

Engaging Stakeholders in Integrated Natural Resource Management: approaches and guidelines from Landcare

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Abstract

The world is becoming more integrated, and “integration” surfaces as the most important concept in modern society. It is a concept that emerges strongly in the field of natural resource management (NRM) because of the complexity of the systems involved. Although resource degradation is a physical process, its underlying causes are deeply rooted in complex socio-cultural, economic and political contexts. Integrated approaches require greater involvement of different types of stakeholders, but the obstacles to successful stakeholder engagement remain, despite the growing recognition of its benefits to NRM. It is argued that stakeholder engagement is not inherently difficult—the difficulties are externally imposed, by the way the rules of engagement are set. Government decentralization is a policy trend that is favourable for stakeholder engagement at the local level, providing ample scope for integration, negotiation and collaboration.

This paper presents examples of approaches and guidelines for stakeholder engagement in Landcare-- a community-based approach that employs innovative solutions to NRM challenges, fostering greater stakeholder engagement by linking farmers with the broader community and helping them influence NRM policy. Landcare focuses on empowering local people to willingly take action on local problems, and integrating actions to address broader issues. As an approach, Landcare has a wider applicability within differing or similar biophysical, socio-cultural and political contexts, with some 17 countries or multilateral organizations in the Pacific, Africa, America, Europe, and South East Asia who are either independently implementing Landcare programmes, or receiving limited support to initiate them. The common elements to stakeholder engagement are *emphasis on the broad “relevance” of Landcare, linking it to wide-ranging sectoral interests, emphasis on “inclusiveness”, emphasis on home-grown methods or structures—less imposition of external ones, and use of step-wise approach—in size, scope, content and process.* In summary, broad stakeholder engagement has been successful with Landcare, because it serves as a platform for all walks of life to fully express their land ethos in a concerted way. Landcare is thus a “proof of concept”, demonstrating successful stakeholder engagement in NRM.

Key words: Integrated NRM, stakeholder, Landcare

1. Background and context

The world is becoming more integrated, and “integration” is increasingly surfacing as the most important concept in modern society. In the field of natural resource management (NRM), ‘integration’ emerged as an important concept (CGIAR 2004), owing to the numerous complex systems involved. For example, a farmer engages in crop production as part of a broad livelihood portfolio that encompass a wide variety of off-farm activities, such as the gathering of forest products, raising livestock, marketing products, etc. (CGIAR 2004). But, the farmer, in this case, is not only concerned with productivity enhancement, but also risk reduction and sustainability of crop production. Because of the variability of production inputs (e.g. soil fertility, land and labour availability, etc.) and volatility of outputs, the farmer will constantly struggle to meet his production goals, while managing the basic resources, upon which production depends.¹ As the land is degraded, productivity declines and incomes fall, and poor farmers are often been blamed for environmental degradation due to their lack of a conservation ethic (Boada 1988; Catacutan 2007), but Nelson (1996) that this is understandable given the lack of incentive to practice soil conservation due to the cycle of poverty and skewed patterns of economic development (Catacutan 2007). It is said that even if resource degradation is a physical process, its underlying causes are deeply rooted in complex socio-cultural, economic and political contexts-- with population pressure, changes in economic patterns imposed by global

¹ All of which, are affected by local conditions (from the household level) and the constantly changing economic climate.

market competition, and low production, the world's rural communities are trapped within a vicious cycle of poverty (Catacutan 2007). According to Nelson (1996), this downward spiral is hard to break without external assistance. In seeking to address the complexity of NRM, the Consultative Group on International Agricultural Research (CGIAR) has adopted the INRM approach as a unifying research framework. Researchers defined INRM as a conscious process of incorporating multiple aspects of natural resource use into a system of sustainable management to meet the explicit goals of resource users, managers and other stakeholders (e.g., production, profitability, risk reduction and sustainability goals).² This means, integrating across disciplines, across scales, across stakeholders, and across components (Lal et al. 2001). This implies major changes in the culture and organization of research (Ashby 2001), and in this case, not only that INRM is built in a social learning process, it also requires institutions to evolve as learning organizations, employing institutional flexibility and promoting conditions that are favourable to complex learning and integration of scientists with other stakeholders (CGIAR 2004).

