

Cooperatives in fruit farming and tree plantation: possibilities and challenges

Anant Kumar Basnet

Ministry of Land Management, Cooperative and Poverty Alleviation

2077/11/03



Outline

- ▶ Cooperatives in figure
- ▶ Constitution
- ▶ Directive / procedure / Act / Regulation
- ▶ Program / Project
- ▶ Organization / financial sector / market
- ▶ Cooperatives in fruit farming and tree plantation
- ▶ MOALD website
- ▶ Challenges
- ▶ Way forward

Cooperatives in figure:

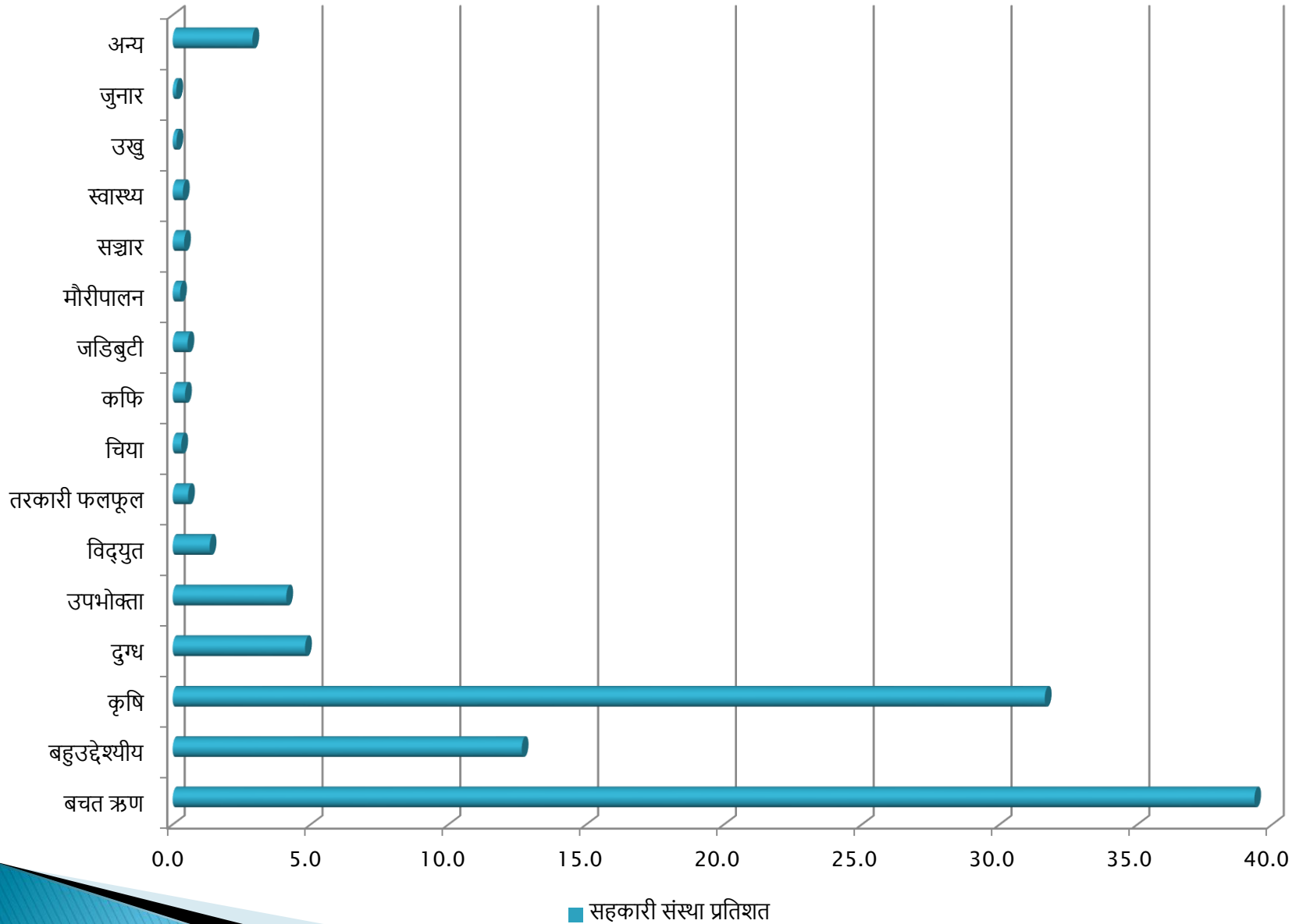
- ▶ Contribution of cooperatives to GDP in Nepal: 3% (Economic Survey, 2076/77)
- ▶ Contribution of agriculture cooperatives to GDP in Nepal: 0.71% (2075/76, 25 years strategic plan of cooperatives in Nepal, 2077, NCDB)
- ▶ Contribution of cooperatives to GDP in Asia: 3.255% (Global senses on cooperatives, 2014)

