

# **CHAPTER- I**

## **INTRODUCTION**

### **1.1 Background of the Study**

Nepal is predominantly an agricultural country. More than 86 percent of the population resides in rural areas and about 80 percent people are dependent on agriculture for their income and employment.(Economic Survey 2007). Agriculture sector contributes 36 percent of GDP. The agricultural production and productivity, however, have not been satisfactory to give momentum to the pace of development and, therefore, agriculture alone is insufficient for rapid development of the country. There must be a combination of agriculture with business. Particularly agro-based industries are the best examples of such combination. It is obvious that industry can play important role in the rapid economic development of country. Development of industrial sector has manifold benefits. Particularly it is important in mitigating the problems of growing unemployment and poverty. The contribution of manufacturing sector to GDP is estimated to be around 10 percent. Various institutional and legal provisions have been made to speed up the process of industrial development.

It is evident that marketing has a critical role in the economic development of a nation. Therefore, the development of an efficient marketing system is essential for rapid industrialization. Marketing can accelerate the pace of industrialization in various ways. Without a marketing system, which facilitates mass distribution of goods and services, it is indeed very difficult to reach the stage of mass consumption which Rostow classified as the final stage of development (Rostow, 1961:10).Without mass consumption; a developing country can never

hope to achieve the high standards of living. High mass consumption acts as a powerful catalytic force for mass production. Further, mass consumption which encourages mass production ultimately leads to economies of scale in production, which can benefit consumers in the form of lower prices. People in developing countries are often deprived of enjoying lower prices in the absence of efficient marketing system. The absence of an efficient marketing system further limits the size of markets to small areas, surrounding the points of production which in turn inhibit investment, raise the cost of production and make it difficult for local manufacturers to compete with imported goods.

### **Concept of Marketing**

Marketing concept is also referred to as business concept or business philosophy which guides the marketing efforts and activities of any product or organization. There are two main and five alternative concepts under which organizations conduct their marketing activities. They are as follows:

- i. Old concept of marketing
- ii. New concept of marketing

#### **i. Old concept of marketing**

The old concept of marketing does not consider about the need wants and demands of customer. This concept believes that consumers will favour those products which are widely available in low cost. This concept was concentrated on achieving high production efficiency and wide distribution of the products. "We sell what we make" is the main philosophy of old concept of marketing. This concept includes:

- a. Production concept,
- b. Product concept and
- c. Selling concept

## **ii. New concept of marketing**

New concept of marketing is the customer oriented philosophy. This concept believes that "We make what can we sell", producing goods by identifying the needs wants and demands of customer are the main philosophy of this concept. This concept believes that customer are the guest of producer/seller, so each producer/ seller always should be aware for customer satisfaction. This concept includes the: a. Marketing/ Customer concept and b. Social marketing concept

## **Ginger production and Marketing in Nepal**

Ginger is the root crops planted by the famers have the hand like structure mostly used a spices and medicine long back. This product grows underground like roots. The product has contains natural flavoring.

The name ginger is derived from rhizome of Zinger, whence it was imported to Europe in the 15<sup>th</sup> century. Botanically ginger is known "Zingiber officinal Rosc" It herbaceous perennial having the underground rhizomes, Arial shoot leafy attaining 0.5 to 0.75.

Ginger farming in Nepal is gaining popularity over the year. The crops are mainly cultivation in low range of Mahabharat hill altitude 450 m to 1600m. In the present time, ginger is cultivated from east to west. Annually 11626.7 6 quintal (2007 report), ginger produced in Nepal. The quantity of production is going to growth. The main external market of Nepal for ginger is India. According to the data, (2007) 6660 metric ton ginger was exported in India and earns I.C.172.27 million in value. Hilly area of Chitwan is suitable for ginger production. Siddi is one of that V.D.C., where 700 metric ton ginger is annually produced.

## **1.2 Statement of the Problem**

Ginger is a cash crop production in Nepal. It is widely believed that the performance of most of the enterprises has been below the mark. Various factors might be responsible for such a situation. More importantly, they are faced with most challenging and competing business environment which requires very efficient and effective marketing strategies. A firm producing quality product cannot guarantee to achieve success in competitive and dynamic business environment. But it becomes possible when its marketing effort is adequate. In modern dynamic age, marketing must be effective otherwise; the production cannot meet its goals and objectives.

In this context, it is proposed to explore and analyze the prevailing market structure and marketing system of agricultural product such as ginger. It is intended to examine whether agricultural production of ginger is sufficient to meet national demand and whether the farmer are capable to gain profit from ginger production and marketing.

## **1.3 Research Questions**

There are many issues to be deal for the purpose of the study .This research can only focused the Ginger Production and Marketing in Nepal.

The research attempts to sort out the answer to the following questions

- a. What is the existing market structure and marketing system?
- b. How to facing the problems of Ginger Production and Marketing.
- c. How much the demand of Ginger production.
- d. How much the Profit by ginger Production.

## **1.4 Objectives of the Study**

The followings are the objectives of the study

- 1) To examine the existing market structure and marketing system.
- 2) To analyze problems facing ginger production and marketing.
- 3) To suggest and recommend to the farmers and businessman as well as others who are involved in ginger production and marketing.
- 4) To tire out the demand of ginger in Nepal.
- 5) To analyze the profit of ginger.

## **1.5 Significance of the Study**

In the context of Ginger Production in Nepal there are mainly two types of users. They are institutional users and non-institutional users. The institutional users purchase the goods for further processing, selling, production or office use. Middle men producers wholesaler, retailer and different organizations or offices are the example of institutional users.

Non- institutional users are those who purchase the goods for their own or family use. Mainly ultimate customers are included under this category. For example: Species production industry purchase the Ginger to produce species so, they are institutional users and the buyers purchase the Ginger for personal use or family use they are non-institutional users.

## **1.6 Limitation of the Study**

This is simply a partial requirement for MBS program. The study is limited to the Ginger Production in Nepal and it confined only to the practice of this books. This study will be limited by following factors:

- a) The whole study is based only the Primary secondary data collected from the organizations.

- b) It is very difficult to identify about the attitude values, perceptions and behaviour of the participants and non-participants of the Ginger Production and Marketing.
- c) The study covers the analysis of past 5 years (2005-2009) data and analysis is concerned in some statistical tools and non- statistical tools.
- d) Some of statistical as well as non- statistical tools should be used in the study. Hence, the drawback and weakness of those tools may have an adverse effect on the outcome of the study.

## **1.7 Structure of the Study**

This study is organized into five different chapters.

### **Chapter 1: introduction**

The first chapter deals with the subject matter consisting introduction, back grounding of the study, statement of the problem, objectives of the study, significant of the study, limitation of the study and structure of the study.

### **Chapter: 2 Review of the Literature**

The second chapter focused on literature review that included a discussion on the conceptual framework on loan management and review of major – studies relating with lending decision.

### **Chapter: 3 Research and Methodology**

The third chapter describes the research methodology used to conduct the present research. It deals with research design, sources of data, data

processing procedures, population and sample; period of the study, method of analysis and financial and statistical tools.

#### **Chapter: 4 Analysis of ginger production and marketing**

This chapter is Concerned with Ginger Production and Marketing.

#### **Chapter: 5 Summaries, Conclusion and Recommendation**

The fifth chapter includes the summary, conclusion and recommendations of the study which deals about the main theme of study and comparison of lending policy of the banks with recommended for improvement of loan

# **CHAPTER-II**

## **REVIEW OF LITERATURE**

### **2.1 Conceptual Review**

In this section, basic marketing concepts are reviewed, besides some core concepts like market demand, market potential, all leading to a brief description of the concept in focus, i.e. Market Potential Analysis.

#### **Fundamentals of Marketing**

An organization adopts the marketing concept with a view of orienting itself towards the philosophy of management that strongly influences the management of marketing effort. Marketing involves relating the needs and desires of people with the producer's products or services. Marketing activities are those most directly concerned with demand stimulating and demand-fulfilling efforts of the enterprise.

A company operating under the marketing concept takes its principal direction from the market place, i.e. from its knowledge and understanding of its customers' needs, wants, and desires. This becomes, then, the main basis for organizing operations, not only marketing, but production, finance, and other organizational units are geared towards satisfying customers' needs, wants, and desires.

Marketing is a system which has interacting and interlocking activities by which a company develops and makes its products available, distributes them through marketing channels, promotes them, and prices them. That is the reason why we say marketing is nothing but is all about 4Ps, namely 'Product', 'Place', 'Price', and 'Promotion'.

John B. Mc-Kotterick (2001), in his quest for Marketing Concept puts it this way:

“The *Marketing Concept* holds that the key to achieving organizational goals consists in determining the need and wants of target markets and delivering the desired satisfactions more effectively and efficiently than competitors.”

Marketing guru Mr. Philip Kotler (2001) in his famous book ‘Marketing Management’ defines Marketing as, “a social and managerial process by which individuals and groups obtain what they need and want through creating and exchanging products and values with others”.

The above definition outlines the some core marketing concepts, like needs, wants, and demands; products; utility, value, and satisfaction; exchange, transaction, and relationship; markets; and marketing and marketers.

## **2.2 Marketing Management**

There is no definition as comprehensive as the one that was approved by American Marketing Association in 1985. And this is the official definition of American Marketing Association for Marketing Management. It goes like: (Dik, 1983).

“Marketing Management is the process of planning and executing the conception, Pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational objectives.”

This definition again outlines the core marketing concepts- *Planning, implementation, and control; ideas, goods, and services; exchanges; satisfaction etc.* The definition also highlights the concept of 4Ps (Dik, 1983).

Marketing Management has the task of influencing the level, timing, and composition of demand in a way that will help organization achieve its objectives. Marketing managers cope with this task by carrying out

*Marketing research, planning, implementation, and control. Within marketing planning, marketers must make decisions on target markets, market positioning, product development, and pricing, channel of distribution, physical distribution, communication, and promotion.*

Marketing Management relies heavily on research. Such research which help in setting Marketing policies, in planning marketing operations, and in controlling marketing operations and functioning of the sales units, is generally termed as 'Marketing Research'.

Analyzing marketing opportunities is one of the major activities carried out under Marketing Management. In this context, Marketing Management Guru Prof. Philip Kotler (Kotler, 1988) clearly points out that, to analyze marketing opportunities, it is necessary to Gather information and measure market demand Scan Marketing Environment Analyze Consumer Market and buyer behavior Dealing with the Competition Identifying Market Segments and selecting target market.

The marketing Environment is changing at an accelerating rate. So, the need for real-time Marketing information is greater than at any time in the past. Marketing Information System (MIS) is an important tool in the hands of Management to gather information regarding market. And MIS consists of four components- Internal Record System, the Marketing Intelligence System, and Marketing Decision Support System. Besides gathering information, measuring market demand is another task to analyze 'Marketing Opportunities'. Those organizations succeed better than others that can measure and forecast demand more accurately than others. (Kotler, 2001)

Companies undertake Marketing Research to identify market opportunities. Besides that, companies Measure and Forecast the size,

growth, and profit potential of each market opportunity. There are different measures of market demand, and each demand measure serves a specific purpose. Distinction should be made between market demand and company demand, which are different things.

Marketing research is the function, which links the customer, and public to the marketer through information - information used to identify and define marketing opportunities and problems; generate, Refine, and evaluate marketing actions; monitor marketing performance; and improve understanding of marketing as a process. Marketing research specifies the information required to address these issues; designs the method for collecting information; manages and implements the data collection process; analyze the results; and communicates the findings and their implications.

Marketing managers need information on customers and markets. However, they are separated from their final customers, and so from the information they need. Therefore, Business and other organizations are increasingly turning to marketing research to obtain the information they need for decision-making.

In context of country like U.S., surveys done by American Marketing Association in industrial and consumer products companies reported that almost every company (99 percent) used marketing research to measure market potentials, characteristics of their markets, and their share of markets. And approximately three fourths of the consumer products companies and more than half of the industrial companies undertook some sort of marketing research to help them make better advertising decisions. Similarly, more than 90 percent of the companies used

marketing research to evaluate new-product opportunities and acceptance, and to test existing products relative to competitor's products. Lastly, more than 95 percent of the companies undertook marketing research to obtain information that could help them make short-range and long-range forecasts. (Kotler, 2001)

### **2.3 Market Demand**

As mentioned earlier, measuring Market Demand for a product is the first step in analyzing and evaluating marketing opportunities. Market demand can be defined as customer group in a defined time in a defined marketing environment under a defined marketing program.

Companies work out on finding *Demand Estimate*, objective being the demand measurement. There are two kinds of estimates-

Current Demand Estimate

Future Demand Estimate

While Future demand estimate is a Sales Forecast, estimating current demand involves estimating Total Market Potential, Area Market Potential, and Total Industry Sales and Market Share. The design of marketing mix is based on estimates of current market demand. The current market demand is estimated by the - Total market potential estimate, Area market potential estimate, & company market share estimate.