Natural resources are influenced by the day-to-day management decisions of large numbers of different types of actors or stakeholders at various scales (Van Noordwijk 2001) therefore, INRM should be stakeholder-centred. These stakeholders often, (e.g., small and large holder farmers, policy makers, managers, administrators, businesses, scientists, communities, and other economic and social sectors) have contrasting objectives and activities, based on their specific circumstances, and influenced by a multitude of exogenous factors. In the context of NRM, 'integration' will be based on multi-stakeholder situations and multiple objectives, which are hinged on dynamic systems, and ingrained in a complex social arena. Stakeholders, at different levels and stages, are crucial to the success of NRM interventions. However, the processes involved in engaging stakeholders can be also complex and time consuming. A common critic about stakeholder engagement is in the high inputs or costs involved in building relationships and partnerships. Such inputs are not limited to financial or material resources, but also include social or personal relationships. The latter are usually unaccounted for, in conventional project management, and are even hardly recognized as inputs or costs by stakeholders (Catacutan et al. 2001), but personalities and social relations are essential ingredients in any successful stakeholder engagement. The outcomes of stakeholder engagement are expected to be significant, including community *empowerment, ownership and sustainability*. In the process of engaging stakeholders, adaptive capacity is developed, because people are given the time to strengthen networks, knowledge, resources and the willingness to find solutions (Conde & Lonsdale 2006).

2. The Landcare Approach

Landcare movements began emerging in the mid-1990s as an approach for mobilizing collective action by local farming and ranching communities concerned about land degradation and NRM challenges (Bumacas et al. 2007). The movement is based on the Landcare approach—a community-based approach that employs innovative solutions to NRM challenges, linking farmers with the broader community and helping them influence NRM policy. The approach centers on formation of community landcare groups, supported to varying degrees through partnerships with government and non-government agencies (Cramb and Culasero 2003; Catacutan 2007; Bumacas et al. 2007). Community landcare groups significantly benefit from the concerted support of local and national governments and other non-governmental actors. Groups with a common agenda work together to determine how problems can be solved, and mobilize resources to solve them based on the principles of volunteerism, genuine participation, responding to local demand and building partnerships and support from the local level (Bumacas et al. 2007). Groups engage in varying activities, including total farm care, catchment care, vegetation management, coastal management and property planning. Landcare also builds necessary partnerships between farmer, catchment, regional approaches, and government policy to deliver broader landscape change, employing facilitators and coordinators to provide an interface between government agencies and landcare groups (Bumacas et al. 2007).

Beginning in mid-1980s, the growth of Australia's Landcare movement has been explosive, with over 4,000 Landcare groups formed. Today, thousands of farmers are organized into landcare associations and institutions, by some 17 countries or multilateral organizations in the Pacific, Africa, America, Europe, the UK, and South East Asia who are either independently implementing Landcare programmes, or receiving

² Defined by scientists convened by CGIAR at a meeting in Penang, Malaysia in August 2000.

limited support to initiate them. The genesis of Landcare in these countries were different and that Landcare has developed through different pathways, but the problems that community landcare groups are trying to address are similar, adhering to the same principles, which is the enrichment of human and social capital to mobilise local action for reversing land degradation issues and improving rural livelihoods, and with emphasis on local demand, volunteerism, genuine participation, partnerships, and use of outside resources. Thus, regardless of differences in circumstances, the driving principles for mobilising local communities to achieve Landcare outcomes are quite general. The essential requirements to facilitate this process are also common, that is, a good balance between community efforts, government partnerships, and support from non-government agencies in the form of technical or institutional innovations, advocacy, and funding. The genesis of these efforts and the pathways these efforts might take, will vary from one situation to another, but the philosophy behind these efforts is fundamentally shared. Ultimately, in a world with many common problems and an increased emphasis on local governance, the Landcare philosophy might help to mobilise local actions for greater NRM benefits with specific variations only in the implementation strategies to suit to varying local conditions (Catacutan 2007).

Evidence suggest that Landcare has significantly contributed to improving NRM and livelihood outcomes in areas where it is active. Landcare associations around the world have developed more resilient capacities to transform farming systems to mitigate, and adapt to climate change through landcare practices that increase carbon sequestration. In the Philippines, Landcare has served as the coping mechanism for communities to achieve resiliency. In Uganda, Australia, New Zealand, Germany, Iceland and South Africa, Landcare associations are instrumental in massive tree planting, and are actively implementing sustainable farming practices, and catchment-wide management projects. Wider relevance and applicability to different situations is a characteristic of Landcare, making it attractive to a wide range of stakeholders. In Germany, Landcare associations are able to access support for projects from the EU-CAP's agri-environment schemes³ (Blumlein 2007, forthcoming), while corporate engagement in Landcare is mastered in Australia. In Iceland, landcare initiatives are mainstreamed in regular conservation programs, while in Uganda, Landcare efforts centres on improving access to resources and livelihood improvement. Moreover, Landcare institutions are linked horizontally and vertically to technical service providers, including research and development institutions. In New Zealand, landcare efforts are supported by the NZ Landcare Trust, a research-based non-government organisation (NGO). Similarly, ICRAF has pioneered Landcare research in the Philippines and in the East African region, while Virginia Tech University has facilitated Landcare research and development linkages in the USA, and various Australian research agencies and universities have centred many of their research activities on Landcare. Landcare has thus demonstrated a mechanism for linking scientific knowledge with actions at local, national, and international levels.