Cooperatives in figure

Province	Coops number	members	Female	Male	Share (Arba)	Deposit (Arba)	Debt investment (Arba)	Direct employment	
	1	4737	935701	500249	435452	8.2002	41.21	38.9529	20685
	2	4153	555197	252112	303085	2.3652	23.1996	15.0511	10843
Bagmati	10418	2717469	1457202	1260267	51.4064	214.6622	199.8647	33892	
Gandaki	2671	1116632	642130	474502	22.0509	86.0745	88.378	7638	
Lumbini	3755	898611	576312	322299	5.8222	59.9637	40.8068	6989	
Karnali	1967	404956	272033	132923	1.918	8.8681	7.9252	4534	
Sudur Pashchhim	2060	542989	319100	223889	2.015	10.4434	11.4995	2815	
Department	125	135908	73257	62651	0.3266	33.5392	23.7837	913	
Total	29886	7307463	4092395	3215068	94.1045	477.9607	426.2619	88309	

Source: Sahakari Jhalak, 2077, Department of Cooperative

सहकारी संस्था प्रतिशत (विस्तृत सहकारी तथ्याङ्क, २०७४, सहकारी बिभाग)



Constitution:

- ▶ **Article 50-3: Economic objective:** Public, private and cooperative partnership for the socialist-oriented economy development
- ▶ **Article 51: Economy, industry and supply policy:**
 - **Article 51-Gha-1:** To strengthen economy through public, private and cooperative partnership
 - **Article 51-Gha- 3:** To mobilize cooperatives for national development
 - **Article 51- Nga: Agriculture and land reform policy:**
 - scientific land reform
 - to increase production and productivity
 - commercialization, industrialization and product diversification of agriculture
 - environment friendly land use
 - to increase access of farmers to market and agriculture tools,

Policies:

- ▶ **National Cooperatives policy, 2069:**
 - To mobilize cooperatives for the promotion of business based on agriculture, production and service sector.

- ▶ **National agriculture policy, 2061**
 - To promote agriculture, industry and business based on cooperatives
 - To attract cooperatives for investment in Agricultural production, processing and market development

Policies...

- ▶ **Agricultural Development Strategy (ADS), 2015– 2035):**
 - **vision:** self-reliant, sustainable, competitive, inclusive agriculture sector
 - **Key stakeholders:** coops, Private sector, farmers
- ▶ **25 years strategic plan of cooperatives in Nepal, 2077, NCDB:**
 - **Goal:** contribution of cooperatives to GDP in Nepal– 15% by 2101 /02
 - **Program:** for cooperatives promotion in agriculture sector

Policies.....

- ▶ **Guidelines on sustainable development goals for cooperative movement in Nepal, 2019, NCF:**
- ▶ **Activities with responsibility of cooperatives:**
 - Advocacy for defined role of cooperatives in provincial level agricultural related policies
 - Provisions of integrated services of technology, **agro-inputs**, technical knowledge to primary cooperatives
 - Run **cooperative farming**
 - Operationalization of **cooperative markets**
 - Maintain genetic diversity of seed, plants and animals
 - **Collective investment** in processing plant, cold storage, input supply for agriculture and marketing
 - Educate the members about climate change situation with adaptation and mitigation

Policies...

