

Climate-smart agriculture takes off, thanks to 'women-friendly' tools and a gender-smart approach

Key messages

A climate-smart agriculture initiative by Local Initiatives for Biodiversity, Research and Development (LI-BIRD) across different agro-ecological areas of Nepal demonstrates key 'success factors' for achieving climate-resilient rural development. These include:

- 1. Work with women farmers** to understand how climate-smart agriculture technologies can deliver multiple development and wellbeing benefits for them and their families. In particular, identify site-specific solutions that could reduce women's workloads while delivering improved income stability and food security.
- 2. Integrate climate smart-agriculture** into the government's regular work programme at provincial and municipal levels. In this case, LI-BIRD established how the Chief Minister's Environment Friendly Model Agriculture Village Programme (CMEFMAVP) of Gandaki province could be effectively integrated into local agricultural strategies.
- 3. Engage women political leaders** in the process. In Nepal, 'travelling seminars' enabled female politicians to have interactive discussions with farmers and learn about on-the-ground realities of agriculture and climate change. Through this initiative, women political leaders developed important messages for advocating in policy processes.

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There is an urgent need for climate-smart agriculture in Nepal. Climate change is affecting the livelihoods of the two-thirds of Nepalis who work in agriculture.¹ Many farmers already follow farming practices that cause long-term environmental damage, such as haphazard over-application of chemicals and unsustainable natural resource use, which degrade soil quality and fertility. Climate change compounds these detrimental effects.

Nepal has three agro-ecological regions: high hill, mid hill and *Terai* (flat plains) regions. All three suffer from climatic hazards. Villages located at higher altitudes are exposed to drought, landslides and hailstorms. The *Terai* is exposed to floods, cold and heat waves and drought. These climatic hazards negatively affect agricultural productivity and yields; for example, by eroding top soils. This has knock-on effects on communities' income and food security.

There is a lack of information among Nepal's farming communities and across the country's agro-ecological regions for tackling these climate hazards and their subsequent social, economic and environmental impacts. Women are especially hard hit. They face structural power inequalities and, as such, have especially poor access to information and resources that could bolster their climate resilience. Furthermore, a male exodus for overseas employment has made rural women's position more precarious. That is why a gender-responsive approach to climate-compatible development is vital.



Women's group works at plant nursery, Nepal.

Photo credit: LI-BIRD

In this context, an important government initiative with the potential to improve rural women's wellbeing is the Chief Minister's Environment Friendly Model Agriculture Village Programme (CMEFMAVP). In Gandaki province, this programme is implemented by the Ministry of Land Management, Agriculture and Cooperative. The CMEFMAVP is designed to make communities more climate-resilient and to promote sustainable farming systems. This short study documents LI-BIRD's experiences in working with the provincial government to implement CMEFMAVP to its full potential.²

Challenges to the uptake of climate-smart agriculture practice

Initially the roll-out of climate-smart agriculture technologies and practices faced serious challenges, namely:

- Government staff's lack of sufficient information and technical knowledge on climate-smart agriculture and the climate-smart village concept, which was required for both initial implementation and subsequent scaling up.
- The diversity of agro-ecological and socio-economic settings across Gandaki province, which called for location-specific implementation strategies.
- Limited awareness on climate change and climate-smart agriculture among political leaders, whose support was required in order to prioritise the issue.
- The slow pace of adoption of climate-smart agriculture technologies and practices, which initially failed to keep up with the urgency of the climate impacts experienced in rural communities and among predominantly female farmers.

'Women-friendly' techniques are key to accelerating climate-smart practices

LI-BIRD took a range of steps to overcome these implementation hurdles. First, LI-BIRD arranged training for government staff to widen their knowledge of climate-smart agriculture and the climate-smart village concept. 'Travelling seminars' were organised, which included field visits with associated round table meetings. These helped municipal, provincial and federal leaders to witness, first-hand, the adaptation practices adopted by successful farmers. The project team then worked with several local governments to develop site-specific, climate-smart agriculture plans that would be integrated into local agricultural development strategies.

Endnotes

- 1 <http://www.fao.org/nepal/fao-in-nepal/nepal-at-a-glance/en/>
- 2 LI-BIRD would like to acknowledge the CGIAR programme on Climate Change, Agriculture and Food Security, CCAFS, which provided the financial support for the activities described here.

Second, LI-BIRD held capacity-building trainings on climate-smart agriculture techniques to strengthen the technical knowledge of the CMEFMAVP staff and the farming communities themselves.

The approach focused on providing climate-smart solutions for crop production and animal husbandry, based on local agro-climatic conditions. The participatory and gender-responsive methods brought to light that some climate-smart techniques were more helpful than others in saving women's time and energy. It is no surprise that the 'women-friendly' tools and techniques were more readily adopted by the majority-female workforce.

Women-friendly tools include the hand-held corn sheller, millet thresher and jab planter. These tools were found to reduce women farmers' drudgery and allow them to work more efficiently. In addition to being highly effective in saving women's time (where women would conventionally use a more labour-intensive method), these tools are also physically suited to women's use.

On the basis of this critical feedback, LI-BIRD disseminated information about women-friendly practices more broadly in the province to improve implementation of the CMEFMAVP scheme. The specific tools mentioned here (corn sheller, millet thresher, jab planter) were promoted in the relevant agro-ecological zones where corn, millet and vegetables are grown, respectively.

This experience shows how blanket approaches to promoting climate-smart agriculture may falter, especially if they unintentionally incorporate male bias. However, careful programme design that responds *both* to local climate hazards *and also* to the different preferences of female and male workers can accelerate the uptake of locally-appropriate, climate-smart solutions.



I really like how transparently the resources are leveraged from different partners is presented publicly. It seemed that women, in particular, have benefitted the most from these pilot Climate-Smart Village programme activities.



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References: Lakpa Sherpa, Balam Thapa (2018). Travelling Seminar: Action for Strengthening Elected Women's Leadership in Local Government for Scaling-Up Climate Smart Village Approach in Nepal. Kathmandu: LI-BIRD.



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