- i) ***Total Market potential Estimate.*** Total Market potential is the maximum amount of sales that might be available to all firms in an industry, during a given period, under a given level of Industry Marketing effort and environment conditions. First of all, all potential buyers are identified, by arriving at a suspect pool of prospects. This figure multiplied by average purchase

quantity, and which again multiplied by price gives the Total Market Potential Estimate.

Total Market Potential = Potential No. of Buyers x Average Quantity Purchased x Price

ii) ***Area Market potential Estimate.*** Market, taken as a whole, like country market, is never a homogenous one and varies on several dimensions among territories. And companies have to optimally allocate marketing expenditures to different territories having different Sales Potentials. In such a case, Area Market Potentials of different districts, cities, etc. gives the best measure of Market Potential.

Area Market Potential can be measured in two major ways, depending upon the product which is offered. They are- Market Buildup method, and Market Factor Index Method. The former method involves identifying all the potential buyers in each market and estimating their potential purchases. If we can accurately list out potential buyers and estimate precisely what each will buy, the results are very accurate. In the latter method,

One or multiple factors index is used to compute the Market Potential. Besides these above two, a company may use company Market Share estimate to estimate the current demand.

## **2.4 Market Potential**

In general, higher level of Industry Marketing expenditure would yield higher levels of demand. However, marketing expenditure beyond a certain level would not stimulate much further demand, thus suggesting an upper limit to a level of demand, which can be termed as *Market Potential*. Thus, Market Potential is the limit approached by market

demand as industry marketing expenditures approach infinity for a given marketing environment. Market Potential depends upon the marketing environment. Potentials vary during times of recession & prosperity. So, the total market potential is the maximum limit of sales of a product or service in a specified time under the specific level of industry's combined marketing efforts within the specified marketing environment.

Similarly, Product Penetration Percentage also influences market potential estimates. However, the data like ownership or use of a product or service may not be available in our context.

Normally, it is not possible to survey all market participants with regard to their current purchasing behavior or that which is to be expected. The results of a representative sample allow direct conclusions as to the respective potential market volume. New products and markets in particular require such potential estimates, in which we determine sales and turnover figures for the entire market based on the purchase probabilities we have found as well as taking into account the relevant structural characteristics. In order to increase the dynamic quality of these results, all market factors and circumstances that are to be expected are added in the prognosis as well. That way, different market and business developments over the following years can be illustrated to provide important assistance in decisions.

How can we measure the Market Potential for a new product or services? Reliably estimating the business potential of a new product or services is a complex, multi-step process. First, the maximum potential volume for the product or service must be determined. Knowing the maximum potential volume permits one to evaluate a new idea relatively quickly

and easily, before proceeding with more in-depth analysis. The maximum volume potential for a new product or service is also a function of three variables: Trial, Repeat, and Usage Rate.

## **2.5 Market Potential Analysis**

Conducting Market research and Analysis is one of the main components of a marketing plan. Marketing Research includes '*Market Potential Analysis*', 'Market Share Analysis', 'Sales Analysis', & 'Sales Forecasting'. Market Potential Analysis is a major activity under Marketing Research. Market Potential Analysis applies to those studies of individual markets that seek to determine the Sales Potential within them. Through Market Potential Analysis Research, a company seeks to obtain Sales Potential for each of the geographical markets it serves to help determine the amount of sales effort that should be allocated to a specific market. Market Potential is stated for a given product for a given area for a given period. The Market Potential for a product in a given geographical area for a given year is the maximum amount that can be sold in that area by all sellers of the product in that area.

The key to successful marketing is identifying what business you are in and what motivates customers to buy. The most successful business is one that has carved out a "Market Niche" or unique benefit for its customers. People buy results, not products. Therefore, good marketing is determining what customers need and want, and then fulfilling that need better than your competitors. The first step toward developing a marketing plan is collecting and analyzing relevant data. Market research defines the needs for the product, aids in predicting market share, identifies competition, provides direction for efficient use of advertising

and promotional rupees, identifies problems and opportunities, and establishes benchmarks by which to measure progress and success.

Another school of thought says, Market Research and Analysis consist of following components:

- Economic Trend Analysis
- Political and Social Analysis
- Product and Service Analysis
- Customer Analysis
- Market Potential Analysis
- Competitive Analysis

Market potential is the total of all sales you plan to capture in units or Rupees. Published sources can provide excellent data for many industries, but information is not plentiful for new or unique products and services. Professional surveys are often necessary to support market potential data and to make the best prediction of annual sales.

Estimating what percentage of total market sales your company might capture from the competition is very important. Every source possible is used in making the "guesstimate," then it is continued to track market share not only in geographical areas but also by product line. Slow growth areas must be recognized and corrected.

Sales assumptions in a new business should be projected for at least two years, and allowances must be made for seasonal fluctuations. Sales increase projections for additional years may be estimated by multiplying sales by a reasonable percentage such as the gross national product (GNP) or other economic activity indicator.

Harper Boyd, Jr., Ralph Westfall, Stanley F. Stasch, in their popular text book 'Marketing Research' have presented a case which highlights the significance of measuring market potential:

Lotus performance cars is counting on its new agency, McCann-Erickson, to prepare advertising for a line expansion that includes a \$120,000 "Super Car".

The company plans to launch its \$120,000 "Super Car," a direct competitor to the Italian-made Ferrari Testarossa, in 1990 or 1991. Lotus plans to build 200 to 250 of the cars a year.

"Lotus is a very low volume car that is marketed to very select individuals," said Wes Fredericks, group executive consultant at Group Lotus.

Lotus target audience is 35-to-45-year-old professionals, primarily males with incomes of more than \$150,000 a year or whose net worth is at least \$1 million.

Mr. Fredericks estimated there are 10,000 to 20,000 persons in the U.S. who can afford and would be interested in owning one of the Lotus model.

## **2.6 Uses of Market Potentials**

Decision makers in management can put Market Potential estimates to a number of uses. Some of the uses are –

Allocation of Marketing Resources

Defining Sales Territories

Setting Sales Quotas

***a. Allocation of Marketing Resources***

The primary use of information on market potentials has been in the allocation of marketing resources, especially the allocation of Salesmen. It is difficult to estimate a market-response function - that is, the way a group of potential customers will respond to various combinations of marketing inputs. Under ideal conditions, resources will be invested in each market until the incremental returns for each unit of resources invested is equal in each market and until further investment will yield a return smaller than could be obtained by investing elsewhere.

All selling efforts - sales force, advertising, and non-advertising promotion - should be allocated only after a consideration of potentials. In the simplest situation, a market with 10 percent of the total potential should receive 10 percent of the sales effort. The primary usefulness of market potentials is to focus attention on the relative worth of individual markets. No firms should, however, rely completely on such rankings as basis for allocating sales resources.

***b. Defining Sales Territories***

A sales manager typically tries to develop sales territories that are equal in sales potential and in work load so that each salesman has an equal opportunity to make sales. Studies reveal that territorial characteristics are typically used in defining

sales territories. Market potential is used in every case, while concentration, dispersion, and workload are used in lesser degrees. So, it

is recommended to use market potential as the primary factor to be used in establishing territories.

### *c. Setting Sales Quotas*

Sales quotas should be set after market potentials have been derived and sales territories established. The potential for each territory is then known; but sales quotas must also consider past sales performance, changes to be made in the amount of supporting sales effort during the coming year, and anticipated activities of competitors. Quotas are usually set for each sales territory and for each sales representative. They are ordinarily not the same as potentials or even of the same relative size. One market may have twice the potential of another, but may have local competitor that take so large a share that a firm's quota may be smaller there than in an area with less potential.

Sales quotas set in light of sales potentials furnish a much better basis for measuring the efficiency of sales representatives than do the quotas set by the old rule of thumb. If two sales representatives turn in the same annual sales volume, they are usually paid about the same and are held in equal esteem by the sales manager. If market analysis shows that sales representative, A has a territory with far less potential than sales representative B, the sales manager may wonder if representative A may not actually be superior. A shift of the two might lead to an improvement in total sales.

While sales potential is a key factor in establishing sales quotas, it should be remembered that the setting of quotas also involve a complex interpersonal relationship between the sales manager and the salesman. The best quota is the one that stimulates the best effort by the salesman.

Since salesman varies in personal reactions to the challenge and risk implied by quotas, the successful manager is one who can adopt the objectively determined quota to each individual salesman.

## **2.7 Methods for measuring Market Potential**

There are three major methods available for estimating Market Potentials. One of them involves the use of direct data - that is, data on actual product for which one wishes to estimate potentials. The other method involves the use of corollary data- data related to, but different from, the product at hand. Corollary data method can use single or multiple factors, and the latter can be combined in a variety of ways. The last method involves use of surveys to determine the potential.

Direct Data Method

Corollary Data Method

Use of Surveys

### ***Direct Data Method***

This method is based on the principle that total industry sales of a particular type of product can be used as the basis for estimating market potential for one brand of that product. First, total industry sales is broken down into a firm's sales territories, like Eastern, Western, Central regions. So, each territory has a fixed percentage of industry sales. The percent gives the exact measure of potential existing in each of the company's territories. Second, this percentage is applied to 'Total Forecasted Sales' of the firm. The result gives the company potential of each territory.

The following illustration gives the example of this method-

Table 2.1 Illustration of use of Direct Data Method				
Company	Total Industry Sales		Company	Actual
Sales	Volume	Percent	Potential	Company Sale
Territory	(Rs '000)	Of Nepal	(in Rupees)	(in Rupees)
1	100	13	12,500	10,000
2	200	25	25,000	20,000
3	150	19	18,750	15,000
4	300	38	37,500	35,000
5	50	6	6,250	10,000
Total	800	100%	100,000	90,000

The percentage distribution, in column 3 in table 2.1, is used as a measure of the relative potential existing in each of the firm's territories. These percentages can then be applied to the firm's estimate of its total sales to arrive at a potential figure for each territory. Column 4 in table 2.1 illustrates the resulting potential for a company that has estimated its potential at Rs. 1, 00,000.00.

Comparison of potential sales with actual sales indicates this company is weak in sales territories 1, 2, and 4 and strong in territories 3 and 5. It might be concluded that management should exert itself in the weak areas where the firm has not been able to obtain its proper sales.

The principal advantage of using total industry sales to measure market potential is that actual results (sales) are being used. The method is straight-forward and doesn't require as much clerical work as do some of the other methods.

However, several limitations prevent this method from being used by more firms. First of all, there are a few commodities on which total sales are available. Another most important limitation to the direct data method is that past sales are used to indicate market potentials - that is, no attention is given to the potentials except as they are revealed through past experience. And in absence of direct data on the sales of individual products by desired geographical areas, the manager must turn to corollary data. Lastly, this method requires a pre-estimated Total Country Market Potential.

### ***Corollary Data Method***

In absence of direct data on the sales of individual products by desired geographical region, one must turn to Corollary Data method. It is based on principle that, if a given series of data (such as Industry Sales) is related to a second series of data (such as no. of employed persons), the distribution of second series by market area may be used to indicate the distribution of the first series in the same market areas.

This method can be used in two different ways – Single Factor index, and Multiple Factor Indexes.

*Single Factor Indexes* are the most simple of the corollary data methods of market analysis. A typical example of Single Factor Index Method is use of the sale of one product to indicate the Market Potential of another. This is more apt to be satisfactory if the two items have a closely related demand – i.e. demand for one is derived from the other or is a complementary demand. Automotive replacement parts offer a good illustration of a derived demand. The demand in any area is closely

related to the number of cars in the area. For example, the number of Tata cars can be used as an index of the potential for sales of Tata parts (cars). Factors other than sales of related products are also used in the corollary data, single-factor method. For example, Population & Household data are frequently used indicate market potentials. The reasoning back of this use of population data is that sales can be made where people are; therefore, if one area has twice as many people as another, it has twice the sales opportunity. Total retail sales are often used as an index of market potential for specific consumer products.

Disposable income is a general index often used to measure general potential for consumer goods. Many analysts in developing market potentials for industrial products use the number of production workers in the target industries to measure the potential of different areas. Discretionary Income is a general index often used to measure potential for luxury goods like Cars. Whatever is the case, the bottom line is that the index series most closely resembling the company sales is used.

Similarly, *Multiple Factor Indexes* method uses indexes developed by combining several factors, occasionally as many as 20. Not all market potential indexes are developed from a single series. Particular companies or industries to measure Market Potential for their products develop many of these indexes. Others are developed by independent organizations, frequently publishers, as indexes of market potential for consumer products in general.

*Special multiple factor indexes* are designed to measure the relative potentials of different markets for a particular product. Such indexes have the advantage of taking into account several factors that influence

the sales of the given product. For this, Potential buyers are identified along with their principle characteristics and backgrounds. However, individuals preparing the index usually use their judgment in selecting the factors to combine. Whether this judgment is sound or not cannot be proven .

Let us assume, potential buyers for Tata 'Indigo' sedan cars may be identified as people- 30-50 years old.

Professionals/ Doctors/ Engineers/ Businessmen.

Annual incomes higher than Nrs. 5,00,000.00.

This, in fact, is more of a single factor index because any one person must have all of these characteristics to be considered a potential buyer. An area with 25,000 professional men aged 30-50 would have zero potential for Tata Indigo if none of them had incomes of more than 5,00,000.00.

