



Republic of Kenya

**MINISTRY OF AGRICULTURE, LIVESTOCK, FISHERIES AND
IRRIGATION**

**NATIONAL AGRICULTURAL AND RURAL INCLUSIVE GROWTH PROJECT
(NARIGP)**

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

Revised October 2018

ACRONYMS AND ABBREVIATIONS

AfDB	African Development Bank
CBO	Community Based Organisation
CPCU	County Project Coordinating Unit
CDD	Community Driven Development
CDDC	Community- Driven Development Committees
CEOs	Chief Executive Officers
CICA	Canadian Institute of Cultural Affairs
CIG	Common Interest Group
CSO	Civil Society Organizations
EIA	Environmental Impact Assessment
EA	Environmental Audit
EMCA	Environment Management Coordination Act
ESIA	Environmental and Social Impact Assessment
EMMP	Environmental Monitoring and Management Plan
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
EWS	Early Warning Systems
FGDs	Focused Group Discussions
GIS	Geographic Information System
GOK	Government of Kenya
GPS	Geographic Positioning System
IDS	Institute of Development Studies
IPM	Integrated Pest Management
IPMF	Integrated Pest Management Framework
KAPAP	Kenya Agricultural Productivity and Agribusiness Project
KALRO	Kenya Agriculture and Livestock Research Organization
KEPHIS	Kenya Plant Health Inspectorate Service
KFS	Kenya Forest Service
KWS	Kenya Wildlife Service
MoDP	Ministry of Devolution and Planning
MOALFI	Ministry of Agriculture, Livestock, Fisheries and Irrigation

MMP	Mitigation Management Plan
M&E	Monitoring and Evaluation
MIS	Management Information System
NARIGP	National Agricultural and Rural Inclusive Growth Project
NEMA	National Environment Management Authority
NGO	Non-Governmental Organization
NIB	National Irrigation Board
NPCU	National Project Coordinating Unit
NRM	Natural Resources Management
PDO	Project Development Objective
PIC	Public Information Centre
PICD	Participatory Integrated Community Development
POs	Producer Organisations
SPs	Service Providers
TOR	Terms of reference
VC	Value Chain
VMGs	Vulnerable and Marginalized Groups
WB	World Bank
WRA	Water Resources Authority

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EXECUTIVE SUMMARY

0.1 Introduction

1) National Agricultural and Rural Inclusive Growth Project (NARIGP) is environmentally classified as category B. These are projects that have minimal and site-specific impacts that are less costly to mitigate. Environmental Screening of the NARIGP revealed that the project would trigger the following World Bank policies and procedures: (OP/BP 4.01) Environment Assessment, (OP/BP 4.04) Natural Habitats, (OP 4.09) Pest Management, (OP/BP 4.10) Indigenous People and (OP/BP 4.12) Involuntary Resettlement. The development of an Environmental and Social Management Framework (ESMF) is a way to comply with the World Bank safeguard policy on Environmental Assessment (EA) (OP/BP 4.01) in a case when the project activities are not defined prior to project appraisal as the case with NARIGP. For NARIGP the EA process takes into account the natural environment (air, water and land); human health and safety; social aspects (involuntary resettlement, indigenous peoples; and physical cultural resources) and trans-boundary and global environmental aspects.

2) EA integrates environmental and social aspects in project implementation with project and in country considerations and conditions to the extent that the World Bank will not fund any project or activity that is not in line with in country overall policy framework; national legislation, international treaties and agreements or even institutional capabilities in environment and social issues. Using the ESMF, which is derived from the EA (OP/BP 4.01), therefore, the EA process intensity depends on the nature, scale, and potential environmental impact of the proposed project (WB, 2008). A range of instruments are available that satisfy the OP/BP 4.01 including: Environmental Impact Assessment (EIA); Strategic Environmental and Social Assessment (SESA); Environmental Audit (EA); hazard or risk assessment; Environmental and Social Management Plan (ESMP) and the Environmental and Social Management Framework (ESMF). Environmental screening is thus undertaken to determine the extent of potential impact and the type of instrument to use. This ESMF has been reviewed and aligned to the Ministry of Agriculture, Livestock, Fisheries and Irrigation (MOALFI) as the Implementing Agency. It had earlier been developed and disclosed by the Ministry of Devolution and Planning (MoDP).

0.2 Brief Description of Project

3) The Government of Kenya has requested for a credit facility from the International Development Agency (IDA – World Bank Group) to finance the implementation of the NARIGP. The project implementation is under the overall responsibility of Ministry of Agriculture, Livestock,

Fisheries and Irrigation. The project supports Kenya's Vision 2030 whose key element is the development of 'an innovative, commercially oriented and modern agriculture, livestock and fisheries sector' in an inclusive way. Specifically, the project aims at transforming smallholder subsistence agriculture by: (i) increasing the productivity, commercialization, and competitiveness of selected agricultural commodities; and (ii) developing and managing key factors of production, particularly land, water and rural finance.

0.3 The Project Development Objective

4) The Project Development Objective (PDO) is “to increase agricultural productivity and profitability of targeted rural communities in selected Counties and in the event of an eligible crisis or emergency to provide immediate and effective response. The project activities will contribute to this objective by transforming and improving the performance of the agricultural value chains, empowering communities and stakeholders in the project area.

0.4 Project Components

5) NARIGP has 4 components. Component 1 entails strengthening community level institutions' ability to identify and implement investments that improve their agricultural productivity, food security and nutritional status and, linkages to selected Value Chains (VCs) and Producer Organizations (PO). Component 2 aims at strengthening POs and improves market access for smallholder producers in targeted rural communities. Through a VC approach, Common Interest Groups (CIGs), and Vulnerable and Marginalized Groups (VMGs)s formed under component 1 will be supported to federate into strong business-oriented POs. Component 3 is intended to strengthen the capacity of county governments to support community-led development initiatives identified under Components 1 and 2.

6) This includes the provision of technical advisory services and enabling environment for the private sector and Public-Private partnership (PPP) to operate, and inter-community investments based on priorities identified under Components 1 and 2. Component 4 is concerned with financing activities related to the national and county-level project coordination, including planning, fiduciary, human resource management, safeguards compliance and monitoring, Management Information System (MIS) and Information Communication Technology (ICT) development, Monitoring and Evaluation (M&E), impact evaluation, communication and citizen engagement. In the event of a national disaster affecting the agricultural sector, the project through this component would finance emergency responses.

0.5 Project Beneficiaries and Project Counties

- 7) The primary beneficiaries of the project will be targeted rural small and marginal farmers, including women and youth and VMGs, and other stakeholders, organized in CIGs and federated into POs along the VCs, and selected County Governments. NARIGP will be implemented in 21 selected counties.
- 8) The ESMF is therefore, prepared to guide the selection and implementation of micro-project that will require precautionary measures related to EA (BP/OP 4.01) in the selected counties. The World Bank's safeguard policy on environmental assessment, OP4.01 is to be complied with where potential risks and impacts are anticipated. In this case, therefore, project alternatives would be the way to go by preventing, minimizing, mitigating or compensating for adverse environmental impacts and enhancing positive impacts where project selection, siting, planning, design, and mitigating and managing through project implementation is concerned. Preventive measures over mitigatory or compensatory measures should be the priority.
- 9) This framework will target certain activities that may negatively impact on the livelihoods of the target beneficiaries thus reducing the average household yields. Examples of such activities include sustainable land and water management, and infrastructural development.
- 10) The World Bank O.P.4.01 requires that ESMF report, including the Integrated Pest Management Framework (IPMF), be disclosed as a separate and stand-alone report by the Government of Kenya. The disclosure of the document should be in both project visible locations where it can be accessed easily by general public and at Info shop of the World Bank.

0.6 Potential Project Impacts

- 11) The potential impacts include but not limited to the ones related to the following: pollution as a result of agro chemical use; SLM issues; soil fertility management issues; air quality; solid waste generation; food safety issues; deforestation as a result of expanded land fields; decrease in faunal species and inequality issues. In line with the World Bank safeguard policy OP 4.01, NARIGP will therefore, prevent and minimize environmental and social impacts through a number and structured steps which are detailed in the main text of the framework.

0.7 Environmental and social impacts

- 12) This ESMF considers that due mitigation process starting with screening will be adopted for each micro-project and formulate an Environmental and Social Management Plan (ESMP) for each

micro-project. An Integrated Pest Management Plan (IPMP) will be formulated and used where agrochemical usage will be required in each micro-project.

0.8 Mitigation Measures

13) The right EA tools will be applied as and where necessary based on the anticipated impacts and risks.

0.9 Institutions/Departments Responsible

14) The main institutions involved in the implementation of the ESMF are: Ministry of Agriculture, Livestock, Fisheries and Irrigation (MOALFI), State Department for Crops Development; National Project Coordination Unit (NPCU) of the NARIGP; the National Environment Management Authority (NEMA); County Governments, farmers (Common Interest Groups and /Producer Organizations). The implementation of activities will be under the overall guidance of the NPCU of the MOALFI. The NPCU will undertake Training Needs Assessment (TNA) with regard to the project's capacity to mainstream Environment and Social Safeguards. Following the outcome/gaps identified during the TNA, the NPCU will in collaboration with the relevant institutions conduct capacity building of the staff from NARIGP project implementing agencies both at national and county levels. The Farmers (Common Interest Groups/ Producer Organizations) will be trained on the mainstreaming of Environmental and Social Safeguards in the activity implementation.

0.10 Training and Awareness Creation Budget for ESMF Implementation

15) The target communities will be expected to realize positive impacts from the safeguard trainings. Key among these include: (i) increased conformity to safeguards through various capacity building levels, (ii) increased income especially from sale of quality agri-products as a result of mainstreaming safeguards in both individual smallholder farmer and community-based investments, (iii) inclusion of all segments of the community and gender mainstreaming in micro-project activities and community level decision-making structures; (iv) special targeting of the vulnerable and marginalized, and (v) increased participation of youth in the project's activities through funding of specific Youth Actions Plans (YAPs) where applicable. These positive impacts contribute immensely to an enhanced ability of VMGs and the other participating CIGs members to take care of their basic needs such as payment of schools fees, health care and nutritional requirements of their families.

0.11 Participatory Monitoring and Evaluation Plan

16) All project results indicators will be disaggregated by gender to monitor women's participation in the project interventions. The project will also enhance capturing of this environmental and social gender data in a disaggregated manner where applicable.

0.12 Stakeholder Consultation, participation and Disclosure of ESMF

17) Once the draft ESMF is approved by the NCPU, it will be circulated to the relevant institutions for comments. This is in accordance with the requirements provided for under EMCA (1999) and World Bank (WB) policy OP/BP 4.01 Environmental Assessment. Information and consultation on the NARIGP environmental and social management framework will be circulated to: MOALFI; NEMA; Kenya National Agricultural Federation of Farmers (KENAFF); State Department for Cooperatives as well as the WB amongst others.

18) The Consultants carried out appropriate consultations with stakeholders during the preparation of the earlier disclosed ESMF. Stakeholders consulted included relevant Government agencies, county government officials, non-governmental organizations, non-state actors and civil society groups identified during the consultative period. Further a consultation between consultants and the government-implementing agency was also held. Useful comments were made which have since been included in the disclosed ESMF. Public and stakeholder consultations were held in Nairobi on 22nd December 2015. This instrument had earlier on been extensively consulted upon on all stakeholders both at the county and national levels; it was therefore, felt that because the target beneficiaries are not changing but the fiduciary department, similar consultations would not be necessary. And so, the ESMF can only be reviewed to be aligned to the new fiduciary department, and consequently disclosed both in- country and in the WB External Website.

19) As provided for under WB policy OP 4.01, information and consultation on the NARIGP environmental and social management framework was organized as follows: Circulation of the draft ESMF for comments to all relevant institutions (e.g. MOALFI, NEMA, KENAFF, State Department of Cooperatives, as well as the WB).

0.13 Public Consultations

20) Comments by stakeholders' public workshops were incorporated in the earlier disclosed ESMF; all comments including the ones by the WB team were also communicated to the Consultant for incorporation into the final ESMF. The final ESMF was reviewed and cleared by both GoK & World Bank, both in-country (in the project/government sites and official media) and disclosed at the WB External Website prior to disclosure.

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1.0 INTRODUCTION

21) The Government of Kenya through the Ministry of Agriculture, Livestock, Fisheries and Irrigation with support from the World Bank is implementing the National Agricultural and Rural Inclusive Growth Project (NARIGP). NARIGP builds upon the country's rich experience in promoting Community Driven Development (CDD) approaches to rural development as introduced through programs such as Western Kenya Community Driven Development and Flood Mitigation Project (WKCDD/FMP), Kenya Agricultural Productivity and Agribusiness Project (KAPAP), Kenya Agricultural Productivity and Sustainable Land Management Project (KAPSLMP) and the Kenya component of the East Africa Agricultural Productivity Project (EAAPP); all of which each had success stories.

1.1 Strategic Context

22) Agriculture is a major driver of the Kenyan economy and the dominant source of employment for majority of the Kenyan people. The Agricultural sector directly contributes about 27% to the Gross Domestic Product (GDP) and a further 27% through manufacturing, distribution and service sectors and accounts for 65% of the total export earnings annually (ERA, 2017). The sector employs over 80% of Kenya's rural work force and provides more than 18% of formal employment. The performance of the agriculture sector and the national economy are closely linked with the economic growth - declining whenever there is a shock in the agriculture sector and vice versa (GoK, 2017). About 83 % of land area is in the Arid and Semi-Arid Lands (ASALs), which are mainly pastoral areas; and only 17 % (where also 80 % of population lives) is classified as medium to high agricultural potential zone. Kenya's farms are small, and for the most part getting smaller, which is a major concern. Climate change is increasing agricultural risk, with serious implications for agriculture, the natural resource base, food security, livelihoods, and the stability of the wider economy. Kenya is highly vulnerable to the impacts of climate change..

23) To transform the agricultural sector and build resilience to climate change risks, Kenya needs to focus on increasing productivity and commercialization. To achieve this Kenya also needs to address the main constraints to increasing agricultural production, productivity and value addition, which are: (a) low use of agricultural inputs; (b) frequent droughts and climate variability; (c) natural resources degradation (particularly soil and water), as a result of nutrients mining and soil erosion; (d) low levels of private investment in the primary production (subsistence commercial-oriented agriculture) and in value addition; and (e) poor rural infrastructure, such as small scale irrigation, roads, marketing and storage.

24) The ESMF therefore, details environmental and social management policies, guidelines, technologies practices and procedures to be integrated into the implementation of the NARIGP micro-projects in order to effectively address the above sector constraints using the CDD approach. It is envisaged that implementation of the ESMF document will ensure compliance with applicable legislation, policies and regulations under the Kenyan Constitution, the NEMA as well as relevant World Bank policies on environment and social management issues.

1.2 Project Development Objective

25) The NARIG project will contribute to the Government's high level objective, which aims at transforming smallholder subsistence agriculture into an innovative, commercially oriented, and modern sector by: (i) increasing the productivity, commercialization, and competitiveness of selected agricultural commodities; and (ii) developing and managing key factors of production, particularly land, water and rural finance.

26) The Project Development Objective (PDO) of NARIGP is *“to increase agricultural productivity and profitability of targeted rural communities in selected Counties and in the event of an eligible crisis or emergency to provide immediate and effective response.”*

1.3 Project Beneficiaries

27) The primary beneficiaries of the project will be targeted rural small and marginal farmers, including women and youth and Vulnerable and Marginalized Groups (VMGs) and other stakeholders, organized in Common Interest Groups (CIGs) and federated into Producer Organizations (POs) along the Value Chains (VCs), and selected county governments. NARIGP will be implemented in 21 selected counties and will cover 20 wards per county.

1.4 Project Counties

28) The project counties were chosen mainly aimed at up scaling efforts initiated by the Western Kenya Community Driven Development and Flood Mitigation Project (WKCDD&FMP) and Kenya Agricultural Productivity and Agribusiness Project (KAPAP) which have since been phased –out. The former was anchored in the Ministry of Devolution and Planning while the latter was in the Ministry of Agriculture Livestock, Fisheries and Irrigation. The project design also drew experiences and lessons learnt from the Kenya Agricultural Productivity and Sustainable Land Management Project (KAPSLMP) and Kenya Adaptation to Climate Change in Arid and Semi-Arid Lands Project (KACCAL). The project counties therefore are as follows:

Table 2: NARIGP Counties

Agro-geographical Area	Counties
Arid areas	Samburu, Turkana
Semi-Arid areas	Makueni, Meru, Kitui, Embu, Kilifi, Kwale, Narok
Medium to high rainfall areas	Kirinyaga, Kiambu, Murang'a, Nakuru, Bungoma, Trans Nzoia, Nandi, Vihiga, Kisii, Nyamira, Migori and Homa Bay

2.0. DESCRIPTION OF PROJECT COMPONENTS

2.1 Component 1: Supporting Community-Driven Development

29) The overall objective of this component is to strengthen community level institutions' ability to identify and implement investments that improve their agricultural productivity, food security and nutritional status; and linkages to selected VCs and POs.

Subcomponent 1.1: Strengthening Community Level Institutions

30) The project will finance activities aimed at building the capacity of community-level institutions, such as Community Driven Development Committees (CDDCs), CIGs, and VMGs, to plan, implement, manage and monitor agricultural and rural livelihoods development interventions. Specifically, activities to be financed under this subcomponent will include: (i) facilitation of community institutions, including community mobilization, awareness creation of the Participatory Integrated Community Development (PICD) process through which priority interventions will be identified; (ii) development of, and training on, standardized training modules for PICD, VC development, fiduciary management (i.e., community financial and procurement management, and social audits) and environmental and social safeguards monitoring (i.e., use of checklists in micro-projects identification and implementation); (iii) payments to competitively selected advisory Service Provider (SP) consortia (i.e., to provide technical and extension advisory services, micro-projects planning and implementation support, local value addition, and link CIGs/VMGs to POs; and (iv) facilitation of County Technical Departments (CTDs) to provide oversight and quality assurance at the sectoral level (e.g. agriculture, livestock, fisheries, environment and natural resources, cooperatives, youth and women affairs, among others).

Subcomponent 1.2: Supporting Community Investments

31) This subcomponent will finance physical investments in the form of community micro-projects identified in the PICD process that increase agricultural productivity, include a strong nutrition focus, improve livelihoods and reduce vulnerability. Micro-project investments will fall under four windows: (i) Sustainable Land and Water Management (SLWM) and VCs development; (ii) market-oriented livelihood interventions; (iii) targeted support to VMGs; and (iv) nutrition mainstreaming through three pathways: consumption (e.g. nutrient-dense crops and livestock products), income (e.g. home-based value addition, storage and preservation), and women empowerment (e.g. on-and off-farm activities, labour-saving technologies, and savings and credit schemes). Priority will be placed on micro-

projects that have the potential to increase agricultural productivity and incomes, value addition, and links to markets via POs; and sustain natural resources base and returns to targeted communities rather than simply providing inputs.

