

Governance and Natural Resources Management: Emerging Lessons from ICRAF-SANREM Collaboration in the Philippines¹

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The concept and practice of governance and natural resources management (NRM) is emerging as a popular debate in the Philippines, as in many countries in the region. It is now widely accepted that Local Government Units (LGU) plays a critical role in the management of resources within their jurisdiction. This debate is constructed from a combination of people, processes and structures under a diversity of circumstances. Hence, it is pluralistic in nature that necessitates participation more widely by various civil society sectors, including the scientific community.

Our collaborative work with the Sustainable Agriculture and Natural Resources Management-Collaborative Research Support Program for Southeast Asia (SANREM-CRSP/SEA) is a serious attempt to understand better the methodological, institutional and policy hurdles impinging upon the success of local NRM. The experience begun in Lantapan in Phase I of SANREM, with the aim to better integrate environmental knowledge in planning and decision-making at the watershed level. SANREM supported an LGU-led planning process for the development of a five-year Municipal Natural Resources and Development Plan (NRMDP) of Lantapan. The NRMDP was recognized as a national model for locally led and research-based NRM planning by the Philippines' National Strategy for Watershed Management (DENR-FMB, 1998). Inspired by the Lantapan experience, a scaling-up process was pursued in four municipalities in northern Bukidnon. The recently concluded plans were legitimized with institutional and financial support—embracing the technological, institutional and policy aspects of resource management.

We concluded that there are socio-political and technical factors affecting the sustainability of local NRM. Four sustainability factors for successful NRM emerged from our study. These are: clear local financial investment, enhanced local technical capacity, sound political culture conducive to NRM, and a supporting National Mandate. However, to ensure that these conditions are met will require a virtual overhaul of programmatic areas of effective governance, as well as setting a national level policy direction that proactively support the local enforcement of such policies. These factors are in fact, conditions predispose to sustainable NRM at the local level.

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1.0 Introduction

The inextricable link of good governance to local NRM brought profound challenges – needing a paradigm shift in the planning, legislative and political processes at the local government level. The Philippine Local Government Code of 1991 created sweeping changes from centralized government to decentralization- thereby creating space for an improved local NRM. LGUs however, are stifling its ability to explore optimum benefits of the Code, as they face the dilemma of the pre-Code influence, and the modernist theorems of politics and governance. The imperatives of LGU leaders are enormous. The astute leaders must keep a firm grasp of the reality in knowing what they need to do to maintain their state of governance and their own political survival (Malayang, B. et al.) Certainly, there are key factors predispose to the success and sustainability of local NRM. There are pre-conditions that have to be met or constructed, least, progress becomes slow and uncertain. Successful NRM in essence, is fundamentally based on three inseparable elements: technologies, persons and situations (de Leener, 2001), which are for the purpose of this study, constructed into socio-political and technical factors.

Within the decade of decentralization, the Philippines has been the focus of many experimentation and intervention in the arena of NRM. It has been a major recipient of various foreign investments that aim to develop technologies, provide support services and design program and policy interventions. Despite this, the number of LGUs responding to their roles in NRM remains below par. This reality requires a “deconstruction” in our understanding of politics and governments, and our expectations of the local Government Code as an imprimatur for local NRM. This would mean determining the complex web of factors that sustains the success of local NRM initiatives – thereby, constructing the conditions that predispose sustainable NRM.

Researchers from the International Centre For Research in Agroforestry (ICRAF) hypothesize that there are policy hurdles, institutional and methodological issues impinging upon the sustainability of local NRM. For example, well-crafted NRM plans can be held hostage by a political exercise, a change in political leadership, or a shift in national goals and priorities – resulting in a bleak implementation of previously developed NRM plans. Our questions therefore are threefold: 1) What are the conditions predispose to sustainable NRM at the local level 2) How can these conditions be constructed, and 3) How can the national government reconfigure their support to accelerate progress in the NRM sector?

To better understand these, ICRAF, with support from USAID-funded SANREM-CRSP/SEA, initiated an adaptive research that aims to understand these issues and derive results that will form the basis for recommendations to the national and local government levels.

