ICIMOD

PROCEEDINGS

Exploring opportunities for transboundary collaboration on large cardamom value chain in the Kangchenjunga Landscape

22–23 May 2019
Phungling, Taplejung, Nepal

This publication is available in electronic form at www.icimod.org/himaldoc

Cover photo: A farmer shows a diseased clump of large cardamom

Published by
International Centre for Integrated Mountain Development
GPO Box 3226, Kathmandu, Nepal

Production team
Samuel Thomas (Senior editor)
Rachana Chettri (Editor)
Dharma R Maharjan (Graphic designer)

Report preparation
Basant Pant, Surendra Joshi, Tashi Dorji and Nakul Chettri

Photos
Ghanashyam Sharma: Cover
Nakul Chettri: all others

Citation
ICIMOD (2019). *Proceedings of the Regional Workshop on 'Exploring Opportunities for Transboundary Collaboration on Large Cardamom Value Chain in the Kangchenjunga Landscape'. 22–23 May 2019, Phungling, Taplejung, Nepal*, ICIMOD Proceedings 2019, Kathmandu: ICIMOD

PROCEEDINGS

Exploring opportunities for transboundary collaboration on large cardamom value chain in the Kangchenjunga Landscape

22–23 May 2019
Phungling, Taplejung, Nepal

Kangchenjunga Landscape Conservation and Development Initiative (KLCDI)

Contents

PARTICIPANTS OF THE WORKSHOP

SECTION 1

Background

The Kanchenjunga Landscape (KL) is a transboundary complex that spreads across Nepal, Bhutan and India in the Hindu Kush Himalaya (HKH). The landscape is home to an array of mountain niche products, among which large cardamom (*Amomum subulatum*) is most significant. Nepal is the world's largest producer of this particular species of large cardamom, with a total production of 6439 metric tonnes, followed by Darjeeling and Sikkim, India (4300 metric tonnes) and Bhutan (2091 metric tonnes). The increasing demand for large cardamom in the local and global market in the recent past strongly motivated farmers to bring more land under large cardamom cultivation. At the same time the high fluctuation in yield and fall in prices has driven farmers to explore more sustainable modes of large cardamom production. The large cardamom sector faces various challenges, such as increased exposure to climate impacts, low economic opportunities, lack of access to finance and the global market, lack of initiatives for value addition and increased competition with substitute products. Considering these challenges, key stakeholders from Bhutan, India and Nepal have felt the need to share their experiences to better understand the impacts on large cardamom and develop measures to address them.

Under the EU funded programme 'Support to Rural Livelihoods and Climate Change Adaptation in the Himalayas (Himalica)', ICIMOD and its partners conducted action research and a pilot project in Taplejung, Nepal to address some of the issues identified by the Kangchenjunga Landscape Conservation and Development Initiative (KLCDI) in the large cardamom-alder agroforestry system.[1] The action research aimed to generate knowledge of ecosystems, including the role of honeybees in the pollination of cardamom, whereas the pilot

[1] ICIMOD, WCD, GBPNIHESD, RECAST. (2017). Regional conservation and development strategy and regional cooperation framework. ICIMOD Working Paper 2017/2. Kathmandu: ICIMOD

interventions sought to promote a package of practices. These practices aim to enhance household income and reduce risks of production volatility. However, challenges remain in scaling up these good practices at the landscape level and in promoting large cardamom as a unique product in the regional and international markets.

A two-day regional workshop on 'Exploring opportunities for transboundary collaboration on large cardamom value chain in Kangchenjunga Landscape' was organized on 22–23 May 2019 in Phungling, Taplejung, Nepal. The broad objectives of the workshop were to a) enable cross-country learning and up-scaling of successful interventions in large cardamom, and b) develop a common understanding among Bhutan, India and Nepal to address common challenges including the market price fall due to increased competition with other varieties of cardamom, such as white cardamom (*Amomum krevanh*) and green cardamom (*Elettaria cardamomum*).

More than 30 participants from Bhutan, India and Nepal attended the workshop. They included high-level representatives such as Director, Department of Agriculture, Royal Government of Bhutan; Additional Directors, Department of Agriculture, Sikkim; Director General, Department of Agriculture, Nepal; Under Secretary, Ministry of Industry, Commerce and Supplies, Nepal; Chief, National Centre for Potato, Vegetable and Spice Crops Development, Government of Nepal, along with representatives from Bhutan Chamber of Commerce, women entrepreneurs, scientists, farmers and local government representatives including the Mayor and Deputy Mayor of Phungling Municipality.

