

RESEARCH ARTICLE

ASSESSMENT OF PRODUCTION AND MARKETING STATUS OF LARGE CARDAMOM IN LAMJUNG DISTRICT, NEPAL

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ARTICLE DETAILS

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ABSTRACT

The survey research entitled "Assessment of production and Marketing of large cardamom in Dordi rural municipality, Lamjung" was conducted from January- May 2019. The Dordi rural municipality was selected purposefully, and sample households were taken at random (96). The percentage of male households were greater than the number of female households. Tamang and Gurung were the dominant ethnic groups. Most of the respondents have completed primary level education, very few completed secondary level and rest are illiterate. The average cardamom cultivating land was 10 ropani. Practice of growing cardamom under the agro-forestry system is prevalent there. Mostly cultivated varieties of cardamom are Ramsai, Golsai and Dambarsai. Years of experience in cardamom production ranges from 5-10 years in the study area. Mostly diseases like Chirkey (*Streaky mosaic*) and Furkey (*stunty mosaic*), rhizome rot are problematic. Average cost of production was Rs 210000, and benefit was Rs 371000 per ha. then Benefit cost ratio was found to be 1.76. Thus, cardamom farming could be highly profitable, preferable, and export-oriented enterprise. It was observed that all the households use modern driers for drying fresh harvested cardamom. Rainwater is the source of irrigation. The main production determining biological factor is plantation of proper shade pant in the orchard. The shade mostly Used is *Alnus nepalensis*. Diseases like chirkey and Furkey and insect like leaf eating caterpillar have high problem in cardamom orchard. The payback period for cardamom is calculated as 4 years of plantation. High price fluctuation and lack of technical knowhow are the main problems in the study area.

KEYWORDS

Marketing, commodity, disease, pest, harvesting, production

1. INTRODUCTION

1.1 Background Information

Large cardamom (*Amomum subulatum Roxb*) belonging to family Zingiberaceae is a high valued potential horticultural crop. It is one of the important exports leading agricultural commodities because of comparative advantage and competitive socio-economic aspect. In recent years, its production is decreasing rapidly and if it continues, it will lead to many social, economic, and environmental problems. The reduction in production of the cardamom is due to negative impacts of conventional farming. Cardamom farming had emerged in Sikkim, is not just sustaining organic farming but also empower the grower to earn more from their produce in coming years. Himalayan large cardamom also called as the black gold has now been established as the prime source of income in the Himalayan rural. In Nepal over 21960 households and 37 districts are engaged in cardamom farming. Large cardamom is also known as high value low volume crop and is extensively used in bakery, perfumes, food items and many more.

Nepal is the largest producer of cardamom in terms of both quality and quantity over the world. Cardamom is a perennial cash crop and gives the production for 10-15 years after planting. It can tolerate high humidity (>90 percent) and can be grown on swampy and riversides land with (>70%) soil moisture. Taplejung, Panchthar, Ilam, Shankhuwasabha and Lamjung are the major cardamom producing districts (ICIMOD, Enhancing Large Cardamom Production, 2016). Large cardamom has been emerging

as an important crop for the livelihood of people in Lamjung district. Generally, the cultivation of large cardamom is done in the forest land and forest plays an important role on enhancement of the soil organic matter and cardamom production. Shade plays an important role on the production performance of cardamom and *Utis (Alnus nepalensis)* is mostly used for the shade purpose in cardamom. These shade trees have been able to satisfy the subsistence need of local people for an extended period. Cardamom growing communities are dependent on the forest products. i.e., Fuel wood, fodder, timber, and other non-timber forest products.

1.2 Statement of The Problems

Cardamom farmers of Dordi Rural Municipality in Lamjung district are showing willingness to do large cardamom farming in fact on a commercial basis and some are doing so even. Price of cardamom is also decreasing now days. Farmer have faced fluctuation in market price of cardamom as a most serious problem of cardamom commodity. They want stability on cardamom market price. Traders of Nepal export major portion of cardamom to Indian market. Birtamode, Jhapa of Nepal is the biggest marketplace of cardamom. Traders in Birtamode want to export cardamom on global market being independent of Indian market and sell Nepalese cardamom to all over the countries directly from Nepal. To enhance the market of cardamom globally, minimize the problem of decrease in price of large cardamom and to make a strong economy commercial cardamom cultivation is necessary.

Most of the farmers are involved on cardamom cultivation in Lamjung

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district and faced problem on diseases and pest, irrigation, high market margin, lack of processing ideas and less knowledge on market price. The expected production of large cardamom in Lamjung district has not been reached due to the incidence of cardamom stem borer, Rhizome rot (*Fusarium spp*, *Rhizoctonia solani*), viral diseases like Chirkey and Furkey also seems to be problematic on cardamom orchards. Poor sanitation of the orchard and climate change also adds to the decrease in the production performances of large cardamom production in Lamjung district (Baral, 2074). Different fluctuations in the temperature and rainfall patterns during the critical growth stages causes flowers to fall and decay, resulting in loss of fruiting intensity. However, cardamom fetches more price than the other crops and could be the better way to uplift the economic and social status of farmers and other stakeholders in Lamjung district.

1.3 Rationale of The Study

Cardamom fetches more price than other crops and its cultivation could be better solution to uplift the economic and social condition of farmers and other stakeholders. The net income from large cardamom is higher than from other cash crops throughout the period (Shrestha et al., 2018). Large cardamom cultivation has played a vital role in the economy of Lamjung district of Nepal such that it is a purely exporting commodity for earning foreign currency (Sharma, 1999). The sloppy and shady land area of Lamjung has been used for cardamom production and for some it is the main source of income. About 60-70% of the people on Dordi Rural municipality are fully dependent on the income from cardamom.