32) The County Project Steering Committee (CPSC) will be responsible for approving the investment proposals submitted by CIGs and VMGs through a competitive process, based on the recommendations of the County Project Coordination Unit (CPCU). The mechanism for implementing micro-projects, including matching grants will be detailed in the Project Implementation Manual (PIM).

2.2 Component 2: Strengthening Producer Organizations and Value-Chain Development

33) The objective of this component is to strengthen POs and improve market access for smallholder producers in targeted rural communities. Through a VC approach, CIGs and VMGs formed under Component 1 will be supported to federate into strong business-oriented POs; and integrated into input/output and service markets to improve production; and to take advantage of market opportunities available along the selected VCs. Targeted POs will include cooperatives, farmer associations and companies constituted by CIGs and VMGs.

Subcomponent 2.1: Capacity Building of Producer Organizations

34) The objective of this subcomponent is to federate targeted CIGs and VMGs into profitable business-oriented POs through which they can have a stronger say in the VCs they participate in; negotiate for improved access to farming inputs, technologies and agricultural services (including extension and finance); and markets for their produce. The project support to POs will finance activities organized around two pillars: (a) organization and capacity building; and (b) financing for enterprise development tailored to the needs of the PO and its members. At the start of the project, each selected PO will be supported to prepare a 5 year Business Plan, which will become the main instrument for guiding project investments to the PO.

Subcomponent 2.2: Value Chain Development

35) The objective of this subcomponent is to identify and up-grade competitive VCs for integration and economic empowerment of targeted POs. Project support will be used to finance activities related to the: (i) selection, mapping and organization of competitive nutrition-sensitive VCs for smallholder development; and (ii) VC upgrading through a matching grants mechanism targeted at addressing key investment gaps, including: strengthening of inputs supply system (e.g. foundation seed by research institutions,

commercial seed production by private sector, and community-based seed multiplication); development of farm mechanization technologies for climate smart-agricultural practices; value addition and processing; and post-harvest management technologies and facilities (e.g. drying, storage and warehousing receipt system).

36) Similar to subcomponent 1.2, the CPSC will be responsible for approving the investment proposals submitted by POs through a competitive process, based on the recommendations of the CPCU. Details on implementing VC activities, including how the matching grants process, will be detailed in the PIM.

2.3 Component 3: Supporting County Community-Led Development

37) The objective of this component is to strengthen the capacity of county governments to support community-led development initiatives identified under Components 1 and 2. This includes the provision of technical advisory services (e.g. public extension services); enabling environment for the private sector and public-private partnership (PPP) to operate; and inter-community investments (e.g. catchment or landscape-wide and larger rural infrastructure) based on priorities identified under Components 1 and 2. This component will enable the county governments to have effective citizen engagement through consultations, sensitizations, capacity building and partnerships.

Subcomponent 3.1: Capacity Building of Counties

38) This subcomponent will finance the capacity building of participating counties in the area of community-led development of agricultural and related livelihoods. The objective is to enable them to support activities under Components 1 and 2. The project will ensure that capacity building under this subcomponent is coordinated and harmonized with ongoing county capacity building under the National Capacity Building Framework and other donors' ongoing initiatives. The subcomponent will finance activities related to: (a) stakeholder engagement through sensitization and awareness creation to become familiar with project objectives and "philosophy"; (b) the preparation of a Capacity Needs Assessment (CNA) and Capacity-Building Plan (CBP) for each participating county; (c) capacity-building through: (i) different forms of training (including the development of relevant standard training manuals, and Information, Education and Communication (IEC) materials) and technical assistance; and (ii) limited but necessary facilitation of relevant county staff (e.g. logistics, tools and basic equipment).

Subcomponent 3.2: County Investment and Employment Programs

39) This subcomponent will finance investments in key agricultural and rural development infrastructure, as well as natural resource management investments that span across multiple targeted communities. It will also finance short-term employment during off-season, particularly for VMGs and unemployed/out-of-school youth. Employment opportunities will largely be created under public works using cash-for-work approach and facilitated by concerned county governments. The employment programs will also provide life and technical skills development training in order to have long-lasting impacts beyond temporary works. Typical investments would include the construction of rural roads, small multipurpose dams, earth pans, small scale irrigation systems, market and storage facilities (under PPP arrangement); restoration of degraded catchments and water courses; and rehabilitation of similar existing infrastructure. Co-financing and the availability of an operation and maintenance (O&M) plan, including cost recovery or sharing mechanisms and other sources of funding will be key criteria for the counties to access project funds.

40) The county investment proposals will be approved by the National Technical Advisory Committee (NTAC) through a competitive process, based on the recommendations of the National Project Coordination Unit (NPCU).

2.4 Component 4: Project Coordination, Monitoring and Evaluation

41) This component will finance activities related to the national and county-level project coordination, including planning, fiduciary, human resource management, safeguards compliance and monitoring, MIS and Information, Communication and Technology (ICT) development, M&E, impact evaluation, communication and citizen engagement. In addition, in the event of a national disaster affecting the agriculture sector, the project through this component would respond through a contingency emergency response provision.

Subcomponent 4.1: Project Management

42) This subcomponent will finance the costs of the national and county level project coordination units (NPCU and CPCUs), including salaries of the contract staff, and O&M costs, such as office space rental, fuel and spare parts of vehicles, office equipment, furniture and tools, among others. It will also finance the costs of project supervision and oversight provided by the NPSC and CPSC; and any other project administration.

Subcomponent 4.2: Monitoring & Evaluation and Impact Evaluation

43) This subcomponent will finance activities related to routine M&E functions (e.g., data collection, analysis and reporting); development of ICT-based Agricultural Information Platform for sharing information (e.g., technical or extension advisory services, business and market-oriented, agro-weather information and others); and facilitate networking across all components. It will also finance the baseline, mid-point and end of project impact evaluation of the project. The Agricultural Information Platform is intended to provide the project and other stakeholders the ability to: (i) capture data from ongoing programs and projects using electronic devices connected to mobile networks; and (ii) upload information from manually collected data and geospatially aggregate the data from community, county, and national levels including agricultural statistics.

Subcomponent 4.3: Contingency Emergency Response

44) This zero budget subcomponent will support a disaster recovery contingency fund that could be triggered in the event of a natural disaster affecting the agricultural sector through: (a) a formal declaration of a national emergency by the authorized agency of GoK; and (b) upon a formal request from the National Treasury (NT). In such cases, funds from the unallocated expenditure category or from other project components would be re-allocated to finance emergency response expenditures to meet agricultural crises and emergency needs.

3.0 ENVIRONMENTAL AND SOCIAL ISSUES RELEVANT TO THE NARIGP PROJECT

46) While the project counties are earmarked, past experience under the CDD approach within the agriculture sector as shown by the previous projects mentioned earlier indicates that there is potential for minor and reversible negative impacts within the envisaged micro-projects. NARIGP has prepared an Environmental and Social Management Framework (ESMF) to ensure that all investments are adequately screened for their potential environmental and social impacts, and that correct procedures will be followed, for all the types of the investment to be made by NARIGP as stated in the ESMF.

3.1 Objectives of the ESMF

47) The Objectives of the ESMF are to:

- (i) Comply with the legal framework, and establish procedures, and methods for environmental and social screening, planning, and review, approval and implementation of the investments to be financed;
- (ii) Identify roles and responsibilities, including reporting procedures and monitoring and evaluation;
- (iii) Identify capacity/or training needs for different stakeholders to ensure better implementation of the provisions in the ESMF and also in the micro-projects Environmental and Social Management Plans (ESMPs) and;
- (iv) Identify resource requirements to ensure effective mainstreaming and implementation of the framework.

3.2 Rationale for realigning this NARIGP Environmental and Social Management Framework

48) NARIGP has realigned and updated ESMF following the transfer of the fiduciary responsibility from the Ministry of Devolution and Planning to the Ministry of Agriculture, Livestock, Fisheries and Irrigation. The ESMF was earlier prepared, publicly consulted, reviewed, approved, cleared and disclosed in the MoPD e-government sites and also the World Bank External Website. The ESMF is realigned and disclosed by the MOALFI. This is to ensure that all investments are adequately screened for their potential environmental and social impacts; and that correct procedures are followed, for all types of investments to be undertaken.

3.3 Project Environmental Risks

49) Based on the project components and envisioned activities the project is environmental risk category is B. The overall risk rating for the environmental safeguards as identified through assessment of project components is substantial.

50) The project environmental risks so far identified in the project implementation include: (i) the technical capacity to handle implementation and monitoring of the ESMF is very limited with the NARIGP and implementing agencies. It will therefore be necessary for NARIGP to hire the right staff/consultants to handle the entire implementation process including monitoring. (ii) A factor that may affect ecosystem processes, functions or attributes, which is related to human actions is the use of agri-chemicals and fertilizers.

51) NARIGP is supporting about 80% agriculture related activities that thrive on use of agri-chemicals to enhance productivity. Individually, the expected negative impacts are negligible however over a long period impacts from past/present pressures may result in a variety of cumulative effects on land, water bodies and other ecosystems.

52) SLM technologies and practices for sustainability; natural resources should not be used beyond their capacity to be naturally replenished, both in quality and quantity, for the well-being of future generations. Failure to invest in SLM leads to farming, agro-pastoral and fisher folk populations producing less and less thus facing food and nutritional insecurity. The populations become more vulnerable to future economic and climatic shocks as 70% live and exclusively depend on the smallholding setups of the agriculturally productive regions.

53) This aggravated situation may further lead to resource use conflicts, starvation and destitution. Remedial measures planned for in the design of the project and detailed in the ESMF for targeted communities include: Sustainable productive land management technologies and practices in healing erosion hotspots; establishment of a community early warning system; adoption of early maturing crops; and production of appropriate fodder and forage including preservation and conservation technologies and practices.

54) This ESMF has been re-designed to anticipate and address potential impacts at the planning stage of existing and new investments and related activities. Some of the micro-projects envisaged in the revised ESMF have some positive environmental and social impacts. These are briefly discussed below and summarized in table 2.

3.3.1 Positive Environmental Impacts

- ***Conservation and protection of biodiversity***

55) The activities of the project will help identify and to implement the necessary measures for the conservation and protection of biodiversity areas thus conserving the wealth of the species at the local and national levels e.g. important bird areas, wetlands. The flowering stage of the crops introduced during project implementation could provide more nectar and pollen for the natural pollinators hence providing an improved nutrition base that will attract more pollinators and lead increased biodiversity within the project area.

- ***Combating desertification***

56) NARIGP investments are likely to contribute to combating desertification; enhancing reforestation, soil conservation and restoration and the implementation of national resources conservation activities.

- ***Protection of Water Catchments***

57) The water catchment basins will be better used for the socio-economic benefits of the communities whilst at the same time establishing sound management practices to conserve water resources as a result of the watershed protection and landscape management interventions.

- ***Climate data Management***

58) Investments towards climatic data management and forecasting will help in developing fairly precise climatic forecasting which will equally be of use to the farmers in timing crop regimes and production. This will help farmers to embrace smart farming.

- ***Flood Mitigation***

59) Flood control and infrastructure to ensure climate change resilience remains a key benefit due to the adverse impacts caused by climate related risks and disasters such as flooding.

3.3.2 Negative Environmental Impacts

- ***Loss of vegetation cover***

60) There is likelihood of vegetation loss during the construction phase for project investments to pave way for access roads, actual project establishment among others. This may involve encroachment into productive agricultural and pasturelands. Removal of vegetation cover may expose the soil to agents of soil erosion thereby leading to land degradation.

- ***Decline of Faunal species***

61) Potential investments may generally fragment ecosystems, isolating species population and cutting off migrations and other movement. This isolates them from vital breeding and feeding areas.

- ***Soil Erosion***

62) Soil erosion could occur either during the construction phase of factories or dams or in the general tillage practices when loose soil is swept by waters and during the operational phase especially when irrigation investments are involved. This will be as a result of the intensive activities that will be going on in the construction areas especially land clearing and /or cultivation without regard to sustainable land management practices. The heavy equipment and machines that shall be used in the construction process will interfere with the soil structure making it loose hence liable to degradation. Intensive irrigation activities are likely to cause waterlogging effects. This is likely to occur in paddy areas or where intensive horticulture is being undertaken.

- ***Water Pollution***

63) Increase in suspended particles due to farming and construction may affect water quality especially where micro-project activities are close to natural water bodies. Suspended particles including soil from the neighboring catchment area will contribute to deterioration of water quality. Water quality could deteriorate significantly due to reduced water recharge and balance leading to stagnation contributed by upstream use of fertilizers and pesticides as well as investments in irrigation agriculture. Agrochemical pollution could become a major problem with intensification of monoculture especially in areas where banana and flower value chains are involved. Locating cattle dips near water bodies can also lead to water pollution and pose health hazards.

- ***Borrow Pits and Quarry Sites***

64) Borrow pits and quarry are sites where stone, sand, gravel, till, clay, or other granular soils are extracted for construction of the various investments including roads within NARIGP. The term 'pit' is used when granular material is extracted. The term 'quarry' is used where consolidated rock is removed. Environmental impacts of pit and quarry development can include the loss, reduction or disturbance to wildlife and habitat, erosion, dust, soil/groundwater contamination, damage to historic resources, waste disposal, noise,

and aesthetics. Burrow pits if not well-managed can pose a health hazard by providing breeding grounds for mosquitoes and bilharzias vectors.

- ***Air Pollution***

65) Airborne dust will be caused by excavation, vehicle movement hence engine combustion and materials handling, particularly downwind from the construction sites during the construction phase of the identified investments. Uncovered stock piles and asphalt mixing plant operations are another source of dust. Air pollution will be further caused by emissions from vehicles and construction machinery. There will be decreased air quality due to dust, suspended particles, and hydrocarbon vapors, oxides of nitrogen and sulphur (NO_x and SO_x) and Volatile Organic Compounds (VOC) among other emissions.

- ***Greenhouse Gas (GHG) Emissions***

66) Greenhouse gases such as methane will be emitted from the irrigation schemes with rice paddies through methanogenesis process from the dam reservoirs and paddies. This occurs mainly in rice paddies such as in the Mwea Irrigation Scheme in Kirinyaga County; however, recent empirical studies have also demonstrated that livestock emit a lot of GHGs especially when chewing cud. Areas with high density livestock herd also contribute to GHG emissions. The cumulative effects of greenhouse gas effect on the climate leads to global warming and climate change.

- ***Water Losses***

67) It was observed that substantial amount of water is lost by canal seepage and leakage. Seepage occurs where canals have been constructed from materials that have high permeability such as sandy soils. In general seepage was noted in the schemes where canals were not lined. Leakage was observed where rodents or termites had made holes in canal beds or sides, canals which were eroded and had washed away banks and canals with cracked cement lining or joints that were not tightly sealed. Water loss is one of the problems that lead to low level of water in the channels contributing to crop production inefficiencies. Water loss can also affect the biological diversity and the water users downstream of the project.

- ***Surface Capping***

68) Surface capping is formed as a result of rain falling on the bare soil surface so that when the soil dries up after the rains, the caps set so hard that crop seedlings cannot emerge.

- ***Water Logging***

69) Water logging occurs due to poor water application methods, resulting in the accumulation of water in all macro- and micropores of soils. This condition promotes breeding of disease vectors such as mosquitoes.

- ***Soil Salinity***

70) Soil salinity occurs when there is a waterlogged condition in the project due to poor water application practices. The salts and nutrients that are dissolved in the water are left on the water surface when the water has evaporated.

- ***Water Borne Diseases***

71) Water is habitat of the macro-organisms including snails that are secondary hosts to the micro- organisms that cause and transmit diseases to livestock as well as humans. In almost all the projects visited, people complained of diseases such as malaria, dysentery and bilharzia. The proposed project could therefore consider community capacity building to enhance the health and social impacts.

- ***Wildlife and pests***

72) Hippos and pests are a threat in some of the schemes. Birds were also noted to threaten the production of rice. The project should encourage liaison and collaboration between the farmers and the KWS to develop strategies for overcoming this problem where it is a threat.

- ***Change of river course***

73) This problem occurs when water leaves its natural course due to either river bending or deposition of sediments or anthropogenic activities that block the waterway.

- ***Disappearance of the riparian ecosystem downstream of the schemes***

74) Disruption of the river flow is the cause of this problem. When water is abstracted from the river, the water flow downstream reduces and when some parts of the river dry up, this disturbs the ecosystem balance in form of fauna and flora population and composition.

- **Flooding**

75) This problem occurs when there is no or very little vegetation that can reduce the speed of runoff water to encourage infiltration into the soil, after heavy rainfall.

3.4 Project Social Risks

76) The overall risk rating for the environmental safeguards as explained in the identified risks is moderate. There are several social risks envisioned in the implementation process of NARIGP including: (i) NARIGP and even the line ministries do not have the capacity to implement, monitor and supervise both the RPF and VMGF; it is thus critical and prudent that NARIGP bring on board staff/consultants with the experience, knowledge and skills to effectively guide the implementation of the NARIGP Frameworks. In addition, a capacity needs assessment will be undertaken on the safeguards implementation knowledge and where possible capacity building will be done on the aspects/gaps so identified. (ii) There are still general accountability and transparency concerns in Kenya that have been taken into consideration in the NARIGP design. The project design includes elements to ensure transparency, accountability and good governance of the project implementation process. A strong emphasis is laid on social accountability and independent verification mechanisms. (iii) socio-cultural issues in some target communities hinder resource allocation/share, resource access and use, and equity issues in project implementation, (iv) the presence of minority communities and vulnerable and marginalized groups within the project counties poses a risk of such groups not being involved, consulted appropriately in terms of their cultures, traditions, customs, or religion or any other form which unless properly addressed would be discriminatory. These challenges affect project implementation and ownership.

77) Therefore, in the project design gender, and inclusion of youth and VMGs will be mainstreamed at all levels of implementation as well as capacity building stakeholders in the weak areas. (iv) During the implementation of NARIGP component 1 and 2, specific investments in bulk water supply including infrastructure for small irrigation, roads infrastructure, climate change adaptation technologies, and ground water development among others will more likely lead to acquisition of a sizeable portion of hectares of land in project sites. This is likely to lead to land acquisition on a permanent or temporary basis for community investments' specific infrastructures(Holden & Shiferaw, 2004).