*General multiple-factor indexes* have been developed by a number of organizations. They usually are constructed as indexes of consumer purchasing power and are presumed to be indexes of market potential for consumer goods in general. However, a major weakness of general index is that it is general - that is, it is not designed to measure the potential for a specific product. This assumes that the relative market potential for in a given area is the same for all consumer products. This, of course, is not true.

Air Conditioners have a larger potential in hot climates, overcoats in cold; automobiles sell best where income is high, potatoes do not. Thus, while general indexes are available for quick and easy use, they have little else to recommend them over special indexes.

### **C. Surveys**

In any of the Exploratory Research study, after secondary data are searched, analyzed, survey is required to gather Primary data, which are accurate and very useful. Surveys are done with the help of questionnaire. This procedure consists of projecting sample survey results to the total market using published market data (like census data).

With the industrial products, the 'Standard Industrial Classification (SIC) system' provides unique and effective way of projecting survey data. Central Bureau of statistics also publishes data in which all industries are classified on the basis of SIC system. The standard Industrial classification as developed by the government agency is by far the most widely used system of industrial classification.

The SIC system is intended to cover the entire field of economic activity: agriculture; forestry and fisheries; mining; construction; manufacturing; transportation; communication; electricity; wholesale and retail trade; finance; insurance; services; and government. All manufacturing establishments are combined into about 20 major groups, sub groups, and industries.

When using the survey procedure to estimate the market potential, researchers use mail, telephone, or personal interviews to obtain information on purchases made by firms that have been identified as belonging to the appropriate SIC categories. This information is then projected to the universe of all firms in those categories.

The following steps illustrate the use of the survey method combined with the SIC system to determine potential for an industrial product:

From a sample of companies within each of the Industrial classes that could conceivably buy the product, the amount of the product purchased and no. of employee for each company is determined.

Using the sample data, average purchases per worker for each SIC group is computed.

The average purchases per worker in each SIC group is multiplied by the total no. of workers in that group. This gives an estimate of the National Market Potential for each SIC group.

The National Market Potential for each SIC group is allocated among the various districts according to the proportion of that SIC group workers in each district. Thus, if Chitwan district employs 10 percent of all the workers in a given SIC group, Chitwan will have a potential of 10 percent of the national potential represented by that SIC group.

A Company may be interested in Market Potential figures for a new brand of Car it is going to launch soon. It can plan its marketing expenditures and allocate it to different territories depending upon the Market Potential of each area. In such case, first of all, the company has to identify all potential buyers of the new type of car in an area, say Kathmandu valley. Different categories of customers who purchased the previous brand of Car of the company are all potential buyers for the new brand of car.

The same general procedure can be used to estimate market potential in a single market. Separate potentials for each SIC group in the single market can be estimated and then added to give a total potential for the market area.

It is more difficult to use the survey approach to determine market potentials for consumer goods than for industrial goods. Buying intention studies are typically limited to major purchase item for obvious reasons. However, the procedure for estimating market potentials for consumer goods using the survey method is essentially the same as for industrial goods.

## **2.8 Review of Related Studies**

This section contains reviews of previous Theses, Project Works, and Articles related to the subject under study. A brief review of such literature is done to get insight into knowledge that has been developed, and to know what progresses have been made in the field of research.

## **2.9 Review of Theses**

Researchers are beginning to develop some base of information about Market Studies, including Market Potential studies. What follows are brief descriptions on some of the theses on market potential of some of the consumer goods:

Baral's (1991) studies on Advertising & Sales Promotion of cars in Nepal (with a special reference to 'Hyundai Santro') revealed that the automobile business is one of those sectors of Nepalese business which aggressively uses advertising & promotion to promote their business, and every automobile dealer is coming out with competitive promotional schemes, that includes financing schemes at lowest interest rates.

The basic objective of the study was to evaluate effectiveness of advertising & sales promotion for attaining and retaining the market, concentrating on automobile business in Nepal. The study also aimed to analyse the importance of promotion in building a company's reputation.

Both Primary and secondary were collected for the purpose. Field survey was done to collect primary data from market, using questionnaire and personal interview. Promotional activities planned and implemented by AVCO international (Hyundai motor dealer for Nepal) was analyzed. Lastly, the researcher recommends to bring out advertising and promotional scheme regularly.

Adhikari's (1995) studies on 'Market Potential of Aluminum Architectural products in Kathmandu valley' suggests that use of such products in Kathmandu valley is in increasing trend, and so is the number of establishments producing such goods, and so is the consequent sales.

The researcher, through his thesis, has made an effort to examine the Potentiality of the above-mentioned products and performances of Nepalese manufacturers regarding production, distribution, promotion, and services, thus enabling other producers and users to analyze variety of products. Observation and Interviews were done to collect primary data.

The researcher first tried to find out the existing position of Aluminum products in Kathmandu valley. Based on this, he tried to show the trend from very beginning of development of the industry. Information regarding sales of the product were analyzed, opinion on uses of the products and services of the producers were taken from users and non-users of the product.

The major findings of the research were:

Mostly used aluminum products in Kathmandu valley are aluminum sliding windows because of easy operation, less space taken, good looks etc.

Raw materials are being imported from neighboring countries.

The establishing rate of firms is increasing annually in Kathmandu valley and consequently the sales.

### **Use of Aluminum products is in increasing trend.**

Most of the non-users were not convinced of the strength prevalent on Architectural Aluminum products (AAP), and lack technical know-how.

AAP are expensive but durable, smooth in operation, and non-rusty. Marketing effort to increase awareness of AAP among general masses is lacking.

Finally, the researcher concludes that the potential users of AAP are not adequately informed of its use. So, with good marketing effort, there is a good potential of it in Kathmandu valley. And researcher recommends the producers to focus its marketing first on commercial complexes.

Another research study done nearly 2 decades ago to explore the Market Potential of Gandaki noodles in Kathmandu valley revealed that majority of customers preferred Rara brand of Gandaki noodles at that time, and among other brand available, sales volume of Gandaki noodles were above 84%. The product being newly introduced at the time, the study revealed that a huge Market potential existed for the Gandaki noodles brands in Kathmandu valley.

For the study, the researcher obtained and analyzed information about the sales of different brands of noodles at the time. Consumer's opinion on Price, quality, tastes of different brands were obtained. Consumer's loyalty over several brands expressed in percentage were computed. Similarly, price, quality, tastes, and sales of Gandaki noodles were compared with that of other brands in the industry. And lastly, data on consumption (percentage) of different brands were collected. For the purpose of data collection, respondent's profiles were defined; sample was selected from different aspects of economy; behavior of the total universe was defined.

Besides the fact that majority of consumers preferred Gandaki noodles, and its sales percentage is highest, other finding of the research are that

76% of the respondents felt that Gandaki noodles brands were reasonably priced, and had high quality. Similarly, 94% of the respondents (family) consumed 1 to 5 packets of Rara per day. And about 80% ranked Rara as No. 1 in terms of quality.

Researcher finally concludes that Gandaki noodles had limited varieties of instant noodles to offer to consumers. He recommends producer to increase incentives to dealers and retailers to motivate them to sell the Gandaki noodles brands. Research found that retailers kept stocks of Gandaki noodles only due to high sales turnover, though margins and incentives offered were very less. Indian brand, names 'Maggi' was the immediate threat to Gandaki noodles.

A simple meaning of 'marketing' is selling of goods or services. However, in the marketing literature the term 'marketing' has a wider coverage. Marketing is the process of discovering and translating consumer needs and wants into products and services (through planning and producing the planned products), creating demand for these products and services (through pricing and promotion), serving the demand (through transport and storage) with the help of marketing channels and then, in turn expanding this demand (Sherlekar, 1981:9).

Subedi's (1978) studied on "Problems of Agricultural Marketing in Nepal (With Special Reference to Sugarcane Marketing)" concludes that Nepal has sufficient production of sugarcane to meet the total demand for sugar mill. However, due to many hindrances (for e.g. lack of good transportation system and assembling) the collection of scattered sugarcane production has not been possible so that the sugar mills are facing the problem of sugarcane shortage. Shortage of raw materials, high

production cost, relatively low sugar recovery rate and management problems were the main factors of low production in Nepal.

K.C.T.B. (2005), wrote about the ginger production and its marketing in his book “A Study of Dry Ginger in Salyan District” stated that the ginger is one of the important crops of Nepal. It is a good source of living particularly in the hilly region of country and is important sources of foreign currency earning.

Dhungael Vidhyapati (2005), focuses on the agricultural production in Nepal and its marketing. In his thesis, he mentioned the major problems of the agricultural production and marketing which are generally faced by the local farmers.

## **2.10 Review of Project Reports**

Jayandra Lal Shrestha (1981), highlighted the ginger in his article “Market for Nepalese dry ginger in the European common market” as the popular cash crop of mid and low hills people of Nepal. Ginger is annual crop which is reproduced by means of cutting from the rhizome. Moreover as per reported that the production of ginger in Nepal is less and low quality as compeered to other countries. It is because the farmers have used traditional method of production.

## **2.11 Review of Articles/ other publications**

Agricultural project service Centre conducted a workshop/ seminar in ginger production on 5<sup>th</sup>, 7<sup>th</sup>, 1979. The, 1989. The study was conducted for to acquire information regarding women’s participation in ginger producing and processing of ginger. Regarding this, it stated that ginger can be considered as one of the principle cash crops of Nepal. It is used as

a spice when cooking different type of foods like fish, meat, sweets, pickles and vegetables. It also used of marketing Ayurvedic and Allopathetic medicines and syrups. This study has found out that out total 76 women farmer are engaged in ginger production. The annual outcome from ginger production is 15,400000 which have per family income of Rs 400. The father suggestions made by the study were improve the quality of dry ginger processed within country by providing short term training to the local village women with the help of agriculture experts from the concern institutions.

## **2.12 Research Gap**

The review of above relevant literature has contributed to enhance the fundamental understanding and knowledge, which is required to make study meaningful and purposive . There has been lots of article published in field of Ginger Production Marketing. There are various researches available on ginger production and marketing in Nepal. In addition to this, though another person had done on "Ginger Production " with reference other production, I am doing with reference to concern with the Ginger Production in Nepal. Therefore the research attempts to study in area. To know the ginger production will probably be the first study in this subject matter. So, this study will be fruitful to those interested person parties, professor, students, industry and government for academically as well as production.

## **CHAPTER-III**

### **RESEARCH METHODOLOGY**

Research methodology refers to the various sequential steps which are adopted by a researcher in studying a problem. It would be appropriate to mention that research projects are not susceptible to be studied. Thus, an entire process by which we attempt to solve the problem is called research methodology. This chapter is devoted to the methodology applied in the study to achieve the goals. Both primary and secondary sources of data were used in the study. Opinion survey techniques were adopted while collecting primary data.

Research methodology is a way to systematically solve the research problem. It includes research design population and samples, sources of data, data gathering procedure, hypothesis of the study, data processing procedures and analysis tools.

#### **3.1 Research Design**

The research is designed. Field study research design describes the attitude, values, perceptions and behavior of the participants and non participants of the ginger production and marketing. The descriptive research design used to assess the opinions, behaviors or characteristics of sample beneficiaries and to describe the situation and events occurring present analytical research design makes analysis of collected information and data & makes a critical evaluation of it.

#### **3.2 Selection of the Study Area**

The study area of this research was lies in the foot hill of Mahabharat range altitude between 800-1600 m from the sea level which is suitable climate for ginger cultivation. It is lies north east part of Chitwan district where ginger has been produced by long ago. There is a problem of marketing due to the problem of transportation. The finding of this

research will be beneficial for those is directly and indirectly involved in the ginger cultivation and marketing Siddihi V.D. C. of Chitwan.

### **3.3 Population and Sample (Source of Data)**

The total populations of the study were the farmer who produces ginger. There are more than involve in that work, who are directly method this research. Here accidual sampling method is used for this study. Among them 100 were taken as the sample population of the study.

### **3.4 Nature and Sources of Data**

Data were collected from both primary and secondary sources.

#### **Primary Source of Data**

Primary data were collect through a schedule of self- structural questionnaire. The sources of primary were the sample beneficiaries. A set of questionnaires were prepare intending to capture the production process, trend area; under production mark situation of ginger etc, the questionnaires were made up open ended, as well as multiple choices. Household head will selectto administrate those questionnaires.

#### **Secondary Source of Data**

Secondary data were collected from different related books, articles and previous research. For that central library T.U. Patan campus library was visited and collect related information which help to support the research.

### **3.5 Data Analysis Techniques**

To analyze the quantitative data fundamental mathematical operations along with simple statistical tools such as percentage, ratio, average etc, have used. Beside these tables, charts, diagrams are also used for the presentation of the findings. The study is descriptive as well as analytical in nature which examination of the ginger production and marketing of hilly region of Chitwan district, mainly in Siddi V.D.C.

## **CHAPTER-IV**

### **DATA PRESENTATION AND ANALYSIS**

This chapter is the backbone of the research. In this chapter, both the primary and secondary data are presented in systematic manner. Collected data were presented in systematic formats and analyzed, using different appropriate tools and techniques.

