A CASE STUDY
GINGER PRODUCTION IN PALPA DISTRICT

By

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This is to certify that Mr. Krishna K.C. has prepared the Thesis entitled "A case study Ginger Production in Palpa District" under my supervision. It embodies has original and independent work. I am fully satisfied with the work in terms of its literature review, research methodology, presentation and analysis of data and over all research work.

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Keshab Ghimire
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DECLARATION

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Abbreviations

AEPC	Alternative Energy Promotion Center
AMT	Amount
AOA	Agreement of Agriculture
CBS	Central Bureau of Statistics
CCIA	Central Carpet Industries Association
DADO	District Agriculture Development Office
DDC	District Development Committee
DEO	District Education Office
EDTC	Electronic Depository Transferred Cheque
ESAP	Energy Sector Assistance Programmed
FY	Fiscal Year
GCDS	Ginger and Cardamom Development Section
GR	Growth Rate
ICS	Improved Stoves Programmed
ILO	International Labor Origination
JTA	Junior Technical Assistant
K.W.	Kilo Watt
LDC	Least Developed Country
MDD	Marketing Development Division
MP	Municipality
PES	Public Enterprises
REDA	Rural Economic Development Association
RRESC	Regional Renewal Energy Service Center
SATA	Swiss Association for Technical Association
SLC	School Leaving Certificate
TPC	Trade Promotion Centre
TU	Tribhuvan University

UN	United Nation
VDC	Village Development Committee
WDR	Western Development Region
WID	Women in Development
WTO	World Trade Organization

CHAPTER I

INTRODUCTION

1.1 Background

Nepal is a small and least developed country in between two emerging economic powers of Asia, China in the north and India in the east, west and south. The total geographical area of the country is 147181 sq. km. Despite its size, it has diversified climatic condition, which is suitable for growing a large valuable species of crops. The country is administratively divided into five development regions and seventy-five districts. Ecologically, Nepal has been divided into three regions the Terai, the hills and the mountains. These regions differ greatly from one another in topography climate and population density.

Palpa district is also one of the famous districts in western development region as other district of the Himalayan kingdom of Nepal. This district is very famous for its natural beauty, history and tourism. This district is situated in the middle of Rupandhahi, Nawalparasi, Syanja, Gulmi, Tanahu and Arghakhanchi districts. It is located in Lumbini zone and covers 1373 sq km of the area of the Nepal. Tansen is the head quarter of the Palpa district. Palpa have 60 VDC and 2 Municipality. This district is situated 83 km away from the birth place of Lord Gautama Buddha, Lumbini. With the aim to develop the develop the people of Palpa district to achieve the success or goal for there well being the organization like REDA are working in this Palpa district to promote and strengthen the local area people, government and organization.

The full form of REDA is Rural Economic Development Association. It is a nonprofit making community based on nongovernment organization established in 1991 A.D. at Palpa District. It has been registered to District Administration office Palpa on 1993 A.D. and affiliated with social welfare council on 1994 A.D. It comprises 475 general members along with 17 board members. The main objectives of REDA is enabling community people to identify and mobilize social, physical and human resources in achieving higher level of self reliance. It facilitates communities' enchanting their planning, implementation and monitoring capacities. REDA has been lunching the ginger promotion program since 2055 B.S in the financial and technical support of Helvatas, Nepal. This program has been supporting farmers in production, processing and establishment of institutionalized market mechanisms in order to maximize farmers who produce ginger. One farmer can earns about Rs 9000/- annually. Six thousands one hundred and forty- one ginger farmers have been directly benefited through this program. Ten ginger co-operatives have been established and operated in order to support ginger farmers in selling their products at maximum price rate and avoid cheating from the local traders. One district level federation of ginger cooperative also has been established and operational zed since January 2008. REDA is caring and raring these cooperatives institution despite of the external support.

In the technical and financial assistance of Heifer International, Nepal and in the initiation of REDA livestock program has been implemented at Palpa since 2001 A.D. This project has been launched in the partnership of REDA and Heifer Internationals, Nepal till now. There are four projects under this program namely REDA Goat Raising Program, Youth Integration in community development, Phek Goat Raising Program,

Youth Integration in community development, Phek Goat Raising Program and Palpa Integrated Rural Development Program. This program has been implemented to promote livestock under the leadership of women in order to reduce the rural poverty. There are 56 women groups in the limitation of REDA. The main aim of this program is to empower the women and support for the economic development of farmers 860 goats to 430 families and 60 buffaloes to 60 families have been gifted by REDA through Heifer project till now. REDA, under the agreement made between Alternative Energy Promotion Centre/Energy Sector Assistance Programmed(AEPC/ESAP) on August 2004 has been working through the Regional Renewal Energy Service Centre (RRESC) to promote rural activities in Palpa, Syanja, Gulmi, Arghakhanchi, Rolpa and Pyuthan districts with the aim of promoting with the aim of promoting of Micro hydro projects. ESAP has been providing financial subsidy since August 2004 to till date. Major achievements of the program are-

In total 212 K.W. for 2,661 households (175 K.W. for 1941 households through micro hydro project and 37 K.W. for 720 households through Pico hydro project, has been build under the social mobilization and technical supervision of REDA. This program targets for the production of 1.5 Mw electricity in near future. AEPC had primarily involved in promotion and development of Biogas Technology and implementation of the National Improved Stoves (ICS) program. The ICS program has been initiated by REDA under the financial and technical assistance of CRTN from 2001 to 2003 A.D from January 2006 REDA has been implementing this program in Palpa district under the financial and technical support of AEPC/ESAP. There are 20 local partner organizations in four districts to run this program. 651 promoters have

been trained to install the ICSs and 5817 ICSs have been installed up to 2007.

The agricultural sector, which dominates the economy of Nepal, accounts for about 38 percent to the national Gross Domestic Product (GDP) and provides direct employment to about 76 percent of the economically active population There is considerable degree of regional specialization among cash crops due to ecological conditions, transport and marketing considerations, locations of processing facilities and socio-economic factors. Sugarcane, tea, tobacco, potatoes, oil seeds, ginger, cardamom and jute are the principal cash crops grown in Nepal (Sedhain and Aryal, 2002).

Agriculture, in spite of the top priority accorded by government plans and programs, remains a subsistence sector with low productivity. Although resource allocation to the agriculture sector has been 25 percent of the development expenditure, the dismal performance of this sector has forced Nepal to import rice to meet the food shortage in the country (Dahal, 1999). Agricultural diversification and commercialization have drawn attention of the planners and policy makers in terms of generating more income, employment opportunities and biodiversity conservation. Because of poverty of the farmers and geographical impasse, the traditional agricultural practices have undergone little changes. As agriculture has been a key sector in Nepalese economy, agricultural sector has to be developed and commercialized to raise the living standard of rural people by providing employment opportunities (Adhikari, 2000). The living standard of the farmers can be raised by identifying high-value low-volume crops, which have comparative advantage, and by optimally utilizing the available resources for sustainable development (Gautam and Saraf, 1995). To accelerate the

growth in agriculture sector, the government of Nepal has launched 20 years strategic plan, Agriculture Perspective Plan (APP). APP seeks to raise agriculture GDP growth from 2.96 percent in 1992-1995 to 4.88 percent by 2011-2015. Likewise, APP aims to uplift farmers' status by including high value crops on a commercial basis in hills of Nepal.

Ginger is cultivated mainly for export and major production areas are Syanja, Palpa and Tanahun districts in Western Development Region and Salyan district in the Mid Western Development Region and Morang, Taplejung, Panchthar, Tehrathum in Eastern Development Region. Production of ginger in 1981/82 was 1648 mt. whereas recent area occupied by ginger is 8956 ha with the productivity of 8.42 mt/ha (GRP, 2000). It has been estimated that out of the total production 60 percent is exported particularly in India (KC, 2002).

The traditional value and geographical location influence decision-making process in rural communities (Devkota, 1999). Involvement of women in agriculture plays an important role in agricultural production and marketing processes in Nepal. In Nepal, female population constitute 50.50 percent of the total population and 98 percent of them are engaged in agriculture (Adhakari, 2002). In much of the communities throughout Nepal, the women carry out much of the agriculture work and almost all household activities. The contribution of Nepalese women to economic activities in various friends is not less than men though they were not completely deprived of economic right, yet they are not given equality to it.

Nepalese women are still confined to their traditional roles. Activities like fuel wood and water collection, food preparation, giving birth, child care, and washing clothes are seen as non-economic activities are performed by

women where as men are involved in marketing activities and social gathering (Bhattarai, 2002).

Women's role is very crucial for promoting of high value crops production and marketing. As women comprise 76 percent of the total labor force in ginger production, women should be targeted as the key players to promote agribusiness of high value crops to increase household income (Tulachan, 1994).

1.2 Focus of the Study

Demand for spice crops are increasing day by day in the country because of population growth, increase in external market demand and also increasing in the local spice industries (GCDS, 2000). His Majesty's Government of Nepal in its Tenth Plan has emphasized on the commercialization of ginger in the identified pockets through pocket package strategy. This strategy not only improves the income of the farmers but also promote agribusiness.

Efficiency of marketing is crucial in determining the profits from the production. Ginger marketing system and most of the market centers are poorly organized and rudimentary. It is therefore, this study was conducted to examine the marketing situation of ginger including marketing system, pricing mechanism, gender decision making, production and marketing problems and export potentiality of ginger in Palpa district.

1.3 Statement of Problem

Mixed farming that includes crop farming, livestock rising and forestry is typical of Nepalese agriculture. The farming system in the mid-western hill is subsistence oriented to a large extent. A well-developed and efficient production and marketing system plays a pivotal role in transforming the subsistence agriculture towards commercialization.

Past efforts in the development of agricultural sector have been largely concentrated on production aspects. However, there have been gradual changes in the scope of agricultural marketing with the increased production in some pockets, increased urbanization and production. Despite the substantial emphasis given on production aspects, past efforts have failed to achieve the significant productivity gains (Karki, 1997).

Nepal's excellent topographical variation provides vast opportunities for growing and exporting a variety of High value cash crops. However, the government has been focusing to invest on the traditional pattern of research focusing on a few cereal crops like rice, maize, wheat and legumes (Sedhain and Aryal, 2002). Ginger is one of the most feasible high value crops of export potentialities. Because of various problems related to agricultural marketing in Nepal like long marketing channel, large number of middleman, bio-physical and socio-economic constraints, farmers are not able to trap the expected opportunity from ginger cultivation. One of the problems of often expressed by the ginger growers was the fluctuation in the availability of market as well as market prices that resulted in heavy exploitation by the traders. Agricultural marketing in Nepal has because of investment of long marketing channels, a large number of middlemen, many type of physical, social economic and facilitating marketing functions and services. Due to these problems farmers are not able to trap the opportunity form ginger

cultivation. To cope with these problems, Nepal should prioritize the commercialization of ginger through efficient marketing facilities to accelerate economic growth of the rural communities in the hills. Farmers are losing their control over the domestic markets.

