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# IFC Advisory Helps Farmers Adapt to Climate Change

## Pilot Program for Climate Resilience

### AT A GLANCE

- IFC and PPCR are positioning agribusiness firms to directly help farmers adapt to climate change by promoting early adoption of climate-smart practices such as agricultural water management and improved resilient seed varieties.
- The project aims to improve the productivity of smallholder farmers by providing them with tools and technology to help them adapt to climate change.
- IFC's global experience in working closely with the private sector allowed the project to identify and develop relationships with leading Nepalese agribusinesses and to deliver technical know-how, new technologies, and better farming practices to Nepal.
- IFC and PPCR are laying a foundation for future investments through a climate-smart business model that promotes resilience and increases productivity across the South Asia region. It has already been replicated in Bangladesh.
- Recognizing that women make up a majority of the agricultural labor force in Nepal, the IFC-PPCR project is providing services that specifically address the needs of women farmers and while increasing their competitiveness.

*Nepal is the world's fourth most climate vulnerable country.<sup>1</sup> In a country where more than 68 percent of the population depends on agricultural activities for their livelihood, a suite of challenges, including lack of dependable weather systems and harsh terrains that limit farmer access to markets, sets a bleak stage in the face of increased high-intensity climate events.<sup>2</sup> In response, IFC, with support from the Pilot Program for Climate Resilience (PPCR), part of the Climate Investment Funds (CIF), is working to help Nepal overcome these challenges.*

### TRAINING FOR GROWTH AND RESILIENCE

To support the ability of Nepal's agriculture sector to continue to develop in the face of climate change, PPCR and IFC are mobilizing private sector agribusinesses in the rice, maize, and sugarcane industries. These crops are vital to Nepal's economy in terms of both food security (rice and maize) and industrial raw materials (sugarcane and maize), but an IFC study found that these crops were also among the most vulnerable to climate change. In addition, the ability of Nepalese farmers to manage flash floods and droughts is severely limited by traditional agribusiness supply-chain challenges including inadequate extension support, primitive farming systems,

and limited access to finance and technical expertise. The IFC-PPCR project is showing private sector companies how to extend their supply chains by providing technology and innovative climate-smart practices to smallholder farmers.

A central part of the project is training staff how to utilize a tailored Climate-Smart Agronomic Package of Practices that facilitates climate-smart production of these key crops. The staff can then share this knowledge with businesses and farmers. The program utilizes the “triple bottom line” of principles in environmental, economic, and social sustainability.

By identifying and promoting the appropriate adoption of higher-yielding crop varieties that are more resilient to projected extreme weather conditions (such as recurrent droughts) and by improving practices in soil fertility and disease-resistant crop care, farmers are adapting to their changing climate. Additionally, new agricultural water management practices are allowing farmers to mitigate the effects of unpredictable rainfall patterns and increased evaporation caused by higher temperatures.

Because of a large emigration of males for higher paying foreign jobs, additional workload has been imposed on women workers.<sup>3</sup> Over 80 percent of employed Nepalese women depend on agriculture for work, and they are becoming the main drivers of national agricultural development. The project recruited several female extension officers, oriented them on gender-sensitive training approaches, adjusting the training schedule to meet women farmers’ specific needs, and connected women farmers with input suppliers and off-takers.

## IFC’S INCLUSIVE APPROACH

During the project, IFC completed an in-depth diagnostic study which evaluated and identified priority subsectors (rice, maize, sugarcane), and geographic locations (the Terai plains south of the Himalayan foothills) that were particularly vulnerable to climate change. Project personnel then engaged with leading agribusiness companies to show them how to provide climate-adaptive solutions to farmers via their supply chain, train farmers to utilize climate resilient practices, and sustain these efforts beyond the project’s lifespan through improved extension of services and development of stronger relationships between the firms and the farmers.

*“Climate change risk is inevitable and inherent to all sectors. Prudent businesses see the urgency and opportunities in adopting resilient practices.”*

— **Anand Bagaria**  
Managing Director  
NIMBUS Holdings P. Ltd.

IFC’s global experience in agribusiness and the private sector within the context of developing countries positions it as an important catalyst for change. By integrating climate-smart practices with financial know-how, IFC is helping developing countries meet policy goals. The IFC-PPCR project in Nepal was IFC’s first effort to develop sustainable and replicable models of private-sector engagement with smallholder farmers to improve farming output resilience, expand the sector, and respond to the challenges of climate change. Lessons learned from this project can be useful in replicating the model in other countries that face similar challenges presented by climate change.

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  - [2] International Labour Organization. 2016. The ILO in Nepal. Geneva, Switzerland. [http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-kathmandu/documents/publication/wcms\\_445059.pdf](http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-kathmandu/documents/publication/wcms_445059.pdf)
  - [3] Department of Foreign Employment, Ministry of Labour and Employment, Government of Nepal. 2014. Labour Migration for Employment – A Status Report for Nepal: 2012/2014: 9. Kathmandu, Nepal. [http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-kathmandu/documents/publication/wcms\\_312137.pdf](http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-kathmandu/documents/publication/wcms_312137.pdf)

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