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## RESEARCH ARTICLE

# LARGE CARDAMOM PRODUCTION AND MARKETING IN NEPAL: A REVIEW

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## ARTICLE DETAILS

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## ABSTRACT

This article review was carried to identify existing situation of large cardamom production and marketing in Nepal from local to global context. Different data and article review was carried out obtain from several published and unpublished literatures, Department of Agriculture (DOA), Ministry of Agriculture Development (MoAD) etc. The study revealed that majority of eastern hill people were encourage towards the large cardamom production. Despite the increase in global market demand and planting of large cardamom in Nepal, its production has not increased at an expected rate. After the adoption of commercial farming technique farmer were aware about different quality and price variation. Marketing channel of large cardamom was limited in certain collection center of eastern region. About 90-95 percent of total large cardamom produced in the country were exported. Main buyer of cardamom was India. Major problem encountered during production and marketing were lack of technology and fluctuate in price

## KEYWORDS

*Amomum subulatum*, market, local, global.

## 1. INTRODUCTION

Agriculture sector contribute about 31.7% of total national Gross Domestic Product (AICC, 2017). Due to different topography, only less than 20% of total land is cultivable. Currently, 3.09 million hectares of land is under cultivation for agriculture. (MoAD, 2017). Horticulture contributes about 16.75 percent to AGDP, 7.04 percent by fruits and spice crops for national development (MoAD, 2015). Large cardamom (*Amomum subulatum* Roxb.), is also known as black cardamom is one of the oldest indigenous spice of the eastern Himalayas. It is better established in sloppy areas with a temperature range of 10 to 30°C under uniformly distributed annual rainfall of 2000 to 3500 mm (Biswas et al, 1988). It can be grown successfully in altitude ranging between 600 and 2400 masl (Adhikari and Sigdel, 2016). A minimum of 70 percent moisture on soil and the relative humidity of greater than 90 percent is desirable for large cardamom cultivation.

For centuries, Pakistanis and Indians have used its smoky flavor in their traditional biryani dishes as a symbol of wealth. Compared with the green variety, large cardamom has a very distinct roasted smell and taste, and brownish color, which originates from an ancient drying method. Nepal is by far the world's largest producer and exporter of large cardamom. The Government have selected cardamom as priority sector part of the Nepal Trade Integration Strategy (MoC, 2016). Large cardamom farming in Nepal was initiated from eastern hilly districts of the country. Initially the cultivation of large cardamom was confined to eastern region of the country. Gradually, the cultivation extended to western districts and now

a total of 48 districts cultivate large cardamom in the country (MoAD, 2017). Of total world production per annum, the largest producer of large cardamom is Nepal (52%) followed by India (37%) and Bhutan (11%) (Pothula and Singh, 2013). Although the market is relatively small and concentrated in India and Pakistan, it is a lucrative business for all value chain actors: it is a major cash crop for more than 67,000 farmers in the hilly regions and 40 wholesalers in Birtamod, the regional trading hub. However, Indian intermediaries capture the biggest share of earnings because they control most of the trade, particularly logistics. Despite notable export prospects, this monopolistic situation hinders export development because Nepali exporters have limited leeway and thus distribution of the benefits throughout the sector is limited.

Large cardamom is a high value agricultural commodity having high demands across the world. Large cardamom farming has been a major source of livelihood for most of the people residing in remote hilly areas of Nepal. Large cardamom has served as a lifeline for most of the remote farmers of hilly districts of the country. Large cardamom gives a perennial source of income for those farmers. Large cardamom cultivation is rapidly blooming across the hilly districts of the country. New farmers are being driven to large cardamom farming because of low initial investment required and high return obtained. But due to different marketing problems and price fluctuation numbers of farmers are unable to extends their cultivation in large area. The objective of the study was to assess large cardamom production and marketing in Nepal, marketing trends and the problem during the production and marketing of large cardamom.