The gender disparity in farm related decisions is common in our society. Though women have significant role in farming men make more decisions about farm related activities. The legal provision regarding the right of women has been accepted now. However, women are still far behind men.

1.4 Rationale of the Study

Agriculture, in spite of top government priority, continues to be largest sector with a low productivity and traditional farming system. Traditionally, Nepal's hill farmer have had limited access to the marketing network for the commercialization of their production, thus limiting the commercialization of hill agriculture as well as farmer's income generating potential.

Agricultural perspective plan (APP) has recognized the importance of ginger as the high value spice crop in Nepal. Hilly region is found more suitable for high value commodity production. Some hilly VDCs of Palpa district is important ginger growing district in the Western Development Region of Nepal. The total area under cultivation, production and productivity of ginger in Palpa district in 2012\2013 were 995 ha. 13541.95 mt. and 13.61mt/ha. Respectively (DADO, 2006). In absence of sufficient information about pricing mechanism and market planning, the farmers of this district are facing difficulty in obtaining remunerative

price of their product. Efficient marketing system may help them in fetching better prices for their produce.

Women play a vital role in the production of all high-value commodities. However, they have little access to alternative means of earning income. In view of the government's present policy of encouraging women in the agribusiness sector, there is considerable need for research on gender analysis that encourages women's involvement in socioeconomic activities.

Under these circumstances it is important to understand production and marketing situation of ginger as major exportable cash crop. This study has made an effort towards this direction.

1.5 Objectives of the Study

The general objective of this study was to assess the production and marketing dynamics of ginger with special reference to ginger in Palpa district. The specific objective was :-

- To identify the marketing practices, marketing channel and business tradition of ginger;
- To analyze the gender role in household decision making process with regard to ginger production and marketing of ginger;
- To assess the sales and production in quantity.
- To identify the major constraints of production and marketing.

1.6 Scope of the Study

It is expected that the output of the proposed study will help the farmer to remove the weaknesses and make effective production and marketing plans of ginger. This will also help the ginger-producing farmer to reap a maximum profit and rise in standard of living. This study will also be useful for policy makers and planner in formulating policies and guidelines regarding production and marketing of ginger.

1.7 Limitation of the Study

This research addresses the production and marketing dynamics of major exportable spices, especially ginger, in Nepal. Sincere effort was made to minimize the limitations. However, the present study may have the following limitations.

The study was limited to Village Development Committees (VDCs) and municipality (MPs) of Palpa district. As this study has not covered all the agro ecological zones of Nepal its findings may not be representative of hills of Nepal Despite the several spices grown in Nepal including Palpa district, this study covers only one spice i.e. ginger. So it may not be representative for all the high value cash crops having export potential (MDD, 2001).

1.8 Organization of the Study

The thesis has been categorized into five chapters as:

Chapter I: Introduction

The first chapter consists of introduction of the study, background of, the study, History of Ginger production in Nepal, statement of the problems,

significance of the study, objectives of the study, Research hypothesis and limitation of the study.

Chapter II: Review of Literature

This chapter includes review of the literature, which was obtained during the review of books, articles, journals, reports and other relevant materials.

Chapter III: Research Methodology

This chapter deals on research design, population and sample size, source of data, data collection and processing techniques and analysis of tools.

Chapter IV: Data presentation and Analysis

This chapter attempts to analyze and evaluated data with the help of analytical tools and interpret all the result into the unit of empirical findings and results.

Chapter V: Summary, Conclusion and Recommendations

This chapter covers on the results and findings and recommend some suggestions.

CHAPTER II

REVIEW OF LITERATURE

This study intends to analyze the production and marketing dynamics of ginger in Palpa district of Nepal. Therefore, this chapter briefly reviews the earlier studies carried out on different aspects of production and marketing of ginger inside and outside of the country, which are relevant to the present study.

2.1 Marketing: Concept and Definition

Marketing:

Marketing is considered as an integral part of any policy for agricultural development. Marketing is a process that makes goods and services available to the consumers. Success of any production-oriented program depends upon the efficient of produce

Marketing comprises all the activities aimed at satisfying the customers through the exchange relationship to achieve organizational objectives with social responsibility (Agrawal, 1999).

Kohls and Uhl (1985) defined marketing as the performance of all business activities involved in the flow of product and service from the point of initial agricultural production until they are in the hands of consumers.

2.2 Marketing System and Marketing Margin

In a dynamic and growing economy, the agricultural marketing system provides important linkages between the farm production sector and the non-farm sector. A part from performing physical and facilitating function of transferring the goods from the producers to consumers, the marketing system also perform the function of discovering the prices at different stages of marketing and transmitting the prices signals in the marketing chain (Acharya, 1998).

Efficient marketing system is a prerequisite for development of agriculture sector. A well developed and efficient marketing system promote and provides extra leverage to the overall growth and development of an economy by facilitating optimal product mix and planning and its efficient distribution (Gurung, *et al.*, 1996). In developing countries agricultural marketing systems have been characterized by a diversity of structure often involves arrangements for credit, storage and transport as well as network of intermediaries that include large and small traders, cooperatives and government agencies resulting the higher costs of assembling and transporting farm products (Yanagi, 1996). This is relevant in the marketing of ginger in Nepal as well. So there is a need to improve marketing arrangement so that the consumer may benefit from stable delivery of products and farmer may receive higher returns. An efficient marketing system is essential for timely delivery and reduces marketing cost.

A marketing system is a network of subsystem, which is linked by corresponding changes of information, products and money. In marketing system producers, traders, transporters, wholesalers, retailers and consumers are the main factors involved to carrying out different activities (MDD, 1999). Marketing system depends on the distance of the

production area from the city and quality of produce in transportation (Pun and Karmacharya, 1988). Lower marketing margin and higher production share on the retail price ensure efficiency of marketing system.

Haque *et al.*, (1996) in their study on guava marketing found that the long marketing channel are one of the reasons for increased marketing cost and bring inefficiency in marketing. This results in the consumers' welfare and producers share.

Saini *et al.*, (1999) in their study on role of ginger in rural development of Meghalaya, India stated that in the marketing system, most of the benefits were reaped by the middleman as the majority of farmers were forced to accept the value offered by the traders through middleman due to unawareness of market trend. Farmers were compelled to sell their produce at any price because of perishability of the produce (fresh ginger), cash need and dependence on middleman to market the produce. It was suggested that the sales should be done through government agencies like state cooperative marketing and consumers' federation. This would help in minimizing the margins of the intermediaries and ultimately ensure better producers share in the consumers' rupees.

2.3 Spices in Nepalese Agriculture

Varieties of spices are traditionally grown in Nepal. Spices are very popular in the Nepalese cuisine and kitchen for flavoring the delicious food. Major spices grown in Nepal include large cardamom, ginger, cinnamon, chilies, turmeric and garlic (GCDS, 2000). With the view In Nepal the engine of economic growth is agriculture as it share the major part of the export earnings. Nepal is blessed with the favorable

geographical and agro climatic diversity providing the scope for producing export potential high value cash crops. High value cash crops accounts for 8 percent of the total cropped area of Nepal. Species, especially cardamom and ginger, are most important and highly commercialized to increase export earning and farmers' income, spices have been considered as priority high value cash crop for hill farmers (APP, 1995). At present, Nepal is earning more than 45 corer rupees annually from the export of spices (Niroula, 1996). The area under the spice crops is gradually expanding due to government effort (MDD, 1999). Considering this, the income from high value crops is expected to triple over the courses of the APP (APP, 1995). This can be possible only by making spices cultivation as profitable enterprise to the farmers. An efficient and organized marketing mechanism, which provides incentives for farmers to get reasonable farm get price, is helpful for the promotion of both export and domestic marketing of spice (Pratap, 1995).

2.4 Production and Marketing of Ginger in Nepal: A brief Scenario

Very few formal researches have been carried out on production and marketing aspects of specie crops however, the relevant research output is cited under three major areas namely ginger in mid hill of Nepal, production trends of ginger and marketing of ginger.

2.4.1 Ginger in Mid Hills of Nepal

Ginger (*Zingier official* Rosc), one of the most important spices as well as cash crops particularly in the mid-hill of Nepal, is grown as mono-crop or mixed crop with maize planted in April and harvested in December (GCDS, 2000). Ginger contributes the hill economy in the number of

ways. Ginger cultivation can improve the socio-economic situation of rural people by providing high economic return to the farmers. Therefore the cultivation of ginger in the hills is highly remunerative to small as well as large farmers. In addition to the high economic return, it also reduces the environmental degradation, provide food security from income generation provides employment opportunities to women and helps in bringing diversification and commercialization in hill agriculture. In Nepal ginger contributes 0.44 percent of the agricultural GDP (MDD, 1999). The Western Development Region (WDR) shares about 11 percent of the total ginger growing areas and about 25 percent in total production. The principle ginger-growing district in the WDR includes Palpa, Shayanja, Arghakhachi and Gulmi. The highest shares in areas and production is occupied by Palpa district as it occupies about 52 percent of total area and about 65 percent in total production (MDD, 1999). The area coverage and the amount of production under ginger are increasing in recent years. Despite the fact the ginger production program should be linked with well-organized marketing for the promotion of both production and marketing.

2.4.2 Production Trend of Ginger in Nepal

Ginger is cultivated nearly 55 districts of Nepal. The willingness of Nepalese farmer in ginger cultivation is increasing gradually due to large export opportunities to India, which has caused the rapid increment of the area under ginger cultivation (MDD, 2001). The total production and area under ginger cultivation in Nepal is estimated as 8551.15mt and 7051 ha respectively during 2011/2012 which increased to 792265 mt and 8551.15 ha during 2012/2013(MDD, 2001). The highest share in area and

production is occupied by Western Development followed by Eastern, Mid-Western, Central and Far-Western Development Region.

2.4.3 Marketing of Ginger in Nepal

After production, marketing is the most important function, which involves assembling, processing and distribution. Ginger marketing includes all the business activities involved in moving ginger from producers to the market centre and ultimately to the consumers. In Nepal, fresh and dried form of the ginger is market through different marketing channel. However, fresh ginger has been the dominant form in which ginger is marketed in the domestic and Indian market (Sharma, 2002). Generally, producers bring the ginger to the primary collection centers, repack and makes ready for dispatch to long distance market. In some cases, collector themselves come to production packets to collect ginger. The most common marketing channel found in Nepal for marketing of ginger is: farmers – Assembly traders – wholesalers/ Indian traders – Export market (MDD, 1999). High marketing cost and margin, lack of market information and market price fluctuations are common features of ginger marketing in Nepal, which reflects the inefficient marketing system. Unless and until marketing system is improved, no incentives to increase the production will benefit the growers.

