

PROCEEDINGS OF THE REGIONAL SYMPOSIUM ON

Organic agriculture: Youth engagement and enterprise development

18–20 December 2019
Paro, Bhutan



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The symposium provided a regional forum for discussing the opportunities and challenges around promoting organic agriculture in the HKH. Its primary focus was on bridging knowledge gaps and improving understanding on the linkages around organic farming systems.

SECTION 1

Background

Organic agriculture is a production system that sustains the health of soils, ecosystems, and people. It relies on ecological processes, biodiversity, and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit communities and the shared environment. It is also an excellent alternative for women in agriculture. Organic crops requiring low external inputs can help meet the nutritional and income needs of women, who face systemic, social, and financial barriers to well-being.

Organic agriculture also helps mitigate climate change and enhance rural livelihoods. There is great potential for organic agriculture in the Hindu Kush Himalayan (HKH) countries. But despite the growing demand for the region's organic products in both national and international markets, promotion of organic agriculture in the HKH faces numerous challenges, owing to inadequate awareness and marketing mechanisms for organic products, technical and financial services, quality inputs, and policy support.

It is therefore important to develop appropriate institutional mechanisms and innovative project and programme management structures, improve local capacities for responding to the needs of organic producers, and create interest among all stakeholders to ensure the sustainability of organic agriculture. To achieve these goals, we must develop strategies that increase the knowledge and understanding about organic agriculture systems, promote product-marketing mechanisms in the mountain context, and foster partnerships that promote gender-responsive organic agriculture.

In this regard, the International Centre for Integrated Mountain Development (ICIMOD) – in collaboration with the Agriculture Research and Development Centre, Yusipang (under the Department of Agriculture, Ministry of Agriculture and Forests, Royal Government of Bhutan) – organized a three-day regional symposium entitled “Organic agriculture: Youth engagement and enterprise development” from 18 to 20 December 2019 in Paro, Bhutan (see Annex 1 for the programme agenda).

About the symposium

The regional symposium aimed to share the knowledge, good practices, and lessons learnt regarding organic agriculture in the HKH, provide opportunities for fostering business partnerships, and in particular, support the implementation of Bhutan's National Organic Flagship Programme. It also served as a forum to initiate dialogues among relevant stakeholders by providing a knowledge sharing and networking platform for national, regional, and international experts, investors, and businesses, and to harness investment opportunities for business development in organic agriculture. The regional symposium mainly focused on three aspects:

Environmental aspects: These included the benefits of transitioning from conventional to organic agriculture, especially as they pertain to short-, medium-, and long-term effects on agro-ecosystems and crop yields. Participants presented solutions, technologies, and practices on production and input supply for promoting organic agriculture.

Economic aspects: These included business opportunities pertaining to organically certified products, innovations (value addition) informed by consumer behaviour, branding, investment, and B2B connections and partnership development.

Social and institutional aspects: These included gender and social inclusion aspects, and institutions working on production volume and aggregation of organic products (e.g., cooperatives); niche-product value chains and certification of organic products (through participatory guarantee schemes like Bhutan's Local Organic Assurance System (LOAS)); and support services and delivery mechanisms in the HKH context.

Objectives

The symposium's main objective was to provide a regional forum for discussing the opportunities and challenges around promoting organic agriculture in the HKH. The symposium primarily focused on bridging knowledge gaps and improving understanding on the linkages around organic farming systems. The following were the symposium's specific objectives:

- Explore regional collaboration and networks on organic agriculture in the HKH.
- Identify evidence-based solutions and technologies for production, marketing, and governance (specifically accounting for gender and social inclusion).
- Harness opportunities for B2B connections and investments.
- Develop a common understanding of regional HKH-level norms and mechanisms for standardization of organic agriculture, with a focus on the LOAS/participatory guarantee scheme.

The symposium was attended by 120 participants (40 women and 80 men) representing policymakers, government officials, development experts, businesspeople, and climate and agro scientists from 11 countries from the HKH region and beyond (see Annex). Also in attendance were around 20 private sector personnel and 30 youths engaged in the organic sector.

In recent years, the organic sector has grown substantially throughout the HKH region and beyond. In the HKH countries, there is increasing policy support for organic agriculture. But despite the growing demand, the promotion of organic agriculture in the HKH faces numerous challenges, owing to inadequate awareness and marketing mechanisms for organic products, technical and financial services, quality inputs, and policy support.

Summaries of presentations and discussions

Session 1: Inaugural session

Host of the inaugural Session: Ganga Maya Rizal, Department of Livestock, MoAF, Bhutan

The symposium was inaugurated with the traditional marchang ceremony by Jambay Gyeltshen, Programme Director, NRDCAN, DoL, Bhutan.

Kinlay Tshering, Director, Department of Agriculture, MoAF, Bhutan

Tshering extended a warm welcome to participants on behalf of the symposium organizers. Below are the main points of her speech:

- The National Flagship Programme of the Ministry of Agriculture and Forests supports the development of the organic sector for sustainable food security and livelihood, with the overarching goal of sustainable production of safe and nutritious food.
- This symposium should benefit Bhutan immensely, especially with regard to implementing the flagship programme's interventions in the field. Presentations and discussions on technical knowledge, experiences and expertise will be very useful for designing and implementing project interventions.

Dasho Rinzin Dorji, Secretary, Ministry of Agriculture and Forests

Dorji provided key statistics on and an overview of the current state of organic agriculture in Bhutan. The main points of his speech were as follows:

- In Bhutan, around 26,000 acres of land have been designated for organic agriculture, but only 263 acres have been certified as organic. About 15 organic products have been certified by the Bhutan Agriculture and Food Regulatory Authority and many more are in the process of being certified – by using the Local Organic Assurance System.

- The present government has shown strong political will in investing Nu 1 billion for promoting organic agriculture in its 12th Five Year Plan. The time and environment is just right for promoting organic agriculture, as 95 percent of the farmers still use natural farming techniques, with limited use of chemicals.
- The country has a strong conservation policy; it has seen an increase in market demand for organic products; there is increased recognition of the need for safe and nutritious food and to adapt to the impacts of climate change.
- Through the Organic Flagship Programme, Bhutan aims to allot 40,000 acres to organic agriculture and generate exports valued at Nu 500 million.
- This symposium is timely and relevant, especially in light of His Majesty the King's message regarding economic development, youth engagement, and enterprise development in his national address.

Eklabya Sharma, Deputy Director General, ICIMOD

Sharma provided an overview of organic agriculture development in the HKH. The key points of his speech were as follows:

- Organic agriculture in the HKH can create economic opportunities for youths. In this regard, everyone can learn from Sikkim, India.
- The HKH needs a regional vision of organic agriculture that can help reduce poverty, address social vulnerabilities and enhance ecosystem services.
- Focusing on four key strategies can help achieve that vision: generate evidence to enable decision makers to respond to complex risks and challenges; design solutions for inclusive and sustainable investment in safety nets and future-fit enterprises, and promote nature-based products; strengthen capabilities of communities and institutions to implement and scale up mountain solutions; and promote inclusive investment and digital marketing.

- Organic agriculture could be one of the pillars for Gross National Happiness.
- The HKH needs regional-level technology guidelines for developing organic standards.

Lyonpo Yeshey Penjor, Minister, Ministry of Agriculture and Forests, Chief Guest of the symposium

Penjor outlined the following in his speech:

- Bhutan is honoured to host this important symposium. Bhutan is committed to organic agriculture, and the Constitution itself enshrines values that ensure ecologically balanced farming systems that benefit people's health, the environment, and the economy.
- Bhutan, a champion of environmental conservation, is a mountainous country prone to environmental degradation. Reducing use of chemicals to protect the environment also makes economic sense, in that it can ensure food and nutrition security for the people. Organic food is critical for minimizing health risks and reducing health care costs.
- The country should start focusing on niche markets for products that fetch higher prices so that farmers can earn more. The government has taken the responsibility for creating an enabling environment; the youth and private sector must use this opportunity, by getting involved in public-private partnerships. There will obviously be challenges, so the role of ICIMOD and other well-wishers is critical, especially relating to technical inputs, capacity building, and knowledge sharing. This requires regional and bilateral collaboration.

Kesang Tshomo, Programme Manager, NOFP

Tshomo delivered the vote of thanks. The key points of her speech are as follows:

- Thanks to each and every one involved in the symposium for their time and commitment.
- Special thanks to Lyonpo Yeshey Penjor, Minister of Agriculture and Forests, and Chief Guest of this symposium, for his time and for gracing the inaugural session.

Workshop sessions

The following section provides a summary of one technical session (Session 2, in the plenary format); four parallel sessions (Session 3A, 3B, 4A and 4B); presentations and discussions; and the closing session on the way forward.

Session 2. Organic agriculture: Current knowledge and trends (plenary presentation)

Session chair: Dasho Rinzin Dorji, Secretary, Ministry of Agriculture and Forests

Co-chair: Eklabya Sharma, Deputy Director General, ICIMOD

Host: Laurie Vasily, Head of Knowledge Management and Communication, ICIMOD

Background

In recent years, the organic sector has grown substantially throughout the HKH region and beyond. In the HKH countries, there is increasing policy support for organic agriculture. But despite the growing demand in both national and international markets for the region's organic products, the promotion of organic agriculture in the HKH faces numerous challenges, owing to inadequate awareness and marketing mechanisms for organic products, technical and financial services, quality inputs, and policy support. It is therefore important to understand the state of current knowledge, skills and practices, and trends in organic agriculture in the region.