78) These investments will likely affect negatively the livelihoods though the envisaged impacts are mainly positive. For the negative impacts the magnitude will vary in degree depending on the nature of investment under the NARIGP. At this point, the exact impact of the future investments under the NARIGP is not yet known and it will only be known when

investments under NARIGP are identified. Nonetheless, all the future investments are considered in the project design and addressed in detail in the NARIGP RPF.

79) NARIGP has been categorized as Environmental Category B in accordance with World Bank OP 4.01 (Environmental Assessment) and therefore, OP/PB 4.01 is triggered. The overall environmental impacts of the project are expected to be positive. Significant positive impacts to the natural and socio-economic environments will be achieved by increasing agricultural productivity and profitability leading to improved livelihoods and reduced vulnerabilities of targeted rural communities. The activities envisaged under micro-project cumulatively may have far reaching impacts if not well mitigated and therefore the use of this framework will be very important at all implementation levels.

3.4.1 Positive Social Impacts

- *Availability of clean drinking water*

80) The water supply projects likely to be introduced by the NARIGP will make clean and safe water available to the local populations for domestic use. In addition, more water will be available for their livestock. This may reduce conflicts over water resources by neighboring communities.

- *Capacity building*

81) Investments geared towards developing capacities of the stakeholder institutions that manage the natural resources of the NARIGP will ensure good environmental governance of the natural resources thereby ensuring their sustainability.

3.4.2 Negative Social Impacts

- *Public Health*

82) Improved access to water and irrigation will have positive benefits on the lives of the communities such as improved crop yield and better access to safe and clean drinking water. However, it could also have some negative impacts. Dams and diversion weirs could impact the health situation of those living close to them due to increase in the number of mosquitoes and bilharzia carrying snails or even waterborne diseases such as typhoid.

- *HIV/AIDS Prevalence*

83) There is also potential risk that the construction works for most of the investment projects in the NARIGP could increase HIV/AIDS prevalence in the project areas especially through interactions of the locals with immigrant labourers.

- **Labour Influx**

84) NARIGP will finance investments in key agricultural and rural development infrastructure as well as natural resources management investments that span across multiple targeted communities. It will also finance short-term employment during off- season, particularly for VMGs and unemployed/out-of-school youth. This is likely to cause labour influx into the project sites. Whereas labor influx can have positive effects (e.g., increased opportunities for local businesses, increased human capital), more often than not labour influx results in or contributes to adverse social, economic, and environmental impacts. If not planned for and effectively managed, labour influx can lead to human welfare risks, including gender-based violence and trauma and negatively affect public infrastructure, housing, natural resource management and social dynamics in the project area. These impacts can represent a significant risk projects and lead to community anger and social conflict.

- **Loss of Land**

85) There will be loss of farmland, grazing land, business and structures among others by the local landowners, as individuals or community due to construction of irrigation schemes, dams, and bulk water supply systems among others. The existing land use of the project area might be altered by the construction of access roads, construction camps, opening up of burrow pits sites and quarry sites among others. Such activities often scar the land, cause vegetation loss thereby leading to soil degradation.

- **Impacts on Vulnerable and Marginalized Groups**

86) Changing land use patterns and workloads resulting from the introduction or formalizing of irrigation are likely to affect men and women, ethnic groups and social classes unequally. Groups that use "common" land to make their living or fulfill their household duties such as charcoal production, hunting, grazing, collecting fuel wood, growing vegetables and so on; may be disadvantaged if that same land is taken over for irrigated agriculture or for building irrigation infrastructure. Historically, it has been men from the more settled and powerful groups that have had greatest access to the benefits and increased income from irrigated agriculture. Women, migrant groups and poorer social classes have often lost access to resources and gained increased workloads.

87) Irrigation agriculture related projects might ignore the role of women in agriculture and existing producer groups as well as water users associations. Similarly inadequate capacity, access to services (extension and others) and decision making especially for women may tilt the scale and cause further disparity among women who may be affected negatively by the investments.

88) Vulnerable groups include special marginalized groups, orphans, and child headed households, the sick, elderly and female headed households among others and who may be adversely affected by the proposed investments especially in the event that their status as vulnerable or marginalized groups is not considered in the planning, and implementation of the specific investments.

- ***Increased crime rate***

89) The increase in the number of people in a specific project area or site especially during construction has the potential to lead to a number of negative socio-economic impacts including increased insecurity and community conflicts, increased incidences of diseases; increased risk of occupational hazards; and immigration of construction workers and labour force management challenges.

- ***Food Security***

90) There is a possibility that increase in investments such as irrigation system may reduce food security of the local communities due to more attention to cash cropping. This could specially affect the women and children who have less access to cash crops and better farming technologies.

- ***Employment Issues***

91) The construction activities of micro-project investments may require recruitment of “foreign” skilled and unskilled labour that could trigger conflict, resentment and tension by the local communities over perceived inequities in distribution of job opportunities by the local communities.

Table 3: Examples of NARIG Project Impacts

Component	Environmental Impacts	Social Impacts
Component 1: Supporting Community-Driven Development		
Subcomponent 1.1: Strengthening Community Level Institutions	Soil fertility issues; SLM issues; pollution issues; soil and land degradation	Inequality issues on resource accessibility and use; ownership; gender disparities; leadership issues; presence of VMGs and inclusion processes; etc.;
Sub Component 1.2: Supporting County Investments	Air quality impacts; waste generation; decline of faunal species; additional garbage; water pollution; OHS;	Inequality issues on resource accessibility and use; ownership; gender disparities; leadership issues; presence of VMGs and inclusion processes; etc.;
Component 2: Strengthening Producer Organizations and Value-Chain Development		
Subcomponent 2.1: Capacity-Building of Producer Organizations	Food safety issues; food quality; activities out of tune with the environment i.e. construction of cottages or small-scale processing infrastructure; installation of processing equipment and machinery; construction of small scale earth pans; laying of small scale irrigation equipment, etc.	Land acquisition; In equality issues on resource accessibility and use; economic dislocation of beneficiaries; ownership; gender disparities; leadership issues, etc.; Inequality issues on resource accessibility and use; ownership; gender disparities; leadership issues; conflicts, etc.;
Subcomponent 2.2: Value Chain Development	Air, water and land pollution through use of chemicals; deforestation; soil fertility issues; SLM issues; adaptation to technologies/practices to climate change; etc.;	Inequality issues on resource accessibility and use; ownership; gender disparities; leadership issues; etc.;
Component 3: Supporting County Community-		

Led Development		
Subcomponent 3.1: Capacity Building of Counties		Disruption of utility services; restriction of access to livelihood and other assets; minor land/asset acquisition impacts; delays in compensation (if any); and provision of alternative means of livelihood; community disputes; etc;
Subcomponent 3.2: County Investment and Employment Programs	Loss of biodiversity; soil erosion;	Inequality issues on resource accessibility and use; ownership; Occupational Health Safety (OHS); gender disparities; leadership issues; etc.;
Component 4: Project Coordination, Monitoring and Evaluation		
Subcomponent 4.1: Project Management		Conflicts
Subcomponent 4.2: Monitoring & Evaluation and Impact Evaluation		Inter-intra Community conflicts
Subcomponent 4.3: Contingency Emergency Response	Flooding, land slide, Famine, disease outbreak	Displacement of people, Loss of lives and property, Food insecurity

Source: Author (2015) and modified, 2018.

4.0 National Environmental and Social Policies, Regulations and Guidelines

4.1 National

92) This section reviews the relevant institutional, legal and policy framework in the country, which has a direct bearing on the NARIGP. Any new policies, regulations or guidelines introduced after the earlier disclosed ESMF are also reviewed. The section also outlines the World Bank Safeguard Operational Policies applicable to the project including a comparative analysis and gaps existing between the Bank's policies and host country regulations and suggestions on bridging the gaps. Finally, sections on international laws and conventions that bear relevance to the implementation of this project have also been highlighted.

93) Implementation of the NARIGP will require that appropriate and effective institutional structures and management mechanisms are put in place at national, county and local levels. It is assumed that, wherever possible, existing structures and mechanisms will be harnessed, and strengthened where necessary. But some new ones may also be necessary. There may also be a need to amend, harmonize, or even introduce new legislation, policies, rules and regulations to enable effective implementation of the project. The Kenya Government environmental and social management requirements for NARIGP funded micro-projects are discussed below:

4.1.2 The Kenya Constitution, 2010

94) Kenya now has a new Supreme law in form of the New Constitution which was promulgated on the 27th of August 2010 and which takes supremacy over all aspects of life and activity in the New Republic. With regard to environment, Section 42 of the Constitution states as follows:- 'Every person has the right to a clean and healthy environment which includes the right: To have the environment protected for the benefit of present and future generations through legislative and other measures, particularly those contemplated in Article 69; and To have obligations relating to the environment fulfilled under Article 70'.

95) In Sections 69 and 70, the Constitution has inter alia identified National Obligations in respect of the environment and Enforcement of Environmental Rights respectively as follows:-

Section 69 (1): The State shall—

- I. Ensure sustainable exploitation, utilization, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits;
- II. Work to achieve and maintain a tree cover of at least ten per cent of the land area of Kenya;

- III. Protect and enhance intellectual property in, and indigenous knowledge of, biodiversity and the genetic resources of the communities;
- IV. Encourage public participation in the management, protection and conservation of the environment;
- V. Protect genetic resources and biological diversity;
- VI. Establish systems of environmental impact assessment, environmental audit and monitoring of the environment;
- VII. Eliminate processes and activities that are likely to endanger the environment; and
- VIII. Utilize the environment and natural resources for the benefit of the people of Kenya.

96) Section 69 (2) States that; every person has a duty to cooperate with state organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources.

97) Section 70 provides for enforcement of environmental rights thus: If a person alleges that a right to a clean and healthy environment recognized and protected under Article 42 has been, is being or is likely to be, denied, violated, infringed or threatened, the person may apply to a court for redress in addition to any other legal remedies that are available in respect to the same matter.

98) On application under clause (1), the court may make any order, or give any directions, it considers appropriate: To prevent, stop or discontinue any act or omission that is harmful to the environment; To compel any public officer to take measures to prevent or discontinue any act or omission that is harmful to the environment; or to provide compensation for any victim of a violation of the right to a clean and healthy environment.

99) For the purposes of this Article, an applicant does not have to demonstrate that any person has incurred loss or suffered injury.

4.1.3 Kenya Vision 2030

100) The economic, social and political pillars of Kenya Vision 2030 are anchored on macroeconomic stability; continuity in governance reforms; enhanced equity and wealth creation opportunities for the poor; infrastructure; energy; science, technology and innovation (STI); land reform; human resources development; security as well as public sector reforms. The 2030 Vision aspires for a country firmly interconnected through a network of roads, railways, ports, airports, water and sanitation facilities, and telecommunications (Constantin Severini, 2009).

4.1.4 Environment Management and Coordination Act (No. 8 of 1999), EMCA and other EMCA Related Regulations

101) This is an Act of Parliament providing for the establishment of an appropriate legal and institutional framework for the management of the environment and for matters connected therewith and incidental thereto. This Act is divided into 13 Parts, covering main areas of environmental concern as follows: Preliminary (I); General principles (II); Administration (III); Environmental planning (IV); Protection and Conservation of the Environment (V), Environmental impact assessments (EIA), audits and monitoring (VI); Environmental audit and monitoring (VII); Environmental quality standards (VIII); Environmental Restoration orders, Environmental Easements (IX); Inspection, analysis and records (IX); Inspection Analysis and Records (X); International Treaties, Conventions and Agreements (XI) National Environment Tribunal (XII); Environmental Offences (XIII).

102) This Act has been amended and the new Act is referred to as **The Environmental Management and Co-ordination (Amendment) Act, No. 5 of 2015**. This Act does not replace or repeal EMCA (1999) but it introduces some amendments to align it with the devolved governance structures. For example, **section 40 of EMCA (amendment, 2015)** requires every County Environment Committee to prepare within one year of the commencement of this Act and every five years thereafter, to prepare a County Environment Action Plan (CEAP) in respect of the county for consideration and adoption by the County Assembly. Every County Environment Committee (CEC), in preparing a CEAP, shall undertake public participation and take into consideration every other CEAP already adopted with a view to achieving consistency among such plans. The respective County Executive Committee members of every county shall submit the CEAP referred to in subsection (1) to the Cabinet Secretary for incorporation into the National Action Plan (NAP). However, EMCA (1999) repealed in 2015 remains the **principal environmental law in Kenya**.

103) EMCA (1999) provides for the setting up of the various ESIA Regulations and Guidelines, which are examined in the sections that follow below:

- ***Environmental (Impact Assessment and Audit) Regulations 2003***

104) The Environmental (Impact Assessment and Audit) Regulations 2003 state in Regulation 3 that “the Regulations should apply to all policies, plans, programmes, projects and activities specified in Part III and V of the Regulations” basically lists the guidelines of undertaking, submission and approval of the ESIA Reports a key requirement outlined in this ESMF.

- **Environmental Management and Co-ordination (Waste Management) Regulations 2006**

105) These are described in Legal Notice No. 121 of the Kenya Gazette Supplement No. 69 of September 2006. These Regulations apply to all categories of waste as provided in the Regulations. These include among others industrial wastes, hazardous and toxic wastes and pesticides and toxic substances.

106) The proposed Project will have to abide by these regulations in dealing with waste management especially the provisions of wastes which may be generated during their construction and operation phases of the micro-project investments. Pesticides are expected to be used in the agricultural activities envisaged in the NARIGP and as such the regulations on the disposal of pesticide wastes must be adhered to.

- **Environmental Management and Coordination, (Water Quality) Regulations 2006**

107) These are described in Legal Notice No. 120 of the Kenya Gazette Supplement No. 68 of September 2006. These Regulations apply to drinking water, water used for agricultural purposes, water used for recreational purposes, water used for fisheries and wildlife and water used for any other purposes. This includes the following: Protection of sources of water for domestic use; Water for industrial use and effluent discharge; Water for agricultural use:

108) These Regulations outline:

- 3.3.1 Quality standards for sources of domestic water;
- 3.3.2 Quality monitoring for sources of domestic water;
- 3.3.3 Standards for effluent discharge into the environment;
- 3.3.4 Monitoring guide for discharge into the environment;
- 3.3.5 Standards for effluent discharge into public sewers;
- 3.3.6 Monitoring for discharge of treated effluent into the environment.

109) In fulfilling the requirements of the regulations the NARIGP proponent will have to undertake monitoring of both domestic water and wastewater and ensure compliance with the acceptable discharge standards.

- **Environmental Management and Coordination, Conservation of Biological Diversity (BD) Regulations 2006**

110) These regulations are described in Legal Notice No. 160 of the Kenya Gazette Supplement No. 84 of December 2006. These Regulations apply to conservation of

biodiversity which includes conservation of threatened species, inventory and monitoring of BD and protection of environmentally significant areas, access to genetic resources, benefit sharing, offences and penalties.

- **Environmental Management and Coordination (Fossil Fuel Emission Control) Regulations 2006**

111) These regulations are described Legal Notice No. 131 of the Kenya Gazette Supplement no. 74, October 2006 and will apply to all internal combustion engine emission standards, emission inspections, the power of emission inspectors, fuel catalysts, licensing to treat fuel, cost of clearing pollution and partnerships to control fossil fuel emissions used by the contractor. The fossil fuels considered are petrol, diesel, fuel oils and kerosene.

- **Environmental Management and Coordination (Wetlands, Riverbanks, Lake Shores and Sea Shore Management) Regulations 2009**

112) These regulations provide for the protection and management of wetlands, riverbanks, lakeshores and seashore management and detail guidelines on the same.

- **Environmental Management and Coordination (Noise and Excessive Vibration Pollution) (Control) Regulations, 2009**

113) These regulations prohibit making or causing any loud, unreasonable, unnecessary or unusual noise which annoys, disturbs, injures or endangers the comfort, repose, health or safety of others and the environment. It also prohibits the contractor from excessive vibrations which annoy, disturb, injure or endanger the comfort, repose, health or safety of others and the environment or excessive vibrations which exceed 0.5 centimetres per second beyond any source property boundary or 30 metres from any moving source. Under the regulation the contractor will be required to undertake daily monitoring of the noise levels within the Project area during construction period to maintain compliance.

4.1.5 Occupational Health and Safety Act, 2007

114) This is an Act of Parliament to provide for the safety, health and welfare of workers and all persons lawfully present at workplaces, to provide for the establishment of the National Council for Occupational Safety and Health and for connected purposes. The Act has the following functions among others:

- a) Secures safety and health for people legally in all workplaces by minimization of exposure of workers to hazards (gases, fumes & vapours, energies, dangerous machinery / equipment, temperatures, and biological agents) at their workplaces.
- b) Prevents employment of children in workplaces where their safety and health is at risk.
- c) Encourages entrepreneurs to set achievable safety targets for their enterprises.
- d) Promotes reporting of work-place accidents, dangerous occurrences and ill health with a view to finding out their causes and preventing of similar occurrences in future.
- e) Promotes creation of a safety culture at workplaces through education and training in occupational safety and health.

4.1.6 Water Act No. 43 of 2016

115) **The Water Act of 2016** replaces the Water Act of 2002. According to this Act water resources in Kenya are owned by the Government in trust for the people. A **Water Recourses Authority** has been created to issue water permits, manage and regulate water uses and flood mitigation. The control and right to use water is exercised by the Cabinet Secretary administering the Act, and such use can only be acquired under the provisions of the Act. The Cabinet Secretary is also vested with the duty to promote investigations, conserve and properly use water throughout the country. These regulations will relate to abstraction and use of water from rivers. The Act also establishes the National Water Harvesting and Storage Authority whose mandate includes to:

- a. Develop national public water works for water resources storage and flood control,
- b. Maintain and manage public water storage infrastructure.
- c. Formulate water resources policy and enforce water harvesting interventions and
- d. Deal with water emergency especially during drought.

4.1.7 The Wildlife Conservation and Management Act, Cap 376

116) The Wildlife (Conservation and Management) Act, Cap 376 of 1976, as amended in 1989, covers matters relating to wildlife in Kenya including protected areas, activities within protected areas, control of hunting, import and export of wildlife, enforcement and administrative functions of wildlife authorities. The 1989 amendment specifically established the Kenya Wildlife Service (KWS) as the parastatal charged with implementation of the provisions of the Act.

117) The Act specifically provides for the protection and regulation of protected animals, game animals and game birds as defined in three schedules. The first schedule includes game

animals mostly mammals, although the list also includes crocodile and ostrich. The second schedule lists game birds, and the third schedule lists protected animals, which comprise primarily mammals, although it also includes two species of marine turtles, while in 1981 it was amended to include several species of reptiles, amphibians and butterflies. Apart from the protection provided to plants within National Parks and National Reserves, plants receive no further protection under this Act outside the protected areas.