3. Issues involved in stakeholder engagement

Many of the difficulties experienced in gaining stakeholder engagement in INRM are the result of poor policy analysis and poor program design (Gleeson 2006). This led to the proliferation of NRM approaches that tended to embrace reductionism resulting in institutions specializing in production, conservation, or regulation and control. This structural constraint reduces chances for innovation, integration, and stakeholder collaboration. Landcare was not exempted to these structural constraints. At the national level, issues are more complex, especially when dealing with high-ranking government officials and agencies that are locked in their organizational boundaries. An example of issues related to structural constraint is presented in Box 1.

³ Agri-environment scheme is a strategy integrated into EU's Common Agricultural Policy (CAP), in recognition of the vital role of the environment in pushing for agriculture and economic development.

Box 1- Issues in stakeholder engagement with regards to structural constraints in the Philippines

The Department of Environment and Natural Resources (DENR) is the primary agency responsible for the management of the country's natural resources. It controlled decision-making, funding, and project management but, with limited funds to support forest development projects, DENR's work was more regulatory than developmental. On the other hand, the Department of Agriculture (DA) is the principal government agency responsible for the promotion of agricultural development. It provides the policy framework, helps direct public investments, conducts research, and in partnership with local governments provides support services necessary to make agriculture a profitable enterprise and helps to spread the benefits of development to the rural poor. Interfacing these agencies is the National Economic Development Authority (NEDA), the central planning body which directs or influences agency programs, and decides on projects funded by foreign donors. Engaging stakeholders at the level of these central agencies was daunting, due to differences in organizational cultures and priorities. DENR and DA have very distinct roles and responsibilities. The former is in charge of all public lands, while the latter is tasked on private lands, and have disconnected efforts. Both agencies understood the broad aspects of Landcare, encompassing their agency mandates, however "integration" seemed difficult because of "turf" issue—in some cases, Landcare initiatives are in state forest lands, but are also active in many private lands. In some instances, the NEDA has preferential treatment to certain agencies, causing more confusion when it comes to deciding for the most appropriate stakeholder. Competition between agencies and structural issues, make it very difficult to determine the most legitimate stakeholder, with which to engage.

Source: Catacutan D. 2007

Furthermore, the complexity of issues changes with geographic scope, types of stakeholders involved differential interests, and local contexts. In areas with deep historical conflicts, stakeholder engagement needs to start by cultivating new types of relationships. An example of issues in stakeholder engagement with deep historical conflict is presented in Box 2.

Box 2: Mt. Elgon National Park and the Benet

The Benet, traditionally hunters and gatherers have resided in the forests and Moorlands of Mt. Elgon National Park in eastern Uganda. Shifting conservation policies, from informal acceptance of Benet residence and use of protected area resources under British rule to forced exclusion from the park, have created tensions between the people and protected area officials. In addition official fines, abuses committed by local level protected area officials have exacerbated the conflict. Negative conceptions of each party prevailed—The Uganda Wildlife Authority (UWA) officials treated the Benets as encroachers and the Benet considered the UWA officials as having an interest only on trees and animals. The history of Benet marginalization from their traditional resource base led them to pursue a legal resolution to resolve the conflict at the national level. A court case was passed to seek reinstatement of Benet land rights. A first gesture of reconciliation was initiated by the Kapchorwa Landcare District Chapter (KADLACC) and its supporting institution, the African Highlands Initiative (AHI). Identifying the stakeholder, with which to work closely, at the initial stage was problematic—the issue was so sensitive that any wrong move can easily spark a fire between the two parties. KADLACC officials started with identifying allies and lobbying with both parties. Through constant communication and negotiation, the impasse was unlocked by focusing on "interests" rather than "positions" within Mt. Elgon. Later, both parties agreed on certain "bottom line" that is, "biodiversity conservation" in Mt. Elgon. The lesson learned is that, conflict among stakeholders can be reduced if each party concedes something to the other, in the spirit of reconciliation and collective good. In this case, KADLACC has served as the honest broker and negotiator. Finally, KADLACC learned that effective stakeholder engagement can be done by breaking communication barriers and by making "common interest" more explicit between parties, rather than what one holds in society.