This research is done to know about the trend of production then and now. This study also assesses the economic status of cardamom growing

farmers in study areas. If this project is investigated and recommended, the positive and direct feedback is obtained from cardamom farmer in Dordi Rural Municipality, Lamjung. The area for the cultivation of cardamom have been increasing in Lamjung district and the living standard of the farmers have been increasing rapidly. Large cardamom cultivation has played a great role in the upliftment of the social and economic status. Cardamom cultivation have increased the employment opportunities which decreases the out migrants.

1.4 Objectives of The Study

1.4.1 General Objectives

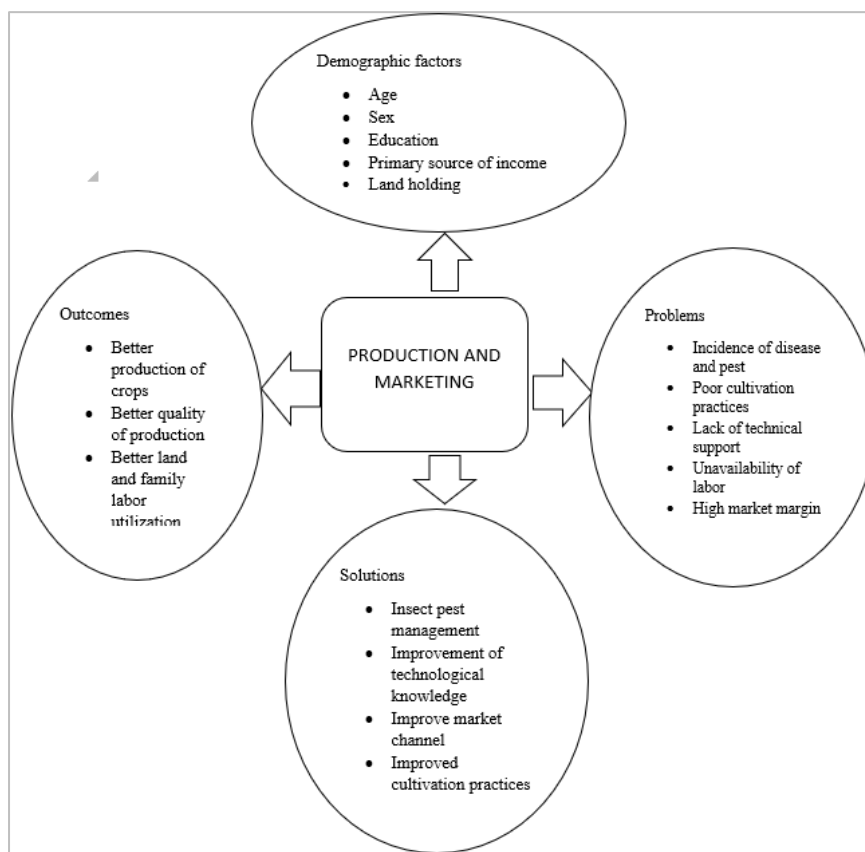
The general objective of the study was to access the production and marketing of large cardamom for the promotion of its overall trade and income generating activities in Dordi Rural Municipality Lamjung.

1.4.2 Specific Objectives

- To learn the demographic characters of cardamom growers.
- To know about the trend of cardamom production.
- To explore the problems related to cardamom production and marketing.
- To calculate the BC ratio.
- To examine the strengths, weakness, opportunities, and threats in cardamom production.

2. MATERIALS AND METHODS

2.1 Conceptual Framework



2.2 Study Area and Subsector

Lamjung is one of the hilly districts situated in province number four. Due to the ecological favorability for growth of cardamom, this district bears high potentiality for cardamom production. The site of the study was Dordi rural municipality which falls under the cardamom zone.

2.3 Sample and Sampling Techniques

Out of the six wards of cardamom zone of Dordi Rural Municipality, Ward No. 4, 5, 6 and 9 were selected purposefully. 96 households were taken randomly for the household survey. Two focus group discussions were

done in a group of 10-15 peoples at Dordi Rural Municipality to generate information whether data collected from the household survey meet the objectives or not.

2.4 Research Design

The study site Dordi Rural Municipality was selected purposefully, and primary data was collected from the household survey (96) and two focus group discussion while the secondary data was collected from the published and unpublished literatures, DADO profile, an agricultural statistical profile published by MOAD etc. Both the primary and secondary data were analyzed using statistical tools like SPSS and Excel.

2.5 Data and Data Types

2.5.1 Primary Data

Primary data were collected through household survey and focus group discussion.

2.5.1.1 Household Surveys

To collect the information, share knowledge, experience and their perception about production and marketing of cardamom, questionnaire survey was carried to the selected households. The data and information are collected at the household level (96). A set of questionnaires related to the production and marketing of the cardamom were asked to one respondent household of the family. The questionnaire consisted of mainly close ended and few open-ended questions. In questionnaire demographic information, production and marketing information, problem related to the large cardamom production, varieties used by the producers, production costs, livestock holdings, income from various agricultural activities, benefit, and their preferences etc. Related close and open-ended questions were used during the household survey. From the obtained data mean, minimum and maximum values, standard deviation was calculated, and regression analysis was done through the statistical tool.

