An analysis of policy related documents in the context of integrated land and water management in Kenya

F.M. Matiri, Anastasia W. Kagunyu and Kwena Kizito

Kenya Agricultural Research Institute, Embu, P.O. Box 27 Embu, Kenya, francis_matiri@yahoo.com
KARI-Marsabit
KARI-Katumani, P.O. Box 340-90100 Machakos, Kenya

Abstract

Agriculture is the single most important sector in the economy in terms of GDP generation and employment creation. Water and land resources are vital for humans and economic development of a country, hence, need to maintain available water and land and provide good quality water for optimum development of the country. Therefore, integrated land and water resources management (ILWRM) system is fundamental. Agricultural policies in Kenya focus on increasing resource productivity and incomes; enhanced food security, emphasizing on irrigation for agricultural output stability, thus underlining the importance of sustainable ILWRM through an integrated approach, and therefore a need for an enabling policy environment. Main objective of the study was to undertake a review of the extent the existing policies favour or hinder implementation of ILWRM practices and propose interventions and recommendations for improvement. Materials on policies and strategic documents related to ILWRM were collected, reviewed and analyzed for strength, weaknesses identified, and recommendations on improvement proposed. Results showed that most materials that were reviewed have strong and sustainable indicators of natural resources and environmental management issues. However, from the broader ILWRM perspective, most of the materials appeared weak on specificities of ILWRM, although these seemed implicitly embedded in soil, water and environmental management issues. Therefore, there is need to explicitly incorporate ILWRM issues in the existing policies and strategic plans, have an enabling legal framework, identify gaps between the proposed policies and actual implementation, as well as lobby the policy makers for enhanced incorporation of ILWRM issues in the relevant policies.

Key words: integrated, land, management, water, sustainable.

Introduction

Agriculture remains the backbone and the single most important sector in the Kenyan economy, contributing approximately 25% of the GDP, and employing 75% of the national labour force (Republic of Kenya, 2005). The importance of the sector in the economy is reflected in the relationship between its performance and that of the key indicators like GDP and employment. Trends in the growth rates for agriculture, GDP and employment show that the declining trend experienced in the agriculture’s growth, especially in the 1990s, is reflected in the declines in employment and GDP as a whole (Alila and Atieno, 2006).

Land and water are vital for human survival and for economic development of a country. The need to maintain available land and water resources, provision of good quality water for utilization by the increasing population and for the optimum benefit in development of the country should therefore be a priority for any country hoping to improve and sustain adequate standard of life for its populace. However conflicting demands for these resources often make decisions very critical. There is therefore a need to have clear, long-term land and water management policies to ensure optimum benefit to the country. The Integrated Land and Water Resources Management (ILWRM) facilitates appropriate planning and implementation of water and land resources projects, and management through development of policies, while considering important driving factors including economics, social aspects, environment and political climate.
According to Sadrudin (2005) in Thalmeinerova (2007), the main objective of Integrated Water Resources Management (IWRM) system is to maintain a sustainable source of water supply that provides optimum benefit to the population in the catchments by satisfying their personal needs, while allowing them to undertake socio-economic activities without unnecessarily damaging the environment and also to control the resource in a way that minimizes the impact of natural disasters. Thus, IWRM calls for knowledge application from an array of disciplines and stakeholders for developing and managing water resources in a way that balances socio-economic needs, and ensures the protection of ecosystems for future generations. IWRM is also a cross-sectoral policy approach, replacing the fragmented sectoral approach to water resources and management that has led to poor services and unsustainable resource use. Like water, land is recognized as an important factor of production that needs to be managed well for agricultural productivity, equity, environmental sustainability and culture conservation (NLP, 2011).

Agricultural policy in Kenya revolves around the main goals of increasing productivity and income growth, especially for smallholder landowners; enhanced food security and equity; and emphasis on irrigation to introduce stability in agricultural output (Allila and Atieno, 2006). Kenya has 540,000 hectares of irrigable land but less than 90,000ha have been irrigated (SRA, 2004). Hence, there is need to exploit this potential through an integrated approach in an enabling policy environment. It is in this context that this review was undertaken to understand the extent of ILWRM incorporation in policy documents and strategic plans. The main policies and strategic plans related to ILWRM that were reviewed include the Economic Recovery Strategy for Wealth Creation and Poverty Reduction (GoK, 2003), Strategies for Revitalization of Agriculture (SRA) (GoK, 2004), National Water Policy on Water Resources Management and Development (GoK, 1999), Kenya Forest Services Strategic Plan (GoK, 2009), VISION 2030 (GoK, 2007) and Agricultural Sector Development Strategy (ASDS) (GoK, 2008), among others.

