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Policy and institutional context for NRM in Kenya: Challenges and opportunities for Landcare

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Challenges and opportunities for Landcare

Thomas Yatich[1], Alex Awiti[2], Elvin Nyukuri[3], Joseph Mutua[4], Agnes Kyalo[5], Joseph Tanui[6] and Delia Catacutan[1]

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Abstract

Kenya's natural resource base has dwindled over the years. The existence of many land-related laws, some of which are incompatible, has resulted in complex land management regimes, giving rise to fragmented interventions, poor land administration, and inadequate provision of agricultural services. The consequences are serious environmental problems aggravated by social, economic and political factors. Traditionally, land use practices were more sustainable, but many of these Landcare practices were discarded with the advent of colonialism. Today, significant progress is evident in rule-making, paving the way for adoption of more integrative approaches to natural resources management (NRM), including the more sustainable Landcare. Landcare is a widely-adopted community-based approach to NRM, that started in Australia in mid 1980s. The adoption of Landcare in Kenya, however, requires understanding of the policy and institutional contexts for which it can be applied. This paper attempts to identify regime structures and policy instruments for anchoring the Landcare approach in Kenya. It informs a larger regional effort for the transformation of NRM through a Landcare framework. This review paper concludes that: 1) the existing policy context is neither inhibitive for Landcare nor does it require new policies; 2) Due to the existing complex institutional architecture, the introduction Landcare approaches in Kenya should be pragmatic and nuanced; 3) Landcare adoption will not only lead to achievement of national goals, but international obligations as well; 4) The relevance and longevity of Landcare is dependent on appropriate modes of integration; and 5) a coalition approach appears to have the potential mode for integrating Landcare in Kenya.

Key words: Land use, landcare approach, land policy, environmental management, environmental policy, ecosystem services, natural resources management, water management, forest policy, NRM

1.0 Background

The degradation of Kenya's natural resources and critical ecosystems continues unabated, albeit numerous initiatives of government, non-governmental organizations (NGOs) and civil society organizations at conservation. Environmental problems are generally attributed to the complex interplay of socio-economic, policy and institutional factors aggravated by population growth and rapid urbanization. The antagonistic perceptions and attitudes of local communities towards the government's regulatory approaches exacerbate the situation. These negative perceptions grew out of stringent enforcement of soil and water conservation measures by colonial settlers during the pre-independence period. The Swynerton plan of 1954 saw most of the settled high-and medium-potential areas terraced with the aid of coercive and restrictive regulations.

The clear disconnect between the provisions and enforcement of the law and the sheer lack of public literacy about these laws have strained government relations with local communities. This worsened after independence, as farmers failed to construct new conservation structures or maintain the old ones. Since then, enforcement of soil and water conservation regulations has relaxed and communities are increasingly involved in managing resources.

The current state of natural resource management (NRM) can be traced to Kenya's pre-colonial, colonial and post-colonial experience with respect to the country's

political economy, which can be best summarized by the three epochs[1] of development transformation. The pre-colonial mode of resource management was based on communal resource ownership governed by cultural and religious norms with binding regulations and sanctions. Low population density, the use of simple tools, limited trade, and relative abundance of natural resources ensured that communities met their needs without damaging the environment. The dawn of colonialism[2] adversely transformed the relationship between local communities and "their own resources".

This transformation was driven by changes in resource rights, use and ownership. Through gazettement, the colonial government appropriated huge chunks of arable and forest land for agricultural expansion to provide raw materials for the European market. Forests were declared off limits for local communities, who were pushed into crowded colonial reserves. Native reserves became "pools" of cheap labour for settlers' farms. Coercive and restrictive law enforcement and economic deprivation caused conflicts between the "governed" and the "governors", providing the impetus for Kenya's liberation campaign.

After independence, the government continued to enact laws and pursued governance structures that extinguished the stewardship rights of communities over natural resources. Kenya's post-colonial government employed a vertical planning approach in which local communities were treated as passive recipients rather than active players in NRM.

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[1] Elsewhere these epochs can be classified as pre-industrial, industrial and post-industrial

[2] Kenya became a British protectorate since 1801 and gained its independence in 1963. Most of its regime structures and governance are British-based

Integrative policy and legislative reforms, albeit minimal, started in 1980s. As government resources dwindled and the population increased, the authorities saw the need to promote collective action by involving[3] local communities in NRM. This was reflected in Kenya's National Development Plan of 1974-1978 and in subsequent policy and legislative frameworks. Reform-based initiatives at the national level were catalyzed by international policy processes, beginning with the Stockholm Conference on Environment and Development in 1972 and the establishment of the National Environment Secretariat. Kenya's participation in Multilateral Environmental Agreements and the Earth Summit in Rio de Janeiro and Johannesburg can be seen as the turning point for mainstreaming environmental concerns in long-term economic development planning.

This new thinking opened up opportunities for partnerships among different stakeholders for sustainable NRM that continued into the new millennium. However, this transformation process was not without problems. This new approach was viewed by large-scale farmers and the business sector as anti-development and prone to corruption and selective law enforcement. For instance, some developers view environmental impact assessment (EIA) requirements as instance, are seen by some as many developers as anti-development despite the planning and management advantages. Over the years, resource users have come to crisp with the reality of natural resources conservation for sustainability purposes.

Today, Kenya's governance structure provides more space for the integration and implementation of other innovative strategies such as the Landcare approach. The

[3] Involvement was perceived by the government as a way of acquiring free labour in project implementation, implementing soil and water conservation measures, obtaining information and most importantly winning the community's support. This was opposed to the paternalistic approach pursued earlier and which persisted despite paradigm shift from top-down to bottom-up approach. This shift was just on paper.

Landcare concept originated in Australia in mid 1980s, and is becoming a widely adopted approach to community-based NRM, because it embraces many of the principles embodied in democratic governance, such as voluntary participation and public-private partnerships. As an approach, Landcare is focused on building social capital for local communities to voluntarily resolve local problems affecting them, resulting in more tangible environmental outcomes. The unique aspect of Landcare is its effective partnership with government and the broader society, including the business sector. Landcare programmes are supported to varying degrees by government, but its core values are voluntary participation, cooperation, and self-determination.

Current devolution of resource management and financing — like the Constituency Development Fund (CDF) — provide opportunities for "real" community participation in planning and decision-making. However, despite efforts of the Kenyan government to adopt bottom-up approaches, many critical decisions remain a preserve of the central government. This double-standards approach has perpetuated inequitable distribution of resources, especially in rural areas. Lack of alternative livelihood opportunities in some of these areas has left the people with land as the only resource to mine for their basic needs, putting heavy pressures on the land. Without a comprehensive approach to sustainable livelihoods, rural communities are degrading the very environment on which they depend.

This study argues that Landcare can contribute towards solving the many environmental challenges the Kenyan government faces. This study is aimed to expound on the policy context and institutional set-up within which the Landcare approach can be pragmatically integrated in natural resource management in Kenya.

2.0 The policy context of NRM in Kenya

The policy environment in Kenya is constantly changing. Macro-and micro-economic policies interact at different scales, influencing NRM strategies. The policy formulation approach is multi-sectoral, but is often centralized, with devolved structures provided only for local implementation. This has had ambivalent results at different scales. Agricultural policy and ongoing reforms take place in the context of the government's overriding socio-economic development strategies. Ongoing agricultural policy reviews are undertaken as an integral component of the broader policy reforms in conformity with the Structural Adjustment Programme and poverty reduction strategies. These policy reviews provide an excellent opportunity to formulate 'outward looking' policies, but the process is only valuable if it can be exploited by proactive leaders, developers, environmental planners and managers as well as knowledge and information are used to inform sound decisions.

The *Economic Recovery Strategy (ERS) for Wealth and Employment Creation* (2003-2007) provides the framework for economic growth. Under this general framework, the government pursued strategies to reform governance, raise the production levels of its productive sectors, reduce poverty and create 500,000 jobs annually. The building and construction industry was of particular interest, since its projected growth rate rocketed to 18 percent. Overall, this was promising for the economy, but was pursued without considering the potential impacts of the industry on the natural resource base. The ERS is embodied in Kenya's *Vision 2030,* which is aimed at achieving Second World economic status by 2030. In this Vision, environmental concerns are embedded in the social pillar aimed at achieving a *"just and cohesive*

society enjoying equitable social development in a clean and secure environment." (Gakuru 2007). This policy statement is profound, but if Kenya were to achieve a double digit economic growth in the next two decades, its leaders should rethink the environmental policies and push for a paradigm shift among technocrats and politicians.