2.5.1.2 Focus Group Discussion

Focus Group Discussion (FGD) was organized to generate the information whether conducted household survey meet the objectives or not. The focus group discussions were conducted in a group of 10-15 peoples. The status of producers and situation of large cardamom production at the study site was discussed in the focus group discussion. The information obtained from the focus group discussion were helpful to know the various situations and their production conditions at local level which was supportive to the information obtained from the HHs survey.

2.5.2 Secondary Data

Secondary data was obtained from District Agriculture Development Officer (DADO) annual reports, newsletters, bulletins and relevant articles, libraries and information office, Department of Agriculture, Ministry of

Agriculture Development (MoAD), Agriculture Service Centre (ASC), internet browser etc. Besides this, National Spice Crop Development Program (NSCDP), Cardamom Development Centre (CDC), production area, production and productivity data were obtained from MoAD, and official websites. The secondary data assist research from the very beginning and overall research process which may be during the preparation of the questionnaires, variables to be used in the statistical analysis, information related to the study area were able to collect through the secondary data.

2.6 Data Analysis Techniques

Data were entered in MS-excel and tools used for the analysis of data were SPSS, STATA, Excel. All the quantitative data were entered in these assistive media for data processing, analysis, and interpretation. Other descriptive statistics like graphs, charts, and other tools were used to analyze and present the data. From the available information mean, maximum, minimum, standard deviations were calculated simply.

3. RESULTS AND DISCUSSIONS

3.1 Demographic Study

3.1.1 Population Characteristics of Sampled Household

The age of the respondents was taken during the study to know the age category of population involved on cardamom farming. This data plays an important role to determine the brain drain and muscle drain from the country. Youths of the study area are working abroad so that the rest of the population are engaged on cardamom farming. This data also indicates the type of cardamom farming system i.e., traditional, or modern. The average age of the respondent is 51.25, maximum is 88 and minimum is 20.

3.1.2 Gender of The Respondent

The pie chart shows that in the study area, 93.8% Of the respondents were male and 6.2% of the respondents were female. This shows that male is in the position of decision making for different aspects. They hold the superior position in the family and decide for different aspects in farming.

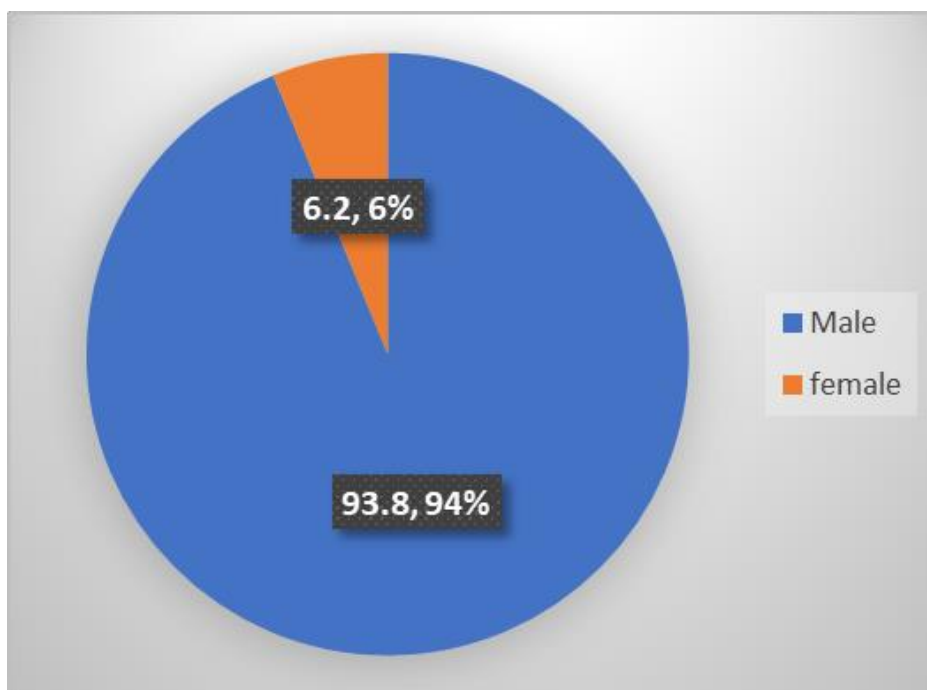


Figure 1: Gender of the respondent

3.1.3 Ethnicity of The Respondent

Following bar graph shows that 95.8% of the total respondents were Janajati, 3.2 percent of the respondents were Brahmin and 1.2% of the total respondents were Chhetri. Janajatis hold the major portion of the total population in Lamjung district and so is on the study area.

3.1.4 Educational Status of Respondent

From the below pie-chart, it could be known that 34.4% of the respondents are illiterate, 43.8% of the respondents have education of

primary level and 20.8% have studied up to secondary level. The educational status represents the ease for technology adoption and enterprise extension.

3.1.5 Primary Source of Income

The primary source of income for 52.1% of the respondent was remittance, 34.4% was from agriculture, 8.3% from the government, 3.1% from business and 1.1% from the other sources. More than half of the household's income was held by remittance.