GROUP DISCUSSION ON POST-HARVEST MANAGEMENT

SECTION 2 | DAY 1, 22 MAY 2019

Inaugural session

Remarks

PROGRAMME COORDINATOR-KLCDI, ICIMOD

Nakul Chettri, Programme Coordinator, KLCDI, explained the overall objective of the workshop and the reason for inviting partners to the workshop in Taplejung district, eastern Nepal. He emphasized that the workshop was based on experience gained from Himalica's work on large cardamom in Taplejung and new market challenges faced by the value chain actors in the region. He emphasized the need for regional cooperation to address some of the common issues faced in the large cardamom sector across all three countries in the KL. The workshop therefore aimed to develop a common understanding to address challenges including the market price fall due to increased competition with other varieties of cardamom, and to create a platform for cross-country learning and scaling up good practices. The specific objectives included: (i) exchange ideas and share success stories and approaches with representatives of relevant organizations working in the large cardamom sector in Nepal, India and Bhutan, (ii) identify areas of common interest for transboundary collaboration in order to promote the large cardamom value chain, and try to define the process and steps for achieving this. Finally, Chettri emphasized the need to work jointly using large cardamom as an entry point or a thread for bringing Bhutan, India and Nepal together to address common regional issues.

MAYOR, PHUNGLING MUNICIPALITY, TAPLEJUNG, NEPAL

Chattrapati Pyakurel, Mayor of Phungling Municipality, welcomed all participants to his municipality, and said he was happy to see that top government officials had managed to visit such a remote place to find common solutions for the

development of the large cardamom sector. He noted that the price of large cardamom is four times less this year compared to five years ago, which has caused worry and uncertainty for the local communities. However, switching to other crops is not a viable option for the communities because possible alternate crops (e.g., millet, maize) will not fetch better prices compared to large cardamom.

DIRECTOR, DEPARTMENT OF AGRICULTURE, MINISTRY OF AGRICULTURE AND FORESTS, BHUTAN

Kinlay Tshering, Director of the Department of Agriculture, Bhutan, mentioned that the workshop was very timely and had brought together important participants who would help take large cardamom to the next level. Tshering stated that large cardamom is important to Bhutan because of its high value rather than the volume of production. Cash crops like large cardamom are very important as they require low labour input, are non-perishable and can provide high return on investment. Tshering mentioned that 17,000 farmers are engaged in farming large cardamom and in 2017 the country was able to exchange 20 million dollars from its export. In terms of revenue (foreign currency) generation, large cardamom comes second (first being Cordyceps) in Bhutan.

She emphasized the need to tap into the unmet demand for large cardamom, and reiterated Bhutan's willingness to collaborate with and learn from India and Nepal in research, market exploration, and post-production activities including processing.

ADD DIRECTOR, DEPARTMENT OF HORTICULTURE & CASH CROPS DEVELOPMENT, INDIA

Bhimlal Dahal, Additional Director, Government of Sikkim, India mentioned that large cardamom is a life-saving and income-saving capsule for farmers whose livelihood is heavily dependent on it. He highlighted the need to add value to the product to support farmers' livelihood and improve crop health with nutrients, water and other good management practices. He shared some interesting technical information on habitat requirements, disease stress and pollination services. According to Dahal, low intake of nutrients is causing diseases in large cardamom. The crop depends on seepage areas and perennial water sources as it is shallow rooted and cannot tolerate moisture stress. He added that the upper canopy should be sparse so that the plant can receive both shade and light. Pollination also supports large cardamom growth. The decline of bumblebees has led to the decline in large cardamom production.

Dahal talked about the support the Government of Sikkim is providing for the production, post-harvest management and marketing of large cardamom, and emerging issues faced by the value chain actors. The total cultivable land in Sikkim is 27,000 ha of which 21,000 ha is under large cardamom cultivation. Dahal mentioned that the department will freely distribute seeds and bio fertilizers and provide irrigation services.