Despite their temporal scales[4] and societal dynamics, policies formulated after independence still underpin resource allocation, affecting the current state of the ecosystem. Sessional paper No. 10 of 1965 on *African Socialism and its Application to Planning in Kenya* and Sessional paper No. 1 of 1986 on *Renewed Growth for Economic Development* are considered milestones for economic development planning and NRM. These policies targeted the high potential areas as "hotspots" for spurring development with expected trickle-down effects in arid and semi-arid lands (ASALs). But until recently, a widening socio-economic gap between low-and high-potential areas persists, creating an impasse in the debate on the need for a 'Marshall Plan' for ASALs. Currently, the development of the ASALs is a key issue in ongoing constitutional and land use policy reforms. The failure to synergize the provisions of different legislations has promoted overlapping and wasteful efforts on the part of government.

Traditionally, Kenya's approach to policy making has been piece-meal and fragmented, with significant shifts to multi-sectoral integrated approaches only in late 1990s. The need to shift from a fragmented policy formulation and implementation was expressed through Sessional Paper No. 1 of 1999 on *Environment and Development*, which defined an integrated policy framework for sustainable

[4] The time difference between their year of formulation relative to their environmental and socio-economic impacts today

environment, NRM and poverty reduction, with specific goals for soil conservation, forestry, wetlands, and water resources management. The policy paper recognized the widespread degradation of natural resources and its intractable links to declines in economic productivity and poverty. It also outlines strategies that seek to balance the achievement of both conservation and development goals. These strategies seek greater involvement of non-governmental organizations, local communities and the private sector. Furthermore within this policy paper, the government advocated for population control to maintain the carrying capacity of the country with respect to man-land ratio. This particular aspect was articulated as a policy in Sessional Paper No. 1 of 2000 on *Population Policy for Sustainable Development.* Subsequently, the government formulated the environmental framework law, referred as *Environmental Management and Coordination Act (EMCA) No. 8* of 1999. EMCA provides for the "*establishment of an appropriate legal and institutional framework for the management of the environment*[5] *and for matters connected therewith and incidental thereto"*. Institutional structures created and legal instruments applied for were meant to be synergistic and interconnected with other regime structures. The details of EMCA and other key NRM policies are discussed in turn in the section that follows.

2.1 Environmental Management and Coordination Act, No. 8 of 1999

EMCA was the basis, to which the National Environmental Management Authority was formed. The Authority is mandated to examine land use patterns to determine their impact on the quality of natural resources, as well as establish and review land use guidelines. The review is to be done in consultation with various agencies.

[5] In the Act, environment is defined to include the physical factors of the surroundings of human beings including land, water, atmosphere, climate, sound, odour, taste, the biological factors of animals and plants and the social factor of aesthetics and includes both the natural and the built environment.

Under EMCA, institutional structures are provided for, including the National Environment Council (NEC), National Environment Management Authority (NEMA), National Environment Trust Fund, National Environment Restoration Fund and a number of national statutory and decentralized environment committees at the provincial and district levels that are directly linked to NEMA at the national level.

NEC is charged with policy formulation, promoting partnerships for environmental management, setting national goals and objectives as well as determining environmental policies and priorities (section 5). NEMA on the other hand, is the government's principal instrument for implementation of all environmental policies. It promotes integration of environmental considerations into development policies, plans, programmes and projects. Statutory committees provided for in the Act include the Standards and Enforcement Review Committee, the National Environment Action Plan Committee and the Environmental Impact Assessment–Technical Advisory Committee, and the Provincial and District Environment Committees. The National Action Planning framework provides for decentralized planning where, Provincial, District and National Environment Action Plan Committees are to prepare environment action plans every five years. The environmental action planning committee recommends legislative measures for preventing, controlling or mitigating adverse environmental impacts. It recommends methods for building national awareness through environmental education campaigns. The processes used in the formation and operation of the various committees are not only synergistic, but also participatory, providing a suitable entry point for the integration of Landcare. Furthermore, memberships to these committees include representatives from interest groups, including businesses. These institutions are open to new partnerships and can be tapped for the implementation of new approaches such Landcare.

The National Environment Trust Fund supports research to further the requirements of environmental management, capacity building, environmental awards, environmental publications as well as scholarships and grants. In addition, the objective of the Restoration Fund is to act as supplementary insurance for the mitigation of environmental degradation. It will be used in cases where the perpetrator of the damage is not identifiable, or under exceptional circumstances that force the Authority to intervene.

Finally, EMCA provides policy instruments for the protection and conservation of rivers, lakes, wetlands, areas of cultural significance, hilltops, hillsides, mountain areas and forests. The policy instruments include environmental impact assessment, economic instruments such as fiscal incentives, environmental quality standards, restoration orders, conservation orders and environmental easements. Under EMCA, developers and resource users are required to undertake environmental audits or impact assessments. This provision supports the Physical Planning Act, which requires developers to advertise and seek approval of change of use of a particular land unit. Through restoration, conservation or easements, the authority can effectively demand restoration, conservation or restrict the right, interest and use of a burdened land with compensation as deemed appropriate. Most of the other resource-based policies and legislation have been formulated based on the environmental framework law.

2.2 The draft National Land Policy

The National Land Policy encourages full participation of citizens, including marginalized groups, to gain better access, use and control of land and land-based

resources. It intends to establish a mechanism for sharing the benefits of natural resources by the people of Kenya, and through the use of participatory methods, define benefit-sharing criteria within clearly delineated areas. The management policies for land-based resources are harmonized through EMCA. If the draft Land Policy is passed into law, the following land quality conservation principles shall be implemented: 1) intensification of use in high-potential, densely populated areas, through the application of efficient methods; 2) improvement of the condition and productivity of degraded lands in rural and urban areas; 3) dissemination of agricultural research results and experience to the farming communities; 4) application of cost-effective irrigation methods in areas of low agricultural potential; and 5) formulation of a clear policy for comprehensive development of the livestock sector.

2.3 National Policy on Water Resources Management and Development

Sessional Paper No. 1 of 1999 on *National Policy on Water Resources Management and Development* recognizes the need to apply management options that are not only participatory, but which also provide opportunities for poverty alleviation as per the poverty reduction strategy paper (PRSPs), support the aspirations of the National Environmental Action Plan (NEAP), and contribute towards the realization of the National Action Plan. The goals of the policy include rational allocation of water, establishment of an efficient and effective institutional framework to achieve systematic development, and general management of the water sector.

The policy recognizes that increased human activity in catchment areas has contributed to siltation of water courses and reduction in supply of quality water for domestic, commercial, industrial and agricultural uses to downstream areas. The latter is attributed to inappropriate land-use practices within farmlands adjacent to forested areas. The government believes that the solution lies in judicious use of resources through effective management of river basins that fully recognizes the contribution of forests and soil conservation innovations (Sessional Paper, section 2.1.2). Additionally, it recognizes the important role of rural communities living in critical catchments, and accords them with a pivotal part in decision-making. The 2002 Water Act has operationalized most of the provisions of this policy.

2.4 The 2002 Water Act

The 2002 Water Act introduced comprehensive and radical changes in the management of the water sector in Kenya. The provisions include: 1) separation of the management of water resources from the provision of water resources; 2) separation of policy making from day to day administration and regulation; 3) decentralization of functions to lower level state organs; and 4) encouraging non-government entities in the management of water resources and in the provision of water services. The Act provides for the management, conservation, use and control of water resources, and for the acquisition and regulation of water rights.

Under this ACT, the government established two entities to deal with different aspects of the water sector, namely the Water Resources Management Authority (WRMA) and the Water Services Regulatory Boards. The board is responsible for water supply and sewerage, while the authority is mandated to develop guidelines and procedures

for water allocation, monitor and reassess the national water management strategy, receive and determine application for permits for water use, regulate and protect water resources from adverse impacts, and manage and protect catchments. The national water resources management strategy provides for the creation of water users associations[6] and catchment area advisory committees.

