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Improving sub-national capacity to adapt to climate change in agriculture



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Climate change planning capacities and processes vary among the various Southeast Asian countries. But common is the difficulty faced in mobilising local action.

In Cambodia, the need for policy that supports climate change adaptation (CCA) mainstreaming into national policies, planning and budgetary processes has affected mainstreaming efforts at sub-national levels (AKP 2010a). In Vietnam, provinces without CC projects are not aware of the issue and have not yet taken any action (AKP 2010b).

On the other hand, the Philippines has been responsive in terms of policy. Its Republic Act 9729, approved in 2009, mainstreamed CC into government policy formulations, established the Framework Strategy and Program on Climate Change, and created its Climate Change Commission. The year before, a memorandum circular was issued encouraging all executive councils at the provincial and municipal levels to implement CCA and disaster risk reduction (DRR) measures. Despite this policy support, local government units (LGUs) have a hard time accessing funds and operationalising CCA in development planning (AKP 2012).

Mobilising local CC response is crucial, especially for agriculture since the factors that influence vulnerability

and adaptive capacity to climate risks are highly site and context-specific. Climate proofing agricultural productivity is essential for Southeast Asia, whose economy is largely agriculture-based. A sizeable portion of the region's agricultural activity is carried out on small and marginal farms by smallholder and subsistence farmers, who are among those who will suffer the most from CC impacts (Easterling et al. 2007). Clearly, CC presents an additional layer of threat to regional food security if productivity improvements and adaptations are not applied (ADB 2009).

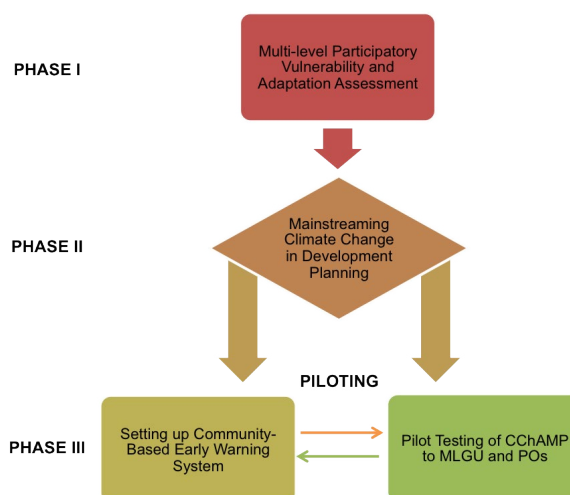
Mainstreaming adaptation: the FPAVAS process

With LGUs at the forefront of local CCA mainstreaming, it is important that they be capable of effectively translating national policy goals into local action plans to ensure agricultural productivity and food security. One of the components of the European Union's Focused-Food Production Assistance to Vulnerable Sectors (EU-FPAVAS) project focused on helping Philippine LGUs in mainstreaming CCA in their local development plans. The FPAVAS project was implemented by SEARCA from January 2010 to October 2011 in six Philippine provinces. Besides CCA mainstreaming, other components of the project focused on food production assistance.

The project's CCA mainstreaming process was divided into three phases (Figure 1):

- Phase I: Vulnerability and adaptation assessment through wide stakeholder engagement.** Perception of climate risks and hazards of provincial representatives from offices in charge of planning and development, agriculture, and environment were validated through several on-site farmers' orientations on CC. Additional data was gathered through a survey of 600 farmer informants. Using the gathered risk perceptions and five factors maps (i.e., elevation, slope, soil type, land use/cover, and soil erosion), a GIS-enhanced vulnerability map was produced for each of the six provinces.
- Phase II: Mentoring LGU representatives on how to operationalise CCA in their development planning processes.** A seminar-workshop attended by representatives of the six provinces' Technical Working Groups (TWGs) on DRR/CCA was held in Albay, which was declared in 2008 as a "Global Local Government Model for Climate Change Adaptation" by the *United Nations International Strategy for Disaster Reduction* and the World Bank. With lessons based on Albay's best practices and CCA framework, a series of mentoring workshops followed wherein the CCA TWG members drafted their provincial Climate Change Adaptation and Mitigation Plan (CChAMP), with guidance from FPAVAS national CC experts.

Figure 1. FPAVAS Mainstreaming Process



- Phase III: Pilot testing of priority activities.** Initially, the intention was for all prepared CChAMPs to be presented to their respective provincial executive councils for approval during the project cycle. However, because of unforeseen delays, not all were approved in time. This approval was important for Phase III so that LGU funding can be used to support the pilot testing of CChAMP priority activities. Because of the delay, activities pilot tested during Phase III were limited.

Practical advice in mainstreaming at the sub-national level

The FPAVAS experience provides much insight on how to accelerate CCA mainstreaming at the sub-national level. Based on the lessons learned by the SEARCA-based FPAVAS Central Project Management Unit (CPMU) and the provincial DRR/CCA TWG representatives, below are their advices to governments who wish to improve sub-national capacity in dealing with CC uncertainty.

- National governments should provide timely detailed directives that enable immediate local response.** LGU readiness, which is important to mainstreaming, is indicated by the integration of CCA in local development plans, says a CCA TWG representative from a Provincial Planning and Development Office (PPDO). Such integration is highly dependent on how well national plans and policies enable local response. Without the necessary policy directive from the national government, it can be expected that there is no budget allocation or even clarity of roles at the sub-national levels.