Presentations

After the host introduced them, the speakers delivered their presentations.

PRESENTATION 1: ORGANIC AGRICULTURE IN BHUTAN

Kesang Tshomo, Bhutan

Key points

- Since early 2000, there have been many developments that led to the National Organic Flagship Programme under the current 12th Five Year Plan. Although organic agriculture in Bhutan still faces some challenges, there is much to look forward to. The National Organic Flagship Programme should create

opportunities to improve organic agriculture with better inputs, infrastructure, and capacity building.

- Some of the challenges include – lack of labs and qualified technicians, insufficient bio-products/inputs, labour shortages, lack of high-quality organic seeds, and so on. This symposium should provide Bhutan with a pool of experts and help establish a network of a wide range of stakeholders in the organic-promotion chain. It is not possible to promote organic farming in the absence of technical support and without the capacity to support the farmers in the entire value chain.

PRESENTATION 2: OVERVIEW OF THE GLOBAL ORGANIC MOVEMENT: OPPORTUNITIES AND CHALLENGES

Andre Leu, Australia

Key points

- While the overall land area under organic agriculture continues to increase, climate change is negatively affecting food security and making mountain areas more vulnerable.
- Organic agriculture has been found to be regenerative, resulting in increased soil organic matter and more efficient water retention capacity. According to researchers, organic agriculture ultimately generates higher yield.
- The global organic market is growing faster than all other agricultural product markets. It is now worth more than USD 100 billion. A total of 112 million hectares of land have been certified for organic produce, and that is increasing annually.
- The organic sector needs more farmers to produce the large number of products needed by various markets.
- A combination of higher prices and yields will ensure the wellbeing of farming communities and incomes for countries that rely on agricultural sales such as countries in the HKH region.

PRESENTATION 3: THE ORGANIC AGRICULTURE MOVEMENT IN INDIA AND THE CURRENT STATUS OF ORGANIC AGRICULTURE IN SIKKIM

Ghanshyam Sharma, TMI, Sikkim, India

Key points

- Sikkim Organic Mission: when and how it started – challenges, gaps, strategies, preparation to go organic and the action areas that needed intervention for going organic.
- Sikkim's organic movement supports sustainable farming, production, and consumption of nutritious food, value addition, value chain development, marketing, social and business enterprise and niche-product development.
- It also supports traditional food production systems; innovations in niche, high-value crops and natural product development; and promotes innovations in institutional mechanisms, including marketing.
- The government of Sikkim intends to mainstream and position organic agriculture as one of the main solutions to the tremendous challenges of sustainable mountain development and globalization, and as a way to adapt to the effects of climate change faced by the region.

PRESENTATION 4: CREATING ENTREPRENEURSHIP OPPORTUNITIES FOR TRADITIONAL CROPS IN NEPAL THROUGH AN ORGANIC MISSION PROGRAMME

Sabnam Shivakoti, Nepal

Key points

- Highlights of the Government of Nepal's organic mission programme, with a focus on conservation and promotion of traditional/native crops.
- Organic farming provides growing opportunities as it requires fewer external inputs and can be classified as resilient agriculture.
- The programme seeks to support stakeholders who provide inputs for organic agriculture, including producers of good quality fertilizers, seeds, and biological and botanical pesticides.

- The programme focuses on developing and strengthening value chains for commercial organic agriculture and traditional crops.
- The government has started implementing its "Guidelines on Organic Agriculture Promotion Mission Programme 2018." It has already implemented its first-year interventions through the federal department, in coordination with the Agricultural Knowledge Centres under the provincial agricultural ministries. To facilitate smooth implementation, the government is providing support for production and marketing activities, including for subsidies on seeds, post-harvest machinery, processing, and marketing.
- Despite the above initiatives, organic production (including traditional crops) and marketing is largely unorganized and scattered. There is no dedicated institutional setup and mechanism to support and coordinate the organic sector at the government level. Nepal needs to work on these constraints in order to promote organic agriculture in the country.

PRESENTATION 5: ORGANIC AGRICULTURE AND FOOD SECURITY OF SMALLHOLDER FARMERS IN NORTH THAILAND

Budsara Limnirankul, Thailand

Key points

- Presentation based on work done with small-scale farmers in Northern Thailand.
- Farms have been converted into pesticide-free farms using the farmers' field-school approach.
- The findings suggest that participatory processes help raise farmers' awareness on various dimensions of food security.
- Access to food and food stability criteria were ranked higher than that of food availability and food quality; access to farming land and stability of household income are key determinants of household food security in the highlands.

PRESENTATION 6: LINKING BHUTANESE FARM PRODUCE TO MARKET

Kesang Choedon and Yeshey Choden, Bhutan

Key points

- Chuniding Food's mission is to preserve Bhutan's traditional foods while also being innovative.
- The enterprise has progressed from producing 14 products to 120 products till date.
- They focus on producing wellness food and sharing benefits with the main producers (farmers).
- They focus on the revival, preservation, and innovation of traditional foods, by encouraging local and organic food production practices that also create employment opportunities, particularly for rural women.
- The major challenges faced by the company pertain to logistical and post-harvest issues.

Following the presentations, the floor was opened for discussion. Afterwards the chair and co-chair summarized the discussion.

Tenzin Dendup (ICTD, MoAF) briefed the floor on the communication plan for the symposium through social media platforms such as Facebook and Twitter.

Marketplace

A marketplace showcasing organic products was inaugurated jointly by Dasho Rinzin Dorji, Secretary, MoAF, Bhutan, and Eklabya Sharma, DDG, ICIMOD. A total of 12 stalls were set up to showcase products from Bhutan, India, Nepal and Thailand. All the participants visited the stalls and interacted with entrepreneurs from the region. Many participants said that the marketplace provided them a wonderful opportunity to explore local organic products and to discuss marketing opportunities and challenges.

KEY MESSAGES FROM SESSION 2

- Focus on high-value low-volume products while also pursuing holistic farming systems.
- Need to expand the market for organic agriculture and bring back youths to farms.
- Use holistic approaches to tackle challenges – for example, with policy that supports organic agriculture.
- Focus on mountain production, enterprise development, ecotourism, and seed enterprises.
- With the success of the farmer-field schools, farmers seem prepared to cope with the changes while also being agents of change.
- Food for wellness is very critical, and the focus should be on both profit and social enterprise development in a sustainable manner. Farmers should be paid for their role in ecological and environmental conservation.

Parallel session I

Session 3A: Transitioning to organic agriculture – solutions, technologies, and practices

Background

Climate change and other environmental and socioeconomic changes are bringing new risks and uncertainties for communities in the HKH. These changes not only increase their vulnerabilities but also affect biodiversity and ecosystem services, with severe consequences for downstream communities who depend on these services. Organic agriculture can be one of the strategies to reduce the vulnerability and build the resilience of mountain communities in the HKH. However, affordable solutions, including technologies, practices, and approaches in the organic sector, are limited. In particular, vital inputs such as bio-fertilizers and bio-pesticides are either not accessible or are expensive.

In this regard, this session brought together experts from the HKH region and beyond to share their knowledge and experiences and identify workable solutions. The session aimed to contribute towards resolving the identified challenges and harnessing opportunities that will support HKH countries in transitioning to organic agriculture.

Session moderators

Session 3A was moderated by Tayan R Gurung, Advisor/Specialist, Department of Agriculture, MoAF, and co-moderated by Sanjeev Bhuchar, Senior Watershed Specialist, ICIMOD.

Presentations

The session had a total of eight speakers, including three speakers for the Power Talk segment. Key points from their presentations are provided in the table below.

SN	Speaker(s)	Presentation(s)
1.	MC Manna, India	Sustaining soil health: Management approach and its relevance to organic agriculture Presentation focused on soil health, soil quality and stability, and its sustainability. It's important to note the differences in yield obtained with the use of inorganic fertilizer and the use of organic fertilizer. The former increases the yield and the latter results in reduced yield. Others topics of interest are bio-waste management through organic agriculture and policy options relevant to the promotion of organic agriculture, among others.
2	Mahbuba Jahan, Bangladesh	Non-chemical based vegetable production systems Currently, over 200 insecticides are registered in Bangladesh as people look for easy options to combat pests in their fields. But the trend of pesticide use is gradually decreasing due to people's awareness about their drawbacks.
3.	Keshab Dutta Joshi, Nepal	Mobilizing communities for organic agriculture How organic agriculture can be promoted by involving community members as key actors right from the planning phase and linking them with authorized entities to ensure sustainability.
4	Madhuban Gopal, India	Pesticide residue in food systems in South Asia: Role of organic agriculture The large population of South Asia, estimated to be 8.5 billion by 2030, could lead to stagnation or decrease of land for food production. The only option is to minimize losses due to pests. Overview of steps towards fixing the MRL and also the QuEChErs method: new technology to assess residual pesticide levels.