- ▶ **Poverty Alleviation policy, 2076**
 - **Employment and self-employment generation policy:** promotion of crop cultivation and livestock sector through cooperatives, land use through cooperatives
- ▶ **SAARC Poverty Alleviation Plan of Action (PAPA), BIMSTEC Poverty Plan of Action (PPA):** Poverty alleviation through strengthening cooperatives

Act/Regulation/Directive/Procedure

- ▶ **Cooperative act, 2074 and regulation 2075:**
 - provision of Specialized cooperative union
- ▶ **भन्सार महशुलमा छुट सुविधा सिफारिस सम्बन्धी कार्यविधि, २०६८**
- ▶ **सहकारी संस्थाहरुलाई अनुदान सुविधा प्रदान गर्ने निर्देशिका, २०७३:**
 - सहकारी विभागबाट कार्यक्रम अनुदान, विउ पूँजी अनुदान र पूँजीगत अनुदान दिने व्यवस्था
- ▶ **आय कर ऐन, आर्थिक ऐन:** बिभिन्न अवस्थामा सहकारी संस्थाको आयकरमा छुट दिएको अवस्था छ।
- ▶ **Crop and livestock insurance:**
 - Insurance premium: 5 % of production cost
 - Subsidy form government: 75%

Act/Regulation/Directive/Procedure.....

- ▶ **Fruits Development Program implementation procedures, 2075:**
- ▶ **Objectives:**
 - to increase production and productivity of fruits,
 - to enhance the capacity of agriculture entrepreneur, **cooperatives** and farmers group for improved fruit cultivation technology
- ▶ **Fruits cultivation expansion program in public and private land procedure, 2075**
- ▶ **Fruits Nursery Promotion Program conduction procedure, 2077**

Programs / Projects

- ▶ **Prime Minister Agriculture Modernization Project (PMAMP):**
- ▶ **Objective:**
 - Support to implement ADS
- ▶ **Output:**
 - By 2082, Self-reliant in main fruit crops

Prime Minister Agriculture Modernization Project (PMAMP): Fruits value chain development

Province	District	Fruit	Province	District	Fruit	
1	Jhapa	supari	Gandaki	Gorakha	Orange	
	Ilam	Kibi		Lamjung	Cardamom	
	Panchthar	Cardamom		Nawalpur	Orange	
	Taplejung	Cardamom		Mustang	Apple	
	Bhojpur	Cardamom		Shangjha	Orange	
	Samkhuwasa bha	Cardamom		Manang	Apple	
	Udayapur	Orange		Magdi	Orange	
	Solukhumbu	Orange, Kibi		Rukum E.	Walnut	
	Terathuma	Cardamom		Lumbini	Gulmi	Orange
	2	Saptari		Mango	Karnali	Jajarkot
Siraha		Mango	Humla	Apple		
Bagmati	Dolakha	Kibi		Dailekh	Orange	
	Sindhuli	Junar		Jumla	Apple	
	Ramechhap	Junar		Kalikot	Apple	
	Chitwan	Banana		Dolpa	Apple	
			Sudur Pashchim	Darchula	Apple	

विभिन्न क्षेत्रमा व्यवसायिक रूपमा खेती गर्न सकिने फलफूलहरू

क्र.सं.	क्षेत्र	फलफूलहरू
१.	शितोष्ण प्रदेश तापक्रम: $< 90^{\circ}\text{C}$ उचाई: २००० - ३००० मी	स्याउ, नास्पती, आरू, ओखर, खुपानी, आरुबखडा, कागजी बदाम
२.	समशितोष्ण प्रदेश तापक्रम: $90-92^{\circ}\text{C}$ उचाई: १३०० - २००० मी	आरू, नास्पती, आरुबखडा, खुपानी, हलुवावेद, स्ट्रबेरी
३.	उपोष्ण प्रदेश तापक्रम: $96-28^{\circ}\text{C}$ उचाई: २०० - १३०० मी	सुन्तला, जुनार, कागती, अम्बा, अनार, हलुवावेद, अङ्गुर, मेकेडेमिया नट, स्ट्रबेरी, एभोकाडो, किवी
४.	उष्ण प्रदेश तापक्रम $> 28^{\circ}\text{C}$ उचाई - २०० मीसम्म	आँप, लिची, केरा, भुइँकटहर, मेवा, रूखकटहर, सुपारी, नरिवल

स्रोत: फलफूल बाली/डालागि ज्यावेज अफ जाकिट्स, २०१९/२०
नेपाल कृषि अनुसन्धान परिषद्, राष्ट्रिय वाह्य अनुसन्धान केन्द्र

