

Kenya

Upper Tana-Nairobi Water Fund (UTNWF)

Detailed design report

Appendices

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Appendix 1: Country and rural context background

1. **Economy:** Kenya covers a total area of 582,646 km², of which 1.9% or 11,230 km² is water bodies. Of the remaining 571,416 km² landmass, some 490,000 km² (or 84% of total land mass) comprises arid and semi-arid lands (ASALs) which are characterised by low, erratic rainfall, high evapotranspiration rates, poor soil fertility and few water resources. The remaining 16% of Kenya's landmass is of high and medium agricultural potential with adequate and reliable rainfall. This potentially arable land is dominated by commercial agriculture with cropland occupying 31%, grazing land 30% and forests 22%, the rest being settlements and urban areas. These zones host the largest proportion of Kenya's population (64%) most of them in central and western parts of the country, where the population density is in some cases higher than ten times the national average of 69 persons/km². Administratively, Kenya is divided into 47 Counties, in a devolved system of Government introduced under the new constitution¹, in which certain functions of the national government were transferred to the 47 counties. Devolution has wide-ranging implications for the implementation of new projects and initiatives in the country.

2. **Rural Poverty:** The incidence of poverty in Kenya has dropped, from 52.2% in 1997 to 46% in 2013². The country ranks 147/186 in the Human Development Index³. Within the high potential areas of Kenya, despite having relatively high rainfall, the Land units are small, averaging less than two hectares per capita. The region is home to 44.3% of Kenya's population, and given its small size in terms of land area, it also has the highest population density. Rapidly expanding urban centres in the highlands continually cause agricultural land sizes to decline and expansion of agricultural land is highly limited. Thus, high population density, rapid growth, and intensive farming practices all contribute to the environment challenges facing the region, including deforestation, erosion, and diminishing water resources. Paradoxically, these high potential areas also host a large numbers of poor people, with poverty prevalence estimated⁴ at about 35.4%. Despite smaller landholdings, the favourable climate lends itself to high value agriculture, while good infrastructure generally provides better access to urban markets. These opportunities have not been fully exploited to benefit smallholders in Kenya's water towers.

3. **Agriculture and smallholder farming:** The agriculture sector is the mainstay of Kenya's economy, contributing 27.3% of the GDP in 2014⁵. The sector accounts for 65% of Kenya's total exports, 75% of industrial raw materials, 60% of export earnings, as well as 18% and 60% of the formal and total employment respectively⁶. Crop production comprising industrial crops, food crops and horticulture accounts for 82% of agricultural GDP and 94% of export earnings from agriculture. The remaining three subsectors of agriculture - livestock, fisheries and forestry currently account for 18% of agricultural GDP and 8% of export earnings from agriculture, but still have significant potential not fully exploited. Meanwhile, Kenya's agriculture⁷ is predominantly small-scale farming where production is carried out on farms averaging 0.2–3 ha, mostly on a commercial basis. This small-scale production accounts for 75 per cent of the total agricultural output and 70 per cent of marketed agricultural produce. Small-scale farmers produce over 70% of maize, 65% of coffee, 50% of tea, 80% of milk, 85% of fish, and 70% of beef and related products. However, despite recent improvements, access

¹The Constitution of Kenya (2010). The Government of the Republic of Kenya.

² Kenya Population situation analysis. UNFPA, 2013
(<http://countryoffice.unfpa.org/kenya/drive/FINALPSAREPORT.pdf>)

³ Human Development Index (HDI), 2014.

⁴ Agricultural Growth and Poverty Reduction in Kenya. ReSakss, 2012.

⁵ Economic Survey, (2015). The Kenya National Bureau of Statistics, Government of Kenya

⁶ Republic of Kenya, 2013. Second Medium Term Plan (2013-2017).

⁷ Government of Kenya, 2010. Agricultural Sector Development Strategy (2010–2020)

to financial services remains limited with farmers relying mainly on costly and inadequate informal financial systems.

4. **Women and Youth:** Traditional norms have in the past and continue at present to disadvantage both women and youth in Kenya, in terms of access to resources and decision making. For instance, only 29% of those earning a formal wage throughout the country are women, leaving a huge percentage of women to work in the informal sector. Furthermore, 54% of agricultural workers are women providing the bulk of the labour force in agriculture⁸. Yet few women own assets such as land. As a result, poverty in Kenya has a gender and age dimension, due to the gender disparities that exist in terms of access, ownership and control of productive resources, as well as differences in capabilities. Meanwhile, Kenya has ratified various international⁹ and regional protocols¹⁰ on gender equality and women empowerment. Nationally, both the National Gender and Equality Commission Act enacted from 2011, as well as the new Constitution (2010) promote gender equality and women empowerment. Women's participation in leadership, governance and decision-making was pegged at a minimum of 30% by the constitution. This helped increase women's presence in leadership from 20.5% in 2008 to 38.6% in 2012 due to the affirmative action measures. Notably the inclusion of gender mainstreaming in the performance contracting process helped strengthen accountability on gender equality in public service.

5. **Youth:** The youth comprise 36% of the national population but alarmingly 61% of them remain unemployed¹¹. About 92% of the unemployed youth lack vocational or professional skills demanded by the job market. Despite their numerical weight, the youth are not well represented in the national and local political and socio-economic development processes. Lack of access to land and dissatisfaction with agricultural production as a livelihood strategy especially among rural males limits their livelihood options. Yet it is the youth who are most energetic, better educated and more technology savvy. Thus, their exclusion represents untapped potential for increased adoption of productivity-enhancing farming technologies.

6. **Environment:** Kenya is committed to the protection of the environment, as is enshrined in the constitution (2010), under Articles 42, 60(c) and 69(a-h), espousing the rights to a clean and healthy environment, sustainable and productive management of land resources, and sustainable use and protection of genetic and biological diversity. Several policy documents have been developed that facilitate environmental protection in Kenya. Among these are the National Environment Policy (2013), National Policy for the Sustainable Development of Northern Kenya and other Arid Lands (2012), Forest Policy (2014), National Land Policy (2009), Biodiversity Regulations (2006) and the National Action Programme to combat desertification (NAP, 2002). Furthermore Kenya is a party to many international treaties, agreements and protocols on biodiversity, ecosystems and the environment, among these, the Convention on Biological Diversity (CBD) in 1994, the UNCCD (1997), UNFCCC (1994), and Ramsar Convention on Wetlands (1992). Institutional reforms since the new Government dispensation starting 2013, saw several ministries merged, but later in 2015, the Water Department was upgraded to a full Ministry, leaving the Ministry of Environment and Natural Resources (MENR), which also holds the Regional Development docket. MENR has under its jurisdiction state corporations which include the Kenya Forest Service (KFS), and the National Environment Management Authority (NEMA), among others.

7. It is important to note that despite water resources being regarded as a national affair, environment, agriculture and forestry have now been devolved from the national government to the respective County governments. Each County has a County executive appointed to

⁸ Kenya Labour market profile, 2014. Danish Trade Union Council for International Development Cooperation

⁹ Convention on the Elimination of All Forms of Discrimination against Women. UN General Assembly, 1981

¹⁰ Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa. African Union, 1995.

¹¹ Second Medium Term Plan (2013-2017). The Presidency and Ministry of Devolution and Planning

coordinate each of these sectors with staff reporting directly to the County government. The action plans, budgets and targets are defined in the County integrated development plans. National ministries maintain their roles with regard to overall policy development, coordination and advisory services.

8. **Forest cover:** At independence in 1963, Kenya's forests covered 10% of the total land area, and by 2003, this had drastically reduced to about 2% forest cover. Over the years, the forest cover in Kenya drastically reduced due to poor protection, forest excision for settlement, wood fuel, legal/illegal logging, cultivation and poor enforcement of laws that have always existed to protect forests¹². However, according to that National Forest Policy¹³, recent re-afforestation efforts have seen resurgence attaining 6.99% national forest coverage, and approximately 1.24 million hectares of closed canopy indigenous forest contributing to 3.6% of Kenya's GDP. Biomass from forests comprises about 80% of all energy used in the country, while forests also provide a variety of other goods support subsistence livelihoods of many communities. Forests comprise the country's water towers and catchments, where over 75% of the country's renewable surface water originate, and therefore, are important for human livelihoods, irrigated agriculture, and hydro-power generation. The five major water catchments or water towers in Kenya are the Mount Kenya, Aberdare ranges, Mau forest, Mt. Elgon and Cherangani hills. Generally, the expansion of agriculture, rapid urbanisation, growing demand for timber and charcoal trade and the destruction of the rich biodiversity by human encroachment threatens these forest ecosystems¹⁴. Deforestation in Kenya's water towers deprives the Kenyan economy of 6 billion Shillings annually and threatens the supply of more than 70% of the country's water supply¹⁵. Therefore, GoK is committed to the restoration of forest cover and the conservation of the five Kenyan water towers is a priority to MENR. The Vision 2030, proposes to increase forest cover in the country from 2% in 2010 to 10% coverage under a protected area system. This aims at increasing significant amount of forestation area, and also including afforestation of the other degraded areas and isolated smaller forests.

