

Lari Landscape

Site Report form Policy Dialogue

Report prepared by Leah Mwangi, KENVO

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Contents

Introduction	2
Description of Methodology for Consultation	3
Key ILM Issues	4
Innovations.....	4
Challenges	5
Financing of Landscape Activities	6
Supportive Government Action	7
Gaps in Government Action	9
Recommendations for Government Action	12
Learning Themes	0
Reflection on the field work.....	0

Introduction

Landscape Designation

Located between 0°50' and 1°40' S and 36°35' and 36°43' E in Kiambu County, the Lari-Landscape is part of the larger Kikuyu Escarpment landscape that lies on the eastern slopes of the Aberdare Mountains of Central Kenya. The landscape is approximately 442Km² with a human population of 123,895 persons (2009, Census Kenya).

The climate is largely influenced by altitude; however the landscape is divided into two agro- ecological zones, the lower and the upper highland zones, with altitude varying from 1760m above sea level in the lower zone to 2610m a.s.l in the upper zone respectively. Rainfall varies depending on the altitude, ranging from 700mm in the low altitude zone to 1400mm in the upper zone. Rainfall is bimodal with the long rain occurring in the months of March to May followed by a cool season during July and August and culminating in the short rain in October and November. The rainfall is well distributed and reliable and has largely influenced agricultural activities in the landscape. The land is purely an agriculture zone and the agricultural practices are rain dependent. (Mwangi J.N. and Mutua J.M).

Soils in the landscape are highly fertile, very deep, well drained, dark reddish brown, strongly calcareous and saline in many places. The soils have high organic carbon content (3-4%), which reflects high level of applied organic matter, low nitrogen, while phosphorus levels remain average (Makokha Stella, Kimani Stephen et. al). There is use of both organic matter and inorganic fertilizers for soil fertility.

Forest and Water Resources

Forest covers about 37,000 ha with 13,000 ha located in a different landscape. The highest percentage of this forest is natural indigenous forest and a small section of exotic tree plantation for timber production. The forest is designated as an Important Biodiversity Area and listed by Birdlife International in the highest category "critical" for conservation action (Bennun and Njoroge 1999). It hosts a variety of important global species and is particularly rich in bird life. It is home to 140 bird species, 20 of which are considered rare ("BirdLife", 2007). The forest is an important community asset which has been a main source of forest products including water, fuel wood, herbal medicine, fodder for livestock, building materials as well as leisure space. The forest is an important catchment area that supplies water to the Kenyan capital, Nairobi (Kuria and Githiru 2007).

The surface water and sub-surface water resources in the landscape are abundant. There are a number of permanent rivers, springs, wells and boreholes. Reliability of these water sources is very high as most of the rivers and water facilities are perennial. A substantial percentage of households in the landscape also harness rain water through roof catchment. Similarly, underground water resources are greatly exploited and boreholes drilled have high yields with good potential for irrigation with the proper mechanization.

Economic and production systems

The landscape has nearly 90% of the population engaged in cultivation. The majority of these people depend on small scale farming with the average size of the land being 0.8hectares where they grow various types of cash and subsistence crops and keep livestock in their small holdings. Tea and horticultural products are the main income earners. While the tea is the main cash crop in the Landscape, there has been some major shift to livestock and high value horticultural enterprises in the recent years due to a ready urban market like Kiambu, Nakuru, Nairobi as well as Mombasa. However, this sub-sector is yet to achieve its full potential owing to constraints such as use of uncertified seeds, shortage and high costs of farm inputs, lack of appropriate storage facilities, poor farming skills and harsh climatic conditions like frost and flooding in some parts of the landscape. The high population pressure has resulted in high

fragmentation of land, thus decreasing the average landholdings to about 0.8 ha which necessitates intensive cultivation.