Government Organizations

- ▶ Ministry of land Management, Cooperatives and Poverty Alleviation
- ▶ Ministry of Agriculture and Livestock Development,
- ▶ Ministry of Agriculture, Land Reform and Cooperatives
- ▶ NARC, Bagwani Kendra, Agriculture Knowledge center, Agriculture development section in Local level, Agriculture and Forestry Universities
- ▶ Ministry of Forest and Environment

Cooperative organization related to fruits

- ▶ National Cooperative Federation
- ▶ Nepal seed, vegetable and fruits central cooperative federation
- ▶ Junar central cooperative federation,
- ▶ Central sugarcane producer's cooperative federation
- ▶ Nepal central supari cooperative federation
- ▶ Primary cooperatives

Financial sector

- ▶ Agriculture Development Bank,
- ▶ National Cooperative Bank
- ▶ Small Farmer Development Microfinance Financial Institution
- ▶ Youth and Small Entrepreneur Self-employment Fund
- ▶ Saving Credit primary Cooperatives
- ▶ Poverty Alleviation Fund

Market

- ▶ Urban population in 2019/20: 63% (Nepal in figure, 2020, CBS)
- ▶ 293 Municipalities
- ▶ Hat bazar, market in main cities,
- ▶ Digital Agriculture Market (moald website),
- ▶ Marketing aps
- ▶ Cooperatives markets
- ▶ **Cooperative Market Development Program (CMDP),**
- ▶ **Value Chain Development Program (VCDP)**

Cooperatives in fruit farming and tree plantation

- ▶ **Innovative Agriculture Cooperative (Sunsari), 2014:**
 - Main businesses: **tree plantation**, medical herbs cultivation, spice (turmeric) production, pig farming, and goat farming. They have started this business in the area of 6 hectares land. They have rented this land from forest office with 1 thousand Rupees per hectare land. They have 85 members.
- ▶ **Small Farmers Agriculture cooperative Limited, Letang, Morang :**
 - Goat farming, Fish farming , **tree plantation** (source: Nepal Agriculture Cooperative Central Federation, Yek Jhalak)

Cooperatives in fruit farming and tree plantation...

- ▶ **Markanday Banana Production agriculture cooperative, Ratnagar, Chitawan:** produce Banana
- ▶ **Krisak sudhar fruits and vegetable cooperative, Benighat rorang, Dhading:** marketing of mango, lichi, Guava, pineapple, lemon, orange
- ▶ **Ratnanage fresh vegetable and fruits production cooperative, Ratnagar, Chitawan:** marketing of mango, lichi, Guava, pineapple, lemon, papaya, Dragon fruit
- ▶ **Janajagriti hariyali fresh vegetable and fruit production cooperative, Rapti, Chitawan:** marketing of mango, lichi, Guava, pineapple, lemon
- ▶ **Dojyo pragatisil agriculture cooperatives:** marketing of strawberry

MOALD website

- ▶ **Agro-met advisory bulletin (AAB):**
 - advice on weather, rainfall, temperature, humidity, wind speed for coming week, Advice on precaution for good agriculture cultivation practices, possible disease and treatment
- ▶ **Krishi Diary:**
 - **Information:**
 - Grains, fruits and vegetables: productivity, feasible region for production
- ▶ **Crop calendar: apple, banana, kibi:**
 - Species, temperature, altitude, climate, soil, time, garden management, post-harvest management, disease
- ▶ **District Profile:**
 - Households, population, arable land, crop area, crops, productivity, marketing

MOALD website...

- ▶ **Climate smart improved cultivation practices:** climate smart species, Local seeds, wind barrier, drip irrigation, tissue culture, high density planting
- ▶ **Hamro krishi:** AAB, weather information, contact numbers of agriculture offices
- ▶ **Package of practices for fruit crops: 2019/20, NARC:** Species, method of cultivation, disease, crop protection
- ▶ **Fertilizer calculator:**
- ▶ **Crop disease control:** information

Policies for tree plantation

Climate Change Policy–2019

- ▶ agroforestry with species of multipurpose tree in **uncultivated forest land**
- ▶ agroforestry development in uncultivated in slopping and **low grade forest areas, riverbed**
- ▶ Integrated watershed management in Chure
- ▶ plantation on roadside and **unused land**

Policies for tree plantation....

