publications published by the various authorities.

CHAPTER-IV

DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation and Analysis

Secondary Data

Main sources of secondary data are District Agriculture Office, Kathmandu (DAOK), Agro Enterprise Center (AEC), Kalimati/Kuleshwor fruits wholesale markets, etc.

As per the fruits production data received form district Agriculture office, Kathmandu, following major fruits was produced in Kathmandu as per following:

Table:1

Table showing production of major fruits in Kathmandu

(production in MT)

Major Fruits	2060/061	2061/062	2062/063	2063/064
Pear	121.27	121.3	122.8	120.8
Peach	75.88	75.9	76.9	89.9
Plum	85.24	85.2	86.2	89.2
Lapsi	53.5	63.5	73.5	88.5
Orange	188.8	190.8	192.1	195.1
Lime	82.17	83.2	84.88	86.88
Others	138.71	138.71	104.97	107.64

Note: Others include Apple, walnut, apricot, persimmon, guava, sweet lime, lemon, etc.

All the deficit quantities of fruits and other varieties of fruits are either imported form other places on Nepal or form India, China, etc.

Similarly, following table shows the status of commercial production of various fruits in Kathmandu:

Table: 2

Showing Commercial and Non-commercial production of the Major Fruits

(Production in MT)

Major Fruits	Commercial Production	Non-Commercial Production
Pear	62.60	60.20
Peach	-	89.9
Plum	-	89.2
Lapsi	20.00	68.50
Orange	-	195.1
Lime	-	86.88
Others	34.00	73.64

Table: 3

Showing Productive Area of the Major Fruits

(Production in MT)

Major Fruits	Productive Area
Pear	111
Peach	67
Plum	75
Lapsi	50
Orange	126
Lime	66
Others	66

This table clearly shows that major fruits production in Kathmandu District is on non-commercial based. This means that there is lack of proper pricing system based on cost or market. Producers accept whatever price agreed by traders. Since fruits are produced through a non-commercial farming proper distribution channel has not been used

resulting in low returns to the producers. There is no tendency of using promotional mediums for marketing fruits in Kathmandu.

Primary Data

Before entering to the survey field i.e. in Kathmandu district two types of questionnaire were prepared for primary data collection from the respondents. During the period of distribution of the questionnaire were randomly distributed to the respondents i.e. to consumer as well as to the sellers who were different in age, sex and education as well as the social status and differ in religious aspects, who were the representative sample of different kind of population of the area. Some of the questionnaire were distributed and collected by the personal contact and some were visited in kalimati and kuleshwor wholesale markets. The total two hundred questionnaire were distributed to the consumer but only 192 were responded back. Similarly, in case of sellers out of 110 questionnaire 104 reply was found.

4.2 Consumer's Responses

Among the distributed 200 questionnaire only 192 were returned back from the consumers, so the respondents were 96%. They are presented in the table below:

Table: 4

Showing the time of fruits purchase by the consumers.

Particulars	Respondents	Percentages
Once in a week	93	48
Daily	80	42
Twice in a month	19	10
Total	**192**	**100**

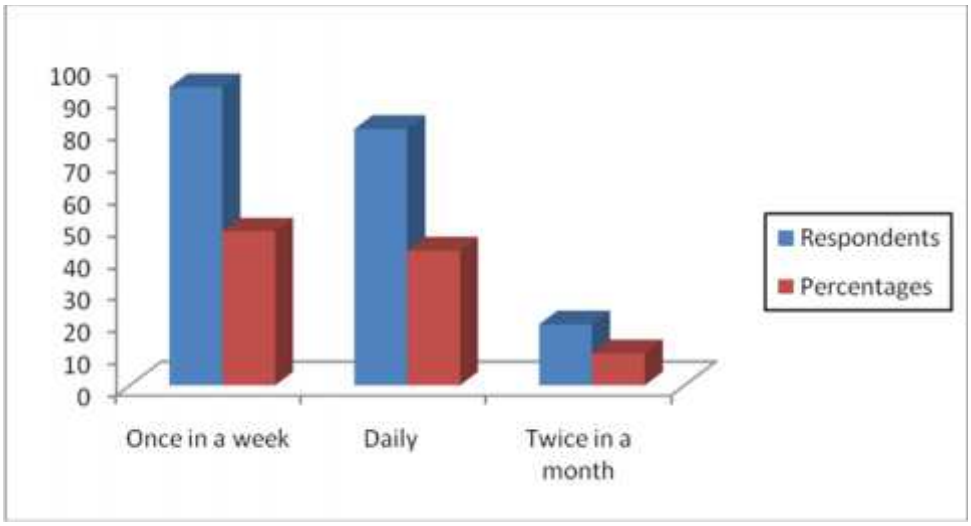
Source: Questionnaire

By the above table, it is clear that 93 respondents or 48% said they buy once a week where as 80 respondents or 42% said daily and 19 respondents or 10% said that they buy fruits only twice in a month. Thus it is clear that the highest percentage of people (consumers) buy

fruits once in a week in Kathmandu district. The above table can be shown in the following graph

Graph-1

Showing the time of fruits purchase by the consumers



By analysis the above figure, it is found that most of the consumers buy fruits in weekly basis.