9. **Water resources availability and demand-** The water resources of Kenya are consistently affected by increasing demand, due to increasing population, industrialisation and changing lifestyles. To this end, Kenya has been described as a water-scarce country¹⁶, with rapidly dropping fresh water availability¹⁷. In 1992, the per capita water availability was about 647 m³. Due to increasing population, this had dropped to 534 m³ per capita by 2011 and is projected to decline to 235 m³ by 2025¹⁸, meaning the country will be severely water stressed. Meanwhile, the demand for water supplies and services continues to grow. The total water demand for domestic, industrial irrigation, livestock, wildlife and inland fisheries will increase from 3,218 million m³/year in 2010 to 21,468 million m³/year in 2030 and growing to 23,141 million m³/year in 2050. Generally, current developed water infrastructure in the country is often inadequate across all services, including for industrial, commercial, domestic as well as for irrigation, livestock and wildlife use. In addition, excessive abstraction of surface and groundwater, cultivation of water catchment areas thus causing soil erosion have increased **pollution of water sources**, by increasing the eutrophication and siltation of lakes, dams and pans and pollution from toxic chemicals, including agricultural pesticides and heavy metals. Thus, the increasing demand for water will continue to intensify competition among users and

¹² The Forest Act-2005 (repeal of Cap 385). Sessional Paper No. 9. Government of Kenya, Nairobi

¹³ National Forest Policy, 2014. Ministry of Environment, Water and Natural Resources

¹⁴ NEMA (2011). State of the Environment and Outlook Report for Kenya 2010. National Environment Management Authority (NEMA), Nairobi

¹⁵ Republic of Kenya, (2012) Report of the high - level national dialogue on Kenya water towers, forests and green economy

¹⁶ A country is considered water scarce if the total per capita water availability is less than 1,000 m³. It is water stressed if the values is below 500 m³.

¹⁷ Recent discoveries of huge groundwater reserves means that there is need to revise these figures.

¹⁸ www.informaworld.com/smpp/content-db=all-content=a917971133

uses. Meeting the growing demand for water faces major challenges particularly due to rapid urbanisation and changing lifestyles.

10. **Land Degradation:** Land degradation has many definitions, but in the context of this project, is defined¹⁹ as “*The reduction in the capacity of the land to provide ecosystem goods and services and assure its functions over a period of time for its beneficiaries.*” Land degradation is increasing in many areas of Kenya in both severity and extent, with over 20% of all cultivated areas, 30% of forests, and 10% of grasslands being subjected to degradation²⁰. The main causes of land degradation include; population pressure requiring to grow more food, leading to opening up more land for cultivation with attendant destruction of natural vegetation as well as other activities such as poor farming practises (failure to use inputs, over-grazing), poorly planned infrastructure developments, and generally unsustainable over-exploitation of natural resources. Unfortunately, the areas which experience the highest degradation risk coincide with the most productive areas in the country. These areas also continue to experience increased fragmentation and deforestation due to increasing pressure for new cultivation and grazing lands as well as for settlement.

11. Wetland degradation brings another dimension of land degradation in Kenya, pushed by expansion of agriculture and unsustainable exploitation of wetland resources, and subsequent losses to biodiversity (through harvesting wetland products, including medicinal plants).²¹ Wetlands play a fundamental role by maintaining hydrological stability through regulating stream flows, improving water quality by sediment filtration absorbing heavy metals and other toxic pollutants as well as reducing the risk of flooding downstream. They also help to recharge groundwater aquifers thereby making groundwater easily available and augmenting stream flows, functions which are now threatened as wetlands dry up or are polluted. Combined with rampant degradation of the catchment areas, this is causing the drying up of springs, reduced dry season flows in streams and rivers to the extent that many formerly perennial streams have turned ephemeral or dried up completely. These kinds of hydrological imbalances can be restored through catchment-based planning and action.

12. **Vulnerability to climate change:** There is growing evidence of climate change in Kenya. The frequency of droughts, floods, and other extreme climate events has increased over the last four decades. Since the early 1960s, both minimum and maximum temperatures have been increasing (warming) throughout the country. The minimum temperature has risen generally by 0.7–2.0°C and the maximum by 0.2–1.3°C, depending on the season and the region²². Temperatures are increasing and the six warmest years have all occurred since 1987. Also, the frequency of ‘hot’ days has increased dramatically, by 57 days per year whilst cold nights have declined by 42 days per year.²³ Projections indicate increases of 1-3.5 degrees centigrade by 2050s²⁴. The general warming is leading to reduced glaciers on Mt Kenya and sea level rise along the coast. The National Climate Change Response Strategy (2010) and National Climate Change Action Plan (2013) seek to mainstream an inclusive and equitable low-carbon development pathway for the country in the face of climate change. The Action Plan feeds into Vision 2030’s Second Medium Term Plan (2013 – 2017) and lays a solid foundation for reducing vulnerability to climate change and enhancing climate adaptation in the country. It takes adaptation and mitigation efforts in all key sectors including: livelihood diversification, development of human capital, water resources conservation and

¹⁹ FAO 2011. Manual for Local Level Assessment of Land Degradation and Sustainable Land Management. Food and Agriculture Organization of the United Nations. Rome.

²⁰ Muchena, F. N. (2008). “Indicators for Sustainable Land Management in Kenya’s Context”. GEF Land Degradation Focal Area Indicators, ETC-East Africa. Nairobi, Kenya.

²¹ NEMA (2009). Environmental Management and Coordination Act (EMCA).

²² Government of Kenya, 2010. National Climate Change Response Strategy.

²³ Temperatures in Kenya vary with altitude. Cold temperatures can be as low as 9°C in the highlands, while hot temperatures can exceed 33°C at the Coast.

²⁴ GoK 2010 State of the Environment Report.

development, climate-proofed infrastructural development (roads and energy), afforestation and reforestation, and climate-resilient agricultural systems, among others.

13. **Institutional frameworks:** A multiplicity of laws, policies, strategies and institutional frameworks exist in Kenya touching on land, agriculture, water resources, catchment management and infrastructure, in support of national development and human wellbeing. Supreme among these, is the new Constitution²⁵ enacted in 2010 and which became fully operational after the general elections of 2013. The Kenya Vision 2030²⁶, the country's development blueprint covering the period 2008 to 2030, which aims to transform Kenya into a newly industrializing, "*middle-income country providing a high quality of life to all its citizens in a clean and secure environment by the year 2030*". The implementation of the vision is undertaken through a series of 5-year medium term plans (MTPs), with the current one being the Second MTP (2013-2017)²⁷, which proposes extensive development programmes for water, agriculture and catchment protection, and based on the Vision's MTP, MENR's key sectoral priorities include the rehabilitation and protection of the Kenyan water towers.²⁸ The second MTP further recognizes the need to strengthen private sector involvement in development issues.

14. With regard to **Water Resources**, the Constitution of Kenya (2010) recognizes water as a human right and espouses the protection of the environment and natural resources such as forests, game reserves, water catchment areas, including all rivers/springs, lakes and wetlands. It accords that water resources/catchment areas; rivers, lakes, protected areas and other water bodies shall be held in trust for the people by the National Government (NG). The Constitution further assigns responsibility for water supply and sanitation provision to the 47 Counties under the devolved system of government²⁹. The new devolved system of government elected in March 2013 has wide-ranging implications for water resources management and catchment protection, including on the upstream-downstream water sharing responsibilities and mandates.

15. Meanwhile, a raft of laws, Bills, Policies, Strategies institutional and regulatory structures are currently being developed, while existing ones are being revised/reviewed to be in line with the new Constitution (2010), the Kenya Vision 2030, and other emerging policy changes. In this regard, the Water Act 2002 is currently under review, with the process having passed the first reading in Parliament as the Draft Water Bill³⁰. Although still in progress, key policy issues to guide the water sector are emerging. Most of the regulations in Water Act 2002 have been retained. For instance, the right to clean and safe water is reinstated in as stipulated in Article 43 of the Constitution of Kenya, also retaining ownership of water resources by the National Government. The bill further espouses the administrative and regulatory structures to support water resources management, including retaining the roles of Water Resources Users Associations (WRUAs) and geographic mandates as per water catchment areas (rather than Counties) as the basic planning unit.

16. With regard to **Agriculture**, the three main ministries at national were merged in 2013 into the Ministry of Agriculture, Livestock and Fisheries (MoALF) with three State Departments each headed by a Principal Secretary reporting to one Cabinet Secretary. The regulatory framework governing Kenya's agriculture is also undergoing significant legislative reforms following the coming into force of newly enacted laws - the Agriculture, Fisheries, and Food Authority (AFFA) Act 2013, the Crops Act (2013), and the Agricultural and Livestock Research

²⁵ The Constitution of Kenya, 2010, Republic of Kenya

²⁶ Government of Kenya (2008). Kenya Vision 2030: A Globally Competitive and Prosperous Kenya. The Government of the Republic of Kenya.

²⁷ Second Medium Term Plan (2013-2017). Ministry of Devolution and Planning. Government of Kenya (2013)

²⁸ MENR (2014). Project Concept Notes. Nairobi, Kenya (discussion paper for development partners)

²⁹ Devolution in Kenya: Opportunities and Challenges for the Water Sector. Water and Sanitation Program: Policy Note, September 2013

³⁰ Republic of Kenya 2014. Water Bill 2014 (released by Parliament).