Objectives

The objectives of this review on policy related documents in integrated land and water management in Kenya are to:

- Critically assess the extent to which the existing policy framework favour or hinder the advancement of ILWRM practices
- Identify strengths, weaknesses and gaps in the existing land and water related policies and strategic documents
- Propose recommendations for improved integrated land and water management issues at the policy level

Methodology

This work focused entirely on the critical review of relevant documents in the context of ILWRM. These included strategic plans, sessional and strategic papers and documents among others. The main strategic documents from the relevant departments like agriculture, water, environment and forestry among others were collected and formed case studies for this work. These materials were accessed through visiting relevant institutions, explaining the aims of the visits and requesting for materials that they have related to the work. The scientists implementing this activity perused through the materials and noted important information. Depending on the enormity and importance of the materials, the researchers also borrowed some of the materials for reading and noting for a specific periods of time. After collection of these documents, indicators for indicating extent of incorporation of ILWRM issues in each strategic and policy document were developed. These indicators included: (a) the extent of incorporation of natural resources management, soil and water conservation and broader ILWRM issues in the strategic objectives of the cases, (b) the extent of integration of the relevant sectors in the strategic documents and policies, and (c) the extent of technological integration of ILWRM
interventions in the cases. By use of these indicators all cases were summarized and content analysis conducted and a report prepared.

Results

Analysis of the relevant main policies

National Land Policy (2007). The National Land Policy (GoK, 2007) recognizes the importance of land in the context of agricultural productivity, equity, environmental sustainability and cultural conservation. The policy emphasizes on security of legitimate rights and equitable access to land in the interest of social justice and resolution of genuine historical and present land injustices. The policy document also indicates that vulnerability is a manifestation of poverty and deprivation and includes groups such as: subsistence farmers and pastoralists, and the need for their land rights to be recognized and protected. Thus, this policy focuses on putting structures in place for identifying, assessing and monitoring the vulnerable groups; redistribution of land and resettlement, their facilitation in decision making over land and protecting their land rights from unjust and illegal expropriation. It also recognizes three types of land tenure; public, community and private land.

National Food and Nutrition Security Policy (2011). The National Food and Nutrition Security Policy (GoK, 2011) is framed in the context of basic human rights, child and women rights; including the Universal Rights to Food. The policy identifies human and environmental resources, economic systems as well as political and cultural factors to be the main causes of inequalities, disparities in resource access and discrimination on the basis of status, residence, gender and ethnicity among others. It also identifies food security as a national security issue as articulated in Article 231 (1) of the Constitution of Kenya (the right to free from hunger, to have adequate food of acceptable quality and uninterrupted supply of clean and safe water in adequate quantities at all times). The policy also emphasizes on promotion and support of sustainable land, irrigation and water management as one of the ways of increasing diversified food production. It also supports measures that can improve food security and access to land and water resources to all Kenyans; by taking necessary measures to enable the vulnerable groups have access to land use and water; and the accruing benefits. The policy also proposes increased funding for irrigated agriculture expansion in line with Vision 2030. In addition, the policy calls for review of the regulatory framework governing the land and irrigation subsectors for enhanced productivity and development.

Ministry of Agriculture Strategic Plan (2008 – 2012). The Ministry of Agriculture Strategic Plan outlines in the outset that one of the key functions of the ministry is to promote management and conservation of the natural resource base for agriculture. Hence soil and water being natural resources, it implicitly means that they are embedded in this core function. The mission statement also clearly outlines the importance of appropriate policy, environment, effective support services and sustainable natural resource management. In the strategic mission and objectives, promotion of sustainable land use and conservation of the environment is also one of the key strategic objectives.

Economic Recovery Strategy for Wealth Creation and Poverty Reduction (ERS). ERS envisages viable interventions to reverse alarming environmental deterioration and natural resource degradation. It recognizes that one of the serious challenges the country faces is mismanagement and uncontrolled profiting at the cost of the environment. Soil and water being natural resources, the policy therefore implicitly recognizes the importance of ILWRM.