#### **4.1 General Introduction of the Ginger and its Production and Marketing**

History of ginger production in Nepal can be found long years ago but the farmers had neglected its actual farming due to the unfamiliarity of commercial value. According to the previous report of farmers, its farming is commenced rapidly since few decades, because of high market value. long years ago farmers did not give more interest in the ginger production due to lack of low market price, the small amount of output were produced and consumed locally as medicine. During the 1980s the demand of ginger went up and ginger became precious for village people. Increased price of ginger made the ginger producer to produce more ginger. Ginger production has started in this area as the commercial product land holder use their waste land, they produce ginger in every land (Pakhkho and Khet) . In new soil ginger, production is higher than the other ordinary land. The poor people of the study are also started to produce ginger is in increasing trend due to sufficient availability of input required. Now, due to the disease and pest the trend of ginger production is in the state of fluctuation. According to the over saying of acute ginger producers and tradesman in the production year 1970 1975 the price of ginger is Rs 25 to 50 per mound( forty kg) but after 1980- 85

the price of ginger raised and became Rs 200 to 800 per mound. In the present time the price of ginger is not fixed approximate, it was sold in Rs. 30-50 per kg. Due to the source of good income, source people are attracting in cultivating ginger.

#### **4.2 Importance of Ginger Production in This Area**

The climate condition of lower range of Mahabharata is suitable for ginger production so government of Nepal make plan to make policy about ginger production. It will be coming soon although it has been cultivating as the people side by using traditional knowledge and technology. It is taken as the economic and valuation and is the main source of income. Producing and selling it raised the living standard of former of the study area. It also provides employment to the village people. Hence, production has been successfully raised in the study area.

#### **4.3 Ginger and the Process of its Production**

There are local varieties of ginger. They are Majhuley, Bhaisey, Jorehange and Gorubathney. In Sikkim few years ago, two new varieties are not popular as compared to local varieties. Majhualay and Bhaisey have covered the study area. Majhualay is small in size than Bhaisay. Gorubathney, Jorethang do not exist in the study area. The climate condition is suitable for the cultivation of Majhualay and Bhaisey.

#### **Agro Climate Requirement**

The ginger of commerce consist of the thick scaly rhizomes( underground stem) of the plant. It is cultivated in the hilly region with an inclination of 5 to 30 degree . For its cultivation the temperature of 15 to 30 degree is very suitable and uniformly distributed rainfall of 2100mm to 27mm and an altitude ranging from 300m to 15 m is considered to be ideal.

### **Method of Cultivation**

In hilly region of Nepal including Siddhi V.D.C. people cultivate ginger for commercial purpose. Siddhi is hilly V.D.C. of Chitwan though hand and oxen do its cultivation. It is more difficult than plain; tilling the land by over and remaining work is done by human labor. Ginger cultivation is done slowly because most of the work done by human labor. Still ginger cultivation in Siddhi is done by using traditional method. They do not use more labor because of low income. Every people of the village cultivate ginger in their small pieces of land. Ginger is the main source of income of the study area. There are following step for cultivation of the ginger.

### **Seed Collection**

High yielding varieties are essential in the crop production. The farmers find out the high quality seeds for maximization of production in future, they have to be responsible enough to search high quality seeds of ginger. As soon as harvesting is done the producer keeps the selected seed under the ground to protect from sun and water covering by husk of rice, soils etc. till the time of sowing.

### **Cite section**

Slop land, which is free water logging, is very suitable for ginger production. Virgin land is ideal for its cultivation. Among the soil, red soil is appropriate for ginger cultivation.

### **Land preparation**

Spring season is the best for cultivation of ginger in Siddhi V.D.C. Organic manner is applied in the loosen land before the land is ploughed. It is ploughed twice or thrice before sowing in order to lose the soil. Then

bed is prepared by spade and is divided in 40-50 and 15 -20 cm height a space of 30- 40 cm between beds to drain n rain water.

### **Planting and Manuring**

Ginger is planted in shallow pits. The ginger rhizome is made into pieces of 25- 30 gram seeds and planted between 8-10 inches within a row. As it is a tuber crop, it consumes high nutrients present on the soil. So seeding and leaving of the soil is done after extraction of Mau ( Mother Rhizome). Very few growers use organic fertilizers (like urea and DAP) in quantity 2-5 kg per mound after line extraction of Mau/ mother rhizome) but rhizome is not regarded as best seeds for next season.

### **Mulching**

This is the process of converting the sown by liters dry leaves to keep soil moist and shaded to minimize soil erosion. The mulching protects the young plant from heavy rainfall. Mulching is done to keep the land free from weeds and to lose the soil. It also helps to maintain the fertility of soil through its decomposition.

### **Weeding**

The uprooting of unwanted plants from the field to make plant more health is weeding unwanted plants disturbs the growth of the ginger plant. These weeds always compass with the nutrition of the field. It is very necessary to uproot twice or thrice in a showing year. ( see annex)

### **Mau – Extraction**

The work of Mau- extraction varies from place to place, the process is started after the germination of ginger till the mid of august by kute( iron

made) or bamboo knife ( Dabilo) .there is variation on market price of Mau during the time of Mau- extraction.

### **Earthing up**

Earthing up is done in between of 20-30 days after Mau- extraction during the month of July to September using tools. It is done for the protection of ginger from direct sun which dries out the ginger and to protect from thrust which Detroit the production skilled labour is essential for earthing up as the end of Mau-extraction. (See Annex)

### **Harvesting Cleaning and Storage**

Harvesting of ginger is done twice a year in the study area. At first in the month of June- August ( i. e. Mau extraction) and another in the month of December to February ( i.e. fresh rhizome). In the month of June to august ginger is harvested and as soon as sold at the market. This kept as the seed storage. Whereas, in some parts of ginger is harvested during the time of February, than stored for seed. The rhizomes used for sowing are kept beneath the earth surface protected by husk of rice or litterers and remaining ginger is send to market for sell. The time of different activities performed in the process of ginger cultivation is presented in the following table

Table 4.3  
Calendar for Ginger Cultivation

Operation	Function											
	J	F	M	A	M	J	J	A	S	O	N	D
Land preparation												
Planting and manuring												
Mulching												
Weeding												
Mau-extraction												
Earthing up												
Harvesting												

*Field survey, 2010*

### **Nutritional Value of Ginger**

It is one of the world's most nutritious plant nutritional value per 100 gm of ginger is shown in the following table.

Table 4.3(b)

**Nutritional Value of Ginger ( per 100gm)**

Nutrient	Amount (gm)
Protein	2.30
Fat	1.00
Carbohydrate	12.30
Calcium	20.00
Iron	2.60
Vitamin A	67.00
Vitamin b2	6.00 mg
Vitamin C	0.03 mg
Energy	67.00 cal

Source: ANRC present situation of spices crops in Nepal, Lalitpur, 2065

**4.4 Area Production and Productivity of Ginger**

The government of Nepal has set horticulture Department for development of cash crops in Nepal. It successfully establish horticulture farm in different district. In some district INGO and NGO were involved to overcome the problems of disease and pest to increase the production productivity of ginger. The area production and productivity of ginger ha presented in the following table.

Table :4.4

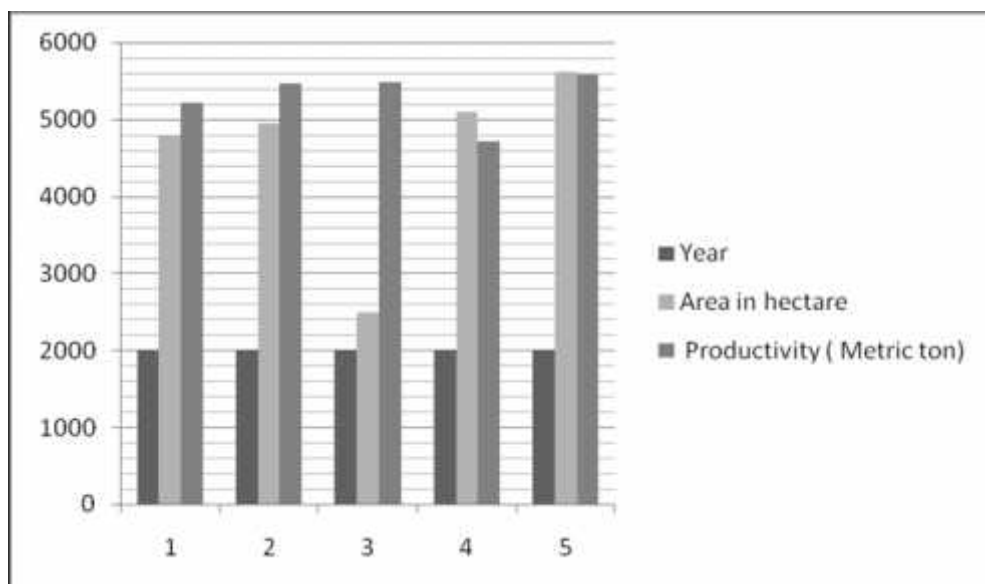
**Area of Production and Productivity of Ginger in Nepal**

Year	Area in hectare	Productivity ( Metric ton)
2005	4800	5208
2006	4940	5465
2007	2490	5475
2008	5100	4706
2009	5610	5584

*Ministry of Agriculture, Annual, 2009*

**Figure . 4.4**

**Area of Production and Productivity of Ginger in Nepal**



Above table and figure shows the increasing trend of ginger cultivation in Nepal although it would not increase rapidly. According to the data ginger, cultivation is limited in 4800 hectare in 2005 and it would expand and cover 5600 hectare in 2009. It shows the ratio of ginger cultivation is high in Nepal. Like that, productivity of ginger also increases in Nepal in

1005 only 5208 metric ton ginger produces whereas in 2009 the production increases in 5585 ton.

#### **4.5 Area and Production of Ginger (Ward wise) 2005- 2009)**

Siddhi V.D.C is one of the hilly V.D. C. of Chitwan where farmer produced ginger as the main source of income. Ward wise ginger production area as presented in the following table.

**Table :4.5**

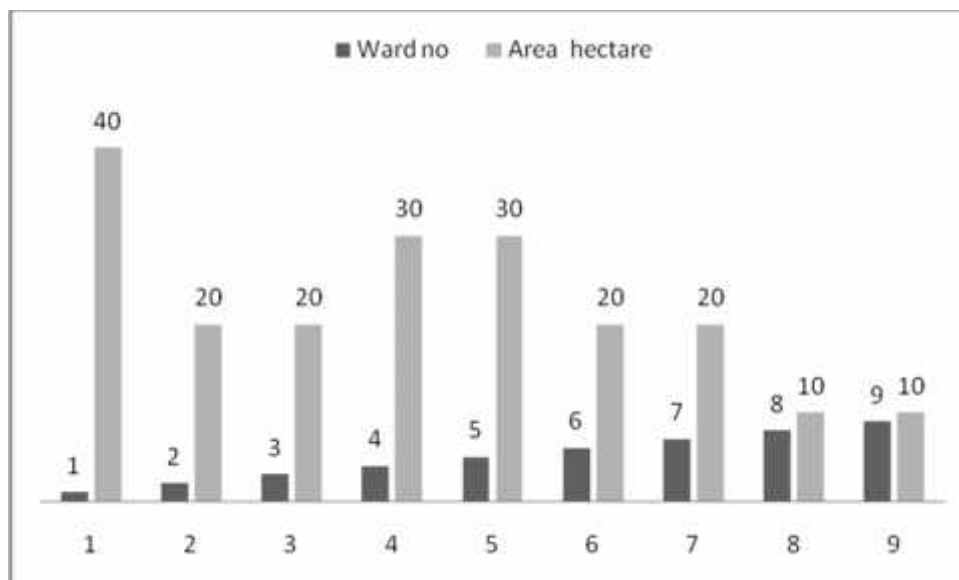
#### **Area and Production of Ginger (Ward wise) 2005- 2009)**

<b>Ward no</b>	<b>Area hectare</b>	<b>Productivity kg</b>
1	40	8000
2	20	2000
3	20	2000
4	30	3000
5	30	5000
6	20	4000
7	20	2000
8	10	2000
9	10	2000
<b>Total</b>	<b>200</b>	<b>30,000</b>

*Source :Field Survey 2010*

**Fig: 4.5**

**Area and Production of Ginger (Ward wise) 2005- 2009)**



Above table and figure shows the area of ginger production in Siddhi V.D.C. of Chitwan district. According to the data ward no 1 is famous for ginger [production where 40 hectares land is covered by the ginger cultivation. The land is very suitable for ginger so the productivity also better than the other wards. Like that ward no 9 and 8 are to step for ginger production and there is no virgin land for it so there is only 10 hectare land covered by ginger cultivation although the productivity is not so worse in these area. Overall productivity and land occupation shows that ginger production is popular in all words of the V.D.C.