Act (2013) among others. These new laws are expected to transform Kenya's agricultural sector into a commercially oriented and internationally competitive industry. They unified the 131 laws that have governed agriculture in the past and, once implemented, will merge the 24 state corporations associated with agriculture into a single regulating entity (the Agriculture, Fisheries and Food Authority – AFFA). Already, KARI has undergone structural reforms, creating the Kenya Agricultural and Livestock Research Organization (KALRO) with six theme-based research institutes (<http://www.kalro.org>). Under the new regulatory framework, AFFA will now oversee operations of Kenya's agricultural sector, which includes: licensing and law enforcement; farmer registration to enable the country to better provide services such as training and extension; a checks and balances system to allow Kenya meet international standards and agreements; and policy guidelines on agricultural issues that local entities must implement in order to ensure that national standards and policies remain consistent country-wide. At the devolved level, the powers of the county include (a) crop and animal husbandry, (b) livestock sale yards, (c) county abattoirs, (d) plant and animal disease control, and (e) fisheries.

17. With regard to **Catchment Protection**, an important legal instrument for the protection of Kenya's environment and biodiversity is guided by the Environmental Management and Coordination Act³¹. EMCA contains several provisions that could be used to promote the conservation of forests and biodiversity, including conservation easements, restoration orders, and environmental impact assessment. On protection and conservation of the environment, EMCA regulations cover the protection of forests, rivers, lakes, wetlands, traditional interests, hill tops and hill sides, mountain areas and forests. It also covers the reforestation and afforestation of hill tops, hill slopes and mountainous areas and planting of trees or woodlots. Further, the Act covers the conservation of biological diversity (in situ and ex-situ) and energy conservation. Among other things, NEMA has developed national guidelines to encourage the identification and designation of environmental easement areas (ESAs), including biodiversity. Potential ESAs therefore include areas which contain the variety and variability among all living organisms from all sources, and the ecological complexes of which they are a part and the diversity within and among species, and ecosystems: areas which contain significant, rare or endangered plant or animal species.

18. The Water Resources Management Authority (WRMA) is in charge of developing and implementing Catchment Management Strategies (CMS) for the six water catchments in Kenya. A CMS is the framework for the management of the water- and related land resources in the catchment and it outlines how the concept of Integrated Water Resources Management can be implemented at the catchment level. For the whole of the Tana catchment area, the current CMS covers 2014-22, a recent update requested by Kenya's Vision 2030.

³¹ The Environmental Management and Co-ordination Act (EMCA No.8 of 1999), Government of Kenya

Appendix 2: Poverty, targeting and gender

Poverty

1. According to the latest Kenya National Bureau of Statistics poverty survey, about 46% of Kenyans lived in poverty in 2005, the incidence being higher (49.1 per cent) in rural areas, which host roughly 83% of poor people. The poverty line in 2005/2006 was 1,562 Kenya shillings (KES) per month per adult equivalent for rural areas, while the food poverty line was KES 988. The Long Rains Assessment Report 2011 by the Kenya Food Security Steering Group (KFSSG) indicates that approximately 12% of the rural population is food insecure, most of it being communities living in ASALs.³²

2. The 2005/06 poverty survey revealed strong regional disparities in the distribution of poverty. The lowest incidence of rural poverty was in Central Province (30.3%), followed by Nyanza (47.9%), Rift Valley (49.7%), Eastern (51.1%), Western (53.2%), Coast (69.7%), and North Eastern (74.0%). The fragile arid and semi-arid lands (ASALs) which make up more than 80% the country's land mass and are home to over 30% of the population, have the highest incidence of poverty averaging about 65% and very limited access to basic services. National absolute poverty declined from 52.3% in 1997 to 46.1% in 2005/06. This level of poverty is considered high in comparison to neighbouring countries such as Tanzania (36%) and Uganda (31%). About 6.5 million people are considered as hard-core poor, i.e. they are chronically food insecure even if they were to forego all non-food expenditure. The Kenyan society is characterised by wide income disparities, with the poorest 20% of the rural population receiving only 3.5% of rural income.

3. The majority of the rural poor live in the medium-high potential areas (MHP) that cover only about 20% of the country but often have a high population density rate (up to 10 times the national average); however, the ASAL areas have the lowest development indicators and the highest incidence of poverty. Causes of poverty include: low agricultural productivity and poor market access and marketing; insecurity leading to loss of property; unemployment and low wages; lack of capital to facilitate self-employment; poor governance; land issues; limited rural infrastructure incl. bad roads; high cost of health services and education; and HIV/AIDS that is negatively affecting the most productive segment of the population. Women are more vulnerable to poverty than men because of their unequal access to social services and economic assets.

4. Among the poorest households have to be included: the landless; those who own land but do not have access to other means of production; those who own land but face labour constraints that make it difficult or impossible to farm; households headed by women or old people; and youth-headed households mainly as a result of HIV/AIDS.

National Rural Poverty Reduction Strategy

5. The rural poverty reduction strategy for Kenya is captured mainly in the following seven policy documents:

- Kenya Vision 2030;
- National Policy for the Sustainable Development of Arid and Semi-Arid Lands (Kenya) (2007);
- Plan of Action (2008-2012) to Implement the National Policy on Gender and Development (2008);
- Kenya's third National AIDS Strategic Plan 2010-2013 (2009);

³² IFAD COSOP 2013.

- Comprehensive Africa Agriculture Development Programme (CAADP) Compact (2010); and
- Agricultural Sector Development Strategy (ASDS, 2010).

6. The Vision is hinged on three pillars: economic, to maintain sustained growth of over 10 per cent per annum over the 25-year period 2005-2030; social, to achieve equitable social development in a clean and secure environment; and political, to develop an accountable, democratic political system. Under the economic pillar, the vision is to transform agriculture into a commercially oriented, modern sector by reforming institutions, increasing productivity, transforming land, developing ASALs and increasing market access. Accordingly, the priorities of the ASDS include transforming key institutions to promote agricultural growth; increasing productivity; introducing land-use policies; developing more irrigable areas in ASALs; improving market access by smallholders; and adding value to agricultural products for various markets. The CAADP Compact has five strategic objectives, similar to the ASDS priorities: increasing productivity and promoting commercialisation and competitiveness; increasing market access; furthering sustainable natural resource management (NRM); reforming institutions; and promoting private-sector participation in agricultural development.

7. The priorities identified for the agriculture sector during 2006-2015 by the National Policy for the Sustainable Development of ASALs include increased area under small-scale irrigation, improved extension services and produce marketing, and access to credit by farmers' associations. The Plan of Action to Implement the National Policy on Gender and Development aims to remove impediments to equal access to economic and employment opportunities for men and women, and promote sustainable livelihoods and environmental sustainability. The constitution requires that not more than two thirds of elective public positions may be occupied by one gender. The Kenya National AIDS Strategic Plan aims to reduce the number of new infections by at least 50%.

IFAD Targeting strategy

8. According to the 2013 COSOP, IFAD will mainly target ASAL and MHP agro-ecological areas. Poverty data at location level will be used to select focal development areas with large numbers of vulnerable people. Targeting will also consider the potential for scaling up. The core target group will consist of poor households depending on agriculture for their livelihoods and capable of generating a marketable surplus. The targeting strategy will focus on women, youth, agro-pastoralists and pastoralists who can benefit from an increase in their technical knowledge and organisational capacities to enhance their incomes.

9. **Agro-pastoralists** and pastoralists lack basic services, public and private investment in infrastructure and economic development, combined with poor access to markets and insecurity, in which the more vulnerable in society (pastoralist women in particular) are the easy victims. Cyclical droughts cause massive livestock losses for pastoralists, with cattle losses as high as 95 per cent during rain deficient years. Pastoralists and agro-pastoralists can be supported through improvements in water provision, innovative and intensive grazing and range management, animal health, irrigation development, marketing and value addition as well as diversification of livelihoods for men and women. In this regard, the poor inhabitants of ASAL areas will also require specific targeting in line with the nature of their needs and the demands of their environment. Most of the interventions in ASALs will be through grants.

10. Since most interventions involve groups, measures will be promoted that enable those with very small plots and major production constraints, such as youths who have received some land through subdivision and women who have been left with a small plot, to join those groups and access technical advice, benefit from the mutual assistance that is a common feature among group members, and to sell produce jointly. Another approach will be to focus on different enterprises, including activities requiring low investment and carrying low risk, which are more likely to appeal to the poorer producers. During group capacity development, aspects will be emphasised that are likely to be weak among the poorer group members, such

as basic production and financial records. Special attention will consistently be given to the participation of women, for example regarding the number of female members among group executive leadership, and skills development of and roles played by women.

11. Market-oriented production is often labour intensive, and a focus on commercialisation will increase seasonal employment opportunities for the poorest, both in carrying out farm operations at individual farms and related to administrative and post-harvest tasks at group level. In addition, work programmes are a tested approach to poverty alleviation, and construction of roads and other infrastructure by small contractors using local labour will create employment opportunities for the poorest. Finally, interventions related to important cross-cutting issues, such as HIV/AIDS, hygiene and nutrition, and environmental degradation and conservation, as well as for special interest groups, will be integrated in sensitisation and extension activities.

Targeting in the UTNWF context

Geographic Targeting

12. Prior piloting investments in the Upper Tana catchment were undertaken in 2012-15, based on a modelling approach linking spatial prioritisation (resource investment optimisation system, RIOS) with an impact assessment for soil and water (soil and water assessment tool, SWAT) and an analysis on return on investment (ROI). By employing a set of core indicators such as biophysical effectiveness, feasibility, stakeholder preferences, cost-effectiveness per activity, a baseline of priority locations and most promising SLM activity areas in the upper Tana catchment was established.³³

13. The priority target area for UTNWF is located in the three counties of Muranga, Nyeri and Nyandarua, covering an area of 17,000 km² and is hydrologically delineated as three major sub-catchments, the Sagana-Gura, Maragua, and Thika Chania.