Environment Policy 2019

- Environment friendly action plan in all LG
- plantation programme in **riverside, roadside, open space**
- development of climate friendly villages

Forest Policy 2018

- Promotion of **community based forest management system**
- Promotion of green industry business through forest area expansion devt and medicinal herbs
- **Green entrepreneurship by forming cooperatives of forestry user groups**
- Conservation of biodiversity diversity

Policies for tree plantation...

National Agroforestry Policy 2019

- Special programme for LL where no natural forest
- **Cooperative market for fruits and vegetable trade**
- Financial incentive for agro forestry sector
- agroforestry system being given **priority vacant, barren land**

Act/Regulation for tree plantation

२६. कबुलियती वन प्रदान गर्ने: (१) नेपाल सरकारले देहायको प्रयोजनको लागि राष्ट्रिय वनको हैसियत विग्रिएको कुनै भाग कबुलियती वनको रूपमा तोकिए बमोजम सम्झौता गरी प्रचलित कानून बमोजिम स्थापित कुनै सङ्गठित संस्थालाई उपलब्ध गराउन सक्नेछ :-

- (क) वन पैदावारमा आधारित उद्योगहरूलाई आवश्यक पर्ने कच्चा पदार्थ उत्पादन गर्न,
- (ख) वृक्षारोपण गरी वन पैदावारको उत्पादनमा वृद्धि गरी बिक्री वितरण गर्न वा उपयोग गर्न,
- (ग) वनको संरक्षण र विकास हुने गरी कृषि वन बाली वा पशु फर्म सञ्चालन गर्न,
- (घ) वनको संरक्षण र विकास हुने गरी कीट, पतङ्ग तथा वन्यजन्तुको फार्म वा उद्यान सञ्चालन गर्न,
- (ङ) वनको संरक्षण र विकास हुने गरी पर्यापर्यटन व्यवसाय

Act/Regulation for tree plantation...

२८. **धार्मिक वन:** (१) डिभिजनल वन अधिकृतले परापूर्व कालदेखिको धार्मिक स्थल र त्यसको वरिपरिको वनको संरक्षणका लागि प्रचलित कानून बमोजिम स्थापित कुनै धार्मिक निकाय, समूह वा समुदायलाई उक्त क्षेत्र वरिपरिको राष्ट्रिय वन धार्मिक वनको रूपमा संरक्षणको लागि हस्तान्तरण गर्न सक्नेछ।

(२) उपदफा (१) बमोजिम संरक्षणको लागि हस्तान्तरण गरिएको कारणले मात्र त्यस्तो वन त्यस्तो धार्मिक निकाय, समूह वा समुदायको नाममा हक हस्तान्तरण भएको मानिने छैन।

Act/Regulation for tree plantation...

Forest Act

- **Private forest**
- **individual or organization can register (36)**
- **can develop, conserve, manage, use and sell by determining price on their own (36)**
- **Govt can provide certain benefit to the private forest owners (36)**
- **Roadside area and park can be managed or developed in collaboration with org. or private sector(38)**

Program/Projects in tree plantation

- ▶ **Kabuliyati Ban programme**
- ▶ **Model Agroforestry programme** (निजी, सरकारी, सार्वजनिक तथा संस्थागत, अतिक्रमणबाट फिर्ता भएको, नदि उकास, हैसियत विग्रेको, विद्धुत लाइन मुनिको आदि जग्गा)
- ▶ **Forest decade programme (2071–80):**
 - one house one tree, one village one forest, one city one garden, private forest development and registration
- ▶ **Private fruit Nursery Strengthening Programme**
- ▶ **Integrated Community Model Modern Agriculture Farm Establishment Programme**

Challenges:

- ▶ Migration of youth and labor
- ▶ Agriculture workload on women
- ▶ Utilization of remittance in agriculture
- ▶ Impacts of Climate change
- ▶ Food balance sheet of imports and exports
- ▶ Low attraction of youths in agriculture
- ▶ Weak bargain power of coops
- ▶ Low inclusion of poor, marginalized people in coops
- ▶ Low expansion of coops in remote areas
- ▶ Low capacity of coops in terms of HR, technology, Management

Challenges...