Background of the study

The SANREM research evolved with knowledge products that supported a scientifically based local NRM planning process in Lantapan, Bukidnon. In 1998, the town Mayor and the Municipal Council committed human and financial resources to the implementation of such a plan, for which there was no precedence in the Philippines (Catacutan, et al., 1999, per. comm.). The municipal government created a multi-sectoral NRM Council that served as the local planning team. The draft plan was circulated and subjected to public hearings, and enacted the Municipal Council in early 1998. The Municipal Government has currently allocated 5% of the municipal budget for plan implementation. Ten villages within the Municipality have allocated an average of 10% of their budgets for activities outlined in the plan. The initial outcomes of the plan has included a number of new policies and regulations related to natural resource conservation and activities have been implemented for the conservation of land and water resources and biodiversity (Catacutan, et. al., 1998).

ICRAF's technical contributions to the plan stemmed from its research in agroforestry, conservation farming and biodiversity conservation. For example, numerous steep ravines emanate from the Kitanglad Range out into the agricultural landscape. These valleys are the least disturbed parts of the agricultural areas and they harbor diverse natural communities. They may be valuable in radiating strands of natural biodiversity outward from the protected area into the agricultural parts of the landscape. We worked to develop an appropriate strategy to enhance the biological integrity of the ravines. Glynn (1996) developed a methodology to survey and map the vegetative communities of major ravines of the Alanib River. The maps provided a basis for identifying the hot spots where change in land management practices is needed to protect stream water quality and riparian biodiversity. Based on this information, a ravine habitat management component was incorporated into the Municipal Natural Resource Management Plan. The communities have now been actively re-vegetating the degraded stream bank areas with trees.

The Lantapan experience is a significant advancement in municipality-led and participatory local NRM planning. It is also a milestone in the devolution of planning and management for natural resource protection to the local level, and a major shift from traditional top-down planning approaches towards participatory multi-sectoral planning and research-based decision-making. It emulates the role of the LGUs in harnessing local talents and skills in deriving a workable plan using simple participatory methods with minimal investment, as against the conventional hiring of externally paid Consultants to develop such a plan. In 1998, the DENR recognized the Lantapan experience as a national model for local NRM planning in the Philippines' Strategy for Improved Watershed Resources Management (DENR, 1998).

The experience in Lantapan guided our efforts to scale-up to other municipalities surrounding the Mt. Kitanglad Nature Park in the northern part of Bukidnon Province (Baungon, Libona, Manolo Fortich and Impasugong). This formed the basis for an Adaptive Research that aims to test the Lantapan NRM planning model to other areas with similar biophysical and socio-economic conditions. Specially, we aimed at:

- Testing the adaptability of the Lantapan NRM planning model to other municipalities surrounding the national park;
- Determining the key factors that affect the sustainability of local NRM; and

- Analyzing their policy implications.

2.0 Methodology

The study was initiated through a technical Assistance Program (TAP) to four self-selected municipalities in Northern Bukidnon. The NRM planning process was completed within a period of 12-18 months, since we were only depending on the pace of the individual municipalities, which did not start at the same time. Self-Assessment Workshops were implemented to evaluate the performance and assess the participation levels of those involved in planning. LGU support and leadership issues were also tackled in the workshops.

By then, we developed a survey instrument to determine the respondents' perceptions (98) on the factors that sustain local NRM programs. There were two groups of respondents: elected local government officials and organic officials from government-line agencies. Majority of the respondents were members of the NRM Councils, which served as the planning teams in the municipalities.

With additional resources from the International Fund for Agricultural Development (IFAD), we also conducted countrywide case studies of eleven (11) practicing LGUs in the arena of the Environment and NRM to verify the study results in Bukidnon, and expand the context-base of this study.

The data were collected and analyzed using both descriptive and empirical statistics. The analyses of results were substantiated with personal interviews of key informants and the results of the self-assessment workshops.

3.0 Results and Discussions

Adaptability of Participatory NRM Process

From a "local governance" standpoint, the Lantapan NRM planning process is generally adaptable, since it embraces the elements of subsidiarity, equity and multi-stakeholder participation – (the bottom-line of decentralization). The adaptation however, varies with ranges high, low medium and high degree of innovation. For example, all the participating municipalities created their own NRM Secretariat composed of local staffs that were then responsible for coordinating planning activities. Some municipalities have longer capacity-building periods allowing for an internalization process. In one municipality, the Mayor was very much an active participant in the different planning events. Adaptation variability is affected by a sum of factors and local conditions. Foremost are: fund allocation, strength of the local interim NRM Secretariat, degree of interest of the Mayor, and diversity of planning team members. The value added to this experience was that LGUs were able to overcome the *institutional constraints* of initiating NRM planning activities at their level. Further, LGUs were able to *match the inherent richness of their local expertise with that of an external expert facilitator, exercise full autonomy in planning, and legitimization without having to comply certain bureaucratic orders, and exhaust their financial resources* for this purpose. The spin-off value

is that the NRM planning activity was conceived in the context of “protected area management” since these are municipalities bordering a protected area. The value-added goal is to compliment the protected area management plan and emulate a “Preventive Systems Approach” to managing natural ecosystems (booklet forthcoming).