14. The Nature Conservancy, together with CBOs and NGOs, e.g. local Water Resources User Associations (WRUAs) or the Green Belt Movement, over the last three years successfully promoted pilot SLM interventions in the Upper Tana catchment, based on the above-mentioned modelling, particularly in areas such as vegetation buffer zones along river banks, agroforestry, terracing of steep and very steep farmlands, grass buffer strips in farmlands, reforestation of degraded lands at forest edges, and erosion mitigation from dirt roads.

Poverty Targeting

15. The project will follow the overall national and IFAD poverty targeting approaches and guidelines. In doing so, the project will apply the following poverty targeting criteria, among others: a) extent of environmental degradation; b) vulnerability to land degradation; c) poor rural infrastructure; d) access to safe water; e) food security.

16. To allow for a focussed poverty targeting and monitoring of relevant socio-economic parameters from project start, including for gender disaggregated livelihoods, the existing baseline data will be complemented by IFAD's Multidimensional Poverty Assessment Tool (MPAT). The MPAT tool kit will be expanded to account for an appropriate gender analysis and will include the Women's Empowerment in Agriculture Index (WEAI). Further, to incorporate indicators and monitoring tools for vulnerability, resilience and adaptation, tools and concepts from the STAP's Resilience, Adaptation Pathways and Transformation Assessment Framework (RAPTA) will be incorporated into the MPAT.

³³ TNC, 2015. Upper-Tana Nairobi Water Fund Business Case. Nairobi, Kenya.

Gender

Gender and Agriculture in Kenya

17. Traditional norms have in the past and continue at present to disadvantage both women and youth in Kenya, in terms of access to resources and decision making. For instance, only 29% of those earning a formal wage throughout the country are women, leaving a huge percentage of women to work in the informal sector. Furthermore, 54% of agricultural workers are women providing the bulk of the labour force in agriculture³⁴. Yet few women own assets such as land. As a result, poverty in Kenya has a gender and age dimension, due to the gender disparities that exist in terms of access, ownership and control of productive resources, as well as differences in capabilities.

18. Eighty percent of the Kenyan population derive their livelihoods directly or indirectly from agriculture. Although women do the bulk of agricultural work, the majority of agricultural extension service workers funded through the budget are males who may not be able to reach female farmers due to cultural constraints. Women in Kenya own between 1-5% of land titles. They contribute up to 80% of all labour in food production, but receive only 7% of agricultural extension information. Eighty percent of rural Kenyan women spend between 1-5 hours per household per day searching for fuel wood. In terms of decision making only 7.3% (2007) of parliamentarians are females.

19. The youth comprise 36% of the national population but alarmingly 61% of them remain unemployed³⁵. About 92% of the unemployed youth lack vocational or professional skills demanded by the job market. Despite their numerical weight, the youth are not well represented in the national and local political and socio-economic development processes. Lack of access to land and dissatisfaction with agricultural production as a livelihood strategy especially among rural males limits their livelihood options. Yet it is the youth who are most energetic, better educated and more technology savvy. Thus, their exclusion represents untapped potential for increased adoption of productivity-enhancing farming technologies.

National Commitments to Gender Equality

20. Kenya has ratified various international³⁶ and regional protocols³⁷ on gender equality and women empowerment. Nationally, both the National Gender and Equality Commission Act enacted from 2011, as well as the new Constitution (2010) promote gender equality and women empowerment. Women's participation in leadership, governance and decision-making was pegged at a minimum of 30% by the constitution. This helped increase women's presence in leadership from 20.5% in 2008 to 38.6% in 2012 due to the affirmative action measures. Notably the inclusion of gender mainstreaming in the performance contracting process helped strengthen accountability on gender equality in public service.

21. The National Gender and Equality Commission Act – 2011 aims at institutionalising The Kenya National Policy on Gender and Development (NPGD) of 2000. With the reorganisation of the Kenyan Government in 2013, coordination of gender issues was strategically placed under the Presidency, Ministry of Devolution and Planning. The Directorate of Gender was created in the Ministry to promote gender mainstreaming in national development processes and champion socio-economic empowerment of women. Current priorities for the Ministry include: Developing and implementing the National Equality Policy, the National Affirmative Action Policy and the National Policy on Gender and Development; review and implement an action plan for implementation of the National Gender and Development Policy; finalize the National Policy on Prevention and Response to Gender Based Violence and develop an action

³⁴ Kenya Labour market profile, 2014. Danish Trade Union Council for International Development Cooperation

³⁵ Second Medium Term Plan (2013-2017). The Presidency and Ministry of Devolution and Planning

³⁶ Convention on the Elimination of All Forms of Discrimination against Women. UN General Assembly, 1981

³⁷ Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa. African Union, 1995.

plan for its implementation; formulate a framework to implement the Supreme Court ruling on 2/3 Gender Rule.

22. The Kenya National Youth Policy (2007) aims at enhancing youth participation in national development goals and ensures that programs are sufficiently well coordinated to address the interests of youth. Specific objectives of the National Youth Policy include sensitising policymakers to the need to identify and mainstream youth issues in national development, identifying ways to empower youth, and exploring ways of engaging youth in economic development. However, it is important to note that Agriculture and Rural Development is missing in the policy and hopefully, the planned review of the policy will address these issues. Youth affairs have also been placed under the Directorate of Youth in the Ministry of Devolution and Planning.

23. Despite the existence of the policies, legislative reforms, plans and programmes, gender inequalities continue to exist in legal, social, economic and political levels of participation in decision making, access to and control of resources, opportunities and benefits. Gender and poverty analysis studies show that there are gender gaps in virtually all the core dimensions of poverty - opportunities, capabilities, empowerment and security. Similar issues continue to prevail for equal opportunities for youth.

Gender Issues in the UTNWF context

24. At project start, socio-economic survey will be conducted to complement the existing baseline, currently mainly focussing on agro-ecological issues. To be able to account for socio-economically determined inequalities, including poverty, gender and youth issues, the IFAD MPAT will be incorporating core indicators of the Women's Empowerment in Agriculture Index (WEAI), developed by IFPRI. Among others, the WEAI allows to track women's engagement in agriculture in five areas: production; resources; income; leadership; and time use. It also measures women's empowerment relative to men within their households, providing a more robust understanding of gender dynamics within households and communities.³⁸

25. Based on these datasets, UTNWF will make strategic investments to initiate activities that enhance women's empowerment, which in turn is closely linked to issues such access to land and water, production resources, credit, alternative energy sources, technology, vulnerability and resilience, information and markets. The project will therefore explore entry points for engaging with women and youth so as to create and sustain alternative livelihoods and economic opportunities for them. Capacity development activities will especially promote women's leadership in various rural organisations (such as farmers' organisations, water users' organisations). Such capacity will include access to the latest technological information regarding agriculture, production and natural resource management as well as an understanding of the socio-economic and policy issues that affect them.

26. Women and youth groups will be encouraged to engage in project activities and in confidence building and other capacity development strategies to empower women and youth to participate in rural decision making processes. Currently, there is a presidential directive in Kenya requiring 30% participation of women at all levels. However, quotas need to be implemented with other empowering measures. The project will conduct institutional mapping within the project area and strengthen its linkages with other organisations (NGOs, development agencies, relevant government ministries) in order to provide linkages for community members to relevant county agencies and services, even if this is beyond the scope of the project.

³⁸ For more detail, please refer to IFPRI's WEAI resource center: <http://www.ifpri.org/topic/weai-resource-center>

Attachment 2.1: IFAD's targeting policy: Checklist for Design

Policy criterion	Design
1) Does the main target group - those expected to benefit most- correspond to IFAD's target group as defined by the Targeting Policy	Based on the criteria outlined in the Kenya 2013 COSOP, the project will target food deficit households and poor and middle smallholder farmers, both men and women, whose livelihoods revolve around agriculture. Poverty data at location level will be used to select focal development areas with large numbers of vulnerable people. Targeting will also consider areas where biophysical degradation is most severe.
2) Have target sub-groups been identified and described according to their different socio-economic characteristics, assets and livelihoods - with attention to gender and youth differences?	Prior piloting investments in the Upper Tana catchment were undertaken in 2012-15, based on a modelling approach linking spatial prioritisation (resource investment optimisation system, RIOS) with an impact assessment for soil and water (soil and water assessment tool, SWAT) and an analysis on return on investment (ROI). By employing a set of core indicators such as biophysical effectiveness, feasibility, stakeholder preferences, cost-effectiveness per activity, a baseline of priority locations and most promising SLM activity areas in the upper Tana catchment was established.
3) Is evidence provided of interest in and likely uptake of the proposed activities by the identified target sub-groups? What is the evidence?	The pilots were conducted together with local NGO and CBO, ensuring involvement and identification of different target groups according to socio-economic status and vulnerabilities and related to needs and expectations for a good uptake of project activities.
4) Does the design document describe a feasible and operational targeting strategy in line with the Targeting Policy, involving some or all of the following measures and methods:	The targeting strategy is described in this design document and its Appendix 2.
4.1) Geographic targeting – based on poverty data or proxy indicators to identify, for area-based projects or programmes, geographic areas (and within these, communities) with high concentrations of poor people	See above #2 and #3
4.2) Direct targeting - when services or resources are to be channelled to specific individuals or households	Special attention will be given to women as a target group, which is reflected by the selection of crops that promote food and nutrition security as well as in small stock; but also in the choice of value chains for marketing. Targeted commodities are not labour intensive and do not require huge investments and technical expertise.
4.3) Self targeting – when goods and services respond to the priority needs, resource endowments and livelihood strategies of target groups	
4.4) Empowering measures - including information and communication, focused capacity- and confidence-	The use of GEF resources will provide an institutional infrastructure that will ensure the flow of long term funding to protect the Upper Tana Catchment and ensure interventions developed and promoted to specific target groups in the