DIRECTOR GENERAL, DEPARTMENTOF AGRICULTURE, NEPAL

Surya Prasad Paudel, Director General, Department of Agriculture, Nepal said that the workshop was timely as it would help them design strategies for large cardamom development in the region. He recounted how the large cardamom centre was established in Fikkal, Ilam some 25 years ago and how large cardamom production has extended to about 50–55 districts of Nepal. Large cardamom cultivation is a sector most affected by climate change after the fruit and vegetable sector. Large cardamom is suffering from widespread diseases and the market price is highly unpredictable. Paudel highlighted the need to make large cardamom value chain more equitable so that optimal benefits can reach farmers. There is also a need for regional collaboration for exchange of technology and knowledge to improve yield and market access.

COORDINATOR, DISTRICT COORDINATION COMMITTEE, TAPLEJUNG, NEPAL

Dhanedra Maden, Coordinator, District Coordination Committee, welcomed all participants to his district and acknowledged ICIMOD's efforts to bring high-level delegates to Taplejung to explore ways to promote large cardamom. He said that large cardamom is a product that has significantly improved the living standard of people in Taplejung. The abrupt rise and fall in the price of large cardamom has impacted the livelihood of people. Maden therefore requested the workshop team to come up with common action plans for promoting large cardamom. He noted that we should learn from and build on the success of initiatives like Himalica to take large cardamom to the next level. He requested the Department of Agriculture, Nepal to consider Taplejung as a super zone for large cardamom under the Prime Minister Agriculture Modernization Project. Maden expressed his hope that the workshop would be successful and generate fruitful action plans that can benefit all stakeholders of large cardamom.

DISCUSSING THE OPPORTUNITIES AND CHALLENGES OF PROMOTING HIMALAYAN LARGE BLACK CARDAMOM TRADE AS A SECTOR

SECTION 3

Technical session

Large black cardamom in the Kangchenjunga Landscape: Importance, opportunities and challenges

Surendra Joshi provided a brief overview of large cardamom trade and the production and productivity status in the region, and highlighted key issues and emerging opportunities. He also shared the experiences of the Himalica Initiative focusing on what worked well, how it worked, what can be replicated and scaled up in other parts of the KL.

Joshi mentioned that large cardamom is a low-volume, high-value and non-perishable mountain product. It is also called 'black gold', since it gives much higher return per unit of land than other crops grown in the same plot. It has comparative advantage, particularly in areas where soil and climatic conditions are not conducive to production of other crops. Based on a thorough assessment of provisioning services in the KL, the KLCDI identified large cardamom as an important cash crop in the eastern Himalayan region. Large cardamom is an ideal export commodity that helps generate revenue and reduce trade deficit,

According to trade statistics, Nepal is the world's largest producer, with a total production of 6,439 metric tonnes of large cardamom from about 15,700 ha of land (MoAD, 2016), followed by Sikkim, India (4300 metric tonnes) and Bhutan (2,091 metric tonnes). In recent years, large cardamom has been facing a number of issues such as:

- Price variability (weak market linkages, substitute products, increased competition with commercial large producers)

- Decline in yield and fluctuation in production due to climate-induced changes, poor crop management – disease, pests, and old plantations.
- Lack of product positioning, value addition and innovation
- High dependency on a single crop – increased risk and vulnerability

Joshi discussed ICIMOD's efforts (under the Himalica Initiative) to resolve some of the key issues. He mentioned that the solution package that ICIMOD has co-developed with local stakeholders and demonstrated in farmers' plots offers the possibility to increase yield and reduce the risk of crop failure. The solutions are simple, affordable and supported by nature and therefore easy to adapt, contextualize and replicate. Large cardamom is facing increased competition with substitute products (white and green cardamoms), and needs to be better positioned to compete in international markets. Consumers need to be informed about the unique attributes of large cardamom (e.g., why it is different from green and white cardamom; what its specific health benefits are). Regional collaborative efforts are important to send a common message supported by evidence. Joshi said we need to think about how to position large cardamom as a 'different' product, how to enhance competitiveness – cost of production, delivery, and market promotion, and how to diversify products and carry out market segmentation.

Country strategy for promotion of large cardamom value chain

BHUTAN

Kinlay Tshering presented the status of large cardamom development in Bhutan, issues and challenges associated with it and the strategies to overcome those challenges (Table 1). She mentioned that large cardamom was introduced in Bhutan in the 1970s from Sikkim. It is one of the primary sources of livelihood for rural people and middlemen. On average 17,000 farmers are engaged in large cardamom farming. It is among the top ten export commodities in Bhutan. In 2017 it was the second most exported commodity. In Bhutan, 5616.63 hectares of land is under large cardamom cultivation and the total production is around 1,753 metric tonnes, according to 2017 data. The product is exported mainly to Indian and Bangladesh. The challenges faced by the large cardamom sector in Bhutan and the proposed strategies for overcoming them are presented in Table 1.