What factors affect local NRM?

Conditions predispose to sustainability

Earlier, we identified eleven (11) factors affecting local NRM and were aggregated into the following: Socio-Political, Technical and other Intervening Factors. This aggregation appears to be a reconfiguration of the elements of sustainable watershed management and upland development earlier cited in various literatures regarding: technical, institutional and policy innovations (ICRAF, 2001) and technologies, persons and situations (de Leener, 2001).

Socio-Political Factors vs. Sustainable NRM

Among the socio-political factors, “**National Mandate**”, which is monumentally represented by the 1991 Local Government Code marked the highest correlational relationship (.80) with respect to sustainable NRM in the study sites. This implies that a national legal framework is significantly important in the pursuit of NRM upon which local programs can be derived. This signals the need for a decisive top-level strategic planning to set-up a national framework that guides LGUs in the efficient planning and effective NRM implementation. **Community-Based NRM Programs** and models also marked high (.80) correlational relationship. This implies the appreciation and need for a functional participation of local communities. Moreover, this also implies a bottom-up approach to planning and implementation given that appropriate participatory tools are made available. A “top-down” and “bottom-up” planning combinations or a “plan-top-plan” approach to planning appears to be more acceptable. On the other hand, **National and Local Protective Rules** posed moderate correlational relationship (.60). This result supports the relationship earlier established between National Mandate and sustainable NRM. This shows that the social relevance and effectiveness of a State Policy can only be judged if they are strictly enforced and supported with appropriate local preventive rules, designed to compliment it. While the general perception of people about rules is about tyranny, this finding proved otherwise. This is also supported by the political theory of Thomas Hobbes (1657), which states “*the State can not be in a state of nature, where men are loose, where man is enemy to every man, where men live without security, where there is a great deal of grief because there is no power able to awe them all*”. Protective rules are not suppose to suppress rights nor penalize the violators, rather it is suppose to provide incentives to those who obey the rules. Policy incentives can form part of a social contract between the governed and the governor. However, such political reforms may require much greater commitment and a virtual overhaul of the political space. Local **Political Culture** also posted moderate correlational relationship (.60) to sustainable NRM. Accordingly, this is related to the above-result. The political culture defines the condition that is conducive for a collective action to take place. It transpires from a social capital formed by the “governors” and the “governed” to work together for a common good. While the political culture is formed by interplay of characters, norms, rules and situations in the context of local governance, it largely refers to the political will and leadership of local leaders.

Technical Factors vs. Sustainable NRM

Among the technical factors, support from **External Technical Agencies** (e.g. Research Institutions, NGOs, banks, etc.) and **Local Technical Capabilities** exhibit high correlational relationship (.80). Clearly, external expertises are recognized to match the richness of local experts. However, building a functional relationship and participatory arrangements between local technical people, local communities and external support providers require a great deal of facilitation. On the other hand, availability of **Participatory Tools and Approaches** posted moderate correlation (.60). These tools are important in improving public participation.

Other Intervening Factors

Earlier, we identified two intervening factors for sustainable NRM. They are **Local Financial Investment and Local Environment Conditions**. Interestingly, **Local Financial Investment** obtains the highest coefficient of determination (.85) among all the factors presented. This means that the sustainability of NRM implementation rest largely upon the LGU's internal financial investments. Among other prominent socio-political and technical factors, LGUs perceived that their own expenditure assignment could sustain the success of local NRM. Following this are: **Local Technical Capabilities** (.71), **Political Culture** (.69) and **National Mandate** (.60), respectively.

The above-results were verified through case studies of twelve (12) nationally recognized successful LGUs in NRM. A synthesis of the case studies revealed substantial similarity with those of the main study sites (Northern Bukidnon).