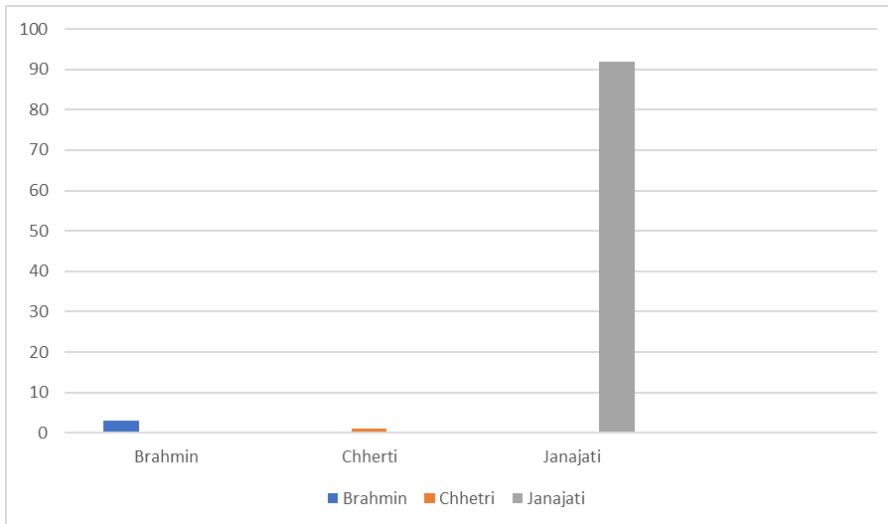


Figure 2: Ethnicity of respondent

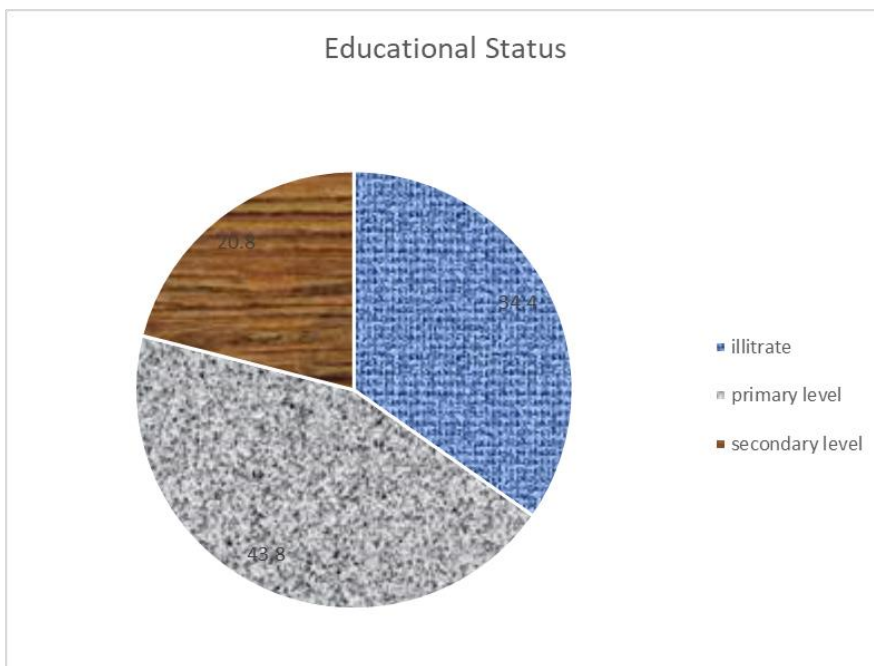


Figure 3: Educational Status of respondent

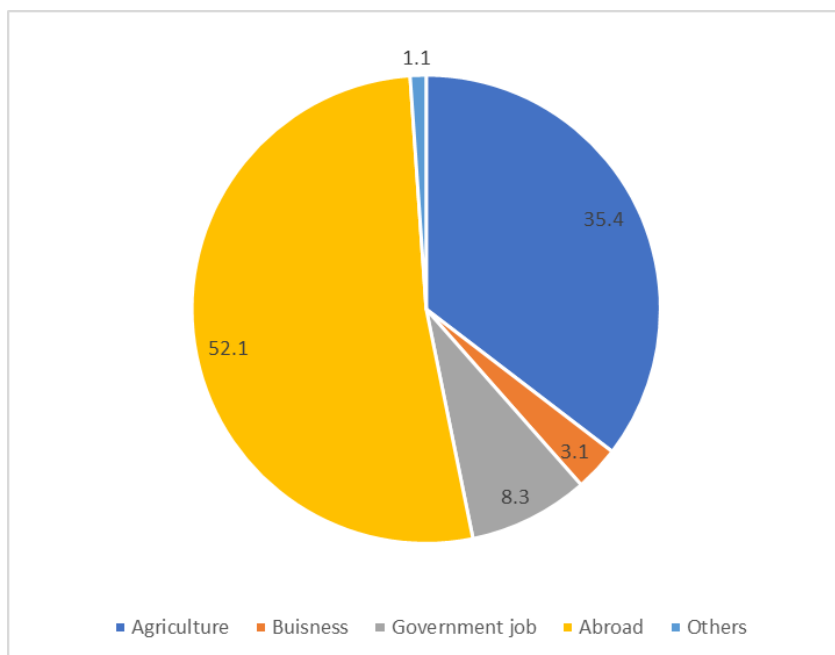


Figure 4: Primary Source of Income

3.1.6 Secondary Income Source

About 60.4% of the respondents take agriculture as the secondary source of income. For 21.9% of the households the secondary source of income is

business. Similarly, 6.3% of the households have government job as the secondary source, 5.2% NGO and INGOS, 3.1% abroad 3.1% other occupations. The pie-chart represents that for majority of the households, cardamom growing is the secondary source of income.