2.5 Production and Marketing Problems

Mukunda *et al.,* (1999) in their study on ginger in rural development of Meghalaya found that the major constraints which confronted on the farmer of Meghalaya in the economic production and marketing of ginger were lack of proper, transport, communication, suitable organizational

and marketing set up, weak cooperative organization, lack of literacy and education; and deplorable condition of the primary markets. This is relevant in production and marketing of ginger in Nepal as well as indicated by Oli (1999) in his research study paper on market study ginger.

Thapa *et al.*, (1995) in their study on constraint in agriculture marketing in Nepal pointed out the poor institutional, legal and marketing infrastructure as the major constraint of agricultural marketing in Nepal.

Ginger is mainly grown under rainfed conditions in mid hills on sloppy lands of the hilly terrain. Due to lack of appropriate technology and available inputs, cultivation harvesting, sorting, grading, washing and processing (making Sutho) are done by hand by rural people which has resulted low production, low quality (KC, 2002).

Marketing Development Division (2013) reported that even exporter and traders were usually harassed by the Indian officials at custom while exporting the ginger in India.

2.6 Export Market of Nepalese Ginger

2.6.1 The World Market Scenario

Globally ginger is traded in three basic forms, namely, fresh, preserved and dry. However, preserved and dried gingers have been dominating form, particularly when these are internationally marketed. Dried ginger is used directly as spice as well as ginger oleoresin preparation from its extraction (Purseglow *et al.*, 1981).

It is estimated that India is the largest producer of dry ginger in the total ginger production in the world. India's contribution to the world trade is around 20% and brings more than 5 corers Indian rupees annually (Saini

et al., 1999). However, Nepal's share in the world market is negligible in terms of volume of production and export. The volume and value of spices exported from Nepal is small and therefore its share is less than 0.6 percent both in terms of value and volume. (Sharma, 2000., Niroula, 1998). Sharma (2003) reported that China, India and Nigeria are major ginger exporting countries whereas America, Britain, Japan, Canada, Saudi-Arabia and Singapore are major ginger importing countries.

India has been the traditional market for Nepalese spices (TPC, 2000). Primarily, Nepalese ginger is exported to Indian markets such as Silguri, Patna, Gorakhpur Varanasi, Lukhnow and Delhi. Nepal's overseas export has ceased since 1990 due to which India is the single largest importer of Nepalese spices (Niroula 1998). After a long gap it was reported that a total 21 tons of dry ginger equivalents to 3 million rupees was exported to Singapore in 2012/13 (GRP, 2000).

2.6.2. Nepal in World Trade Organization (WTO)

A ray of hope for boosting export of ginger, foreign trade is an important factor of economic development of any country. Nepalese economy has encountered serious economic problems as its foreign trade has tremendously been suffering from growing trade deficit (Devkota, 2000). Nepal's trade, in the past was confined to India because of limited transit facilities provided by India, which had constrained its trade with overseas countries.

Nepal has adopted the different policies in different time to promote the foreign trade. Nepal has started the process of economic liberalization program since 1992(Sedhain and Maharjan, 2002). There are diverging opinions among the economist about liberalized economic policies. After

the introduction of a liberalized economic policy, the government has withdrawn subsidies in agricultural sectors; farmers are losing their control on the domestic markets which has created today's agricultural issues more serious than yesterday (Sedhain and Aryal, 2002). Tulachan (2012) argued that because of liberalized economic policy there is a vast opportunity to rapidly stimulate agricultural led growth using the private sector through their involvement and investment in high value cash commodities.

Agriculture has always been a subject of major concern for the developed countries as well as the developing countries with respect to World Trade Organization (WTO). Nepal’s membership to WTO is inevitable to integrate into global mainstream and also a matter of national pride to be recognized as; it's independent entity capable to trade (Shrestha, 2003).

The main thrust of WTO's Agreement on Agriculture (AOA) is to remove production and trade distortion practices and to facilitate trading system (SAWTEE, 2002). The AOA requires WTO member countries to undertake a number of measures towards liberalizing agricultural trade. There are three major areas of commitments namely market access, domestic support measure and export competition. All WTO members except Least Developed Countries (LDCs) were required to make commitments in all these areas in order to liberalize agriculture trade (Shrestha, 2003).

Developed Countries have to reduce import tariffs on agriculture products by average of 39 percent (across the board) over six year’s period from 2012 with a minimum of 15 percent tariff reduction for any one product. Developing countries have to reduce import tariffs by average of 24 percent over a ten years period form 2012 with a minimum of 10 percent tariff reduction for any one product $LDCs_s$ are not required to follow

these provisions (AEC, 1999). The Least Developed Countries can enjoy preferential status in terms of tariff reduction as they are not required to follow this provision.

There is the provision that applied rate of tariffs can't be exceeded the bound duties. Thus it is known that the simple average of the bound rates on agriculture products is 52 percent initially and 42 percent after reduction by 2006 (Nepal, 2003).

Least developed countries like Nepal, have been provided the special provisions by WTO for promotion of trade without distorting the domestic market. Such provision includes: preference for export of LDCs, protection of domestic market by tariff, safeguard from permitted subsidies, and safeguard against unilateral decisions, positive discrimination and assistance for capability (Shrestha, 2003).

India is the major market for Nepal's agriculture as it shares about 80 percent imports (AEC, 1999). Membership of Nepal to WTO will be beneficial to boost the Nepal's export not only to India but also overseas countries. WTO membership means not only opportunities but also big task ahead for Nepal. It is important to note that in the context of WTO, market access is about both giving and taking. Nepal gives access to its own market to other WTO members in return for access for Nepalese goods to the markets for these countries. It shows that there is a possibility of overflow of cheaper farm products threatening the Nepalese agricultural sector. This situation reduces the export potential, as local producers are unable to compete with the cheap imports. Some of Nepal's agricultural production enhancement program had faced the setback due to increasing flow of cheaper imported farm products. If this situation prevails continuously, no one can deny that there will be considerable

reduction of export market potential of agricultural commodities like ginger.

Before 1980, Nepal used to export considerable amount of dry ginger to the overseas countries especially in Japan, the Federal Republic of Germany, the Netherlands, The United Kingdom and Singapore. At the same time it was reported that high stocks and the availability of cheap sliced ginger from Indonesia made it difficult for Nepalese ginger to penetrate the markets in United Kingdom (ITC, 1980).

There is an ample scope for Nepal to export ginger to the international markets. The government of Nepal should explore and find the ways and means to take the advantage of WTO membership. For this Nepal should increase the exportable volume of ginger and the exportable ginger should be competitive in global market both in terms of price and quality.

2.7 Gender Role in Production and Marketing

The term gender refers culturally specific set of characteristics that identifies the social behavior of women and men and relationship between them. Gender based division of labor is common in Nepal. Traditionally women do house work and remain responsible for the reproduction of labor force as housewives. Gender is taken as relatively a new approach emerging to complement in Women in Development (WID) approach that was adopted in 1970s (Bhattarai, 2002). The low representation of women social activities is more acute in developing countries (Sharma, 1998).

Gender differentiated decision marking is common in South Asian Countries. Agriculture production depends on availability, access and control of production resources. One of the major factors influencing low

productivity and income of women is unequal access to productive resources such on land, capital, credit, and technology and extension services. Women farmers often do not obtain much benefit of agricultural and rural development programmed because of their lack of access to membership, in cooperative in the south Asian countries (UN, 1996).

Gender issue in agricultural development has become an area of global concern. Women constitute an integral part in the socio-economic life of any country in the world however their role in economic development has not been considered seriously (Konar, 2000). In Indian context, the gender discrimination deprivation syndrome has deleterious consequences for female entrepreneurship (Shanmu Gasundaram, 2000). Though women are taking more active part in production than before, almost everywhere they are paid less than men (Basu, 2000). Even in U.S.A. women are typically paid less than male by 10 percent and single women earn 88 percent as much as men in the same age group (Sathe, 2000).

The constitution of the Nepal, 1990(act 2058 B.S) states that all citizens shall be equal before the law and no discrimination shall be made in the application of general laws on the ground of sex. It also includes that special provision may be made by law for the protection and advancement of the interest of women (Constitution of the Nepal, 2047 B.S). Despite these facts, the gender differential in the decision-making is common in male dominated society of Nepal.

Gender issue in agricultural development has become an area of global concern. Nepal so far is a predominantly agrarian society where women contribute almost 60 percent of the agricultural labor force (Shakya, 2001). 56 percent of the economically active female is mostly involved in agriculture where as 44 percent in case of male (CBS, 2011).

Gender involvement in agriculture varies according to location, class, culture and ethnicity of a society. Rural women play multiple roles in the world's agriculture system. Rural women in developing countries play important role both in their communities and in national economies as producers, traders and marketers, street, vendors and caretakers of their families (FAO, 2010). In spite of women's major role in agriculture, they still remain largely ignored by government extension services and benefit programs. The farmer's decision making regarding production and marketing affects in farm production.

Women have a comparatively more involvement in the production of minor crops whereas for major crops grown for cash earning the decision was made solely by the men (Bajracharya, 1994; Shrestha, 1990). In Nepal, women are involved in all the aspects of crop production except plugging.

Bhattarai (2002) studied gender dynamics in crop production in the hill of Nepal. She found that women's involvement in crop production was higher than men's in both the Indo-Aryan and Tibeto-Burman communities. She also pointed that women's access to resources and benefits has increased, but control is still with men.

It has been observed that women are becoming increasingly conscious of their rights and capabilities. However, the inequalities still exists in the Nepalese society.

2.8 Review of Journals, Articles & Previous Thesis

In this subject, effort has been made to examine and review of some of the related articles published in different economic journals, bulletins of

Ginger Production in Nepal, dissertation papers, newspapers, researchers view and findings towards fund mobilization and other related books.

Katri (2005), in his thesis entitled *"Ginger Production and Marketing of Morang."* with the main objective of:

a) To present the impacts on ginger production and marketing in Morang.

b) To see the impact on ginger production of Nepal.

REDA (2004), this institute provide training and promoting program with the support of local media to improve ginger production in Nepal.

GPCU (2013) this institute also provide training to improve ginger production in Palpa District. Browsers also publish and provide for local people but not any books published yet.

Shrestha (2006), in his article "Ginger production in Nepal" has specified, Nepal ginger production Limited has been much efficient in the collection of resources from the people in both urban and rural area of the country.