Table: 5

Showing the quality of fruits purchase by the consumers

Particulars	Respondents	Percentages
One kg	80	42
Two kg	90	47
>Two kg	22	11
Total	**192**	**100**

Source: Questionnaire

According to the above table, it can be noticed that 90 respondents i.e. 47% buy fruits 2kg and respondents 80 i.e. 42% buy 1kg at last more then 2kg buy 22 respondents i.e. 11%. Thus it can be concluded that 90 respondents buy 2kg of fruits at a time. The above table can be shown in the following graph

Graph-2

Showing the quantity of fruits purchase by the consumers

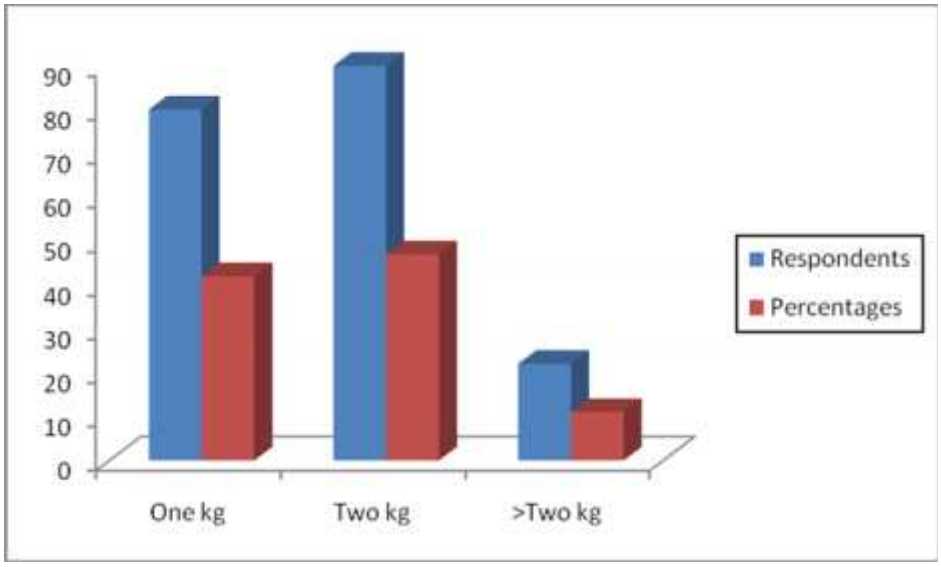


Table: 6

Showing the percentage of income spent in fruits purchase by the consumers

Particulars	Respondents	Percentages
Less than 5% of income	85	44
Less than 10% of income	70	37
More than 10% of income	37	19
Total	**192**	**100**

Source: Questionnaire

By the above table it is found that most of the consumers spent less than 5% of their income in fruits purchasing where as 85 respondents or 44% said that they spend less than 5% in fruits buying. Similarly, 70 or 37% respondents spent less10% of income and at last more than

10% by 37 or 19% of the respondents. Thus it can be concluded that 44% respondents spent 5% of their income in fruits buying. The above table can be shown in the following graph

Graph-3

Showing the percentage of income spent in fruits by the consumers.

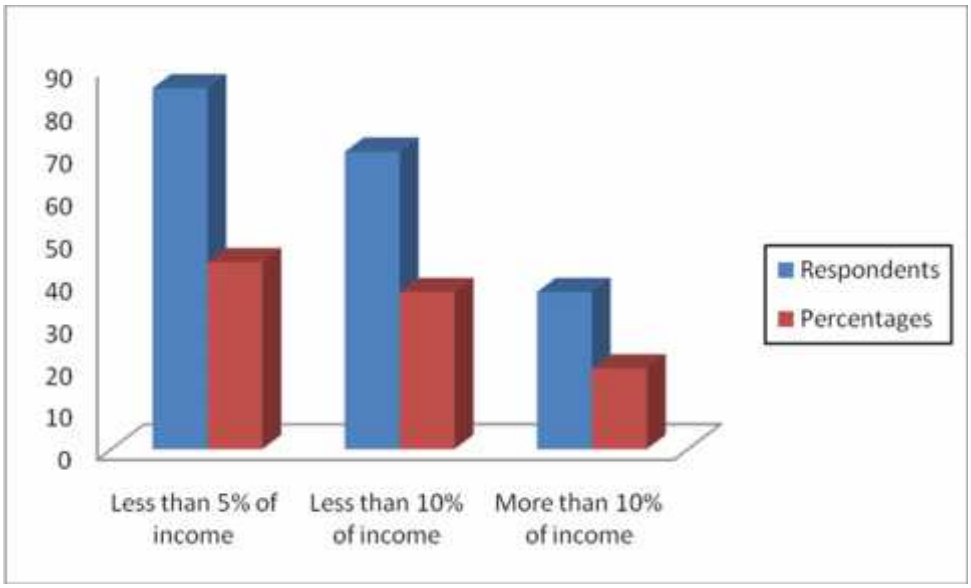


Table: 7

Showing the basic reason to consume fruits

Particulars	Respondents	Percentages
To become healthy	85	44
To meet hunger	82	43
To show other as rich	25	13
Total	**192**	**100**

Source: Questionnaire

By analysis of the above table 85 respondents or 44% said that reason for consuming fruits is to become healthy, secondly 82 respondents i.e. 43% said to meet hunger and least 25 respondents i.e. 13% to show

others as rich. It can be notified that 44% or 85% respondents feel that to consume fruits is to become healthy.

The above table can be shown in the following graph

Graph-4

Showing the basic relation to consume fruits

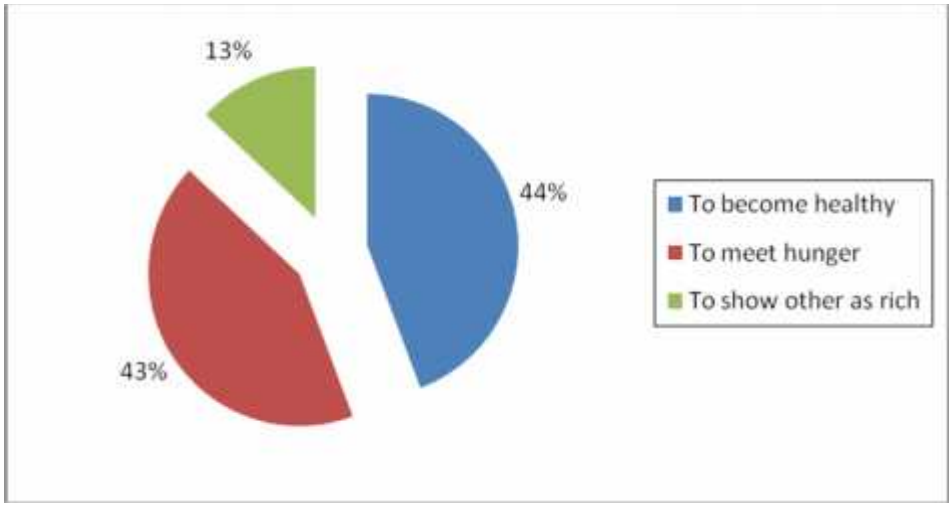


Table: 8

Showing the main problem of not getting the desired types of fruits

Particulars	Respondents	Percentages
Price factor	95	49
Quality aspect	81	42
Time aspect	16	9
Total	**192**	**100**

Source: Questionnaire

From above table, 95 respondents i.e. 49% said that their main problem of not getting the desired types fruits is by price factor. Similarly, 81 respondents or 42% said quality and at last 16 respondent or 9% by the time aspect. Thus, it can be results at more respondents feel price is the limiting factor.