5.	Karma Dema Dorji, Bhutan	<p>Sustainable land management: A basis for organic agriculture</p> <p>Organic farming & SLM are inseparable. SLM improves soil fertility, and causes minimal soil disturbance while conserving water.</p> <p>The status of sustainable land management in Bhutan, which is as follows:</p> <p>17.3% contribution to GDP</p> <p>>30% agricultural land are slopes as steep as 50% or more</p> <p>Use of marginal land with poor management practices</p> <p>Land degradation</p> <p>Availability of 11 SLM technologies</p>
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Power Talk

SN	Speakers	Key message from the power talk
6	Sundeeep Kamath, India	<p>Biodynamic agriculture</p> <p>Organic plus, focusing on spiritual regenerative agriculture</p> <p>Biodynamic label provides for premium price based on mutual benefits</p> <p>Keep the value of the product in the country</p> <p>Associative marketing: building relationships with buyers</p>
7	Soe Win, Myanmar	<p>Genetic resources management</p> <p>Choose naturally grown, traditional crops, rather than categorized crops</p> <p>Re-localize the production system</p> <p>Profile smallholder farmers and maintain a data system</p>
8	Sushil Ghimire, Nepal	<p>Participatory Guarantee System</p> <p>Lack of machinery for linking buyers and suppliers</p> <p>Digitalize the PGS; this should be led by the private sector</p> <p>Establish and link with the global PGS network</p>

Group work

Following the presentations, participants broke into three groups that discussed three broad topics:

What are the constraints in transitioning?

What are the resilient solutions for transitioning?

What should be the strategy for upscaling resilient solutions?

Key messages from group work

Key constraints: The groups categorized the key constraints under four headings: knowledge, governance, economy, and actors.

Knowledge

Inadequate technical know-how for managing pests and soil fertility, sustainable land management

Many solutions are plains-focused and not appropriate to the mountain context

Limited access to robust data and database on organic agriculture

Lack of research and action research capacities (gender-based)

Low extension capacities for supporting the transitioning phase

Governance

Lack of sustainable land-use/management policies

Some existing policies encourage indiscriminate use of chemical inputs (fertilizers, pesticides, herbicides)

Economy

Poor access to market (forward-backward linkages)

Lack of certification schemes and high cost of certification

Lack of pricing control (at different nodes)

Limited skills on brand positioning and marketing

Labour shortages (on-farm)

Inadequate farm implements, machinery (not women-friendly)

Small landholdings: difficult for scaling out

Actors

Limited consultations and coordination among stakeholders

Lack of national and regional forums for knowledge exchange

Resilient solutions

BASKET OF SOLUTIONS: NATURE-BASED AND GENDER-RESPONSIVE

On-farm biomass management; IPM; bio-waste management; sustainable land management; composting

Nutrient management based on soil index

Associative or collective dealing

Digitalization of data

Bio-dynamics

Traditional farming systems (technologies, institutions)

NEW SOLUTIONS FOR THE LONG RUN

Prioritization of areas for organic agriculture

Resistant seeds and breeds

Market networks

Institutionalization and certification

Moving beyond mono-cropping (intercropping, crop rotation, leverage rich agro-ecology)

Develop learning hubs (community-based and on-station)

Establish autonomous Bhutan organic associations (professional management supported by the government)

Strategies for scaling up

KNOWLEDGE

Need to profile mountain products

Raise awareness about the attributes of mountain products

Understand the landscape and formulate appropriate strategies

GOVERNANCE

Strengthen institutions, including farmers' groups; establish cooperatives; strengthen public-private partnerships

Provide access to finance; PGS networks; set up regional standards, including maximum residue limits

Strengthen policies, regulatory frameworks, and guidelines. These include policies pertaining to investment, inputs, and service provision, including incentives for organic seeds and fertilizers

ECONOMY

Increase bio inputs through improved crop-livestock systems (feed, fodder, forests)

Provide subsidies for the industry/individuals/ women groups to produce bio-pesticides locally

ACTORS

Mobilize, motivate, and ensure participation of local communities

Ensure long-term commitment, cooperation, and coordination (government, NGOs, civil society, private sector, academia)

Session 3B: Gender equality and social inclusion in organic agriculture

Moderator: Suman Bisht, ICIMOD

Background

As a production system, organic agriculture not only involves low start-up and production cost but also sustains the health of soils, ecosystems, and people. It relies on processes adapted to local conditions, rather than the use of inputs that can have adverse effects. It builds on traditional knowledge that women have of agro-ecologies to promote sustainable farming practices. As a result, organic agriculture is less risky, more affordable, and accessible to women. However, the revolutionary potential of organic agriculture to reshape food systems and empower women can be compromised if gender issues are not given adequate attention.

Adequate research training and funding opportunities are necessary to encourage participation of women. This session was dedicated to understanding not just the role that organic farming can play in empowering women but also how women's participation can broaden the scope of organic farming.

Key points from the introduction by moderator Suman Bisht

Gender equality and social inclusion are important for organic agriculture.

Globally about 50% of women are engaged in agriculture as labourers/workers in the field. This results from women's lack of land ownership and lack of social support.

In this regard, organic agriculture provides opportunities to create gender equality.

SN	Speaker(s)	Topic/discussion
1	Nazmul Chowdhury, Bangladesh	<p>Living with disasters and coping with technologies: A climate smart innovation to transform agriculture to an agribusiness system led by women and youth in the HKH region</p> <p>The presentation focused on examples of climate-smart innovations that have transformed barren flood-prone riverbeds into farming-based agribusiness systems led by women and youth in Bangladesh.</p> <p>The programme used disaster- and sand-casting to transform land access by identifying transitional riverbed land and negotiating access to such land. Farmers from marginalized communities were able to harvest produce from that land in 180 days.</p> <p>The programme successfully identified crops suited for the sand bars, and developed a village-based market system to benefit the producers.</p> <p>A key approach that led to the success of this programme involved transferring technology and skills to producers; forming farmers' associations; and providing policy support for identifying and defining land for farming. The approach transformed the poor and marginalized, who were struggling to feed themselves, into exporters.</p>
2	Kinley Pelden, Bhutan	<p>Women entrepreneurship</p> <p>The presentation highlighted the challenges and opportunities for Bhutan's women farmers.</p> <p>Although women in Bhutan own land, the plots they own are often terraced lands that are small and fragmented. In this scenario, an even bigger challenge for women is the corporatization of agriculture.</p> <p>Despite land ownership, women face gender discrimination at home, society, institutionally as well in policy, which prevents them from innovating and taking up new opportunities.</p> <p>A way forward is to focus on capacity and skill development of women farmers, particularly on financial literacy, leadership, food valuation, and branding.</p> <p>They require long-term guidance, and land holding issues need to be at the forefront.</p>

SN	Speaker(s)	Topic/discussion
3	Lhap Dorji, Bhutan	<p>Youth engagement in agro-based enterprises: A way forward for upscaling organic farming in Bhutan based on experiences from eastern Bhutan</p> <p>The presentation focused on the possibilities for youth employment in agriculture through appropriate policy and programmatic support. It was based on examples from Bhutan where youth had successfully engaged in farming as an enterprise.</p> <p>While commercial farming seems to have the potential for reversing rural-urban migration, the programme was only able to attract 30% of young women as compared to 70% men.</p> <p>Some key lessons from this programme are:</p> <p>Consistent follow-up, mentoring, guidance and capacity development can encourage youth to get involved in agriculture.</p> <p>Enterprises that have short gestation periods are more attractive to the youth.</p> <p>Market-based production with assured market linkages leads to rewarding farming.</p>
4	Khaing Khaing Htwe, Myanmar	<p>Ensuring gender and social inclusion in government programmes in Myanmar</p> <p>The presentation focused on the key government initiatives in Myanmar to address gender inequality.</p> <p>The National Strategic Plan for the Advancement of Women (2013–2022) has listed 12 priority areas. The Enhancing Rural Livelihoods and Income Project (2014–2017) took the following steps to ensure women's participation:</p> <p>40% women participation in all meetings and decision-making processes;</p> <p>40% trained in livelihood-related skills, including improved crop, shrimp and fish production;</p> <p>50% women membership in village development committees;</p> <p>80% of all infrastructure projects prioritized by women to be constructed.</p> <p>All these efforts aim to reduce the gender wage gap and increase gender equality.</p>
Power Talk		
5	Judith Chase, Nepal	<p>Congregating the community for going organic</p> <p>She started with a kitchen garden and gradually moved onto training women in the community on bio-intensive farming.</p> <p>Today the number of women has increased and they have also started to make earnings from growing vegetables.</p> <p>Her initiative has changed the lives of many women in Nepal and they are now earning more than they used to.</p>
6	Kesang Om, Bhutan	<p>Becoming a successful woman entrepreneur</p> <p>She is the founder and owner of the Institute for Learning Solutions. She has overcome lots of hurdles and social barriers to become an entrepreneur.</p> <p>She has provided training to people in the education sector and health sector to develop their capacity, productivity, and performance.</p> <p>Key message: if you want to bring changes, the change must start from home; and in your journey, you are not alone.</p>
7	Damchoe Dem, Bhutan	<p>Building up production volume to meet the demands of startup entrepreneurs</p> <p>They are working with marginalized groups.</p> <p>Building production volume to meet startup entrepreneurs' demands.</p> <p>The BOAWE is working with farmers to produce raw materials for the startup projects.</p> <p>Producing enough volume is the main challenge entrepreneurs face today.</p> <p>We should also look at how CSOs and NGOs can effectively play a role in developing entrepreneurship for women and youth.</p>

Group work

Three groups were formed to discuss three broad topics: 'Approaches for gender and social inclusion in the organic movement'; 'Policy and institutional gaps in gender equality'; and 'Small scale and volume and market'. The key issues and solutions the groups identified were as follows:

Key message from group work

KEY CONSTRAINTS

Access to resources, knowledge, extension services

Financial literacy

Outmigration and increased workload

Gender bias

APPROACHES FOR GENDER AND SOCIAL INCLUSION IN ORGANIC AGRICULTURE

Need to identify and prioritize critical areas where women are engaged

Need for gender and social inclusion in planning processes at the grassroots level

Need to identify appropriate technologies for mechanization of agriculture

Capacity building needed for transferring skills and technology

Monitoring and evaluation needed to ensure gender and social inclusion in programmes

INSTITUTIONAL AND POLICY GAPS TO BE ADDRESSED FOR PROMOTING GENDER AND SOCIALLY INCLUSIVE ORGANIC AGRICULTURE

There is a need to develop a certification system that is consistent with international standards.