118) Specific provisions of the Act allow for the establishment of National Parks (Section 6), National Reserves (Section 18), and local sanctuaries (Section 19). The National Parks are managed by KWS. Strict regulations prohibit various activities within National Parks, unless they are subject to the written consent of the Minister or, in other cases, the Director of KWS. No such prohibitions are specified for National Reserves or for local sanctuaries. Areas that were formerly game reserves but are declared as National Reserves continue to be administered by the local authorities, unless otherwise directed by the Minister by notice in the Kenya Gazette.

4.1.8 Public Health Act Cap 242

119) The Public Health Act provides for the protection of human health through prevention and guarding against introduction of infectious diseases into Kenya from outside, to promote public health and the prevention, limitation or suppression of infectious, communicable or preventable diseases within Kenya, to advice and direct local authorities in regard to matters affecting the public health to promote or carry out researches and investigations in connection with the prevention or treatment of human diseases. This Act provides the impetus for a healthy environment and gives regulations to waste management, pollution and human health.

120) The Public Health Act regulates activities detrimental to human health. The owner(s) of the premises responsible for environmental nuisances such as noise and emissions, at levels that can affect human health, are liable to prosecution under this act. An environmental nuisance is defined in the act as one that causes danger, discomfort or annoyance to the local inhabitants or which is hazardous to human health. This Act controls the activities of the project with regard to human health and ensures that the health of the surrounding community is not jeopardized by the activities of the project such as water development.

4.1.9 Physical Planning Act

121) This Act provides for the preparation and implementation of physical development plans for connected purposes. It establishes the responsibility for the physical planning at various levels of Government in order to remove uncertainty regarding the responsibility for regional

planning. A key provision of the Act is the requirement for Environmental Impact Assessment (EIA). This legislation is relevant to the implementation and siting of sewerage plants in pilot urban centres as identified in the project document.

122) It provides for a hierarchy of plans in which guidelines are laid down for the future physical development of areas referred to in a specific plan. The intention is that the three-tier order plans, the national development plan, regional development plan, and the local physical development plan should concentrate on broad policy issues.

123) The Act calls for public participation in the preparation of plans and requires that in preparation of plans proper consideration be given to the potential for socio-economic development needs of the population, the existing planning and future transport needs, the physical factors which may influence orderly development in general and urbanization in particular, and the possible influence of future development on natural environment.

4.1.10 The Land Act, 2012

124) It is very explicit in the Land Act, 2012, Section 107, that whenever the national or county government is satisfied that it may be necessary to acquire some particular land under section 110 of Land Act 2012, the possession of the land must be necessary for public purpose or public interest, such as, in the interests of public defense, public safety, public order, public morality, public health, urban and planning, or the development or utilization of any property in such manner as to promote the public benefit; and the necessity therefore is such as to afford reasonable justification for the causing of any hardship that may result to any person having right over the property, and so certifies in writing, possession of such land may be taken.

4.1.11 Community Land Act No.27 of 2016

125) The Community Land Act, No. 27 of 2016 (the Act) came into force on 21 September 2016. The Act aims at: Giving effect to Article 63 of the Constitution of Kenya, 2010 (the Constitution) which provides for a classification of land known as community land. To this end, the Constitution provides that community land shall vest in and be held by communities. Providing for, first, the recognition, protection and registration of community land rights. Second, the management and administration of community land. Third, the role of county governments in relation to unregistered community land and related matters.

118. The Act repeals the Land (Group Representatives) Act (Chapter 287 of the Laws of Kenya) and the Trust Lands Act (Chapter 288 of the Laws of Kenya).

- **Salient features**

Ownership

126) Community land in Kenya shall vest in the Community. In this respect, the term “Community” has been defined to mean a consciously distinct and organised group of users of community land who are citizens of Kenya and share any of the following attributes: common ancestry, similar culture or unique mode of livelihood; socioeconomic or other similar common interest; geographical space; ecological space; or ethnicity. The Constitution of a community is therefore not limited to ethnic lines as is the case with the current practice. The Act requires a community claiming an interest in or right over community land to be registered.

- **Tenure systems and classes of holding of community land**

127) Community land may be held under any of the following land tenure systems: (a) customary; (b) freehold; (c) leasehold, and such other tenure system recognised under the Act or other written law. Further, community land may be held as communal land, family or clan land, reserve land, or in any other category of land recognised under the Act or any other written law.

- **Registration of community land rights**

128) The Act requires community land rights to be registered in accordance with its provisions and the provisions of the Land Registration Act, 2012. In this respect, a Certificate of Title issued by the Community Land Registrar shall be evidence of ownership of the land. This Certificate of Title shall not be subject to challenge, except on grounds of fraud or misrepresentation to which the person is proved to be a party or where the certificate of title has been acquired illegally, unprocedurally or through a corrupt scheme.

129) The registration of a community as the proprietor of land shall vest in that community the absolute ownership of that land, while, the registration of a community as the proprietor of a lease shall vest in that community the leasehold interest described in the lease, together with and subject to all implied and express rights and privileges.

4.1.12 The Lakes and Rivers Act Chapter 409 Laws of Kenya

130) This Act provides for protection of river, lakes and associated flora and fauna. The provisions of this Act may be applied in the management of the project.

4.2 Relevant Sector Policies

4.2.1 Agriculture and Food Authority Act, 2013

131) An Act of Parliament to provide for the consolidation of the laws on the regulation and promotion of agriculture generally, to provide for the establishment of the Agriculture and Food Authority, to make provision for the respective roles of the national and county governments in agriculture excluding livestock and related matters in furtherance of the relevant provisions of the Fourth Schedule to the Constitution and for connected purposes.

132) The Authority shall, in consultation with the county governments, perform the following functions—

- (a) Administer the Crops Act, in accordance with the provisions of these Acts;
- (b) Promote best practices in, and regulate, the production, processing, marketing, grading, storage, collection, transportation and warehousing of agricultural products excluding livestock, livestock products as may be provided for under the Crops Act;
- (c) Collect and collate data, maintain a database on agricultural products excluding livestock products, documents and monitor agriculture through registration of players as provided for in the Crops Act;
- (d) Be responsible for determining the research priorities in agriculture and to advise generally on research thereof;
- (e) Advise the national government and the county governments on agricultural levies for purposes of planning, enhancing harmony and equity in the sector;
- (f) Carry out such other functions as may be assigned to it by this Act, the Crops Act, and any written law while respecting the roles of the two levels of governments.

4.2.2 National Policy on Environment and Development

133) Currently, a far-reaching initiative towards an elaborate national environmental policy is contained in the Sessional Paper No. 6 of 1999 on Environment and Development. This policy advocates for the integration of environmental concerns into the national planning and management processes and provides guidelines for environmental sustainable development. The challenge of the document and guidelines is to critically link the implementation framework with statutory bodies such as the National Environmental Management Authority (NEMA), Kenya Wildlife Service (KWS), and Kenya Forestry Service (KFS).

134) The National Environmental Sanitation and Hygiene Policy is devoted to environmental sanitation and hygiene in Kenya as a major contribution to the dignity, health, welfare, social well-being and prosperity of all Kenyan residents. The policy recognizes that healthy and

hygienic behaviour and practices begin with the individual. The implementation of the policy will greatly increase the demand for sanitation, hygiene, food safety, improved housing, use of safe drinking water, waste management, and vector control at the household level, and encourage communities to take responsibility for improving the sanitary conditions of their immediate environment.

4.2.3 Forest Policy 2005

135) The goal of this Policy is to enhance the contribution of the forest sector in the provision of economic, social and environmental goods and services. The specific objectives of this policy are to:

- Contribute to poverty reduction, employment creation and improvement of livelihoods through sustainable use, conservation and management of forests and trees.
- Contribute to sustainable land use through soil, water and biodiversity conservation, and tree planting through the sustainable management of forests and trees.
- Promote the participation of the private sector, communities and other stakeholders in forest management to conserve water catchment areas, create employment, reduce poverty and ensure the sustainability of the forest sector.
- Promote farm forestry to produce timber, wood fuel and other forest products.
- Promote dry land forestry to produce wood fuel and to supply wood and non-wood forest products.
- Promote forest extension to enable farmers and other forest stakeholders to benefit from forest management approaches and technologies.
- Promote forest research, training and education to ensure a vibrant forest sector.

4.2.4 Forest Conservation and Management Act, No. 34 of 2016

136) This Act applies to all forests on public, community and private lands. It calls for public participation and community involvement in the management of forests in the country. It provides for consultation and co-operation between the national and county governments. It is concerned with the protection of indigenous knowledge and intellectual property rights of forests resources; and embraces international best practices in management and conservation of forests.

4.2.5 Fisheries Policy, 2005

137) The overall objective of this policy is to “Create an enabling environment for a vibrant fishing industry based on sustainable resource exploitation providing optimal and sustainable

benefits, alleviating poverty, and creating wealth, taking into consideration gender equity.” The specific objectives of this policy are to:

- i. Promote responsible and sustainable utilization of fishery resources taking into account environmental concerns.
- ii. Promote development of responsible and sustainable aquaculture, recreational and ornamental fisheries.
- iii. Ensure that Kenya has a fair access to, and benefit from, the country’s shared fishery resources.
- iv. Promote responsible fish handling and preservation measures and technologies to minimize post-harvest losses.
- v. Encourage value addition, marketing and fair trade in Kenya’s fishery products worldwide.
- vi. Encourage efficient and sustainable investment in the Kenya fishery sector.
- vii. Promote active involvement of fisher communities in fisheries management.
- viii. Integrate gender issues in fisheries development; Promote fish consumption in the country

4.2.6 Wildlife Policy 2007

138) The goal of this Policy is to provide a framework for conserving, in perpetuity, Kenya’s rich diversity of species, habitats and ecosystems for the wellbeing of its people and the global community. The objectives and priorities are to:

- a) Conserve Kenya’s wildlife resources as a national heritage.
- b) Provide legal and institutional framework for wildlife conservation and management throughout the country.
- c) Conserve and maintain viable and representative wildlife populations in Kenya.
- d) Develop protocols methodologies and tools for effective assessment and monitoring of wildlife conservation and management throughout the country.
- e) Promote partnerships, incentives and benefit sharing to enhance wildlife conservation and management.
- f) Promote positive attitudes towards wildlife and wildlife conservation and management.

4.2.7 The National Wildlife Conservation and Management Policy, April 2017

139) This policy is concerned with the sustainable management of Kenya’s wildlife resources through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated

into the wider landscapes and seascapes in order to provide for the social, economic, ecological, cultural and spiritual needs of present and future generations; contribute to the sustainable development of the country; and enhance the quality of human life.

140) To achieve the above aims, the government will pursue the following mutually reinforcing objectives to:

- i. Develop a coordinated framework for wildlife management taking into account other sectoral policies and the roles of various agencies.
- ii. Conserve wildlife resources in national parks, national reserves and national sanctuaries in an effective and equitable manner.
- iii. Ensure maintenance and enhancement of ecological integrity of wildlife and their habitats through the integration of private and community lands into protected area systems.
- iv. Harness the contribution of wildlife resources into the national economy and enhance the benefits to all.
- v. Enhance policy implementation through participatory planning, research, knowledge management and capacity building.

4.2.8 Wetland Policy 2008 Draft

141) The development of this Policy is in cognizance of the importance of wetlands nationally and Kenya's obligation under the Ramsar Convention. The policy takes into consideration the broader national environmental frameworks, particularly the Environment Management and Coordination Act (EMCA) 1999, the country's premier framework environmental law, the Water Act 2002, the Water Policy and the Forest Policy 2007.

4.3 Multilateral Environmental Agreements (MEAs)

142) Kenya has ratified various international conventions that deal with the protection of the environment that may be directly or indirectly applicable to activities under the proposed micro-projects operations and processes in the selected countries. These are as follows: -

4.3.1 The United Nations Framework Convention on Climate Change (UNFCCC or FCCC)

143) This is an international environmental treaty produced at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992, informally known as the Earth Summit. The objective of the treaty is to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate

system. The treaty itself sets no mandatory limits on greenhouse gas emissions for individual countries and contains no enforcement mechanisms. In that sense, the treaty is considered legally non-binding. Instead, the treaty provides for updates (called "protocols") that would set mandatory emission limits. The principal update is the Kyoto Protocol, which has become much better known than the UNFCCC itself.

4.3.2 The United Nations Convention to Combat Desertification (UNCDD)

144) Kenya is a signatory to this treaty, which aims to combat desertification and mitigate the effects of drought through national action programs that incorporate long-term strategies supported by international cooperation and partnership arrangements. The Convention, the only convention stemming from a direct recommendation of the Rio Conference's Agenda 21, was adopted in Paris on 17 June 1994 and entered into force in December 1996. It is the first and only internationally legally binding framework set up to address the problem of desertification.

4.3.3 International Convention on Biological Diversity (CBD) of 1992

145) This treaty promotes the protection of ecosystems and natural habitats, respects the traditional lifestyles of indigenous communities, and promotes the sustainable use of resources.

4.3.4 National Biodiversity Strategy and Action Plan (NBSAP)

146) The country is already reviewing this action plan so as to meet the Aichi Target which aims to halt loss by biodiversity by year 2020.

4.3.5 World Heritage Convention (1972)

147) Kenya is party to this convention, which is concerned with cultural and natural heritage. The convention deals with monuments and areas that are deemed to be of 'outstanding universal value' in terms of beauty, science and/or conservation. Kenya has several sites that have been declared World Heritage Sites, such as Mt. Kenya's natural forests. Any deterioration or disappearance of such heritage is a loss to all the nations of the world. The importance of wetlands and water birds are also covered under the Ramsar Convention of 1971, which governs wetlands of international importance. The convention entered into force in Kenya in 1990 and Kenya is therefore committed to avoid degradation of wetlands under its jurisdiction.

4.3.6 Agreement of the Conservation of Eurasian Migratory Water Birds (2001) and the African Convention on the Conservation of Nature and Natural Resources (1968)

148) Kenya ratified this convention that seeks to protect migratory water birds and also conservation of nature and natural resources. It is therefore important to ensure that the project value chain development recognizes and safeguards nature and natural resources.

4.3.7 The Convention on International Trade in Endangered Species of Wildlife Fauna and Flora (CITES) 1973

149) This international treaty prohibits trade in endangered species and their trophies. Such species include elephant ivory, rhino horns and Dugongs among others.

4.3.8 UN Framework Convention on Climate Change (UNFCCC)

150) The Republic of Kenya submitted its new climate action plan to the UN Framework Convention on Climate Change (UNFCCC) in Bonn in July 23, 2015. This year December 2018, the World Nations will have a new advance universal climate change agreement, which will be reached at the UN climate conference in Paris. Before the universal climate change agreement each member submits an Intended Nationally Determined Contribution (INDC) in advance. This INDC and all others submitted by countries are available on the UNFCCC website, including the Republic of Kenya, and 49 parties to the UNFCCC have formally submitted their INDCs so far.

151) All information such as documentation on designing and preparing INDCs as well as on sources of support for INDC preparation is available. Countries have agreed that there will be no backtracking in these national climate plans, meaning that the level of ambition to reduce emissions will increase over time. The Paris agreement will come into effect in 2020, empowering all countries to act to prevent average global temperatures rising above 2 degrees Celsius and to reap the many opportunities that arise from a necessary global transformation to clean and sustainable development.

4.4 World Bank Operational Safeguard Policies Triggered by the Project

Environmental and Social Safeguards Triggered	YES	NO
OP/BP 4.01: Environmental Assessment	X	
OP/BP 4.04 Natural Habitats	X	
OP/BP 4.36 Forests		X
OP 4.09 Pest Management	X	
OP/BP 4.11 Physical Cultural Resources	X	
OP/BP 4.10 Indigenous Peoples	X	
OP/BP 4.12 Involuntary Resettlement	X	
OP/BP 4.37 Safety of Dams		X
OP 7.50 Projects in International Waters		X

OP 7.60 Projects in Disputed Areas		X
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152) **Environmental Assessment (OP 4.01)**. Proposed project investments in rural infrastructure (e.g. local markets, water conservation structures, etc.) and agriculture value chains (e.g. storage facilities, local level value addition, limited use of agro-chemicals, etc.), are likely to have negative environmental and social impacts, which however are expected to be small-scale, site specific and largely reversible.. The area of project investments and the design of micro-projects will not be known during project preparation, since the project has adopted a Community Driven Development approach. The project adopted a framework approach to managing safeguards, comprising: (a) Environmental and Social Management Framework (ESMF) for environmental assessment; (b) Vulnerable and Marginalized Group Framework (VGMF) for indigenous peoples; and (c) Resettlement Policy Framework (RPF) for involuntary resettlement.

153) These frameworks will provide a mechanism for: (i) identifying and assessing potential adverse environmental and social impacts, based on the types of activities envisioned; and (ii) proposing screening methods and processes of assessing and designing appropriate mitigation measures for the identified investments. The preparation of the safeguards frameworks is informed by the lessons-learned from implementing WKCDD/FMP (with a focus on alternative livelihoods) and KAPAP (aimed at VC development) projects and KAPSLMP (aimed at incorporating SLM in VCs). The localized impacts of the various micro-projects will be determined by the screening process for environmental and social impacts. The screening will utilize: (a) Environmental and Social Screening Form, which will help identify potential adverse environmental and social impacts; and Environmental and Social Checklist, which will outline simple environmental mitigation measures (a simplified EMP) for micro-projects not requiring a full ESIA report.

154) **Natural Habitat (OP/BP 4.04)**. While the locations of the majority of the micro-projects will be rural, their impact on the natural habitats is expected to be minimal and reversible. Although there will be a need for replacement of trees that could be removed from farms, or along the right of way for last mile rural infrastructure, no natural forest will be affected.

155) **Pest Management (OP 4.09)**. NARIGP will support interventions geared towards increasing crops and livestock production and productivity, which ideally would promote the application of pesticides. Thus, NARIGP will sensitize and/or train its beneficiaries on safe handling and application of pesticides. As such, the project developed an Integrated Pest Management Framework (IPMF). The criteria for pesticide selection and use requires that the procurement of any pesticide in this project will be consistent and proportionate to an

assessment of the nature and degree of associated risks, taking into account the proposed use and the intended users, with respect to the classification of pesticides and their specific formulations.