The Water Services Regulatory Board on the other hand, issues licenses to water service providers, determine standards for water provision, monitor compliance, develop guidelines for fixing tariffs, and develop and monitor the implementation of model performance agreements. Currently, there are decentralized water service boards which are linked to the National Water Services Regulatory Board. The most significant aspect of the Act is the role of local water users' associations recognized under section 15(5), which states that they will act as fora for conflict resolution and cooperative management of water resources. With regard to water services, section 53 (2) stipulates that water services shall be provided by a water service provider, defined which may be a company, non-governmental organization or other person providing water services, in accordance with an agreement with a licensee. Community self-help groups providing water services may therefore qualify as water service providers. Given the state centric premise of the Water Act 2002, the role of the self-help community groups is rather marginal.

The Act has, however, vested all water resources to the State, centralizing control of water resources in the ministry. This has far-reaching management implications, particularly in providing water services to the rural poor who have only limited access to State-driven systems. Matters are made worse by administrative, financial and

6 For a for conflict resolution and co-operative management of water resources in catchment areas

technical constraints that inhibit government's ability to effectively implement the provisions of the Act.

2.5 The Agriculture Act, Cap. 318

The *Strategy for Revitalizing Agriculture, National Food Policy, and National Agricultural Extension Policy* aims to transform subsistence agriculture into commercial and profitable business enterprises, and to attract more private investors, who will, potentially, adopt modern farming methods. The strategy is being implemented within the context of various other government reforms. The Kenyan Rural Development Strategy (KRDS), for instance, has set growth targets for each economic sector. Additionally, the PRSPs make the development of agriculture a top priority in the process of poverty reduction.

The Agriculture Act, Cap. 318 of 1986 (revised) is the principal agricultural law. According to Mumma (2003), this Act has significant provisions on the management of catchments, with the primary aim of promoting agriculture. Section 14 mandates the Ministry of Agriculture to deal with issues of soil fertility management, which provides the basis for integrating agricultural interventions in area-wide catchment management. The law gives the Minister for Agriculture the authority to prohibit land use systems that contribute to soil erosion and deforestation, and to protect sloping zones and catchment areas from degradation. The Agriculture (Basic Land Usage) Rules penalize offenders, for instance, for destruction of vegetation on lands with slopes exceeding 35% (rule 3), and prohibits cultivation in slopes greater than 12% but less than 35% when the soil is not protected against erosion (Rule 5).

Despite the punitive implications of such provisions within the agricultural law, commentators (e.g. Mumma 2003) and policymakers concede that it has been unsuccessful in curtailing land degradation, owing partly due to lack of resources to monitor and sanction different land uses and a failure by the law to involve communities in the enforcement and management of agricultural resources (Mumma 2003). Despite such acknowledged failures and concern about the impacts of environmental degradation on agricultural productivity, the Strategy for Revitalizing Agriculture 2004-2014 remained static, ignoring the need to mitigate degradation caused by unsustainable agricultural activities. Moreover, Kenya's forested areas — which are important as biodiversity habitats, carbon sinks and providing regulating ecosystem services — are under siege from illegal logging, charcoal production and encroachment for agricultural expansion and human settlement.

2.6 Kenya's Forest Policy No. 9: The 2005 Forest Act

Forest degradation is inextricably linked to increasing population and poverty, and is aggravated by lack of resources to effectively monitor and support management options. Sessional Paper No.9 of 2005 on Forest Policy seeks to address the threats to Kenya's forests by increasing the area under forest cover by 10%, an acceptable level by international standards. The long-term impacts of afforestation have not been clearly discussed, but the sessional paper espouses the need for participatory approaches to forest management. Accordingly, it requires the government to facilitate the formation of 'community forest associations' to manage community forests (PS 1.6.3), by bestowing to local people user rights over forest resources. Security of tenure is expected to encourage investment in better-farming practices, by individual farmers and collectives. Additionally, the policy aims to achieve

sustainable management of natural and riverine forests within farmlands, through application of soil and water conservation technologies (PS 1.2.5).

The 2005 Forest Act, provides for public consultation and broader community participation in the formulation of forest management plans. An important feature of the Act is its recognition of the potential contribution of sustainable forests to poverty reduction, and to the maintenance of vital environmental services. The Act provides for broad-based collaboration with forest communities, recognizing their traditional cultures and values. Furthermore, the Act takes a comprehensive approach to forest ecosystems management, employing Environmental Impact Assessments and multi-year result-oriented forest management agreements. More specifically, this particular law provides for the following which are of relevance to the introduction and adoption of Landcare:

Section 13(1) and 13(2) requires delineation of forest conservancy areas and creation of forest conservation committees. Section 3(3) provides the functions of these committees, which include informing the Forest Board as well as taking into consideration the ideas, desires and opinions of local people on matters relating to conservation and use of resources within the conservancy area.

Under section 36(1), the Director of Forests may, with the approval of the Board, enter into an agreement with any person for the joint management of any forest.

Section 37(6) provides that the Forest Board shall, before entering into an agreement, call for an independent inventory of a forest and other relevant data to enable it to determine the true value of such forest.

Section 46(1) allows a member of the forest community, together with other persons resident in the same area, to register a community forest association under the Societies Act. Furthermore, Section 46(2) provides that an association duly registered

under 46(1) may apply for permission to participate in conservation and management of forest under the jurisdiction of State or local authority. Section 46(3e) states that the application shall contain the association's proposal relating to: (i) the use of forest resources; (ii) methods of conservation of biodiversity; and (iii) methods of monitoring and protecting wildlife and plant populations.

Section 47(2) stipulates that management agreement may confer the association "use" rights such as: (i) collection of medicinal herbs; (ii) harvesting of timber or fuel wood for domestic use; (iii) harvesting of timber or fuel wood.;(d) harvesting of grass or grazing; (iv) undertaking of agroforestry practices; (v) plantation establishment through non-resident cultivation; (vi) contracts to assist in carrying out specified silvicultural operations; and (vii) development of wood and non-wood forest based industries community based industries.

Under Section 48(1) an association may, with the approval of the Director of Forests, assign all its rights under a management agreement to a suitably qualified agent on mutually agreed terms.

Section 13(3d) and 13(3e) make provisions for setting charges and retention of income from forest resources at the local level. Furthermore, Section 18 provides for the establishment of a Forest Management and Conservation Fund to support community-based forest projects.

Evidently, the Forest Act of 2005 provides institutional and regulatory procedures necessary for reorienting forest management from a command-and-control strategy to a pro-community and stewardship-oriented strategy through:

- Identification and adoption of specific mechanisms for the implementation of stewardship policy mandates, including community participation through community forest associations, mechanisms for joint forest and concessions over state forests;
- Delegation of direct authority, and imposition of responsibilities on forest officials and individuals and entities operating within the forest sector;

- Empowering implementation, oversight and enforcement of stewardship contracts;
- Multi-year joint management agreements that allow different combinations of user rights or bundles; and
- Financial incentives through retention of income from forest resources at local level to finance community projects.

2.7 Weaknesses of the Policy Formulation Process

Despite the advances in policy formulation, some weaknesses exist. Currently, there is no routine policy analysis cycle in Kenya, nor is there a local core of experts available to undertake policy formulation and analysis. Furthermore, there is no standard conceptual framework for agricultural policy formulation and thus, different teams may use different conceptual frameworks (sometimes prejudiced by experience and donor interests). The lack of an overarching logical framework also results in a reactive or tactical approach to policy formulation.

A further weakness is that policy formulation may be too short cited, focusing more on current 5-year development plans, crises and economic adjustment programmes. Only a limited effort is focused on long-term national interests and the use of predictive modeling techniques. The current policy formulation process is also a wasteful endeavour, using voluminous information that is routinely accumulated, but applied in effective long-term projections and planning. Much of this information is largely ignored by planners and policymakers and there is a poorly developed agricultural information network, which forces reliance on information expensively custom- gathered or obtained from sources elsewhere. Therefore, there are information gaps —often, available information is not in appropriate formats and lacks the level of detail required. The biggest gap is, however, in the accuracy and

timelines of information on country-specific ecological changes, including long-term climate change. Another area with significant information gaps is in the field of social dynamics at the district, regional and national levels.