For organic enterprises involving natural products, access to natural resources needs to be flexible

There is a need to ensure financial inclusion through subsidies, credit or other incentives for women and marginalized farmers through relevant institutions.

Institutions need to provide technical support for quality check to support certification processes.

Agribusiness departments need to help farmers and others understand and assess international market demand.

SUPPORTING SCALING UP OF VOLUME FOR COMMERCIAL GAIN

Generate knowledge through market research and forecasting around market-based products and product-based markets.

Develop aggregation strategies to counter scattered production.

Identify appropriate technology to support organic agriculture. Focus on household-based technology that is women-friendly.

Parallel session II

Session 4A: Scaling organic businesses: Opportunities and challenges

Background

The increasing demand for ‘safe for consumption’ food as well as for ‘processed high-value mountain products’ provides a strong basis for expanding agricultural and non-farm production in the HKH. There is strong potential for positioning, with little investment, mountain products as ‘organic’, since traditional mountain farming systems rely on nature-based solutions and a few external inputs. However, mountain communities have not been able to adequately harness the tremendous opportunities on offer, and the main challenge pertains to increasing mountain communities’ capacity to meet the expectations of market systems and to cope with changing realities. Competition in the organic farming sector is increasing owing to the rapid growth of digital communication, increased mobility, and global market integration. This has created the need for improved access of mountain communities to viable business solutions.

During this session, participants discussed possibilities with regard to business solutions for organic and niche products in the HKH, and

explored how such solutions can be scaled up to enable the sustainable development of mountain areas.

SESSION MODERATORS

The session was moderated by Surendra Joshi and co-moderated by Phub Dem and Nand Kishor Agrawal. Surendra Joshi’s introduction for the session:

- The main focus of this session should be harnessing opportunities for organic business.
- Farming systems in the HKH are close to becoming organic, but the challenge is to create a market for products and to develop value chains.

PRESENTATIONS

In this session, four power talks (3 min each) and five presentations (10 min each) were conducted, followed by discussions. The session was moderated by Phub Dem.

S No.	Speaker(s)	Power talk (key messages)
1	Samir Newa, Nepal	<p>Export market for organic products</p> <p>He talked about the Himalayan region’s potential for exporting organic products (herbs and spices) to European countries.</p> <p>The demand for organic products from our region is higher than the supply. We are able to meet only 40% of the demand.</p> <p>His company works with Organic Valley Pvt Ltd., which has links to the Organic Village in the Netherlands.</p> <p>The company is working with 1,700 farmers in Nepal; 70% are women.</p> <p>The company has exported 26 tonnes of sliced organic ginger to Germany.</p> <p>Three challenges they have faced: (i) complex certification process, (ii) financial illiteracy, especially among women and marginalized groups, and (iii) meeting EU standards.</p> <p>Having banks as one of the main value chain actors is very important.</p>

S No.	Speaker(s)	Power talk (key messages)
2	Samita Kapali, Green Growth, Nepal	<p>Green Growth's challenges and achievements</p> <p>Finding markets and consumers was one of the greatest challenges for mountain farmers.</p> <p>Green Growth has established links with mountain farmers and launched “Weekly Baskets” of products. The company uses social media and their website for marketing products. They also have outlets at the Kathmandu <i>Haat</i>. Due to certification issues, the Green Growth group labels their products as ‘safe products’ rather than ‘organic’.</p> <p>Green Growth Travel promotes eco-tourism. They are collaborating with 25 enterprising farmers and offer “Farm Stay” packages, which include agriculture tourism. This allows visitors to observe how safe produce are grown and provides them opportunities to interact with expert farmers.</p> <p>They have also started the Nepal Arc Village in Kathmandu and their business principles include having a circular economy and sustainable environment.</p> <p>Digital connectivity has a big role in connecting farms to markets.</p>
3	Pema Choden Gyeltshen, Bhutan	<p>Overview of Kingdom Essence</p> <p>Kingdom Essence is still a developing success story.</p> <p>Results have been promising owing to the combined efforts of His Majesty the King of Bhutan, the Ministry of Agriculture and Forest (Government of Bhutan), farmers, and ICIMOD.</p> <p>Kingdom Essence operates organic farms that grow medicinal and aromatic plants and integrates conservation of community forests. Their working principles include using local resources, building trustworthiness, and employing ethical practices. The value chains they develop take a wholesome ecosystems approach.</p> <p>Main goal: provide holistic service to aid nation building.</p>
4	Sachin Sahni, India	<p>Overview of KEEROS</p> <p>The company started operations about two years ago. They worked hard to develop tasty and healthy super snacks targeting people with diabetes.</p> <p>India has a huge number of people with diabetes, but most of them lack healthy food options. Products available in the market are pricy and not tasty. KEEROS took advantage of this gap and introduced tailor-made branded products with the aid of experts, including dieticians.</p> <p>They are now selling their products through Amazon. The company is expanding its production capacity and is connected to more than 10 e-commerce platforms. Their products are already on best-seller lists. In addition, products are sold through vending booths and promotions at major festivals.</p> <p>KEEROS aims to be an Indian multinational for healthy and super foods, particularly for people with diabetes.</p>

S No.	Speaker(s)	Power talk (key messages)
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Presentations

5	Mahesh Chander, India	<p>Animal husbandry, health and feed issues in organic farms</p> <p>Despite being one of the most important components of organic agriculture, animal husbandry is neglected in discussions on organic farming. He said that the demand for organic livestock products is growing globally, including in India, and consumers are looking for safer products such as high-quality meat, milk and eggs. He also identified a few challenges related to organic animal husbandry in the Himalayan context, such as managing complex livestock-cropping systems sustainably, maintaining high yielding exotic breeds due to their low adaptability to local conditions and high feed and fodder requirements compared to the local breeds. In addition, organic animal husbandry demands welfare of animals, proper housing, free grazing, etc. While the demand for organic animal products is increasing, the supply remains low. Farmers should prepare themselves to take advantage of this demand and supply gap. He gave an example of a farmer in Uttarakhand (India) who had sold ghee (processed milk) from local cow at a high price with the narrative that the ghee had numerous health benefits, particularly for diabetes patients. There are also certified chickens coming in the market. India already has standards for livestock that are consistent with standards of international markets.</p>
6	R. Bhubesh Kumar, India	<p>Agri-tech startup for organic products</p> <p>There are simple and affordable solutions to many of the challenges and problems that organic entrepreneurs confront.</p> <p>We can work on strengthening research-technology-innovation links with several good solutions related to soil, water, and land management, crop management, waste management, developing farmers into organic seed entrepreneurs, bio-inputs, documentation and traceability systems, marketing facilities including online platforms, nutrition rich foods, value chain incubation models and satellite centres in rural areas.</p> <p>One of the mantras for effective entrepreneurship is the provision of “right service at the right time.” This idea worked for a banana bio-briquette machine designed for farmers based on their needs.</p>
7	Salina Gan, Malaysia	<p>Developing the market for organic products</p> <p>Success of marketing defines the success of entrepreneurship. Mindset and passion are extremely important for success, and the youth should not assume they will get rich overnight. Entrepreneurs should get their hands dirty, have a strong desire for continuous learning, be prepared for multitasking and hard work.</p> <p>It is important to have a road map and good business plan. Branding is very important.</p> <p>Entrepreneurs need to ensure that their products are acceptable globally and for that they need to understand demographics and purchasing power of consumers. Different cultures consume differently; therefore, their needs are also different.</p> <p>There is also stiff market competition, for example, 12 countries want to sell organic turmeric. It is therefore crucial that value-added products are developed to reduce logistics costs.</p> <p>Entrepreneurs must be vigilant and watch out for competitors for their products.</p> <p>Entrepreneurs of organic products need to continually develop new products.</p> <p>Their project OPIKA aims to expand to 18 countries for marketing local organic products.</p>