Dairy production, mostly zero grazing, is practiced due to the small land holding per household. The local food processing industries and proximity to a ready market in Nairobi has increased the demand for livestock products. But the livestock industry is hampered by poor breeds and high prevalence of diseases. Prospects for industrialization remain high in the dairy sector and manufacture of animal feeds. The demand for financial services by the hardworking and enterprising population is enormous and expansion and further capacity building is needed. Fishing is also emerging as a fast growing commercial enterprise but productivity is still low. Beekeeping is also being practiced by a few farmers although its potential has not fully been realized owing to lack of information and inaccessibility of the high cost modern beehives that have high productivity. A considerable number of households are also involved in small-scale businesses due to relatively good number of business clientele and good infrastructure. However, constraints include high competition, low and non-diversified entrepreneurial skills, lack of access to cheap credit and insecurity.

Infrastructure

The landscape is served by the Nairobi-Rironi-Naivasha, old Rironi-Mai-Mahiu-Naivasha and Kimende-Githunguri tarmac roads. The Kimende Githunguri Rural access roads connect to these three tarmacked roads. Other infrastructure are centres of commerce, trade and markets, educational and health facilities. The rural access roads connecting to the all-weather roads are poorly maintained and are practically impassable by vehicles during the rain seasons. This has negatively impacted on the high potential of the landscape in horticultural production. Donkeys play a vital role at such times to ferry farm produce and other goods from the fields to main roads where vehicles would be waiting. Most of the trading centres are supplied with electricity although a sizeable number of households still use paraffin for lighting their houses. The landscape has several agro based industries such as tea factories, dairy processing factory, and the bacon factory (currently not functioning). However compared to other sub-counties in Kiambu County, Lari Sub-county is still lagging behind in agro based industries despite the fact that it has a good potential of industrialization. The landscape is well served with the existing mobile phone service providers, making communication and access to information better.

Kijabe Environment Volunteers (KENVO) has been involved in landscape management in collaboration with the Ecoagriculture Partners since 2007 with the aim of achieving both biodiversity conservation and livelihood improvement. Since 2007 KENVO has been working with various stakeholders who include farmers groups, self-help groups, conservation focused groups such as Community Forest Associations and water Resource Users Associations, churches, schools, other non-governmental organizations both national and international such as UNEP, Canada World Youth, Act (formerly Pact Kenya) and several donor agencies such as Community Development Trust Fund, CIDA just to name a few. In addition KENVO also works in collaboration and partnership with various government agencies, key among them Kenya Forest Service, Ministry of Agriculture, Ministry of environment and Ministry of education. In early 2012, KENVO, in partnership with EcoAgriculture Partners, facilitated a visioning workshop for the landscape to discuss the specific objectives and goals of the landscape platform.

Description of Methodology for Consultation

The policy dialogue meetings facilitated by EP and ICRAF were organized by KENVO who had developed a list of invitees for the 3 days meeting. The meetings were held at the KENVO Resource Centre located at Kereita Forest Station on 14th -16th April 2014.

The first day of the meeting involved various Government Officers from both the Sub-County and County. The Officers were drawn from various Ministries which included Ministry of Agriculture and affiliated departments, Ministry of Environment, Water and Natural Resources, Kenya Forest Service and the Water Resources Management Authority which are parastatal with the Ministry of Environment. The second day

brought together about 35 stakeholders who include the government officers who had attended the previous days meeting. The third day involved meeting five common interest groups involved in different activities within the landscape and who have also been involved in the management of the landscape. During the first day of the meeting, the officers were asked to introduce themselves as well as what their respective departments or Ministries are doing in terms of ILM as well as the challenges they are facing while implementing those activities especially those that are policy based. In the second session of the day the participants were divided into four small discussion groups to deliberate on what they are currently doing that is supportive to ILM, Lari Landscape platform as well as challenges faced in such type of work. The findings of the discussion group were presented in a plenary session. The last session of the day involved group discussion where the participants were divided into two groups to discuss current policy actions within their respective sectors that can be changed to support ILM and policies that can enhance collaboration among the various sectors and within different levels of government. The facilitators also introduced the LPFN objectives and purpose of the meeting.