It is also of concern that central planning offices lack the capacity to collate and integrate the data and information available into packages that can be of immediate use to policymakers. There is a scarcity of hardware, software and data-handling expertise for information integration in metadata bases at many national departments and ministries. Information dissemination and communication are frequently slow, locking up valuable information in different offices and libraries for long periods. Additionally, universities and research organizations have not yet developed effective outreach (extension) programmes to disseminate information generated through research. In government ministries and departments, there is frequently a communication gap between field officers, planners and policymakers at headquarters, which can have serious implications for policy implementation.

Ultimately, “timing” and “quality” of data remains a serious constraint in policy formulation. National databases are few and poorly developed, and there is a strong case for increased investment in computer hardware and software to support better analysis, presentation, access and dissemination of information relating to land.

3.0 Paralysis in policy reform and innovation: The case of the ‘shamba’ system

As mentioned earlier, Kenya’s policy formulation and implementation process are not without problems. Kenya’s ‘shamba’ system — which allows cultivation in forests —

best reflects the political, social and equity dimensions of the multi-objective approach of policy making. It is also a manifestation of Kenya's unpredictable policy context.

The 'shamba' system or 'taungya', originated in Burma and was introduced in Kenya by the colonial government in the early 1900s. Its objective was to provide cheap labor for plantation development in Kenya. Since then, the system has been used intensively to establish exotic plantation in many parts of the country, especially in Central and Rift Valley provinces. At the beginning, cleared forest land was allocated to smallholders for cultivation. After one season, seedlings were planted and the farmers allowed to plant their crops at the same time. This continued during subsequent seasons until the plantation was established.

The system was seen as the best approach of plantation development since very little financial resources were used, but it has contributed to food security, provided lands to the landless, and ensured continued and systematic re-afforestation of cleared forest lands. Politicians initially supported and replicated the 'shamba' system in their regions. However, it later metamorphosed into a conduit for excising forest land and allocating it to individuals. Politicians, in the name of the landless and the 'shamba' system allocated their families and clans huge chunks of the forest land. In some cases, communities from outside the areas near forests were given land and the original beneficiaries driven out. Such irregularities created conflict and hostilities between and among local communities, politicians and government personnel. As a result, farmers deliberately manipulated the performance of planted seedlings, either by de-barking or cutting the roots of saplings to ensure continued tenancy of the land for subsistence crop production.

Gradually, abuse of the system has led to intense and unregulated cultivation in forests. Forests were exploited for timber and opened to grazing. Indigenous forests were encroached and riverines cultivated. In 1985, the government banned the system, especially in key water towers, including Molo, Timboroa, Mau, and Bahati forests. In some places, system continued due to political patronage, and despite the ban, forest encroachment was unabated. In 1986, the government used the Nyayo Tea Zone development approach to control forest encroachment in areas adjacent to Mau and Aberdares forest. These tea buffer plantations were expected to stem the increasing trend in cultivation encroachment.

The Nyayo Tea zones however, promoted illegal logging by local communities and tea factories for processing purposes. In 1993, the President lifted the ban on the 'shamba' system because the government could not cope with the backlog in its reforestation program. Even after the ban, cleared forest land was never replanted. A recent study by the Kenya Forest Working Group and Kenya Wildlife Service (KWS) revealed that over 75 % of clear-felled plantations in Mt Kenya, Imenti and Ngare Ndare have not been replanted with trees, although these areas are under the 'shamba' system (Kenya Wildlife Service 1999). Similarly, only 21% of clear felled plantation forest land on the margins of the Aberdares Range Forest was replanted with trees (Kenya Wildlife Service 2003).

The mortality rates of tree saplings have also been very high, with tree survival in 'shamba' zones declining dramatically in the second and third year of cultivation. Surveys in areas where the 'shamba' system was practised at the margins of Kakamega, South Nandi and Mt. Elgon forests show that tree sapling survival declined from 90% in the first year to less than 40% in the third and fourth years (Awiti, et al 2004).

Replacement planting efforts are also constrained by lack of seedlings. The margins of indigenous forest in the neighborhoods of the ‘shamba’ system zones are also the most active frontiers of deforestation. For instance, 4% and 19% of forest cover has been lost in Aberdares range and Mt. Kenya respectively due to cultivation encroachment (Kenya Wildlife Service 1999; Kenya Wildlife Service 2003). Awiti et al (2004) observed that farmers cultivating in ‘shamba’ zones towards the Kakamega and South Nandi Forests have extended their farms by about 30 metres into the forest between 1990 and 2003. These are catalyzed by markets, factors influencing expansion of agricultural land, politics, and lack of boundary enforcement by government agencies.

In 2002, a newly elected government reinstated the ban on the ‘shamba’ system, arguing that it had caused forest destruction by encouraging squatters to settle in forests. However, there were proactive political leaders who wanted the ‘shamba’ system allowed to continue. As a result of pressure by such leaders, a pilot project was commissioned in Ndundori forest in the Subukia area of Nakuru in September 2004.

It can be argued that the ‘shamba’ system has since matured into a political strategy. Since its inception, the government’s attitude manifests limited ability to deal with the difficult challenges in forest management fuelled by landlessness, poverty and food insecurity. Matching political interests and environmental conservation objectives often threatens the status quo. Weaknesses within the interface between conservation and development provide the rationale for proponents of the ‘shamba’ system, politicians, and forestry professionals to advocate its re-introduction. Some of the reasons include:

- *Inability of the Forest Department to finance reforestation or afforestation programmes*. The recent ban on the 'shamba' system has caused a reforestation backlog of 30,000 hectares due to limited financial resources for forest management. In Kenya, the cost of planting an hectare of trees and financing the establishment of plantations is Ksh.3,000 and Ksh.27,000 respectively. Under the 'shamba' system, these costs would be greatly reduced, as smallholders would continue weeding and looking after the young seedlings for about 3 to 4 years.
- *The 'shamba' system offers an interim solution* to the squatter crises that has remained unresolved around forests in central Kenya and Rift Valley Province, especially in the Mau and Subukia areas. It is expected that with the ongoing land policy reforms, a long-term solution to the nagging land crisis will be provided.
- *The 'shamba' system is a traditional method of achieving household and national food security*. The supply deficits of Irish potatoes, carrots and beans to urban areas have been attributed to the ban on this system in 2003. Without the resident-cultivation system, a food deficiency is expected in areas where the arrangement had been in place.
- *The social and economic impacts of forest eviction and prolonged ban of the 'shamba' system* pose more serious consequences to national security, particularly in urban areas. Former forest evictees and unemployed youths are more likely to engage in illegal activities, including robbery in towns.

Despite the strengths and advantages of the 'shamba' system however, it is noted that continued reliance on forest land for agriculture by farmers as well as their tendency to agitate for extended tenancy and poor attitude towards reforestation (manifested in destructive activities such as debarking of saplings) were the main reasons for its failure. New forms of partnerships and adoption of integrated approaches to NRM can provide opportunities for improving the 'shamba' system. The adoption of innovative approaches like reward mechanisms in some catchments could come with prescriptions for improved land and land-based natural resource management.

Finally, 'paralysis' in policy analysis in Kenya is likely to continue because of differing political viewpoints on and interests in policy issues. NRM also faces difficulties, especially given the lack of funds to address frequent shifts in government priorities. However, ongoing policy changes and changing attitudes of government

officials demonstrate a willingness to change in the context of adaptive policy management, providing opportunities for integrating other innovative approaches like Landcare.

4.0 Nesting Kenya's NRM policies in international policy processes

After the Rio and Johannesburg meetings on sustainable development, the Kenyan government has pursued sustainable development initiatives by integrating environmental objectives in strategic, long-term and day-to-day decision-making. EMCA provides for conservation in consultation with the lead agencies as provided for in the Convention for Biological Diversity (CBD). The National Environment Management Authority prepares legislative proposals for effecting international laws. This enables Kenya to perform its obligations or exercise its rights under various treaties, conventions or agreements. Indeed the Forest Act of 2005 declares the binding commitment of the Kenyan government to international obligations under any treaties relating to forest management to which it is party.