**4.6 Involvement of Ginger cultivation in Siddhi V.D.C.**

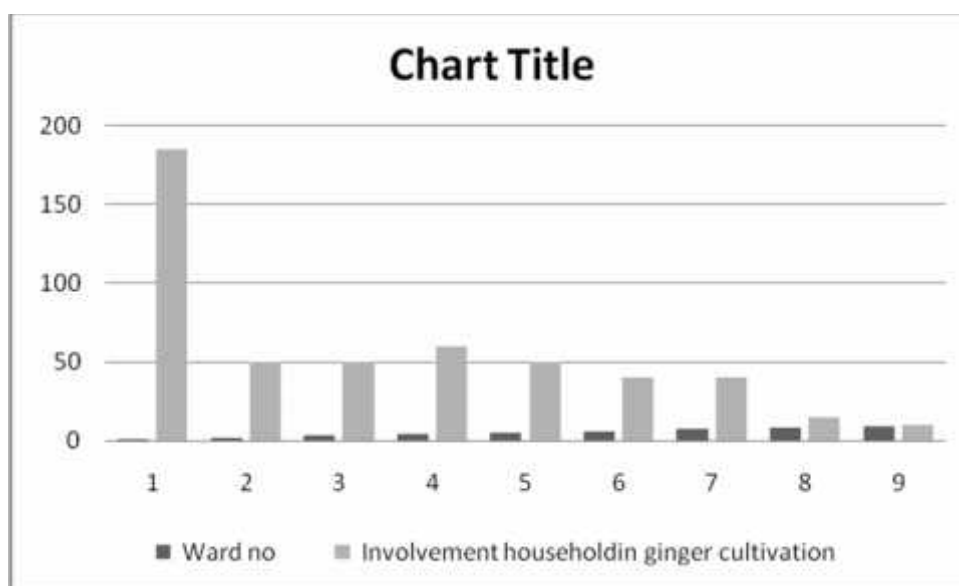
There were 1200 households in Siddhi V.D.C. while taking the information. Among them 500 household were involved in ginger cultivation although some cultivate it in very few land only 200 household cultivate it as the main crops although all of them take

income from ginger. Involvement of ginger production is mention in the following table.

**Table 4.6**  
**Involvement of Ginger Cultivation in Siddhi V.D.C.**

S.N	Ward no	Total hh	Involvement household in ginger cultivation
1	1	200	185
2	2	150	50
3	3	100	50
4	4	150	60
5	5	200	50
6	6	100	40
7	7	120	40
8	8	80	15
9	9	100	10
<b>10</b>	<b>Total</b>	<b>1200</b>	<b>500</b>

**Fig 4.6**  
**Involvement of Ginger cultivation in Siddhi V.D.C.**



Above table and figure shows that out of 12 household 500 were involve in ginger production and marketing activities . in ward no 1 among 200 household 185 were involved in ginger cultivation like that in ward no 9 only ten percent were involved in ginger production . It shows that ginger cultivation is popular in the village.

#### **4.7 Economy of Ginger Production**

Ginger is one of the important cash crops of the study area and its cultivation is done in traditional way as well as modern basis using different inputs. It is the main source of income of the study area. It helps to improve economic status of the society and living standard of the village people.

#### **4.8 Cost of Production of Different Crops**

Study area being subtropical to temperate region is famous for the different type of horticulture and agricultural crops. Production follows process of consisting factors imputes into product (outputs). Land, labor, seed maximize etc, are the major imputes used in the agricultural production process. Beside ginger Maize, yam, pluses oil seeds vegetable etc, are grown in the study area. As per the field information, the cost for production per acre of land of different crops in the study area has been shown in the following table.

Table :4.8

**Cost of Production of Different Crops**

operation	Maize	Ginger	Oil seeds pluses	Millet	Other vegetables
Land preparation	-	1200	915	2000	5000
seeds	1085	25500	-	100	1000
showing	-	1050	-	900	2000
Manuring	2000	5900	676	-	-
Fertilizer	200	2710	-	2000	-
Weeding	650	2260	-	4000	-
Non-extraction	-	1000	-	-	-
Earthing	410	300	-	-	-
Harvesting	300	700	330	3000	500
Storages	-	400			8500
Mulching	-	500			
Total	4565	41510	1921	12000	

*Source: Field Survey 2010*

The above table shows that cultivating ginger is expensive in itself so it is difficult to cultivate ginger by poor people. In comparison, other crops can cultivate in low cost although ginger is popular because of its return. According to the data oil seeds, production cost is very low in comparison of ginger but these crops could not be made source of income so people attraction is high in ginger cultivation. If government provide loan for ginger production it poor people even involved in ginger cultivation.

#### 4.9 Total Cost Return from Different Crops

Different crops have different production cost, price per unit of production, total returns and output. Total cost return from different crops mention in the following table.

Table :4.9

#### Total Cost Return from Different Crops

<b>Crops 1</b>	<b>Production per acre (in Rs.(2)</b>	<b>Production in quintal)(3)</b>	<b>market price per quintal( in Rs) (4)</b>	<b>Total output in(Rs.) *4)</b>	<b>Yield per acre ( Rs.6(5-2)</b>
Maize	3990	6.77	500	3385	(-) 605
Millet	3730	5.11	800	4080	(-)642
Ginger	36510	34.15	1275	43541	7031
Oilseeds	1762	4.42	1000	4420	2658
Pulses	1618	5.37	1200	6444	4826
Vegetable	4340	52.0	200	10400	6060

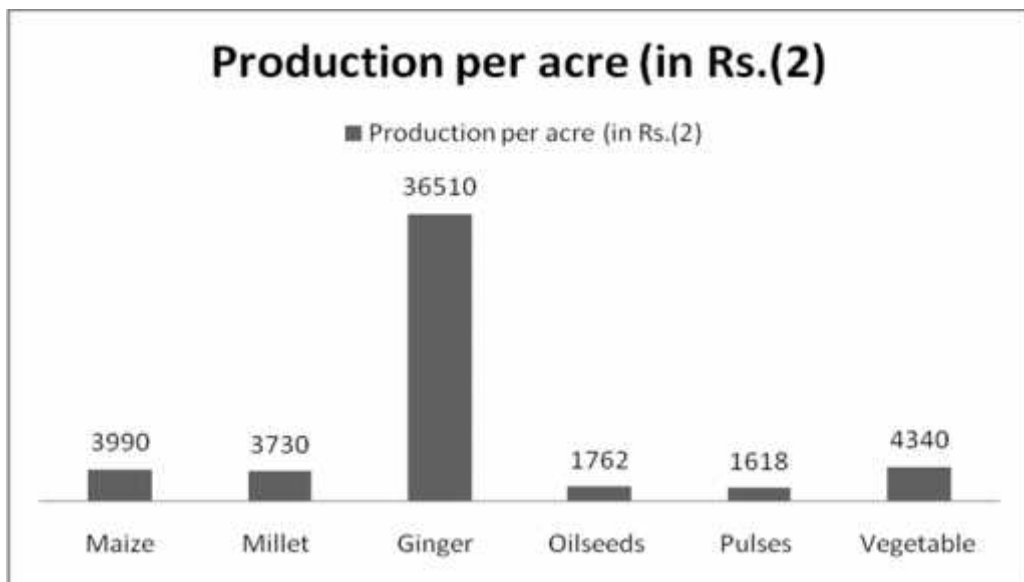
Source: Field Survey 2010

The market price in agricultural product in Siddhi is always fluctuation. In which fluctuates from years to years. The money value of the output from an acre of the land is derived by multiplying production and market price( i.e. total output= production x market price) and yield is calculated by deducting cost of production from total output in its money value (i.e. yield per acre ( in Rs.) = output ( in Rs.)- production cost (in Rs)]

The table clearly shows that the cost of production is higher than any other crops from the point of view of return. Ginger come third rank among the crops. The return from vegetables is higher than other crops. Very few farmers cultivate vegetables due to the lack of irrigation

facilities and unsuitable topography. According to field survey, the farmers are growing millet and maize continuously for the self consumption. As per the report of farmer respondents, low productivity of maize and other crops except ginger is mainly due to irregular, uneven distribution of rainfall and unfertile soil. The following figure makes it further clear;

**Figure 4.9**  
**Total Cost Return from Different Crops**



#### **4.10 Changes in Income**

Ginger has been considered as the traditional cash crop by the people of the study area and produced since long time. The importance of ginger trade was generally during 1990 onwards. After that time ginger was produced for only commercial purposes, and then after, it was produced for household consumption as spice and medicine and religious activities by Chepang and Tamag people which so the cultural intact cultural attachment with the people.

Hence, these days out of 12000 household 500 households were engaged in ginger cultivation. To show the change in income level from ginger production it is difficult to perform as producers do not keep record of their income in arranged order. The changes in income level have been shown in the following table.

Table: 4.10

**Change in Income**

Ward No	Average annual income before production of ginger ( Rs,)	Average annual income after production of ginger ( Rs.)	Change in income ( Rs.)	% change
1	2324590	3045650	7,21060	31.02
2	3058320	3932580	874260	28.59
3	3987540	4898570	911030	22.85
4	3198650	4118580	919930	22.85
5	3018550	3218550	20000	3.9
6	-	-	-	-
7	-	-	-	-
8	-	-	-	-
9	204000	224000	20000	5.6
Total	15791650	19437930	3,466,280	114.81

*Field Survey 2010*

The percentage increase in income of ginger production is 114.81 through out in the study area. In ward no 1 these has seemed significant change in income. It helps them to improve living standard of people in the study area. Report of farmer of the area is that, they have to earn more income from ginger production they are not engaged in other sectors except the job. The ginger producer have construct building over there, they have send their children in school. And they have collect T.V. radio and other family gadget. It shows that ginger cultivation is one of the strong factor to improve economic status of the Siddi V.D.C.'s people.

#### 4.11 bDistribution of Income

The equal distribution of income is not possible throughout the study area. Analysis of the distribution of income has been shown in the following table.

Table:4.11

#### Distribution of Income

Income level(Rs.)	Average annual income( in Rs)	No of household			
		Producing household	&	Non producing hh	%
5000-1500	10000	200	22.33	145	24.30
15000-25000	20000	100	19.4	100	22.35
25000-35000	30000	150	18.44	150	19.19
35000-45000	40000	40	16.58	105	12.14
45,000-Above	50000	10	13.33	200	10.48
<b>Total</b>		<b>500</b>		<b>700</b>	<b>88.46</b>

*Source Field Survey, 2010*

The table shows that income distribution is not equal in all ginger producers. There are total 1200 household are divided in two group one is those group who are involving in ginger cultivation another is non involving group and then total households were divided in five categories and analyze the according to the capacity of getting income from ginger production.

#### **4.12 Major Problems of Ginger Production of the Study Area**

The problems of ginger production in the study area are climatic condition, location and topography. The production and productivity of ginger is not satisfactory. The major problems faced by ginger producer in the study area as explained below.

##### **I Poor Economic Condition**

The economic condition of ginger producing foddors/ grower farmer directly influences the cultivation o ginger. While observation the sampled household in the study area, it has noticed, about 70% of the small farm size farmer are poor. Due to lack of stable economic source, they cannot show more ginger crops usually when the price is highly in the market besides this they cannot afford to use any kind of imputes i.e. chemical fertilizer, micro nutrients pesticides, weedicides and fungicides etc. in proper time which helps to increase the yield of its production. Therefore, farmer having low economic status cannot afford balance impute, owing to that they have low yield of production. According to the respondents, almost all the poor farmers face this sort of problems. After having completed the field survey the report shows that, only few of them can afford necessary equipment for ginger cultivation hence economic condition is a significant factor, which directly influences the cultivation of ginger in the study area.

### **i. Uncertain Character of Monsoon**

Ginger cultivation in the study area has to depend upon monsoon rain. Most of the ginger cultivated area is located on the rain shadow area; hence, the rainfall is unevenly distributed. An average rainfall of 2000 to 4000mm is recorded in the area annually. But while observing the rainfall pattern of the study area two distinct seasons are noticed i.e. the summer season April to September and which is hot and wet. Rainfall is heavy and well distributed from June to August, July is considered as rainiest month. Ginger is at risk in this time as crop does not tolerate stagnant water, the rain spread diseases. Irrigation is not possible due to the steep topography of the area.

### **ii. Lack of Seed**

Defiance of improved seed is another significant problem for the cultivation of ginger in the study area. Majority of the farmers select seed from their own production, which is local variety and low quality, which also usually suffers from various unseen disease. Respondents have complained on the seed which they used to cultivate. This has become the major problem for the ginger cultivation. Hence, to promote the ginger in the study area the government should provide high yielding variety of improved seeds to the local farmers.