On day two the participants were introduced to LPFN and purpose of the meeting as well as to the lari landscape including the various innovations within the landscape. Further the facilitators explained the expected outputs of the day as well as various approaches to be used to conduct the meeting. Through a plenary session, the meeting identified more innovations in the landscape as well as challenges facing the landscape. Further they identified the role the government is currently playing as well as made recommendations on the various environmental and conservation issues. The participants were then divided into five discussion groups to discuss on how the government can help them in scaling up their best practice and how the government can help in addressing the identified challenges. The findings were presented in a plenary session. Through the same groups they also identified the learning themes, both what they would wish to share with others and learn from others. The day ended with an evaluation of the day on what worked well and what needed improvement.

The third day of the meeting brought together 4 common interest groups that included dairy farmers group, beekeeping farmers group, horticulture farmers group and Natural Resource and public land group. The participants in this meeting were taken through the inputs and recommendations from the previous meetings and were requested to add their inputs. The second session of the day focused on looking at how policy impact on ILM with the participants identifying what the government is currently doing to support ILM activities in the landscape. The participants were then divided into four discussion groups according to their area of interest to discuss how the government should support activities in the landscape, how their activities are currently financed and finally what should be done to improve the financing of the activities. For all the meetings, the facilitators explained the next course of action.

Key ILM Issues

Objectives of the landscape:

- Provide a platform for learning and knowledge sharing.
- Building on local innovations, practices and resources.
- Enhance biodiversity conservation including at farm level.
- Diversify livelihood alternatives
- Provide a platform for empowering the community to participate in decision making.

Innovations

Innovations identified by the full stakeholders group

Technical

- New technical practices like drip irrigation

- Value addition of milk (yoghurt)
- Honey processing and hive making

Market

- New cooperative society (Fish farmers).
- Show casing of successful ventures during field day
- Group marketing of products and sourcing of farm inputs e.g. Bathi Dairy and Horticulture farmers have a milk kiosk.

Institutional/policy

- County government forum
- Linking local innovations to policies
- Multi-stakeholders approach-organizing joint events like the farmers field days, supply of subsidized fertilizer.
- Establishment of the Lari Agriculture Stakeholder's forum
- Common interest group approach (dairy, beekeepers, horticulture and poultry)

Financial

- Table banking enhancing access to finance.
- Accessing loans based on farm productivity from financial institution

Knowledge/Skills/training

- Learning exchange program
- Peer learning among farmers
- Common interest group approach (Dairy, beekeepers, horticulture and poultry).
- Showcasing successful ventures during field days

Challenges

Key challenges identified by the full stakeholders group

The stakeholders identified the following challenges within the landscape:

- Low/poor prices for agricultural commodities
- Poor coordination among farmers
- Low production level among farmers due to lack of coordination and organizing among the farmers.
- Limited access to market information
- Poor marketing channels
- High cost of farm inputs
- Dependence on rain fed agriculture.
- Inappropriate farming techniques.
- Farming as a social/cultural practice rather than a business.
- High cost of financial services
- Poor quality of farm inputs
- Poor infrastructures especially roads
- Lack of information sharing among farmers
- Lack of teamwork/poor teamwork
- Over reliance on donor and government for support to adopt new technologies.
- Lack of coordination across landscapes.
- Low level of education
- Slow adoption of new technologies such as drip irrigation

- Lack of documentation of good practices.
- Market inefficiency
- Unorganized local markets (some products like honey cannot meet local demands)
- Lack of standard measures /weights for markets –legal notice on weights exist but not known to most farmers
- Fear of past failure and corruption
- Cultural stereotypes/mindset.

Financing of Landscape Activities

The following were identified as source of financing currently in the landscape:

Membership Contribution: Most of the self-help and common interest groups have their members subscribing to the group on monthly basis. This money is then used to support some of the group activities. Further most of them have established table banking cum merry go round among the members to enable the members undertakes some of the group activities. Some of the groups have expanded their table banking by opening saving accounts in local financial institutions from which they access loans through guaranteeing each other and based on their level of saving.