- ▶ Weak financial administration
- ▶ Weak data management
- ▶ More attraction to saving and credit coops
- ▶ Weak governance
- ▶ Weak risk management
- ▶ Weak self-regulation
- ▶ Weak entrepreneurship and professionalism
- ▶ Weak partnership with government and private sector
- ▶ No reform in structure as per federalism
- ▶ Weak marketing
- ▶ High production cost due to subsistence farming
- ▶ Weak commitment of members with coops
- ▶ Not enough land for small farmers

Way forward

- ▶ **Build coop markets – CMDP**

way forward....

- ▶ Programs and awareness to build strong **relationship** between members and coops
- ▶ Increase **production and productivity** – irrigation, seed, fertilizer, technology
- ▶ **Partnership** with government and private sector
- ▶ Develop **commercial farming**–land pooling, Land Bank

Way forward....

- ▶ emphasize in Comparative advantage and product diversification
- ▶ **Engagement with governments** for strategic intervention and policy reform
- ▶ **Sensitization** to federation, district union and primary cooperatives to encourage them for the promotion of fruit farming and tree plantation

Queries / Feedback

Thank You



Cooperatives in Organic Farming and Participatory Guarantee System (PGS)



Saroja Adhikari

Scientific Officer

Department of Environment

Ministry of Forests and Environment

February 15, 2021

Contents



Organic Farming



Participatory Guarantee Systems



Cooperatives



Environmental Dimension




Organic Farming

Sustainable Agriculture



What is Organic Farming?

“Organic farming 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 farming combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.” (IFOAM, 2008)






Organic Farming (Contd.)

Organic farming works in harmony with nature rather than against it. This involves using techniques to achieve good crop yields without harming the natural environment or the people who live and work in it.





Fundamentals of Organic Farming

- a. **The Principle of health**: Organic farming should sustain and enhance the health of soil, plant, animal, human and planet as one and indivisible.
 - b. **The Principle of ecology**: Organic farming should be based on living ecological systems and cycles, work with them, emulate them and help sustain them.
 - c. **The Principle of fairness**: Organic farming should build on relationships that ensure fairness with regard to the common environment and life opportunities.
 - d. **The Principle of care**: Organic farming should be managed in a precautionary and responsible manner to protect the health and well being of current and future generations and the environment.
- 


Quality Assurance of organic farming (Certification Systems)

- Third-party
- Participatory guarantee systems
- Alternative certification options





Participatory Guarantee Systems (PGS)



“Participatory Guarantee Systems (PGS) is quality assurance initiatives that emphasize the participation of stakeholders, including producers and consumers a long supply chain.

It operate outside the frame of third party certification but the same process. It is for small scale farmer and relevant for local markets.



Participatory Guarantee Systems

“Participatory Guarantee Systems are locally focused quality assurance systems. They certify producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange”. (*IFOAM (2008)*)



PGS enable the direct participation of producers, consumers and other stakeholders in:

- A. The choice and definition of the standards
- B. The development and implementation of certification procedures
- C. The certification decisions



Guiding Principles for Organic Participatory Guarantee System

In tune with the international trends and IFOAM's PGS Guidelines, the PGS system is based on participatory approach, a shared vision, transparency and trust. In addition it gives PGS movement a National recognition and institutional structure without affecting the spirit of PGS. The guiding principles are:

- **Participation**
- **Shared Vision**
- **Transparency**
- **Trust**
- **Horizontality**



Member

Nepal Permaculture Group

Nepal

Working in the field of sustainable agriculture, sustainable development and permaculture.

More information



Member

One World - a learning center (P. Ltd.)

Nepal

We are a Demeter Agriculture & Rural Development ethical business. We develop and implement climate change related development aid projects for INGOs & NGOs. We are a producer P Ltd company of organic and Demeter goods and market organic and bio-dynamic products from Nepal to EU.



