

**Governance and Natural Resource Management:
Key Factors and Policy Implications:
*Emerging lessons from ICRAF- SANREM Collaboration in the Philippines*¹**

by

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Abstract

The concept and practice of governance and natural resource management 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) play 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's pluralistic nature, necessitates participation more widely by various civil society sectors, including the scientific community.

Our collaborative work with SANREM/CRSP is a serious attempt to understand better the methodological, institutional and policy hurdles impinging upon the success of local natural resource management. The experience begun in Lantapan in phase 1 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 Resource Management 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 completed 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 success and sustainability of local NRM. Four of these 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 Philippines' 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 the 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, 2001). Certainly, there are key factors predispose to the success and sustainability of local NRM. These 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 have 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 predispose to 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 of 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 (Sustainable Agriculture and Natural Resource Management-Collaborative Research Support Program/Southeast Asia) 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, pers. com.). The municipal government created a multi-sectoral NRM Council, that served as local planning team. The draft plan was circulated and subjected to public hearings, and enacted by 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 on 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 area, 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 was 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 streambank 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 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 natural resource management 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, 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. Specifically 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, or predispose 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 (4) self-selected municipalities in Northern Bukidnon. The NRM planning process was completed within a period of 12-18 months, since we were depending on the pace of the individual municipalities which did not start at the same time. Self-Assessment Workshops were implemented to 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 country-wide case-studies of eleven (11) practicing LGUs in the arena of Environment and NRM, to verify the study results in Bukidnon, and expand the context-base of this study.

3.0 Results and Discussions

Adaptability of participatory NRM planning processes

From the standpoint of local governance, the Lantapan NRM planning process appears to be 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 of low, medium and high degree of innovation. For example, all the participating municipalities created their own NRM Secretariat, composed of local staff, who were then, responsible for coordinating planning activities. Some municipalities have longer capacity-building periods, allowing for an internalization process. In Manolo Fortich, the Mayor was very much an active participant in the different planning events. The adaptation varies from one municipality to another--affected by a sum of factors and local conditions. Foremost were; the funds allocated for this purpose, the strength of the local interim NRM Secretariat, the 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 experts, 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. Proceedings of "Self-Assessment" workshops conducted in the municipalities show that, the NRM Councils/Committees were fairly satisfied with their participation in various activities, although, much could have been improved if there was more time spent for learning and discovery (Baungon, Libona, Manolo Fortich NRM Plans, 2001). The spin-off value was that, the NRM planning activity was conceived in the context of "protected area management" in municipalities bordering the protected area. The value-added goal was to compliment efforts in protected area management, 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, re: technical, institutional and policy innovations (ICRAF 2001) and, technologies, persons and situations (de Leener, 2001).

Socio-political factors influencing sustainable NRM at the local level

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" & "bottom-up" planning combinations or a "plan-to-plan" approach to planning, appears to be more acceptable. On the other hand, ***national and local protective rules*** pose, 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 that, "*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 an interplay of characters, norms, rules and situations, in the context of local governance, it largely refers to the political will, proactiveness and leadership quality of local leaders.

Technical factors influencing sustainable NRM at the local level

Among the technical factors, support from **External Technical Agencies** (eg. Research Institutions, NGOs, banks, etc.) and **Local Technical Capabilities** exhibited high correlational relationship (.80). Clearly, external expertise are recognized to match the richness of local experts. However, building a functional relationship and participatory arrangements between local technical people, local communities and the 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 perceived to be important in improving public participation.

Top Four Sustainability Factors

Earlier, we identified two intervening factors for sustainable NRM. They are: **Local Financial Investment and Local Environmental Conditions**. Interestingly, **Local Financial Investment** obtain the highest coefficient of determination (.85) among the 11 desegregated factors. 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 can 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 eleven (11) nationally recognized successful LGUs in NRM. A synthesis of the case studies revealed substantial similarity, with those of the main study sites (north Bukidnon).

The key findings are:

- ◆ Successful LGUs are those who have allocated 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 "Environmental and Natural Resource 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 LGUs, were inspired by their own vision to make a difference and break-away from conventional politics and governance.
- ◆ Local policies were promulgated to support the local implementation of environmental 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 recognized that their own financial and human resource investment within a sound political culture will sustain success in local NRM, with support of a clear national mandate.