Loans form financial institutions: Mainly these loans are based on agricultural production such as milk sales, as well as group saving where members guarantee each other. Some financial institutions like Equity bank has agricultural loans that are advanced to farmers based on the farmers productivity.

Funding/grants/donations from donors: Some of the groups indicated that they have received grants from donors such as farmers groups receiving funds from Njaa Marufuku Kenya Programme through the Ministry of agriculture, international donor funds to KENVO which is then used to support some of the farmers groups like USAID through Pact Kenya (funded establishment of ecotourism facilities), Eco agriculture Partners, DANIDA through the Community Development Trust Fund (CDTF), which currently supporting some of the stakeholders, the Kenya Agricultural Productivity and Sustainable land management Programme currently supporting improvement of agricultural productivity and SLM activities in part of the landscape.

Volunteerism: This is mainly in environmental conservation where people volunteer their time, labour and skills to carry out conservation work such as tree planting. The Kenya Defense Forces have also been volunteering in doing tree planting to rehabilitate the forest.

Donations from Corporate bodies and learning institutions: Some companies such as pharmaceutical companies (e.g. Phillip pharmaceutical company), banks, Kenya Breweries, Safaricom Foundation are supporting forest conservation in the landscape through provision of funds to purchase seedlings while learning institutions such as the Oshwal Schools have been supporting forest rehabilitation through tree planting.

Income from Sales of farm products: Farmers also finance activities from sale of products generated jointly such as sale of honey.

The stakeholders also cited the following as actions that can be taken to improve financing of their activities:

- Setting up a devolved fund to support conservation
- Having policies that benefit environmental conservation organizations e.g. timber harvesting tenders
- Subsidized rates for those involved in conservation when accessing natural resources e.g. lower rates for fuel wood ticket for Community Forest Association Members.

- Setting a percentage on all revenue generated from natural resources to support conservation and development initiatives in a specific region. E.g. 5% on revenue generated in a particular forest station to support the conservation efforts in that particular station.
- National fundraising events for conservation
- Government to continue providing farmers with grants such as the Njaa Marufuku Kenya Program (NMK) to upscale their best practices.
- Subsidizing the cost of beekeeping equipment such as honey extractor, bee suits.
- Strengthen the revolving fund scheme through training in financial management.
- Flexibility by financial institutions
- Reduce the cost of inputs e.g. by removing the VAT on raw materials
- Lowering interest rates for agricultural loans
- Prompt payment of farmers' products.
- Offer affordable credit facilities to acquire inputs.
- Reduce the loan service charge which is quite high
- More training on financial management, leadership and governance of farmers' organizations/groups this shall help in improving on accountability and transparency in the groups.
- Enhance and invest more in value addition and marketing to increase sales.

Supportive Government Action

These are the current government activities and policies that are supporting progress on key identified landscape issues.

Identified by full stakeholder group

- Training on better ways to plant trees
- Grants although not enough e.g. Njaa Marufuku Kenya (NMK).
- Harmonization of policies across sectors e.g. KWS and KFS (ongoing)
- Providing subsidized fertilizer thus reducing the cost
- Sensitization on purpose of shifting from use of DAP to NPK fertilizer (Advising farmers on the right fertilizer to use –extension services).
- Repairing of access roads.
- Promoting on-farm tree planting.
- Government has ensured community participation on Natural Resource Management (NRM), through establishment of Community Forest Associations (CFAs) and Water Resource Users Associations (WRUAs).
- Training and capacity building on new technologies as well as establishment of common interest groups.

Identified by county government officials

These were identified based on what each of the departments presented they are currently doing to support integrated landscape management in the Lari Landscape.