The above table can be shown in the following graph

Graph-5

Showing the main problem, of not getting the desire type types of fruits

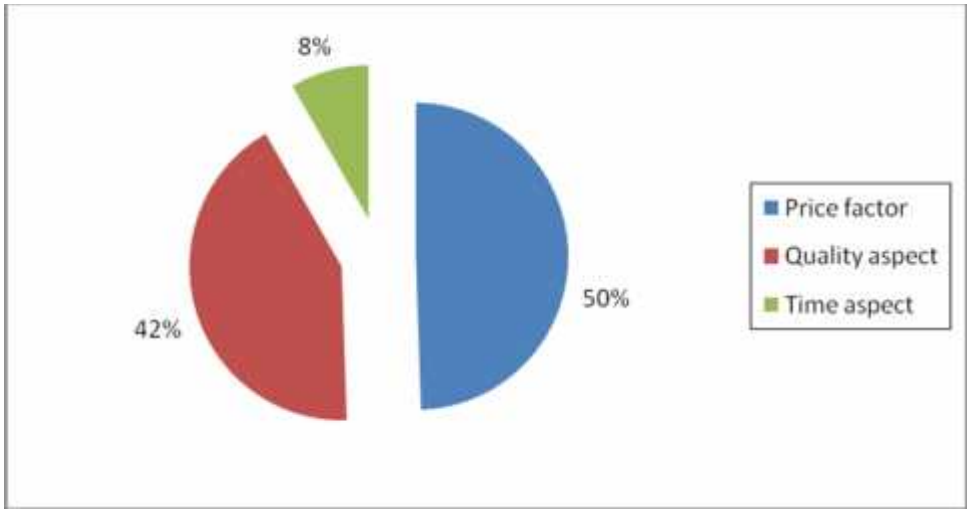


Table: 9

Showing the preference of fruits among the consumers.

Particulars	Respondents	Percentages
Banana	50	26
Apple	110	57
orange	25	13
Mango	7	4
Total	**192**	**100**

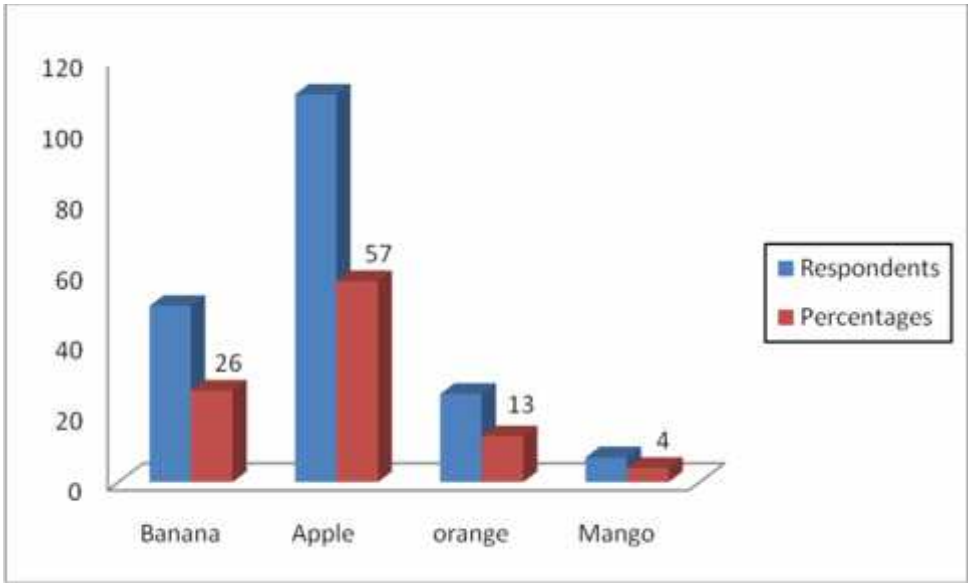
Source: Questionnaire

According to the above table among the fruits consumers 110 or 57% of the respondents prefer apple where as 50 or 26% respondents prefer banana, 25 or 13% of respondents prefer orange and at last 7 respondents or 48% prefer mango. Thus, it can be said that apple is the most preferred fruits among the respondents.

The above table can be shown in the following graph

Graph-6

Showing the preference of fruits among the consumers



4.3 Sellers View

Among the distributed 110 questionnaire 104 is return back, so the respondent's percentage is 94%.

Table: 10

Showing the time of fruits selling in the market by the fruits sellers.

Particulars	Respondents	Percentages
Day	8	8
Morning	68	65
Evening	28	27
Total	**104**	**100**

Source: Questionnaire

According to the above table 68 respondents 65% sells fruits in the morning, 28 respondents i.e. 27% sells in the evening and 8 or 8%

sells at day time, thus, it can be concluded that morning is the prime time to sell fruits.