INDIA

In his presentation, Bhimlal Dahal focused on the establishment of a high-tech nursery to increase large cardamom production. According to him, the variety of large cardamom to be planted needs to be decided based on altitudinal gradient. Planting materials should be of high quality. Dahal mentioned that the story of large cardamom is similar across the landscape and this provides opportunity to work together. He gave the example of Arunanchal state of India, where one wrong decision of planting a wrong species of large cardamom resulted in waste of farmers' time and money. According to him, the quality of nursery raised seedlings and plantation area is important. Farmers should know which land type is appropriate for growing good quality large cardamom. Dahal said that the Sikkim government has introduced the drip irrigation technique and is also conducting capacity building training for large cardamom farmers. There should be provisions for insurance against crop failure – one of the ways could be product diversification and planting various crops through multi-tier farming. Dahal emphasized the need to form producers' associations to strengthen the producers. The Sikkim government has formed up to 27 such associations. One private company in Sikkim is building a factory that will buy raw large cardamom capsules and process it in an efficient manner so that it can then be sold in the external market. The challenges for large cardamom development in Sikkim and proposed strategies for overcoming those challenges are presented in Table 1.

NEPAL

Hari Bahadur KC, Chief of the National Centre for Potato, Vegetable and Spice Crops Development, presented the national strategy for developing the large cardamom sector.

According to KC, the government of Nepal has adopted three major strategies: a) improve production and post-harvest practices of large cardamom to increase value retention; b) foster sector development, coordination and research; c) and promote black and pink Everest cardamom to achieve greater market penetration and diversification.

He mentioned that large suitable areas ensure larger adaptability. The National Trade Integration Strategy 2016 aimed to produce 6500 metric tonnes of large cardamom. This could be the best source of income and employment as there is an increasing global demand for large cardamom as an organic spice and

TABLE 1 **CHALLENGES FACED BY THE LARGE CARDAMOM SECTOR IN BHUTAN, SIKKIM (INDIA) AND NEPAL AND STRATEGIES FOR ADDRESSING THEM**

Country	Challenges	Strategies
Bhutan	• Limited research on developing high quality cultivars/varieties, post-harvest technology and market • Poor quality of planting materials • Shift in its farming system – dry land based farming system • Poor management of plantations • New pests and disease including chirkey and furkey viral infection • Assigning grade C to Bhutanese large cardamom in the international market • Poor adoption of sustainable curing systems – most farmers use a traditional curing system called Bhatti	• Input stage • Establish repositories and nurseries for large cardamom and provide manuals on nursery development and cultivation • Train and monitor nursery operators to ensure quality production • Production stage • Capacity building on management of plantation including shade and shade tree management • Create awareness on the cause, prevention and management of pest and disease • Promote sustainable harvesting and curing system • Link farmers with the market and encourage group marketing • Marketing, export & processing • Link large cardamom farmers to formal/institutional buyers and promote group marketing • Promote direct links between farmers, and processors and exporters for better price • Invest in geographic indication branding to distinguish large cardamom from Bhutan • Symmetric information about prices through radio broadcasts for farmers • Regulate exports to minimize potential negative impact on farmers • Develop linkages with importers from high-value markets like UAE, Europe • Establish a processing facility in Bhutan
Sikkim (India)	• Poor quality seedlings • Poor irrigation facility • Lack of technical knowhow on land fertility management • Lack of insurance mechanism	• Establish a high-tech nursery • Plant large cardamom according to altitudinal gradient • Plant high-quality seedling to reduce mortality rate • Provide good irrigation facilities • Form farmers'/producers' associations to strengthen farmers' groups • Create an insurance mechanism to protect farmers against crop failure • Harmonize the role of middlemen to ensure benefits for farmers
Nepal	• Price vulnerability • Processing and value addition • Assurance of good quality saplings • Quality and cleanliness standard of products • Trade dependency on a single country • Physical infrastructure • Technical knowhow of growers and processors • Diseases and insect pests, and inadequate research	• Characterization and registration of varieties • Ensure the availability of high-quality seeds/saplings • Establish processing and value addition industries • Promote organic spice production • Develop physical infrastructure including storage facilities • Establish a quality control mechanism • Work towards trade diversification • Strengthen international linkages for research and extension

ayurvedic medicine. Table 1 presents the challenges faced by the large cardamom sector in Nepal and the strategies for overcoming them.