Department	What department is currently doing
<p><i>Water Resource Management Authority</i></p> <p>This is a Corporate body in the national Ministry of Environment, Water and Natural Resources (previously under the Ministry of Water and Irrigation. Department of Irrigation has now moved to the Ministry of Agriculture). With devolution a lot of changes to institutional arrangements have taken place. Their main responsibility is water management and catchment conservation</p>	<ul style="list-style-type: none"> • Gazettement and conservation of water catchments • Incorporating various stakeholders through formation of Water Resource Users Association (WRUAs) in each catchment as outlined in the Water Act 2002. • Incorporating the citizens in the management of water resources • Development of sub-catchment plans in a participatory manner involving all the stakeholders.
<p><i>Department of Fisheries</i></p> <p>This is a department within the Ministry of Agriculture. Usually receives funding from the Economic Stimulus Program 2010-2017 under the national government, though currently have not received funds due to the ongoing devolution.</p>	<ul style="list-style-type: none"> • Supporting farmers to establish fishponds and providing them with inputs such as feeds to reduce pressure on rivers and reduce pollution. • Training of farmers on fish farming as an alternative livelihood and for nutrition improvement through provision of protein. • Conservation of wetlands through establishment of fish ponds like in Kinale area.
<p><i>Sub-County Water Department</i></p> <p>One of the institutions within the Ministry of Environment, Water and natural resources.</p>	<ul style="list-style-type: none"> • Key responsibility being development of infrastructure for water service providers. • Water harvesting programme • Construction of lined ponds for water harvesting
<p><i>State Department of Agriculture</i></p> <p>The department is semi-devolved as the work with both the National and County government.</p>	<ul style="list-style-type: none"> • Promotion of high value crops due to reduced land sizes. • Transfer of appropriate technologies to farmers such as greenhouses farming. • Soil and water conservation through river bank protection, tree planting, Training on making terraces and cut-off drains and agroforestry. • Encourages farmers not to farm around riverbeds • Promotes Common Interest Groups Approach (for production and marketing of agriculture products) • Training farmers in various aspects of farming such as compost making to enhance soil fertility. • Water harvesting and promotion of drip irrigation.
<p><i>State Department of Livestock Production and Development</i></p> <p>A department within the Ministry of Agriculture.</p>	<ul style="list-style-type: none"> • Advising farmers on livestock production. • Training on Value addition especially milk and feed formulation.
<p><i>Kenya Forest Service</i></p>	<ul style="list-style-type: none"> • The extension forest service deal with farmers groups in building their

A parastatal within the Ministry of Environment, Water and natural resources. Focus on both forest conservation and rural extension for farm forestry.	<p>capacity to establish tree nurseries and provide them with inputs.</p> <ul style="list-style-type: none"> • Advising on the right tree species to plant in catchment areas, and agroforestry. • Provide farmers with seedlings during tree planting season. • Establishment of fruit orchards.
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Gaps in Government Action

These are the current gaps in government action.

Identified by full stakeholder group

- Lack of access to financing/ provision of affordable loans at zero or low rates of interests.
- Lack of technical staff
- Policies between different sectors are uncoordinated
- Lack of timely road grading and involving local communities in road rehabilitation
- Lack of zero rating of agricultural inputs or guaranteed minimum returns
- Inadequate market information provided
- Inadequate assistance with value addition
- Lack of price standardization
- Inaccessible services
- Inadequate assistance with water harvesting
- Lack of emphasis on contract farming
- Inadequate maintenance of roads
- Inadequate dissemination of market information
- Lack of technical information to the farmers such as soil testing techniques.
- Inadequate enforcement of legislation on standardization of quality and quantity of agricultural products
- Lack of investment or funding for research based on sector and landscape