The above table can be shown in the following graph

Graph-7

Showing the time of fruits selling in the market by the fruits sellers

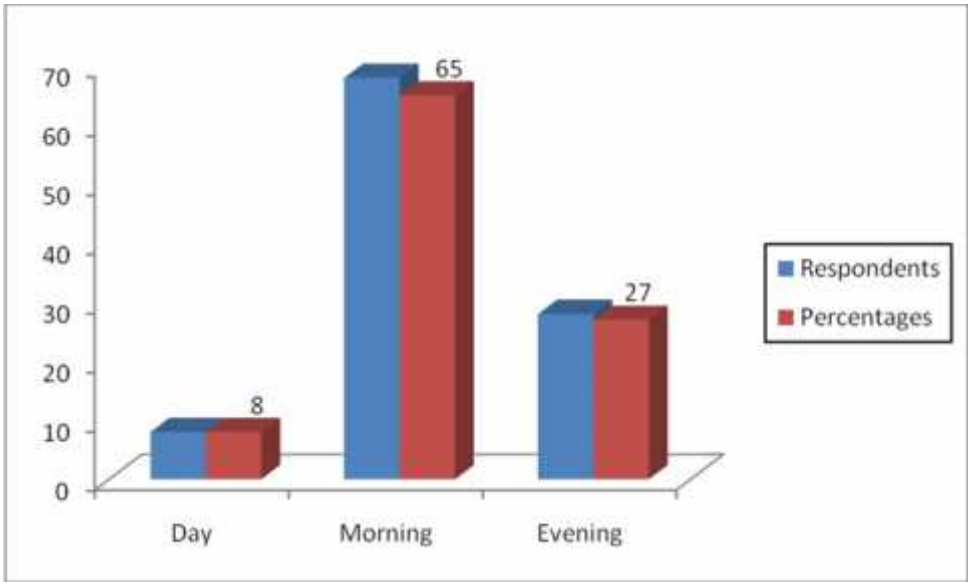


Table: 11

Showing the quality of fruits sold by the sellers.

Particulars	Respondents	Percentages
Less than 5 kg	71	68
15 kg	29	28
More than 15 kg	4	4
Total	**104**	**100**

Source: Questionnaire

According to the above table 71 respondents or 68% of respondent said that they sell 5dg at a time and 29 respondents or 28% sells 15 kg

of fruits at a time and at last 4 or 4% of the respondents sells more than 15kg of fruits at a time. Thus it can be found that the 5kg is the most selling quantity.

The above table can be shown in the following graph

Graph-8

Showing the quantity of fruits sold by the sellers

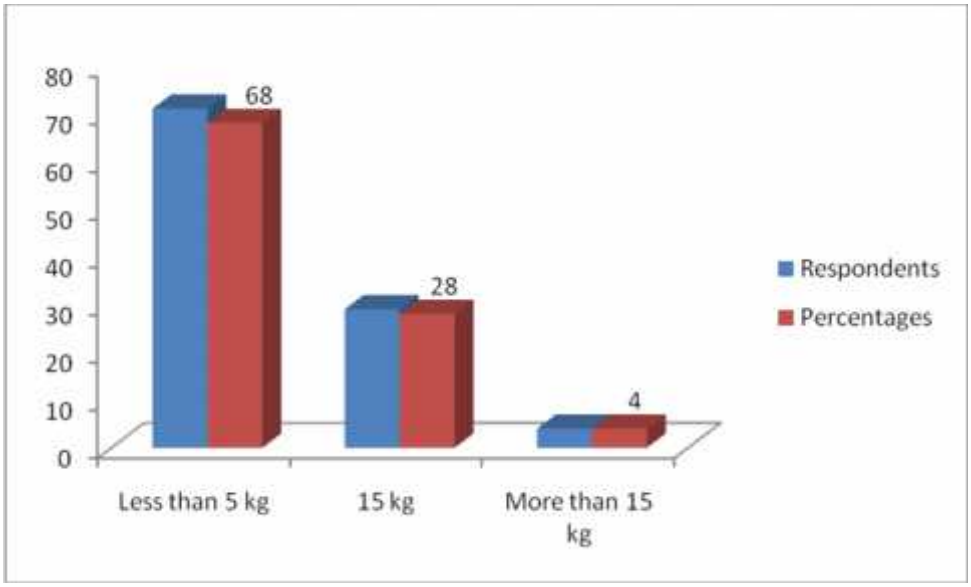


Table: 12

Showing the fruits coming from the different places

Particulars	Respondents	Percentages
Kuleshwor wholesale fruits market	63	61
Form farmer	18	17
From own farm	23	22
Total	**104**	**100**

Source: Questionnaire

According to the above table 63 or 61% of the respondents said that they bring fruits form kuleshwor wholesale market followed by 23 or 22% form own farm and at last 18 or 17% bring form framers. Thus, it can be concluded that kuleshwor wholesale market is the potential place for fruits buying.

The above table can be shown in the following graph

Graph-9

Showing the fruits coming form the different places.

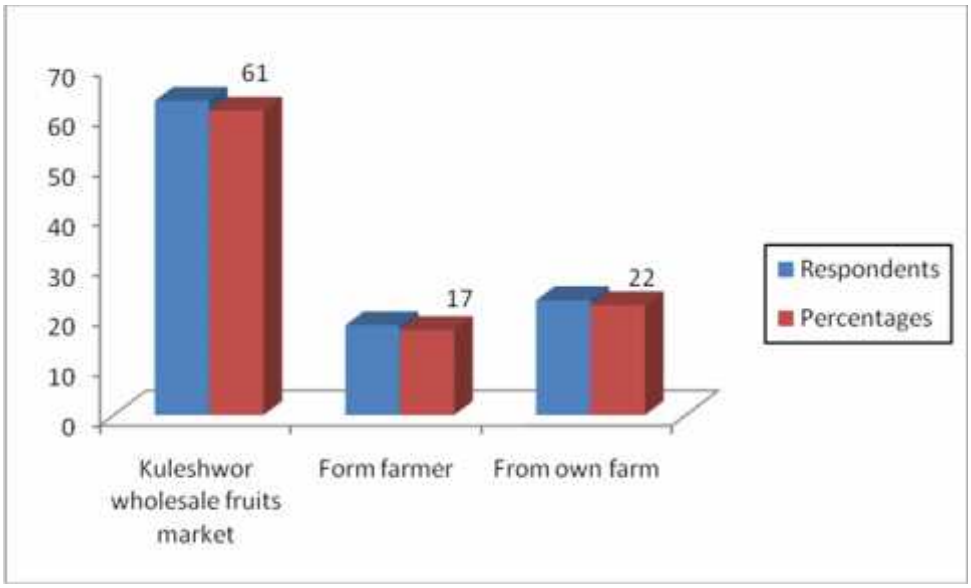


Table: 13

Showing the competition among the sellers by the different factors.