Source: Tanui J. 2007

Another issue raised in stakeholder engagement is in the way such engagement is being sought. According to Gleeson (2006), difficulties are created by the external setting of directions, indicators and targets, by not having common languages and processes across the landscape, by differing timeframes for engagement, and by ineffective and inefficient processes. Stakeholder engagement also presents a challenge to established hierarchical structures. All these can be possibly removed with proper stakeholder analysis and mapping. This is a common approach used by many Landcare practitioners, to determine significant relationships between stakeholders, and to examine opportunities and constraints of stakeholders.

4. Approaches in stakeholder engagement

There are a great number of approaches, tools and techniques to stakeholder engagement, and combinations of these are usually applied to suit to a particular situation (Conde & Lonsdale 2006). The choice of these depends on the *nature of engagement*, the *purpose* and *resources available to the stakeholders involved*.

In Australia, homegrown ramifications of stakeholder engagement in NRM abound, including the “property planning” approach to the recent “regionalization” scheme. Among the many approaches employed by Australian Landcare, the **Australian Landcare Management System (ALMS)** has been widely and effectively used to engage and support landholders in environmental management (Gleeson et al. 2004; 2006). ALMS is an environmental management support system which builds on the aspirations and capabilities of individual landholders (Gleeson 2006). The features of ALMS are in Box 3.

Box 3- Features of ALMS that promote stakeholder engagement

The features of ALMS that promote engagement include:

- **Doing rather than talking:** ALMS begins with the aspirations and capabilities of landholders, either individually or in groups. The engagement of landholders in ALMS is through a structured process of planning, doing and reviewing. Hence landholder engagement is not reliant on consultative process with uncertain outcomes.
- **Holistic rather than reductionist:** ALMS applies across the whole farm in ways connected to the broader landscape. ALMS covers all the components of ecosystems and the impacts of all activities.
- **Enabling Recognition:** From the outset ALMS decide not to take the ‘low road to nowhere’ but rather to design a system that will deliver improved environmental management and that can be audited for local, regional, national or international recognition. To do otherwise is to potentially mislead landholders in relation to the recognition they might receive for their environment management activities. As membership categories differ primarily only in respect to auditing landholders working within groups can choose the category of ALMS membership that best suits their individual requirements.
- **Enabling Belonging:** Responsibility for the development and implementation of ALMS rests with the Board of ALMS Ltd, -- not – for – profit organisation established by landholders to support and provide recognition for landholders improving their environmental management. Hence ALMS ‘tribe’ and as the ‘tribe’ grows so to will the mutual support members receive from other members.
- **Providing Support:** ALMS trainers, coordinators and auditors support ALMS members through their portfolio of tools and processes to assist landholders develop, implement and have audited their ALMS action plans.

Source: Gleeson 2006

In the USA, the push by the current US administration for “cooperative conservation” permitted Landcare to be relevant in long established conservation institutions, and for Landcare to take on a variety of forms and functions in specific locations and situations (Robertson et al., 2007, forthcoming). To further engage a wide-range of stakeholders, two concepts were incorporated into Landcare, namely “**working landscapes**” and “**Triple Bottom Line**” (Robertson et al. 2007, forthcoming). The former, is a strategy for sustaining lifestyles and economies as well as landscapes; the latter, has been used by management and NGO circles to push that business success should be measured not just by the traditional financial bottom line, but also by its social/ethical and environmental performance. Because of this, opportunities for Landcare in the United States are many and growing especially as partners such as the United States Department of Agriculture and the Environmental Protection Agency along with the National Associations of Conservation Districts, Regional Councils, and RC&D Councils, and numerous corporate partners continue to step forward to play a supporting role (Robertson et al. 2007, forthcoming). Furthermore, the iconic “LandCare Center”, spearheaded by Virginia Tech in Roanoke Virginia, was formed as a public-private partnership initiative to serve as platform for stakeholder engagement, with the primary purpose of facilitating the formation and development of local community landcare groups, regional networks, and innovative landcare industries by providing information and decision support to landcare practitioners and serving as a conduit to existing landcare organizations and programs throughout the state and beyond (Robertson et al. 2007, forthcoming).

In Germany, Landcare projects are funded by various stakeholders, including individual farmers, local governments, state and federal governments, and the EU agri-environment schemes. Stakeholders increased with the expansion of project activities. From just planting trees or hedges and grass cutting, to maintaining

diverse cultivated landscapes, and later to promoting sustainable management of extensive land-use systems and through some form of eco-labeling, by helping farmers market their quality products, such as apple juice and lamb-meat (Blumlein 2007, forthcoming). The LCA's efforts to promote the marketing of lamb in local restaurants have encouraged farmers' participation in Landcare activities, showing that sheep grazing on poor-soil pastures can still be economically profitable (Blumlein 2007, forthcoming). As a result, farmers have become interested to employ sustainable grazing management strategies to ensure continuous production of lamb meat. In short, the sustainable livelihood approach served as platform for engaging stakeholders in Landcare.