2.9 Research Gap

Research gap focuses that the researcher how much trying to give new from his/her study with compare to previous studied held by different researcher. Above relevant reviews contribute to enhanced the fundamental understanding and knowledge which require making study meaningful and purposive a research. Most of the previous research studied were based on ginger production and marketing rate. Most they have indicated the sales and production. There are a few researches in the topic impact of production and marketing rate and sales of money. In the

past ginger production support institution were depended only the supporter in present economic dynamism, only the supporter is not sufficient to improve profitability. So researcher has tried to analyze the extraordinary items of income generation in ginger production institution.

Previous researchers covered all the commercial institution and some were either on case study between two commercial institutes or some were on the particular personal production area. But this study focused on some development ratio of ginger production. Researcher has not been found any research work in this review from previous researcher as separately. Thus, to fill the gap, this study had been conducted. However, no one has done study on "Ginger Production in Palpa" with reference to REDA, GPCU, and DDC. Therefore, the researcher attempts to study in this area.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

Research Design provides the overall framework of marketing plan for the collection and analysis of data during the research study. This study is a marketing of the ginger in Palpa district. A study analysis of historical and descriptive research was used in this study to analyze the performance of past 5 year. The research processes both quantitative as well as qualitative aspects.

3.2 Population and Sample

Population and Sample size of 100 ginger growers, 90 from VDC and 10 from Municipality were selected randomly for this study.

3.2.1 Selection of ginger grower

The study population was the ginger growers of VDC and Municipality. Most farmers in these areas had ginger in their farms. However in order to facilitate measurement of interest variables, commercial ginger growers were considered as survey population and were thus included in the sampling frame. The major list of the ginger growers were obtained from District Agriculture Development Office (DADO), Palpa and concerned VDC offices. Key Informants and Junior Technical Assistant (JTA) of the study area were consulted for updating and completing the sampling frame.

Table 1. Sample Size Distribution by District in the Study Area

District	Total ginger growers (No)	Sample size(no)	Percent
VDC	120	90	75
Municipality	20	10	50
Total	**140**	**100**	**71.43**

Source: GPCU, 2013.

Altogether 120 and 20 households respectively from VDC and Municipality were listed meeting the criteria of sampling unit and the population constituted 140 ginger growers.

A sample size of 100 ginger growers, 90 from VDC and 10 from Municipality were selected randomly for this study.

3.2.2 Selection of Ginger Traders

For the purpose of the study, retailers in the market were identified and selected purposively for the interview. Altogether **20** retailers were selected representing **5** retailers from Tansen**, 5** retailers from Butwal, **3** retailers from Bhairawa, **3** from Sunauli and **2** from Dang and **2** from Gulmi, Based on the availability of the retailers.

3.3 Sources of Information

Various sources and techniques were used for collection for necessary information. In this study, both the primary and secondary data were collected and analyzed.

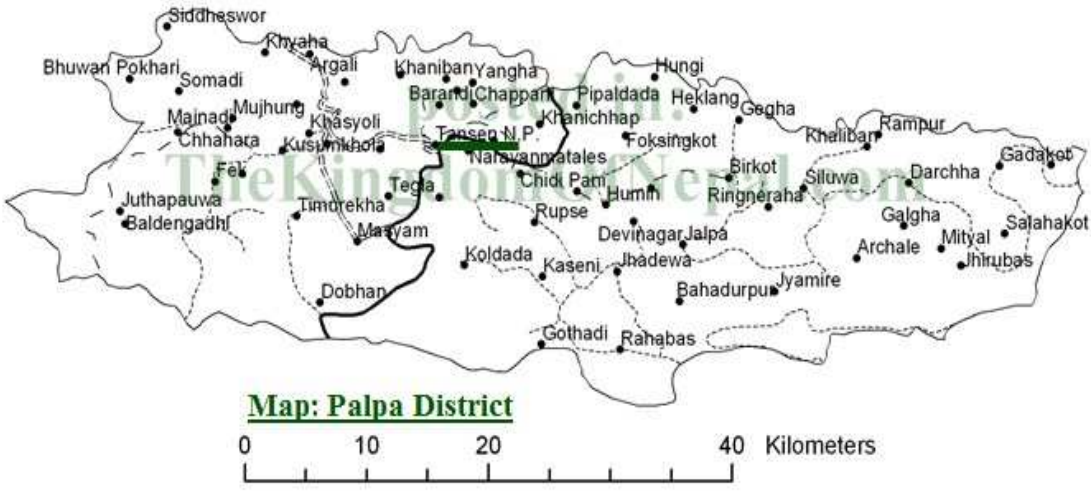
3.3.1 Sources of Data

Ginger growers and the traders were the major sources of primary data. Besides, the information obtained through observation, group discussion, Rural Economic Development Association (REDA) and Ginger Production Co-Operative Union (GPCU), key informant surveys were also given due consideration.

The secondary data through related publication on ginger were obtained from different institutes and organization such as Marketing Development Division, Ministry of Agriculture and Cooperatives, Central Bureau of Statistics, Agro Enterprise Center and District Agriculture Development Office.

3.4 Selection of the Study Area

This study was conducted at Palpa district of Wastern Development Region. Palpa district of Lumbini zone was purposively selected as it is the potential /major ginger growing pocket area of Palpa. Similarly, the pocket areas within the district were selected purposively based on area coverage, production and access to road facility. Based on this, VDC and Municipality were selected for the study. The map of Palpa district showing the study sites is presented in **Figure 1.**



3.5 Survey Design and Data Collection Procedure

This section deals with the designing of interview schedule and data collection procedure employed during field works in Palpa district.

3.5.1 Interview Schedule Design

Two sets of interview schedules were designed for primary data collection. One set of interview schedule was prepared to collect information from ginger growers and another set was prepared to collect information from different traders. With the help of the interview schedule information regarding respondent's introduction, land holding and its utilization pattern, sources of income, ginger cultivation, production and marketing system, and production and marketing problems, price fixation were recorded.

3.5.2 Pre-testing

The interview scheduled was pre-tested prior to administering to the actual respondents for checking the reliability and validity of interview schedule. The pre-testing was done on 5 respondents of VDC and Municipality. The corrections made during the pre-testing were incorporated in the final interview schedule.

3.5.3 Techniques of Data Collection

In order to carry out any research and draw reliable and meaningful conclusion, it is very much essential that the methods and techniques of data collection be precise and accurate. Different techniques such as interview, group discussion, REDA, GPCU, informal interaction were

used for the collection of necessary information, which has been briefly discussed below.

Interview

The respondents were interviewed for the collection of primary data. A Pre-tested and semi structured interview schedule was administered to them. The data regarding the, prevailing marketing system and different problems of production and marketing of ginger in the study area were collected from the ginger growers by interview. Different identified traders were also interviewed by using checklist to collect information on marketing system, market price, marketing margin and marketing problems Participatory.

Rural Economic Development Association (REDA) and Ginger Production Co-Operative Union (GPCU) REDA and GPCU were conducted to identify and prioritize the major production and marketing problems of ginger. Information on farmers and traders view regarding the export potential of ginger was also obtained through group discussion.

3.5.4 Field Survey

Field survey was undertaken during February-March, 2014. The respondents were interviewed visiting at their house. The collected data sets were cross- checked and edited regularly.

3.6 Methods and Techniques of Data Analysis

Both the primary and secondary information collected from the field survey and other methods were coded, tabulated and analyzed by Micro-Soft Excel.

3.6.1 Socio Demographic and Economic Variables

Socio demographic and economic variables were used for descriptive analysis of the study sites and the study population. Variables like family size, occupational pattern, educational status, and size of holding were analyzed by using simple descriptive statistics such as frequencies, percentage, mean and standard deviation.

3.6.2 Indexes

Indexes were formed mainly taking into account of qualitative data. On the basis of response frequencies, weighted indexes were calculated for the analysis farmers' perception on the farm gate price fixation and extent of production and marketing problems of ginger growers.

a) Index of influence

Farmers' perception on influence of various agents on farm gate price fixation of ginger was measured by five point level of influence comprising very high influence, high influence, normal influence, low influence, and no influence. Various agents like producers, traders, farmers group and neighboring farmers' influence on price fixation of ginger was measured. Scale value of 5, 4, 3, 2, and 1, were assigned for very high influence, high influence, normal influence, low influence, and no influence respectively. The index of influence was computed as follows:

I_{inf} = $\sum (s_i f_i /N)$

I_{inf} = Index of influence

$\sum$ = Summation

s_i = Scale value

f_i = Frequency of influence given by the respondents

N = Total numbers of respondents.

b) Index of importance on production and marketing problems

Farmers perception on the importance given to the different production and marketing problems was analyzed by using five point scale of problems comprising very high importance, high importance, normal importance, less importance and the least importance by using 5, 4, 3, 2, and 1 respectively. The index of importance was computed by using the following formula:

I_{imp} = $\sum (s_i f_i /N)$

Where,

I_{imp} = Index of importance

$\sum$ = Summation

s_i = Scale value

f_i = Frequency of importance given by the respondents

N = Total numbers of respondents

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

This chapter deals with the presentation of results obtained through the analysis of the collected information and the discussion thereof under the following subheadings.

4.1 Description of the Study Area

This section deals with the general overview, geographical situation; land utilization pattern, marketing environment and institutions development and population status of Palpa district.

4.1.1General Overview

Palpa district is one of the Hilly District of Lumbini zone in the Western Development Region of Nepal. Palpa district shares its border with Nawalparasi district in the east, Arghakhanchi and Gulmi district in the west, Gulmi, Sanjha and Tanahu districts in the north and Nawalparasi and Rupandahi in the south. The district headquarter is Tansen.

4.1.2 Geo-physical Situation

Geographically, the district lies between 27^0 40" to 27^0 57"north latitude and $83^0$14 "to $84^0$02" east longitude with an altitude ranging from 213m to 1922 m above mean sea level. The district comprises 60 VDCs and 2 Municipality. The total area covered by the district is 1373square k.m (136595 hectare).

4.1.3 Land Utilization

The land use pattern of the district shows that the total land is 136595 ha, among them 81957, 20490, 16392, 13660 and 4096 is cultivable land, forest land, barren land, residential land covered by rivers, and streams respectively (DADO, 2008).

4.1.4 Land Holding

Out of total population 261180 farmers 235062 farmers, 5224 farmers' families are landless and 255956 farmers' having land ranging from less than 0.1 hectare to more than10 hectare (DADO 2008).

4.1.5 Climatic Condition

Subtropical climate is prevalent in this district. Annual average temperature varies from a minimum 3.7^0 c to a maximum about 35^0 c. Average annual rainfall in this district is 1903mm (DADO, 2008).

