



SANREM CRSP

ABOUT  
SANREM CRSP

SANREM'S mission is to assist in the analysis, creation and successful application of decision support methods, institutional innovations and local capacity approaches to support participatory sustainable agriculture and natural resource planning, management and policy analysis at local, municipal, provincial and national levels.

## SANREM CRSP RESEARCH BRIEF

Sustainable Agriculture & Natural Resource Management Collaborative Research Support Program

2003 No. 14

### **INTEGRATING RESEARCH AND POLICY FOR NATURAL RESOURCE MANAGEMENT: LESSONS LEARNED IN THE PHILIPPINES**

*How can research inform environmental policy dialogue and design? What are the methodological approaches and institutional arrangements necessary to sustain interactions between research and local governance?*

It is uncommon for policymakers to seek out scientific information before making decisions. If they do it is often for the purpose of confirming the soundness of a policy position after a decision has been made. This situation results in a low appreciation for the value of research and, consequently, an unwillingness to devote resources to it. It also means that policies do not gain from advances in knowledge. These problems are compounded by the way science is designed and results disseminated, often failing to take into account policy makers' needs and their capacity to access and absorb information, as well as the constraints of policy making in the real world.



*An aerial view of the Manupali watershed*

Currently, pressures for change emanate from two sources. First, funding agencies are exerting greater demands on scientists to ensure that publicly-funded research has clear potential for societal benefits. Secondly, the ongoing devolution of governance in many countries is increasing the demand for locally based research, as communities look to their elected leaders for initiatives to stimulate the local economy and manage the natural resource base. In this Brief we analyze interactions between environmental research and local governance, using the SANREM CRSP experiences in the Philippines to show how a participatory approach contributes to

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ensuring research relevance and fostering policy linkages.

## BACKGROUND

### The research-policy interface

Policy-focused research has been largely disconnected to local policy processes; until recently, environmental decisions in many developing countries have been confined to the national level. Consequently, the tendency has been for national agencies to distill scientific findings into rigid “one-size fits all” policy prescriptions for country-wide application. In a context of decentralized environmental governance, policy relevant research requires an in-depth understanding of the conditions in which local level policymakers operate. The following issues exemplify some of the specific challenges that characterize the local level policy environment:

- \*Local governments’ powers are much more limited than that of the national government.
- \*There are often contradictions among the policies of different national agencies, and between national and local government policies.
- \*Local governments face severe constraints in terms of fiscal and human resources, which affect the performance of their devolved functions.
- \*Policy priorities evolve dynamically in growing economies and are subject to change in order to adapt to transitions in political administration at national and local levels.

### The case study

#### The research setting

Nestled within the upper-watershed area of the Manupali River, Lantapan is one of the major municipalities of the Bukidnon province through which water flows to the Pulangi IV hydroelectric power plant. It is also one of the eight municipali-

ties bordering a major national protected area, the Mt. Kitanglad Range Nature Park. Sugar cane and corn are cultivated in the lower and middle elevations of the watershed. Temperate climate crops, destined to urban markets, have replaced traditional crops on higher elevations such as abaca and coffee. Towards the end of the 1990s, Lantapan experienced a major shift in its economy when two joint-venture banana plantation companies and several large-scale livestock production facilities began operations. Rapid agricultural growth, marked by expansion in cultivation of



*Competing use of resource bases affects quality and quantity of water resources (picture shows a dam on the Manupali River, Pulangi reservoir)*

high-value vegetable crops in ecologically fragile areas as well as a push towards agro-industrialization, has placed severe pressure on the local environment. Deforestation, soil erosion, loss of biodiversity, and degradation in water quality and quantity have occurred at unprecedented rates.

#### The policy context

The launching of the SANREM CRSP program in the Philippines (1993) came on the heel of two key policy developments: a) the promulgation of the 1991 Local Government Code, which brought about a radical devolution of political and administrative authority from national to sub-national units; and b) the creation of the Philippine Council for Sustainable Development (PCSD), with the mandate of articulating the country’s commitment to the goals of Global Agenda 21 (formulated at the 1992 Rio Earth Summit). Unfortunately, neither measure provided for the generation of scientific information and human capacity needed to underpin local natural resource management policy. This is the lacuna that the SANREM program set out to fill.

During the first phase of the SANREM program (1992-1997), SANREM partnered with the municipal government to develop the Municipal Natural Resource Management and Development Plan; this collaboration served as the nexus of an effort to link research and policy. The Plan was informed by SANREM’s research outputs as well as by the programmatic emphasis on participatory approaches and inter-institutional collaboration.

In its second phase (1998-2003), SANREM focused on the creation and successful application of decision support tools (e.g., biophysical and economic models, environmental monitoring, etc.), policy analysis and advocacy activities at the local level, and capacity-building activities. It also concentrated efforts towards scaling out and up, by expanding to municipalities bordering the Mt. Kitanglad Range Nature Park and by linking its policy research and activities to national level. In scaling out, SANREM played an important role in facilitating cross-jurisdiction communication among officials from the different municipalities involved in park administrations as well as new environmental responsibilities recently devolved from the national level. Scaling-up to national level was prompted by recognition that, despite the devolution, much of the responsibility for environmental policy continues to emanate from the national government agencies including those with a direct mandate over natural resources as well as those whose decisions influence natural resource management through market interventions.

