



Developing rainfed crop-livestock value chains through Innovation Platforms: experiences with rural communities in the Volta Basin

The context

The Volta basin is home to around 19 million people, of whom 70% are rural. This population is projected to increase to 50-60 million by 2050. The urban population in the basin will also rise with the ratio of rural to urban population expected to change dramatically from 2.3 now to 0.5 in 2050. Rainfed crop-livestock systems are the mainstay of livelihoods/economies in the basin but these are affected by factors such as environmental degradation, loss of soil fertility, insecure land tenure, limited market access and price volatility as well as poor distribution, late onset and early cessation of rain.

Furthermore, insufficient infrastructure and financial capacity amplify the challenge for smallholder farmers to accessing agricultural inputs and the water they need to produce enough food. This situation leads to lower crop yields and lower livestock productivity calling for more innovative farming practices and adaptation techniques. Poverty therefore remains strongly rural and is exacerbated by a number of social inequalities including gender inequality in access and control over natural resources. However, the growing population and urbanization in the basin will contribute to develop local and informal markets, which are opportunities for productivity and economic growth.

Multi-actor system as an Innovation Platform (IP)

The Challenge Program on Water and Food in the Volta basin aims "to strengthen integrated management of rainwater and small reservoirs so that they can be used equitably for multiple uses." One way by which to accomplish this is to increase crop and livestock productivity through Rainwater Management Strategies (RMS) and improve water productivity at the farm level.

IPs are a form of a public-private partnership. They are also multi-actor systems set up to identify:

- how stakeholders can work together in various capacities and competencies for a given value chain in crop-livestock systems in the Volta basin and improve actor interrelationships;
- opportunities, constraints and develop strategies for addressing challenges and promoting the value chains.

IPs provide a mechanism to facilitate learning, sharing and communication amongst value chain actors, including farmers, to promote joint action and stimulate innovation. They also create common ground for different actors with varied interests and challenges to identify opportunities to enhance their benefits in a given value chain. Membership is based upon peoples' interest and need to improve the value chain for their own benefit.

From baseline studies to setting up the Innovation Platforms

The IP approach involves dynamic and fluid platforms of multiple actors at various levels that support action learning and strategies for scaling up and out. Through the Volta Basin Development Challenge (VBDC) project on "Integrated management of rainwater for crop-livestock agro-ecosystems" (V2), the CPWF worked with the Netherlands Development Organization (SNV) in Burkina Faso and Ghana to develop appropriate innovation platforms around identified crop-livestock value chains.

The project started by understanding the baseline situation to be able to monitor and evaluate its value-added and impact. Based on the site selection criteria developed during the project-planning meeting in November 2010, eight communities per country were identified for the implementation of project activities. In those communities, the Institut de l'Environnement et de Recherches Agricoles (INERA) in Burkina Faso and the Animal Research Institute(ARI) in Ghana carried out a Participatory Rapid Appraisal (PRA) survey to characterize crop-livestock systems, available natural resources, rainwater management practices, key local actors and institutions, and market access. Based on findings from the PRA and ensuing value chain studies in the selected communities as well as interactions between project partners, SNV brought together farmers (both males and females), traders, livestock keepers, input suppliers, technical agents, researchers, and NGOs involved in rural credit to set up innovation platforms in the project sites. Eventually four IPs were established (two in each country) by the project in order to contribute to develop four crop/livestock value chains. SNV was supported in the process of setting up and facilitating IPs by innovation systems experts at International Livestock Research Institute (ILRI).

Achievements and lessons learned

The success of an IP can be measured by the extent to which its structure and processes have contributed to achieve the desired outcomes. We hypothesized that communication and coordination within IPs help to enhance the outcomes of improved productivity and market access by beneficiaries. Specifically, our IPs were set up to contribute to improvement of (i) soil and water management; (ii) access to inputs; (iii) access to credit; (iv)crop and livestock production; and (v) access to market information for the IP members. Although the extent to which our IPs have achieved these outcomes remains to be firmly established, we have gathered and analyzed information and data on the IP structures and processes to draw partial conclusions. It should be noted that the project could only facilitate the IP structures and processes but external factors (finance, environment, weather, etc.) are also important in leading towards achieving the desired outcomes.

That clarified, farmers, our IP members in the project communities in rural Northern Ghana and Burkina Faso, reported some improvements in access to inputs, improved soil & water management, and market information access and exchange and the coordination of activities. Improved soil and water management was mainly the result of our participatory action research, exchange visits between IPs and training sessions by International Water Management Institute (IWMI) on soil and water conservation techniques. The improved market information access, exchange and coordination among value chain actors were directly the result of our IP activities. Progress towards market access and credit access was deemed low because the emphasis was on rainwater management meaning in practice that the IPs mainly focused on the productivity of the agricultural system.

In the IPs management process, we soon learned that scale does matter. Initially many individual participants were invited from each participating village, but it was difficult to manage the meetings due to the large number of people; hence the project had to re-organise the IPs by selecting focal points for stakeholder groups from the different villages. In the same vein, the four commodities chosen by the IPs made it complex to do a robust actor analysis although producers were willing to discuss their production system as a whole. It is clear that in order to improve production efficiency in response to market demand, IP stakeholders should understand how to use value chain analysis on just one commodity so that they can do it again on their other commodities. But through the value chain analysis, producers should first understand how their entire production system participates in bringing the one commodity to the market. In addition, there is a need for IP stakeholders to pay attention to the viability and sustainability of their IP. One option to attain this is to formalize the existence of the IP as an association or multi-stakeholder cooperative, if possible, in order to access credits and services as a group; another option is to anchor the IP to an existing well-established multi-actor association or institution. In any case, the interests of the IP members should prevail.



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