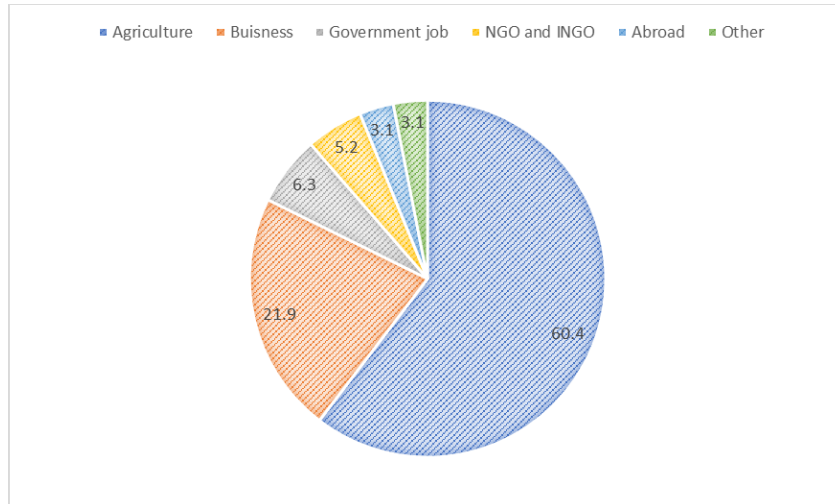


Figure 5: Secondary source of income

3.1.7 Land Holding Information

The land holding information of the respondents is represented by the following table. The mean cardamom growing is 10.24 ropani, average

upland is 6.30 ropani, average lowland is 6.80 ropani, average rentout land is 7 ropani, average fallow land is 6.68 ropani and the average agro forestry land is 5.033 ropani.

	N	Mean	Std. Deviation
Cardamom growing area	96	10.24	9.821
Total upland	89	6.30	4.955
Total lowland	87	6.80	5.034
Total rent in land	0		
Total rent out land	3	7.00	3.606
Total fallow land	31	6.68	6.858
Total agro-forestry land	3	7.33	5.033

3.2 Production Information

3.2.1 Years of Cardamom Growing

According too the field survey, 84.4% of the farmers have 5 years of cardaom experience and rest of them have 10 years of experience. The result shows that cardamom is an emerging product of this rural municipality.

3.2.2 Type of Farming System

On the study area all of the households practice traditional type of farming

system. This is due to low access to technological knowledge on modern cardamom cultivation. Similarly, the educational status of the respondents is also poor. Traditional cardamom cultivation is also a prime cause for low production and poor access to national market.

3.2.3 Variety of Cardamom

Following are the varieties of cardamom suitable on the ecological conditions of the study site. Among all Ramsai variety is cultivated by 13.5%, Golsai by 14.6%, Dambarshai by 1% and Ramsai and Golsai both are cultivated by majority of the households (70.8).

Years	Frequency	Percentage
5 Years	81	84.4
10 years	15	15.6

Variety	Frequency	Percentage
Ramsai	13	13.5
Golsai	14	14.6
Dambarsai	1	1.0
Ramsai and Golsai	68	70.8

3.3 Post-Harvest Information

3.3.1 Grade of Cardamom

There are three grades of cardamom. Chalanchalti (*small size*), super deluxe (*medium size*) and Jumbo jet (*large size*). In the study area 71.1% of the harvested and dried crdamom are of large size (*Jumbo jet*) and 22.9% are of medium size (*super deluxe*).

3.3.2 Cleaning and Tail Cutting Status

The freshly harvested commodity should be properly cleaned before drying them which also determines the price to be fetched. In the study area I have found a proper flow of ideas on cleaning process among the farmers. Tail cutting is either done manually by scissors ob by rubbing them against wire mesh while drying. Practice of removing tail on rubbing against wire mesh during drying reduces the cost of labor (Shrestha et al., 2018).

Table 4: Grade of Cardamom		
Grade of Cardamom	Frequency	Percentage
Jumbo Jet	74	71.1
Super Deluxe	22	22.9

3.3.3 Type of Driers

Use of traditional drier produces black colored, smoky flavored cardamom which decreases the quality and fetches lower price says (Maharjan, 2016). In study area all of the households dry their fresh cardamom in modern driers either of their own or in groups. Cardamom zone Lamjung has the most important role for the extension of this technology.

3.3.4 Grading Status

Grading is the method of differentiating cardamom on the basis of the size. In the study area, 8.3% of the households perform grading activity, 56.3% of the households do not perform grading, 20.8% of the total respondents carry grading activities and the rest of the households 14.6% of the

respondents do not have any ideas on what grading is. Quality grading is only done by local dealers, wholesalers and large traders who employ large number of workers for the purpose (Gautam, Large Cardamom Farmers Worried by Slow Demand, 2019).

3.4 Marketing Information

3.4.1 Knowledge on Monetary Basis

From harvesting to the final market, there are various factors which determine the value of the commodity such as cleaning, tail cutting, grading, smoke dried, smokeless drying, storage, packaging etc. in the study area, 60.4% of the household are known about such price governing factors and 39.6% of the households are known about it.