Policy criterion	Design
building measures, organizational support, in order to empower and encourage the more active participation and inclusion in planning and decision making of people who traditionally have less voice and power	<p>UNTaNRMF and KCEP-CRAL projects are scaled out throughout the catchment.</p> <p>The Project will invest in an information system that is specifically aimed at engaging with a school awareness programme as well as information centres at county and federal level. These aim at incorporating community level decision making in county resource management processes and to bring experiences in integrated resource management at decentralized level into the policy arena at federal level.</p>
4.5) Enabling measures –to strengthen stakeholders’ and partners’ attitude and commitment to poverty targeting, gender equality and women’s empowerment, including policy dialogue, awareness-raising and capacity-building	Barriers to women and youth’s participation in the planning process will be identified and addressed. Opportunities for local construction and repair services rooftop (rainwater harvesting) and farm mechanisation will be linked to support to young people willing to establish local enterprises.
4.6) Attention to procedural measures - that could militate against participation by the intended target groups	
4.7) Operational measures - appropriate project/programme management arrangements, staffing, selection of implementation partners and service providers	CBO and NGO that have longstanding experience in collaborating with the intended target groups are partners in designing and delivering project activities; the preceding three-year pilot activities were well-received and provide a good baseline for realistic expectation management.
5) Monitoring targeting performance. Does the design document specify that targeting performance will be monitored using participatory M&E, and also be assessed at Mid-term review? Does the M&E framework allow for the collection/analysis of sex-disaggregated data and are there gender-sensitive indicators against which to monitor/evaluate outputs, outcomes and impacts?	<p>The baseline surveys, MPAT and PRAs to be conducted as part of the project’s start-up activities will include a gender analysis and will include the Women’s Empowerment in Agriculture Index (WEAI). This will be enhanced through the use of the Ex-ACT GHG audit tool to make initial assessments (see first outcomes in Appendix 11) and be complemented by more detailed carbon assessments at the LDSF network is established.</p> <p>This will facilitate the tracking of poverty targeting and contribution to gender equality and women empowerment (GEWE) especially at MTR and project completion.</p>

Attachment 2.2: IFAD'S Gender policy: checklist for design

Policy criterion	Design
1. The design document contains – and programme implementation is based on - gender-disaggregated poverty data and analysis of gender differences in the activities.	The PDR, annexes and working papers provide detailed analysis of gender issues. Given that subsistence and smallholder farmers are mainly women, particular emphasis will be placed on ensuring their active participation in programme activities. The choice for development of value chains in food crops and small stock is biased towards women.
2. The design report articulates actions with aim to: Expand women's economic empowerment through access to and control over productive and household assets; Strengthen women's decision-making role in the household, community, and representation in local institutions; Achieve a more equitable balance in workloads and sharing in social and economic benefits.	<u>Control over productive assets:</u> Rainwater harvesting for domestic use will reduce women's time and labour use in fetching water. Increased availability of water at household level will broaden agricultural production options and improve livelihood options. <u>Decision-making:</u> Partner NGO and CBO already employ gender-sensitive decision making processes. Special emphasis will be given to ensure active participation of women, youth and marginalized groups in decision making processes and selection of project activities. <u>Equitable benefits:</u> Across programme activities, attention will be given to addressing priorities of households that may be marginalised or disadvantaged and less endowed but capable to participate (female-headed, HIV/AIDS-affected and youth-headed households, etc.). The household approach that emphasized joint household visioning will support equitable sharing of workloads and benefits at the household level.
3. The programme identifies at least one gender-specific objective supported by clear budget allocations	Household mentoring approach will be used for vulnerable households
4. The design document describes operational measures to ensure gender- equitable participation in, and benefit from, project activities. These will generally include:	The PDR outlines a range of operational measures as described below for ensuring gender equitable participation in and benefit from programme activities. These will be implemented under the framework and in support of the government's national gender policy.
4.1 Allocating adequate resources to implement the gender strategy	Government staff and focal points dealing with gender and women's empowerment, supported by out-sourced NGO and private sector service providers will support programme implementing agencies to mainstream gender in all programme activities.
4.2 Ensuring and supporting women's active participation in project-related decision-making bodies and committees	There will be no minimum level for female participation in both project and water fund committees. Participation will be closely monitored, and outcomes will be used in review workshops.
4.3 Ensuring that programme management arrangements (composition of PIU, terms of reference, etc.) reflect attention to gender equality and women's empowerment concerns	During the Project's start-up phase: A detailed gender and youth action plan/strategy will be developed based on the socio-economic data collected during baselines but more importantly with all the service providers. This will ensure that besides the PIU, the service providers will be required to demonstrate poverty targeting as well as contribution to gender equality and women's empowerment. Engagement of CBO and NGO as project partners will further contribute to pay close attention to gender equality – as already experienced during the pilot activities.
4.4 Ensuring the programme engages and works with men to address gender inequities to support more effectively women's participation in, and benefits from the programme	

Policy criterion	Design
5. The logical framework and M&E system specify in design – and M&E unit collects and analyses gender-disaggregated performance and impact data.	<p>The people-centred indicators of the logical framework are disaggregated by gender and age.</p> <p>Gender and youth disaggregated performance and impact data will be followed through from the baseline studies, internal reports, to and including supervision and evaluation reports.</p>

Appendix 3: Country performance and lessons learned

1. **Experiences from previous IFAD projects in Kenya:** IFAD has extensive experience in Kenya, having implemented development projects that have a poverty targeting, food security as well as catchment conservation focus. Among these include closed projects such as; (i) Mount Kenya East Pilot Project for Natural Resource Management (MKEPP); (ii) Green Water Credits (GWC); (iii) Central Kenya Small Holder Dry Areas Project (CKDAP); (iv) South Nyanza Community Development Project (SNCDP), and (v) Programme for Rural Outreach of Financial Innovations and Technologies (PROFIT). Also, there are on-going projects such as; (i) Smallholder Dairy Commercialization Programme; (ii) Smallholder Horticulture Marketing Programme, (iii) Upper Tana Catchment Natural Resources Management Project (UTaNRMP), and the recent (iv) Kenya Cereal Enhancement Programme - Climate Resilient Agricultural Livelihoods Window (KCEP-CRAL). A number of these projects have laid the background for the current UTNWF project, more specifically the GWC, MKEPP, UTaNRMP and KCEP-CRAL. The findings from a review of the Country Performance Reports (PCRs) provided lessons for the design of UTNWF. In addition, during the design mission, an assessment of the degree of practical implementation of the regulatory frame work based on UTaNRMP and KCEP-CRAL was undertaken in order to draw lessons to be applied the new project, based on the fact that UTNWF will be operating under similar devolved policy and institutional arrangement dealing with multiple counties in two water towers; Mt. Kenya and the Aberdares Range.

2. **Project Design:** The design of UTNWF has been informed by lessons learned from relevant IFAD-assisted and other projects on agriculture and natural resources management, ecosystem restoration and related activities in the Upper Tana catchment and elsewhere. Notable examples include the on-going UTaNRMP and its predecessor the MKEPP. However, the UTNWF will be the first water fund to be established in Kenya, and in Africa, designed to facilitate catchment protection and restoration, and largely financed by private sector to get the quality and supply of water from one of Kenya's most productive and economically important regions; the Upper Tana River basin which covers approximately 17,000 km² and is home to 5.3 million people. Therefore, the project design has also gathered from other projects which have a focus on incentives for water/ecosystem conservation, implemented within the same zones. These include the IFAD-supported GWC, which pioneered PES schemes in Kenya in 2006. Others include the Pro-Poor Rewards for Ecosystem Services (PRESA) implemented by ICRAF and WRMA's Natural Resources Management Programme (NRMP), among others.

3. **Gender and youth focus:** Lessons from UTaNRMP show that the following strategies are important for gender and youth integration: (i) using community-based groups as an entry point for the project's interventions; (ii) setting quotas for access by women and youth to project services and activities supported by actions that facilitate their participation (such as, facilitating women with babies to attend with their baby sitters during trainings, and making 30% of leadership come from women); (iii) arranging trainings or meetings at convenient times for women; (iv) introducing gender- friendly technologies such as dairy goats, poultry, labour-saving technologies such as increased access to water and energy-saving devices; (v) supporting diversification and introducing improved breeds and seeds; (vi) using gender-sensitive Participatory Rural Appraisal methodologies in the planning, implementation and monitoring processes; (vii) supporting training and access to credit; and (viii) sensitisation and capacity development on gender and other relevant areas. Furthermore youth and women, and more specifically women-headed households to benefit from direct targeting mechanisms guided by quotas for livelihood support.

