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Generating a Conceptual Framework of Agro-Climate Information Interventions in Vietnam

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Abstract

Farmers' agricultural practices in Vietnam are highly sensitive to variable weather and vulnerable to the impacts of climate change. The lack of timely and actionable weather forecasts and agricultural advisories can lead to significant yield loss and unprofitable investments in agricultural inputs, which can have severe consequences for resource-constrained farming communities, including many women and ethnic minorities. Development organisations in Vietnam have provided agro-climate information services (ACIS) in the form of climate-informed agricultural advisories to farmers. However, so far these interventions have been very limited in scale. Development organisations are advocating the government to consider upscaling the provision of climate advisory services, but a large-scale roll-out could strain their financial and human resources. We developed a conceptual model of costs, benefits and risks involved in such an intervention aiming to provide effective support to the government's decision-making process. The model was developed from expert knowledge gathered in workshops, which also served to generate data and offer space for learning and reflection. We used collaborative tools to explore the implications of the government's decision on investing in ACIS interventions in the complex and uncertain context of agricultural production in Vietnam.

We held a series of model building workshops in 2019 with a team of technical staff from government and NGOs with experience in implementing ACIS and expertise in meteorology, climate change, crop production, animal husbandry, communications, gender and poverty. The workshops were designed to generate and validate a conceptual framework of the decision. The resulting model includes: (1) costs for generating forecasts and translating them into advisories for farmers, including transfer, support, monitoring and evaluation; (2) benefits, including increased yields, reduced losses of agricultural inputs, reduced poverty and gender inequality and improved health; (3) risks including the possibility of inaccurate weather forecasts leading to misguided advice causing yield losses and inefficient use of costly agricultural inputs.

The framework offers a foundation for the design, implementation and evaluation of ACIS. It provides pragmatic guidance on ACIS interventions, and can be adjusted to fit specific circumstances on the ground.

Keywords: Agro-climate information service, conceptual framework, cost-benefit