Field visit to Himalica pilot site

The field visit provided the workshop participants an opportunity to observe large cardamom farm management practices and interact with the local community, local entrepreneurs engaged in making value-added blended products, and market outlet owners. The participants recognized that Bhutan and India could learn from some of the innovative practices in Nepal, and vice versa. At the same time, large cardamom farming across the KL faces problems and challenges that can only be addressed through joint efforts. These include – a poor repository of large cardamom; lack of information on genetic characterization; limited varietal options due to restriction on germplasm transfer from one country to other; and crop disease. The field observation and discussions on day one led to the conclusion that two areas in particular require regional collaboration: 1) disease management, 2) genetic characterization and germplasm exchange.

HIMALAYAN LARGE BLACK CARDAMOM NURSERY

WORKSHOP PARTICIPANTS DURING A FIELD VISIT

A CARDAMOM CURING HOUSE

TISSUE CULTURE LAB AT CARDAMOM DEVELOPMENT CENTRE

DAY 2, 23 MAY 2019

The role of large cardamom in ecosystem health and human wellbeing in the Kangchenjunga Landscape: Challenges and opportunities

In his presentation, Nakul Chettri recounted how the KLCDI has evolved over the years. The Initiative is trying its best to connect the dots to sustain ecosystem services and support human wellbeing. He talked about the role of large cardamom in ecosystem health. According to him, large cardamom can be grown in fallow land, which helps to put under-utilized lands to use and restore the ecosystem. Large cardamom helps enrich biodiversity and habitats; it also treats catchments and helps increase soil nutrients, thus increasing land fertility. The large cardamom sector contributes to the local as well as national economy, works as a buffer against vulnerability, and supports people's adaptation mechanism through carbon trade. However, the sector is facing challenges related to positioning, climate change, production and market, out scaling and quality, infrastructure and research. According to Chettri, there are opportunities where KL partner countries can join hands to promote large cardamom as a regional product. For this, partner countries have to adopt a coordinated approach to organize the large cardamom market, build better infrastructures, conduct joint research, and adopt compatible regional policies. Finally, he said that we need to give priority to product diversification, positioning large cardamom as a geographical indicator. There is also need for scientific backup through research and development, strong policy support from governments, and hand holding from the private sector.

GROUP DISCUSSION ON LARGE CARDAMOM MARKETING

PRESENTATION ON POST-HARVEST MANAGEMENT

Group work on collaborative actions at regional level

TABLE 2 **CHALLENGES FACED BY THE LARGE CARDAMOM SECTOR IN BHUTAN, SIKKIM (INDIA) AND NEPAL AND STRATEGIES FOR ADDRESSING THEM**

Production issues	Recommended actions
• Disease • Poor varietal options • Poor research and development • Lack of suitable shade trees • Poor nutrient management • Poor institutional linkages • Limited information on suitable planting material • Inadequate knowledge of inter-cultural operations among growers/PoP	• Form a task force (expert group) from three countries to identify the causal organism of diseases/pests and recommend disease management practice (organic/inorganic). • Identify location specific varieties/climate resilient varieties • Characterize existing and new varieties (morphological, genetic and functional composition): collaborate. • Establish a germplasm exchange and repository (mother plants) in three countries • Identify mixed crop combination with large cardamom – nutrient uptake, shade percentage, economic value • Identify best crop management techniques –nutrient management, irrigation management (drip/sprinkler/flood, etc.) • Capacity building of growers and technicians; exchange visit of relevant people (researchers/exporters/growers) • Formalize institutional linkages between agencies in three countries (MoU/LoA).
Post-harvest management issues	**Recommended actions**
• Unavailability of appropriate drying technology (cost size, design, energy use, location) • Lack of a common storage facility, technical knowhow, self-life (information) • No product development at the community level (skill, knowledge, information). • Absence of a functional farmers' association at the landscape level • Lack of sorting and grading at farm level. • Lack of a collection centre and warehouse • No proper processing technology and expertise • Problem in transportation (cost, facility, feasibility) • Lack of knowledge, information dissemination, awareness about market.	• Research and development of drying technology and its extension to the field level (accessible to the farmers) • Develop infrastructure for collective storage, warehouse facilities for long-term storage • Develop appropriate processing technology for large cardamom • Develop information, knowledge, technology and skills for diversification of large cardamom • Form large cardamom farmers' associations at the landscape level for information and knowledge sharing
Marketing issues	**Recommended actions**
• Lack of product claim • Lack of proper grading, branding and packaging • Lack of communication for market promotion • Lack of product diversification • Price fluctuation	• Conduct research to generate knowledge/information on chemical characteristics and uses, and testing and certification facility to support product claim • Establish guidelines, product standards and a code of conduct, and a legal support system to assure quality • Develop a common message, do extensive promotion through media, and participate in regional/international trade fairs • Detailed product mapping (value addition), and product diversification based on market trend analysis • Identify alternative markets, positioning large cardamom as a unique product with the brand 'Himalayan large black cardamom', and penetrate new markets