156) The NPCU will refer to the World Health Organization's *Recommended Classification of Pesticides by Hazard and Guidelines to Classification* (Geneva: WHO 1994-95) for guidance. The following criteria will specifically apply to the selection and use of pesticides in this project:

- i. They must have negligible adverse human health effects;
- ii. They must be shown to be effective against the target species;
- iii. They must have minimal effect on non-target species and the natural environment. The methods, timing, and frequency of pesticide application are aimed to minimize damage to natural enemies;
- iv. Pesticides used in public health programs must be demonstrated to be safe for inhabitants and domestic animals in the treated areas, as well as for personnel applying them;
- v. Their use must take into account the need to prevent the development of resistance in pests and diseases;

157) The Bank requires that any pesticides it finances be manufactured, packaged, labelled, handled, stored, disposed of, and applied according to standards acceptable to the Bank. The Bank does not finance formulated products that fall in WHO classes IA and IB, or formulations of products in Class II, if (a) the country lacks restrictions on their distribution and use; or (b) they are likely to be used by, or be accessible to: lay personnel, farmers, fisher folk or others without training, equipment, and facilities to handle, store, and apply these products properly.

158) **Physical Cultural Resources (OP/BP 4.11)**. This is triggered as a precaution, because the micro-projects are not expected to traverse areas of cultural or historical importance. Chance found procedures will be included in all infrastructure contracts and in the environmental and social safeguard framework documents – Annex 13 of this ESMF.

159) **Indigenous People (OP/BP 4.10)**. The project triggers OP 4.10 on Indigenous People and the applicable laws and regulations of the GoK. The policy is triggered when it is likely that groups that meet criteria of OP 4.10 “are present in, or have collective attachment to, the project area.” The project is a national project. However, the location of the micro-projects will be

determined through the of the PICD approach and therefore their locations are not yet known, but some could fall in vicinities where there are groups that meet the criteria of OP 4.10. For these reasons it is triggering OP 4.10 to ensure that groups that meet the criteria of OP 4.10 are included and benefit from the project activities.

160) ***Involuntary Resettlement (OP/BP 4.12)***. Although no resettlement is envisaged, OP4.12 is triggered as a precautionary measure. The purpose of the RPF will be to establish the resettlement and compensation principles, organizational arrangement, and design criteria to be applied to meet the needs of affected people who may be affected by the various micro-projects to be implemented under NARIGP. The RPF therefore is prepared to guide and govern NARIGP as micro-projects are selected for financing and sets out the elements that will be common to all micro-projects that will entail involuntary resettlement. The World Bank's safeguard policy on involuntary resettlement, OP4.12 is to be complied with where there is involuntary resettlement, impacts on livelihoods, acquisition of land or restrictions to access to natural resources. The Bank O.P.4.12 requires that RPF report must be disclosed as separate and stand-alone report by the Government of Kenya and the World Bank. The disclosure of the document should be in both in locations where is can be accessed by general public and at Info shop of the World Bank.

161) Whenever applicable, the Environmental Assessments/Environmental Management Plans (EAs/EMPs), Resettlement Action Plan (RAPs) and Vulnerable and Marginalized Group Plans (VMGPs) would be developed for individual micro-projects during project implementation.

162) On another front, some activities qualifying and approved under NARIGP investments, may involve irrigation at micro-projects level bordering on rehabilitation of existing dams (medium or small), or the construction of new small dams/dykes/weirs. Other types of micro-projects may depend only on the use of existing dams. In these particular cases, the dams will probably be used for one or a combination of these reasons;

- a. As a reservoir
- b. To manage water flow and levels in rivers/lakes
- c. Provision of head of water to maintain flow in irrigation channels.

163) NARIGP would not finance any new establishment or rehabilitation of large-scale irrigation facilities and dams above 4.5-meter height. WB will also not finance a dam having special design complexities including foundations, and located in a zone of high seismicity as such dams are considered high hazard even with their dam height less than 4.5m. However, the

Bank might finance the construction of check dams or small dams for water storage (less than 15m height) and will finance activities that may rely on the performance of an existing dam.

5.0 ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

5.1 Objectives of the ESMF Preparation:

- 164) This ESMF is the result of a preparation study with the following objectives:
- a) To examine potential environmental and social impacts for each micro-project to be financed under NARIGP.
 - b) To describe the potential negative and positive environmental and social impacts resulting from such investments.
 - c) To propose streamlined procedures for the environmental and social assessment process and subsequent supervision of micro-projects.
 - d) To define a typology of projects which might require an environmental assessment (ESIA, ESMP) by location, size of project and other site-specific criteria.
 - e) To develop guidelines for preparation of the operation and maintenance plans by communities and local government for new investments taking into account environmental and social considerations and mitigation measures identified during micro-project evaluation.
 - f) To consider potential policy and institutional issues regarding the environment and discuss means of resolution that could be undertaken during project implementation.
 - g) To develop a monitoring and evaluation system for environmental and social impacts and significant environmental values to be included in the overall project monitoring and evaluation system.
 - h) To suggest improvements to the program for sensitization and capacity building of community leaders and county and national officials involved in the implementation of NARIG project.

5.2 Justification of the ESMF in the NARIGP

165) The above specific ESMF objectives are in line with the procedures of the World Bank OP/BP 4.01: Environmental Assessment (EA) which are: (i) The Bank requires environmental assessment (EA) of projects proposed for Bank financing to help ensure that they are environmentally sound and sustainable in order to improve decision making; (ii) meet the EA process whose breadth, depth, and type of analysis depend on the nature, scale, and potential environmental impact of the proposed micro-project; (iii) ensure that the project's potential environmental risks and impacts in its area of influence are accurately identified and assessed; (iv) ensure that project alternatives are identified and examined; (v) guide in identifying ways of

improving project/micro-project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and (vi) include the process of mitigating and managing adverse environmental impacts throughout project implementation. It should be noted that the Bank favors preventive measures over mitigatory or compensatory measures, whenever feasible and therefore, NARIGP would follow the same rule; (vii) EA will take into account the natural environment (air, water, and land); human health and safety; social aspects (involuntary resettlement, indigenous peoples, and physical cultural resources); (viii) EA considers natural and social aspects in an integrated way. It also takes into account the variations in project and country conditions; the findings of country environmental studies; national environmental action plans; the country's overall policy framework, national legislation, and institutional capabilities related to the environment and social aspects; and obligations of the country, pertaining to project activities, under relevant international environmental treaties and agreements. (ix) The Bank will not finance project activities that would contravene such country obligations, as identified during the EA; (x) The Ministry Agriculture, Livestock, Fisheries and Irrigation is responsible for carrying out the EA and hence the formulation of this ESMF. (xi) A range of instruments are recommended here to satisfy the Bank's EA requirement of mitigation measures: environmental and social screening checklist; environmental impact assessment (EIA), Social assessment to get a baseline for the vulnerable and marginalized groups including the minority communities; environmental audit (EA); environmental and social management plan (ESMP) just to mention a few.

5.3 Methodology for ESMF Preparation

5.3.1 Detailed and In-depth Literature Review

166) This updated ESMF was developed through detailed and in-depth literature review of relevant documents such as safeguard frameworks developed for similar World Bank projects in Kenya. Desk review started during the preparation of the inception report and continued throughout the data collection and analysis phase. The earlier disclosed ESMF was reviewed, revised and updated. Recent policies, guidelines and Acts relevant to the updating of the framework were also considered.

167) The consultant did not collect primary data through formal surveys such as a questionnaire. This is because the present consultancy was for a limited duration of only 15 days, which were not sufficient for a questionnaire survey for the relevant stakeholders. Therefore, most of the analysis relied upon available secondary data. Such analysis was useful

in updating the earlier disclosed framework. Key Informant Interviews were conducted with officials drawn from NEMA and Ministry of Environment and Forestry.

168) Consultative meetings were held with key stakeholders specifically the MoDP. Before finalizing the framework, consultative meetings and engagement will be held with NPCU in which the draft framework will be presented. NPCU will review the updated draft framework, give input and upon approval, the final framework will be prepared and submitted to the client in accordance to the set timelines for deliverables. The framework as is the requirement with all WB safeguard documents will be locally disclosed again and also forwarded to the World Bank for another disclosure.

5.3.2 Stakeholder Consultation

169) Stakeholder consultation formed part of the methodology in preparing the earlier disclosed ESMF where the project interested and affected stakeholders who could be identified at this early stage were consulted. The stakeholder consultation was significant to the preparation of the disclosed ESMF and formed the basis for the determination of potential project impacts and design of viable mitigation measures. Various discussions were held with NARIGP preparation team on the objectives, content and logic of the ESMF. Key stakeholders in the application and implementation of the ESMF for the NARIGP were also consulted including NEMA officials. Therefore, due to the extensive consultation done when preparing the earlier disclosed ESMF, it was felt that another similar consultation was not necessary.

170) During the implementation of NARIGP activities, potential environmental and social impacts must be considered and managed using the guidelines as spelt out above in Table 1. The impacts must be mitigated, minimized or preferably avoided particularly to meet the Government of Kenya National Environmental requirements as set out in the NEMA and the World Bank safeguards policies requirements. The initial screening of the areas to be financed through Project Preparation Grant (PPG) confirmed that there would be no land acquisition or resettlement, as all project physical activities including civil works under Components 2 &3 are envisaged to be carried out within the existing NEMA standards. Consequently OP4.12 is triggered as a precautionary measure and the ESMF along with a RPF; VMGF and IPMF are prepared to guide preparation of site-specific abbreviated RAP; and other plans including: IPMP and VMGP. There will be no micro-project supported that require involuntary land acquisition or the acquisition of land requiring the resettlement or compensation of more than 200 people. If, in an exceptional case, a micro-project requires land acquisition and resettlement of more than 200 PAPs, the RPF prepared by MOALFI for NARIGP, will be applicable.

171) The project will be implemented in 21 counties across all communities based on the CDD approach. The project is not expected to involve relocation and resettlement because the project is basically agriculture oriented with no known physical displacements of individuals.

172) For each micro-project, ESMPs will be prepared & disclosed prior to the award of funding by the NPCU. In case of any micro-project involving the VMGs, NARIGP team, through a consultant will conduct an Environmental Impact Assessment and Social Impact Assessment (EIA/SIA), including development of a VMGP.

173) The ESMF includes the following list of Annexes to be used as tools for screening, assessing and monitoring micro-projects during selection and implementation phases.

Annex 1: Environmental and Social Screening Checklist

Annex 2: Framework for Abbreviated Resettlement Action Plan

Annex 3: Format for Documentation of Asset contribution

Annex 4: Format of Quarterly Monitoring Report

Annex 5: Draft Terms of Reference for Micro-project Requiring an ESIA

Annex 6: Complaints Registration Form

Annex 7: Training Matrix Budget for the Environmental and Social Safeguards

Annex 8: Grievance Handling Mechanism (GRM)

Annex 9: General Environmental and Social Mitigation Plan

Annex 10: Project Impacts by Component Explained

Annex 11 – Chance Find Procedures

169. The objective of the ESMF is to outline the institutional arrangements relating to: (i) identification of environmental and social impacts arising from activities under the NARIGP micro- projects, (ii) the implementation of proposed mitigation measures, (iii) Capacity building and (iv) Monitoring and Evaluation.

174) The ESMF will be included in NARIGP Project Implementation Manual (PIM) and the Project Operations Manual (POM) that is being reviewed by IDA. The ESMF outlines mechanisms for:(i) Screening of proposed micro-projects, identifying potential environmental and social impacts and management of safeguard policies implications;(ii) Institutional arrangements for implementation and capacity building; (iii) Monitoring Environmental and Social Management Plan (ESMP); (iv) Public consultation and Grievance Redresses including communication channels; and (v) The estimated costs related to the ESMP.

6.0 ESMF IMPLEMENTATION ARRANGEMENTS

6.1 Institutional Arrangement

175) Implementation of NARIGP ESMF will involve a 3 tier institutional arrangement (national, county and community). The 1st tier, which is at national level, will represent the MOALFI (the main implementing agency) and other national GoK and non-state stakeholders (Agriculture, livestock, Fisheries, Industrialization, CSOs, etc.) need to be sensitized on the environmental and social safeguards. In the MOALFI the project will be anchored in the State Department for Crops Development. The 2nd and 3rd tiers are the county and community levels respectively. The county governments are the executing agencies of the project while at the community levels are the target beneficiaries who will directly implement community-led-interventions. In all the three tiers environmental and social safeguards experts must be deployed for ease of coordination and implementation of the safeguards. All levels need to be trained and capacity build on safeguards and implementation of the frameworks in order to ensure the relevant safeguard policies are integrated in a sustainable manner into all project activities. The three tier institutional arrangement aims at achieving efficient decision-making process and implementation as well as using the constitutionally mandated governance procedures at all levels for a sustained application, adoption and compliance of the environmental and social safeguards.

176) The overall implementation oversight is guided by the National Project Steering Committee (NPSC) chaired by the Cabinet Secretary, Ministry of Agriculture, Livestock, Fisheries and Irrigation. It will be prudent to establish other coordinating and governance structures at all levels to feed the NPCU (See Fig. 1 below proposed NARIGP implementation diagram).

6.2 CDD Process for Environmental and Social Safeguards

177) The CDD approach envisaged by NARIGP will entail total inclusivity and participatory by all targeted beneficiaries. For this reason, therefore, specific community needs and issues along the environmental and social safeguards must be identified at that level based on what the communities feel is a priority to their development but within the NARIGP principles. Community Resource Assessment/Social Assessment (CRA/SA) along the PICD is the methodology that will help map out gaps in a participative way and suggest possible environmental and social interventions within the proposed community investments including the ones proposed by the VMGs.

178) The key outcome of the PICD process is the participatory development of Community Development Plan (CDP), which is a statement of the communities' aspirations with regard to the micro-projects that they wish to implement in order to overcome financial and other development challenges that they identified during the situation analysis. The Community Action Plans (CAPs)/Vulnerable and Marginalized Groups Plans (VMGPs) will be prepared for the target Communities and must have broad community support.

6.3 Community Development Plans, Approvals and Funding

179) Community plans and budgets will be prepared by the communities assisted by their specific value chain service providers; the specific proposed interventions and budgets will be technically reviewed and approved by the county technical teams. This activity will be coordinated at the county level by the project-coordinating unit. Once this is completed, the CPCUs will share the prioritized and approved proposals with the national technical team through the NPCU. The national team will appraise the proposals and allocate the funds.

180) **The Communities assisted by their Service Providers will administer the environmental and social screening checklist to the best of their capacity on the proposed community projects.** The filled up checklists are then shared with the County Environment Committee chaired by the County Executive Committee member in charge of Environment. The CEC then shares the inputs with the Project Coordinating Unit at the county level; and the next course of action as recommended is also shared with the target community. The benefitting community is thus aware of what is expected of them in order to conform to the relevant safeguards. Then funding is released to the target communities.

181) The NARIGP team includes an Environmental and Social Safeguards Officer (ESSO). The Safeguards Officer's main task is to ensure that the micro-projects comply with the relevant National requirements and the World Bank's environmental and social safeguard policy requirements, including reviewing, screening, approving, monitoring and reporting of the micro-project implementation progress. The NARIGP technical person will also be responsible for the dissemination of the ESMF/ESMPs in the project.

6.4 Micro-project screening

182) The screening procedure strengthens accountability to the communities targeted for support, stakeholders in the development processes, and the broader development portfolio. Environmental and social screening and assessment processes for projects have now become standard practice in development cooperation and are usually required by national regulatory

frameworks and multilateral and bilateral donors. Therefore, application of the environmental and social screening and review processes demonstrates the appropriateness of safeguard measures. Additionally, safeguard approaches have proven to be ideal vehicles for consultation and disclosure of information. When associated with well-designed grievance mechanisms, they provide an effective process for conflict resolution and mediation as spelt out in the NARIGP Frameworks.

183) Screening thus constitutes an environmental and social safeguard approach, which is a key component of overall quality assurance process (Annex 1). The outcome of the environmental and social screening process is to determine if and what environmental and social review and management is required. The screening process aims to quickly identify those projects where no potential environmental and social issues exist, so that only those with potential environmental and social implications will undergo a more detailed screening process. Therefore, the two main objectives of environmental and social screening are to: firstly, enhance the environmental and social sustainability of a proposed project.

184) This aspect of screening focuses on the environmental and social benefits of a project. And secondly, to identify and manage environmental and social risks that could be associated with a proposed project. This aspect of screening focuses on the possible environmental and social costs of an intervention and may point to the need for environmental and social review and management. Community meetings will be convened by the county project technical coordinating teams together with the county technical teams and service providers, CIGs and local administration for validation and adoption of approved community plans and budgets, signing of grant MoUs/agreements after being taken through what has been approved, for how much and for how long. The MoUs/agreements detail name(s) of the CIGs & projects, amounts proposed and finally disbursed and expected community contribution.