Particulars	Respondents	Percentages
Price factor	76	73
Level	26	25
Belief factor	2	2
Total	**104**	**100**

Source: Questionnaire

As per the above table 76 or 73% respondents said that the competition among the sellers is by the main factor of price. Similarly, 26% or 25% of the respondents feel that level is other factor and at last belief with 2 or 2% of the respondents. Thus, by the analysis price is the important factor for competition among the sellers.

The above table can be shown in the following graph

Graph-10

Showing the competition among the sellers by the different factors.

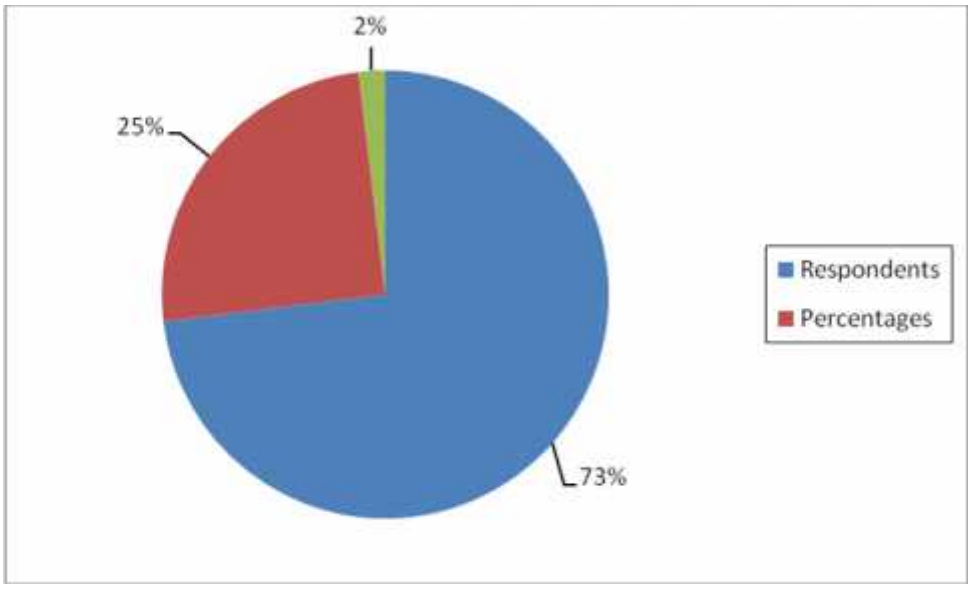


Table: 14

Showing the number of family members of the sellers.

Particulars	Respondents	Percentages
Yes	18	17
No	86	82
Total	**104**	**100**

Source: Primary Data.

As per the above table 86% or 82 respondents said that they have no other profession and 18 or 175 of the respondents have other ancillary profession. Thus, it shows that the without other profession only fruits selling is sufficient to take care of whole family members.

The above table can be shown in the following graph

Graph-11

Showing the competition among the sellers by the different factors.

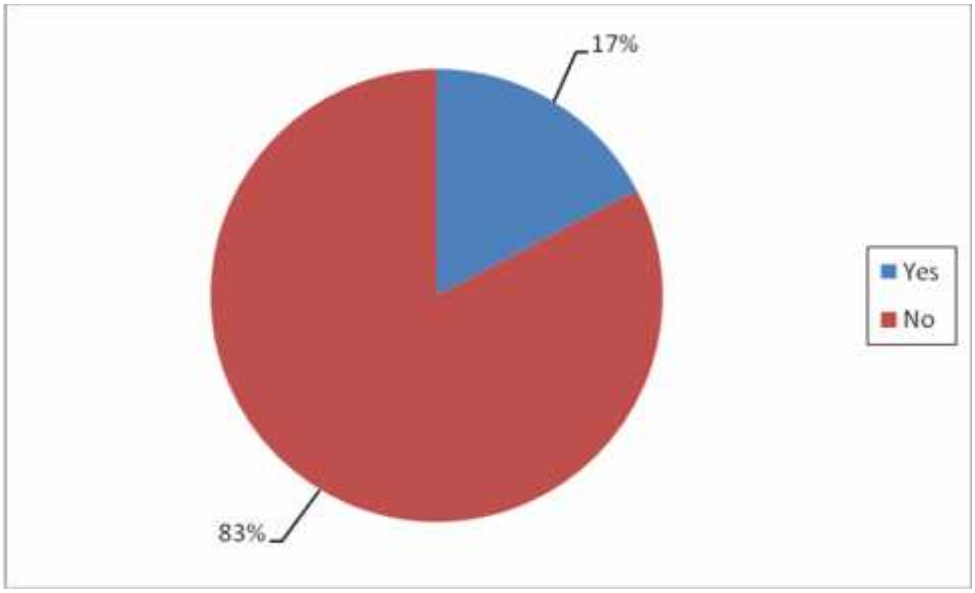


Table: 15

Showing the basic problems of the sellers.

Particulars	Respondents	Percentages
Lack of regular supply of fruits	11	10
Fruits destruction	62	60
Problem of Cold stores	31	30
Total	**104**	**100**

Source: Questionnaire

According to the above table 62 or 60% of the respondents fell that fruits destruction is main problem. Similarly, 31 or 30% said that their problem is cold storage and at last 11 or 10% of respondents said that there is lack of regular supply. Thus, it is clear that fruits destruction is the main problem of sellers.

The above table can be shown in the following graph

Graph-12

Showing the basic problems of the sellers.