SECTION 4

Summary and the way forward

The workshop received a high level of participation from member countries, and was able to reach consensus for developing future interventions to better position the product as 'Himalayan large black cardamom' with geographic indication. The participants had the opportunity to learn from each other about the challenges and issues related to large cardamom. Representatives from all three countries supported the idea of carrying out regional projects and jointly addressing some of the key issues. ICIMOD has been given the mandate to explore resources and facilitate regional collaboration for addressing issues and harnessing opportunities. It is clear that large cardamom is facing market challenges due to increased competition with other cardamoms (mainly white and green cardamoms) from other parts of the world. There have been no efforts to establish large cardamom from the Himalaya as a unique product, nor is there adequate scientific knowledge on chemical characteristics, usage and end market of large cardamom. Hence there is a need to develop a common message highlighting the unique attributes of large cardamom produced in this region, and to convey this message clearly and widely.

Based on the results from the group discussion (Table 2), the participants agreed to work towards a roadmap and help promote large cardamom through some short, medium and long-term actions:

Short-term action

It was suggested that as a first step, the proceedings of the workshop should be documented and shared. As an immediate next step, the participants agreed to discuss the issues identified and recommended actions with concerned actors within their organization and beyond. The process for inter-departmental coordination and intra-regional cooperation will be discussed at the country level. In this regard, a meeting is to be held at the Ministry of Industry, Commerce and Supplies, Government of Nepal to pave the path for large cardamom development in the landscape. Similar meetings will be facilitated by the agriculture departments in Bhutan and Sikkim. Representatives of the KLCDI can attend these meetings, offer technical support, if required, and work closely with the country team to develop new proposals for taking recommended actions. The group suggested forming an informal network for sharing ideas and knowledge and for addressing common problems identified in the production, post production and marketing phases. The group also highlighted the need to build the capacity of farmers, identify better varieties, best practices, and develop an information and knowledge sharing mechanism.

Medium-term action

The group envisaged developing proposals and working towards infrastructure development, research and exchange of germplasm, value addition provisions, maintaining a repository of suitable varieties, transfer of post-harvest technology, development of a common regional brand and market promotion.

Long-term action

To promote large cardamom and develop landscape level association and networks, the group agreed on the roadmap for formalizing institutional linkages through the signing of MoUs/LoAs among the three countries. The group also agreed to work towards regional branding, common marketing strategies along with detailed product mapping, and to find alternative and sustainable markets.

ICIMOD is expected to address the recommendations of the workshop while developing a project with a focus on regional interventions for large cardamom value chain development and facilitate the way forward.