Table 5: Grading Status of Households		
Grading Status	Frequency	Percentage
Yes	8	8.3
No	54	56.3
Sometimes only	20	20.8
No idea of grading	14	14.6

Table 6: Knowledge on Monetary Basis of Cardamom		
Knowledge	Frequency	Percentage
Yes	58	60.4
No	38	39.6

3.4.2 Medium for Knowledge

The flow of technical knowledge among 69.8% of the respondents takes place by the collectors of cardamom, 29.2% occurs through neighbors and among 1% of the respondents flow of knowledge occurs through trainings and seminars. From the study it is found that collectors are the primary players of knowledge flow.

3.4.3 Medium for Selling Commodity

There involve many mediators for directing the commodity from farmers gate to the final consumers. In most of the farmers sell their cardamom through the local and few national traders. very few of the farmers either directly sell the commodity to the market or sell through the groups.

Table 7: Medium for the Flow of Knowledge		
Medium	Frequency	Percentage
Through collector	67	69.8
Through neighbour	28	29.2
Through training and seminars	1	1

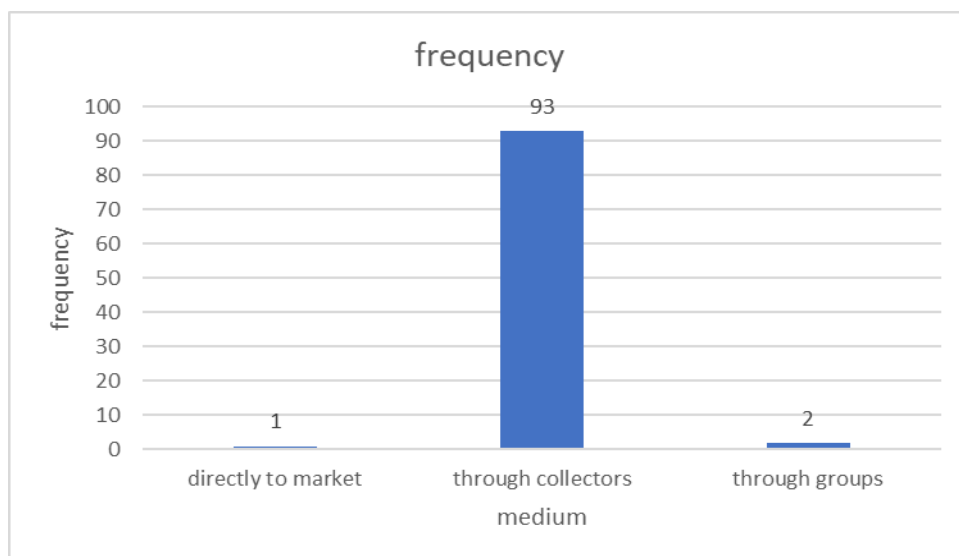


Figure 6: Medium for Selling Cardamom

3.4.4 Satisfaction of The Producers from Quality and Quantity

In the study area, cardamom is an emerging enterprise and is also a major source of income for Majority of the marginal farmers. From the field

survey, it is found that 44.8% of the households are not satisfied and 55.2% of the households are satisfied with the quality and quantity of cardamom they produce. Cardamom is a cash crop which needs less inputs and can be grown easily on the forest and marginal land.

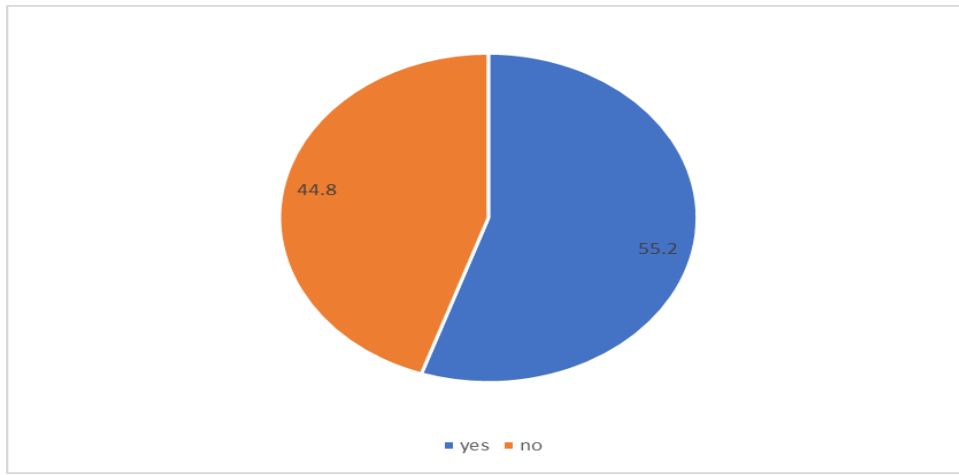


Figure 7: Satisfaction from quality and quantity

3.4.5 Knowledge on Product Market

As a land locked country, Nepal faces issues accessing the international markets (Nepal, Nepal National Sector Export Strategy, 2017-2021). Nepal

is the largest producer and exporter of cardamom in the world and its exports are mostly centered in Indian and Pakistan (Lamjung reaps Bumper Cardamom Harvest, 2019). In my study site, Majority of the farmers have knowledge about the final product market.