### **iii. Disease and pests**

Ginger is attacked by insect pests both in field and storage, foliar disease and storage disease which are caused by the pests known as *Losidomerma* sp and *Stegobium* sp. respectively. The ginger crop is also attacked by other minor pests like the maggots of *Caloboata* sp (Diptera, microperzidate) which bore into the rhizomes and roots; *Celyphus* sp (Diptera celyphidia) which feed on the rhizomes and cause of their

rotting, the weevil *hydrychrous* which feed on leaves. These are the major limiting factors of ginger production. The disease like rhizome rot (paheli) nematode dying (Sukha) phylosticta sp. (Leaf spot) etc. are most common. Farmers are able to find out the cause and disease but unable to solve the problem completely. It is reported that disease and pests exploit large volume of ginger during rainy seasons. This is the main problem of the ginger cultivation in the study area. Thus, the majority of farmers complained that they are ignorant of the measures to be adopted against disease and pests. (See in Annexes)

#### **iv. Lack of Extension Services**

The ginger production in the study area reported that they have no scientific knowledge of ginger cultivation. Majority of farmers cultivating ginger follow traditional method, which requires high quantity of input like land labour, seeds and farmyard manure, which the poor farmer are unable to afford. Lack of extension services has also become big problem in the study area.

#### **Future of Ginger in the Study Area**

The study area is under ginger cultivation since long time. It has already been established as a major crop in the study area. At the present time it has bright potentiality as an earning source for the people. Thus, larger farmer is flourishing in this area. Due to favourable climatic condition and high price of ginger, the local ginger growers are interested towards its cultivation. Continuous cultivation of cash crops resulted in the decline of soil fertility. Increasing population pressure on marginal land creates various environmental imbalances (climate change) resulting in so many kinds of natural disasters like landslide, flood, desertification, soil erosion etc. Thus, ginger cultivation plays an important role in balancing

the declining environmental condition. From the cost and return point of view ginger cultivation is more economical than other cereal crops cultivation in the study area. This is also due to the suitable topography and land formation. Problem faced by ginger cultivators is manuring and mulching is some part of the area. Whereas the cultivated land in the study area is surrounded by dense forest, open mixed jungle, open scrub and scattered jungle, which providing and litters for making the ginger and also provide fodder for animals.

In this study area, livestock is considered as integral part of agricultural activities. Hence, every household engaged in agricultural activities, have livestock as per forest facilities utilized by him. The livestock farming fulfills the need of manure required for manuring the ginger field. Hence, from the income point of view, ginger cultivation in this area remains as viable option which will continue to remain in future too.

#### **4.13 Ginger Marketing Analysis**

Marketing may be define as “all business activities in the flow of goods and services in defined from places and on time from producers to usersthrough various marketing organization”. Marketing has got different meaning for laymen and economist. To the layman, marketing generally means the selling and purchasing of a commodity, which is only a part of marketing. But economists define marketing as the performance od all business activities involved in the row of goods and services from the point of intitial production to ultimate consumer.

According theamerican marketing management association marketing is the process of planning and executing the conception , pricing, promotion and distribution of ideas, goods and services to create exchanges that satisfy individual and organizational objectives. The endeavour of an

efficient marketing system is always to get better price for the producers and supply of quality product to the consumers out its optimum taste and satisfaction. Kotler has also defined, "Marketing as a social and managerial process by which individuals and group obtain what they need and want through creating offering and exchanging products of value with other".

Marketing does not automatically adjust itself as economic grows but it is a vital force to accelerate economic development. If the efficiency of total marketing system improves it becomes a strong multiplier of economic development. The efficiency of the marketing system lies in the availability of national and domestic markets presence of marketing infrastructure such as transportation etc. in hilly area of Chitwan, such systems have not yet developed. Thus, in consequence growers, consumers and planners face such problems. Exchange of good assumes a very important role in maintaining equilibrium between production and consumption in the planned economic development. Therefore, a direct bearing upon the prosperity of the cultivators. Marketing facilities exchange relationship between the buyer and seller. The buyer exchanges value in terms of money and the seller exchanges value in terms of product. Marketing as an exchange system are as follow:

Agricultural marketing in its broadest sense comprises all the operations involved in the movement of food and raw materials from the field to final consumer. It includes the handling of product at initial, processing, grading and picketing in order to maintain and exchange quality and avoid wastage.

Marketing is the means by which commodities are brought from the place where it is produced to the consumers, place. Time and procession utilities are involved but their development requires marketing only when the exchange in ownership also is involved. We can say that marketing is

the combination of the activities by which agricultural product and raw materials are made ready for, or capable of consumption and reach the final consumer in the stable form at the time and reach the place where consumer wants them. Hence it includes assembling, transport, cleaning storage sorting grading packing initial processing, looking for supplier, looking for outlet financing, the holding of produce between the item that producer is paid and when it is brought by the producer is paid and when it brought by consumer and taking the risk of holding produce until the outlet is found.

In Nepal market problem is i.e. lack of transportation, storages facilities, lack of organized market and marketing information is the important one mainly the hilly region. It is the same condition in Siddi V.D.C. Because there are no such facilities. Thus, farmers, retailers, middlemen and businessman adopt the present marketing system. Lack of organized market system, most of the farmers sell their product in the local area to the middlemen. On the other hand, the producer and seller have to manage their market in four ways. They have to produce the product according to the need and wants of the consumer. They have no maintained standard of the product, feature, and design branding and picketing. The cost price which include retail price discount allowance and credit should be payable by consumer. The place of the production should be convenient. So that wholesale and retail selling become easier. It has to set up channels of an advertisements, direct marketing and public relation.

#### **4.14 Market Relation**

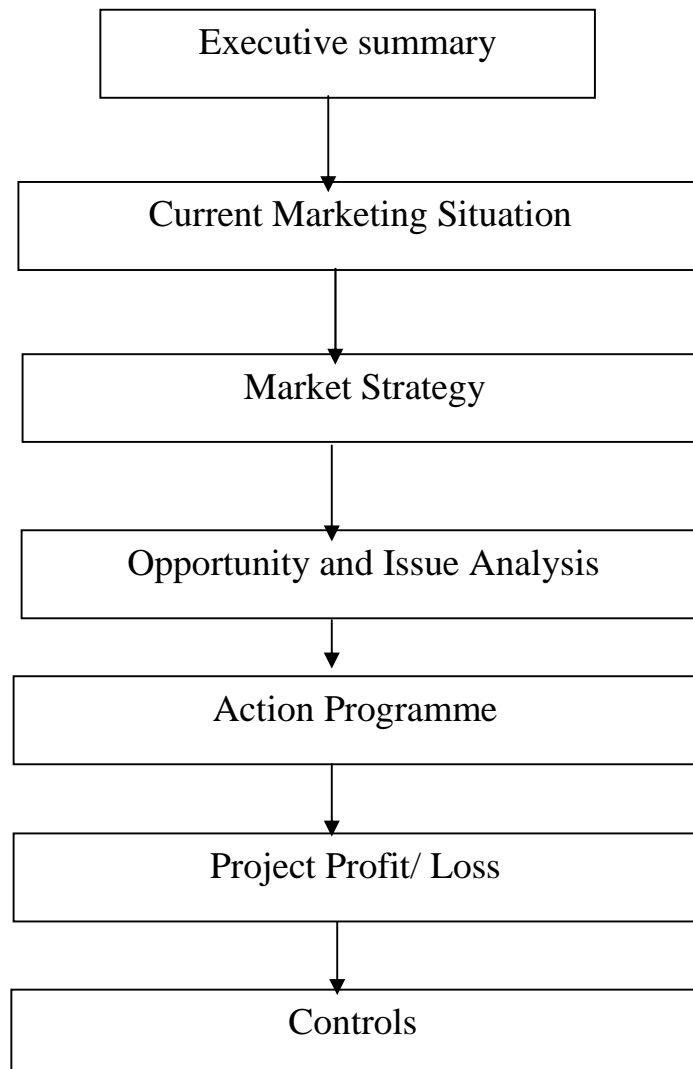
Marketing implementation is the process that wins marketing plan into action. Assignment ensures that they are executed in a manner that accomplishes the plan's stated objectives. Marketing plan are the central

instruments for directing and coordinating the marketing effort. It consists of four steps:

- i. Analyzing market opportunity
- ii. Researching and selecting target markets
- iii. Organizing
- iv. Implementing and controlling the market effort

Figure 4.15

**Market Relation**



#### 4.15 Ginger Marketing in Siddhi V.D.C. of Chitwan District

Generally, ginger marketing is buying and selling of it. At the beginning, the village economy was far from modern economic activities. At that time, the village people used barter system to sell their product. Nowadays the ginger cultivators knew the importance of cash crop such as ginger, vegetable etc. So they use modern techniques, ginger market in Nepal is assembly market. It is one of the importable cash crops of Nepal. Ginger assembled at the different market in Nepal is sent directly to Bhairawa or Birjung which serves as transit market. The trade flow and volume of ginger in the main market are presented in the following table.

Table:4.16

#### Major Market Place of Nepal for Ginger Selling

Market place	Volume of ginger Quintal	% of total trade
Palpa	5395	31.14
Nepalganja	3300	19.05
Pokhara 1700	1700	9.81
Mahendra nagar	1287	7.42
Dhankuta	1900	10.96
Sindhuli	1090	6.21
Naranghat	1150	6.63
Ilam	1500	8.65
Total	17322	100.00

*Source: Ginger Market Survey report,2010.*

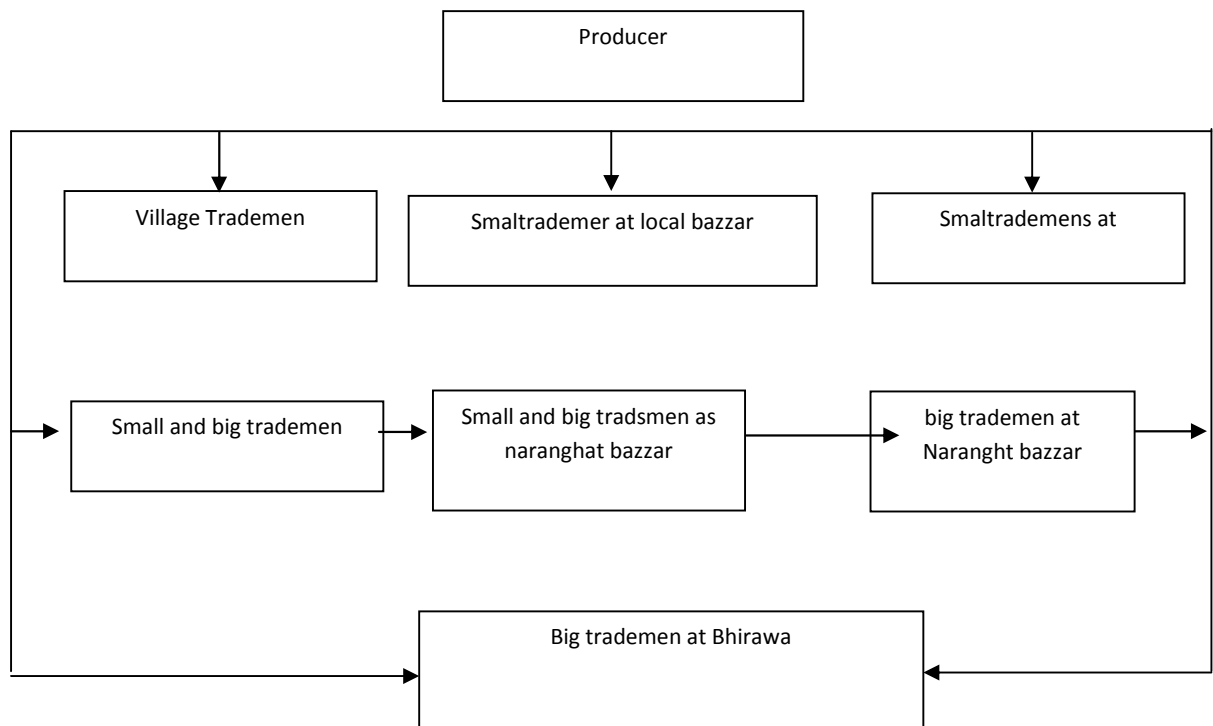
The table presents that palpa is the largest share in ginger trade in Nepal with total volume of about 5395 quintal which has percentage 31.14 of

the total volume of ginger. Nepalganja, Pokhara, Dharan Ilam Naranghat Mahendra Nagar etc are the other major market place of ginger except that area other Border area Birjung, Bhairawa, Lalbandi Biratnagar Mechinagar also the market place of it. Collected ginger from transit market are send to Calcutta, Delhi, Ludhina and Amritsar for processing. The largest volume of ginger is prepared for medicine and spices and remaining is exported third country.