VARIOUS PRODUCTS MADE FROM LARGE CARDAMOM STALKS

SECTION 5

ANNEX 1: Programme

Time	Session	Remarks
DAY 1: 22 MAY 2019		
Inaugural session		
09:00–09:10	Welcome remarks and highlight on the objective of workshop	Nakul Chettri
09:10–09:45	Remarks from Chief Guest	Chhatrapati Pyakurel
	Remarks from the head of delegation: Bhutan	Kinlay Tshering
	Remarks from the head of delegation: India	B L Dahal
	Remarks from the head of delegation: Nepal	Surya Prasad Paudel
	Closing remarks from Chair	Dhanendra Maden
Technical session		
09:45–10:15	Presentation on the importance, key issues, opportunities, and interventions of ICIMOD and partners in large cardamom	Surendra Raj Joshi
10:15–10:45	Group photo and tea break	
10:45–11.45	Country strategies for promotion of large cardamom value chain by representative from Bhutan, India, Nepal	
11:45–12:30	Discussion on success stories/approach – what worked well, where and how	
12:30–13:30	Lunch	
13:30–17:00	Visit to Himalica pilot site, community enterprise, market outlets	
DAY 2: 23 MAY 2019		
09:00–09:30	Reflections from the field	All Participants
09:30–10:00	The role of large cardamom in ecosystem health and human wellbeing in the Kangchenjunga Landscape: Opportunities and challenges	Nakul Chettri
10:00–10:40	Plenary discussion on recent market trends, issues of market price volatility, quality	All participants
10:40–11:00	Tea/coffee break	
11:00–12:30	Group work on country specific proposed actions to address a list of issues/challenges	All participants
12:30–13:30	Lunch break	
13:30–15:00	Collaborative actions at regional level – what can we do together to better position large cardamom in the international market	All participants
15:00–15:20	Tea/coffee break	
15:20–16:00	Discussion on the next step/follow-up plan	All participants
16:00–16:30	Closing session	

ANNEX 2: List of participants

Bhutan

Kinlay Tshering
Director
Department of Agriculture, Ministry of Agriculture and Forests
E: kinlaytshering@moaf.gov.bt

Yeshi Dorji
Head
Research and Planning Division, Research and Planning Department, BCCI
E: yeshi.dorji@bcci.org.bt

Tshering Wangmo
Project Coordinator
Rural Livelihood Development Project, Bhutan Association of Women
E: wangmocee89@gmail.com

India

Kailash Gaira
Investigator
GB Pant National Institute of Himalayan Environment and Sustainable Development
E: kgaira@gmail.com

Bhimlal Dahal
Add Director (spices)
Department of Horticulture & Cash Crops Development, Government of Sikkim
E: bhimdahal67@gmail.com

Lhandup Lepcha
Progressive Farmer,
Laven village, Sikkim, India
E: mlasngo@gmail.com

Manoj Kumar Subba
Add Director (vegetable)
Horticulture & Cash Crops Development, Department, Govt. of Sikkim
E: manoj.subba44@gmail.com

Nepal

Surya Prasad Paudel
Director General
Department of Agriculture
E: suryapaudel4@gmail.com

Hari Bahadur KC
Chief
National Centre for Potato, Vegetable and Spice Crops Development, Department of Agriculture
E: kchari2002@gmail.com

Srijana Tiwari
Under Secretary,
Ministry of Industry, Commerce and Supplies
E: srijana127@yahoo.com

Narendra Adhikari
Vice Chairperson
Federation of Large Cardamom Entrepreneurs of Nepal
E: flcen.mod@gmail.com

Bam Bahadur Bhattarai
Deputy Mayor
Phungling Municipality

Tika Gurung
Large cardamom trader
Phungling Municipality

Ananda Gautam
Media representative
Phungling Municipality

Dhanendra Maden
Coordinator
District Coordination Committee, Taplejung

Chhatrapati Pyakurel
Mayor
Phungling Municipality

Harka Gurung
Large cardamom trader
Phungling Municipality

Padam Adhikari
Chief Officer
Cardamom Development Centre
Fikkal, Ilam
E: padamadhikari04@gmail.com

Chandra P. Bhattarai
Cardamom trader
Phungling Municipality
E: cptaplejung@gmail.com

Shrimohan Lal Karna
Divisional Forest Officer
Taplejung

Raj Kumar Baniya
Large cardamom trader
Phungling Municipality

Bhim Gurung
Large cardamom trader
Phungling Municipality

ICIMOD

Nakul Chettri
Programme Coordinator, KLCDI
ICIMOD
E: nakul.chettri@icimod.org

Surendra Joshi
Sr. Resilient Livelihoods Specialist
ICIMOD
E: surendra.joshi@icimod.org

Basant Pant
Programme Officer
ICIMOD
E: basant.pant@icimod.org

In collaboration with

Supported by

ICIMOD gratefully acknowledges the support of its core donors: the Governments of Afghanistan, Australia, Austria, Bangladesh, Bhutan, China, India, Myanmar, Nepal, Norway, Pakistan, Sweden, and Switzerland.

International Centre for Integrated Mountain Development
GPO Box 3226, Kathmandu, Nepal
T +977 1 5275222 | **E** info@icimod.org | **www.icimod.org**