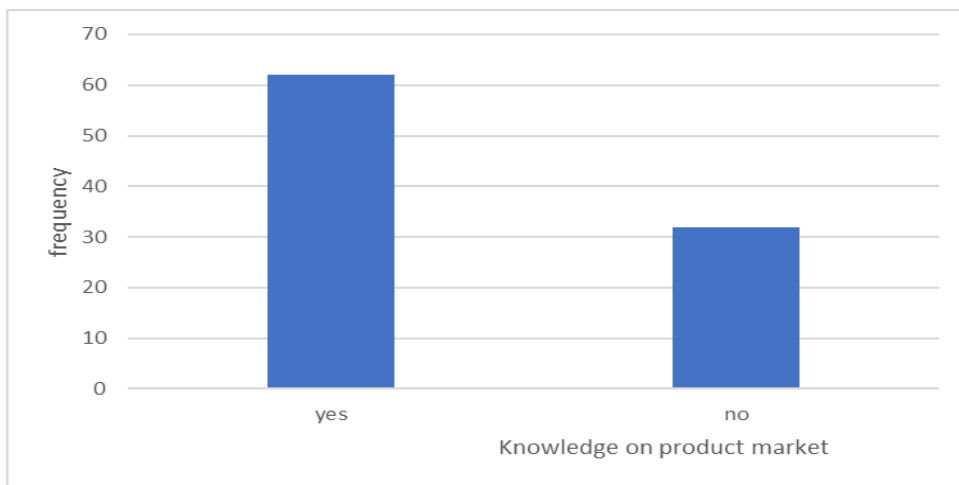


Figure 8: Knowledge of respondents about product market

3.4.6 Interest on Selling to National Market

The farmer respondents of my study area have shown less willingness to sell the product to the national market. Trade over the international market needs more technical knowledge and human resources. Nearly 90% of the large cardamom is exported to India and sequentially to Bangladesh, Pakistan and other gulf overseas destinations says (Gautam, 2019). So, this can be a reason for low willingness of farmers to sell their product to national market.

3.4.7 Storing Cardamom on Surplus Period

Storage during commodity surplus period not always provides guarantee for the handsome price during the deficit period. The authors says insect damage, higher moisture, and inability to decide right selling period leads to loss of quality of cardamom (Singh and Pothula, 2013). None of the respondents in my study area practiced storage of cardamom to achieve more bonanza later.

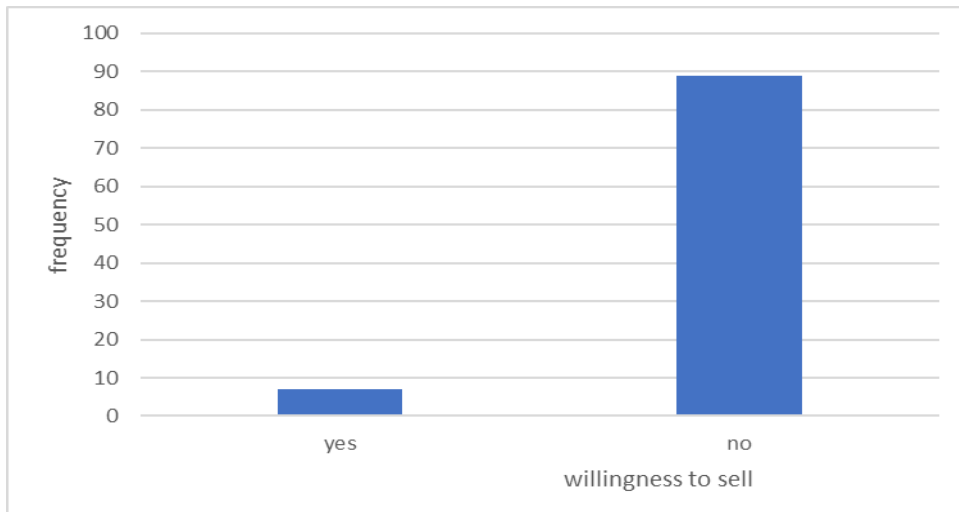


Figure 9: Households' willingness to sell Cardamom at National Market

3.5 Ranking on Different Aspects of Cardamom

3.5.1 Ranking on Monetary Basis of Cardamom

Different post-harvest handling practices determine the quality of the

product and gains price accordingly says (Mandae and Rao, 2001). The respondents were asked to rank the monetary factors of cardamom and got proper drying as the first, cleaning as the second, proper grading as the third, smokeless drying as the fourth and smoke drying as the fifth essential for higher price on cardamom.

Table 8: Ranking on Factors Determining Price								
Problem	1	0.8	0.6	0.4	0.2	Weightage	Index value	Ranking
Proper grading	18	20	16	20	22	56	0.583333	III
Proper drying	37	21	27	8	3	73.8	0.76875	I
Cleaned cardamom	20	19	23	20	14	59.8	0.622917	II
Smoke dried	8	17	15	12	44	44.2	0.460417	V
Smokeless dried	13	19	15	36	13	54.2	0.564583	IV

3.5.2 Factors for Good Production

Production is a function of various factors. In the study area respondents view proper use of shade as the most important factor for production so says (Singh, Rai, Pritam, & Bhutia, 2019). Other factors are Use of healthy seedlings, regular orchard sanitation, application of manure and fertilizers and regular irrigation.

3.5.3 Problems During Marketing

Some researchers said the price for 1 kg at the farmer, collector, wholeseller, and retailer level are US\$12.16, US\$13.38, 16.26 and 20.33 respectively (Singh and Pothula, Post Harvesting Processing of Large Cardamom in Eastern Himalayas, 2013). High market margin was the major problem then comes lack of proper price, pre-contract trading, uneven price on same area and access to traders respectively.