4.1.6 Population Status

The total population of Palpa district was 261180, of which 115840 were males and 145340 females. The average family size was 4.40(59291) approximate. The average annual population growth rate was –0.28 percent (DDC, 2005).

4.1.7 Farming Situation

Agriculture is the only means of livelihood for majority of the households in Palpa district as 90 percent of active population is engaged in

agriculture. Crop- livestock integrated farming system is common in this district. The major cereal crops grown in this district are wheat, maize and rice. Besides cereals, ginger, vegetables, potato and citrus fruits are also grown. Considerable farmers in the hilly VDCs of district are growing ginger as major cash crops (DDC, 2006).

4.1.8 Marketing Environment and Infrastructure Development

As Palpa is a hill district, most of the villages are not accessible and most of the development programs are concentrated in limited accessible pockets in the district. Tansen, the headquarter of Palpa district.

Organizations like District Agricultural Development Office (DADO), District Livestock Development Office, District Soil Conservation Office, Agricultural Development Bank and District Co-operative Office are providing services in the development of agricultural sector.

4.2 Socio-economic Characteristics of the Respondents

The socio- economic characteristics of the respondents include total population, gender distribution, family size, economically active population, education, occupation, ethnicity, land utilization and cropping pattern. These characteristics are described below.

4.2.1 Population Distribution

Table 2: Distribution of Population of Sampled Household by Gender of Palpa

Gender	Frequency	Palpa				Total
		VDC		Municipality		
		Percent	Frequency	Percent	Frequency	Percent
Female	92	49.2	95	47.5	187	48.32
Male	95	50.8	105	52.5	200	51.68
Total	187	48.32	200	51.68	387	100

Source: GPCU, 2013.

The following table, total population of the 60-sampled house was found 387 out of which 48.32 percent were from VDC and 51.68 percent from Municipality. The male population was found higher than female in both VDC and municipality.

4.2.2 Family Size

Table 3: Distribution of Family Size of Sampled Household by Palpa

Palpa	Sample household	Average family size	Maximum	Minimum	Model size
VDC	30	6.23	10	2	5
Municipality	30	6.67	11	3	5
Total	60	6.45	11	2	5

Source: GPCU, 2013.

The following table, family size is an important variable as it reflects the availability of labor force to the farm. The average family size of the respondents was found 4.40, relatively high in comparison to the national average of 5.50 (CBS, 2011; MOAC, 2012). The average family size of VDC was slightly higher than of Municipality. The model family size of both VDC and Municipality was found the same.

4.2.3 Economically Active Population

Table 4: Distribution of Population of the Sampled Households by Age Group of Palpa

Age group	Palpa				Total	
	VDC		Municipality			
	Frequency	Percent	Frequency	Percent	Frequency	Percent
16-30 years	56	29.94	60	30	116	29.97
31-55 years	113	60.43	124	62	237	61.24
55 above	18	9.63	16	8	34	8.79
Total	**187**	**100**	**200**	**100**	**387**	**100**

Source: DEO Palpa 2013.

The following table, total populations of the sample households was categorized into three age groups. Among them the economically active population in this study refers to the population belonging to the age group of 31-55 years. Economically active population was 61.24 percent. This is an active labor force seeking employment in the labor market.

Similar distribution pattern was found in both VDC and Municipality. However, Municipality had relatively more economically active population as compared to VDC. Similarly, the Municipality had more young members and VDC had relatively more people of older age.

4.2.4 Educational Status of the Family

Table 5: Distribution of Population of the Sampled Household by Level of Education

Education level	Palpa				Total	
	Municipality		VDC			
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Illiterate	76	40.64	65	32.5	141	36.43
Primary	50	26.74	43	21.5	93	24.03
Lower secondary	35	18.72	48	24	83	21.45
Secondary	15	8.02	20	10	35	9.04
Intermediate	7	3.74	15	7.5	22	5.68
University	4	2.14	9	4.5	13	3.36
Total	187	100	200	100	387	100

Source: DEO Palpa 2013.

The following table, it is believed that education would create employment opportunity and generate human and leadership needed for the development of a country. The educational status of the farmers would play a significant role in adoption of modern technology in agricultural sector and dissemination of the new technologies as well. In this study, the education level is categorized into six groups. Illiterate

refers to those who can neither read nor refers and has no formal schooling. Primary level refers to those who have attained formal schooling up to 5 classes. Similarly, lower secondary means up to 8 classes, secondary up to School Leaving Certificate (SLC), intermediate refers two years study after SLC and University Level, more than Intermediate Level. From the Table, it was found that 36.43 percent of the total population was illiterate. In comparison with District 40.64 percent people in Municipality and 32.5 percent in VDC were illiterate.

4.2.5 Education Status of Household

Table 6: Education Level of Household Heads of the Sampled Households of Palpa

Education level	Palpa				Total	
	Municipality		VDC			
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Illiterate	16	53.33	13	43.33	29	48.33
Primary	7	23.33	8	26.67	15	25
Lower secondary	3	10	3	10	6	10
Secondary	2	6.67	3	10	5	8.33
Intermediate	1	3.33	2	6.67	3	5
University	1	3.33	1	3.33	2	3.33
Total	30	100	30	100	60	100

Source: DEO Palpa 2014.

The following table, a majority (48.33 percent) of the household heads were found to be illiterate. Particularly, 53.33 percent of household heads were illiterate in Municipality whereas 43.33 percent in VDC.

4.2.6 Occupational Pattern of the Family

Table 7: Major Occupation of Economically Active Population of the Sampled Households of Palpa

Education level	Palpa				Total	
	Municipality		VDC			
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Agriculture	73	64.6	56	45.16	129	54.43
Service	15	13.27	21	16.94	36	15.19
Business	3	2.65	12	9.68	15	6.33
Student	20	17.7	32	25.81	52	21.94
Others	2	1.77	3	2.42	5	2.11
Total	113	100	124	100	237	100
Agriculture	73	64.6	56	45.16	129	54.43

Source: REDA, 2013.

The following table, occupational pattern showed that 54.43 percent of the economically active population was employed in agriculture. The distribution of occupational pattern by Palpa showed that 64.6 percent of the economically active population in Municipality and 45.16 percent in VDC were employed in agriculture. It clearly revealed that agriculture is the main occupation for the majority of the population in the study Palpa.

4.2.7 Occupational Pattern of Household Heads

Table 8: Major Occupations of Household Heads of the Sampled Household of Palpa

Education level	Palpa				Total	
	Municipality		VDC			
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Agriculture	24	80	19	63.33	43	71.67
Service	4	13.33	4	13.33	8	13.33
Business	2	6.67	4	13.33	6	10
Student	0	0	1	3.33	1	1.67
Others	0	0	2	6.68	2	3.33
Total	30	100	30	100	60	100
Agriculture	24	80	19	63.33	43	71.67

Source: REDA, 2013.

The following table, majority of the household heads (71.67%) were found having agriculture as a main occupation. In Municipality, 80 percent household heads had agriculture as major occupation where as 63.33 percent in VDC. It revealed that the occupational pattern of the household head was slightly different by location. However, agriculture remained major occupation of the farmers of the study area.

4.2.8 Ethnicity

Table 9: Distribution of Respondents by Ethnic Group

Education Level	Percent	Palpa				Total	
		Municipality		VDC			
		Frequency	Percent	Frequency	Percent	Frequency	Percent
Magar	52.03	6	20	8	26.68	14	45.4
Brahmin	17.46	5	16.67	4	13.33	9	28.6
Newar	3.47	6	20	6	20	12	6.6
Kami	6.72	4	13.33	2	6.67	6.0	3.8
Cheetri	7.9	6	20	5	16.67	11	2.34
Others	12.42	3	10	5	16.67	8	13.26
Total	100	30	100	30	100	60	100

Source: DDC, 2014.

The following table, ethnicity plays an important role in structure of socio-cultural setting. Various ethnic groups were found in the study area. In total majority of the respondents were Magar (45.4%) followed by Brahmin (28.6%), Newar (6.6%) Kami (3.8%) Sarki (2.34%) and other castes (13.26%) . Particularly, in both of Municipality and VDC Palpa majority of the people belongs to Magar and Brahmin castes.

4.2.9 Land holding

Table 10: Distribution of Land Holding in the Sampled Household of Palpa

Palpa	Land holding (Ropani)			Standard deviation
	Average	Maximum	Minimum	
Municipality	13.29	29.49	2.95	8.38
VDC	18.3	44.24	5.9	11.3
Total	15.8	44.24	2.95	9.84

Source: GPCU, 2013.

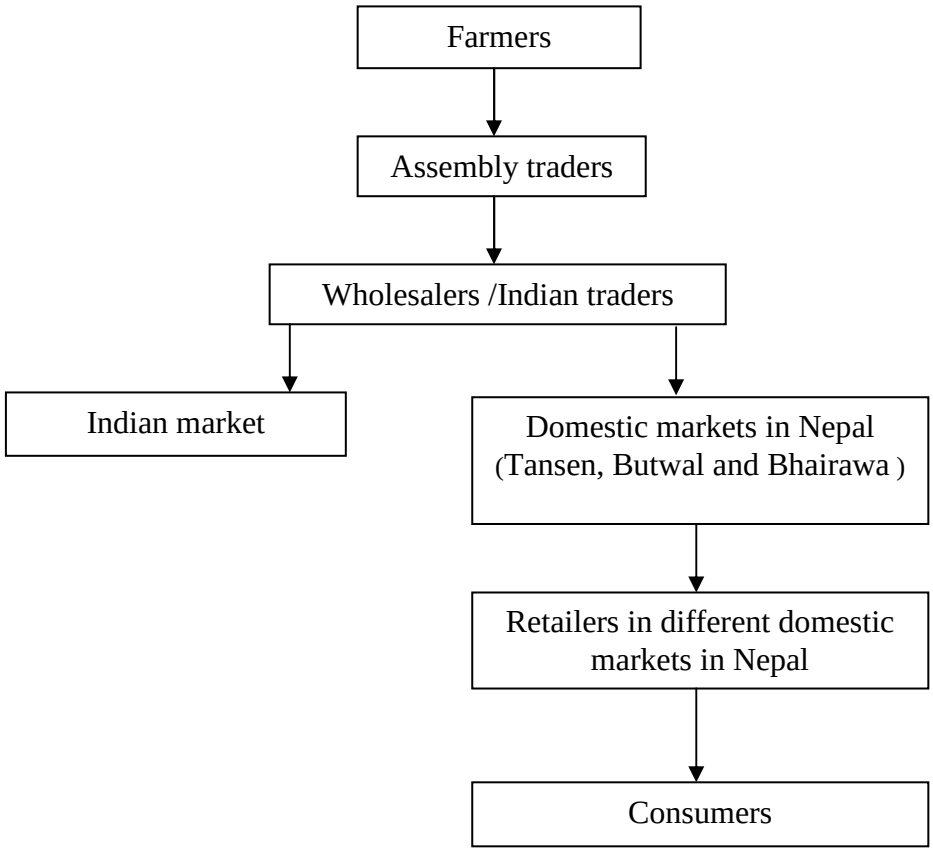
The following table, the results showed that the average land holding size of the overall sample was 15.8 Ropani. Comprising the land holding of respondents it was observed that the farmers of VDC had larger holding than that of Municipality.

