



Highlighting sustainable food systems in mountains for the UN Food Systems Summit 2021

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Mountain agriculture and food production sustain the livelihoods of 1.1 billion people living in the mountains and those of a much larger number of people in the lowlands that depend on healthy mountain ecosystems for freshwater and for the conservation of key plant and animal biological diversity.

Worldwide, more than 80 percent of all food is produced by small-scale farmers. Small-scale farmers and pastoralists are predominant in mountain regions, where generally harsh weather and limiting topographical conditions prevail. Progress towards sustainable food systems cannot happen without improving the situation of small-scale mountain farmers worldwide.

Call to action

The Mountain Partnership calls on all its members to actively participate in the process leading to the [UN Food Systems Summit \(UNFSS\) 2021](#) by conveying the following messages in all available platforms for consultation including [national dialogues, independent dialogues, open surveys, and public forum](#).

Mountains matter for a healthy planet

- **Agricultural techniques:** Over centuries, mountain people have developed agricultural techniques to cultivate the land for food production and have designed mechanisms to govern their commons while preserving the natural resources surrounding them. As a result, inhabited mountain areas are often characterised by agricultural terraces or alpine pastures rich in biodiversity, agrobiodiversity and biocultural diversity owing to the fast-changing terrain and climate conditions.

- **Diversity:** The diversity of agricultural varieties and wild crop relatives and animal breeds in mountain farming systems are the basis for ensuring diversified and affordable healthy diets for mountain people. In addition, mountains represent an important repository of agrobiodiversity that might be key to the future of world food security in the face of climate change by providing a gene pool of resilient crops.
- **Ecosystem functions:** Mountain agricultural systems provide important ecosystem functions such as the protection and retention of slopes, which also contribute to the provision of freshwater for downstream populations. Such global benefits are often not fully understood and valued.

Addressing mountain people's vulnerabilities

- **Marginalization:** Mountain people are often marginalized with limited access to infrastructures, markets, education and capacity building opportunities, or digitalization. This contributes to poverty and inequality, as does mountain people's distance from decision-making processes.
- **Mountain hazards:** Steep slopes, harsh climates and high altitudes hold extraordinary natural beauty but also leave inhabitants exposed to high risks of devastating natural hazards such as landslides, flooding, avalanches or earthquakes.
- **Food insecurity:** Mountain people face globally high rates of food insecurity and malnutrition, which are on the rise and expected to increase with the COVID-19 pandemic. Small-scale mountain farmers and pastoralists who produce their own food are particularly vulnerable to economic, social and environmental shocks, and indigenous people, women and youth are disproportionately affected.

Why a sustainable food systems approach?

Definition of food systems: "A food system gathers all the elements (environment, people, inputs, processes, infrastructures, institutions, etc.) and activities that relate to the production, processing, distribution, preparation and consumption of food, and the output of these activities, including socio-economic and environmental outcomes," (High Level Panel of Experts on Food Security and Nutrition, 2020).

Sustainable food systems: Food systems not only cover the whole food chain from agricultural inputs and production through processing, transport, marketing and distribution to food consumption and waste. They also include the involved actors and their agency and networks, the natural resource context and regulatory political and economic frameworks. Having a sustainable food system lens means addressing different dimensions of sustainability and justice across the whole food system as both represent key challenges in most modern food systems.

Why a food systems approach in mountains: In mountains, sustained poverty, remoteness, limited access to goods and services, degradation of natural resources, as well as the COVID-19 pandemic challenge the food security of mountain people. To ensure mountain people are not left behind and to build back better from the pandemic, sustainable food systems in mountains must be supported and further developed in a holistic manner.

Maintaining ecosystem health, improving livelihoods and increasing resilience through sustainable food systems in mountains

Agrifood systems are the main driver of development in mountain regions. Food production and processing directly benefit mountain economies, agro-pastoral landscapes and their restoration indirectly supports other livelihood opportunities such as tourism.

The following fields of actions are in line with the UN Food Systems Summit's Action Tracks and should be given priority to deliver food systems that work for both mountain people and ecosystems and that recognise the critical role of small-scale mountain producers.