Identified by County government officers

Department	What are the gaps/challenges?
<p><i>Water Resource Management Authority</i></p> <p>This is a Corporate body in the national Ministry of Environment, Water and Natural Resources (previously under the Ministry of Water and Irrigation. Department of Irrigation has now moved to the Ministry of Agriculture). With devolution a lot of institutional arrangements have taken place. Their main responsibility is water management and catchment conservation</p>	<ul style="list-style-type: none"> • Lack of financial facilitation to implement the projects identified in the sub-catchment plans. • Laxity in enforcing and enacting laws. • Encroachment in catchment areas. • Funding for community projects takes long to come by, as only the Water Service Trust Fund provides financial support to the WRUAs through the Water Development Cycle Programme (WDC).
<p><i>Department Of Fisheries</i></p> <p>This is a department within the Ministry of Agriculture. Usually receives funding from the Economic Stimulus Program 2010-2017 under the national government, though currently have not received funds due to the ongoing devolution.</p>	<ul style="list-style-type: none"> • Farmers are dependent on the funding from the government and government funding is uncertain • Slow uptake of fish farming as it's a new concept in the landscape. • Weather conditions are sometimes a challenge to fish farming especially tilapia. • Seeking funds to establish a hatchery and pellet making machine within the landscape. • Unclear policies regarding the creation of fish ponds in marsh areas. The Department of Fisheries recommends farmers construct fish ponds in marsh areas, while WRMA is trying to conserve riparian areas to enhance water flow.
<p><i>Sub-County Water Department</i></p> <p>One of the institutions within the Ministry of Environment, Water and natural resources.</p>	<ul style="list-style-type: none"> • Inadequate and fragmented funding for water programs. • Transitional period has affected funding of the departments activities (unclear where the funding will come from, county or national government) • Transition to Ministry of Environment has been difficult (there is no Environment Officer currently in the county) • Lack of policy on how the community should benefit from conservation efforts; the local community pays for water at the same rate as those downstream.
<p><i>State Department of Agriculture</i></p> <p>The department is semi-devolved as the work with both the National and County government.</p>	<ul style="list-style-type: none"> • Lack of facilitation to operate (as a result of devolved government as they have not received funds for the current financial year). • Lack of investors to do processing of perishable products. • Poor infrastructures especially roads affecting transportation of farm products. • Farmers attitude towards river line conservation.
<p><i>State Department of Livestock production and development.</i></p> <p>A department within the Ministry of Agriculture.</p>	<ul style="list-style-type: none"> • Poor marketing systems especially for milk (only 2 cooperatives in the landscape). • High interest rates on loans

	<ul style="list-style-type: none"> No feed manufacturers within the landscape hence high cost of concentrates leading to high cost of production.
<p><i>Kenya Forest Service</i> A parastatal within the Ministry of Environment, Water and natural resources. Focus on both forest conservation and rural extension for farm forestry.</p>	<ul style="list-style-type: none"> Farmers attitude towards conservation at farm level Fear on who owns the planted trees among farmers.

From the above the following can be deduced as major gaps in government action/challenges in the landscape:

- Fragmented policies on environment and conservation*- This issue regards the existence of various policies across the various government sector which are sometimes conflicting e.g. policy on riparian land conservation is different in the Ministry of Agriculture, WRMA as well as KFS, this is the same case with the right tree species that can be planted in the riparian land, hence need to harmonize the policies.
- Inadequate officer to enforce the policies especially in the forestry sector*- This issue was mainly concerns the forestry sector where there is huge deficit in terms of personnel in respect to the size of forest they are expected to enforce the law, hence resulting to continued destruction of the forest.
- Different and conflicting policies at the county and national levels*- The new county governments are in the process of developing various policies some of which are in conflict with the national policies as well as duplicated across the two levels of government. Some of the government departments are also cutting across the two levels of government making access to resources difficult hence unable to implement policies.
- Lack of information on available natural resources within the landscape and the county*- there is currently no inventory on the available natural resources within the sub-county nor at the county level. This is a big challenge as it is difficult to sustainably utilize these resources for the benefit of the community without knowing what is available and the quantities available.
- Low level of knowledge among community members regarding various environmental policies*- This was identified as a major issue as most community members are not conversant of the existing policies hence sometimes community is slow in implementing the policies even when law enforcers try to implement them.
- High cost of adopting new technology among the farmers*- farmers acknowledge that the government is promoting various technologies that are aimed at increasing productivity as well as contribute to environmental conservation, however most of the technologies are expensive for the farmers to adopt hence the need for the government to subsidize the cost or provide alternative financing to enable the farmers adopt the technologies such as drip irrigation and greenhouse farming as well as biogas.
- Lack of benefit sharing mechanisms especially on those accruing from natural resources like the forest*. - This is a major issue facing those involved in environmental conservation where there are no tangible benefits from their efforts; instead all revenue generated from the conserved resources goes to the government, thus demotivating the farmers to engage in conservation initiatives.
- Lack of land use management framework*- Lack of land use policy has resulted to fragmentation and subdivision of land to uneconomic level as well as conversion of agricultural land into residential units (real estate) which is a major challenge facing Kiambu county and thus the landscape is not an exemption. (The saying that Kiambu is the sleeping quarters for Nairobians). This has resulted to reduced farm sizes affecting agricultural production.