#### **4.16 Marketing Channel for Ginger Collection**

The process of moving goods and services from the producers to the consumer is known as channel of distribution. Marketing is dynamic process. In the study area, the ginger producers have no direct contact with transporters and commission agents. The ginger producers sell their product through village tradesmen or small tradesmen. The process of ginger collection in the study area is shown in flowing chat

Figure: 4.17  
Process of Ginger Collection



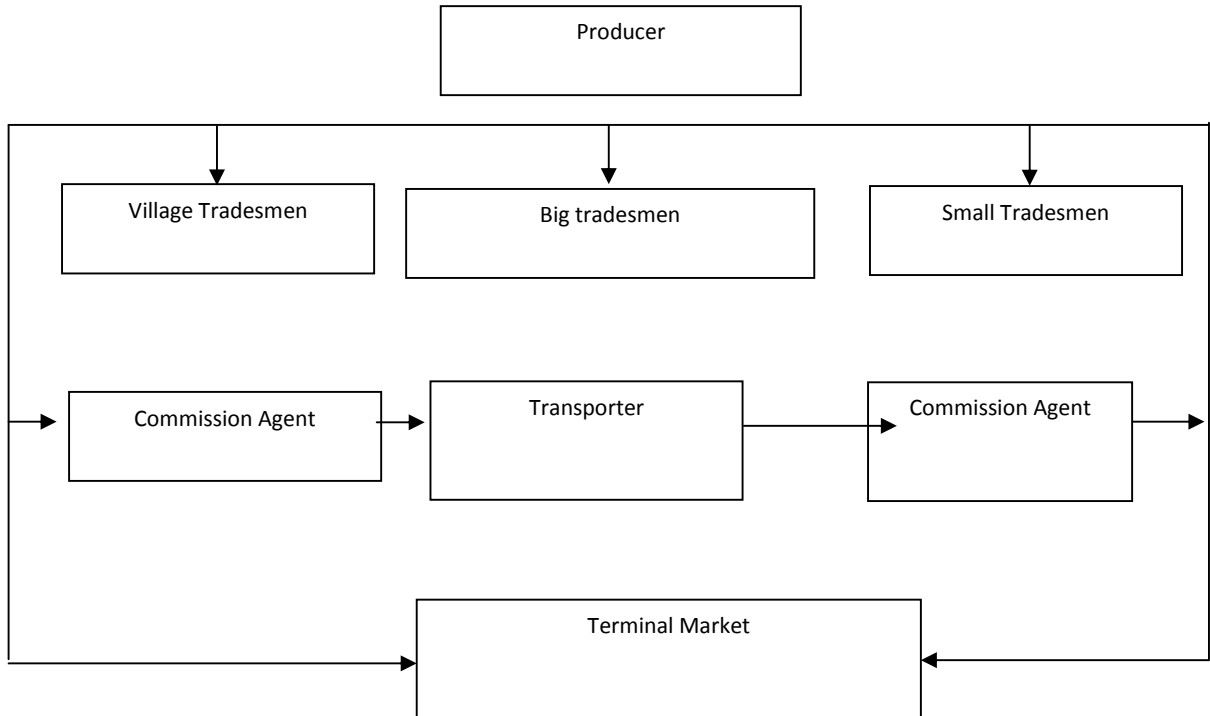
The above figure depict that the small tradesmen good link with producers and big tradesmen. The big tradesman generally does not have good deal with producer but they have good deal with small tradesmen and small trademen. The big trademan is presented in the market of Naranyanghat , Birjung and Bhairawa.

#### 4.17 Market Functionaries and Trade Practices

Trade of ginger business is specialized in the study area. Ginger traders do their business mainly in the local market where they have a shop. The main actor and their relationship of ginger in market are summarized in the following figure.

Figure:4.17

**The Main Actors and their Relationship in Ginger Trade**



The above chart depicts that the ginger produced in Siddhi V.D.C. trades through three channel.

**Channel A:** Producer - village tradesmen - small tradesmen big tradesmen- commission agent - transporter

**Channel B:** Producer- small trade men – big tradesmen – commission agent- transporter

**Channel C:** producer- big tradesmen – commission agent – transporter

**Producer**

The ginger producers sell their production to the pre-harvested contractors, viz, village tradesmen, small tradesmen and big tradesmen.

However, some of the growers go to the market centre and sell themselves. Depending of holding capacity of the producers, they hold their product for different length of time.

### **Village Tradesmen**

These functionaries are frequent visitors of the assembly markets. They have good contact with small and big tradesmen situated in assembly markets as well as with ginger producers in the villages. Usually village tradesmen does of take any risk or loss because only after knowing the assembly market price they fix price of ginger with the villagers.

### **Small Tradesmen**

Small tradesmen purchase ginger from villages, villages tradesmen and they sell their products to big tradesmen in the assembly market. However, the small tradesmen of the markets stock transfer will take place only at the transit point. The risk remains with the small tradesmen until the stock is handed over to the big tradesman at the transit point. Normally they do not bear any risk in their business a they sell their produce locally and with a special margin. So they have significant role in the ginger market.

### **Big Tradesmen**

The big tradesmen purchase ginger from producer , village tradesmen and small tradesmen. They have to send their ginger straight to Delhi wholesale market and occasionally to other terminal market Calcutta, Patana etc.

### **Transporter**

Transportation is the important factors in marketing process. Transporter keeps line in between big traders and commission agent in the market.

### **Commission Agents**

Commission agents are traders working o the collective basis and they have to carry full truck loaded with ginger from Nepal to India. They do not bear any risk. The commission agents pass the regular market signal on to the tradesman of local market to transit market point.

### **4.18 Ginger Market in the Study Area**

Ginger is traded in local markets to transit market of Bhairawa/ Birjung producers and village tradesmen sell their production to the local market which are Shaktikhor Bazzar, Tandi Bazeer. Generally, Tandi is the shopping centre of the village and few of them deal with ginger or direct negotiation, pre-harvesting contact or barter basis with small storages facilities. All the market centre have inland transport facilities with study area and the storages facilities. The distance between market centre and study area are Shaktikhor 5 km , Tandi 30 km Naranghat 45 km . These market centre sell their produce with the high margin of profit charged is determined by market price of transit market in Naranghat

### **Market Share in the Study Area**

The markets share of ginger produced is determined by different factors such as the cost of marketing, price structure in the market, distance involved facilities of transportation the relation of producers with shopkeeper. The market share of different market is explained in the following table.

Table :4.19

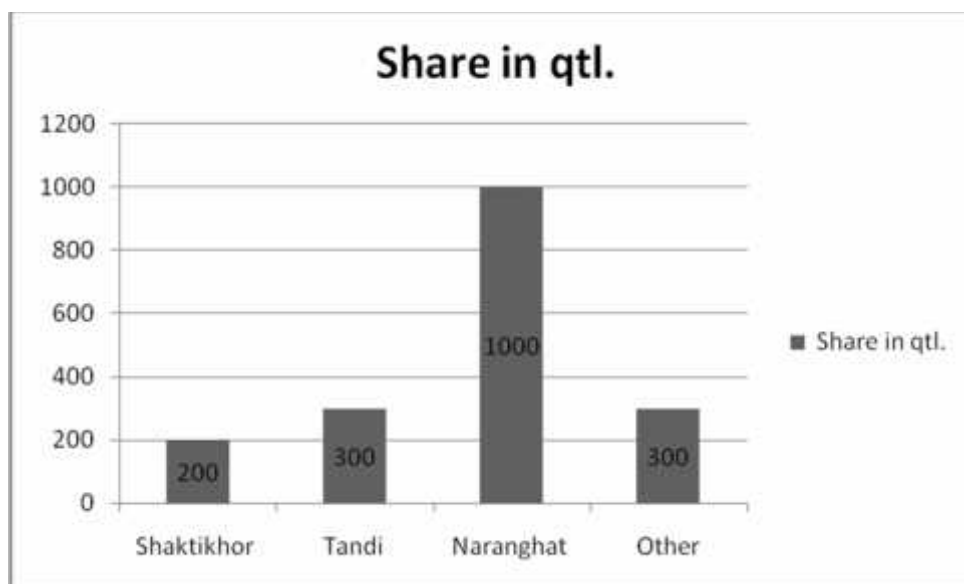
**Share Different Market**

S.N.	Markets	Share in qtl.
1	Shaktikhor	200
2	Tandi	300
3	Naranghat	1000
4	Other	300
5	Total	2000

*Source: Field Survey 2010*

Figure: 4.19

**Share Different Market**



On the basis of factor determining marketing, ginger is sold to five market places. Above table and figure, show the market share of the ginger produced in the study area.

#### 4.19 Cost of Ginger Marketing

The price of ginger is different in the different market places. The cost of ginger varies according to different market places due to the distance involved and availability of transport facilities. The cost of marketing has been shown in the following table.

Table:4.20

#### Cost of Marketing

Market centre	Cost of labour and tax for local political party in rs.(per100kg)	% of cost labor	Vehicle per 100kg. (Rs.)
Shaktikhor	100	20.8	40
Tandi	200	41.6	50
Naranghat	300	62.4	60
Other ( Khlesimal, Jutpani etc)	100-200	20.8	20-40

*Source : Field Survey,2010*

Above table shows that the variation is due to different in wage charge and vehicle charge which varies as per the distance involved and tax of the local political parties. In any market, loading /unloading charge of labour is different. In the study area, some places no road facilities. So by labor the producer reach their ginger to the market. So the labor charge is quit high in some places of the study area.

#### **4. 20 Bottlenecks and their Impacts**

Although ginger occupies the first position in terms of its marketing among the other different cash crops in the region, yet various problems are faced by different ginger growers while selling their product in the market. Following are the main problems faced by ginger cultivators in the marketing according to the respondents in the study area.

##### **i. High Transportation Cost**

As already stated Tandi Bazzar is principal market place of the study area. There are no regular facilities of transport so the vehicle takes more rate than the cost of other places

##### **ii. Lack of Fixed Commission Agent**

Due to the lack of commission agent in the local area, majority of ginger grower are decided by various middlemen i.e. Village tradesmen, small tradesmen etc. while selling their goods. Among three groups, especially village tradesmen frequently visit to local market contact with small tradesmen. The price determined randomly as per the market price of transit market. So the producer does not get the actual price of the product.

##### **iii. Lack of Market Information**

Majority of the ginger producers are not conscious about the market situation, especially due to lack of awareness and literacy. They sell their product without clear information about market price. Moreover, if there is high value of ginger in market most of the tradesmen present low value of ginger in the market, which often easily cheat the producer. Therefore, due to lack of awareness and literacy about the market situation most

of the ginger producers are greatly deceived in the sale of their product in the study area.

#### **iv. Presence of Middlemen**

The middleman plays the pivotal role of the ginger marketing in the study area. They have to take the advantages from the small scale producers, when they are serious in need of finance during the production period. Hence, the middle men enjoy the large amount of profit which is the great deal of loss. Due to the loss to the producer, they do not get encourage to produce more.

#### **4.21 Major Finding**

The major findings associated with the study are as follows:-

- ) Ginger production is increasing in the study area although the problems are increasing in the process of cultivation.
- ) 30 percent of total agricultural land in the study area is under ginger cultivation.
- ) Ginger production is one of the main sources of income in the study area as compared to other agricultural production and business.
- ) The living standard of the people of study area were improved from the ginger production.
- ) Out of total ginger production sixty percent is sold to the market ten percent consume and thirty percent kept for seed.
- ) The marketing of ginger in the study area is being attended to by a chain of middlemen at different stage eroding the producer share in consumer rupee.

The big problem existing in the production and marketing of gingers are :

- disease
- pest
- economic condition of the ginger producer
- lack of good seed
- lack of extension services,
- uncertain character of monsoon( climate change ),
- lack of credit facilities
- unavailability of virgin land,
- price fluctuation,
- presence of middlemen,
- Lack of storage facilities
- high transportation cost etc

## **CHAPTER-V**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Summary and Conclusion**

Siddhi is one small agricultural village of Chitwan, with 90 percent of population are depending on agriculture economy. The area possesses the characteristics of underdeveloped economy as poverty, low per capita income, excessive dependence on agriculture, high birth rate. Among the two main groups of crops i.e. Agricultural crops and horticultural crops, horticultural crops became very important crops for to improve the economic development of the area. Moreover, among the horticultural crops ginger occupy the first place in the study area next to yam then after comes other crops i.e. seasonal vegetable, maize millet etc. It has been reported that in the year 2008 the total area under ginger cultivation is 200 hectare with production of 150 metric ton.

Ginger ( *Zingiber officinal rose*) is the second major crops of the study area next large yam. Ginger has been produced in the area time immemorial. It has religious important to Chepang and Tamang which its attachment to the people of lower hilly region of Mahabharata ranges.

However while observing the study area , ginger cultivation is greatly influenced by several factors i.e. attitude, soil , degree of slope , rainfall, temperature, size of land holding and economic condition of grower, which greatly influence the cultivation of ginger in the constituency. Its cultivation in study area was started long back. But majority of them practice in traditional manner of cultivation only a handful of the population is educated and ready to adopt the scientific method of its cultivation in the study area. Hence, it is greatly profitable to cultivate the

ginger by scientific way rather than traditional way. In the beginning the production of ginger was increase s a higher rate but in recent years the production is not increase in the ratio of past which is practically due to the cause of new disease, pests and unavailability of virgin land for cultivation, whereas, the trend of area under ginger is increasing. the area households and production of ginger differ from one hill to another. The production of ginger has become successful raising the living standard of the people in the study area. Moreover, among the area of the village occupies of the first place in term of production of ginger and again it is slightly increased because of the use of modern technology in its cultivation by some conscious households in the area. Moreover the cost of production per acre of land for ginger is Rs.( 6000-1000 approximate ) in traditional method and Rs. 15000 for scientific method of its cultivation except the value of ginger seeds. Hence, the net profit which is gained by scientific method of cultivation s higher than that gained by traditional method.