The key findings are:

- Successful LGUs are those who have collected their own local funds from either the general or local development funds as part of their Annual Investment Plan.
- These LGUs have created their local Environment and Natural Resources Management Office (ENRO), as a regular division of the LGU with staffing support and annual budget allocation. Some LGUs created an interim but functional ENRO from the ranks of local staff. This necessitates special manpower re-alignment and innovations within the institution. We learned that the impetus for the creation of local ENRO was not necessarily the "loose mandate" of the Local Government Code. Some of the LGUs were inspired by their own vision to make a difference and breakaway from conventional politics and governance.
- Local policies were promulgated to support the local implementation of environmental protection programs.
- The main driver of NRM emanates from strong "political will and leadership" of the local leaders, usually the municipal/city Mayors and provincial Governors. NRM programs transcend beyond the political terms of a chain of proactive, modernist and radical leaders. The caveat however is that political will and effective leadership is an elusive commodity and is hardly replicable.

The sequential order of the sustaining factors follows a very practical logic. Also, it carries a brighter promise if these perceptions can be attributed as impacts of the Local Government Code.

The LGUs recognize that their own financial and human resource investment within a sound political culture will sustain success in local NRM supported with a clear national mandate. The conditions predispose to the sustainability of local NRM are formed from these factors, and herein iterated:

- LGUs must ensure a continuous flow of funds available for NRM investment from three potential sources of funds: the General Fund, the Local development Fund (LDF), and from self-generated funds from various public or private sources. These should be incorporated in the Annual Investment Plan.
- LGUs must install an institutional infrastructure by creating a functional ENRO with technically qualified staff capable of overcoming constraints to their ability to shape and enforce policies and programs.
- LGUs must endeavor to create a political culture away from “patronage politics”. A political culture that is proactive, catalytic and inclusive of paradigm shifts in development and government systems.
- LGUs must be clarified with some of the “conflict-generating” national policies, particularly their devolved functions, powers and jurisdiction.

Given the above, we need to examine certain provisions in the Code hindering such conditions at the local level. Section 3 of the Code (Operative Principles of Decentralization: LGC 1991) provides that “*LGUs shall share with the National Government the responsibility in the management and maintenance of ecological balance within their territorial jurisdiction subject to the provisions of the Code and national policy*”. This general provision however, sounds categorical with respect to Environment and NRM devolved functions to the LGUs. A closer reading of the Code indicates that local autonomy in NRM is at best, limited and at worst, ambiguous (Manasan, R., 2001). The Code transfers responsibilities of community-based forest and watershed projects, but not the appropriate authority. The national agency (DENR) retains its supervision and control over those projects. Moreover, the Code provides an optional mandate in the creation of local Environment and NRM Offices (ENRO) at the municipal, city and provincial levels, and therefore, fund allocation for Environment and NRM is held under the prerogative or mercy of the Local Chief Executive. Such typical weakness in the devolution process results in a complacent attitude among public officials. The Code (Section 17) also encourages the continued involvement of central agencies on functions assigned to LGUs by allowing central agencies to implement and retain control over projects funded by the General Appropriations Act and Foreign Agencies. Under this situation, national agencies tend to direct LGUs behavior towards national goals, (while acting local) since they are made accountable for the outcomes of those projects. The prevailing regulatory framework aggravates this by permitting the “two-track delivery system” where central agencies and LGUs can initiate devolved activities (Gonzalez, 1996; Manasan, 2001). As a result, LGUs are confused with what exactly are their responsibilities, consequently public accountability unclear of LGUs and the central agencies.

How do we enhance or construct these conditions?

Policy Implications at the National Level

To construct the conditions cited above requires a two-pronged approach.

Firstly, the National Government needs to reconfigure its support to meet these conditions. A first wave of action would be to launch a sectoral re-examination of the gains and pitfalls of the Local Government as it embarks another decade of implementation. Specifically, the following may have to be prioritized:

- The National Government should make necessary amendments with respect to certain provisions that are unclear in the Code, particularly the delineation of expenditure assignments of Environment and NRM functions.
- The National Government should stop showing symbolic gestures of interest by enclosing certain percentage of NRM funds in the “Budget Circular” for LGUs just like how budget circulars for Gender and Development, Anti-Surgency and Drug Prevention budgets are imposed. Otherwise, budget circulars for Local Development Funds should be lifted thereby allowing LGUs to exercise full fiscal autonomy such that, NRM programs can be easily funded without restrictions.
- The national government should make amends to the “loose mandate” in the Code stipulating the optional creation of ENROs at the municipal, city and provincial levels. The creation of local ENRO should be mandatory to affect a full devolution of environment and NRM functions.