Strategies for Revitalization of Agriculture (SRA). One of the key objectives of SRA is improvement of land, water and environment management. This therefore shows the importance that the document implicitly lays on ILWRM. SRA created Agricultural Sector Coordination Unit (ASCU) whose one of the key functions is integration and harmonization of operations of departments as well as programmes in the sector ministries.
Kenya Forest Services Strategic Plan 2009/10 – 2013/14. The KFS strategy aims at contributing to sustainable land use through soil, water and biodiversity conservation and tree planting. This therefore implies that the strategy embraces sustainable land and water resources management. The plan also has a strong component of sectoral integration and community participation for sustainable forest resources management.

Vision 2030. Kenya Vision 2030 is the latest long-term development blueprint for the country. The Vision is anchored on three key pillars: Economic; Social; and Political Governance. The economic pillar aims at achieving an economic growth rate of 10% per annum and sustaining the same till 2030 in order to generate more resources to address the Millennium Development Goals (MDGs). The vision indicates that some of the strategies of achieving the established targets is by coming up with land use polices for better utilization of high and medium potential lands; and developing more irrigable areas in arid and semi-arid lands for both crops and livestock; among others. Its main thrusts include transforming land use through improved land use policies.

Agricultural Sector Development Strategy (ASDS) (2010 – 2020). In 2004, the Government developed and launched the SRA as a follow up and response to the successes of ERS. With most SRA targets achieved by 2007, SRA was revised to capture new developments, thus coming up with ASDS. The ASDS expresses the need for strong partnerships and stakeholders participation among the sector ministries and private sector, hence the sustainability and strengthening of ASCU for sector wide coordination. The main challenges identified include insufficient water storage infrastructure, with water harvesting and storage infrastructure development identified as the main strategies to overcome this. ASDS also indicates that there is potential to increase productivity and the main areas outlined for this include better use of unused land in traditional farming areas, and through irrigated agriculture. Inappropriate land-use practices and environmental policies that have encouraged land fragmentation, cultivation of river banks, deforestation and encroachment into catchment areas and wetlands are also indicated as some of the existing challenges for improved agricultural productivity.

Discussions

The results indicate that different strategic documents and policies have embraced and incorporated ILWRM issues at different levels and in different ways. The National Land Policy (NLP) is very explicit on the land question that has been an issue in the country for a long time. It also takes a robust position on how land in the country would be utilized in an equitable way for improved access and hence improved productivity. NFNSP takes the human rights perspective to access to land and its utilization. Its effective implementation will therefore lead to improved land and water management for improved food and nutrition security. In the context of Ministry of Agriculture Strategic Plan, the mission statement and strategic objectives, sustainable soil and water management is outlined as one of its core functions, hence, it can be argued that integrated land and water management is an important component of the ministry, though the extent of integration in terms of sectoral, view points/aspects or technological integration is not clear. In the case of ERS, the emphasis is on interventions that would reverse environmental deterioration and natural resources degradation, hence explicitly recognizing the importance of sustainable natural resources management, though not explicit on viable ILWRM interventions and strategies for sustainable NRM. Improvement of land, water and environment management being one of SRA’s key objectives implies the importance it attaches to ILWRM. However, it is not explicit on exact processes that will need to be taken to achieve this and although explicit in the policy document it may be different at the implementation level. ASCU has integration and harmonization of operations for agricultural sector ministries as a key objective, hence an important policy statement in that it would enhance sectoral integration and a more harmonized ILWRM across sectors, projects and programmes.

In the outset, Kenya Forest Services Strategic Plan aims at contributing to sustainable land use through soil, water and biodiversity conservation. Hence, it can be argued that if its spirit is translated into
action, it would incorporate ILWRM strategies that would enhance sustainable forest resources and natural resources management. The recognition of the importance of working with stakeholders and community participation in management of the forests resources also creates an enabling policy environment for sectoral and partnership integration. With Vision 2030 having its main thrusts being transforming land use through improved land use policies; it implies that issues related to ILWRM are well embedded in the document. What is crucial in this context is to follow up on the specific projects and programmes under these thrusts to find out to what extent are the ILWRM issues are incorporated.