4.3 Marketing System

4.3.1 Marketing System in Municipality

Marketing system in Municipality was also a private phenomenon. Some of the farmers in this area sold ginger in the municipality level marketer i.e., Tansen and Rampur municipality to the assembly traders. Due to accessibility of road, the traders and collectors also approached to the farmers to collect maximum quantity of ginger. The farmers in this area were compelled to sell mostly on the price fixed by the collectors and traders. The common marketing channel found in the flow of ginger from producers of Municipality is presented in, figure 2.

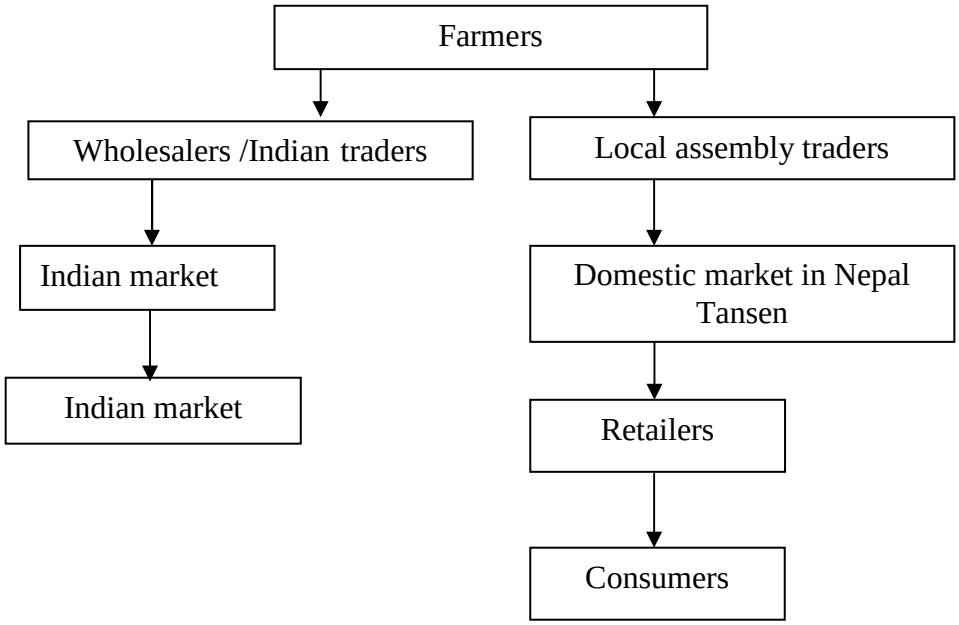
Figure 2 : Marketing System in Municipality



4.3.2 Marketing System in VDC

Like in Municipality, the marketing system in VDC was also a private phenomenon. Most of the farmers in this area sold ginger in the local market i.e., Tansen to the assembly traders. Due to accessibility of road, the traders and collectors also approached to the farmers to collect maximum quantity of ginger. However, most of the farmers found selling their product to the assembly traders in the local market. The farmers in this area were compelled to sell mostly on the price fixed by the collectors and traders. Assembly traders purchase and supply to the wholesalers or Indian traders in Bhairahawa and Sunauli Market who in turn deliver to traders in the Indian market operating on commission basis. The common marketing channel found in the flow of ginger from producers of VDC is presented in, figure 3.

Figure 3 : Marketing System in VDC



4.3.3 Production and Salses in Quantity

Table 11 : Production in Quantity

Production	
Years	Metric Ton
2008-2009	14500
2009-2010	14000
2010-2011	12000
2011-2012	13000
2012-2013	14500

Source: GPCU, 2013.

Production plays an important role in tradition sector. Various groups were found in the study area. In total production of the 2008-2009 was 14500 metric ton, lack of marketing price the production ratio was decrease. In the year of 2012-13 the production of ginger was grown due

to facility of marketing good price rate for ginger production material. In this year the production of ginger ratio was 14500. The production of ginger in metric ton is presented in, figure 4.

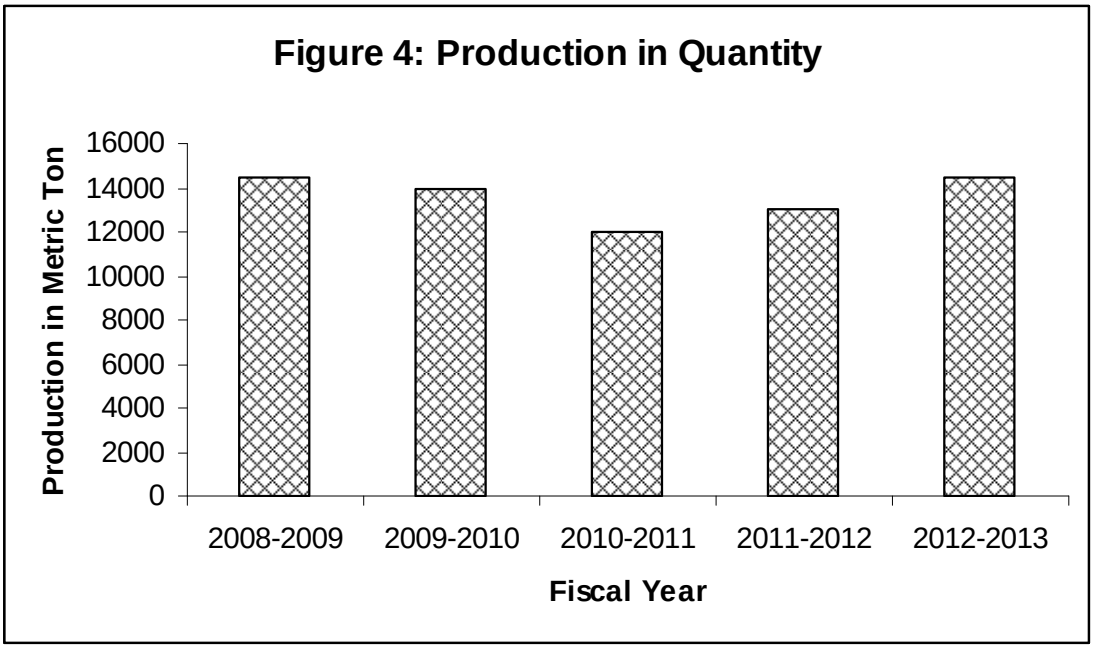


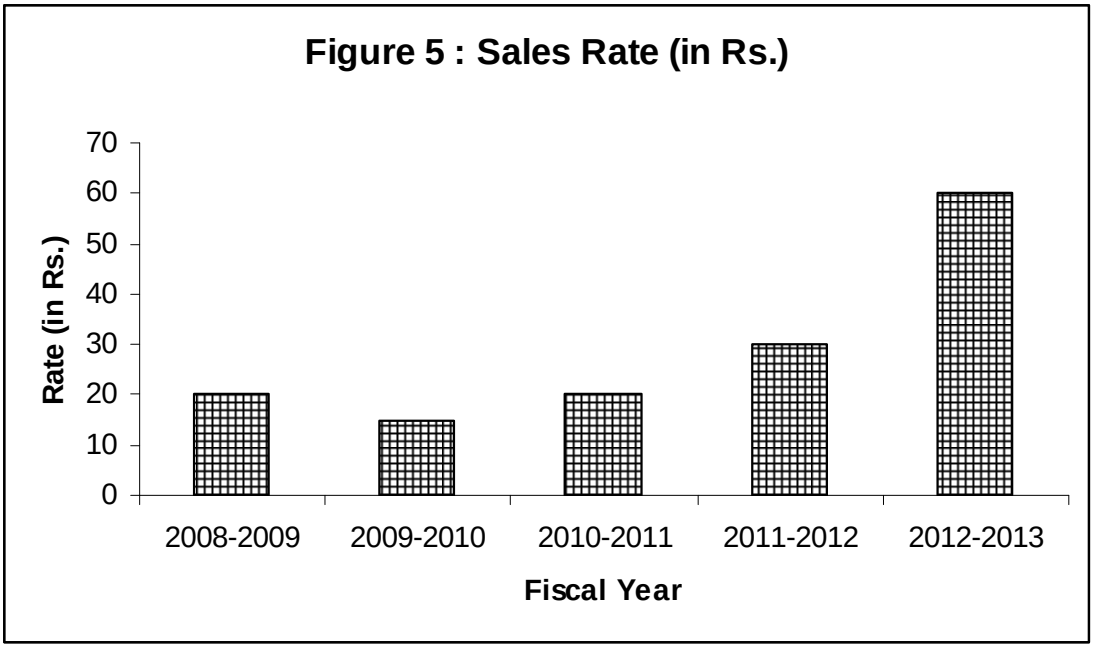
Table 12 : Sales in Rate

Sales			
Years	Qty (in K.G.)	Rate (in Rs.)	Total (in Rs.)
2008-2009	1087500	20	21750000
2009-2010	1120000	15	16800000
2010-2011	840000	20	16800000
2011-2012	1105000	30	33150000
2012-2013	1160000	60	69600000

Source: GPCU, 2013.

Sales rate is an important role in tradition sector. Various groups were found in the study area. In total sales of the 2008-2009 was Rs.

21750000, lack of marketing price the sales ratio was decrease. In the year of 2012-13 the sales rate of ginger was grown due to facility of marketing good price rate for ginger production material. In this year the sales rate of ginger ratio was Rs. 69600000. The sales of ginger in Rs. is presented in,



4.4 Marketing Margin and Producers Share

Table 13: Marketing Margin and Producers' Share in Ginger of Palpa

Palpa	Marketing margin (Rs/Kg)	Producers share (%)
Municipality	80	12.25
VDC	50	120.11
Total (average)	65	66.18

Source: GPCU, 2013.