Secondly, the National Government needs to revisit the programmatic areas of good governance by:

- Reviewing and making necessary amendments with more than a thousand environmental laws that are most often conflicting if not lacking with appropriate enforcement.
- Institutionalizing an effective training program for LGUs to capacitate public officials and devolved technical personnel. The fulfillment of a multifaceted role of LGUs would depend upon the administrative, managerial and technical capability of local administrators and officials. Their capacity can be raised through the undertaking of an appropriate, relevant and training program (Oamar, P., 1998). This broad stroke will hasten the construction of a political culture inclusive to NRM concerns. The Department of Interior and Local Government (DILG) may need to take a lead role in developing this capacity-building program with some help from allied agencies.
- Clarifying the devolved roles, functions and powers at the local level.
- Taking a bold role in elevating NRM as a basic social service along with health, nutrition, social welfare and education.
- Benchmarking and identifying indicators for successful NRM should be clarified, and minimum standards required for each locality.

- Applying the systems approach as a framework for understanding local government dynamics and systems.

4.0 Impacts of the Study

The study has socio-political relevance in the quest for an improved and sustainable NRM. It has contributed in the debate about good governance, sustainable development, NRM policy reforms and the shifting of frontier development initiatives. As a public good, the results are now used to analyze appropriate policy reforms needed in promoting local NRM. Policy makers and development practitioners can take advantage of the experiences and lessons of the municipal study sites as an indicative template in formulating their own NRM plans and providing support policies. The study maybe also helpful for researchers towards evolving a conceptual framework that effectively captures the imperatives of an Integrated NRM (INRM) Research Framework. Involving LGUs in the agenda of a Sustainable Agriculture and NRM research remains a new business despite the intention to include this within the last decade. We cannot avoid recognizing that the concepts available for scientific discussion concerning this desired shift are rather poor (de Leener, 2001). But the pressures of advancing the social relevance of technical research are astounding that the research community needs to change gear in the way research agendas are formulated and implemented. The pluralistic nature of the research goals, at least, beginning the last decade necessitates a multi-tiered and interdisciplinary approach. The outputs clearly contributed to a clarified understanding of the socio-political environment and the delivery of knowledge products to user groups at a scale transcending beyond institutional, temporal and spatial constraints.

5.0 Transferability

Decentralizing countries in the region would benefit from the lessons and insights gained from this study, and SANREM can provide the venue for knowledge sharing among these countries, reinforced with future ground research work in the areas it could possibly expand. Although, context-specific conditions have to be considered, the general conditions hold true in most developing countries, and therefore, the transferability of stuffy framework and result sharing can be realistically achieved. Within SANREM, this calls for a serious commitment to one of its “cornerstone”, the “Interdisciplinary Approach”, requiring stronger cooperation among social and biophysical scientists, as well as policy analysts.

6.0 Conclusions

Although decentralizing governments are grappling in understanding the concept and good practice of “decentralization”, it does by far have a milestone gains (Catacutan, 2001). The decade of Philippine decentralization is a honing phase towards the fulfillment of a “fuller” democratic government. The LGU perspective of sustainable NRM is a manifestation of a maturing understanding of good governance under the decentralization theorems. The challenge however, is to keep abreast of local realities needing a constant re-examination of national

policies supportive of local initiatives. In this case, there is a pressing need to deal with first generation issues to accelerate progress in the NRM sector. Foremost is a policy reform that includes the establishment of an institutional infrastructure and providing financial support thereof. NRM expenditure also derives socio-economic benefits; therefore it should be elated as a basic social service. An important lesson for “would-be” decentralizing countries is to make adequate preparations at the local level including re-orientation and training of public officials and local staff, re-engineering institutional structures, ensuring a critical mass of support, developing appropriate technical capacities and providing financial mechanisms.

A better understanding of technological changes requires better understanding of socio-political changes. In fact, technology adoption is much of a social fact. We cannot talk about technologies alone, *but we should talk about a particular technology of these particular people under that particular situation* (de Leener, 2001). This has implications in which agricultural research agendas are developed and implemented. This may require a multi-faceted paradigm shift for the research sector, so that technologies generated from good science can truly deliver goods of public social relevance.

Such trends on Global Partnership Programmes (GPP) and CGIAR’s (Consultative Group on International Agricultural Research) Challenge Programs require a multi-tiered stakeholder involvement in designing and implementing research programmes. Along this line, the frontier institution at the local level remains to be Local Government Units whose direct management influence and control over their territorial communities reflect the quality of community life. It is therefore important to continue working with them in understanding their conditions and filling-in some information gaps that help them become better decision-makers and resource managers.

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