Inherent in Kenya's policy framework is the decoupling of environmental pressure from economic growth through the adoption of environmental policy instruments like permits, easements and licenses. These are aimed at promoting the sustainability of agro-ecosystems and the associated ecosystem functions as well as interaction between its users. Operationally, this is being supported by Agenda 21, which also advocates the integration of environmental issues at the policy, planning and management levels, as well as the use of economic instruments and market incentives to balance development and environmental goals. In addition, existing laws provide for regime structures for re-investing revenues collected from licenses and permits

given for the use of a resource in resource rehabilitation and improving capacity and quality of life of local communities. Furthermore, social inclusion and participatory NRM are stipulated in the 2002 Water Act and the 2005 Forest Act, respectively.

Current constitutional reforms have uniformly recognized the environment as the foundation for socio-economic advancement and that every citizen is entitled to a clean and healthy environment (also provided for by EMCA 1999). This, however, comes with obligations for citizens to enhance and safeguard a quality environment. The promotion of social inclusion, equity and democratic environmental governance, as advocated by regional and international policy processes, are seen as means not ends in themselves. These are aimed to sustain a steady flow of products and services, integrating the poor into societal processes aimed at diversifying their livelihood strategies, and, eventually, at alleviating poverty.

Integrated approaches provided for in various policies, which are pursued internationally, are aimed at advancing social justice by: 1) Promoting equal partnership in matters of rights, power and authority between the participating communities and government agencies; 2) enhancing legal and policy backing to the practice; and 3) fostering equitable benefit-sharing as provided for in the Wildlife Management Act 376. This, however, should be pursued in a manner that would avoid negative external influences, given the vulnerability of the socio-cultural fabric of most Kenyan communities.

Against a backdrop of population growth and mounting human needs, preventing further degradation of natural resources will require nuanced, new and balanced approaches off-farm biodiversity, and enhance watershed and carbon sequestration functions, while simultaneously meeting the population's economic needs. Equitable

and sustained poverty is however contingent upon the pursuit of environmental sustainability in the context of implementing the Millennium Development Goals (MDGs), which can be said to have mediated Kenya's new generational laws.

5.0 Social and institutional context for NRM

In the 'mire' of complex and dynamic institutional processes, the relative positions taken by different actors in the decision-making space not only represent a hierarchy of commitments[7], but rights, responsibilities, relationships and flow of returns as well. Positioning within the decision-making space should determine the users' level of resource use, associated levels of degradation, levels of technology application, and contributions to NRM status.

In reality, there are underlying power structures and incentives or disincentives for sustainable NRM, which are invariably motivated by different factors, and which, shape and realign stakeholders into different roles. Building synergies among different stakeholders relative to their position within the larger policy space is constrained by suspicion, thereby affecting collective action. Ultimately, accommodating and balancing multiple interests is inherently a tedious and conflict-ridden process.

Sector-based resource management has been the impetus for the creation of regime structures at different local government levels. The key regime structures for NRM are the Ministry of Agriculture's National Agricultural and Livestock Extension Programme (NALEP), Social Forestry Programme, Permanent Presidential Soil

[7] Often commitments provide opportunities for compromise and concessions

Conservation Commission, Farmer Field Schools, Mt. Kenya Watershed Management Programme, and Private Sector Development in Agriculture, among others. A successful government extension programme that has promoted collective action amongst different stakeholders[8] is often seen as providing a model for NRM.

In addition, NGO and CBO structures are important players in the current NRM regime. Many NGOs have provided alternative approaches for conflict resolution; improved NRM, capacity building, and has played a convening role for stakeholders' dialogue on NRM related issues. However, NGO-government relationships have not always been romantic. Some NRM-based NGOs blamed the government of ineptness in implementing social programmes. The ambivalent results of government-led projects have fuelled suspicion and accusations, often damaging relationships.

In sum, the key institutional players within Kenya's NRM regime are the national government agencies, local governments, NGOs and participating community-based organizations or CBOs.

5.1 Decentralized NRM programmes of the government

The National Agriculture and Livestock Extension Program or NALEP is a participatory and community-led programme for agricultural development and livelihood improvement. Participating communities identify and prioritise NRM problems at the village level. At this level, discussions and negotiations are facilitated by the focal area development committees, with the support of agricultural extension

[8] World Agroforestry Centre (ICRAF), Regional Land Management Unit (RELMA), Kenya Agricultural Research Institute (KARI), civil society and faith-based organizations, Kenya Industrial Research Institute (KIRDI), special programmes in food security and the private sector

officers. Other devolved structures of the NALEP programme include the Divisional Steering Committees, which hold the Divisional and District Stakeholders Forums, organized by the District Steering Committees. Over the years, the government has posted over 3450 extension staff from the ministries of Agriculture and Livestock Development to improve the effectiveness of integrated extension services. NALEP is regarded as the most pluralistic, efficient, effective and demand-driven extension model in Kenya, which is now being adopted by many non-government projects, primarily NGOs. Given its success, the government is currently strengthening NALEP as an all-inclusive innovative Agricultural Advisory Service (AAS) that is leaned at the national level, but with developed structures down to the district and local levels.

5.2 National Policy on NGOs in Kenya

It is widely recognized that governments can not single-handedly meet the demands for poverty reduction, redressing gender or ethnic biases, combating environmental degradation or strengthening the more vulnerable regions, among interventions. The provision of services and infrastructure, regulations and market mechanisms and the general economic policy are rarely targeted towards vulnerable groups. Given this scenario, the government recognizes that NGOs and other civil society organizations play a meaningful role in economic development. The government has created an enabling environment for the growth and development of a vibrant NGO sector. Sessional paper no. 10 of 1965, for instance, recognized the role of voluntary organizations in community development. Since then, NGOs have increasingly featured in various government policy documents such the poverty reduction strategy and strategies to fight HIV/AIDS. Subsequent policy documents have encouraged rapid growth of NGOs in the country. Measures to promote the role of civil society include formation of the NGOs Co-ordination Board, through an Act of parliament, as

the statutory body responsible for the registration of, and co-ordination of the NGO sector. To date there are more than 4,000 registered national and international NGOs, working on various development-related issues.

5.2.1 NGO relations with state

NGO relations with state are not always cordial, however. Some states, Kenya included, show extreme suspicion towards NGOs. Former Kenyan President Daniel Moi, for instance, issued a warning threatening to ban NGOs for engaging in politics. Only such bodies as the Red Cross and UNICEF are deemed worthy because they are not seen to indulge in "dubious activities" or political interference. The real problem revolves around power and money. NGOs have become good in fundraising and increasingly command hefty budgets. Many foreign donors have preferred to deal with NGOs rather than bureaucratic governments. Donors have also come to believe NGOs produce comparatively better value for money. This does not seem to go down well with the government, which competes with civil society organizations for donor funds.

At the international level, Kenya has been party to International Conventions on Economic, Social and Cultural Rights (ICESCR 1966). Regionally the East African Cooperation treaty captures the spirit of promoting a supportive and conducive operational environment for NGOs. The treaty enjoins all member-states to facilitate and ensure public participation and civic involvement in decision making both at national and regional levels.

Kenya's policy statement on NGOs recognises various international agreements that have a bearing on NGO operations. Furthermore, Kenya's NGO policy provides a

framework for the regulation and facilitation of NGO activities in the country, in a manner that is efficient, effective and transparent, and which recognises the changing dynamics of the sector, and the need to constantly ensure relevance. It also provides a basis for participatory monitoring of the sector and generation of quality data on the contribution of the sector to national development and on how best, the sector can be further supported to ensure their best possible impacts. The overall objective of the NGO Policy is to create an enabling environment for NGOs to operate effectively and efficiently in the social and economic transformation of the country.

5.2.2 The NGO Coordination Board and status of NGOs in Kenya.

The NGOs Coordination Board, established in 1990, now comprises a 22-member team drawn from NGOs, Government Ministries and private sector personalities. Prior to this, NGO registration and operations were uncoordinated, largely due to lack of a central registration point. The core function of the board is set out in section 7 of the NGOs Coordination Act 1990. It includes facilitation and coordination of the work of all national and international NGOs operating in Kenya, maintaining their registration, receiving and discussing their annual reports, and advising the government on their activities. Furthermore, the Board is empowered by the Act to conduct a regular review of registered NGOs to determine their consistency with respect to their reports, provide policy guidelines to help harmonize their activities, and to receive, discuss and approve the code of conduct prepared by the National Council of NGOs for self-regulation of NGOs and their activities.