4. **Public-Private Partnerships:** The UTNWF is a public-private-partnership of donors, the GoK, and major water consumers 'at the tap' contributing to an endowment fund to support

water and soil conservation measures 'at the top' of the catchment. The UTNWF project will be the first of its kind in Kenya and in Africa and thus draws lessons from international pioneers. The project design draws from experiences from South America, especially Ecuador, Brazil and Peru, where major cities, including Quito, Sao Paulo and Lima, are implementing successful water funds to help secure the water quality and supply while also rewarding upstream communities for SLM activities. This is because water funds are founded on the principle that it is cheaper to prevent some water problems at the source than it is to address them further downstream. Investments in green infrastructure using natural systems to trap sediment and regulate water often provide a more cost-effective approach than relying solely on grey infrastructure such as reservoirs and treatment systems. The conservation measures at the catchment level benefit local farmers through increasing agricultural yields by reducing soil erosion that is so damaging both to crop production, while also contributing to improvements in downstream water quality and supply. The concept for the Water Fund is very much in tandem with provisions of Kenya new constitution and laws specifically The Public Private Partnerships policy statement for Kenya, 2011 and the Public Private Partnerships Act, 2013.

5. **Community empowerment for SLM:** Lessons from UTaNRMP show that the following strategies are important for building the capacities of communities to develop and implement plans aimed at improving integrated natural resources management (INRM) while improving their livelihoods. This was the support provided towards capacity development initiatives at community level through mobilisation and awareness raising, establishing and strengthening key community structures and institutions, and development and implementation of community action plans. The main activities included; (i) sensitisation and awareness raising, (ii) establishment and strengthening of key community structures and (iii) preparation of community action plans for livelihood improvement and sustainable INRM. Meanwhile, community engagement takes place at three levels; (i) water resource user associations, (ii) focal development areas and (iii) community forest associations. The target results include: (i) communities with increased awareness of sustainable INRM, (ii) key community organisations with increased capacity to manage natural resources sustainably, and (iii) community action plans (CAPs) for livelihood improvement and sustainable INRM. Furthermore, communities are not empowered in isolation, but capacity development and awareness creation are implemented for county and sub-county staff. The lessons learned have been factored into the design of UTNWF.

6. **SLM and agro-ecosystems focus:** Important lessons were learned from the community based water resource management approach that was successfully piloted by MKEPP and the Natural Resources Management Programme (NRMP) of WRMA and being upscaled by UTaNRMP. It combines two sub-components; (i) sustainable management of water resources and (ii) sustainable management of forest and agricultural ecosystems. The project facilitates the establishment and/or empowerment of WRUAs – for water resources management, CFAs for forest and ecosystems management and FDA for targeted agricultural interventions. This clustering is not exclusive and farmers can belong to one or more groups. These groups are then supported to improve management of agricultural and forest lands. Activities are identified through participatory planning processes and may include; (i) tree planting/rehabilitation of degraded forest reserves, (ii) efficient use of fuel wood, (iii) soil and water conservation on farm lands (iv) water harvesting for supplemental irrigation, (v) water-saving irrigation technologies (vi) remedial works at environmental hotspots, and (vii) protection of riparian lands and wetlands.

7. **Climate change resilience:** The UTNWF project will work with public and private sector partners to establish the Water Fund as a sustainable financing mechanism to support sustainable land management and integrated natural resource management approaches in the Upper Tana catchment. Through its network of public agencies, NGO and CBO, the Project will support smallholder farmers in the Upper Tana catchment to adopt climate-smart sustainable land management practices, with the aim to increase food security and climate

adaptation potential at household level, to stabilise and restore ecosystem services of the targeted area and to improve water quality and quantity for both upstream and downstream water users. The project will address climate related stresses in the Upper Tana watershed that directly impact water supply for local farmers, Nairobi city and Kenya's hydropower generation. Thus, the UTNWF directly aims at developing and fostering adaptation pathways and resilience capacities of smallholder farmers.

8. **Adoption of Income Generating Activities:** The UTNWF project has a strong focus on poverty reduction. Taking lessons from previous IFAD projects, specific income generation activities (IGAs) will be identified during start-up phase of the project. The adoption of the IGAs will be supported by the endowment fund and through community contributions depending on the nature of the group, with groups of vulnerable members of the community contributing a lower proportion. While communities apply for support by submitting proposals, SLM or water conservation potential of IGAs will be among the main selection criteria, as derived from the lessons learned in the pilot phase of the UTNWF. Value addition at every node in the produce value chain helps improve on shelf life, preservation, palatability and market value and will thus be emphasised. Supporting market access for surplus produce and cash crops will equally improve utilisation and value and also reduce wastage.

9. **Adaptive Research and Demonstrations:** This aims at addressing technical and knowledge constraints to improving livelihoods and ecosystem restoration in the project target areas. It involves partnerships with research institutes, especially the universities and the Kenya Agricultural and Livestock Research Organization (KALRO), to undertake applied research together with other relevant government agencies, e.g. the Horticultural Crops Development Authority (HCDA). The project will assess water saving/conservation technologies as well as options for profitable and climate-resilient agriculture at household level.

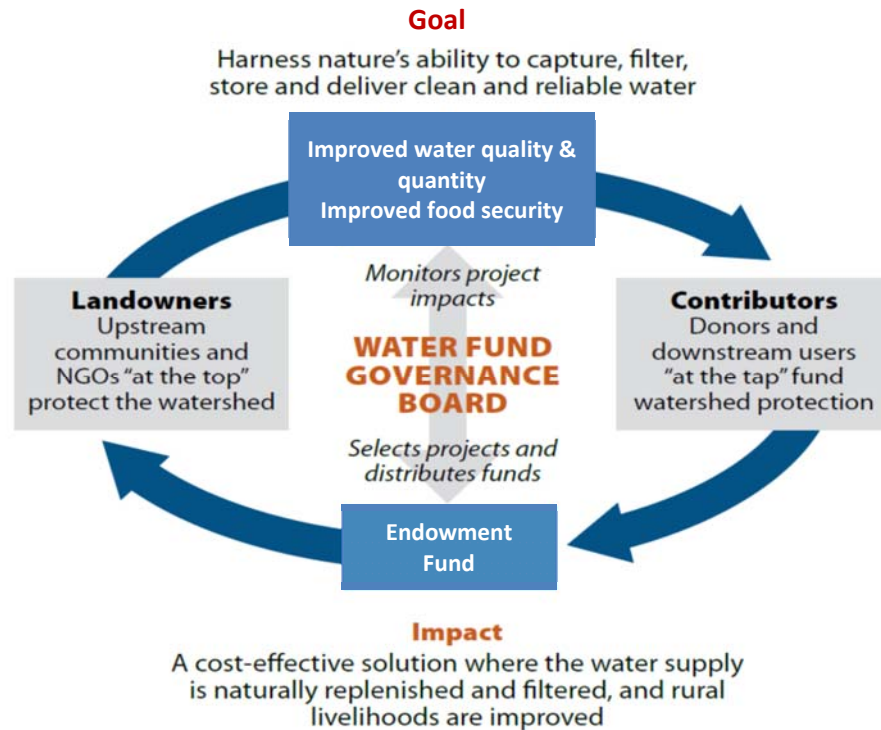
Appendix 4: Detailed project description

Background and rationale

1. **The GEF Integrated Approach Programme (IAP)** on Fostering Sustainability and Resilience for Food Security in Sub-Saharan Africa is one of three integrated approaches that were agreed as part of the sixth replenishment of the GEF. The Food Security Integrated Programme (FSIAP) will target agro-ecological systems where the need to enhance food security is directly linked to opportunities for generating global environmental benefits. The programme aims to promote the sustainable management and resilience of ecosystems and their different services (land, water, biodiversity, forests) as a means to address food insecurity. At the same time, it will safeguard the long-term productive potential of critical food systems in response to changing human needs. The FSIAP will be firmly anchored in local, national and regional policy frameworks that will enable more sustainable and more resilient production systems and approaches to be scaled up across the targeted geographies. The UTNWF project represents one of the 13 national projects under the joint IAP umbrella programme.
2. Forests and wetlands in the Upper Tana play an important role in maintaining water quality and quantity, providing areas where runoff water and sediment can be stored and filtered naturally. However, since the 1970s, forests on steep hillsides and areas of wetlands have been converted to agriculture. As a result, sedimentation is becoming a serious problem, reducing the capacity of reservoirs and increasing the costs for water treatment. Today, 60% of Nairobi's residents are water insecure. The challenges to water security will likely grow as climate change brings increasingly unpredictable rainfall, equally challenging the resilience and food security of upstream smallholder farmers.
3. For greater clarity, the conceptual and institutional framework for project implementation has to be determined from the outset:
 - **UTNWF** – Whenever the abbreviation for the Upper Tana-Nairobi Water Fund is used, this refers to the GEF-financed project under the FSIAP umbrella programme.
 - **WF** – The abbreviation, or the use of the capitalised *Water Fund* signifies the institution and organisational arrangements to be set up with the support of the UTNWF project. This distinction is important, because the principle of sustainability inherent to the water fund concept requires that organisational structures, management staff, knowledge and experiences instituted or gathered throughout project implementation be merged with this newly established body during project lifetime, i.e. UTNWF will increasingly merge into the WF during project lifetime, with the aim of a full fusion by project end, so that the WF continues to support conservation measures in the Upper Tana basin without requiring inputs or investments from the then ceased UTNWF.
 - **Water fund** – Refers to the concept of water funds, i.e. the financing mechanism supported by downstream users to support water quality and quantity through upstream conservation measures.
4. Water funds are founded on the principle that it is cheaper to prevent water problems at the source than it is to address them further downstream. Investments in green infrastructure using natural systems to trap sediment and regulate water often provide a more cost-effective approach than relying solely on grey infrastructure such as reservoirs and treatment systems. Water funds have been successfully implemented elsewhere in the world to help secure the water quality and supply of major cities including New York, Quito, Rio de Janeiro, and Lima, among others. The Upper Tana-Nairobi Water Fund will be the first of its kind in Africa. The UTNWF as a public-private-partnership of donors and major water consumers 'at the tap' contribute to the endowment to support water and soil conservation measures 'at the top'. These measures benefit local farmers through increasing agricultural yields, food security and

incomes by reducing soil erosion that is so damaging both to crop production and to downstream water quality and supply.