- **Sustainable land use practices (Action Track 3: Boost Nature-Positive Production)**
 - i. **Farming according to agroecological principles** increases the resilience of mountain agroecosystems and supports the stability of local food production.
 - ii. **Conservation agriculture:** Forests and soil conservation measures in diversified farming systems help decrease soil erosion and the risks of natural hazards.
 - iii. **Land management techniques** such as terrace farming, rainwater harvesting, grey water harvesting, drainage control, mulching and tree planting make it possible to cultivate under unfavourable conditions and to increase the efficient use of scarce resources.
 - iv. **Sustainable grazing practices** increase soil nutrients, biodiversity and pasture yields.
 - v. **Traditional and indigenous agricultural knowledge and practices**, including knowledge on local breeds and plant varieties, are essential sources for a sustainable management of mountain commons.
- **Diversification of livelihoods (Action Track 4: Advance equitable livelihoods)**
 - i. **A mix of food and cash crops and livestock farming** adapted to local conditions and fed from local feed supports diversified and nutritious diets for the producers and other consumers, offers them additional income for other expenses, and increases resilience.
 - ii. **Local processing** of agricultural primary production creates new jobs, adds nutritional and monetary value locally, and strengthens value chains of high-quality mountain products such as specialty coffee, herbs or livestock products.
 - iii. **The added value of speciality products and certification schemes** can ensure fair prices for mountain farmers and the resulting increased economic stability supports the continued cultivation of indigenous crops and lesser-known species of nutritional and climate-resilient value.
 - iv. **Investments** in related sectors such as lifelong education opportunities, energy production and security for households, or touristic and other infrastructure further strengthens the resilience of mountain food systems and helps mitigate food insecurity.
- **Policy coherence and inclusive participation in decision-making (cutting across all Action Tracks)**
 - i. **Policies** that coherently support food system sustainability across sectors create enabling environments for change. Agricultural, economic and social policies must align along the lines of sustainability and agency within food systems.
 - ii. **Inclusion of the relevant actors** in decision-making processes and to encourage their active participation. Creating and supporting sustainable food systems is inevitably

accompanied by trade-offs and conflicts between the diverse actors' interests and expectations. Particularly women and youth need to be considered and encouraged as they tend to be disadvantaged in mountain food systems and face inherent injustices and inequalities in terms of higher workloads in agricultural production, fewer land rights and less participation in decision-making among others.

Key Mountain Facts

- Mountains are home to **1.1 billion** people (15% of the world's population)
- Mountains cover about **27%** of Earth's land surface
- Mountains host about **50%** percent of the world's biodiversity hotspots
- More than **half of humanity** relies on mountain freshwater for everyday life
- **62%** of mountain people live in rural areas, where agricultural production is mainly carried out by smallholder farmers and pastoralists
- There are **260+** documented sustainable land management technologies practiced in mountains
- **346 million** (53%) of rural mountain people living in developing countries are vulnerable to food insecurity
- **275 million** rural people vulnerable to food insecurity live in mountain areas affected by past natural hazards
- **311 million** people in mountains are exposed to progressive land degradation
- **128 million** rural mountain people vulnerable to food insecurity lived in areas affected by conflicts between 2000–2018

UN Food Systems Summit Action Tracks and examples of “game changing solutions” as they relate to mountains

Action Tracks	Mountain-related issues	Examples of solutions suggested in first wave
Action Track 1: Ensure access to safe nutritious food for all	Mountain people suffer from hunger and malnutrition.	Promote women-led enterprises to grow and sell nutritious but neglected crops.
Action Track 2: Shift to sustainable consumption patterns	<p>Current food consumption models and patterns have an impact on the nutritional status of poor mountain communities.</p> <p>High value mountain products could help shift the consumption balance to healthy and nutritious food but they cannot compete with larger scale productions.</p>	Ecolabelling for promoting healthy and sustainable diets in points of sale and out of home sales
Action Track 3: Boost nature-positive production	<p>Small-scale farming and pastoralism are predominant production systems in mountains that provide local food and help maintain high biodiversity. Land degradation negatively impacts food production and biodiversity conservation.</p> <p>Traditional indigenous food systems are under pressure. Indigenous mountain people are among the most disadvantaged.</p>	<p>Restoring grasslands, shrublands and savannah through extensive livestock-based food systems</p> <p>Scale up agroecological production systems</p> <p>Promote the conservation and biocentric restoration of indigenous peoples’ food systems</p>
Action Track 4: Advance equitable livelihoods	Small-scale mountain producers live on and from their land. Marginalization and unsecure rights on the land make them even more vulnerable to food insecurity.	<p>Securing land tenure rights for resilient and sustainable food systems</p> <p>Strengthening organization in the agri-food sector</p> <p>Promote inclusive and sustainable agroecological network chains for small-scale farmers and indigenous communities linked to rural and urban consumers</p> <p>Bridging the digital divide and increasing access to information and services in food systems</p> <p>Commitment by main supermarket chains to buy locally</p>
Action Track 5: Build resilience to vulnerabilities, shocks and stress	Half of rural mountain people in the developing countries are considered to be at risk of food insecurity and 79% of them live in areas affected by past natural hazards while 37% of them live in areas affected by conflicts.	<p>Local and public procurement schemes specifically targeting smallholder farmers and micro/small/medium-sized enterprises to purchase food with specific characteristics (i.e., locally produced, produced by women’s or youth cooperatives, organic, seasonal)</p> <p>Blended financing mechanism to small projects/initiatives locally owned by women and youth</p>

		<p>E-commerce eco-system solution for rural transformation (platforms to reach last mile households)</p> <p>Financial inclusion to small-scale producers through climate risk profiling</p>
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