Similarly, in compression of two, agricultural and horticultural production, the income from ginger is double. Enhance scientific method of cultivation is more effective to increase the income of the farmers than the traditional method of cultivation. All the production are collected by local tradesmen and send it either Bhairawa or Birjung for exported to India and third countries. From that transit market it is taken to terminal markets like Delhi, Calcutta and other cities. The price of ginger has determined by the transit market.

The price of ginger is differs from market to market as per distance involved which is due to variation of the quality. The production of ginger faces many problems its initial stage of production till its

marketing. /the disease and pests are major problems in the production of ginger. Besides, these absence of double cropping unavailability of sufficient virgin land lack of credit facilities, literacy of farmers, poor quality of seed used, lack of extension services, uncertain character of monsoon, lack of grading and of standard weight, lack of transportation services, presence of middlemen, price fluctuation, lack of market information etc., are the main problems of ginger production and marketing in Siddhi V.D.C. of Chitwan.

## **5.2 Recommendations**

While studying different aspects of ginger cultivation along with its' marketing in the study area. The production of ginger in Siddhi V.D.C. of Chitwan. The production of ginger in Siddhi has become popular due to high price in the market. Hence, in order to solve these problems as well as to promote the yield of its area and production in the study area, following recommendation have been made in this thesis.

- In this study area, the agricultural loan should be provided at a reasonable interest to the ginger growers. If that happen it will encourage the ginger cultivators in the study area.
- Different kind of disease attack ginger plant so it must be provided with insecticides, pesticides, agricultural tools and improved the seeds.
- To reduce cost production, it should be use modern technology to cultivate the ginger for that it is necessary to provide raining to the farmers.
- Since land is not sufficient for ginger cultivation, it is better to dot the crop rotation.
- Virgin land is ideal for ginger cultivation for that government provide barren land for it cultivation from forest area.

- Agriculture office should provide technical support.
- It is necessary to establish collection point near of the study area and end the system of middlemen.

## Bibliography

- Adhikari, P. K. (1999). *Rapid Market Appraisal (RMA), An Investigation of the Ginger in Nepal.*
- Adhikary, Prakash (1995). *A Study on Market Potential of Aluminium Architectural Products in Kathmandu Valley.* An Unpublished Master's Degree thesis, Nepal Commerce Campus, New Baneshwor T.U.
- Agrawal, G.R. (2002). *Marketing Management in Nepal.* Kathmandu: M. K. Publishers and Distributors.
- APROSA (1989). *Ginger Production National Workshop Seminar ESCAP/FAO.*
- Baral, B.P. (2001). *Market Potentiality of Aluminum Architectural Products in Kathmandu Valley.* An unpublished Master's Degree Thesis, Shanker Dev Campus, Tribhuvan University.
- Baral, B.K. (1991). *A Study on Advertising and Sales Promotion of Cars in Nepal (with Special reference to "Hyundai Santro")* An Unpublished Master's Degree Thesis, Shankardev Campus, T.U.
- Based on Patricia Storad, (1987). *Lotus to add new models. Advertising Age*, April 27, presented in Harper W. Boyd Jr. et.al., *Marketing Research*, 7<sup>th</sup> ed. (Homewood, IL.: Richard D. Irwin, 2001), p. 761
- Basnyat, N.B. (1985). *A Study on Market Potentiality of Gandaki Noodles in Kathmandu Valley.* An Unpublished Master's Degree Thesis, Shanker Dev Campus, Tribhuvan University.
- Central Bureau of Statistics, (2001). *Statistical Pocket Book*, National Planning Commission Secretariat, HMG/N.
- Central Bureau of Statistics, (2007). *Statistical Pocket Book*, National Planning Commission Secretariat, HMG/N.
- Dhungel, Bidhyapati (2005). *Dissertation* Yeswanta Singh University of Horticulture and Forestry College, Solan, India.

- Dik, W. Twedt (1983). *Survey of Marketing Research*. Chicago: American Marketing Association, pp. 41-44 Distributors.
- Edward, W. Cundiff, Richard R. Still, Norman A.P. Govoni (1980). *Fundamentals of Modern Marketing*. 3<sup>rd</sup> ed. Eaglewood Cliffs, N.J.: Prentice-Hall.
- Edward, W. Cundiff, Richard R. Still, Norman A.P. Govoni (1980). *Fundamentals of Modern Marketing*, 3<sup>rd</sup> ed. Eaglewood Cliffs, N.J.: Prentice-Hall, pp. 4-5.
- Elizabeth, J. Sherhood (1956). *The Colombia Encyclopedia*. Colombia University.
- Export Market*. M.A. Thesis in Economics, Central Department of Economics, T.U. Kritipur. *Frontiers of Marketing Thought and Action*.
- Fuek, D.N. (1999). *Ginger Cultivation in Illam A Case Study of Chisapani*.
- Harper, W. Boyd Jr. et.al. (2001). *Marketing Research*, 7<sup>th</sup> ed. Homewood, IL.: Richard D. Irwin, p. 765.
- ICIMODE, (2007). *Potentials of Ginger Pineapples in West Goros Hill Maghalaya, India*.
- Indian Council of Philip Kotler, (2003). *Marketing Management*. 11<sup>th</sup> ed. Eaglewood Cliffs, N.J.: Prentice-Hall, pp. 66-68.
- John, B. McKitterick (1957). *What is the Marketing Management Concept? The Frontiers of Marketing Thought and Action* Chicago: American Marketing Association, pp. 71-82.
- K. D. Koirala (2060). *Marketing Management*.Kathmandu: M. K. Publishers and Distributors, pp. 34-35.
- Koirala, K. D. (2004). *Marketing Management*.Kathmandu: M. K. Publishers and Distributors.
- Kotler, Philip (1988). *Marketing Management*. 6<sup>th</sup> ed. Eaglewood Cliffs, N.J.

- Kotler, Philip (2001). *Marketing Management*, 9<sup>th</sup> ed. Eaglewood Cliffs, N.J.
- Kotler, Philip (2003). *Marketing Management*, 11<sup>th</sup> ed. Eaglewood Cliffs, N.J.: Longman group Ltd. London.
- NARC, (May 2008). *Research Highlight*. Khumaltar, Lalitpur.
- Neupane, Bhanu (1994). *Induce /Mutation in Ginger (Zinger official Rose)*. P. hd. of *Modern Marketing*, 3<sup>rd</sup> ed. Eaglewood Cliffs, N.J. Prentice-Hall,
- Pandey, G.K. (1994). *Ginger Cultivation*. A Cause Study of Walling VDC of Syanja.
- Philip, Kotler (1988). *Marketing Management*, 6<sup>th</sup> ed. Eaglewood Cliffs, N.J.: Prentice-Hall.
- Purseglove, J.W. (1968). *Ginger Tropical Crops Monocotyledon*. 2<sup>nd</sup> Edition.
- Rai, R. (2003). *A Study on Advertising and Sales Promotion of Cars in Nepal; with reference to Hyundai Santro*” An unpublished Master’s Degree Thesis, Shanker Dev Campus, Tribhuvan University.
- Report, (2007). *Agriculture Women Farmer Department Division*. Singh Darbar Kathmandu, Nepal
- Thapa, S.P. (2005). *Market System for Frits, Vegetable , Ginger and Cardamom*. An unpublished Master’s Degree Thesis, Shanker Dev Campus, Tribhuvan University.
- Trade promotion centre (2008). *Large Cardomom and Dry Ginger From Nepal*, Author.
- <http://www.uwa.com>**, Urban Wallace Associates, 2010.
- <http://www.uwa.com>**, Urban Wallace Associates, 2010.
- <http://www.learnthat.com>**. 2010.

**Annex -1**  
**Questionnaire**

General in Formations

Name

Age

Sex

Education status

Caste

Occupation

1. When did you start ginger cultivation?

Ans: .....

2. What are the causes of ginger farming?

Ans: .....

3. For what purpose do you plant ginger?

Ans: .....

4. What are the influencing factors of ginger production?

Ans: .....

5. Where do you sell the ginger which you have produced?

Ans: .....

6. When do you sell?

Ans: .....

7. Which is your nearest market?

Ans: .....

8. What is the distance between your home and market where you used to sell your ginger?

Ans: .....

9. How do you transfer your ginger from your field to market?

Ans: .....

10.How much Rs. have you pay for transfer..

Ans: .....

11.Price of ginger per quintile:

Ans: .....

12.What is yearly income from ginger?

Ans: .....

13.What are the specific problems you are facing in marketing ginger?

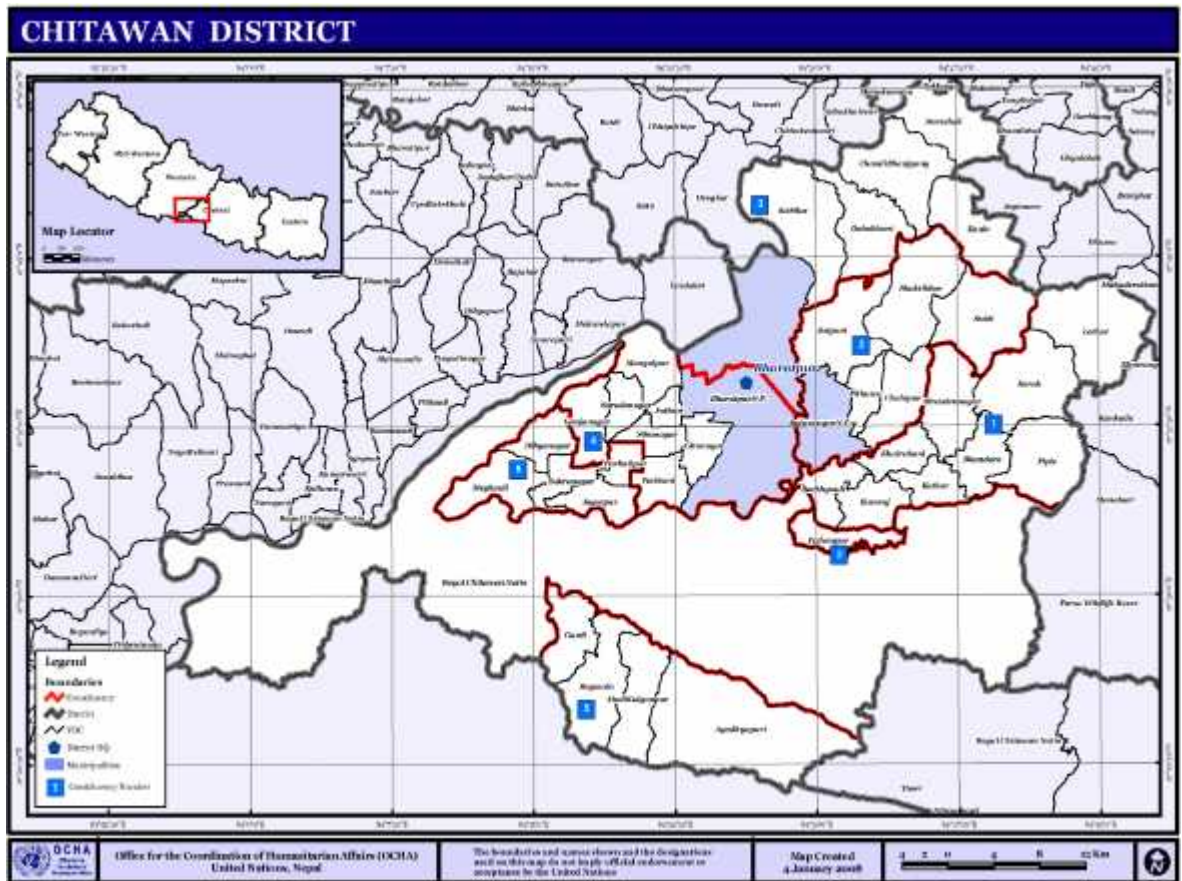
Ans: .....

14.Have you any suggestion to improve the situation of ginger  
producing and marketing?

Ans: .....

## Annexes: 2

### List of Maps



Map of Siddhi V.D.C.

## List of photos



Carrying the load of ginger from village to local market



Wilting for ginger plant



Ginger plant in field



Root of ginger



Rhizome caused by disease



Disease effect in rood of ginger

## CURRICULUM VIATE

### Personal Identification

Name : Basanta Adhikari  
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Religion : Hindu  
Date of birth : 2028/01/16  
Language : Nepali, Hindhi, English  
Call no. : 9857024010

### Academic Qualification

Degree	Board	Year	Institution
Master(M.B.S.)	T.U	2068	Lumbini Banijya Campus, Butwal
MPA	T.U.	2054	Jana Prasan Campus, Kathmandu
Bachelor (B.Com.)	T.U	2051	Shankar Dev Campus, Kathmandu
I.Com.	T.U.	2049	Min Bhawan Campus, Kathmandu
S.L.C.	H.M.G.	2046	Shree Sharada Ma.V., Chitwan

### Professional Training

<b>S.N.</b>	<b>Particular</b>	<b>Duration</b>
1	Regional Development and Planning	3 months
2	Basic Administration training	3 month

## **Experience**

15 years experience on Government Officer Special in Local Government.