NGOs in Kenya are involved in a variety of social, economic, environmental and political issues. Their work covers gender, human rights, environment, advocacy and participatory development. The majority have been assisting in strengthening civil society through informing and educating the public on various issues, such as their

legal rights, entitlement to services or by helping them attune to government policies. NGO activities have increased tremendously since 1980s. A significant shift was observed among NGOs from 1980 to 1990, in terms of their "relief" approach, to more interest in broader development. Today, there are more than 4,000 registered NGOs in Kenya.

5.3 Government Regimes, NGO and CBO structures in NRM

In the late 1990s, the government introduced measures to ensure cross-sectoral coordination in planning at the national level, which made it mandatory for all projects supported by public funds to be approved by Public Investment Programme coordinated by the Ministry of Planning. However, some inconsistencies persist with national level coordination. The role of the District Focus for the Rural Development Strategy has been taken over by NEMA, which is mandated to supervise and coordinate all matters related to the environment. The agency has a presence at the district and provincial levels. Statutory committees of the Authority such as the National Environment Council, the Environmental Tribunal and the Public Complaints Committee set environmental policies and priorities as well as settling environmental complaints.

At the local level, Provincial and District Environment Committees are in-charge of preparing five-year environmental action plans, which synthesized into a National Environmental Action Plan (NEAP). The NEAP becomes the framework for environment and land management programme in Kenya. Other than NEAP, more focused and reform strategies have been developed, including the National Biodiversity Strategy (NBS) and the 2002 Water Act. Significant progress has been made through these reforms in terms of involving local communities and the private

sector in the management and development of water resources. It also emphasized fair and equitable sharing of benefits from such resources, enhancement of environmental resource values and emphasis on environment-livelihoods linkages. Additionally, the Government initiated reforms in the land sector, and developed the Land Sector Strategic Plan for 2003-2006.

Another regime in agriculture and NRM sector comprises national bodies such as the Coffee Board, Tea Development Authority, Sugar Authority, National Irrigation Board, New Kenya Creameries Cooperative, and the National Cereals and Produce Board. These entities cater both small- and large-scale farmers. Production loans are provided by the Agricultural Finance Corporation (AFC). However, smallholder farmers have limited access to the AFC credit, as it typically requires collateral that many cannot provide. Hence, small-scale farmers rely heavily on incentives and micro-financing schemes from cooperatives and NGOs. However, with the entry of banks that target small savers, such as Equity and K-Rep banks, more smallholders are now able to access agricultural production loans. AFC has also begun to provide loans to organized community groups.

Besides credit, Kenya has a well developed agricultural extension network, which includes extension service providers within the Government, NGOs, the private sector and CBOs. In March 2004, the Ministry of Agriculture developed a Ten-Year Strategy for the revitalization of Agriculture (2004-14) to mobilize resources and coordinate their use to stimulate growth. It was thought that a revised national agricultural sector extension policy will enable a more coordinated approach to extension that will in turn stimulate agricultural growth.

Key players in extension include the Agricultural Society of Kenya and the Kenya Agricultural Research Institute (KARI), which have been running capacity building programmes to improve farming and natural resource management. Farmers Training Centres (FTC) found in every administrative district have also had an impact.

In addition, national universities, institutes, and NGOs (both national and international) are also active in agricultural research. These organizations[9] have been effective in catalyzing and synergizing many of Kenya's NRM-related policies and strategies.

6.0 Niche for Landcare Approach in Kenya

As mentioned earlier, the Landcare concept was developed in Australia in the mid-1980s to mobilize collective action by local communities in partnership with government to deal with land degradation and natural resource management issues. The Landcare approach focuses on the formation of community groups that work together to identify problems, mobilize resources and influence natural resource policy. Increasingly, Landcare is being recognized as a global model for tackling land management issues, emulating effective democratic environmental governance.

The Landcare approach has spread to New Zealand in the early 1990s, to the Philippines in mid-1990s, to South Africa in late 1990s, and eastern African countries since 2003. Its application in these countries, while different in some respects from that used in Australia, adheres to the same philosophy: democratic, community-based

[9] UNEP, ICRAF, ICRISAT, CIMMYT, CIP, ISAAA, USAID and ILRI among others

and participatory governance in natural resource management and development. The World Agroforestry Centre promoted the initiation of Landcare approach in the Philippines in the mid-1990s and in Uganda in 2003 through a project called African Grassroots Innovations for Livelihood and Environment (AGILE). Landcare programmes are now being established in Kenya and Tanzania. This paper contributes towards the realization of this end.

Landcare practices in Kenya can be said to have started in 1930s when the Soil Conservation Service responded to serious erosion problems on the land occupied by the European settlers and the former 'native reserves' or African lands. Through the Government of the day, it became compulsory to practice soil conservation from 1937 to the end of the colonial era in 1963. After independence, Landcare measures were relaxed, and were slowly disintegrated. Rapid population growth, poor enforcement of water and soil conservation laws aggravated soil erosion and soil fertility loss. Concerted efforts to address soil fertility loss have not arrested the problem. Increased land pressure has led to intensive cultivation of steep slopes and exploitation of ecologically fragile areas. The pursuit of Landcare approach is thus urgent than it was during the colonial era given the magnitude of the problem and the possibility of reaching an irreversible threshold if nothing is done.

The current policy context and institutional environment in Kenya provides ample scope for integrating the Landcare approach in its NRM policies and strategies. However, pragmatic integration of Landcare will not only be mediated by existing policy context but the effectiveness of devolved government structures as well as existing natural resource approaches. As an approach, Landcare can augment the on-going processes and platforms, to address some of the key NRM challenges in the country, and to achieve the Millennium Development Goals (MDGs). However, while

it is conceived to be a useful approach for improving NRM performance, it is not certainly a panacea for all NRM-related problems. Nonetheless, Landcare has a lot of latent premises, and therefore, can easily find a niche in other approaches or concepts with similar principles, for instance, on resource stewardship and payments for ecosystem services. These concepts are discussed in turn.

6.1 Natural Resource Stewardship and Contracts

Aldo Leopold's concept of a land ethic provides the philosophical underpinning of stewardship. In 1949, Leopold first articulated the relationship between man and his natural abode — the land. Worrell and Appleby (2000) defined stewardship as the responsible use and conservation of natural resources in a way that takes full and balanced account of the interests of society, future generations, and other species, as well as of private needs, and accepts significant accountability to society. Just like Landcare, stewardship captures the full spectrum of long-term benefits offered by a resource for example, carbon sequestration, high-quality watershed services, wildlife habitats, and abundance of timber and fibre in the case of forests. Stewardship emphasizes the vital role of local residents, through strong partnerships with state agencies, in formulating for example, the goals of forest management. Kenya's new generational laws have lots to offer in terms of negotiating management agreements or stewardship contracts, which can provide an entry point for the introduction of Landcare practices as a 'conditionality' for such social contracts.

The intent of stewardship contracting is to develop a process of broad-based community participation in land management that is open, transparent, and inclusive—the result then, becomes a social contract. The concept of stewardship contracts has been adopted in the 1980s in the US, where land service management

contracts were first introduced in response to shrinking federal budgets, reduced personnel, and demands from the public for a broader range of outputs from federal forests and rangeland (O'Laughlin 2003). It has also been adopted in Philippines since 1980s through the social forestry program. In the Philippines, stewardship certificates give settlers use "rights" to the land for a period of 25 years, renewable in exchange for agreements to restore trees on fragile soils and to cultivate the land in a sustainable manner (USAID 1996). Although these contracts were initially developed to push the government's forest management objectives, they soon evolved into a more comprehensive approach, supporting the many tenets and practices defined within the context of ecosystems management.

Stewardship contracts and agreements entered into, by and between local communities and governments have emerged as a new feature on the legal and institutional landscape of many developing countries. In Gambia, for instance, the USAID supported a project aimed at involving local communities directly in the stewardship of trees and tree crops. Originally intended to promote woodlot management, the agreement has been formalized, and expanded to include, increased control and accountability of the local community over common-property forest resources (USAID 1996).