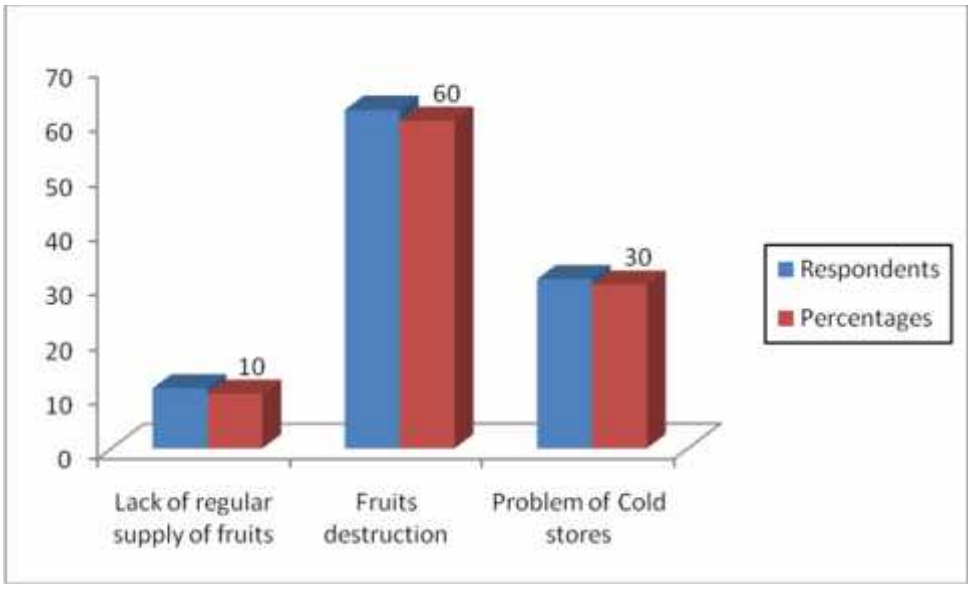


Table: 16

Showing the prospects of fruits market in future.

Particulars	**Respondents**	**Percentages**
Less investment more profit	66	64
More investment less profit	22	21
Less investment less profit	16	15
Total	**104**	**100**

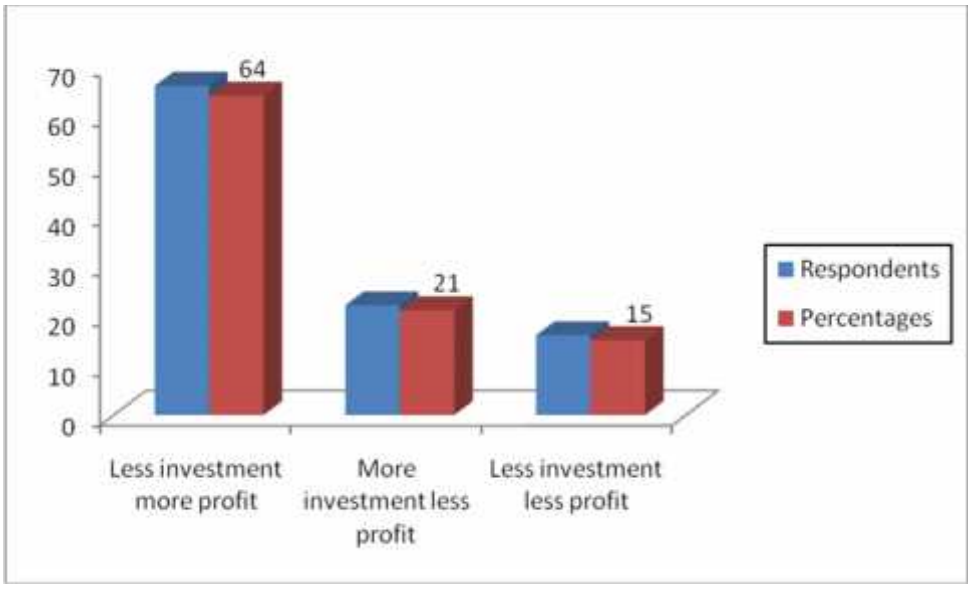
Source: Questionnaire

By above facts it was found that 66 or 64% of the sellers said that in fruits business it has less investment and more profit similarly 22 or 21% of the respondents said has more investment less profit and at last 16 or 15% of the respondents said that it has less investment and less profit. Thus, it can be concluded that in fruits business it has less investment and more profit. So, the future of fruits business is bright.

The above table can be shown in the following graph

Graph-13

Showing the prospects of fruits market in future.



4.4 Major Findings

- The production of different fruits which includes pear, peach, plum, apple, lapsi, orange, lime, lemon, nubuwa, etc. and total production is 5021 metric tonnes and area of production is 560 hectors.

- The consumption of fruits by the consumer or the respondent is in weekly basis by more than 48 percentage and daily by 40 percentages.

- Similarly, the quantity of fruits purchase by the consumer is 3kg at a time by 47 percentages followed by 1kg by 42 percentages more than 2kg b 11 percentages.

- Respondents invest less than 5 percentage of income by 44 percent similarly 10 percent invest by 37 percent and 19 percent invest more than 10 percent in fruits buying.

- The main problem of consumer of not getting the desire types of Fruits is price factor i.e. 49 percent by the respondents followed by quality aspect by 42 percentages and at last by time aspect by 9 percentages.

- The quantity of fruits sold by the sellers at a time is 5kg average and then followed by 15kg and more than 15kg.

- The supply of fruits is form mainly the kuleshwor fruits whole sale market followed by farmers and the farms.

- The competition among the fruits sellers is by the factor of price followed by level and belief.

- The prospects of the fruits market is increasing day by day as if has low investment more profit and can take care of whole family without other profession.

- The man problem of fruits selling is fruits destruction by different reason by 59 percent followed by the lack of proper cold storage facility and than lack of regular supply.

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Fruits are one of the important food items in out daily diet. Due to the consciousness in the health now-a day everybody consumers fruits. So, there is more and more prospect and need of fruits marketing.