6.5 Institutional Roles in implementation of the environmental and social safeguards

185) Proposed layout of the NARIGP Frameworks Implementation arrangement

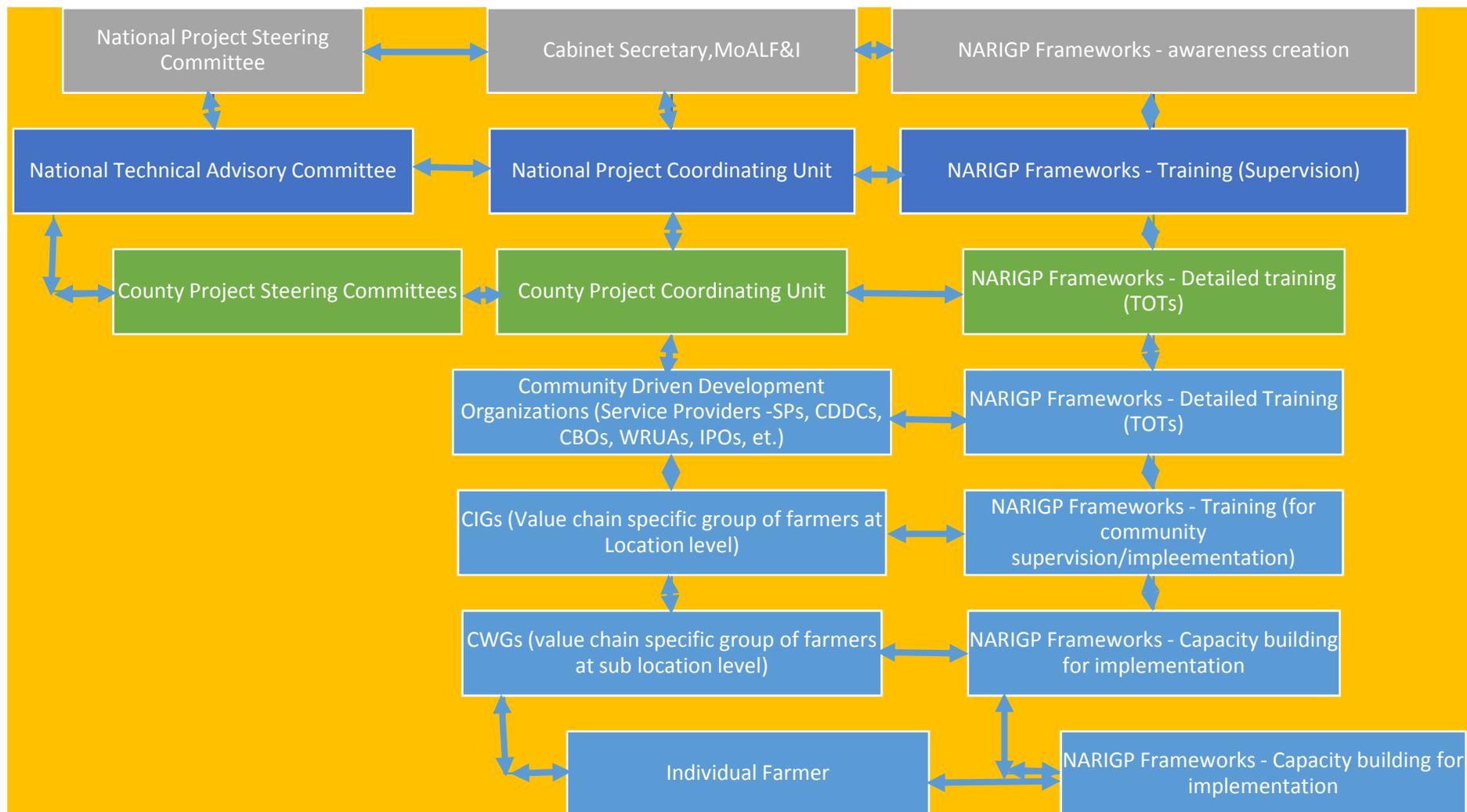


Figure 2: NARIGP Frameworks Implementation Chart

186) The County Technical Team (CTT) will comprise: County Directors of: Crop Resources and Marketing; Livestock production and Veterinary Services; Aquaculture, and Marketing; Environment, land and water Resources; Public Works; Industrialization and Cooperative Development; Primary Education; Gender and Youth; ASAL, Special Programs and Devolution; Any other relevant Department; Indigenous Peoples Leadership (Chairpersons of Council of Elders); The value chain specific service providers. All these institutions will be sensitized on the environmental and social safeguards in order to play a catalytic role in backstopping, and monitoring towards safeguards conformity. The service providers and CTTs will receive detailed trainings in order to serve as ToTs.

187) At the CIG/VMG level there will be: Value chain officials and individual farmers while at the at the Common Working Group (CWG) Level is the value chain specific official at sub location level and individual farmers. These are the focal groups that will constitute farmer leadership. Membership of these structures includes men, women, youth, Vulnerable and marginalized communities including enabled differently and therefore complies with the NARIGP VMGF requirement for inclusiveness in ‘gender and intergenerational terms’. Hence the need for a heightened and practical capacity building in safeguards in order to achieve projects outcome indicators.

Schematic Representation of the ESIA Process

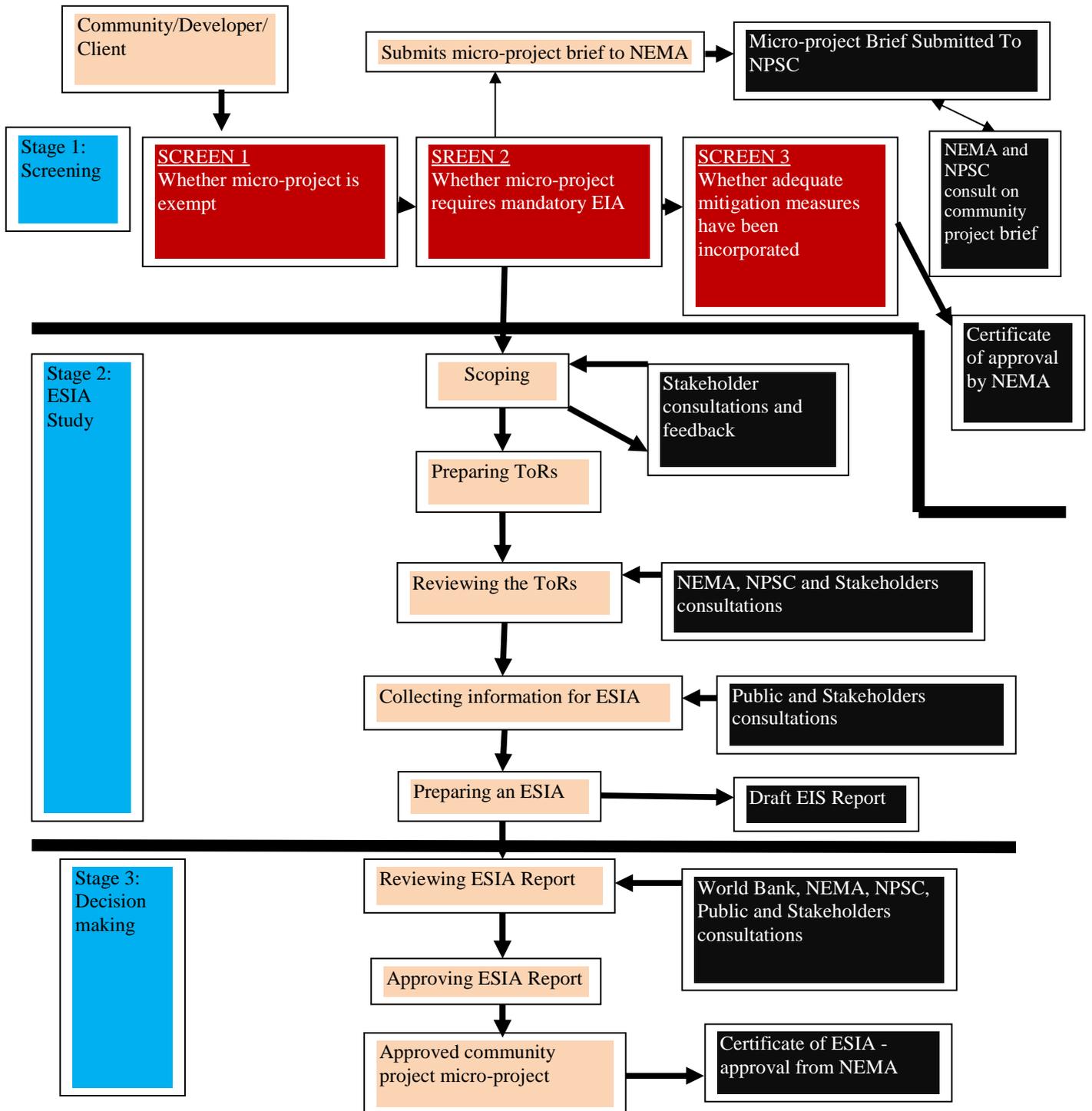


Figure2: Schematic Representation of the Screening process

7.0 ENVIRONMENTAL AND SOCIAL SAFEGUARDS TRAINING AND CAPACITY BUILDING

7.1 Capacity Strengthening for ESMF Implementation

188) In order to effectively carry out the environmental and social management responsibilities for micro-project implementation, institutional strengthening will be required. Capacity building will encompass all NARIGP staff and micro-project executing institutions – Implementing Agencies (IA) and service providers.

189) NARIGP has prepared a training plan that includes training modules for the project staff, service providers, VMGs, IAs and CIGs etc.; as part of the ESMF. The proposed capacity building training needs are as follows amongst others.

7.2 Environmental and Social Management Process.

- Use of Screening form and Checklist
- Design of appropriate micro-project mitigation measures.
- Public consultations in the ESMF process.
- Design of appropriate monitoring indicators for the micro-project's mitigation measures
- Integration of micro-project ESMPs into the NARIGP's cycles during their project implementation stages.
- Grievance Redress mechanism
- Community mobilization/participation and social inclusion
- Training sessions on mitigation of environmental and social impacts and ESMP
- Training on how to generate baseline data

7.3 Examples of Impact Mitigation Plans

190) **Environmental and Social Management Plan (ESMP):** The ESMP is a key output of the ESIA and will be the backbone for the implementation of safeguards during project implementation, operation and decommissioning and its implementation costs have to be well defined and included in the overall project implementation cost. It shall include the following components: (i) mitigation plans, (ii) monitoring plans, (iii) institutional arrangements, (iv)

capacity building, and (v) associated costs. The ESMP will also cover a set of social issues, as applicable: (i) Listing the potential social and gender impacts; (ii) Identifying adequate mitigation or enhancement measures for each impact (direct or indirect; permanent or temporary; physical or economic, residual and cumulative); (iii) Assigning responsibility for the implementation of mitigation and enhancement measures; (iv) Assigning time and cost estimates for implementation of mitigation and enhancement measures (v) Defining indicators with gender disaggregated data for Monitoring and Evaluation of implementation of mitigation and enhancement measures.

191) **Resettlement Action Plan (RAP):** A RAP will be prepared consistent with the country specific Resettlement Policy Frameworks for those NARIGP micro-projects which require the acquisition of land leading to the physical or economic displacement of people. The RAP is designed to ensure that impacts arising from land acquisition, displacement and relocation are avoided, minimized or mitigated at least to restore the standards of living of affected people to pre-project levels. In addition, the pre-feasibility studies may identify areas where there may be restriction of access to natural resources and livelihoods. In this case, a consistent with the World Bank's OP/BP 4.12, a Process Framework (PF) will be developed. The RAP focuses on people affected by land acquisition, relocation and restriction of access, and defines a strategy for formalizing arrangements and responsibilities for mitigating negative impacts caused by land acquisition.

192) **Vulnerable and Marginalized Group Plan (VMGP):** This ESMF recommends the development of an IPP. This should be prepared consistent with a relevant VMGF for those NARIG micro-project areas where Indigenous Peoples are present. In Kenya, indigenous groups are referred to as vulnerable and marginalized groups. Accordingly, consistent with the terminology in the country, a Vulnerable and Marginalized Group Plan (VGMP) in accordance to the Vulnerable and Marginalized Group Framework (VMGF) will be prepared where necessary by the proponents.

Stakeholder capacity building

193) The implementing stakeholders will require trainings on the environmental and social safeguards but at various intensities. This is because each level of stakeholders and type will have a different role in as far as environmental and social safeguards implementation and monitoring are concerned. Some levels such as the service providers, project coordinating unit,

county technical teams will require detailed trainings and some of them will be ToTs while the national level may require just the sensitization/awareness approach; the benefitting farmers will have capacity building which is not detailed but enough to allow them perform and deliver the expected outcomes.

194) The trainings for community level structures will be done in a number of areas. For example, leaders of the community level implementation structures will be trained on governance, procurement, financial management, record/bookkeeping, group dynamics as well as cross-cutting issues such as HIV/AIDs, gender mainstreaming, equity issues, climate change, sustainable land management practices and technologies and environment as recommended in the NARIGP Frameworks.

195) The target communities will be expected to realize positive impacts from the safeguard trainings. Key among these include: (i) increased conformity to safeguards through various capacity building levels, (ii) increased income especially from sale of quality agri-products as a result of mainstreaming safeguards in both individual smallholder farmer and community-based investments, (iii) inclusion of all segments of the community and gender mainstreaming in micro-project activities and community level decision-making structures; (iv) special targeting of the vulnerable and marginalized, and (v) increased participation of youth in the project's activities through funding of specific Youth Actions Plans (YAPs) where applicable. These positive impacts contribute immensely to an enhanced ability of VMGs and the other participating CIGs members to take care of their basic needs such as payment of schools fees, health care and nutritional requirements of their families.

8.0 COMMUNICATION AND GRIEVANCES REDRESS MECHANISMS

8.1 Introduction

196) All communities are faced somewhat with various conflicts including displacement through political influence, cattle rustling, internal civil strifes, and community strifes instigated through external forces. In each of these instabilities there exists local solutions/remedies that can be enhanced to contain the identified conflicts. Project interventions will attract social accountability and hence facilitate sustainable impacts. The conducted groups/communities so far during the NARIGP Framework studies (ESMF; VMGF; RPF) indicated that the local communities were more than receptive of the project.

197) NARIGP is building on lessons learnt under WKCDD/FMP KAPAP and KAPSLMP. It is riding on the same communities and their proposed interventions. The project will thus identify governance structures in each project area through social assessment and enhance their efficiency. Where Council of Elders exists it must be included for participation in charting a leadership and governance structure appropriate for each target community.

198) A conflicts and grievances handling strategy was thus formulated in a participatory way and well explained in the NARIGP VMGF. In addition, a communication strategy has been developed that guides the formal communication for the project together with all stakeholders as explained by the VMGF. In a nutshell, the NARIGP frameworks recommend: institutional strengthening; role of private-public partnerships; targeting of the vulnerable and marginalized groups; need for ideal project environment to boost implementation; project implementation structures and need to capacity build them; and need to delineate roles and responsibilities for peace and efficiency.

199) Social Audit and Integrity Committees (SAIC) will be put in place to resolve any conflicts that would arise during project implementation. The SAIC membership is proposed to consist of 5 people per regional value chain who are known for their integrity (and at least 1/3 must be women and/or vulnerable and marginalized groups) elected by communities. Their functions include and not limited to auditing CDD projects, procurement and financial management processes, handling complaints and grievances, and advisory services to the target communities on pertinent issues of interest. These committees are expected to submit regular reports to the county technical teams.

9.0 COMMUNITY MOBILIZATION AND PARTICIPATION

200) NARIGP builds upon the achievements and experiences of the now closed KAPAP KAPSLMP and the WKCDD&FMP on such areas as the community mobilization approach, and will fine-tune the CDD manual developed under WKCDD&FMP. The NARIGP team will conduct broad consultation with project beneficiaries and stakeholders and will involve them in development of Community Development Plans (CDPs) and project implementation arrangements. Participation of beneficiaries, particularly in planning, budgeting and monitoring is required to ensure community voices are heard and addressed.

201) NARIGP will facilitate community participation to ensure that the target communities in all selected counties establish elected community officials and that the respective CIGs/VMGs include women, and youth.

10.0 PROJECT MONITORING AND EVALUATION

202) All project results indicators will be disaggregated by gender to monitor women's participation in the project interventions. The project will also enhance capturing this environmental and social data in a gender-disaggregated manner where applicable.

197. The implementation of ESMF will be monitored. The NPCU at the MOALFI will establish a monitoring system involving the project staff at national and county level, as well as community groups of CIGs/CDDCs to ensure effective implementation of ESMP. A set of monitoring indicators will be determined during ESMP implementation and will be guided by the indicators contained in the ESMF/PAD document. The NPCU supported consultants will carry out monitoring, as will the World Bank social staff. Appropriate monitoring formats will be prepared for monitoring and reporting requirements.

203) The Environmental Management and Coordination Act (EMCA) require that all projects be subjected to a review and screening process in order to determine whether a full scale ESIA is necessary or not. This is done through preparation of a project report, which will be prepared by the NARIGP. Each investment will need to be reviewed independently for potential environmental and social impacts. In cases where a full scale ESIA is required, it will be mandatory that the feasibility study is undertaken concurrent with the ESIA study in order to ensure that the findings of the ESIA are incorporated in the feasibility study at the design stage. This will ensure that environmentally sound design including proposed mitigation measures as well as alternatives are incorporated in the feasibility reports at the design stage hence avoiding design change at an advanced stage.

204) As already discussed, the NARIGP has been rated as category **B** and does not require a full scale ESIA. The Environmental Management and Coordination Act (EMCA) requires that all projects be subjected to a review and screening process in order to determine whether a full scale ESIA is necessary or not.

205) A completed appraisal package comprises all of the results of the ESIA procedures if undertaken in order to permit a full environmental review. If the World Bank determines that the appraisal package is not complete because the environmental procedures have not been completed, or because after further review it is discovered that the information provided earlier for the screening procedures was incorrect or misleading and that further information is required,

the appraisal package will be deemed incomplete and the review team will promptly notify the applicant of the deficiencies noted.

206) No NARIGP support will be provided until (i) the applicant has presented the certified copy of the positive conclusion of the relevant national authority or - as the case may be - the review committee determines that no further environmental review is required, and (ii) the World Bank has reviewed and cleared the environmental documentation and issued its formal no objection.

11.0 PUBLIC CONSULTATION AND DISCLOSURE

207) The Government of Kenya will consult on all project environmental and social safeguard instruments and make all project documentation publicly available to the relevant stakeholders. NARIGP held a series of public consultations with target communities, county level implementation agencies, non-state actors and civil society including the implementing agencies at national level. The instruments/frameworks were reviewed, approved, cleared by the RSA and they were disclosed at the e-government websites of the MoDP then; and now will be re-disclosed by both the MOALFI e-government websites and the World Bank External website because of the realignment. Subsequently, all other instruments to be so formulated, consulted and cleared by the World Bank in the course of project implementation will also be disclosed in a similar manner.

203. The ESMF and other NARIGP frameworks were discussed in December 2015 to nationwide stakeholders organized by the Ministry of Devolution and Planning. Hence, there is no need for nationwide consultation again. The reviewed ESMF will be discussed by the NPCU and their views incorporated before disclosing the final framework.

208) The 21 counties are committed to apply the same procedures to all micro-projects to be covered under NARIGP prior to commencement of works in each of the project sites. For each micro-project, Environmental and Social Management Plan (ESMP) will be prepared in English and local languages prior to the release of funds as requested in the community development plan proposal (see Annex 2). NARIGP will consult project-affected people and CIGs about the project's safeguards aspects, and will take their views into account. NARIGP will initiate such consultations as early as possible, and for meaningful consultations, will provide relevant material in a timely manner prior to consultation, in a form and language that are understandable and accessible to the groups being consulted.

209) Prior to appraisal of the NARIGP, the reviewed, updated and revised ESMF will be disclosed by the MOALFI. The Government of Kenya intends to make all project documentation publicly available to the relevant stakeholders.

ANNEXES

Annex 1: Environmental and Social screening Check list

ESM Micro-projects Screening Checklist (Prototype)

(Micro-projects screening process by benefitting communities/Agencies)

Section A: Background information

Name of
County.....

Name of CPCU/CESSCO¹

Micro-project location.....

Name of CBO/Institution.....

Postal Address:.....

Contact
Person..... Cellphone:.....
.....

Micro-project name.....

Estimated cost (KShs.).....

Approximate size of land area available for the micro-project.....

Objectives of the micro-
project.....
.....
.....
.....

Activities/enterprises
undertaken.....

How was the micro-project chosen?.....

Expected micro-project
duration:.....