Figure 1: The Water Fund Concept

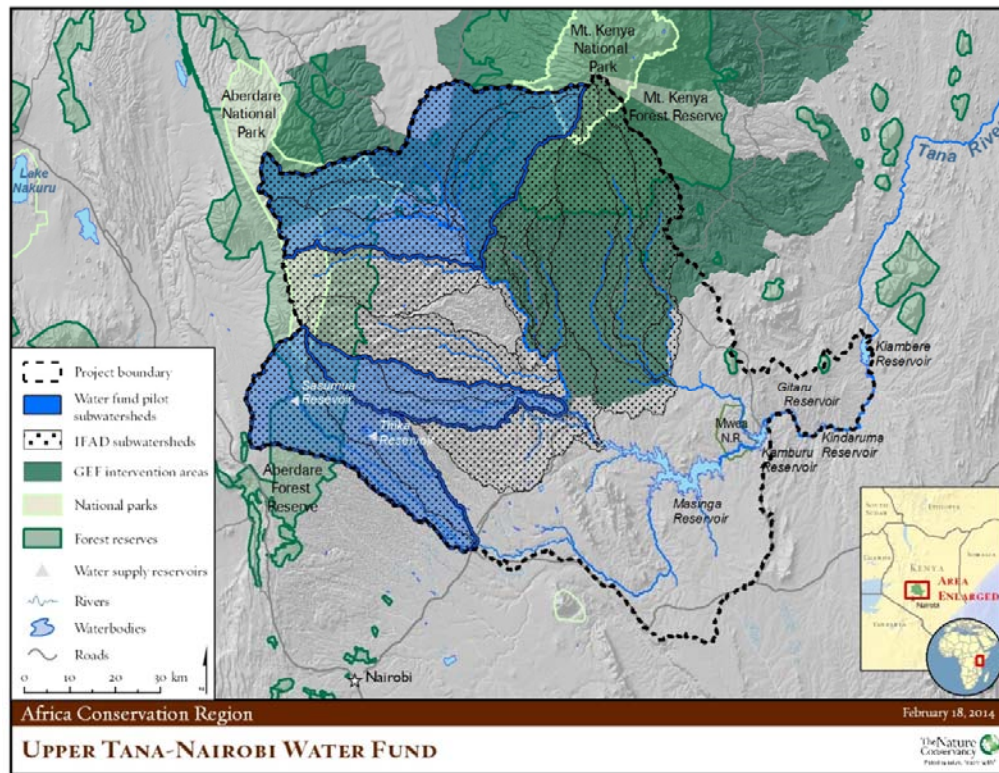


Project area and target group

5. In Kenya, the integrated approach of the Programme will be piloted in three counties of the Upper Tana River basin (Muranga, Nyeri and Nyandarua, targeting in particular three priority sub-watersheds, i.e. Sagana-Gura, Maragua and Thika-Chania), which covers 17,000 km² with 5.3 million inhabitants. This basin includes two of Kenya's five "water towers": the Aberdare Mountains and Mount Kenya. It is home to critical indigenous flora and fauna and sustains important aquatic biodiversity and drives agriculture that feeds millions of Kenyans. Although the water towers lie largely within protected areas, further downstream the river is being choked by sediments and dry season flows are depleted due to poor land and water management practices. Millions of people and the iconic wildlife that depend on the river bear the brunt of these impacts. This is amplified by the impacts of climate change that increases sediment load in times of severe rainfall events which are of increased frequency.

6. The Project will work with public and private sector partners to establish the Water Fund as a sustainable financing mechanism to support sustainable land management and integrated natural resource management approaches in the Upper Tana catchment. Through its network of public agencies, NGO and CBO, the Project will support smallholder farmers in the Upper Tana catchment to adopt climate-smart sustainable land management practices, with the aim to increase food security and climate adaptation potential at household level, to stabilise and restore ecosystem services of the targeted area and to improve water quality and quantity for both upstream and downstream water users.

Figure 2: Project area map



7. UTNWF builds upon both past and current investment programmes that have supported integrated development and food security in the Upper Tana River basin with the Government of Kenya, including past GEF3 financing (Mount Kenya Environmental Pilot Project, MKEPP). The current IFAD investment programmes are the Upper Tana Catchment Natural Resources Management Project (UTaNRMP) and the Kenya Cereal Enhancement Programme - Climate Resilient Agricultural Livelihoods Window (KCEP-CRAL).

8. UTNWF adds value to, and provides an outcome pathway and long term sustainability for UTaNRMP and KCEP-CRAL. To ensure coherence with UTaNRMP and KCEP, the UTNWF design team reviewed the implementation arrangements of the two projects in developing its own manuals for project implementation (PIM), financial management (FMM) and procurement (PM).

9. The three components of UTNWF provide close linkages and add value to both to UTaNRMP and KCEP-CRAL, and vice versa. For instance, to enhance ecosystem services and agricultural production for food security beyond household subsistence levels, UTNWF will build upon lessons learned and smallholder value chain networks established and supported by KCEP-CRAL. Below matrix highlights how these projects mutually support each other in achieving their results.

Table 1: Linkages of UTNWF, UTaNRMP and KCEP-CRAL

	UTNWF component 1: Water Fund establishment	UTNWF component 2: Ecosystem Services support livelihoods	UTNWF component 3: Knowledge management and M&E	UTNWF Project Management
UTaNRMP component 1: improved community-based water resources management	PES for SLM and INRM	Rainwater harvesting Riparian management	Lessons in SLM and INRM Lessons learned Baseline data	
UTaNRMP component 2: Reversed land degradation process	PES for SLM and INRM	Erosion control Irrigation works	Lessons in SLM and INRM LDSFs Lessons learned Baseline data	
UTaNRMP component 3: Increase in household incomes	PES for SLM and INRM	Increased food production Increased resilience	Lessons in SLM and INRM Lessons learned	
UTaNRMP component 4: Project coordination and monitoring			Land degradation monitoring	National SLM capacity
KCEP-CRAL component 1: Sustainable increase in production and improved climate change resilience with sustainable SLM	PES for SLM and INRM	Increased food production Food value chains Increased resilience	Lessons in SLM and INRM LDSFs GIS mapping capacities	Local capacity development and local planning
KCEP-CRAL component 2: Improved post-harvest management and market linkages for smallholders	PES for SLM and INRM	Improved food security Food value chains Improved adaptation capacities		
KCEP-CRAL component 3: Improved access to financial services	PES for SLM and INRM Strengthened food value chains			

Project structure

10. The goal of the Project is that *the Upper Tana-Nairobi Water Fund as a Public-Private-Partnership increases investment flows for sustainable land management and integrated*

natural resource management in the Upper Tana catchment. As such, UTNWF will contribute to the overall objective of the IAP, i.e. to support countries in target geographies for integrating priorities to safeguard and maintain ecosystem services into investments improving smallholder agriculture and food value chains, through the below implementation structure:

11. **Development Objective:** A well-conserved Upper Tana River basin with improved water quality and quantity for downstream users (public and private); maintaining regular flows of water throughout the year; enhancing ecosystem services, specifically for food security, freshwater and terrestrial biodiversity, and improving human well-being and quality of life for upstream local communities.

Component 1: Water Fund Management Platform institutionalised

- Outcome 1.1: Multi-stakeholder and multi-scale platform supports policy development, institutional reform and upscaling of INRM
- Outcome 1.2: Policies and incentives support climate-smart smallholder agriculture and food value chains in financially viable and sustainable watershed stewardships

Component 2: Improved Upper Tana catchment ecosystems that support livelihoods, food security and economic development

- Outcome 2.1: Increased land area, freshwater, and agro-ecosystems under INRM and SLM

Component 3: Robust knowledge management and learning systems implemented to direct UTNWF management and share lessons both nationally and regionally

- Outcome 3.1: Institutions capacitated to monitor GEBs
- Outcome 3.2: M&A framework supports the integration of climate resilience into policy making
- Outcome 3.3: Knowledge management and sharing of lessons learned is facilitated

Component Description

Component 1: Water Fund Management Platform institutionalised.

12. The project will work closely with private and public partner organisations to establish the Water Fund (WF) as a Charitable Trust registered under Kenyan law and governed by a Board of Trustees, comprising representatives of the major stakeholders of the WF. It will be a corporate legal entity in perpetuity for the sole purpose of funding sustainable land management (SLM) activities within the Upper Tana watershed. The Board of Trustees will manage the overall operations of the WF. The WF will have a set of advisory committees at both national and at county levels, to allow for good collaboration between governmental and WF activities and the uptake of lessons and practices into policy and catchment management processes, and a Technical Secretariat, responsible for implementing the decisions and policies of the Board and for the day-to-day management of its activities.