This research has conducted on a topic “Problem and Prospects of fruits marketing in Kathmandu District” in course of research, different people and places were visited for asking questions to the different parts of the district. Before entering to the field, two specific types of questionnaires were prepared. One type for consumers for which 200 questionnaires were given in total out of which 96% responded. Similarly, in case of sellers out of 110 questionnaire 104 response was found.

The main objective of the studies to find out production consumption, problem, prospect, demand supply of the fruits similarly the basic problem prospects as well as to provide the useful suggestions.

The main out come of the study is follows:

- The production of fruits in Kathmandu district is 5021 tm. In case the consumer consumes fruits 2kg. at a time.

- The consumers invest less than 5% in fruits buying

- The sellers have problem in selling fruits as it perishes due to lack of proper cold storage, lack of export in production, lack of proper marketing channels, lack of proper infrastructures for market.

- The low income level and low purchasing power of consumers effect the fruits consumptions. There is competition among the sellers in price and quality.

- The increasing population and increasing demand for fruits clearly indicates the potential market and prospects of fruits market in Kathmandu district.

5.2 Conclusion

Fruits constitute an essential and important supplement ot the human body. Due to the consciousness in health, the demand of fruits is increasing day by day. It helps to overcome the nutritional need of Nepalese. With their low income, as it is the rich source of different vitamins and minerals.

Nepal is an agricultural based country as its economy is based on agriculture. Fruits cultivation is part of agriculture. The production of fruits can contributes a great in national economy and peoples health, but the production of fruits is not in sufficient quantity as well as quality. Similarly there are many more problems in the proper distribution, storing, production and quality aspects.

There are different types of problems regarding the fruits marketing within the both sides i.e. within consumers as well as sellers. In case of consumers they have no sufficient ability to buy fruits so price is the prime factor. In other hand the quality of that product as well as the timely unavailability of that product and another factors. Similarly, on the part of sellers. There is lack of more investment capacity. Competition is very high among sellers. There is more post harvest losses in fruits due to its perishable nature and lack of proper cold storage facilities.

We come to conclude on the basis of this study that there still remaining so many problems but the prospects of the fruits marketing

is increasing in other hand day by day. This study shows that there are great prospectus if fruits marketing particularly in Kathmandu districts. But there are so many problems that need to be addressed properly and timely. Thus, the future marketing is very bright.

5.3 Recommendations

Fruits marketing is one of the needs for the managed urbanization and fr the betterment of the health condition of the people following are the recommendations.

- In Nepal context, the authorized agent for fruits is lacking. So, there is more flexibility in fruits pricing. Here the middle men are getting more profits. So, there must be authorized agents so that framers, consumers and the sellers would be benefited.

- There is only one whole-sale market of fruits in Kuleshowr in Kathmandu district. Lack of fixed and managed market is problem for fruits marketing; most of the consumers are facing the problem of fix and managed market. There are the fruits hawkers and fruits sellers on the side of the road but there is not so reliable. When it rains the sellers are found moving from the market place which is either on the road or without roof or any shade. Besides, there is lack of unity in price due t which the consumers are cheated in one hand and on the other sellers who do not prefer bargaining. Unmanaged market creates lots of problems so we should arrange the fixed and managed fruits market at a stated place and time.

- Information plays a vital role for the development of each sector and it applies in the marketing field also. There is lack of information for both producers and consumers about the market information like market and price. So there should be proper information about the market.

- Some of the fruits are perishable in nature and is destroyed if there is lack of processing and preservation facilities. That's why there should be preservation of fruits, so that these products can be easily sold in the market.

- Because of lack of sufficient storage facilities, farmers, consumers and retailers face a lot of problem. It affects price of fruits also. So, there should be proper storage facilities.

- Government should make the proper policy for promotion of fruits market. Lack of government rules and regulations in one hand and flexible rules are seen in practice. So, Government policy should be stable and practical.

- Most of the farmers need financial support. Lack of finance. They cannot afford the modern technology and good seeds. This creates a lot of problem for them. So, the farmers should be given proper loan facility financial support.

- Most of the people have negative concept about farmer. We must respect to farmers and encourage them to produce fruits. The governments most have proper encouraging, policy and incentive provision to support and promote fruits cultivation.

- We should make marketing planning and research for fruits marketing. We should identify the problems and markets within Nepal and abroad. So, horticulture research centers should be established and strengthened.

- There is lack of agricultural tours and visits exploring new markets. We can sell our fruits in gulfs and others countries. So, there must be governmental institutional attempts for its proper promotion and marketing.

- Fruits could be sold directly or through the middleman. Kathmandu faces some time lack of fruits and some time supply is more than demand so there should always balance in supply and demand by the proper arrangement of transportation for regular supply to meet the demand in time.

BIBLIOGRAPHY

Books

Koirala, K.D.(2007), **Marketing Management**, M.K. Publishers and Distributors, Kathmandu.

Koirala, K.D. (2000), **Marketing Research**, Buddha Academic Enterprises Pvt. Ltd., Kathmandu.

Kotler**,** Philip **(**(2006)**) Marketing Management**, Pearson, Prentice Hall, New Delhi.

Kotler, Philip (1996) **Marketing Management**, Person, Prentice Hall, 7th Edition, New Delhi

Shrestha, Gyan Kumar, (1998) **Fruits Development in Nepal-Past Present and Future of Fruits**, Technical Concern, Kathmandu.

Shrestha, Shyam K.,(2008) **Fundamentals Of Marketing**, Book Palace, Kathmandu.

Wolff, K. Howard And Pant, Prem R.,(2007) **Social Science Research And Thesis Writhing**, Buddha Academic Enterprises Pvt., Kathmandu.

Thesis, Journals, Reports, Magazines and Other

Agriculture Statistics of Nepal, Central Bureau of Statistic, 2007/08.

Annual Report of AEC (Agro Enterprise Center) - 2007/08.

Annual Report of Fruits Development Department, Kirtipur-2007/08.

Annual Report of Kathmandu District Agriculture Office, 2007/08.

Bhattarai, Ishwari, (2004) **Vegetable Marketing In Kathmandu Valley**, Kathmandu.