S No.	Speaker(s)	Power talk (key messages)
8	Pankaj Prasaf Raturi, Nepal	<p>Engaging farmers for high-value crops (medicinal plants)</p> <p>Mountains, especially the Himalayas, are a storehouse of medicinal and aromatic plants.</p> <p>Their company, Dabur, for example, markets about 500 products with an annual turnover of USD 1.6 billion.</p> <p>Dabur has state-of-the-art bioresearch development centres with 200 scientists, and plant tissue culture laboratories for medicinal and aromatic plants along with other research and development facilities.</p> <p>Dabur also established satellite nurseries for producing good quality planting materials. The company uses a contract-farming approach and provides all technical support to farmers, with a focus on mixed cropping systems and agroforestry. They also build farmers' capacity to use post-harvest technologies and upscale their products such as Hajmola, organic honey, Chawanprash, etc.</p> <p>The company now creates products from rainfed crops (e.g., saffron) and promotes youth engagement.</p> <p>Their business approach includes “Bush to Brand” and “Move from Bottom” principles.</p> <p>The Dabur model could be explored and assessed in Bhutan too.</p>
9	Thinley Namgay, Bhutan	<p>A Bhutanese entrepreneur's experiences of fundraising for organic business development</p> <p>Thinley is associated with Druk Metho, a food business established in 2018.</p> <p>They have tried to address the issue of outmigration of rural communities to cities due to lack of marketing and limited modern knowledge. Druk Metho is currently working with rural households and women farmer groups for production and marketing of organic products.</p> <p>They are partnering with Swiss Alpine Herbs and working towards meeting EU standards. At the moment they focus on organic herbs and flowers with local organic certification and support from Agriculture Research and Development centres in Bajo and Yusipang (Bhutan). Their business model is farmer-centric and currently seven products are exported to Switzerland.</p> <p>The company's business approach is very inclusive as they share 60% of the earnings after cost deduction with farmers of which about 20% is put into farm reserve funds.</p> <p>Druk Metho is trying to raise funds through online platforms by sharing stories. They are partnering with HELVETAS (Swiss INGO) and some of their staff have visited Switzerland for cross-learning and to meet stakeholders.</p> <p>The company is still in its early stage, but has seen very encouraging outcomes. It offers an excellent model for working with communities, producing safe and eco-friendly foods, and ensuring fair distribution of profits.</p>

The first part of the session before tea break ended with a Q&A session. There was one question addressed to Mahesh Chander, on how their research and expertise could be expanded in Bhutan and other parts of India. To this, he replied that the road map prepared for Sikkim, India can be useful for Bhutan and other countries.

From the power talks, presentations and discussions, the moderators and rapporteurs distilled the key messages, which were shared in the plenary by R. Bhupesh and Nand Kishor Agrawal after tea break. The key messages for scaling organic business were as follows:

Opportunities and challenges

There is high demand (domestic and internationally) for organic products (livestock, healthy foods, processed goods) but limited production and supply.

Having a certification system in place is not enough. Even if there is such a system, women and marginalized groups are likely to have difficulty understanding the system.

Farmers face difficulties accessing markets and market information.

There are different competitors.

There is a lack of healthy snacks, despite increasing awareness about health and safe food.

Branding, packaging, labelling (also internally acceptable/halal) are very important.

Crop-livestock systems are complex. There is need for more inputs (feed, fodder, animal welfare related issues).

Existing food production systems should meet new requirements (quality, climate, nutrition, etc.).

Countries in our part of the world should have their own products (with branding) and not always import from the West.

Technology-related issues (soil testing, soil water management, bio inputs, removal of stones from soil, seed availability, bio-waste management, plastics, etc.).

Low capacity of farmers and young entrepreneurs.

Inadequate research and innovations.

Not enough nurseries with good quality plant materials.

Limited landholding capacities in the HKH.

Funds needed for initiating and developing organic businesses.

Need to expand research and transfer expertise from one country to another, one state to another.

The way forward

Create adaptive business models

Technology adoption

IT enabled services to farmers

Market platforms (digital and community based)

Participatory businesses

Price discovery and branding

Market infrastructure

Incubation services

Quality management tools

Policy interventions

Social entrepreneurship

Advocacy to government on policies

Market integration (between the markets)

Best practices

Passion

Trust

Total solutions

Long-term vision

Persistence

Adaptability

Use of local resources and market

Profit sharing – social entrepreneurship

Group work

After the presentation of key messages, Nand Kishor Agrawal introduced the group work. The main objective of the group work was to harness participants' knowledge and come up with recommendations for scaling organic businesses. The participants worked in groups to discuss the following:

- What are some innovative (and tested) business solutions (What we already have)? (New solutions)
- How can mountain farmers be best supported in accessing inputs, services, and markets for their niche products? (Access)
- How can the flow of investment be improved? How to incentivize the value chain (policy angle)? (Doable solutions)

After about 45 minutes of discussion in three groups (with each group tackling one question), the key points from the group discussions were shared in the plenary:

GROUP 1: INNOVATIVE SOLUTIONS

Financial support for renewable energy technologies to farmers

Foster public-private partnership

Provide soft loans for value chains

Access to crop insurance

Support farmers to access markets (link to supermarkets)

Share the story behind products

Access to technologies

Dissemination of market information

Every community to have own guideline posters

Develop standard operation procedures

Offer farm-stay packages

Maintenance of operation records by farmers

Train farmers on organic methods

Utilize digital pay systems

Engage social entrepreneurs as partners

GROUP 2: ACCESS

Identify institutions to find niche markets

Need for research on crops, etc.

Contract farming systems

Technology access and capacity building

Extension service providers

Bio-inputs for farmers

Support startup ideas through finance and incubation facilities

Agro-techniques for niche organic products

Digital platforms (entrepreneur-farmers connect; reduce middle agents).

GROUP 3: POLICY

Improve farmers' access to credit (important for more innovations)

Coordination in order to know who is doing what

Simplify land tenure procedures

Access to micro-insurance and resources for innovation

Proper coordination among different projects and programmes

Awareness raising on existing policies

Nand Kishor Agrawal thanked all the presenters and participants and wrapped up the session with the following remarks:

Doing organic business is possible at all scales – from small with 21 households to large with over a million dollar turnover.

If there are problems, there are also solutions.

Money-making should go hand in hand with fair profit sharing. Druk Metho shows this and such a model will inspire any investor.

Entrepreneurship is a process.

Session 4B: Institutional mechanisms for promotion and certification

Institutions set the rules of the game, and while designing institutional mechanisms, we need to keep the following things in mind:

- Formal vs informal: While developing an institutional framework for the HKH region, we need to keep in mind its formal as well as informal aspects. Informal practices are rooted in traditional systems. They derive their legitimacy from traditional norms and are therefore equally important, and formal systems should ideally build on these informal systems.
- While designing the institutional frame, we need to think in holistic terms. The key links that emerge from organic farming, like the cross-sector aspects (health, environmental benefits, etc.), need to be kept in mind. Organic farming touches upon multiple dimensions of our wellbeing. When we think of cross-sectoral dimensions, there will be tradeoffs—for example, while thinking of economic scale, one will have to think of issues of inclusion of marginal farmers, but there will be synergies as well. While thinking of holistic approaches, we need to think of cross-sectoral benefits; and the resulting tradeoffs and synergies need to be kept in mind too.
- Organic agriculture has inherent value (organic farming is important in itself), but it also has instrumental value – sometimes it could be a means of achieving other goals, such as addressing climate change, bringing marginal farmers into the mainstream, or improving health. Regional collaboration is important while setting national priorities.

S No.	Speaker(s)	Presentations(s)
1	Sabyasachi Roy, India	<p>‘The National Dairy Development Board’s approach to organic dairy production, diversification, and market’</p> <p>The presentation started with a brief introduction of the NDDB. The cooperative structure is modeled on the Anand Pattern. In this model, the farmers sell milk to the village cooperatives. The cooperatives are federated at the district level. The main objective of the NDDB is to create market linkages.</p> <p>The Sundarban experience: 34% of the population live below the poverty line; 33% belong to backward classes; there are limited employment opportunities. Therefore the rate of migration is high. A cooperative started in 1997 but closed down in 2014. An all-women cooperative started in 2015; members were required to have a bank account and payment was sent to their account. Every litre of milk was tested, and payment was based on the quality of milk. Use of plastic was prohibited in the value chain. It adopted an organic model for sustainability. The farmers were already practicing vermicomposting; fodder was made a compulsory component. Mustard was promoted; azolla feeding was encouraged. Biogas from cow dung was promoted, followed by diversification: honey, ghee, poultry, and an indigenous variety of rice. Marketing was done professionally and products were advertised on social media. Training and capacity building was a key component.</p>
2	Ong Kung Wai, Malaysia	<p>The organic certification experience from Malaysia, and options for Asia</p> <p>The presentation highlighted experiences from Malaysia and options for Asia.</p> <p>Highlights from the Malaysian Public Sector Organic Milestones: The process started as a voluntary one in 2001, but by 2018 certification was extended from organic production of crops to chicken to food processing. The regulation is very simple, but currently it is only applicable to primary production, i.e., plant food.</p> <p>How to facilitate export certification: export certification in collaboration with certification alliance members and partners (including seven ASEAN member countries; one application, one inspection; dual certification: national and IFOAM)</p> <p>Regarding imports: recognition of prior organic certification by peer countries.</p> <p>What about promotion of expensive food?</p> <p>The certification system is generally built for the minority (as only a few farmers are engaged in truly organic agriculture) and not for the majority. Bhutan is the only country that is thinking of going 100% organic, and so they are thinking of certification for the majority.</p>
3	Steven Arquitt, USA	<p>‘Assessment of long-term impacts of policy decisions, system dynamics’</p> <p>The presentation focused on the systems dynamics methodology/model developed by the Millennium Institute to support strategic planning.</p> <p>Provides evidence base for policy design. The model is driven by feedback loops. It can be used for supply chain management, etc.</p> <p>Presentation of various models for developing policies on organic agriculture and simulations from different case studies conducted by the Millennium Institute, including a Bhutan case.</p>