6.2 Compensation and Rewards for Ecosystem Services

The pressure on land, water, and forested ecosystems is a function of population growth, urbanization processes, increased per capita consumption of forest resources and the failure of previous interventions to adopt approaches aimed at achieving both social and ecological goals. Compensation and rewards for ecosystem services are typically market-based, involving facilitation of negotiated agreements between

smallholders and people living further afield, but benefiting from ecosystem services that are potentially influenced by an individual or group of service modifiers or providers. Often forest dwellers do not value these services, or do not take into account environmental services in their land-use decisions, because hydrological benefits accrue to water users downstream while benefits of carbon sequestration are global in nature (Pagiola 2005).

Governments and downstream consumers of environmental services such as water have started to recognize the important role played by upstream land users in influencing the quality and quantity of environmental services, though upstream land users treat their off-farm impacts as externalities. Recently, efforts have been made to link upstream land users with downstream service demanders using market-based approaches. They have been used, through facilitated agreements, to link service producers to service users and beneficiaries because of its emphasis on 'negotiations' as a process used to recognize and reward upstream smallholders, in order to induce them to adopt land uses that have positive impacts on environmental services available either to downstream beneficiaries or to the global community. This requires involvement of service modifiers and beneficiaries in negotiating and implementing agreements, stipulating the obligations of service modifiers and beneficiaries. The advantage of this concept is that, compensation or rewards are contingent upon meeting the conditions of the contract—this provides room for compelling Landcare practices as a 'conditionality' for the reward, however the reward should be voluntary in nature. Tomich and van Noordwijk (2004) argue that such partnerships improve markets and prices by valuing ecosystem services according to their real worth; generating conservation finance and incentives for service providers; provides rewards and cover costs of ecosystem conservation and enhances livelihoods and income generation.

In Kenya, reward mechanisms exist that can provide entry points for the Landcare approach. These include the Nairobi National Wildlife Lease Program, Ngwesi Community Ranch, Katoomba Group reward schemes, IIED/CARE/WWF partnership for watershed services, a World Agroforestry Centre-UNEP project on sustaining the values of ecosystem services in Lake Victoria basin, several smallholder carbon projects, compensation and attribution related projects funded by ASARECA, another World Agroforestry Centre-led project funded by IDRC on compensation for environmental services, Ford Foundation initiatives and the new IFAD-funded initiative on pro-poor rewards for environmental services in Africa, also implemented by the Centre.

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6.3 Piecing the Elements Together

The concepts described earlier, illustrate a paradigm shift necessitated by the realization of the need to balance the achievement of welfare and environmental goals, as opposed to the pursuit of purely economic development. Innovative strategies[10] for implementing the 'stewardship'approach will likely increase the potential for success in places where stewardship is already being adopted. Clearly, the lessons, innovations, and experiences that have preceded Landcare are robust and the integration of Landcare will depend on its perceived relevance to current approaches, concepts or strategies. It can be conceived that Landcare's potential contribution to Kenya's NRM efforts, is in enhancing a democratic, transparent, and

[10]These strategies include implementing legislation and policies to provide involvement of resource-dependent communities in sustainable forest management decision making and implementation; ii)implement institutional arrangements between local communities and government which reflect a spirit of sharing responsibilities and benefits for the management, conservation and sustainable use of forest lands and resources; and give effect to land claim settlements, treaties and formal agreements on forest resource use and management; iii) supporting capacity building in local communities so that they can effectively participate in processes that lead to community sustainability; and iv) creating and maintaining policies and programs that encourage human capacity, investment, productivity, innovation and competitiveness

decentralized process, to carefully balance the enhancement of livelihood opportunities and ecosystems services as a twin goal of sustainable development. Ultimately, it can be integrated to add value to ongoing initiatives, or implemented on its own, but linked to existing innovations or initiatives.

7.0 Potential Modalities for Mainstreaming the Landcare Approach

The policy and institutional environment in Kenya presents both opportunities and challenges for Landcare. Broadly, the existence of a devolved regime structure and environmental policy instruments, partnerships for NRM, and the high accord to environmental concerns in the policy agenda of government, provides many opportunities for Landcare. However, the road to integration is not without problems. The government, NGOs and CBOs are in many ways, working together, but in some cases, they also work separately, albeit for the same purpose. This presents a challenge, in terms of identifying the best way to integrate Landcare into current policies and programs. Although, there are several modalities for integrating Landcare, their effectiveness depends on the values, cultures, mandates, and resources available to the actors involved. Catacutan (2005) in her review of the different pathways for the integration of the Landcare approach provides a summary of the advantages and disadvantages of the different modalities in the table below.

Table 1: Advantages and disadvantages of the different typologies or pathways for Landcare adoption

Mode	Advantages/strengths	Disadvantages/weaknesses
Government led model	-It is local; -Close to the community; -Permanent institution -Has clear mandate -Can provide or leverage funding -Has vertical linkages	-Can be affected by regime change and associated priorities; -Often limited funding; -Low-level technical expertise
NGO-led model	-Has a broad network; -Good CO experience -Committed -Can easily build local trust -Has more horizontal linkages	-Uncertain funding and local presence; -project-time bounded; -Perceived limited technical expertise;
NGA led (especially dealing with extension and research)	-Has mandate; -Wider scope; -Has the right machinery; -Has more vertical and horizontal linkages with other sectors; and -In-charge of OD projects	-Often has top-down oriented approach; -Unsustainable funding; -Leadership changes; -Transitory interventions; -Involves political considerations; and -High bureaucratic cost
Coalition of actors	-More expertise and resources; -Can raise public profile; -Strong network; and Strong in advocacy and lobbying	-High initial transaction cost; and -Complexity in management

Pursuing any of these pathways will have different implications for capacity building, levels of consultation, negotiations and policy change. In the following section, these modalities are discussed in turn in the Kenyan context.

7.1 Government-led modality

There are several government programmes which can provide a pathway for adopting the Landcare approach. However, most of these are sector-specific, rarely integrative, and often, fail to build synergy with similar government programmes. As indicated earlier, a nationally-developed but locally-specific model, regarded by government as a success story is NALEP — a Swedish SIDA supported initiative, succeeding the National Soil and Water Conservation Programme (NSWCP). NALEP was initiated

in July 2000 as an approach to scale up the good lessons of NSWCP. Inspired by the initial success of NALEP, the government created local structures to coordinate extension services, and build the capacity of extension staff, farmers, pastoralists and fisher folk for effective and efficient extension.

There are many principles and processes shared by Landcare and NALEP, and NALEP has lessons to share with Landcare. With NALEP, some institutional innovations are effectively functioning, such as the stakeholder fora (SHF), focal area (FA), common interest groups (CIG), and extension groups (EG). The program has also created social infrastructures that can provide not only lessons, but entry points for Landcare, including the Focal Area Development Committees[11] (FADCs), Divisional Stakeholders Forum, District Stakeholders Forum, and the National Steering Committee. The NALEP approach includes broad-based surveys (BBS) to identify opportunities and match farmers' resource endowment. Opportunities were identified and promoted based on community action plans. CIGs were enterprise-based, but provide entry points for soil and water conservation, soil fertility improvement, soil erosion control and improved water management interventions.

NALEP's partnership approach and its devolved institutional structure as well as highly trained extension staff are critical elements from which Landcare could learn. The weak part of NALEP is not necessarily in its approach, but in the transitory nature of extension agents, affecting the efficacy of the program. Currently, research linkages with NALEP are weak because of the exclusion of KARI and organizations such as the World Agroforestry Centre. NALEP and any other government-led programmes exhibit permanence, legitimacy, fundability, visibility to clients, and generated support from local communities. However, such programmes are often

[11] Focal Area Development Committees are organized around the formulated community action plans (CAPs)

vulnerable to government's priority shifts, funding fluctuations, and regime change. The bottom line is therefore that, a government-led approach to Landcare, whether it will be a separate program, or to be integrated within existing programs such as NALEP, places itself at risk to the vagaries of politics.

7.2 NGO- led modality

Seemingly, the community is not the best platform for advocating Landcare in Kenya, since it encompasses an assortment of players with different priorities and mandates. NGO focus is frequently shifting relative to availability of funds and ongoing public debates. Furthermore, NGO-state relationships remain unpredictable. Some NGOs are under government's suspicion, because of their agitation for the rights of vulnerable groups and other campaigns that strain their relationship with government. This complicates the feasibility of an NGO-led approach pathway to integrating Landcare in Kenya.