Section B: Environmental Issues

Will the micro-project:	Yes	No
Create a risk of increased soil erosion?	<input type="checkbox"/>	<input type="checkbox"/>
Create a risk of increased deforestation?	<input type="checkbox"/>	<input type="checkbox"/>
Create a risk of increasing any other soil degradation soil degradation?	<input type="checkbox"/>	<input type="checkbox"/>

¹ County Environment and Social Safeguards Compliance Officer

Affect soil salinity and alkalinity?	<input type="checkbox"/>	<input type="checkbox"/>
Divert the water resource from its natural course/location?	<input type="checkbox"/>	<input type="checkbox"/>
Cause pollution of aquatic ecosystems by sedimentation and agro-chemicals, oil spillage, effluents, etc?	<input type="checkbox"/>	<input type="checkbox"/>
Introduce exotic plants or animals?	<input type="checkbox"/>	<input type="checkbox"/>
Involve drainage of wetlands or other permanently flooded areas?	<input type="checkbox"/>	<input type="checkbox"/>
Cause poor water drainage and increase the risk of water-related diseases such as malaria?	<input type="checkbox"/>	<input type="checkbox"/>
Reduce the quantity of water for the downstream users?	<input type="checkbox"/>	<input type="checkbox"/>
Result in the lowering of groundwater level or depletion of groundwater?	<input type="checkbox"/>	<input type="checkbox"/>
Create waste that could adversely affect local soils, vegetation, rivers and streams or groundwater?	<input type="checkbox"/>	<input type="checkbox"/>
Reduce various types of livestock production?	<input type="checkbox"/>	<input type="checkbox"/>
Affect any watershed?	<input type="checkbox"/>	<input type="checkbox"/>
Focus on Biomass/Bio-fuel energy generation?	<input type="checkbox"/>	<input type="checkbox"/>

If the answers to any of the above is 'yes', please include an EMP with micro-project application.

Section C: Socio-economic Issues

Will the micro-project:	Yes	No
Displace people from their current settlement?	<input type="checkbox"/>	<input type="checkbox"/>
Interfere with the normal health and safety of the worker/employee?	<input type="checkbox"/>	<input type="checkbox"/>
Reduce the employment opportunities for the surrounding communities?	<input type="checkbox"/>	<input type="checkbox"/>
Lead to labour influx (immigration from other areas in search of work)?	<input type="checkbox"/>	<input type="checkbox"/>
Reduce settlement (no further area allocated to settlements)?	<input type="checkbox"/>	<input type="checkbox"/>
Reduce income for the local communities?	<input type="checkbox"/>	<input type="checkbox"/>
Increase insecurity due to introduction of the project?	<input type="checkbox"/>	<input type="checkbox"/>
Increase exposure of the community to HIV/AIDS?	<input type="checkbox"/>	<input type="checkbox"/>
Induce conflict?	<input type="checkbox"/>	<input type="checkbox"/>
Have machinery and/or equipment installed for value addition?	<input type="checkbox"/>	<input type="checkbox"/>
Introduce new practices and habits?	<input type="checkbox"/>	<input type="checkbox"/>
Lead to child delinquency (school drop-outs, child abuse, child labour, etc)?	<input type="checkbox"/>	<input type="checkbox"/>
Lead to gender disparity?	<input type="checkbox"/>	<input type="checkbox"/>
Lead to poor diets?	<input type="checkbox"/>	<input type="checkbox"/>

Lead to social evils (drug abuse, gender based violence, excessive alcohol consumption, crime, etc)?	<input type="checkbox"/>	<input type="checkbox"/>
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Section D: Natural Habitats

Will the micro-project:

Be located within or near environmentally sensitive areas (e.g. intact natural forests, mangroves, wetlands) or threatened species?	<input type="checkbox"/>	<input type="checkbox"/>
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Adversely affect environmentally sensitive areas or critical habitats – wetlands, woodlots, natural forests, rivers, etc)?	<input type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------

Affect the indigenous biodiversity (Flora and fauna)?	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------

Cause any loss or degradation of any natural habitats, either directly (through project works) or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>
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Affect the aesthetic quality of the landscape?	<input type="checkbox"/>	<input type="checkbox"/>
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Reduce people’s access to the pasture, water, public services or other resources that they depend on?	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------

Increase human-wildlife conflicts?	<input type="checkbox"/>	<input type="checkbox"/>
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Use irrigation system in its implementation?	<input type="checkbox"/>	<input type="checkbox"/>
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If the answers to any of the above is ‘yes’, please include an EMP with micro-project application.

Section E: Pesticides and Agricultural Chemicals

Will the micro-project:

Involve the use of pesticides or other agricultural chemicals, or increase existing use?	<input type="checkbox"/>	<input type="checkbox"/>
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Cause contamination of watercourses by chemicals and pesticides?	<input type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------

Cause contamination of soil by agrochemicals and pesticides?	<input type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------

Experience effluent and/or emissions discharge?	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------

Export produce? Involve annual inspections of the producers and unannounced inspections?	<input type="checkbox"/>	<input type="checkbox"/>
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Require scheduled chemical applications?	<input type="checkbox"/>	<input type="checkbox"/>
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Require chemical application even to areas distant away from the focus?	<input type="checkbox"/>	<input type="checkbox"/>
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Require chemical application to be done by vulnerable group (pregnant mothers, chemically allergic persons, elderly, etc)?	<input type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------

If the answer to the above is ‘yes’, please consult the IPM that has been prepared for the project.

Section F: Indigenous Peoples

Are there:

Indigenous peoples living within the boundaries of, or near the project?	<input type="checkbox"/>	<input type="checkbox"/>
Members of these indigenous peoples in the area who could benefit from the project?	<input type="checkbox"/>	<input type="checkbox"/>
Indigenous peoples livelihoods to be affected by the micro-project?	<input type="checkbox"/>	<input type="checkbox"/>

If the answer to any of the above is 'yes', please consult the VMGF that has been prepared for the project.

Section G: Land Acquisition and Access to Resources

Will the micro-project:	Yes	No
Require that land (public or private) be acquired (temporarily or permanently) for its development?	<input type="checkbox"/>	<input type="checkbox"/>
Use land that is currently occupied or regularly used for productive purposes (e.g. gardening, farming, pasture, fishing locations, forests)	<input type="checkbox"/>	<input type="checkbox"/>
Displace individuals, families or businesses?	<input type="checkbox"/>	<input type="checkbox"/>
Result in temporary or permanent loss of crops, fruit trees and pasture land ?	<input type="checkbox"/>	<input type="checkbox"/>
Adversely affect small communal cultural property such as funeral and burial sites, or sacred groves?	<input type="checkbox"/>	<input type="checkbox"/>
Result in involuntary restriction of access by people to legally designated parks and protected areas?	<input type="checkbox"/>	<input type="checkbox"/>
Be on monoculture cropping?	<input type="checkbox"/>	<input type="checkbox"/>

If the answer to any of the above is 'yes', please consult the mitigation measures in the ESMF, and if needed prepare a (Resettlement Action Plan) RAP.

Section H: Proposed action

(i) Summarize the above:

All the above answers are 'No'

There is at least one 'Yes'

(ii) Guidance

- If all the above answers are 'No', there is no need for further action;
- If there is at least one 'Yes', please describe your recommended course of action (see below).

(iii) Recommended Course of Action

If there is at least one 'Yes', which course of action do you recommend?

- CPCU²s and CDE will provide detailed guidance on mitigation measures as outlined in the ESMF; and
- Specific advice is required from CDE³, Lead Scientist and CPCUs regarding micro-project specific EA(s) and also in the following area(s)

² Project County Coordinating Unit

³ County Director of Environment and the County Technical Team

Annex 2: Framework for Abbreviated Resettlement Action Plan

In compliance with the Bank's Operational Policy 4.12, in case of less than 200 Project Affected People (PAPs), an Abbreviated Resettlement Framework shall be followed in order to restore housing and issue economic compensation for loss of land and livelihood through a consultative and mutually agreeable process.

Principles

1. All land should be surveyed and mapped and agreement reached with government on explicit eligibility cut-off date.
2. Where land is disputed or land ownership is not clear, the land will be surveyed and a map hereof issued to the affected families. In case of land disputes, attempts should be made to settle disputes prior to project start.
3. Customary and collective rights, e.g. to grazing land and commons, should be verified and documented through community-level consultations and local authorities. Customary and collective rights are also subject to compensation.
4. Compensation for land, housing and assets are based on principles of replacement cost and mutually agreeable solutions based on consultative approach with PAPs.
5. where affected land provide income, the equivalent to the value of the crop lost will be given in compensation, based on the value of the harvests lost until the replacement crop (e.g. fruit trees) come into full production.
6. if land forms basis for other income, the value of the income hereof will be subject to third party assessment
7. If PAPs are squatters/informal settlers on the land, they will receive economic/material compensation to re-establish themselves elsewhere (e.g. on government land) without suffering damage to their livelihood or living standard.

Process

1. Survey of land and assets & census of Project Affected Peoples, including squatters and informal settlers:
 - a. The surveyed land and assets should be identified, marked and photographed, and by the defined eligibility cut-off date the areas should be secured against encroachers.
 - b. The Project Affected People should be identified and registered with full data and photographs
 - c. A compensation package should be developed (categories of impacts and appropriate entitlements to formal and informal settlers landholders and squatters), and
 - d. Initial consultations should be conducted to identify any salient issues or concerns impacting on affected people. Gender separate consultations should be conducted in order to properly ascertain the views of the women.
2. Calculation of individual entitlements. There should be continued consultations with the affected people regarding the project, land acquisition and compensation package in order to reach mutually agreeable solution to land/asset acquisition and/or shifting of house. In case any PAP refuses to shift, an abbreviated Resettlement Plan, compliant to OP 4.12, should be developed.

Outline of an Abbreviated Resettlement Plan

An abbreviated plan covers the following minimum elements:

- a. A census survey of displaced persons and valuation of assets;
 - b. Description of compensation and other resettlement assistance to be provided;
 - c. Consultations with displaced people about acceptable alternatives;
 - d. Institutional responsibility for implementation and procedures for grievance redress;
 - e. Arrangements for monitoring and implementation; and
 - f. A timetable and budget.
3. The compensation package and abbreviated Resettlement Plan should be submitted to the Bank for approval, using the formats included in the Safeguards Framework
 4. The acquisition process is only completed with the actual payment of compensation to Project Affected People and settlement of any grievances they may hold.
 5. Describe grievance mechanisms available:

Annex 3: Format for Documentation of Asset contribution

The following agreement has been made on..... day of.....
between.....resident of(the Owner)
and(the Recipient).

- 1. That the Owner holds the transferable right ofha. of land/structure/asset in.....
- 2. That the Owner testifies that the land/structure is free of squatters or encroachers and not subject to other claims.
- 3. That the Owner hereby grants to the Recipient this asset for the construction and development offor the benefit of the villagers and the public at large.

(Either, in case of donation :)

- 4. That the Owner will not claim any compensation against the grant of this asset.

(Or, in case of compensation :)

- 4. That the Owner will receive compensation against the grant of this asset as per the attached Schedule.
- 5. That the Recipient agrees to accept this grant of asset for the purposes mentioned.
- 6. That the Recipient shall construct and develop the.....and take all possible precautions to avoid damage to adjacent land/structure/other assets.
- 7. That both the parties agree that the.....so constructed/developed shall be public premises.
- 8. That the provisions of this agreement will come into force from the date of signing of this deed.

Signature of the Owner:_____Signature of the Recipient/MRRD/MPW: _____

Witnesses:_____

- 1.
- 2. (Signature, name and address)

(Attestation by District/Province Judge, Date)

Confirmation of County Resettlement Committee:
Signature/Stamp

Confirmation of County Coordinating Unit: _____ Signature /Stamp

Annex 4: Format of Quarterly Monitoring Report

Relevant environmental authority:							
Reporting dates:							
NARIGP County:							
Micro-projects approved:							
Micro-project title	Activities	Project phase ¹⁵	Environmental l. Risks	EIA / EMP Completed?	Environmental Permit granted?	Effectiveness of EMP	Issues ¹⁶
name, location, title or reference	New construction, rehabilitation, maintenance	See note below	(Severe, Moderate or Mild)	Yes, No or N/A	Yes, No or N/A	Good, poor, or needs improvement	See note below
1							
2							
3							
etc							
Micro-projects rejected:							
Micro-project title	Activities	Reasons for rejection			Remarks ¹⁷		

- 15 Micro-project phase will be one of the following: (a) under project preparation or appraisal, (b) appraised, or (c) implementation
- 16 Issues: accidents, litigation, complaints or fines are to be listed
- 17 e.g. if an environmental permit was not granted, explain why?

Annex 5: Draft Terms of Reference for Micro-project Requiring an ESIA

Based on the screening and scoping results. ESIA terms of reference will be prepared. A Consultant Firm (or individual) will conduct the ESIA and the report should have the following format:

Introduction and Context

This part will be completed at a time and will include necessary information related to the context and methodology to carry out the study.

Objectives of the Study

This section will indicate (i) the objectives and the project activities; (ii) the activities that may cause environmental and social negative impacts and needing adequate mitigation measures.

Mission/Tasks

The Consultant should realize the following:

- Describe the biophysical characteristics of the environment where the project activities will be realized; and underline the main constraints that need to be taken into account at the field preparation, during the implementation of the project.
-
- Assess the potential environmental and social impacts related to project activities and recommend adequate mitigation measures, including costs estimates;
- Assess the need of solid and liquid waste management and suggest recommendation for their safe disposal;
- Review political, legal and institutional framework, at national and international level, related to environmental and social, identity constraints and suggest recommendations for reinforcement;
- Identify responsibilities and actors for the implementation of proposed mitigation measures;
- Assess the capacity available to implement the proposed mitigation measures, and suggest recommendation in terms of training and capacity building, and estimate their costs;
- Develop an Environmental and Social Management Plan (ESMP) for the project.

The ESMP should underline (i) the potential environmental and social impacts resulting from project activities; (ii) The proposed mitigation measures; (iii) the institutional responsibilities for implementation; (iv) the monitoring indicators; (v) the institutional responsibilities for monitoring and implementation of mitigation measures; (vi) the costs of activities; and (vii) the schedule of implementation.

Public consultations

The ESIA results and the proposed mitigation measures will be discussed with local communities, NGOs, local administration and other organizations mainly involved by the project activities. Recommendations from this public consultation will be included in the final ESIA report.

Plan of the ESIA Report

- Cover page
- Table of Contents
- List of Acronyms
- Executive Summary
- Introduction
- Description of project activities
- Description of Environment in the project area
- Description of policy, legal and Institutional Framework
- Description of the methodology and techniques used in assessment and analysis of the project impacts
- Description of environmental and social impacts for project activities
- Environmental and Social Management Plan (ESMP) for the project including the proposed mitigation measures;
- Institutional responsibilities for monitoring and implementation; Summarized table for ESMP.
- Recommendations
- References
- List of Persons/Institutions met

Qualification of the Consultant

The Consultant firm to conduct the ESIA studies will be based on their past performances and quality of the deliverables.

Duration of Study

The Duration of study will be determined according to the type of activity

Production of final Report

The Consultant firm will produce the final report one (1) week after receiving comments from NARIGP and WB. The final report will include comments from these institutions.

Annex 6: Complaints Registration Form

Complaints Registration Form: _____
 NARIGP Complaints Registration Form

LOCATION : County: _ Sub County:			
CIG/PAP/VMG Name:			
NAME OF COMPLAINANT:	PHONE number:	ADDRESS:	Community position:
resident <input type="checkbox"/> member <input type="checkbox"/> Official <input type="checkbox"/> Other <input type="checkbox"/>			
Classification of the grievance (Check box)			
<input type="checkbox"/> CIG/formation	<input type="checkbox"/> Inter-community dispute		
<input type="checkbox"/> Procurement	<input type="checkbox"/> Technical/operational coordination		
<input type="checkbox"/> Financial	<input type="checkbox"/> Process delays		
<input type="checkbox"/> Other (specify)			
Does he/she inform the CRC of his/her neighborhood regarding to this grievance? Yes <input type="checkbox"/> No <input type="checkbox"/>			
If No, ask him/her to inform the NSC, for solving this grievance.			
Brief description of the grievance:			
What is the perceived cause?			
Suggested action (by complainant) to address grievance:			
Signature of complainant:		Date: / /	
Received on behalf of NARIGP by:		Registration no:	
Name:	Designation:	Signature:	Date: / /

Annex 7: Training Matrix Budget for the Environmental and Social Safeguards

Activity	Year					Total Budget (US\$)	Remarks
	1	2	3	4	5		
Recruitment of a Desk Officer – Safeguards	X						
Awareness creation at national level	X					145,000	One-off 2 day workshop
Awareness creation at county level (21 counties)	X					190,000	One off 2 day workshop for all relevant county implementing agencies
Awareness creation at CIG, CWG and individual farmer level	X	X	X	X		160,000	One day sensitization meeting
ToT training for service providers, county technical teams	X					150,000	Three-day training workshop
Undertake social assessment (8 counties targeted)	X					300,000	Target
NARIGP Frameworks training to county technical teams	X		X			140,000	Two day training
NARIGP Frameworks training/reviews to communities	X	X	X	X	X	280,000	One day capacity building

Undertake NARIGP Project Environmental and Social Audit (start and end period)	X			X		250,000	Consultancies
Certification for community micro-projects (30 per year starting year 2)		X	X	X	X	240,000	Approvals by the national Institution-NEMA
Training on quality standards, certification and food safety (for the CIGs)			X	X	X	300,000	10 Groups targeted per year
Environmental and Social Safeguards monitoring by the technical teams						120,000	Twice per year
Training on OP/BP 4.10 for relevant groups/NARIGP VMGF	X	X	X	X	X	400,000	All target groups
Train on Involuntary Resettlement OP/BP 4.12 and NARIGP RPF	X	X	X	X	X	400,000	All target groups
Train on Environmental Assessment OP/BP 4.01/NARIGP ESMF	X	X	X	X	X	400,000	All target groups
Train on Pest Management Policy OP/P 4.09/NARIGP IPMF (Annex to ESMF)	X	X	X	X	X	400,000	All target groups
Undertake soil testing, analysis for value chains	X	X	X	X	X	10,000	10 farmer groups Targeted per year
Train on specific communities projects' adaptation and mitigation to climate change strategies		X	X	X		300,000	Detailed training to SPs and county

							technical teams
Community monitoring on environmental and social safeguards		X	X	X	X	100,000	200 groups per year starting year 2
Annual environmental and social safeguards review meetings	X	X	X	X	X	400,000	All actors

Annex: 8 Grievance Handling Mechanism (GRM)

• A. Grievances Redress Mechanisms

Grievances may arise from members of communities who are dissatisfied with: (a) the eligibility criteria, (b) community planning measures, (c) approval of CAPs and allocation of funds or (d) actual implementation.