Neupane, Ram Krishna, (2005) **A Study Of Market Situation Of Toothpaste In Kathmandu**, A Case Study Of 'Close-Up', Kathmandu.

Shrestha, Mohan Krishna, (2005) **Vegetable Marketing In Bhaktapur District**, Bhaktapur.

Statistical Information on Nepalese Agriculture, Ministry of Agriculture and Cooperatives, 2007/08.

Thapa, Babu Kaji, (2007) **Floricultures Enterprises In Kathmandu Valley**, Kathmandu.

APPENDIX-I

QUESTIONNAIRE FOR CONSUMERS

Dear Respondents,

I would like to bring to your kind notice that I am doing this study entitled 'Problems and Prospects of Fruits Marketing in Kathmandu District', for the partial fulfillment of the Master of Business Studies (MBS) under Tribhuvan University, Nepal, your information and responses based on following questionnaire would be very much valuable. The information would be used for research purpose only and would be kept confidential

Please give tick mark (✓) in the appropriate option in the following questions:

1. When do you buy fruits?

a) Once in a Week b) Daily c) Twice A Month

2. How much fruits do you buy at a time?

a) 1kg b) 2k c) More Than 2kg

3. From where do you buy fruits?

a) Near By Shop b) From Kalimati c)At Any Place

4. How much of hour earnings do you spend in fruits?

a) Below 5% b) About 10 c) More Than 10%

5. Why do you eat fruits?

a) For Better Health b)To Show Others As Have Group

c) To Satisfy Hunger

6. What problem do you see in finding fruits of your choice?

a) Price Factor b) Quality Factor

c) Lack Of Regular Supply

7. What is tentative distance of the nearest fruits shop form your residence?

a) 5 Minutes Walk b) 15 Minutes Walk

c) More Than 15 Minutes Walk

8. Which of your family member purchases fruits?

a) Father b) Mother c) Others

9. Which fruit is consumed more by you?

a) Banana b) Apple c) Orange

d) Mango

APPENDIX-II

QUESTIONNAIRE FOR SHOPKEETERS

Dear Respondents,

I would like to bring to your kind notice that I am doing this study entitled 'Problems and Prospects of Fruits Marketing in Kathmandu District', for the partial fulfillment of the Master of Business Studies (MBS) under Tribhuvan University, Nepal, your information and responses based on following questionnaire would be very much valuable. The information would be used for research purpose only and would be kept confidential

Please give tick mark (✓) in the appropriate option in the following questions:

1. When do you sell fruits more?

a) Day time b) Morning c) Evening

2. How much do you sell in a day?

a) 5kg b) 15kg c) More Than15kg

3. Where do you buy fruits?

a) Kalimati Market b) Small shopkeepers

c) General Consumers

4. What kind of customer do you have?

a) House wives b) Small shopkeepers

c) Students

5. What type of consumer buys more?

a) Vegetarian (Rich) b) Family c) Students

6. What is the basis of competition among the shopkeepers?

a) Price b) Quality

c) Honesty and Image

7. How is the loss due to transportation and quality residence?

a) Negligible substantial b) Quality reduction

c) No loss

8. What is the size of your family?

a) 2-4 b) 4-6 c) 6 and above

9. Do you have any other occupation?

a) Yes b) No

10. What problem do you see in this occupation?

a) Perishable nature of fruits

b) Lack of purchasing power of consumer

c) Location factor for shop

11. What prospectus do you see in this profession?

a) Less investment and high profit Margin

c) High investment and less profit Margin

d) High investment and high profit Margin

e) Less investment and less profit Margin

APPENDIX-III

Area, Production and Yield of Fruits in Nepal

Types	Total Area (ha.)	Productive Area (ha.)	Production (mt.)	Yield (mt/ha)
Citrus				
1996/97	13544	7899	76471	9.68
1997/98	14629	8488	83375	9.82
1998/99	15244	8977	88635	8.87
1999/00	15924	9330	92994	9.97
2000/01	17026	10034	100352	10.00
2001/02	18007	10592	107250	10.13
2002/03	19018	11277	113067	10.20
2003/04	20673	11892	121665	10.23
2004/05	22423	12615	130928	10.38
2005/06	23663	13312	139110	10.45
2006/07	24799	13931	148010	10.62
2007/08	25909	14606	156956	10.75
Winter (Deciduous)				
1996/97	12055	8632	72876	8.44
1997/98	12362	8770	75231	8.68
1998/99	12870	9137	78267	8.57
1999/00	13261	9402	81640	8.68
2000/01	13580	9314	83357	8.67
2001/02	14053	9895	85026	8.59
2002/03	14560	10169	87252	8.58
2003/04	15696	1049	89502	8.58
2004/05	16511	10653	91583	8.60
2005/06	17123	10800	92985	8.61
2006/07	17869	10983	94988	8.65

2007/08	18500	11149	97208	8.72
Summer (Tropical)				
1996/97	30592	21377	228564	10.68
1997/98	31999	22287	239682	1075
1998/99	32846	22894	200588	8.76
1999/00	33734	23553	253591	10.77
2000/01	34599	24098	231458	9.6.
2001/02	35434	24621	263737	10.71
2002/03	36499	25046	245015	9.78
2003/04	37466	25846	276159	10.68
2004/05	38663	26512	251108	9.47
2005/06	39643	26905	286770	10.66
2006/07	44040	29198	268399	9.19
2007/08	44903	29553	298715	10.09
Sub-tropical				
1996/97	56191	37908	377911	9.97
1997/98	58983	39445	398288	10.10
1998/99	60962	41008	367490	8.96
1999/00	62913	42285	428225	10.13
2000/01	65205	43746	415168	4.49
2001/02	67494	45108	456013	10.11
2002/03	70068	46492	446334	9.62
2003/04	73775	48166	487326	10.12
2004/05	77537	49780	473611	8.51
2005/06	80426	51016	518864	10.17
2006/07	86707	54112	511397	9.45
2007/08	89312	55358	552879	9.99

Source: Statistical Information on Nepalese Agriculture.