Hence, the timing between mainstreaming efforts and the approval of relevant national policies

affect LGU readiness. For instance, although a memorandum circular was issued as early as April 2008 encouraging LGUs to "mainstream CCA and DRR measures in local policies, plans, budgets and investment plans as a priority concern", the guidelines on how this can be done was only better clarified upon the creation of the Philippine National Climate Change Action Plan (NCCAP), which was approved almost a full year after FPAVAS started. Hence, the project found that much still needed to be done at the local level in terms of creating the necessary local institutional framework and justifying the need to prioritise CCA investments in local government investment plans. "The timing of the trickle down of national policy should be considered," explained a FPAVAS CPMU representative. It takes a while for national policy goals to be translated into local action and sub-national units need much technical guidance for this to be done properly.

- Government initiatives should use participatory social preparation in educating farmers about climate change.** Local farmers must appreciate and understand the importance of CCA and DRR to their livelihood for mainstreaming efforts to bear fruit. This is observed to be best achieved through participatory social preparation.



During the farmers' orientations in Phase I of the project, farmers were asked to list down observed local climactic changes and effects vis-à-vis their current and suggested adaptations. This exercise not only allowed for valuable information to be gathered but also helped farmers better appreciate CC concepts as they were able to relate them to their actual experience.

- **Government mainstreaming efforts should also prioritise local pilot testing of adaptation options.**

Pilot testing provides LGUs with local experience on how to tackle site-specific climate risks, which allows them to better appreciate the possible result of mainstreaming effort. Representatives from the FPAVAS CPMU noted that the shortened Phase III limited the project's ability to demonstrate best site-specific adaptation options. Despite this, the project was still able to introduce stress tolerant rice (STR) varieties to the six provinces and also supported the conduct of STR field trials with the International Rice Research Institute. LGU agriculturists and technicians were trained in the use of new rice technologies for rain-fed and lowland agro-ecosystems that were vulnerable to drought, flooding due to rising sea levels, and water salinity due to salt water intrusion.

- **National governments should provide timely technical assistance that enables the creation of science-based sub-national plans.**

Timely technical assistance is crucial to timely local climate risk responsiveness. Capacity building activities in tandem with comprehensive extension services allow for faster LGU response and better ensure the success of mainstreaming efforts. A FPAVAS national CC expert explains that such mentoring is necessary especially since LGU planning processes are still highly sectoral. "The planning unit and approach for CCA should be ecosystem- or watershed-based instead of LGU- and sector-based," she explains. "Such planning approaches recognise the interconnectedness of different sectors and ecosystems. Since they ignore political boundaries and are more focused on how ecosystems, economies and cultures affect one another, the resulting plans are more holistic and comprehensive," she added.

- **Governments can ensure the sustainability of local efforts through planning and continuous monitoring.** CCA mainstreaming is a continuous process that should not end with the initiating project. Unfortunately, this happens frequently. According to a PPDO TWG representative, even when local executives have signed memoranda of agreement indicating their intent to sustain efforts upon project exit, there is a tendency for municipal-level efforts to wane and for LGU focus to go to other priorities once the initiating project ends.

"Mainstreaming should not be viewed as a one-time project-based initiative," explains a FPAVAS national CC expert. "That is why it is important to invest in monitoring," she adds. The significance of continuous monitoring in ensuring sustainability of efforts is confirmed by the provincial TWG representatives interviewed who added that "monitoring reminds municipal mayors of their responsibility".

Sustainability planning before project exit is also a useful technique. A PAO TWG representative attributed their province's success in sustaining FPAVAS efforts to the sustainability planning that they conducted to ready communities for the project's eventual exit. "As a result, we were able to incorporate project continuity in the provincial investment plan," she explained.

- **National governments should continuously encourage sub-national political commitment to CCA mainstreaming.** LGU commitment is tantamount to success of mainstreaming efforts. The sustained commitment and action of provincial and municipal implementers, and a supportive political leadership are associated with CCA mainstreaming initiatives that have a higher chance of continued success.

It was observed by several provincial CCA TWG representatives that political commitment at the sub-national level is often affected by the leader's length of term left in office. Another common grievance is the political leaders' and local implementers' tendency to show enthusiasm at the start of the project and then lose interest before project completion. This is most observed through frequent changes in stakeholder representation,

which communicates waning commitment to the mainstreaming process and its outcomes. The creation of leaders and champions who do not just 'go through the motions' of CCA mainstreaming was therefore identified as an important investment by a FPAVAS CPMU representative. Governance is social and a large part of its function is to inspire collective action, she explained.

The importance of national and sub-national governments in CCA mainstreaming no longer needs further debate. Based on the advice given above by the FPAVAS team, four important points must inform future national and sub-national CCA mainstreaming efforts:

- a) While sub-national governments are at the forefront of local mainstreaming, they largely depend on national governments for policy and technical support and leadership, which need to be timely and informed
- b) Sustainability of local mainstreaming efforts is largely dependent on the commitment of sub-national political leaders and on how actively they champion CCA mainstreaming and monitor its progress.
- c) For CCA mainstreaming efforts to result into a climate-proofed agricultural sector, additional effort must be given to: i) enhancing farmers' belief in the actuality of climate change; and ii) providing sub-national governments with concrete evidence that proposed adaptation options are appropriate to site-specific needs through pilot testing and demonstration sites.

- d) Governments should invest in the documentation and sharing of local CCA mainstreaming experiences, such as those shared by the FPAVAS team, not only to avoid costly mistakes but also to upscale best practices.

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