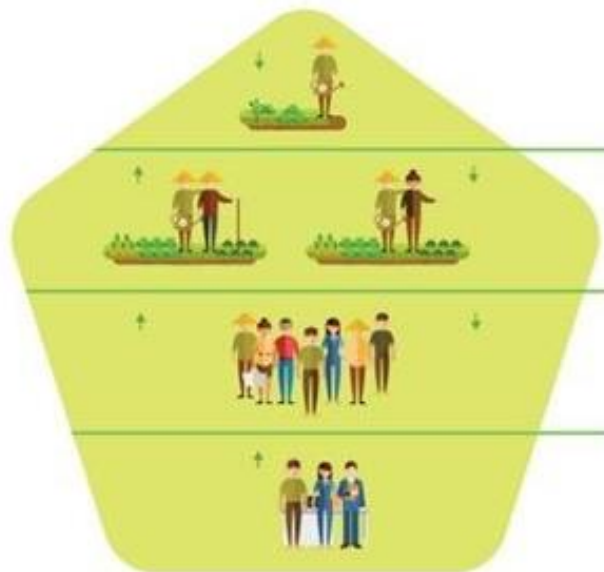
Member

Society for Environment Conservation And Agricultural Research and Development

Nepal

Description of Main Activities; Organic Agriculture promotion through training, workshops, publications on Indigenous Knowledge and Cosmivision for Revival Knowledge. System Plant Health Clinic in collaboration with CABI UK Revival Of Vedic Organic Agriculture. Tradition Non Timber Forest Products, Internal Control System for small Growers. Facilitation for Organic Certification. Different Publications on Organic Agriculture. Training on Participatory Guarantee System for Organic Integrity

PGS operating model



1. Farmers

- Produce vegetables according to a food standard
- Sign a pledge
- Participate in cross-checking & inspections

2. Farmer groups

- Carry-out cross inspection plans & produce inspection reports
- Regularly verify members' compliance with the standard
- Organise member meetings and apply for certification

3. Cooperatives/Inter-groups

- Develop cross-inspection plans and review inspection reports
- Manage certification applications
- Sanction non complying groups

4. Local Coordination Board

- Reviews certification requests and inspection reports
- Carries out random inspections and testing
- Issues certifications
- Support market linkage

Value Chain Diagram



Value chain structure, Source : UNIDO, 2009



What is a Cooperative?



An autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.”

(ILO Recommendation 193 on the Promotion of cooperatives, 2002)





A cooperative organization always prefers

1. Service instead of profit maximization.
2. Survival of the weakest instead of survival of the fittest.
3. Self-help and self-reliance instead of dependence on the external bodies.
4. Development of moral character of members instead of emphasis on pure material development.




Cooperative Farming

Motivation for the cooperative farming is sometimes described as “overcoming the curse of smallness”.

Provides a mythos for farmers to join together in an association, through which a group of farmers can acquire a better outcome, typically financial, than by going along.

Cooperatives are people-centred enterprises owned, controlled and run by and for their members to realize their common economic, social, and cultural needs and aspirations.





Cooperative Farming and PGS

Thousands of organic producers and consumers are now verified through PGS initiatives around the world. Although details of methodology and process vary, the key elements and features remain consistent worldwide.

PGS : Organic Certification to Empower Farmers and Strengthen Communities

PGS : Alternative Ways of Defining, Measuring, and Assessing "Sustainability"





Environmental Dimension

PGS / Organic Farming

Agro-ecological Principles

Diversify and integrate the forms

Promote soil biodiversity

Eliminate the use and dependence on inputs

Resilience and adaptation to climate change.





Organic Farming mitigates climate change.

- Reduces greenhouse gases, especially nitrous oxide, as no chemical nitrogen fertilizers are used and nutrient losses are minimized.
- Stores carbon in soil and plant biomass by building organic matter, encouraging agro-forestry and forbidding the clearance of primary ecosystems.
- Minimizes energy consumption by 30-70% per unit of land by eliminating the energy required to manufacture synthetic fertilizers, and by using internal farm inputs, thus reducing fuel used for transportation.



Department of Environment, MoFE

Department is implementing the National Environmental Policy 2076 in coordination with private sectors, entrepreneurs and cooperative societies. DoEnv invites all for their active involvement to achieve the clean and healthier environment in the following areas.

- Environmental awareness
- Segregation and management of waste
- Reduce, Reuse and Recycle of resources
- Roof top gardening and rainwater harvesting
- Greenery promotion and maintenance
- Eco park, urban plantation, riverside plantation, etc.
- Bio energy and organic manure production
- Adapt climate friendly agriculture system.

Thanks!

ANY QUESTIONS?

You can find me at

- Department of Environment
- Ban-Parishar, Babarmahal, Kathmandu
- sarojajee@gmail.com