## METHODOLOGY

### **The approach and the process**

The linear model, whereby scientists design and conduct research and then pass their recommendations to policy makers, is inadequate in settings where a strong 'research culture' does not exist. Successful building of research-policy linkages requires appropriate methodologies and attention to the *process* whereby multiple stakeholders collaborate to design, implement, and evaluate research. Below we outline three interdependent strategies that guided SANREM's efforts to link research and policy in Lantapan.

#### *Creation of social environments for stakeholder interaction*

SANREM has fostered the establishment and reinforcement of social environments for stakeholder interaction, including consultations with community groups, participation in municipal meetings, and creation of a community advisory council (within the SANREM Philippines management structure) to ensure local representation in

programmatic decisions. Research results were explained to the Lantapan community by means of informal gatherings, called *kapihan* (coffee break) and *pulong-pulong* (dialogue). The *kapihan* were also held at the provincial level, where they brought together a geographically and politically diverse audience including municipal planners as well as provincial and regional level policymakers. These face-to-face information dissemination strategies facilitated understanding of the project's missions and created awareness of pressing local environmental issues. In an impact study conducted at the research site, municipal officials ranked SANREM as the primary information source on natural resource management (Buenavista *et al.* 2001).

#### *Capacity building for communities and local government*

The program undertook numerous training activities directed towards municipal or provincial governments, community-based groups, and other local stakeholders. At the community level, SANREM also trained water quality monitoring volunteers, an initiative that led to the formation of a registered NGO, the *Tigbantay Wahig* (TW) or 'Water Watchers'. With SANREM's support, TW members have played an active role in advocating for policy change and have served as resource persons in municipal and national policy dialogues.

*Demand-driven research and policy advocacy*  
SANREM's strategy has hinged on the production of demand-driven policy studies, coupled with training for local government officials in policy



*Livestock operations are a new economic enterprise impacting the watershed environment*



*Intensive slopeside crop production without proper land management can cause severe soil erosion*

analysis. One such example is a study requested by the local government to assess the feasibility of introducing water tariffs in the municipality as a way of responding to increased water demands by banana plantations and livestock producers. Another example is the technical assistance provided by SANREM researchers in drafting an ordinance banning the use of aerial spraying in banana plantations.

The successful creation of research and policy linkages is a dynamic, interactive process requiring collaboration with institutions that can communicate and connect effectively with policy audiences. SANREM's partnership with the Philippine Institute for Development Studies, which has the specific mandate of advising the government in matters of policy, is an example of effective application of this strategy.

## RESULTS

### **Accomplishments and outcomes**

SANREM's research has been instrumental in alerting policymakers and citizens to incipient trends in natural resource degradation. Local officials responded to SANREM's messages by encouraging the formation of committees to which the municipal government could entrust some of its devolved responsibilities such as the Natural Resource Management Council (NRMC). The NRMCs were responsible for drafting the natural resource management plan and for its approval by the municipal government.

Participatory research provides both a process and a support for community groups to express their

needs and concerns vis-à-vis more powerful stakeholders. In the case of Lantapan, water quality and stream flow data presented by a community-based volunteer water monitoring group (*Tigbantay Wahig*) provided compelling evidence for the local government to act on its environmental policy agenda and to call on the agribusiness sector to invest in local environmental conservation efforts.

It is too early to conclude that the Lantapan Watershed Committee or the NRMCs will develop into robust

institutions that can adapt to political transitions. Their sustainability is clearly linked to their accountability. As their accountability is limited to the local government, chances are that their existence will be threatened with every turn of the electoral cycle. 'Downward' accountability to the community broadens participation and is a dimension of effective decentralization.

The value of research in guiding development interventions is receiving increasing recognition throughout the SANREM site. For example, the Bukidnon Integrated Area Development Project used a SANREM Policy Brief on water resource management to assess the environmental costs and institutional arrangement required to construct communal irrigation and potable water supply systems. Similarly, SANREM research was used in the deliberation of proposals for the World Bank-funded Non-Destructive Livelihood Activities to be implemented in municipalities surrounding the Mt. Kitanglad Range Nature Park.

## CONCLUSIONS

### **Lessons learned**

The Lantapan experience yields important methodological insights and lessons to inform efforts to link research and policy:

- \*Use the research process as a means to bring together multiple stakeholders and to influence policy and action; use the research product to generate public awareness and guide decision makers.

- \*Focus on long-term outcomes that foster local ownership (i.e. establishing a democratic process

for multi-stakeholder participation) rather than top-down short-term interventions (i.e. passing laws without community consultation).

\*Institutionalize mechanisms for community-based dialogue and involvement in research design and implementation.

\*Institutionalize partnerships among agencies with environmental mandates and between researchers and partners in national and local government.

\*Design research with a plan for facilitating uptake of research results; follow-up activities to translate, package, and disseminate results to different audiences should be supported by donors as key phases of the research process.

\*Contextualize research within the political context of the host country. For example, in the Philippines, the devolution of environmental governance enabled the SANREM's program to build connections with local institutions in knowledge generation and policy

advocacy as well as focus on issues of relevance to the local community.

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This Research Brief is drawn from the following paper: Buenavista, G., A. Sumbalan, and I. Coxhead. 2002. How do research projects influence the design of local policies for Environmental and Natural Resource Management? *Philippine Journal of Development*. First Semester 2002. No. 53. Volume XXIX, No. 1.

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SANREM is a Collaborative Research Support Program (CRSP) supported by the U.S. Agency for International Development Cooperative Agreement No. PCE-A-00-98-00019-00 and managed by the University of Georgia. The project brings together researchers from eight U.S. universities who partner with host country universities; local and national government officials; international agricultural research centers; and non-governmental organizations.