This section sets out the measures to be used to manage grievances. The overall process of grievance handling is as follows⁴:

- ❖ Compensation committees including representatives of PAPs will establish the compensation rates.
- ❖ During the initial stages of the valuation process, the affected persons are given copies of grievance procedures as a guide on how to handle the grievances/sensitization of PAPs.
- ❖ The process of grievance redress will start with registration of the grievances to be addressed for reference, and to enable progress updates of the cases..
- ❖ The project will use a local mechanism, which includes peers and local leaders of the affected people. These will ensure equity across cases; they eliminate nuisance claims and satisfy legitimate claimants at low cost.
- ❖ The response time will depend on the issue to be addressed. Compensation will be paid to individual PAPs only after a written consent of the PAPs is received
- ❖ Should a PAP decline the compensation suggested, he/she could appeal to the County Steering Group and local Land Control Board.
- ❖ A Compensation Committee (CC) and local Land Control Board at the local level will first revise his/her case.
- ❖ Then the CC will draft its inclusions and submit them to the implementing agencies (IAs) for deliberation in the aim of settling the differences.

And when these have failed the individual PAP has the right to take his case to the civil courts for litigation.

In order to deal with the grievance that may rise during the implementation of the RAP, there is need to incorporate a grievance redress process with IAs and with PAPs representatives committee to hear the complaints and provide solutions, and reduce unnecessary litigation by resolving disputes through mediations.

• B. Grievance Redress Process

At the time the individual resettlement plans are approved and individual compensation contracts are signed, affected individuals and homesteads would have been informed of the process for expressing dissatisfaction and to seek redress. The grievance procedure will be simple, administered as far as possible at the local levels to facilitate access, flexibility and open to various scrutiny.

The Resettlement Committees⁵ being a party to the contract would not be the best office to receive, handle and rule on disputes. Therefore, taking these concerns into account, all grievances concerning non-fulfilment of contracts, levels of compensation, or seizure of assets

⁴Details of the GRM are to be put in the project operational manual

⁵The role of this committee, establishment and composition will be detailed in the project operational manual

without compensation should be addressed to the County Lands Officer, assisted by the local Land Control Board.

If the verdict rendered by the chief is not acceptable to either the individual affected or the management committee, then the parties in their compensation contract would have agreed that the matter would be appealed to a Court of Law as provided for by law. Notwithstanding that the grievance redress mechanism accepts that the compensation and resettlement plans will be (contracts) binding under the laws of Kenya.

The grievance redress mechanisms is designed with the objective of solving disputes at the earliest possible time which will be in the interest of all parties concerned and therefore implicitly discourages referring such matters to the Courts which would otherwise take a considerably longer time.

Grievance procedures may be invoked at any time, depending on the complaint. No person or community from whom land or other productive assets are to be taken will be required to surrender those assets until any complaints s/he has about the method or value of the assets or proposed measures are satisfactorily resolved.

All attempts would be made to settle grievances. Those seeking redress and wishing to state grievances would do so by notifying their area chief. The chief will inform and consult with the Resettlement Committee, the IA, the local Land Control Board and PAP and other records to determine a claim's validity. If valid, the chief will notify the complainant and s/he will be settled. If the complainants claim is rejected, then the matter will be brought before the County Land Registrar and local Land Control Board. If the PAP is dissatisfied with their decision, then s/he will be free to seek the determination by a Court of Law as provided in the Constitution. The decision of the High Court would be final and all such decisions must be reached within a full growing season after the complaint is lodged.

If a complaint pattern emerges, the IAs, the local Land Control Board and the local Chief will discuss possible remediation. The local leaders will be required to give advice concerning the need for revisions to procedures. Once they agree on necessary and appropriate changes, then a written description of the changed process will be made. The IA and the local Land Control Board will be responsible for communicating any changes to future potential PAPs when the consultation process with them begins.

Annex 9: General Environmental and Social Mitigation Plan

Impacts	Mitigation Measures	Responsibility	Time Frame		
			ST	MT	LT
Physical Environment					
Waste Disposal	<ul style="list-style-type: none"> • Provision of waste receptacles and facilities • Training and awareness on Safe Waste Disposal in construction camps for all workers • NEMA approvals on final waste disposal • Collection and temporal storage of Waste oil /fuel from vehicles and equipment. • Waste oil disposal by approved oil marketing companies or agents. 	Beneficiary Community Members, County Governments, NGO'S , CBO'S, Community Members, NEMA, Ministry of Environment and Forestry, Research Institutions, NARIGP.	✓		
Air pollution	<ul style="list-style-type: none"> • Operation of well-maintained machineries by the contractors. • Routine maintenance program for all equipment and machineries on site. • Use of good quality fuel and lubricants only. • Wetting of operational sites to reduce dust raising 	Beneficiary community Members, NEMA, County Government, Government of Kenya, NGO's, CBO'S, Contractors, Research Institutions, Community Members NARIGP		✓	
Noise and Vibration	<ul style="list-style-type: none"> • Use well-conditioned and maintained equipment and vehicles with some noise suppression equipment (e.g. mufflers, noise baffles) intact and in working order. • Ensure contractual agreements with the construction contractors on noise and vibration mitigation. • Implementation of best driving practices when approaching and leaving the site (speed limit of ≤30 km/hr) to minimize noise generation. • Switching off Engines of vehicles/trucks and 	Beneficiary community Members, Ministry of Environment & Natural Resources, NEMA, Ministry of Public Works, Department of Physical Planning, Ministry of Roads & Transportation, NARIGP.	✓		

	earth-moving equipment and other machineries when not in use.				
Interference with the visual landscape	<ul style="list-style-type: none"> Landscape installation after construction and restoration of disturbed areas e.g. borrow pits for visual aesthetics 	Beneficiary community Members, County Government, Government of Kenya, Ministry of Environment and Forestry, NEMA, Department of Physical Planning, NARIGP, CBO's, NGO's.			✓
Un controlled Water use	<ul style="list-style-type: none"> Issuance of water abstraction permits from the relevant authorities. 	Beneficiary community Members, Water Resources Management Authority (WRMA), Ministry of Water and Irrigation, NEMA, Ministry of Environment & Natural Resources			✓
Water pollution	<ul style="list-style-type: none"> Banning of garbage/refuse, oily wastes, fuels/waste oils into drains or onto site grounds Proper securing of Fuel storage tanks/sites to contain any spillage Maintenance and cleaning of vehicles, trucks and equipment far from project sites or close to water bodies. Adequate provision of Toilet facilities at the construction sites avoids indiscriminate defecation. Application of Integrated Pest Management Plan (IPMP) where necessary. 	Beneficiary community Members, County Government, Ministry of Environment & Natural Resources, WARMA, Research Institutions, Ministry of Roads & Transport, NEMA, Ministry of Public Health & Medical Services, NARIGP.		✓	
Soil and Land Degradation	<ul style="list-style-type: none"> Minimal land clearing Rehabilitation of degraded areas Minimal construction work during rainy season 	Beneficiary community Members, County Government, MOALFI., KFS, Ministry of Public Works, NEMA, Ministry			✓

		of Environment and Forestry, NARIGP.			
Interference and destruction of Faunal habitats	<ul style="list-style-type: none"> Minimal disturbance on sensitive habitat areas. Regular inspection and monitoring on identified or suspected sensitive habitats (swamps/wetlands), prior to start and during work. 	Government of Kenya, KWS, KFS, NEMA, Mistry of Environment and Forestry, WRA, relevant NGO'S &CBO's, NARIGP.			
Contamination of inland water bodies and destruction of aquatic lives and habitats.	<ul style="list-style-type: none"> Implementation of a hazardous materials management plan by the contractor for the proposed investments. Identification of sensitive aquatic mammals during pre-installation and installation of project facilities. Execution mitigation measures upon discovery of these species in the vicinity of the work area to avoid destruction or disturbance. Provision for water flow reserves and appropriate reservoir filling schedules Immediate reporting of any injured or dead aquatic life during project operations including the date and location and the description of the animal/strike. Availing the above report to the NEMA or KWS. Educating the Project workforce and local communities on the project to ensure environmental protection and conservation. 	NEMA, County Government, National Government, MOALFI WARMA, Ministry of Environment &Forestry, KWS, KFS, KEFRI, Ministry of Information, Communication and Technology, Ministry of Lands, NARIGP.			✓
Loss of employment and livelihoods	<ul style="list-style-type: none"> Assisting the affected through livelihood assistance and provision of new jobs to avoid interrupted income flow. Recommendation of necessary measures in accordance with the Resettlement Policy 	Beneficiary community Members, MOALFI County Government, Government of Kenya, Ministry of Lands, Physical Planning Department,	✓		

	<p>Framework (RPF) upon social assessments, socio-economic surveys and resettlement action plans, undertaken in preparation of individual investments/micro-projects.</p> <ul style="list-style-type: none"> • Use of local labor as much as possible and where available. 	NARIGP.			
Land and property loss	<ul style="list-style-type: none"> • Due process should be followed to establish the true owner of any land, be it family or communal land. • Proper valuation of properties to be lost. • Appropriate compensation of acquired land in accordance with the resettlement policy framework (RPF). 	Beneficiary community Members, Gok, MOALF & I County Government, Ministry of Public works, Department of Physical Planning, Ministry of Lands, NARIGP.	✓		
Impacts on human health/ traffic safety and sanitation	<ul style="list-style-type: none"> • Proper covering of Trucks carrying construction materials with polythene material from or to project site. • Use of road worthy vehicles/trucks should be used on sites with qualified and experienced drivers. • Marking of active construction areas with high-visibility tape to reduce the risks and accidents involving pedestrians and vehicles. • Immediate backfilling of open trenches and excavated areas as soon as possible after a construction. • Securing of open trenches and excavated areas to prevent pedestrians or vehicles from falling in. • Availing adequate sanitary facilities for workers and open range defecation will not be countenanced. 	Beneficiary community Members, Ministry of Health, Ministry of Roads and Transport, County Government, Contractors, Physical Planning Department, NEMA, Ministry of Public Health, NARIGP.	✓		

	<ul style="list-style-type: none"> • Provision of protective equipment to the Construction workers and necessary education on suitable Personal Protective Equipment. • Enforce use of PPEs for all workers to minimise accidents • Strict adherence to basic rules with regard to protection of public health such as proper hygiene and disease (HIV/AIDS) prevention. 				
Erosion and interference of cultural heritage / archaeological interest / existing ecologically sensitive areas	<ul style="list-style-type: none"> • Carrying out re-construction surveys to identify and document cultural heritage resources and existing ecologically sensitive. • Implementation of a chance find procedure and reporting system by contractors upon encountering a cultural heritage feature or ecologically sensitive item/issue. 	Beneficiary community Members, Ministry of Gender and Social Service, Ministry of Environment & Forestry, NEMA, MOALFI Ministry of Public works, Relevant CBO's & NGO'S NARIGP.			✓
Impacts on human health and public safety	<ul style="list-style-type: none"> • Implementation of an Environmental, Health and Safety (EHS) plan being that of contractual agreement by the contractors in order to outline procedures for avoiding health and safety incidents and for emergency medical treatment. • Wearing of suitable Personal Protective Equipment (PPE) by contractors in accordance with the EHS plan. • Enforcement of use of PPEs by all to minimise accidents. • Sufficient training to all contractors and workers on safe methods pertaining to their area of work to avoid injuries. 	Beneficiary community Members, Ministry of Public health and medical services, Ministry of public works, Department of Physical planning, MOALFI, County Government, NARIGP, NGO's, CBO's, Financial institutions.		✓	
Labour related issues	<ul style="list-style-type: none"> • Preparation of redundancy plans and packages for 	GoK, Ministry of Gender and	✓		

	the affected workers which will include re-training and re-tooling of the affected and avoidance of labor strife.	Social Services, MOALFI, Ministry of Labour, NGO's, CBO's, NARIGP.			
Waste pollution from construction camps	<ul style="list-style-type: none"> • Preparation of site specific Waste Disposal Plan. • Strategic installation of waste disposal receptacles and signs within the construction camps. • Provision of training and awareness on clean environment. • Provision of adequate toilets and efficient sewer system within construction camps 	County Governments, MOALFI; Ministry of Environment and Forestry, WARMA, NEMA, Ministry of Public health and Medical services, NARIGP.		✓	
Impact on gender access to water for household use and household plots as well as impact on pastoralists and fisheries.	<ul style="list-style-type: none"> • Consideration of diverse needs for water and accessibility modes to be effected for each groups. • Recommendation of appropriate mitigation measures for the affected. • Recommendation of group specific appropriate measures to specific impacts as per the project's specific social assessment. 	Beneficiary community Members, Ministry of Gender and Social Services, Ministry of Labour, MOALFI, WARMA, NGO's, CBO's,			✓
Impacts on vulnerable and marginalized groups	<ul style="list-style-type: none"> • Identification and profiling of vulnerable and marginalised groups through Vulnerable and Marginalised Groups Framework (VMGF). • Designing of investment specific plans. 	Beneficiary community Members, MOALFI, County Government, Ministry of Labour, Relevant NGO's & CBO's, Private financial institutions, NARIGP.		✓	
HIV/AIDS prevalence	<ul style="list-style-type: none"> • Designing and conducting of HIV/AIDS 	Beneficiary community			✓

Spread and other related public health diseases –Water borne diseases etc.	<p>awareness, sensitisation and prevention program for each project with the entire community coverage.</p> <ul style="list-style-type: none"> • Designing of programs targeting reduction of the spread of water borne diseases in collaboration with Ministry of Health 	<p>Members, MOALFI County Government, Ministry of Public Health and Medical Services, NEMA, Ministry of Water , WARMA, Ministry of Public Works, Relevant CBO's & NGO's, Research Institutions, NARIGP.</p>			
Downstream Impacts of dams, dykes and weirs and other water infrastructure e.g. irrigation investments, bulk water supply,	<ul style="list-style-type: none"> • Maintenance of environmental flow reserves for the river to retain water in reservoir during drought, ensure that water retention in dam is controlled to ensure that adequate reserve is left to flow downstream for users Proper designing of dams by qualified personnel; • Instituting dam safety panel and development of a dam safety plan. 	<p>Ministry of Environment & Forestry, Ministry of Water, WARMA, MOALFI, County Government, Ministry of Public Works, Research Institutions, Financial institutions, NGO's, CBO's, NARIGP.</p>			✓
Impacts on community employment, skills and knowledge	<ul style="list-style-type: none"> • Prioritization of local communities in matters of employment and training (skilled) to for sustainable work force in the project e.g. operation and maintenance 	<p>Beneficiary community Members, Ministry of Labour, MOALFI, County Government, CBO's, NGO's, NARIGP.</p>			✓

Source: Author (2015)

Annex 10: Project Impacts by Component Explained

World Bank Policy	Project Component	Environmental Impacts triggered	Social Impacts
OP 4.01: Environmental Assessment	1 & 2	<p>Positive – Improved Environmental conservation measures and practices, Protection of natural resources, Improved climatic conditions. Improved and safe agricultural practices, clean and safe environment.</p> <p>Negative – Possible Pollution of water resources and air pollution land degradation, production of greenhouse gases.</p>	<p>Positive _ Capacity building, improved livelihoods, accessibility to markets through improved infrastructure and reduced food insecurity and improved nutrition status</p> <p>Negative- Impacts on human health and sanitation</p>
OP 4.04: Natural Habitats	1 & 2	<p>Positive- Conservation of natural habitats, Integrated farming- cross pollination, Increased vegetation cover, improved climatic conditions.</p> <p>Negative- Biodiversity loss, minimal interference of faunal habitats,</p>	<p>Positive- Capacity building and awareness, protection of natural resources, Improved climatic conditions.</p>
OP 4.09: Pest Management	1 & 2	<p>Negative _ Air pollution, possible loss of fauna through poisoning during sprays, human poisoning through inhalation of spray chemicals, Residual effect on foods products.</p>	<p>Positive – Capacity building and awareness on safe use of agro-chemical, improved human health use of organic foods.</p> <p>Negatives – Impacts on human health</p>
OP 4.10: Indigenous Peoples	1 & 2	<p>Positive- Improved conservation and protection of natural resources through integrated farming.</p> <p>Negative -Conflicts over natural resource , misuse of natural resources in support of the project</p>	<p>Positive- Capacity building, increased incomes, proper nutrition and health.</p> <p>Negative- Physical displacement of IP like the Ogieks from forest areas, Loss of livelihood</p>
OP 4.11: Physical Cultural Resources	1& 2	<p>Positive – Improved Vegetation cover through increased production of indigenous crops</p>	<p>Positive - Capacity building, social inclusion in the project, use of indigenous skills and resources in the project</p>

OP 4.12: Involuntary Settlement	1 & 2	Positive- Proper use of land, Improved vegetation cover, improved climatic conditions. Negative - Economic loss of land, Land degradation	Positive – Capacity building Negative - Physical displacement
OP 4.20 - Gender and Development	1 & 2	Positive – Involvement in positive environmental conservation practices, rehabilitation of natural resources	Positive - Capacity building, increased, inclusiveness in the projects, Improved nutrition, Human health and sanitation.
OP 4.36 - Forests	1 & 2	Positive - Increased vegetation cover through Deliberate planting of trees by the community, Integrated farming practices Negative - Cutting down of trees to support relevant value chains such as bee keeping.	Positive - Capacity building and increased awareness on protection of forestry resources

Source: Author (2015)

Annex 11 – Chance Finds Procedures

Chance finds procedures are an integral part of the project ESMP and civil works contracts. The following wording is proposed:

If the Contractor discovers archeological sites, historical sites, remains and objects, including graveyards and/or individual graves during excavation or construction, the Contractor shall:

- Stop the construction activities in the area of the chance find;
- Delineate the discovered site or area;
- Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities or the Ministry in charge of managing cultural heritage and related resources in the country (responsible ministry) take over;
- Notify the supervisory Project Environmental Officer and Project Engineer who in turn will notify the responsible local authorities and the responsible ministry immediately (within 24 hours or less);

Responsible local authorities and the responsible ministry would then be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by the archaeologists assigned by the government. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage, namely the aesthetic, historic, scientific or research, social and economic values.

Decisions on how to handle the finding shall be taken by the responsible authorities and the responsible ministry. This could include changes in the layout (such as when finding irremovable remains of cultural or archeological importance) conservation, preservation, restoration and salvage.

Implementation for the authority decision concerning the management of the finding shall be communicated in writing by relevant local authorities.

Construction work may resume only after permission is given from the responsible local authorities or the responsible ministry concerning safeguard of the heritage.