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## 2. METHODOLOGY

The secondary data was obtained through reviewing the statistical records of MoAD, publication mainly produced by Projects for Commercialization in Agriculture (PACT), Agribusiness Promotion and Market Development Directorate, Market research and statistics Management Program Agriculture Development Strategy, Agriculture Prospective Plan (APP) and other articles.

## 3. DISCUSSION

### 3.1 Area, production and productivity of large cardamom in Nepal

According to Ministry of Agricultural Development, in 2015/16, it is grown in 48 districts which occupy 15,700 hectare with productive area of 12,120 hectare and produces 6,439 mt with productivity of 0.53 mt/ha. Development region wise, Eastern development region has productivity of 0.52 mt/ha with total area of 11,300 ha and production of 6,064 mt (MoAD, 2017). Similarly, annual production of large cardamom in the country is 6439 metric tons and productivity is 0.531 tons/hectare. Despite the increase in global market demand and planting of large cardamom in Nepal, its production has not increased at an expected rate. According to (Nepal National Sector Export Strategy-Large Cardamom 2017-2021), over the past 2 decades, the annual production of large cardamom in Nepal has increased by 71.6 percent, from 3,010 tons in (1994/95) to 5,166 tons in (2014/15) and productive area has increased by 41.5 percent, from 8,800 ha to 12,458 ha (2014/15), due to a positive growth in yield per ha of land from 0.34 to 0.41 tons. A report shows 67,000 households engaged in cardamom farming across Nepal, which includes 25,000 households from Ilam, Taplejung and Panchthar districts. These districts are major producers of cardamom as well. Some districts outside the eastern hills produce cardamom in lesser quantities, including 61 mt in Kavre in the central region and 63 mt in Lamjung in the western region. Currently in Nepal, approximately 12,000 hectares in over 40 hill country regions are under cardamom cultivation and the estimated annual production is 6,000 mt. Apart from Nepal, India and Bhutan, large cardamom is also cultivated to some extent in some of the Southeast Asian countries such as Thailand, Indonesia and China. Among them, Indonesia has recently emerged as the additional key producers (ACCESO, 2011). The top five highest large cardamom producing districts of Nepal are:

S.N.	Districts	Total Area (ha)	Productive Area (ha)	Production (Mt)	Yield (Mt/ha)
1.	Taplejung	4500	4150	2490	0.600
2.	Sankhuwasabha	2824	1900	1108	0.583
3.	Panchthar	1950	1731	667	0.385
4.	Ilam	1600	1163	558	0.480
5.	Khotang	1320	940	564	0.600

Source: (MoAD, 2017)

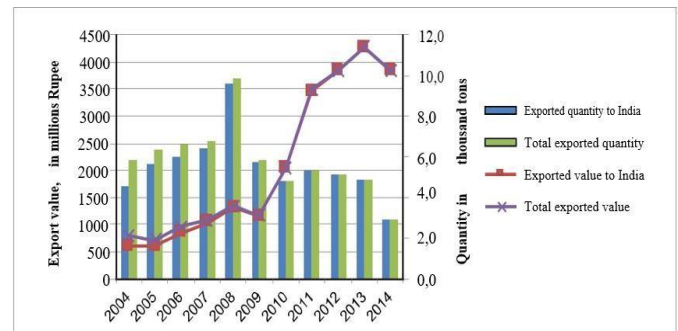
After the initiation of commercial cultivation of large cardamom, its production is increasing gradually over the years. The cultivation trend has shifted from east to western part of the country. The table below gives the general trend of large cardamom production in the country over the past 10 years.