Recommendations for Government Action

Full stakeholder group

- Provide knowledge
- Share Knowledge
- Investment on infrastructure development
- Open markets-ensure market efficiency as a regulator.
- Coordination of various sectors
- Capacity building of groups
- Provide an enabling environment for private sector/investment.
- Implementation of laws/regulations
- Monitoring on policy implementation
- Financing implementation of policies
- Coordination between sectors and across the different levels of government/functions.
- Human resource (Technical persons) and management of the same.
- Consistency of policies in respect to change of political regimes (security of tenure for a particular policy)
- Harmonization of policies that relate to environment and conservation issues across all sectors.
- Recruit more staff especially in the forestry sector.
- Provide housing for forest officers/forest guards
- Review policies (environ&Conservation)at both levels (county and national)
- Enforce planting of deep rooted tree along contour specifically in steep slopes.
- Have a well-defined land use management framework
- Catalogue the natural resources within the county and sub-counties (or within counties and sub counties).
- Educating or sensitizing communities on existing environment and conservation policies and user rights.
- Promoting and subsidizing technologies mainly in energy saving.
- Both levels of government need to come up with benefit sharing framework specifically those accruing from natural resources.
- Enforce policies on land use systems.
- Link farmers or communities to carbon trading markets

County government officials

Agricultural sector

- Funding for agricultural sector is meant to be 10% of the GDP. This should be implemented as the sector is currently at 3%
- Proper balancing/ mapping of staffs within the counties (some counties are overstaffed while others are understaffed)
- Community participation in the planning of various projects and honouring of participatory agreements or inputs from the community.
- Agricultural Finance Corporation (AFC) services should be made available and accessible to all groups including youth and women.
- Review policy on security to access the finance i.e. loans
- Packaging and marketing i.e. package check on weight and price. - Have a regulatory body at the national level with a representation at the county level to regulate packaging and weights of farm products for open air markets.

- Formulate a policy on soil testing and fertilizer application to modify soil pH- have soil testing facilities at the sub-county level.
- Formulate policy on livestock and diseases analysis.

Water

- Avoid duplication of roles (i.e. consolidate funds for water infrastructural development)
- Develop mega dams within the forest where various community projects can access water from instead of the small fragmented water projects that also have negative impact on the environment.
- Proper coordination of the water sector institutions
- Enforcing structure for water policies.
- Funding programme for WRUA i.e. programme that take care for the WRUA partners

Fisheries Sector

- Facilitation to carry out feasibility study
- Advocacy on alternate source of protein

Forestry Sector

- Have a policy on ecosystem services – payments should be reviewed regularly.
- Framework on specific species for the demarcated zones