Table 9: Ranking of factors for good production								
Factors	1	0.8	0.6	0.4	0.2	Weightage	Index value	Ranking
Healthy seedling	23	26	21	16	10	64.8	0.675	II
Proper shade	34	27	21	11	3	73.2	0.7625	I
Manure & fertilizer	13	15	21	21	26	51.2	0.533	IV
Orchard irrigation	5	16	13	20	42	42	0.4375	V
Orchard sanitation	21	12	22	28	13	57.6	0.6	III

Table 10: Ranking of Problems During Marketing								
Problems	1	0.8	0.6	0.4	0.2	Weightage	Index value	Ranking
Access to traders	10	7	0	11	68	33.6	0.35	V
High market margin	57	16	15	7	1	81.8	0.852	I
Pre-contract trading	7	26	41	17	5	60.2	0.627	III
Lack of proper price	17	40	27	4	8	68.4	0.7125	II
Uneven price on same area	4	7	14	56	15	43.4	0.452	IV

3.5.4 Factors Considerations for Effective Marketing

To keep the grower’s cultivating cardamom and to support them in times of severe market failure, the government has included cardamom as one of the commodities in buy back period opines (Co-operatives, 2017). In the

study area, respondents rank price fixation by the government as the first factor for effective marketing. Then other comes low market margin, value addition, farmer access to national market and establishment of farmer’s co-operatives respectively.

Table 11: Ranking of Factors for Effective Marketing								
Factors	1	0.8	0.6	0.4	0.2	Weightage	Index value	Ranking
Price fixation by government	47	12	8	9	20	69	0.718	I
Low market margin	29	26	10	16	15	65.2	0.679	II
Access to national market	8	23	25	19	21	53.2	0.554	IV
Value addition	10	21	28	16	21	54.2	0.564	III
Establishment of farmers co-operatives	2	14	25	36	19	46.4	0.483	V

3.6 Financial Analysis

3.6.1 B/C Ratio

Cost/ha (Rs)	210000
Benefit/ha (Rs)	371000

Benefit Cost ratio= Total Benefit/ Total cost

=371000/210000

=1.76

B/C ratio > 1. The enterprise is feasible economically.

A researcher had proven the cardamom enterprise in Illam, Panchthar and Taplejung economically feasible with the BCR of 2.06 (Shrestha, 2018).

The study recommends that the enterprise is profitable economically and farmers could invest confidently even rate fluctuates very often.

3.6.2 Pay Back Period

A researcher opines that the payback period of large cardamom is 4.09 years when the economic yield started from 4th year and harvesting last up to 20 years (Shrestha, 2018).

Table 12: Determination of Pay Back Period

Years	Income/year	Cumulative income
1	0	0
2	0	0
3	6312	6312
4	25355.81	31667.81
5	13888.75	45556.56
6	5950.24	51506.8
7	4480.24	55987.04

Form the above data from my study area, I applied cumulative income method for calculating the payback period and found within 4 years of plantation the total cost is paid back. In my study area, farmers start harvesting of cardamom from the third years of plantation. The shorter payback period in my study area is due to reduction in cost of manure and fertilizers, irrigation, insecticides and pesticides, marketing, land rent with maximum utilization of natural resources and family labor is utilization is most during practices from planting to harvesting and drying.

3.7 SWOT Analysis

SWOT analysis is a useful technique for understanding strengths, weakness and identifying the opportunities and threats to the enterprise. SWOT analysis was done through the focused group discussion. Following are the SWOTs to analyze the efficiency of cardamom production in Dordi rural municipality, Lamjung.

STRENGTHS	WEAKNESS
Suitability of climatic parameters Less perishable than the other commodities Higher return than the other commercial crops Utilization of family labor Long tradition of cardamom production and marketing as a source of income Increase in access to markets Needs less input and time compared to other crops Unused marginal and forest land could be utilized for cardamom cultivation	Excessive involvement of the middleman Lack of organized collection centers and storage infrastructures No more infrastructures for value addition No idea of value addition and grading High market margin No availability of technical support Inadequate knowledge on quality governing factors Poor post handling practices Non availability of seedlings at a reasonable price
OPPORTUNITIES	THREATS
Establishment of Cardamom Zone, PMAMP High scope for agritourism Relatively good price available to the farmers at the lean period High demand of cardamom on International, national, and local market A better way to strengthen the living standard of marginal farmers Establishment of value adding industry such as wine, bakery, and perfumes	High price fluctuation Youth migration leading to the shortage of the labor Competition with the cardamom produced from India High incidence of diseases and pest leading to the damage of whole orchard Damage of the orchard and fruits by wild animals

4. CONCLUSION

Cardamom is one of the most cultivated and valuable crops in Lamjung district due to its ecological suitability to produce large cardamom. The major occupation of the sampled households was agriculture while income from livestock was also good. Large cardamom is an economically important low volume high value cash crop which is the reason for more attraction of farmers towards this enterprise. It can be cultivated in marginal land, sloppy and forest land even on the crop field. The calculated benefit cost ratio indicates that the crop appears profitable in the study area. The crop contributes significantly to the economy of the households and can be better option for uplifting the socio-economic condition of farmers in the study area. Land under cultivation, years of cardamom cultivation, plant protection measures, input facility and technical knowhow affects the production of the commodity. Incidence of disease and pest, lack of proper price information, lack of technical knowledge and lack of proper price were the main problems faced by the farmers of my study area.

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DECLARATION OF CONFLICT INTEREST

It is declared that the submitted article is free of fore-publication or from current review process except this. Copyrights of all the authors embedded in this paper are truly respected and non-replicable. We are ready to commit any punishment relying on if found guilty or punishable.

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