Fiscal Year	Total Area (ha)	Production (Mt)	Productivity (Mt/ha)
2006/07	11712	6950	0.59
2007/08	12015	7087	0.59
2008/09	11849	7037	0.59
2009/10	11766	5232	0.44
2010/11	12584	5517	0.44
2011/12	11665	6026	0.52
2012/13	11434	5753	0.50
2013/14	11501	5225	0.45
2014/15	12485	5166	0.41
2015/16	12120	6439	0.531

Source: (MoAD, 2017)

### 3.2 Global exports trend of large cardamom

The production and export of large cardamom is highly concentrated in the Himalayan region. Nepal and Bhutan are the main producers and exporters of large cardamom, accounting for roughly 90 % of exported production. The volume of large cardamom exports from Nepal grew modestly from 2004 to 2007, reached its peak in 2008 (over 10,000 tons) and then decreased from 2009. However, exported value has not decreased due to continuous increases in the world market price. In the past two decades, the average export unit price of large cardamom has increased from US \$ 0.34 / kg to US \$ 12 /kg. The value of Nepal's large cardamom exports rose from US \$ 7,440,000 in 2004 to US \$ 39.4 million in 2013 (GON & ITC, 2017).



Source: (Nepal Foreign Trade Statistics, 2015)

**Figure 1:** Exports of large cardamom from Nepal, 2004–2014

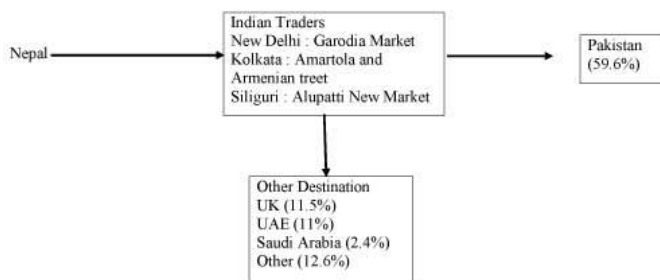
### 3.3 Marketing channel for large cardamom

Marketing system includes producer farmers, traders, transporter, wholesalers, exporters and consumer as the main actors to carrying out different activities (MDD, 1999). Marketing system also consists of subsystems affected by physical, climatic, socio-cultural, technological, economic, legal and political factors (Sidhu, 1986). An efficient marketing system is essential for timely delivery at reduced marketing costs and the efficiency of market is influenced by a number of external factors such as policy, regulatory framework and infrastructures (Joshi et al., 2013). An efficient marketing system is that which has lower marketing margin (Pun & Karmacharya, 1998). A well planned and developed marketing system is essential for the overall development of nation that provides efficiency in product distribution (Gurung et al., 1996). Marketing system depends on the distance of production area from the city and the quality of produce in transportation (Pun and Karmacharya, 1998). Producers, traders, transporters, wholesalers, exporters and consumers are the main actors of marketing system (MDD, 1999).

Marketing of large cardamom in Nepal isn't systematically organized. Farmers are producing cardamom in remote areas but traders, wholesalers are situated in headquarters. Large cardamom is an export commodity and about 90-95 percent of the total large cardamom produced in the country is collected at the Birtamod collection centers and exported from thereon. India is the major buyer of Nepalese large cardamom followed by Pakistan and other Middle East countries. (ITPS, 2015) also suggested that the large cardamom farmers in Nepal sell their products to local agents or district traders from where the product is marketed to Birtamod wholesale traders. The majority of large cardamom produced in the pocket district were marketed to the Birtamod center and then traded abroad. On the basis of KII and several literature reviews, the large cardamom produced in the study was found to be marketed abroad via following channels:

1. Producers → Village level collectors → Birtamod traders → Abroad
2. Producers → Village level collectors → District traders  
Birtamod traders → Abroad
3. Producers → District traders → Birtamod traders → Abroad

### 3.4 Global Marketing channel of Large Cardamom



**Figure 2:** Global Marketing channel of Large Cardamom Source: (ITPS, 2015)

## 4. CONCLUSION

From the above study, Ilam, Taplejung and Panchthar are major producers of large cardamom in Nepal. The production and export of large cardamom is highly concentrated in the Himalayan region. Nepal and Bhutan are the main producers and exporters of large cardamom, accounting for roughly 90% of exported production. Large cardamom is an export commodity and about 90-95 percent of the total large cardamom produced in the country is collected at the Birtamod collection centers and exported from thereon. India is the major buyer of Nepalese large cardamom followed by Pakistan and other Middle East countries. Further study can be done to predict the export rise and fall and other price fluctuation of large cardamom in Nepal in local and global market.

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