

RESILIENT MOUNTAIN SOLUTIONS WEBINAR SERIES

Women farmers and sustainable mechanization

Improving lives and livelihoods in the Hindu Kush Himalaya

Episode I: The Nepal chapter

5 March 2021 | MS Teams | 14:45–16:30 (NPT)

PHOTO: SUMANA PARUI/CIMMYT

Mountain agriculture and changing gender dynamics in the HKH

The challenge of food and nutrition security in the Hindu Kush Himalaya (HKH) has become increasingly complicated by rapid socioeconomic, demographic, and environmental change, including migration and climate change. Increasing climate variability and extreme events, coupled with limited investment in mountain agriculture and rural development, have resulted in low productivity and lack of off-farm employment options, pushing men into seeking alternative livelihoods elsewhere. Women have therefore been compelled to take on tasks formerly done by men, especially in land preparation, harvest, and post-harvest operations, and marketing of produce, adding to their burden of household and off-farm work. This increasing feminization of mountain agriculture has emerged as one of the most pressing issues in recent decades.

Rationale

Mountain agriculture is physically demanding and time consuming. Rural women, who mostly work as subsistence farmers while also performing domestic work and communal activities, often face a poverty trap, undermining their well-being. Despite increasing labour participation in this sector, women remain invisible as active players and agents of change.

A range of new and inexpensive agriculture machinery, adapted to local conditions, could potentially enhance labour productivity, reduce work burden and drudgery, and enable women to gain new skills and knowledge that can transform rural gender relations and reduce inequalities. It could also allow them to shift from subsistence to more market-oriented farming. However, the extent to which these technologies are available, suitably introduced (by individual use or via extension services) or adopted by women farmers in the HKH is still not clear.

Sustainable agricultural mechanization in the context of HKH must be tailored to the diversity of mountain contexts and user needs, especially of women. To gain better understanding of the current context and explore the opportunities and barriers to introducing customized technologies for women farmers in the HKH, the Resilient Mountain Solutions (RMS) Initiative of ICIMOD organized a [regional consultation](#) in 2019. The consultation revealed that while there is some degree of mechanization in mountain agriculture, the process is uneven, understudied, and lacks documentation. It also highlighted the need to address gender-related concerns in agricultural mechanization and its effects on women farmers and disseminate these concerns to a wider policy audience. Some of the challenges to accessing and adopting these technologies are described in Box 1.

Box 1. Barriers women farmers face in accessing and adopting agricultural mechanization

Lack of customized machines and equipment for women: The machines are often piloted with male farmers and fail to consider women's needs and preferences. Lack of pre-consultation with women in technology development, evaluation, and their adoption results in machines that are not scale appropriate for women (too big to handle), easy to learn, handle, or maintain.

Limited access to finance: The cost of machines often makes them unaffordable for small holder farmers, mainly women. Even where subsidies are provided, these are mostly availed by men as women have very little or no information. Limited ownership of land by women in many HKH countries makes it difficult for them to obtain collateral free loans easily. Consequently, women have difficulties in acquiring machines.

Inadequate institutional support: Absence of strong political buy in for upscaling and outscaling as well as limited linkages with existing outreach and extension, credit and market services which fail to target and reach women with information, knowledge, capacity, and services to handle these machines.

Restrictive social norms: Social norms associated with gender roles often amplify gender gaps and influence women's ability to participate in training programmes, access finance, or use technology.

Little monitoring of the impacts of technology: While technologies may offer opportunities to challenge existing imbalances in gender relations, they can worsen existing power imbalances if not monitored. Sometimes, technologies meant to reduce drudgery or improve the socioeconomic conditions of women can push women out of the sector, replacing them with men, thus taking away their opportunity for income generation.



PHOTO: SUMANA PARUI/CIMM

Based on [FAO \(2015\) report](#), and presentation made during the regional consultation meet organized by RMS on 15 November 2019.

Given this background, ICIMOD's RMS Initiative and the Food and Agriculture Organization (FAO) of the United Nations have come together to organize a series of country-specific (Nepal, Bhutan and Myanmar) and regional webinars. These webinars are part of ICIMOD and FAO's commitment to improving women's active participation in agriculture. RMS is committed to scaling out gender responsive and mountain specific resilient solutions that are simple, affordable, replicable, sustainable as well as appropriate and relevant to the needs of stakeholders at different levels.