S No.	Speaker(s)	Presentations(s)
4	Kailash Pradhan, Bhutan	<p>‘Bhutan’s Organic Guarantee System’</p> <p>The presentation explained Bhutan’s Organic Guarantee System (BOGS) document, which is the basis for recognizing organic standards and used by conformity assessment bodies in Bhutan for accessing the Bhutan Organic Certification mark.</p> <p>The National Organic Programme, under the Department of Agriculture, Ministry of Agriculture and Forests, is responsible for managing the Bhutan Organic Mark. Three conformity-assessment bodies have been identified under this scheme, along with the specific roles they play in organic certification in Bhutan.</p> <ul style="list-style-type: none"> • The Local Organic Assurance System is the certification conducted by extension supervisors in accordance with a set of requirements developed by the National Organic Programme in compliance with the Bhutan Organic Standard. The certification decision is taken by a committee established within the National Organic Programme. • The Participatory Guarantee System (PGS) is a peer-reviewed certification system based on social networking, trust, and active participation of the producer groups. Currently, due to inadequate capacity of farmers in Bhutan, the PGS could not be implemented. • The Third Party Certification System is a certification system where independent private or public bodies get involved in the certification of organic products. As farmers in Bhutan lack capacity and there is no competition, for now the Bhutan Agriculture and Food Regulatory Authority (BAFRA) has been designated as the TPC conformity-assessment body.

Power talk

SN	Speakers	Key messages
5	Maheshwor Ghimire, Nepal	<p>The world of organic farming is highly regulated and not recognized. We have too many systems and too many standards, and if you mix two products with different standards, the final product is deemed non-organic.</p> <p>When we talk about organic, we get stuck at the level of chemicals and pesticides or technology. But organic is about environmental protection. There is confusion about what is organic. The products are lab tested for even tiny amounts of chemicals, and any trace of chemical means the product is dismissed, and the farmer can’t do anything about it, even if the farmer is not at fault. A farmer might be engaging in chemical-free farming, but if their neighbour is using chemicals, the farmer gets punished for it.</p>
6	Vitton R Panyakool, Thailand	<p>Certification and extension are one and cannot be separated. The two are interlinked. Extension and certification need to be integrated in whatever system is developed.</p> <p>Organic agriculture is market driven. At the end it is the consumer who decides. If the consumer is happy then certification, etc. doesn’t matter.</p>

This session was moderated by Arbindra Mishra and Tayan R Gurung. Altogether, the experts conducted two Power Talk sessions and gave four subject presentations. The Power Talk speakers were given three minutes each, and the key presenters were given ten minutes each for their presentation. These were followed by discussions and group work.

The key messages from the presentations and Power Talk are summarized in the following table.

Group work presentations

Group 1: Existing institutional mechanisms at the national level

BHUTAN

Ministry as the regulatory body; list of agencies
Ministry as the regulatory body; list of agencies under organic agriculture; legal tools available; international collaboration.

NEPAL

The standards: voluntary; acceptance: mandatory; diversity: representation from different line agencies; inclusiveness: as per representatives; rigidity: working guidelines only; legitimacy: federal as well as provincial.

INDIA

Diversity: Ministry of Agriculture and Commerce at the national level; there is an accreditation body; CB needs to be accredited by AB, all government service providers/NGOs/farmers. If there is good extension, certification is also smooth.

THAILAND

National/sectoral standards and international and regional standards; four certification agencies plus 10 foreign CB certification boards; no compulsory labelling.

Gaps

BHUTAN

Disintegrated stakeholders; organic regulations absent; lack of capacity and competence; lack of awareness; Bhutan has designated third party certification, but this is very expensive; duplication of mandates between standards bodies like BAFRA and the Bhutan Standards Bureau.

THAILAND

There is conflict between people's understanding and practicalities.

NEPAL

Lack of coordination between the Ministry of Agriculture and the Bureau of Standards; lack of clarity on the standards and concepts; farmers get minimal support.

INDIA

Lack of clarity among the stakeholders – bureau and the epic body (ministry); lack of bio-inputs; market issues; lack of clarity on messages (what the standard says); capacity building.

Solutions

BHUTAN

Need for proper guidelines, policies, and bylaws; need to promote marketing of organic products; the term 'organic' is loosely used and needs to have legal recognition; need to establish a recognized CB; establish value chain and marketing.

NEPAL

Clear guidelines, norms, and policies are required. There are some policies but the implementation is very weak.

INDIA

Need for clarity on the roles of different institutions in the certification process; encourage a market-driven focus on the production of bio inputs.

Group 2: Regional collaboration

There is a need for an HKH focused scheme, but this may not meet the needs of trade as it currently exists.

To accommodate that, we need to have a Regional Certification Body for international trade; we can have a regional scheme for certification for regional trade.

Regional knowledge bank: best practices, training, and capacity building; someone trained as an inspector here can be employed anywhere.

International organic trade

Conclusion

Connectivity (SHs); at the national level we need clarity (policy), consensus (institutional setup), coherence (operation), client management (inclusiveness). At the regional level, we need commonality (certification protocol).

Key messages from the parallel sessions

SESSION MODERATOR

Kamal Aryal and Lhap Dorji moderated the plenary session, where presenters highlighted the key messages from the four parallel sessions from Day 1 and Day 2. The key messages for the four broad topics of the session are summarized here:

TRANSITIONING TO ORGANIC AGRICULTURE

- Knowledge management: organic farming; mountain products.
- Control or discourage use of pesticides; encourage appropriate alternatives.
- Lack of certification schemes: need to put schemes in place.
- Mountain agriculture faces challenges of scaling up and efficient production (appropriate technologies and practices).

- Need more private sector involvement in organic farming as a key partner (inputs, services etc.).

GENDER EQUALITY AND SOCIAL INCLUSION

- Gender equality and social inclusion cannot be kept out of organic farming, and thus adequate attention needs to be given to the issue.
- Find approaches to build on traditional knowledge.
- Access to market for organic products and networking, market research, market-driven production, approaches to aggregation.
- Simplified certification process: need a common certification protocol.

SCALING ORGANIC BUSINESSES: OPPORTUNITIES AND CHALLENGES

- Organic farming needs to be up scaled as businesses.
- Approaches for marketing – e.g., weekly food basket.
- Innovate new products from organic farms for wellness, eco packaging, halal products.
- Benefits of organic farming need to be ploughed back to farmers and producers through innovative mechanisms.
- Branding.

INSTITUTIONAL MECHANISMS FOR PROMOTION AND CERTIFICATION

- 6 Cs: Connectivity, Clarity, Consensus, Coherence, Client Management, Commonality.
- For any organic product or agro-based product: Does it really have to be export oriented?

Countries throughout the HKH region have great potential for using organic farming as a means to achieve the Sustainable Development Goals.

SECTION 3

The way forward and closing

The host of the closing session was Pratigya Silwal from ICIMOD. Kesang Tshomo, Programme Manager of the National Organic Flagship Programme, presented a 10-point resolution that the symposium participants jointly came up with. The symposium resolutions were prepared by the organizing team in consultation with moderators, co-moderators, and experts from the symposium.

Symposium resolutions

1. All HKH countries have great potential for using organic farming as a means to achieve the Sustainable Development Goals. In this regard, a cross-country comparative assessment can provide the necessary evidence base to harmonize policymaking.
2. Potential economic gains from a regional organic market are yet to be assessed. A focused market assessment can catalyze the emerging culture of entrepreneurship in the region. Cross-border trade in organic products can be leveraged by policy agreements that can provide a level playing field and deeper markets.
3. An inventory of technologies, practices, and regulatory instruments can guide the regional approach to developing harmonized certification processes and quality standards, and related mechanisms. Special emphasis must be placed on building the legitimacy of a simple, inclusive, and trust-based local participatory certification system.
4. The HKH region urgently requires pooling of technical experts and agencies through knowledge networks, IT-based learning platforms, and regional capacity building programmes. A key goal of pooling would be the creation of a regional network of lead farmers and local champions to ensure bottom-up momentum for achieving organic farming goals.