However, lessons can be learned from NGOs and CBOs that have characteristics and approaches similar to those of Landcare. Some of these organizations are closely working with the government, and can provide entry points, lessons, and knowledge for Landcare. Examples of these NGOs are KENDAT (Kenyan Extension Network for Dissemination of Agricultural Technologies) and Sustainable Agriculture Community Development Programme (SACDEP).

SACDEP facilitates training for farmers in sustainable agriculture, especially on organic farming, and community development with a focus on production, processing, agro-marketing, savings and credit schemes. The NGO is currently working with 4,500 smallholder farmers in eastern and central Kenya. It mainly works with farmers

in organised community groups of about 30 families. It advances the four principles of sustainable agriculture: 1) ecological feasibility; 2) environmentally friendly; 3) social justness; and 4) culturally acceptability. Additionally, SACDEP has over the years, facilitated the formation of farmer organizations to collectively address value adding for production, marketing, savings and credit.

Another route for Landcare in Kenya is through regional or international organizations and programs, which have achieved relative success in implementing NRM programmes, because of their capacity and robust approaches for NRM, their wide networks and coalitions, and their absence of conflicting interests. For example, the World Agroforestry Centre's pro-poor rewards for environmental services in Africa and the framework pursuit by the African Landcare Network as apex programs, through which donors can channel their resources for implementing specific objectives aimed at promoting best approaches, such as Landcare.

Ultimately, a coalition of regional and international organizations with a strong NGO-CBO constituency would offset the weakness of the government, and provide a pathway for an NGO-led Landcare program. However, it has to be noted that since many NGOs are project-based, the sustainability of Landcare may not be guaranteed. Nonetheless, the NGO culture is more inclusive of process and knowledge-oriented approaches, and this may help overcome the risk of short project cycles.

7.3 Coalition-led modality

As discussed in the preceding sections, both the government and NGO- led modalities for Landcare integration have advantages and disadvantages. Neither government nor NGOs can single-handedly facilitate the development of Landcare. A coalition

approach offers the most potential. Facilitating government and NGO partnerships, to collectively work and learn from each other. Such partnerships engender participation, build synergy, promote networks and enhance communities of practice. In a coalition mode, NGOs work better with devolved government structures to implement NRM interventions. NGOs can provide relevant resources and technical backstopping, while national and local governments bring funding and political support as well as highly-trained personnel to undertake project activities. A Coalition-based framework also allows for cross-checking and quality control, effective monitoring, capacity building and upscaling. It also has better chances of attracting broader policy support.

One example of a coalition-approach is the 'Improved land management project in the Lake Victoria Basin Project (TransVic), which was implemented by the World Agroforestry Centre and various partners. This project exemplified how synergy and partnership building in the implementation of project activities lessen suspicion, enhance consensus building, ensure achievement of project activities and influence policy. The TransVic coalition consisted of the Swedish International Development Cooperation Agency, Kenya Agricultural Research Institute, Kenya Forestry Research Institute, Ministry of Agriculture and Rural Development, NALEP, and a number of Kenyan public universities.

In this project, research-extension linkages were promoted through the adoption of the NALEP approach. It therefore meant that within project sites, NALEP activities were being implemented parallel to those of TransVic. The World Agroforestry Centre worked with NALEP in the 28 villages, and a suit of new methodologies were developed and integrated into the already institutionalized NALEP approach. Participatory analysis of poverty and livelihood dynamics (PAPOLD) was also

employed, enabling extension workers to better target the poor, and to identify and promote enterprises that fit their circumstances in the local village context.

TransVic's project structure included a Steering Committee, with members drawn from participating institutions, and chaired by an NGO representative. In 2001, TransVic helped form networks among extension service providers for upscaling purposes. Subsequently, the Consortium for Scaling up Options for Increasing Farm Productivity in Western Kenya (COSOFaP) was formed in 2002, involving over 40 research and development institutions in Western Kenya that dealt with poverty alleviation, land rehabilitation and livelihood improvement (Swallow 2006).

TransVic's institutional structure, facilitation and funding for extension were considered critical to achieving the project's objectives. Daniel Nyantika, who worked for the project as Research-Extension Liaison Officer, says that TransVic provides the best model for initiating a Landcare programme, because it not only depicts how government and other stakeholders should work together, but it provides lessons on raising the profile of land degradation, and on involving in both regional and national level policy processes. However, the coalition-mode requires an 'initiator' or 'convenor' to take a lead formation of the coalition. A common criticism of the coalition mode is the high transaction costs involved, particularly at the start. The choice of coalition members, their level of commitment, expertise, and available resources are crucial elements to success.

Kenya's National Landcare Taskforce, with membership from various organizations with a diverse range of resources and expertise, provides an important partnership and coalition model for Landcare. This taskforce provides a pool of expertise that could be deployed to leverage funds for piloting the Landcare approach in Kenya.

Finally, a coalition mode appears to be applicable in areas or countries where government interests and commitments are initially low, but NGOs are more prepared but have limited resources. It is conventional that governments are keener on 'projects' than on 'programmatic ideas' introduced by an external initiator, especially if it is not complemented with funding to carry out such idea into a 'project', or if the government is already implementing NRM programmes, and can not perceive the 'additionally' or 'complementarily' of the Landcare approach into their existing programmes. In many cases, governments and even NGOs need time to learn from, and build confidence in the adoptability of the Landcare approach. Thus the integration of the Landcare approach in Kenya will require more time, beginning with loosely coordinated initiatives of government agencies that are more willing to integrate the Landcare approach within their current programmes or strategies, and by some willing and committed NGOs in few pilot sites. This approach will enable the Landcare approach to evolve from 'below', making it faithful to its principle of being demand-driven. Adopting a 'from-below approach' in small geographic pilot sites can be the seed for a critical mass that can influence policy and making trigger scaling up of Landcare to the national level.

8.0 Potential issues and challenges

The geographic expansion of research methods and approaches for Landcare are depicted by regional and country-specific Landcare activities in Uganda, Kenya, Ethiopia, South Africa and Tanzania. The formation of the Africa Landcare Network

(ALN) and its nodes in different countries is a clear indication of the wider relevance of the Landcare approach, and its future trend in Africa.

In Kenya, introduction of Landcare to the national NRM regime is favourable, but diverse socio-economic and cultural backgrounds, interests, priorities, viewpoints and perspectives will definitely challenge the integration of the Landcare approach. Currently, Kenya is desperate for approaches for poverty reduction, environmental protection and most importantly, for the implementation of Vision 2030, which aims to boost economic growth rate and drive industrialization. Potentially, Landcare could be a helping model for advancing this goal.

However, its introduction would be perceived differently by different people — and perceptions have serious implications on Landcare. Hence, it is suggested that integration has to be properly planned, with greater consideration of existing approaches and local circumstances. The role, relevance and the place of Landcare relative to other programmes of government and its partners have to be clearly linked. In this context, Landcare can be integrated as value-adding approach, and part of a 'toolbox' for achieving Kenya's Vision 2030. Landcare must not be depicted by government and NGOs as a 'moneybag' and a panacea for all NRM related problems. It should not be introduced within a project nomenclature, raising unrealistic expectations, but should instead focus on building the conditions that sustain the process and benefits for farmers in the future. Although, the integration of Landcare requires resources, both financial and human, transaction costs could be significantly reduced if government, NGOs and other partners buy into it.

Ultimately, the scope and rationale for introducing Landcare needs to be openly clarified to avoid creating tensions among various players. A strong foundational

basis is crucial to success and the sustainability of Landcare — its political relevance is also important — adopting Landcare will thus require conscious efforts to ensure that it contributes significantly to the research-policy interface.

9.0 Conclusion

The implementation of the Landcare approach will not be inhibited by the existing policy framework, neither will it require a new policy backing. A myriad of supportive policies and legislation are already in place. The complex institutional set up, differing mandates and organizational cultures of governments and NGOs, including CBOs may delay the integration process, or even impede successful implementation—however, a pragmatic and nuanced introduction might provide an enabling environment for its implementation. The adoption of Landcare approach will not only enable achievement of national goals, but international obligations as well. Its integration will require more time, and its relevance and longevity will be most affected by careful determination of appropriate mode of integration. Finally, the coalition approach is apparently the most viable approach for integrating the Landcare approach to NRM in Kenya—a coalition approach mirrors a dynamic Landcare Movement that is common in countries where Landcare has been successful.

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