



When to use community-based climate adaptation planning: Case studies from Van Yen and Van Chan, Viet Nam

Key Findings:

- **Using participatory methods to assess community adaptation priorities incorporates site-specific and locally relevant criteria—in addition to stakeholder ownership—into adaptation planning processes.**
- **Incorporating local perceptions of inputs, outcomes and associated costs and benefits of adaptation actions is helpful in establishing cost effectiveness and impact with regard to local contexts and improving uptake of interventions.**
- **Community input on costs and benefits is most useful when the intervention a) builds directly on local experience or expertise, b) is uncommon at the national or regional level or confined to a limited geographic area, and/or c) is poorly studied or documented, limiting national access to local-level data.**

Integration of climate change adaptation into policy and planning processes is critical for the agricultural sector. The Participatory Social Return on Investment (PSROI) framework is a participatory method used to identify locally appropriate adaptation strategies for effective community-based adaptation and to assess the costs and benefits of adaptation plans.

PSROI pilot studies in Van Yen and Van Chan Districts in Yen Bai, Viet Nam showed that community involvement in prioritizing adaptation actions is important for the successful choice of interventions that build resilience and are supported by the communities. Interventions relying heavily on local knowledge or expertise require intimate community involvement for planning and implementation. But in other cases design and planning can adequately occur at national or regional levels.



Introduction

Because agriculture is one of the most vulnerable sectors to the negative effects of climate change, plans and policies must be implemented that support adaptation for the goals of food security and sustained agricultural productivity. There are many possible pathways that may support agricultural adaptation, thus the choice of an adaptation action that is effective, efficient, and appropriate to local contexts can be a challenge. Efforts are increasingly made to conduct inclusive planning processes, which draw upon the knowledge and priorities of a diversity of stakeholders. Despite that, climate change adaptation policies and cost estimates generally continue to lack sufficient resolution to match the realities faced by households and farming communities. The danger of this mismatch is the potential support of interventions that do not maximize opportunities to build resilience and at worst may lead to maladaptation and the increased vulnerability of communities.

The Participatory Social Return on Investment (PSROI) framework helps identify priorities and analyze the value of climate change adaptation actions from stakeholders' perspectives. It uses participatory techniques and builds on existing local capacity to pinpoint appropriate adaptation options given the unique context of the community, and later monetizes the costs and benefits of actions from economic, social, and environmental perspectives. PSROI can be an effective method for incorporating community-based information into adaptation planning at regional and national levels.

In 2012 the Vietnamese Academy of Agricultural Sciences (VAAS), in partnership with International Center for Tropical Agriculture (CIAT), piloted the PSROI framework in two villages in Viet Nam. Local agricultural adaptations options were prioritized and costing strategies were compared between the local and national levels to verify when community-based approaches were most necessary for planning.

When community-level design and costing is essential: *Dai Thang village, Van Yen District*

For agricultural adaptation, villagers from Dai Thang village prioritized the conversion of 50 hectares of private land from pure cassava cultivation to an intercropped cinnamon and cassava system as a form of livelihood diversification. Cinnamon cultivation is a traditional strength of this community, and a unique one; the spice is grown in only a few



locations in Viet Nam and practices are therefore highly dependent on local knowledge. Communities purposefully differentiate their growing techniques to take into account local ecology.

Very few studies have been conducted on understanding the full costs of household cinnamon growing in Viet Nam, and national access to information on the costs and benefits of its cultivation or intercropping with cassava is sparse. In fact, national-level experts adjust their recommendations based on results or changes observed in Van Yen. A cinnamon intercropping intervention is simply an expansion of practices that are current and familiar to the community, and whose costs and benefits are already well known to them. High-level advisors would have minimal additions to the intervention's local implementation. Nevertheless, the link to national or regional planning is still important to buffer against fluctuating international market prices.

Key lessons

- If interventions are based on local knowledge, then engaging communities in detailed discussions of design, inputs and outcomes is a crucial step in accurately costing impact of the intervention.
- The above is also true for interventions that are not highly prevalent at the national or regional level, are confined to a specific geographic area, or are not adequately studied or documented, limiting national-level access to localized data.

When high-level design and costing may be sufficient: Ban Long village, Van Chan District

The development of a semi-intensive pig raising facility was an adaptation priority identified by the villagers of Ban Long village, one that could help them achieve their other adaptation goals such as access to improved rice varieties and environmental clean-up via better waste and water management programs. Here, community involvement in prioritization demonstrated the links between different adaptation options and how they could work synergistically in a multiple adaptation pathway.

However, community involvement was not critical to the design and implementation of the pig-raising intervention itself. Pig raising is highly prevalent and well-researched across Viet Nam and a considerable knowledge base already exists on the inputs, outcomes and costs of optimizing such an operation. Van Chan villagers already had extensive local knowledge about pig raising, but the scale of the operation was new to them. The intervention's design, for example the inclusion of biogas treatment ponds to aid climate change mitigation and environmental protection, was not pre-existing community knowledge and therefore relied on external inputs.

Key lessons

- If a well-established national knowledge base for an intervention already exists, then community involvement in upfront design and costing is not necessarily critical.
- Some key inputs like environmental or hygienic management may need to come from design teams that operate above the community level. Community dialogue is most important around non-identified inputs that may be crucial to run the intervention, or address barriers to its adoption.

Policy implications

1. Engaging communities to understanding their priorities for adaptation is critical for identifying locally appropriate adaptation solutions for agriculture systems aligned with community visions of resilience.
2. The PSROI methodology can be a useful tool for assessing adaptation priorities and costs, which can guide decision making about adaptation planning, identify impact for adaptation funders, and in addition, act as a monitoring and evaluation tool to assess impact over the long term.
3. Costing adaptation interventions accurately does not always require full inclusion of communities in every step of data input. Utilizing the PSROI methodology in its entirety is most appropriate when the local context presents unique variables and costs associated with interventions and when adaptation interventions are based on local design instead of previous information provided by external experts. Ground-truthing key costs and expected outcomes with communities can be useful though even when costing, using entirely community derived data is not necessary.

Notes

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