The conditions predispose to the sustainability of local NRM are firmed 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 funds (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 programmes.
- ◆ LGUs must endeavor to create a political culture, away from “partronage 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 ENR management activities 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. This is aggravated by the prevailing regulatory framework, permitting the “two-track delivery system” where both 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 becomes unclear of LGUs and the central agencies.

How do we overcome these constraints and construct these conditions?

Policy implications at the national level

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

Firstly, the National Government need 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 actions 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-insurgency, 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, which stipulates the optional creation of ENROs at the municipal, city and provincial levels. The creation of local ENRO should be mandatory to effect a full devolution of environment and NRM functions.

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

- ◆ Reviewing and amending more than a thousand environmental laws, that are most often, conflicting, lacking, or were never enforced.
- ◆ 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 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 Utility and Impacts of the study

The study had socio-political relevance in the quest for an improved and sustainable NRM. It has contributed in the debate about good governance, sustainable development, 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 in providing appropriate policy support.

Further, the study may also help the research community towards evolving a conceptual framework that effectively address 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 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, predispose to the successful generation, delivery and utility of scientific knowledge, at a scale transcending beyond institutional, temporal and spatial constraints.

5.0 Transferability of experience and findings

Decentralization has become the buzzword in the area of NRM over the last decades in many parts of the region--so goes, social forestry and community-based forest projects, among others. While a good number of neighboring Asian countries are in the decentralization process, these countries may have to learn from this experience and benefit from the lessons gained from this study. SANREM can provide the venue for knowledge-sharing among these countries, reinforced with future adaptation studies in areas it could possibly expand. The gains of ICRAF and SANREM collaboration can continue to bring new heights in demonstrating the efficacy of an integrated NRM (INRM) Research Framework in the other regions, and among other research projects and institutions. Within SANREM however, the challenge remains in keeping its commitment, to the "Interdisciplinary and Multi-stakeholder Approach" of doing research-- requiring stronger cooperation among social and biophysical scientists, as well as, policy analysts and decision-makers.

6.0 Conclusions

Although the experience is still a work in progress, some conclusions can be earlier drawn:

On local governance. However decentralizing governments are grappling in understanding the concept and good practice of "decentralization", it does, by far have milestone gains (Catacutan, D. ,2001). The decade of Philippine decentralization is a honing phase towards the fulfillment of a "fuller" democratic government. The LGU perspectives on sustainable NRM is a manifestation of a maturing process of decentralization. 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 include 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. Based on the Philippine experience, an important lesson for "would-be" decentralizing countries, is to launch a major social preparation before a decentralization uptake, so that, its constituency can ably participate and enjoy commonly derived benefits. The preparations may include the following: a re-orientation and training of public officials and local staff, re-engineering of the institutional structures, ensuring support from a critical mass, developing appropriate technical capacities, and installing financial mechanisms to promote and support local NRM.

Contribution to better understanding of new knowledge. A better understanding of technological changes requires better understanding of socio-political changes. In fact, technology adoption is much of a socio-political fact. We can not talk about technologies alone, *but we should talk about a particular technology of these particular people under that particular situation (De Leener, 2001).* This

understanding has implications on how agricultural research agendas could be developed and implemented, and require a multi-faceted paradigm shift in the research sector. A shift necessary to ensure that, technologies generated from good science can truly deliver goods of public social relevance.

On SANREM's experience. The second phase of SANREM confirmed De Leener's theorem. SANREM redefined its research goals based on lessons of Phase 1, and made a graceful shift by engaging in research activities that explicitly address socio-political issues in NRM. Such trends on Global Partnerships Programmes (GPP), the CGIAR's (Consultative Group on International Agricultural Research) Challenge Programs, and SANREM's landscape-lifescape principles, require a multi-tiered stakeholder involvement in the design and implementation of research programmes. SANREM's work is a serious attempt to demonstrate how this paradigm shift works in specific communities (at least in Manupali Watershed, Philippines). However, its quest for sustainability in this arena, is a continuing challenge within SANREM, as it embarks on a greater challenge of influencing the global scientific and development communities.

At the local level, Local Government Units remain the frontier stakeholder in the arena of NRM--their management influence and control, governs the fate and destiny of their communities. It is therefore, important to continue working with them-- understand their conditions, fill-in the information gaps, and help them become better decision-makers and effective resource managers.

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