The following table, marketing margin and producers share reflect the efficiency of marketing system. Lower marketing margin and higher producers share on retail price ensure efficiency of marketing system. Table 13 depicts the marketing margin and producers' share in marketing of ginger in the study area. The result showed that overall marketing margin was Rs. 65 per kg of ginger. Similarity the average producers share was 66.18 percent. In particular marketing margin of ginger was Rs. 80 in Municipality and Rs. 50 in VDC. Likewise producers share was 12.25 percent in Municipality percent in and 120.11 percent in VDC. The result clearly revealed that efficiency of marketing in VDC was higher due to lower marketing margin and higher producers' share as compared to Municipality. This result may be due to the accessible condition, presence of alternative market and comparatively less involvement of intermediaries in VDC.

4.5 Farmers' Perception on Farm Gate Price Fixation

Table 14: Index of Influence on Ginger Price Fixation

Influencing agent	Level of influence					Total	Index	Ranking
	5	4	3	2	1			
Producers	2	7	10	20	21	60	2.15	III
Traders	40	10	7	3	0	60	4.45	I
Farmers group	2	5	10	20	23	60	2.05	IV

Source: GPCU, 2013.

The following table, survey finding revealed that farmers' perception on influence of various agents on price fixation of ginger was different. The index of influence calculated showed that traders had high influence on

ginger price fixation followed by neighboring farmers, producers and farmers group. Thus the finding clearly revealed that the traders had dominating role in ginger price fixation due to which farmers are compelled to sell their products whatever price fixed by the traders. The reasons behind this fact might be less bargaining power of the farmers, lack of alternative market and inefficient marketing mechanism.

4.6 Gender Involvement in Decision-making

4.6.1 Gender Decision on Production of Ginger

Table 15: Gender Decision on Production of Ginger between Different in Palpa

Decision maker	Palpa				Total	
	Municipality		VDC			
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Male	8	26.67	17	56.67	25	41.67
Female	6	20	4	13.33	10	16.66
Both	16	53.33	9	30	25	41.67
Total	3	100	30	100	60	100

Source: GPCU, 2013.

The following table, the result showed that gender decision regarding the production of ginger was independent of the location. Overall result from both Palpa's indicated that 41.67 percent of male, 16.66 percent of female and 41.67 percent of both male and female involved in decision making. It clearly revealed that male played the dominating role, as female involvement in decision-making was less than male. It may be due to the male dominated society in the surveyed sample Palpa.

4.6.2 Gender Decision on Marketing of Ginger

Table 16: Gender Decision on Marketing between Different in Palpa

Decision maker	Palpa				Total	
	Municipality		VDC			
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Male	15	50	12	40	27	45
Female	5	16.67	6	20	11	18.33
Both	10	33.33	12	40	22	36.67
Total	30	100	30	100	60	100

Source: GPCU, 2013.

The following table, the result showed that gender decision on marketing of ginger was independent of location as p-value is highly insignificant. It was found that majority of the household, male decided on the different activities on marketing this might be due to the lack of education in male dominated society in the surveyed Palpa.

4.7 Production and Marketing Problems of Ginger Growers

Ginger growers in the study area have faced several problems related to production and marketing of ginger. This section includes the production and marketing problems of ginger in the study area.

4.7.1 Production Problems

Table 17: Production Problems of Ginger Growers

Palpa	Problems	Level of problems					Total	Index	Ranking
		5	4	3	2	1			
Municipality	Pest problems	5	3	10	2	10	30	2.7	V
	Lack of irrigation facility	20	5	3	2	0	30	4.433	II
	Unavailability of necessary inputs	25	1	3	1	0	30	4.666	I
	Lack of technical know-how	20	2	5	2	1	30	4.266	III
	Unavailability of loan	10	2	8	5	5	30	3.233	IV
VDC	Pest problems	4	2	8	5	11	30	2.433	V
	Lack of irrigation facility	10	4	7	4	5	30	3.333	III
	Unavailability of necessary inputs	20	3	5	2	0	30	4.366	I
	Lack of technical know-how	10	2	5	8	5	30	3.133	V
	Unavailability of loan	12	6	3	9	0	30	3.7	II

Source: GPCU, 2013.

This study showed that unavailability of necessary inputs was the major production problems perceived by the ginger growers in Municipality. This may be due to the lack of transportation facility and ineffective government policy to supply required inputs to the farmers. The second

most important problem as indicated by the farmers was the lack of irrigation facility followed by lack of technical know-now, unavailability of loan and pest problems. In VDC also, the unavailability of the necessary inputs was the major problem. This may be due to the ineffective government policy to supply necessary inputs. The second most important problems as indicated by the ginger growers was the unavailability of loan followed by lack of irrigation facility, lack of technical know-how and pest problem.

4.7.2 Marketing Problems

Like production problems, marketing problems are the most important factors hindering the growers of high value commodity like ginger (APP, 1999). In spite of the great potentiality and importance of ginger in the study area, farmers faced several problems regarding marketing which has limited the economic return to the farmers.

The study showed that lower market price of ginger was the major marketing problem perceived by the ginger growers in Municipality. The second most important problem perceived by the ginger growers was fluctuation in market price followed by lack of organized market, lack of transportation facility, lack of market information, lack of processing facility, lack of storage facility (Table 18).

Like in Municipality, lower market price of ginger was the major marketing problem perceived by the ginger grower of VDC. The second most important problem was fluctuation in market price, followed by lack of organized market, lack of market information, lack of transportation facility, lack of storage facility and lack of processing facility.

Table 18: Marketing Problems of Ginger

Palpa	Problems	Level of problems					Total	Index	Ranking
		5	4	3	2	1			
Municipality	Lower price	28	1	1	0	0	30	4.90	II
	Lack of organized market	20	5	3	2	0	30	4.43	III
	Lack of transportation facility	18	5	3	4	0	30	4.23	IV
	Lack of processing facility	10	5	8	6	1	30	3.57	VI
	Fluctuation in market price	25	3	2	0	0	30	4.77	II
	Lack of storage facility	12	5	3	2	8	30	3.37	VII
	Lack of market information	15	5	5	2	3	30	3.90	V
VDC	Lower price	25	5	0	0	0	30	4.83	I
	Lack of organized market	15	5	6	4	0	30	4.03	III
	Lack of transportation facility	10	5	5	2	8	30	3.23	V
	Lack of processing facility	5	3	2	10	10	30	2.43	VII
	Fluctuation in market price	25	1	2	2	0	30	4.63	II
	Lack of storage facility	5	6	4	10	5	30	2.87	VI
	Lack of market information	10	5	5	6	4	30	3.37	IV

Source: GPCU, 2013.

The majority of the ginger-growing farmers were illiterate and resource poor. As a result they have less bargaining power. Farmers were compelled to sell ginger taking the price fixed by the handful of traders. So, lack of education, lack of effective marketing policy of government, and lack of transportation facility might be the reason for lower price of ginger. In both Palpa of the study area, lower price, fluctuation in market price and lack of organized market were the major problems as perceived by the farmers.

4.8 Export Potential of Ginger

This section includes discussion based on both secondary as well as primary sources. Farmers and traders experiences and perceptions on export potential of ginger were gathered through group discussion. On the other hand literatures related to the research on export potential were critically reviewed and tried to link with the finding based on group discussion.

Farmers' and traders' perspective on export of ginger form Nepal

Ginger is one of the major spices grown in Nepal and established as a commercial crop and an exportable commodity. In Nepal, the share of domestic use and exports of fresh ginger production is reported to be 40 percent and 60 percent respectively. (GRP, 2001; KC, 2001). It supports to identify the ginger, as exportable commodity is 46.85 percent of the total export spices value. Since 1990, Nepal's overseas export of ginger has drastically reduced to other countries except India since then India has become the largest importer of ginger exported from Nepal (Niroula, 1998). However export of ginger from Nepal to India has increased for few years (Table 19).

Table.19 : Export of Fresh and Dried Ginger from Nepal to India

Year	Commodity		Total (000Rs)
	Fresh ginger (000 Rs)	Dried ginger (000 Rs)	
2008/09	1600	4100	5700
2009/10	1500	4000	5500
2010/11	1600	4950	6550
2011/12	1650	6000	7650
2012/13	2000	8050	10050

Source: GPCU, 2013.

In above table the export of fresh and dried ginger form Nepal to India has been shown. In the year of 2008/09 the fresh and dried ginger export ratio was 5700 in Total. Due to lack of transportation beginning year transportation rate was decrease. In the year of 2012/13 the fresh and dried ginger export ratio was 10050 increase. Due to transportation facility and increase of production quantity. The export of fresh and dried ginger from Nepal to India is presented in,

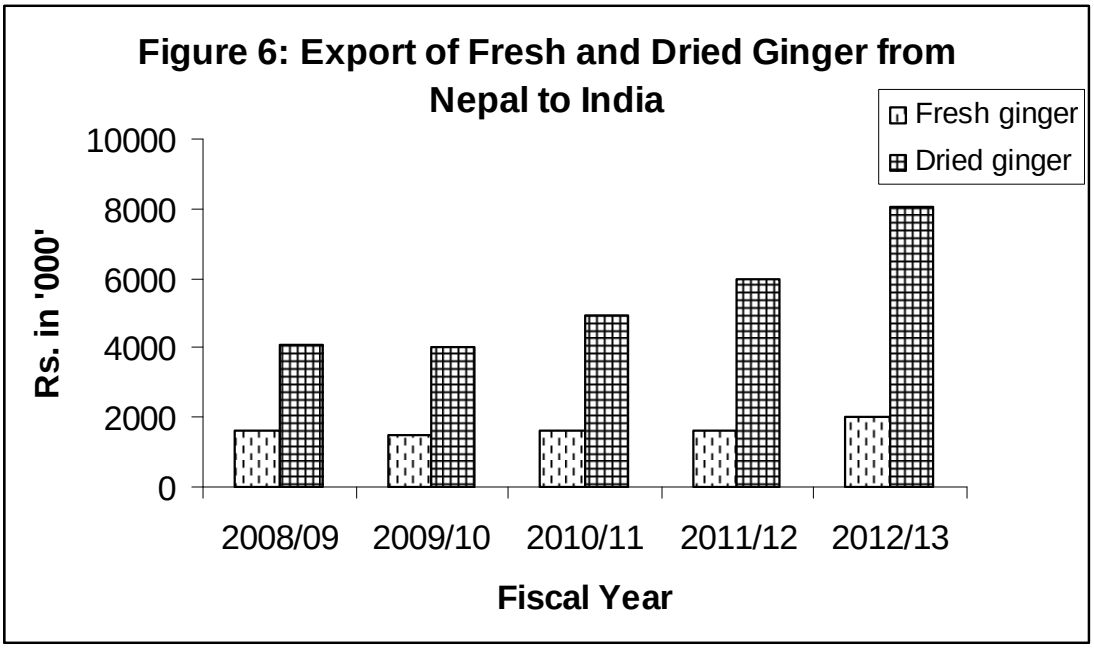


Figure 6: Export of Fresh and Dried Ginger from Nepal to India

Nepal has adopted liberalized economic policy since 1992. After the introduction of a liberalized economic policy the government has withdrawn subsidies in agricultural sectors; farmer are losing their control on the domestic markets which has made today's agricultural issues more serious then yesterday (Sedhain and Aryal, 2000). These issues are relevant with the finding of group discussion, as the government and trading firms have shown no initiative to capture the overseas market for Nepalese ginger in farmers' and traders' perceptions.