Promoting gender responsive farm technologies and mechanization is one of the approaches to develop simple solutions for women farmers in the HKH. To address the gender-related technology adoption constraints, FAO has been extensively working in agricultural mechanization and promoting the dissemination of equipment, machines and tools that are sustainable and can address the drudgery women face. As part of this effort, FAO is also supporting women to take a leading role in developing custom hiring centres for farm equipment.

This webinar series is expected to create awareness and action around current mechanization gaps, and help identify good practices and possible solutions for empowering women farmers in the region.

The webinar series

The webinar series will discuss strategies contributing to the process of mainstreaming and institutionalizing successful efforts of agricultural mechanization for improving productivity while also reducing drudgery for women farmers.

Objectives

The specific objectives of the webinar series are:

- Share lessons learned from projects, programmes, and policies focusing on agricultural mechanization for women in the HKH
- Showcase successful examples and solutions of agricultural mechanization used in the HKH
- Identify key actionable solutions and approaches to promote agricultural mechanization in the HKH



PHOTO: SUMANA PARUI/CIMMYT

Each webinar will conclude with a call for action to align policy with practice to leverage technology to address the constraints and solutions that women farmers face for sustainable, efficient, and profitable farming.

Webinar 1: The Nepal chapter

The first webinar of this series focuses on Nepal. The participants will hear from government officials, international and local development organizations, practitioners, local research organizations, and women farmers/farmers groups about ongoing efforts, key issues, opportunities, and constraints in facilitating women's access to agricultural mechanization.

Nepal country context

Women in the agriculture sector

- About three-quarters of the population work in the agriculture sector, and two-thirds of the population depend on agriculture as their main occupation ([Country Gender Assessment of Agriculture and the Rural Sector in Nepal, FAO, 2019](#))

- Over 74% of the women are employed in agriculture, mostly as subsistence agricultural producers ([The World Bank, 2020](#))
- Female-headed households (HH) accounted for about one-fifth of total agricultural landholders in 2011, a rise of 10% compared to 2001 ([Country Gender Assessment of Agriculture and the Rural Sector in Nepal, FAO, 2019](#))
- Land ownership by women is 19.71% ([Central Bureau of Statistics Nepal, 2011](#))

Migration and remittances

- The percentage of households receiving some sort of remittance increased from 23 percent in 1995/96 to nearly 56% in 2010/11 ([CBS Nepal, 2011](#))
- Remittances accounted for 17% of all HH income at the national level ([CBS, 2011](#)).
- Men accounted for approximately 80% of the total labour migrant population from Nepal in 2017/2018 ([Nepal Labour Migration Report, Government of Nepal, 2020](#))

Agenda

5 March 2021, 14:45–16:30 (Nepal Standard Time, UTC+05:45)

Moderator: Scott E. Justice, FAO

Time (NPT)	Programme	Speakers
14:45–14:50	Welcome and background	Scott E. Justice, Agri and rural mechanization consultant, FAO
14:50–15:00	Welcome address	Pema Gyamtsho, Director General, ICIMOD
15:00–15:10	Opening remarks	Yogendra Kumar Karki, Secretary (Agriculture Development), Ministry of Agriculture and Livestock Development (MoALD)
15:10–15:25	Key presentation 1	Sumitra Manandhar Gurung, Mahila Sahayatra Microfinance Bittiya Sanstha Ltd. (SAHAYATRA)
15:25–15:40	Key presentation 2	Sri Ram Ghimire, Joint Secretary, Agriculture and Livestock Business Promotion Division , MoALD
15:40–15:45	Speed talk	Rashmi Kharel, The Center for Environmental and Agricultural Policy Research, Extension and Development (CEAPRED)
15:45–15:55	Q&A	Scott E. Justice
15:55–16:15	Call for Action	Facilitated by Dipak Gyawali, Academician, Nepal Academy of Science and Technology (NAST)
16:15–16:30	Concluding remarks	Takayuki Hagiwara, Regional Programme Leader, FAO Regional Office for Asia and the Pacific

[Register](#) by 2 March 2021

Co-organized by

International Centre for Integrated Mountain Development ([ICIMOD](#)) and the Food and Agriculture Organization of the United Nations ([FAO](#))

For further information

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