5. Youth and women agri-entrepreneurs will benefit from regional knowledge hubs that can provide mentoring, incubation, and acceleration to support green and resilient enterprises.
6. Database and knowledge management is required at the national level to develop a good understanding of organic farming among producers, businesses, consumers, and regulators.
7. Both public and private sectors must invest more in R&D and technology development for the education and capacity/skills development of actors in the organic value chain.
8. For Bhutan, branding of organic products can leverage its status as a 'carbon-negative country' (organic+). An efficient input supply system needs to be developed to scale up production.
9. A fit for purpose certification system, especially for Bhutan, will need to be matched with a comprehensive and competent quality assurance and accredited mechanism.
10. A supportive policy environment should be created for aggregation, branding, investment, and market development. Public-private partnerships must be encouraged and incentives must be introduced for socially responsible production and profit sharing mechanisms for local communities.

Closing remarks

Dasho Rinzin Dorji, Secretary, Ministry of Agriculture and Forest, Royal Government of Bhutan, expressed his satisfaction and happiness with the outcome of the two-day symposium in the form of symposium resolutions. He stressed the importance of these points for Bhutan and HKH countries; however, he also raised concerns regarding their implementation and urged all the participants to work for the mountains and people and for our beautiful mother earth.

Eklabya Sharma, DDG, ICIMOD thanked Bhutan's Ministry of Agriculture and Forests for co-hosting the symposium and said the event had been highly successful in achieving its anticipated objectives. He echoed the Secretary's view on the symposium resolutions. He emphasized the need to develop regional technical guidelines, which would help Bhutan achieve a fully organic farming system as well as assist HKH countries in carrying out measures to provide youth employment, strengthen organic agriculture, and improve food and nutritional security.

Tashi Dorji, Senior Ecosystem Specialist, ICIMOD, delivered the vote of thanks on behalf of the organizers. (A detailed vote of thanks is available upon request.)

Climate change and other environmental and socioeconomic changes are bringing new risks and uncertainties for communities in the HKH. Organic agriculture can be one of the strategies to reduce the vulnerability and build the resilience of mountain and downstream communities.

SECTION 4 | DAY 3

Field visits to Punakha

A field visit to Punakha and the Agriculture Research and Development Centre in Bajo was organized. The field visit gave the participants an opportunity to learn about ongoing research on organic inputs preparation at the centre.

20 December 2019

Annexes

Annex 1: List of participants

Australia

1. Andre Leu
Regeneration International
2. Julia Leu
Regeneration International

Bangladesh

3. AZM Nazmul Islam Chowdhury
Pumpkin Plus
4. Mahbuba Jahan
Bangladesh Agricultural University

Bhutan

5. Biren Subba
Druk Metho
6. Chadho Tenzin
FOA
7. Chimmi Dem
Kuensel
8. Choidup Zangpo
ICTD, MoAF
9. Damchoe Dem
BOAWE
10. Dawa Dem
NOP
11. Dawa Tshering
Bhutan Essence
12. Dechen Dorji
DCSI
13. Dekhen Kezang
14. Dhendup Wangchuk
RSPN
15. Dorji Dema
Freed Meat
16. Dorji Rinchen
RNR-EDU, PPD
17. Chador Wangdi
QCQD, BAFRA
18. Ganga Maya Rizal
DoL
19. Jambay Gyeltshen
NRDCAN-Bumthang
20. Jigme Wangchuk
NOP
21. Kailash Pradhan
ARDC-Yusipang
22. Kamal Pradhan
BhuOrg Farm, Sarpang
23. Karma Dema Dorji
NSSC
24. Karma Penjor
HOFSI
25. Kencho Namgyal
NOP
26. Kesang Choden
Chuniding Foods
27. Kesang Om
Institute for Learning Solutions
28. Kesang Tshomo
PM-NOFP
29. Kinga Dechen
Dzongkhag Livestock Sector
30. Kinga Lham
NOP
31. Kinga Wangdi
BBSC
32. Kinlay Tshering
DoA
33. Kinley Pelden
Yiga Chocolate
34. Kiran Mahat
NPPC
35. Kuenga Dendup
Kingdom Essences
36. Kuenzang Lhamo Sangay
GNHC

37. Lekden
BAFRA
38. Lhap Dorji
ARDC-Wengkhar
39. Lobzang Dorji
DoFPS
40. Namgay Wangchuk
BAFRA
41. Norbu
NMC
42. Passang Tshering
ARDC-Bajo
43. Pema C. Gyaltshen
Kingdom Essences
44. Pema Chofil
ARDC-Bajo
45. Pema Gyalpo
Organic Cleaning & Bathing Products
46. Pema Gyalpo
TBC
47. Pema Lhazom
Bhutan Herbal Tea
48. Pema Zangmo
NOP-ARDC-Yusipang
49. Phub Dem
PPD, MoAF
50. Prem Lepcha
Bhutan Organic Fertilizer
51. Rinzin Dorji
MoAF
52. Rixzin Wangchuk
SFED, DoFPS
53. Sangay Chezom
BBSC
54. Sangay Chopel
PPD, MoAF
55. Sonam
NSC
56. Sonam Norbu
DAMC
57. Sonam Yonten
BAFRA
58. Tandin Norbu
ICTD, MoAF
59. Tashi Gyelmo
ARDC-Yusipang
60. Tashi Lhamo
CNR
61. Tashi Samdup
DoL
62. Tashi Wangchuk
NSSC
63. Tayan R. Gurung
DoA
64. Tenzin Dendup
ICTD, MoAF
65. Thinley Namgay
Druk Metho
66. Tseten
ICTD, MoAF
67. Tshering Doma
ICTD, MoAF
68. Tshering Penjor
UNDP
69. Tshering Tobgay
ARDC-Samtenling
70. Tshering Wangmo
Takabi Women Group (Zhemgang)
71. Tshering Wangmo
Bhutan Herbal Tea
72. Tshering Zam
NOP, ARDC
73. Tshetrimla
NOFP
74. Ugyen Lhamo
DAMC
75. Ugyen Penjore
DAMC
76. Ugyen Phuntscho
NBC
77. Ugyen Sha
Darla Gewog
78. Ugyen Wangmo
ES, Haa
79. Wangda Dukpa
ARED, DoA
80. Yanten
Freed Meat
81. Yeshey Lham
BAFRA

82. Yeshey Penjor
MoAF
83. Yeshy Choden
Chuniding Foods

India

84. Ghanshyam Sharma
The Mountain Institute, Sikkim
85. M.C. Manna
Indian Institute of Soil Science
86. Madhuban Gopal
Indian Agricultural Research Institute,
New Delhi
87. Mahesh Chander
Indian Veterinary Research Institute
88. R Bhubesh Kumar
Research & Innovation circle of Hyderabad
89. Sabyasachi Roy
National Dairy Development Board
90. Sachin Sahni
Keeros
91. Sailesh Chandra Sharma
DLR Prerna
92. Sundeep Kamath
Biodynamic Association of India
93. Amit Rajaram Salagre
UPL

Korea

94. Denian Koh
BT Bio Venture Company

Malaysia

95. Ong Kung Wai
Organic Association Malaysia
96. Selina Gan
Opika Organic

Myanmar

97. Khaing Khaing Htwe
Ministry of Agriculture, Livestock and
Irrigation
98. Phyu Sin Thant
Myanmar Institute of Integrated Development
99. Soe Win
Yezin Agricultural University

Nepal

100. Arabinda Mishra
ICIMOD
101. Dago Retty
ICIMOD
102. Eklabya Sharma
ICIMOD
103. Kamal Aryal
ICIMOD
104. Laurie Ann Vasily
ICIMOD
105. Mayaju Maharjan
ICIMOD
106. Mewang Gyeltshen
ICIMOD
107. Nand Kishor Agrawal
ICIMOD
108. Pratigya Silwal
ICIMOD
109. Sanjeev Bhuchar
ICIMOD
110. Sonam Zangmo
ICIMOD
111. Suman Bisht
ICIMOD
112. Surendra Raj Joshi
ICIMOD
113. Tashi Dorji
ICIMOD
114. Judith Chase
Everything Organic
115. Keshab Dutta Joshi
CEAPRED
116. Maheshwor Ghimire
SECARD Nepal
117. Nirmala Agrawal
Himalayan College of Agricultural Sciences
and Technology (HICAST)
118. Pankaj Prasad Raturi
Dabur Nepal
119. Reshma Tamang
OWF Nepal
120. Samir Newa
The Organic Valley Pvt. Ltd

- 121. Samita Kapali
Green Growth
- 122. Shabnam Shivakoti
Ministry of Agriculture and Livestock
Development
- 123. Sushil Raj Ghimire
Welthungerhilfe
- 124. Umesh Lama
Organic Certification Nepal
- 125. Yuba Raj Gurung
NRNA NCC Nepal

Thailand

- 126. Budsara Limnirankul
Chiang Mai University
- 127. Promyos Snitwongse
All Bio Products
- 128. Vitoon R Panyakol
Green Net Cooperative
- 129. Miss Pook
All Bios
- 130. Bhurich
SBT All Bio
- 131. Sirikarn