Cross-cutting recommendations and recommendations

- Restricted land use policy to safeguard agricultural land. (Need for a policy to regulate change of land use especially agricultural land example of Kiambu County and the real estate's where there used to be coffee plantations).
- Public Private Partnerships should be well enhanced and clearly communicated to all stakeholders.
- Provide guaranteed minimum return on any agricultural related enterprise.
- Unified approach on management of riparian land.
- Consolidation and harmonization of approaches between Civil Society groups, Private Sector, Government Departments and the community.
- Funding equity i.e. funding sectors based on their mandates and expected deliverables.
- There is need for farmers to change their mindset and look at agriculture in general as a business not as a social/cultural practice as most of them are doing today.
- Farmers' organizing is necessary especially in the dairy sector for them to be able to influence policy and discover existing opportunities.
- There is need to streamline the marketing channels
- Develop and enact strong cooperative policies.
- Capacity building among farmers to enhance good governance and financial management among farmers' organizations that are currently faced with mismanagement and misappropriation of funds.
- Harmonization and coordination of the private sector is necessary to ensure that farmers are getting proper and quality products and information.
- Certification of products.
- Improve financial support to implement policies
- Harmonize currently fragmented and contradictory policies across sectors
- Establish a policy on payment for ecosystem services and the sharing of the benefits from natural resource conservation with local communities
- Improve coordination of the sectors and develop a common strategy/approach
- Consolidate funds supporting projects or initiatives that are cross sectoral in nature e.g. water harvesting for irrigation purposes. This will make it more effective and have a higher impact.
- Establish environmental policy that is multi sectoral in nature.

Learning Themes

The stakeholders groups identified the following as topics they would want to learn and share with other landscape both innovations (i) and challenges(c).

Topics on which to share	Topic on which to learn
<ul style="list-style-type: none"> • How we have obtained conservation agriculture-model farms e.g. Kijabe boys • CFA the avenue for advertising our landscape (Change of livelihoods, lari marathon/ investment in the Kereita forest). Undertaking innovative initiatives in the forest. • Horticultural production-improved small scale horticultural production • Use of drip irrigation and greenhouse farming • Beekeeping, harvesting and processing of honey. • Building partnerships and sustaining them and Capacity building by partners (KENVO) • Multi stakeholders approach i.e. different stakeholders working together. • Environmental conservation initiatives-upstream, tree planting-like agroforestry, re-forestation. • Best practices knowledge exchange specifically on productive farming practices. • Resilient farming /survival tactics on horticulture farming (as a brand) • How landscape approach has brought together various CIGs e.g. beekeeping and dairy 	<ul style="list-style-type: none"> • How other landscapes have acquired and operationalized pallet mixers and raw materials. • How are others generating funds to run their projects successfully e.g. successful CFAs and WRUAs. • Successful dairy business hub • How to stabilize market prices for farm produce • How to solicit for funds • How to do deal with group dynamics (Conflict management) • How to change farmers attitude to move from their comfort zones • How to enhance cooperation and team work • Dry land farming techniques • How to develop and sustain effective cooperatives • How to deal with marketing strategies i.e. area having one crop, value addition. • Learn how to develop market linkages along the value chain • Learn how to capitalize on cooperative movements-to learn together, marketing, procurement of inputs. • Learn how to undertake mapping of specific landscape resources • Learn how to undertake carbon trading.

Reflection on the field work

What went well

- **Punctuality:** The facilitators arrived in early enough every day, however most of the stakeholders were not able to arrive at scheduled time. There was good observance of time during sessions thus ensuring the meetings did not end late.
- **Group Work:** The group work enable good participation by the various participants and allowed for opportunity to clearly understand issues.
- **Facilitators:** They were good and facilitated the meeting well. They ensure that there was proper translation to ensure participants understood better what was being discussed. Also interacted well with the participants.
- **Good participation:** There was good and active participation by all the stakeholder and participants.
- **Good stakeholders' mobilization:** The mobilization had been well done and the stakeholders for the second and third day turned up in large numbers.

What would have been done better

The meeting for the county government officers coincided with another function which was involving most of the officer especially from the Kenya Forest Service who could have provided more detailed and technical information. The day of the meeting being a Monday is not favourable for most officers as they report to office first hence late arrival by all of those who attended. May be future it's good to consider mid-week days. The meeting notice was also short thus making it difficult to engage officers based at the county level such as NEMA, Physical planner among other key officer.

Recommendations for modes of future engagement

The planning process need to start early to allow time for invitations for stakeholders mainly those not based at the landscape but play important role in policy making or implementation. KENVO should continue identifying more stakeholders especially those dealing with research and industrialization/investments and regulatory roles as they seem to be lacking.