According to the farmers, there is potentiality of ginger production if they are assured to the market of their produce remunerative price. From the discussions with the district level traders, it was found that market price of ginger in Nepal was heavily influenced by Indian market price as there exist open boarder. It was also found that dependency on Indian market for ginger export has discouraged the Nepalese growers and traders particularly when Indian officials in the customs overcharged them. According to them they had to pay at least five to ten thousand rupees as illegal money to the officials of Indian custom for exporting of one truck of ginger from Nepal to India. The traders also complained that monopoly taxation and police interference were responsible for less export of ginger from Nepal.

The ginger exporters also complained of receiving low price in Indian ginger market and the reasons were poor quality and cleanliness of Nepalese ginger. They also reported that India imposed unilateral phytosanitary control on Nepalese primary agricultural products including ginger and time consuming procedure of product quality export of ginger from Nepal to Indian market.

Based on the discussion with traders and exporters it was also learnt that drastic reduction of overseas export of Nepalese ginger was due to the poor quality, low export volume and uneven delivery schedule.

Nepal has entered in World Trade Organization (WTO) with the objective of improving its foreign trade (Shrestha, 2003). Chitrakar (2003) suggested that Nepal should increase its exportable items to take advantage of WTO membership and the exportable items should be competitive in international market in terms of price and quality.

Overall study on the export potential of ginger revealed that weak production frontier; low export volume, inferior quality, ineffective government trade policy and lack of competitiveness were the major challenges for promoting ginger export. Under these circumstances, export can be encouraged by improving the quality of products, reducing costs of production, generating export surpluses, liberalizing exports and encouraging research and development.

4.9 Major Findings

Based on the findings of the study following are the major finding were made that may useful to farmers, policy makers and other concerned agencies in order to improve the production and marketing of spices especially ginger in Nepal.

- Research in ginger sector is in initial stage. So development of appropriate package of practices and transfer of technology to the farmer should be done so that they can manage their crops and produce in such a way that it can fetch better market price.
- Marketing is the integral part of production. So collaboration on production, research and marketing research should be emphasized.

- Emphasis should be given to provide quality inputs in time.
- Irrigation facility should be improved.
- Provisions should be made for co-operative farming and marketing.
- Training on quality improvement of products along with grading and packaging of ginger.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This section deals with the summary of finding of this study and conclusion derived based on the finding. Besides these this section also deals with the some suggestions made for polity implications.

5.1 Summary

Varieties of spices are traditionally grown in Nepal. Ginger is one of the important high value spice crops for the mid-hills of Nepal as identified by APP. Nepal's varied climatic nature and soil type offer a wide potentiality for cultivation of ginger. Ginger has been emerging as potential export products of Nepal. Despite the considerable increments in the area as well as production, farmers are not getting reasonable price for their produce. Keeping in view these situations, this study was designed to analyze the marketing system of major exportable spices in Nepal with special reference to ginger in Palpa district. The specific objectives were to identify the marketing system and business tradition of ginger, to analyze the gender role in household decision making process related to production and marketing of ginger, to assess the sales and production in quantity, to identify the production and marketing problems of ginger and to assess the export potential of ginger.

The study was conducted in Palpa district of Western Development Region, which shares considerable area and production of ginger in Nepal. Municipality and VDCs of Palpa district were purposively

selected for the study. A representative sample of 60, 30 from Municipality and 30 from VDC were selected randomly. Producer farmers and ginger traders were the main source of primary data. Besides this relevant and necessary information were collected from the secondary sources.

Descriptive analysis of the survey results revealed that the male population was higher than female in VDC. The average family size of the respondents was found 4.5, relatively lower than national average 5.50 (CBS, 2011; MOAC, 2012). Particularly the average family size was higher in VDC as compared to Municipality. The economically active population was found 61.24 percent in the study areas. The educational status of the respondents showed that literacy rate was low. Majority of people, 40.64 percent in Municipality and 32.5 percent in VDC were illiterate respectively.

The occupational pattern showed that 54.43 percent of the economically active population was employed in agriculture. Likewise majority of the household heads (71.67 percent) were found having agriculture as the main occupation. Ethnicity showed that Brahmin and Magar dominated other castes in Palpa.

The average land holding were 13.29 and 18.3 ropani in Municipality and VDC respectively. The average land holding was higher in VDC. However the respondents of Municipality cultivated ginger in relatively larger area (6.15ropani) as compared to respondents of VDC. In the study area, ginger was mainly grown as monocarp in unirrigated area.

The ginger farmers and the traders were the main actors in marketing system of ginger and the marketing system was purely private based. The majority of the farmers sold fresh and dry ginger in the local market. In Municipality and VDC the traders and collectors approached to the

farmers to collect the ginger due to road facility. Most of the farmers sold their product to the assembly traders in the local market who in turn deliver to the domestic markets and the traders in to Indian market. The marketing channel found in the study area was farmers – Assembly traders – wholesalers and Indian traders – Export market and domestic market.

The average marketing margin in the study area was Rs. 65/kg of ginger providing 66.18 percent share to the producers. However, the average marketing margin in ginger was Rs. 80/kg in Municipality and Rs. 50/kg in VDC. Similarly producers share was 12.25 and 120.11 percent in Municipality and VDC respectively. Lower marketing margin and higher producers share in VDC showed the higher marking efficiency compared to Municipality.

Gender decision on production and marketing showed that female involvement in decision-making was less than male in Palpa.

Among the several production problems of ginger, the unavailability of required inputs was the major production problem. Likewise, the major marketing problems were lower price of ginger, fluctuation in market price and lack of organized market. Besides, lack of transportation facility, lack of market information, lack of processing plants, and lack of storage facility were also the important problems related to marketing as perceived by the respondents in the study area.

Finding on export potentiality of ginger revealed that ginger is a upcoming export items of Nepal if existing problems related to quality and quantity of ginger along with government trade policy are given due consideration for improvement.

5.2 Conclusion

The following conclusions are drawn based on the finding of the study. Municipality and VDCs of Palpa district are potential pocket areas for the ginger. The marketing system in the study area was poorly organized. Farmers were not getting reasonable price for their produce for few years. The existing marketing system was not in favor of ginger growers, as they were not getting reasonable price for their produce. Pricing of ginger was highly influenced by traders. The farm gate price of ginger was mainly affected by volume of sale and location. Production volume and location played the importance role in determining the selling time of ginger as well. Among different problem regarding production and marketing of ginger, unavailability of necessary inputs was the major production problem whereas low price of their produce and fluctuation in market price were the major marketing problems.

Gender decision on production and marketing was independent of location. In Palpa, female involvement in decision-making was less than male.

Despite adoption of different economic reform, export of ginger was not improving as expected. Serious attempts to explore export market are lacking.

5.3 Recommendations

Based on the findings of the study following recommendations were made that may useful to farmers, policy makers and other concerned agencies in order to improve the production and marketing of spices especially ginger in Nepal.

- Research in ginger sector is in initial stage. So development of appropriate package of practices and transfer of technology to the farmer should be done so that they can manage their crops and produce in such a way that it can fetch better market price.
- Marketing is the integral part of production. So collaboration on production, research and marketing research should be emphasized.
- Emphasis should be given to provide quality inputs in time.
- Transportation facility should be improved.
- Irrigation facility should be improved.
- Provisions should be made for co-operative farming and marketing.
- Training on quality improvement of products along with grading and packaging of ginger should be organized to enable the farmers to obtain maximum profit.
- Government should encourage Nepalese exporters by formulating export mechanism.

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APPENDIX

APPENDIX –I

APPENDIX –II

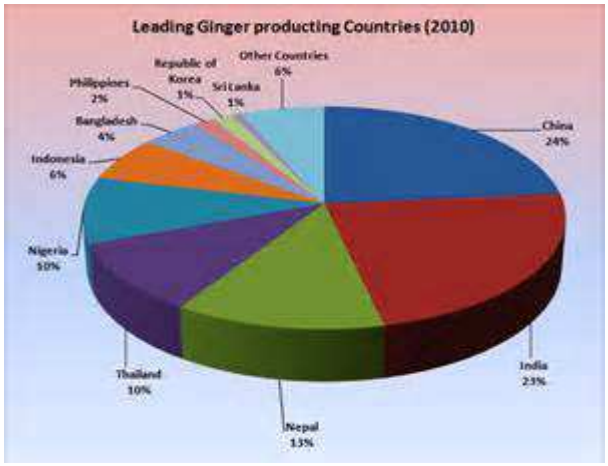
Map of Nepal

Study Area, Palpa District

Data Source: *Election Commission* **Map Source:** *MoHA* ©2013 *salokya@mysansar.com*

APPENDIX –III

Map of Ginger and Production Activities in Nepal



APPENDIX –IV

Survey Questionnaire of ginger traders

1. How did you know about ginger trade progressing news? Please put a tick mark in the right box.

   Advertisement ☐ Family ☐ Friend ☐

   Agency ☐ Others ☐

2. What others cash crop (ginger's competitors) did you check before making the final decision?

   Please write the other cash crop against the make you checked out.

   Sugarcane …….

   Garlic …….

   Onion …….

   Potato …….

   Tomato …….

3. Reason to choose ginger production. Please mark against each factor in preferential order, 1 being top priority and 5 being least priority.

   Cash Crop …….

   Production ratio …….

   Price …….

   Hybrid …….

   Others (please specify) …….

4. Did you make the final decision to product ginger at,

   Personal land ☐ hire rent ☐

5. With whom did you discuss before making the final decision?

   Spouse ☐ Friend ☐ Family member ☐

   Colleagues ☐ Other trade owner ☐

6. How many years would you prefer plan terms to be? Please circle one.

   Below 3 years ☐ 3 years ☐ 4 years ☐

   5 years ☐ More than 5 ☐

7. What suggestions would you like to give to improve the product's feature (ginger) and the production being provide from the Agency? Please write for them.

   ……...……

   ……

8. Please tick on the right box about your information

   Age:

   Below 21 ☐ 21-29 ☐

   30-39 ☐ 40-49 ☐

Marital Status:

Single ☐ Married ☐

If married, how many children?

One ☐ Two ☐