USA

- 132. Steven Arquitt
Millennium Institute

Annex 2: Programme agenda

DAY 1 – WEDNESDAY, 18 DECEMBER 2019

Time	Programme	Details
08:00–08:30	Registration	Responsible persons: Sonam Zangmo, Ugyen Lhamo, Dago Retty, Jigme Wangchuk, Mayaju Maharjan
08:30–09:00	Arrival of Chief Guest – HE Yeshey Penjor, Minister, MoAF, Bhutan	
09:00–10:00	Session 1 – Inaugural session Rapporteurs: Tashi Dorji, Kailash Pradhan Traditional <i>Marchang</i> ceremony Welcome remarks National context setting: Organic agriculture in Bhutan Regional context setting: Organic agriculture in the Hindu Kush Himalaya Inaugural address by the Chief Guest Vote of thanks	
		Rabgye Tobden, Director, Directorate Services, MoAF, Bhutan Kinlay Tshering, Director, Department of Agriculture, MoAF, Bhutan Dasho Rinzin Dorji, Secretary, MoAF, Bhutan Eklabya Sharma, Deputy Director General, ICIMOD HE Yeshey Penjor, Minister, MoAF, Bhutan Kesang Tshomo, Programme Manager, National Organic Flagship Programme (NOFP)
10:00–10:30	<i>Group photo and tea break</i>	
10:30–12:30	Session 2 – Organic agriculture: Current knowledge and trends Chair: HE Yeshey Penjor, Minister, MoAF, Bhutan Co-chair: Eklabya Sharma, Deputy Director General, ICIMOD Host: Laurie Vasily, Head of Knowledge Management and Communication, ICIMOD Rapporteurs: Kamal Aryal, Tshering Zam	
10:30–10:40	Presentations (10 min each)	
	Organic agriculture in Bhutan	Kesang Tshomo, Bhutan
10:40–10:50	Overview of the global organic movement: Opportunities and challenges	Andre Leu, Australia
10:50–11:00	Organic agriculture movement in India and current status of organic agriculture in Sikkim	Ghanshyam Sharma, India
11:00–11:10	Creating entrepreneurship opportunities for traditional crops in Nepal through an organic mission programme	Sabnam Shivakoti, Nepal
11:10–11:20	Organic agriculture and food security of smallholder farmers in North Thailand	Budsara Limnirankul, Thailand
11:20–11:30	Linking Bhutanese farm produce to market	Kezang Choden, Bhutan
11:30–12:00	Discussion and wrap up	
12:00–12:10	Communication plan for the symposium – Laurie Vasily, Tenzin Dendup	
	Group division for parallel session	

Time	Programme	Details
12:10–12:30	Inauguration by HE Yeshey Penjor, Minister, MoAF, Bhutan Visit to marketplace and working tea	Responsible persons: Ugyen Lhamo, Pema Zangmo
12:30–13:30	<i>Lunch break</i>	
13:30–14:30	<i>Visit to marketplace</i>	
FOUR THEMATIC AREAS: PARALLEL SESSIONS (SESSIONS 3A AND 3B)		
14:30–17:00	Session 3A – Transitioning to organic agriculture: Solutions, technologies, and practices	
	Moderator: Tayan R Gurung	
	Co-moderators: Sanjeev Bhuchar, Tashi Dorji	
	Rapporteurs: Surendra Raj Joshi, Tirtha B Katwal	
14:30–14:45	Breaking trends: Power talk (3 min each)	Sundeeep Kamath, India Soe Win, Myanmar Sushil R Ghimire, Nepal
	Presentations (10 min each)	
14:45–14:55	Sustaining soil health: Management approach and its relevance to organic agriculture	MC Manna, India
14:55–15:05	Non-chemical based vegetable production systems	Mahbuba Jahan, Bangladesh
15:05–15:15	Mobilizing communities for organic agriculture	Keshab Dutta Joshi, Nepal
15:15–15:25	Pesticide residue in food systems in South Asia: Role of organic agriculture	Madhuban Gopal, India
15:25–15:35	Sustainable land management: A basis for organic agriculture	Karma Dema Dorji, NSSC, Bhutan
15:35–15:55	Discussion	
15:55–16:40	Group work (45 min)	
16:40–17:00	Presentations (5 min each) and wrap up	
14:30–17:00	Session 3B – Gender equality and social inclusion in organic agriculture	
	Moderator: Suman Bisht	
	Co-moderators: Kuenzang Lham Sangay, Nand Kishor Agrawal	
	Rapporteurs: Pratigya Silwal, Tshetrimla	
14:30–14:45	Breaking trends: Power talk (3 min each)	Judith Chase, Nepal Kesang Om, Bhutan Damchoe Dem, Bhutan
	Presentations (10 min each)	
14:45–14:55	A field innovation lab: Approach for gender equality and social inclusion	AZM Nazmul Islam Chowdhury, Bangladesh
14:55–15:05	Woman entrepreneurship – Yiga Chocolate	Kinlay Pelden
15:05–15:15	Youth engagement in organic and agri- enterprise development	Lhap Dorji, Bhutan
15:15–15:25	Ensuring gender and social inclusion in government programmes	Khaing Khaing Htwe, Myanmar
15:25–15:45	Discussion	
15:45–16:30	Group work (45 min)	
16:30–17:00	Presentations (5 min each) and wrap up	
17:00–18:00	Business marketplace revisit	
18:00–20:00	Reception dinner at Naksel Boutique Hotel and Spa, Paro	

DAY 2 – THURSDAY, 19 DECEMBER 2019

Time	Programme	Details
09:00–09:45	Reflections from Day 1	Laurie Vasily, Nepal Wangda Dukpa, Bhutan
PARALLEL SESSIONS: SESSIONS 4A AND 4B		
09:45–12:45	Session 4A – Scaling organic businesses: Opportunities and challenges	
	Moderators: Surendra Joshi	
	Co-moderators: Phub Dem, Nand K Agrawal	
	Rapporteurs: Sanjeev Bhuchar, Ugyen Lhamo	
09:45–10:00	Breaking trends: Power talks (3 min each)	Samir Newa, Nepal Samita Kapali, Nepal Pema C Gyaltshen, Bhutan Sachin Sahni, India
	Presentations (10 min each)	
10:00–10:10	Animal husbandry, health, and feed issues in organic farms – a transition option	Mahesh Chander, India
10:10–10:20	Agri-tech startups for promoting organic agriculture	R Bhubesh Kumar, India
10:20–10:30	Developing the market for organic products	Selina Gan, Malaysia
10:30–10:40	Engaging farmers for high-value crops (medicinal plants)	Pankaj Prasad Raturi, Nepal
10:40–10:50	Experiences from a Bhutanese entrepreneur on fundraising for organic business development	Thinley Namgay, Bhutan
10:50–11:10	<i>Tea break</i>	
12:15–12:45	Presentations (5 min each) and wrap up	
09:45–12:45	Session 4B – Institutional mechanisms for promotion and certification	
	Moderator: Arabinda Mishra	
	Co-Moderator: Tayan R Gurung	
	Rapporteurs: Suman Bisht, Sonam Yonten	
09:45–10:00	Breaking trends: Power talks (3 min each)	Kamal Pradhan, Bhutan Maheshwor Ghimire, Nepal Vitoon R Pankyakool, Thailand
	Presentations (10 min each)	
10:00–10:10	NDDDB's approach to organic dairy production, diversification, and market	Sabyasachi Roy, India
10:10–10:20	The organic certification experience from Malaysia, and options for Asia	Ong Kung Wai, Malaysia
10:20–10:30	Assessment of long-term impacts of policy decisions, system dynamics	Steven Arquitt, USA
10:30–10:40	Bhutan Organic Guarantee System (BOGS)	Kailash Pradhan, Bhutan
10:40–11:00	Discussion	
11:00–11:25	<i>Tea break</i>	
11:25–12:10	Group work (45 min)	
12:10–12:45	Presentations (5 min each) and wrap up	

Time	Programme	Details
12:45–13:45	<i>Lunch</i>	
13:45–15:15	Key messages from parallel sessions (10 min each) – Plenary <ul style="list-style-type: none"> • Environment/technical solutions (Ghanshyam Sharma/Sanjeev Bhuchar) • Social solutions (Suman Bisht) • Economic/business solutions (B2B) (R Bhubesh Kumar/Nand K Agrawal) • Institutional solutions (Vitoon R Panyakol /Arabinda Mishra) Suggestions and feedback from participants	Moderators: Kamal Aryal, Nepal Lhab Dorji, Bhutan
15:15–15:40	<i>Tea break</i>	
15:40–16:40	Way forward – Plenary <ul style="list-style-type: none"> • National perspective: Bhutan – Kesang Tshomo, Bhutan • Regional perspective: HKH – Arabinda Mishra, Nepal 	Tayan R Gurung, Bhutan Nand K Agrawal, Nepal
16:40–17:30	Closing ceremony Welcome Symposium resolution Closing remarks Vote of thanks	Host: Pratigya Silwal, Nepal Advisor-DoA (Chair-OT) Kesang Tshomo Chief Guest Tashi Dorji, ICIMOD
DAY 3 – FRIDAY, 20 DECEMBER 2019		
09:00–16:00	Option 1 – Field visit to Punakha Option 2 – Continued discussion on business and institutional networking	ARDC-Bajo, ADRC-Yusipang
DAY 4 – SATURDAY, 21 DECEMBER 2019		
As per flight schedules	Depart for respective destinations	Organizing committee



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