In the context of ASDS, its organizational structure from the national to the grassroots level creates strong sectoral integration both horizontally and vertically with envisaged high level of participation of other non-state actors, providing enabling environment for ILWRM. Although use of unused land in traditional farming areas and irrigated agriculture are outlined in the document as some of the areas that can be exploited to increase productivity, ILWRM is not included as a strategy that can increase production of both traditional and non-traditional commodities in irrigated agriculture in both medium altitude and ASALs. Hence, it can be argued that this omission implies inadequate attention was paid in terms of ILWRM and its potential to increase productivity. In addition, ASDS identifies inappropriate land-use practices and environmental policies as some of the existing challenges for improved agricultural productivity. However, lack of appropriate ILWRM strategies and low adoption of the same may have also contributed to inappropriate land-use practices though not mentioned. Hence, it may imply the development strategy is not appreciating the important role that adoption of appropriate ILWRM strategies can play in improving land use practices.

Although ILWRM would be an important strategy in improving land use and crop production, and integrated development and management of rangelands, it is not featuring as a proposed intervention in ASDS, implying the development strategy may be underestimating the importance of ILWRM in this aspect. Although it indicates that managed and developed watersheds can contribute to sustainable water flow and availability, it does not mention integrated water resources management though an important component of water resources and irrigation development, particularly where water availability is limiting. However, the proposed multi-sectoral approach to irrigated agriculture is important for ILWRM because it brings all the relevant sectors on board while embracing stakeholders’ participation.

**Conclusion**

This review shows ILWRM issues are broadly incorporated in most policies but with some variances, with the recent ones like NLP, Vision 2030, NFNSP and Forestry among others having more embedded issues of ILWRM. The analysis also shows that most of the policies and strategic documents that have been reviewed like NLP, NFNSP, Forestry, ERS and SRA that are more recent appear to be embracing issues of sustainable soil, water, land and environmental management compared with the old documents. It is also shown that the NLP has taken a radical position on land rights, past and present land injustices, and access to land by vulnerable groups, which is a landmark shift from the past policies and hence if well implemented may be able to address the land question for improved access and productivity.

However, from the context of the three ILWRM perspectives, most of the policies and strategic plans appear to be weak. At the same time, most of the policies and strategic plans that have been reviewed lack specifics on ILWRM strategies and issues but are ‘clouded or believed’ to be embedded in soil, water and environmental conservation. None of the policies or strategic documents that have been reviewed, that has clearly embraced the three perspectives of ILWRM (sectoral, view points/themes and technological integration). They either put a lot of weight in one while leaving out the other two. The thematic (social, economic, cultural and political) and technological (water harvesting, terracing and soil fertility, among others) integration have been poorly addressed in all the policy documents, except forestry strategic plan where social, ecological and economical perspectives / approaches have
been well spelt out. Also, most of the documents highlight “stand alone” technologies like water harvesting, water storage and irrigation infrastructural development as the panacea to challenges of land and water availability and management. Thus, under estimating the role and synergies of incorporation of other technological interventions like adoption of appropriate crops for specific regions, soil fertility technologies, micro-dosing and agroforestry for sustainable NRM / ILWRM. Except for NLP, ASDS and Vision 2030, most of the policies and strategic plans that were reviewed focus on a specific sector without incorporating other relevant sectors and non-state actors that are important in ILWRM.

Recommendations

ILWRM is important for improved natural resources management and agricultural productivity; hence, it is important to incorporate ILWRM issues more explicitly in the country’s policies and strategic plans. This will create an enabling environment for sectoral, thematic and technological integration for improved agricultural productivity. It is also recommended that an enabling legal framework is put in place to ensure that the policy frameworks are effectively implemented and offenders appropriately sanctioned. Further, there is need to critically review and analyze the extent of policy implementation so as to identify and remove any disconnects and gaps for improved policy consumption. Dialoguing and sharing with policy makers and implementers on the importance of incorporation of ILWRM issues in the policy documents will also be crucial if ILWRM has to play its important role in agricultural productivity.

Acknowledgement

The authors of this paper sincerely acknowledge the funding from ASARECA / World Bank, through KARI, that enabled us to accomplish this study. We are also thankful to KARI Director, Centre Directors KARI-Katumani, Embu and Marsabit for the facilitation and all the logistical support that they extended to us while implementing this work. The many key informants and heads of departments in various ministries that accorded us a hearing and provided us with the materials, we salute you all. We also thank Mr. Kwena Kizito for bringing us on board to work on the policy component of the Integrated Watershed Management project.

References


Charania, S. H 2005. Integrated Water Resources Management with Reference to Developing Countries