In South Africa, the National Department of Agriculture initiated Landcare, emphasising on ***livelihoods and job creation***. It was conceived that Landcare could directly address the livelihood issues of black-dominated poor rural communities in South Africa. It was recognized that the relevance of LandCare lies much in addressing the twin goal of economic upliftment and environmental conservation, and in the context of poor rural communities in South Africa, the idea of environmental conservation has to be clearly linked to income generation or job creation to make it more responsive to local needs (Bsoga et al. 2007, forthcoming). Stakeholder engagement was then built from community-based initiatives within provincial structures and involving strong private and civil society sectors. Today, LandCare is part of the "Expanded Public Works Programme (EPWP), where LandCare projects/activities related to infrastructure development, such as fencing, construction of dikes, dongas, and water reservoirs are being undertaken or assisted by EPWP—this strategy brings in more stakeholders into the Landcare programme.

5. Guidelines in stakeholder engagement

In Landcare, the stakeholders are so diverse, including property owners and resource users, community based organizations, government officials and politicians, NGOs and parastatal organizations, research and development institutions including the academe, and the business sectors among others. These all come from different levels—from the paddock to small catchments or villages, sub-catchments, regional catchments, state and federal or national levels. Diversity in stakeholders gives rise to conflicting motivations and aspirations; if left unattended, such conflicts can border on hostilities. As mentioned earlier, stakeholder analysis is a necessary step, to identify the most significant stakeholder. A number of methods exist to decide how these should be dealt with. Some guidelines for stakeholder engagement as discussed in turn.

a. Master the stakeholders. A fundamental step in engaging stakeholders in NRM is to master their nature, interests and positions. As mentioned earlier, this can be done only through stakeholder analysis and mapping. This allows for better understanding of the stakeholders' in terms of their legitimacy, power and interest on the issues at hand.

b. Make use of existing structures. As far as possible, avoid re-organizing structures that are already there. Analyze the strengths, weakness, gaps and improvements needed within existing working structures, and introduce new structures only where necessary---innovate, rather than re-invent.

c. Allow time for trust building. Trust building and relationships do not happen just magically. It needs to start from proper cultivation.

d. Ensure clarity of goals, costs and benefits. Work towards defining a clear set of goals and identifying the costs and benefits of the engagement—Build consensus on the terms of engagement, rather than push on external rules-- making false hopes is dangerous.

e. Transparency. Work on maintaining transparency at all times. Coming to terms with what is available and doable at the onset is practical and beneficial to all stakeholders. Although the sky is the limit when it comes to opportunities in engaging stakeholders, it is better to be transparent about the potential constraints so that early or mid-course actions can be easily detected.

f. *Knowledge management*. Be clear about what needs to be monitored, assessed/evaluated and or documented at the onset. Stakeholder engagement is a journey of complex processes—without learning from it, is a wasteful endeavour.

6. Conclusions

There are so many aspects, with which to identify the success of Landcare—one of the prominent outcomes of Landcare is engagement of a wide-range of stakeholders, brought about by its inclusive nature, flexibility and adaptative capacity to change. Landcare provides opportunities for people to practice their land ethic without coercion, but in the spirit of stewardship and volunteerism, complimented with various types of support and incentives. Landcare creates opportunities by reorganizing exchanges of goods and services, creating a new types of service providers, and challenging institutional norms that favor short-term profitability over sustainability. For rural landowners, it provides an opportunity to nurture their land with sustainable, profitable management. For urban landowners, it provides opportunities to find, afford and practice green lawn care, create backyard wildlife habitat, and minimize energy consumption. For consumers, it provides opportunities to purchase locally produced, sustainably grown products. For professionals and scholars, it provides opportunities for intellectual discussions and developing management options. For public officials and politicians, it enables improvement of political and administrative governance, bringing public service closer to the people. Finally, for the business sector, it brings new ways of channelling their corporate social responsibilities. The common elements to stakeholder engagement are *emphasis on broad relevance of Landcare, linking it to wide-ranging sectoral interests, emphasis on “inclusiveness”, emphasis on home-grown methods and structures—less imposition of external ones, and use of step-wise approach—in size, scope, content and process*. Landcare is thus a “proof of concept”, demonstrating successful stakeholder engagement in integrated NRM, serving as a platform for all walks of life to fully express their land ethos in a concerted way.

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