13. Once the WF is registered and its governance structure is constituted (output 1.1.1), the financial management system will be established in accordance with Kenyan law and compliant with international fiduciary standards, to allow for the capitalisation of the endowment through funds from its public, private and international partners.

14. In its establishment, the WF's sustainable finance mechanism will be supplied by a hybrid fund, i.e. a combination of an endowment fund with contributions by international donors (e.g. the GEF) and contributions by the private sector entities engaged in the WF; it is envisaged to further leverage additional ODA funding throughout the UTNWF project life time. The WF's finance mechanism will equally include a periodic replenishment through fees and further contributions by public, private and international donors. The Nairobi City Water and Sewerage Company (NCWSC), in anticipation of the WF becoming a legal entity, e.g. already

explored opportunities, and a levy on water prices specifically for Upper Tana catchment conservation purposes was agreed upon with the GoK and gazetted in October 2015.

15. In order to disburse funds, clear indicators for payments for ecosystem services, including the targeting and prioritisation of initiatives and stakeholders in the Upper Tana catchment, will be developed, also based on in-depth assessments of stakeholder needs and expectations – at least at project start and at mid-term, so as to be responsive to local requirements (output 1.1.2). The establishment of national and county level advisory structures will be supportive to this goal (output 1.1.3).

16. To facilitate the monitoring of its long-term sustainability, tools for the economic monitoring of return on investment will be integrated into the WF management structure (output 1.1.4). The success of the WF will, among others, be measured against its ability to disburse funds and to provide incentives for catchment management and to improve downstream water quality and quantity, so as to provide financially viable and sustainable solutions that respond to the needs and expectations of private sector investors in the WF. The extent to which the WF will be responsive to the upstream smallholder target groups' expectations and needs will also be an important indicator (output 1.2.1), taking into account the different roles and responsibilities in smallholder agriculture among men and women, as well as young and older stakeholders. Transparent criteria for different reward schemes and payment for ecosystem services mechanisms will be established, to render the WF disbursements as predictable and measurable as possible, including for the upstream target groups (output 1.2.2). Another indicator will be to what extent the actions and PES schemes employed by the WF will find traction in national and county-level policies and strategies, and how lessons learned can be scaled out to other water towers in Kenya and beyond (close linkage with component 3). Here, emphasis will be placed upon collaboration and exchange with existing policy and implementation bodies instead of creating new entities, to also facilitate the uptake of lessons learned into local and national practice.

Component 2: Improved Upper Tana catchment ecosystems that support livelihoods, food security and economic development.

17. The purpose of the WF is to establish a public-private partnership of downstream water users to support upstream communities, NGOs and smallholder farmers in diversifying climate-smart and -resilient agricultural production systems through the adoption of sustainable land management and integrated natural resource management practices.

18. Sustainable land management (SLM) is the internationally used term for the management of natural resources – rangelands, forests and wetlands – as well as agricultural production systems including climate-smart agriculture (CSA) which embraces conservation agriculture (CA), and climate resilient smallholder farms. However, in the Kenyan context the terms sustainable land management is often used simultaneously and associated with integrated natural resource management (INRM).

19. The aim of the increased investment flows for SLM and INRM to the catchment area, by the UTNWF project - and during project life-time increasingly by the WF itself to sustain these investments - is to foster adaptation and to increase the resilience of the local population through increased food production, household incomes and diversified development options and livelihoods, with due reference and disaggregation of support and results by gender and age.

20. Financial, in-kind and technical support will be provided by the project to sustainable land management initiatives based on a modelling approach linking spatial prioritisation (resource investment optimisation system, RIOS) with an impact assessment for soil and water (soil and water assessment tool, SWAT) and an analysis on return on investment (ROI). By employing a set of core indicators such as biophysical effectiveness, feasibility, stakeholder

preferences, cost-effectiveness per activity, a baseline of priority locations and most promising SLM activity areas in the upper Tana catchment was established.

21. The Nature Conservancy, together with CBOs and NGOs, e.g. local Water Resources User Associations (WRUAs) or the Green Belt Movement, over the last three years successfully promoted pilot SLM interventions in the Upper Tana catchment based on the above-mentioned modelling, particularly in areas such as vegetation buffer zones along river banks, agroforestry, terracing of steep and very steep farmlands, grass buffer strips in farmlands, reforestation of degraded lands at forest edges, and erosion mitigation from dirt roads.

22. The interventions modelled are not meant to limit the activities UTNWF and the WF itself might engage in; the interventions selected are representative for a range of activity types with a high impact possibility on different parts of the landscape, such as riparian corridors, crop lands, forested areas, or dirt roads and quarries. The impact and effectiveness of these activities was assumed to reflect an average change that such activities would cause in the landscape. For example, while there are many different types of terracing possible (e.g., terracing with grass strips, bench terraces, cut-and-fill, fanya juu), the modelling assumed that impact of 'terracing' activities will reflect its implementation in a way best suited to specific site conditions.

23. This baseline modelling to inform estimates for WF intervention impacts, benefits and return on investment opportunities will be combined with Land Degradation Surveillance Frameworks (LDSF), i.e. landscape-level assessments of ecosystem health, including soil condition, vegetation condition/ trends and diversity, land degradation status and carbon assessments, providing UTNWF and the county and national governments with a baseline setting and monitoring tool kit that can be institutionalised and scaled up to other locations (for further discussion on the LDSF, see component 3). These will be complemented with stakeholder needs and expectation assessments (output 1.1.2) to allow for an adaptive portfolio of best suited SLM activities to be employed.

24. Where LDSFs and other assessment tools will be applied or existing information sets be extended will be decided in close coordination with County government agencies and projects in the Upper Tana basin, so as to ensure complementarity and to avoid duplication or contradictory approaches at local levels.

25. In order to achieve the component's outcome, i.e. to increase the land area, freshwater- and agro-ecosystems under SLM, the project will focus its interventions in four output areas. To promote diversified and climate-resilient agricultural production systems that increase food security and incomes at household level (output 2.1.1), UTNWF will invest, among others, in water harvesting equipment, e.g. establishing rainwater harvesting pans, and water conservation measures such as drip irrigation systems. Their application will be furthered through training and capacity development provided to communal water committees. Further activities for improved soil retention capacities to improve agricultural yields will include terracing and grass strips on agroforestry lands with >12 % slopes and > 15 m from streams.

26. Another activity cluster will focus on reducing GHG emissions and increasing carbon sequestration potential in the project area (output 2.1.2), e.g. by providing training and capacity development for nursery management and diversified plant production, improved agro-forestry management through the promotion of (fruit) tree planting campaigns and provision of planting materials. An initial and a final carbon stock assessment will deliver the measurements to determine the achieved changes in land use and in carbon sequestration capacities.

27. Riparian zone management was determined as one of the promising activity clusters for a high return on investment in the baseline model. Therefore, activities for output 2.1.3 will focus on increasing restoration of riparian zones by improving vegetative buffers alongside streams for soil retention; mapping of freshwater wetlands; the production of a wetlands

biodiversity atlas, and an assessment of freshwater biological resources with an emphasis on those with food and feed potential.

28. Road construction and quarry management is another area with high erosion mitigation potential (output 2.1.4). Many stone quarries are located along river banks. Traditional practice includes clearing the vegetation cover and pushing the top soil downhill for easy extraction, increasing immediate sediment runoff and siltation of rivers. Implementing new ways of managing top soil to avoid erosion, coupled with re-vegetation will ensure that these sites remain healthy even after stone extraction is completed. Best practices will be demonstrated, and quarry management committees will be established in sub-watersheds to further discuss and scaled out these best practices. UTNWF equally aims at providing erosion mitigation activities for unpaved rural road shoulders (≥ 30 km) and to provide input and lessons learned to county level road construction manuals and guidelines.

29. Overall, the combination of biophysical and climate-smart agricultural techniques and support for water management, e.g. through rainwater harvesting or drip irrigation, are expected to lead to diversified production and increased yield through improved soil retention; improved adaptation potential and resilience through reduced erosion potential upstream, as well as at least stabilised catchment ecosystem services. Downstream economic benefits will include reduced water treatment costs through reduced sediment concentration and increased hydropower generation through higher water yield and reduced sedimentation.

30. For all these intervention clusters, direct links will be established with the KCEP-CRAL and UTaNRMP project implementation teams as well as with their partner and smallholder beneficiary networks to ensure spatial targeting, knowledge transfer and exchange of lessons learned and to jointly promote emerging best practices across the Upper Tana catchment area.

Component 3: Robust knowledge management and learning systems implemented to direct UTNWF management and share lessons both nationally and regionally.

31. UTNWF will combine a classical project monitoring and evaluation (M&E) approach – i.e. determining whether anticipated project targets were met and supporting decision making for both the Project and the WF itself and allowing for an adaptive management approach for targeted PES and incentive schemes – with a strong emphasis on knowledge management, monitoring and assessment (M&A) to provide Project partners with tools, knowledge and capacities to assess the state and trends in land degradation, ecosystem services and health, climate resilience and adaptation capabilities and sustainable use of resources in agro-forestry systems, jointly with county and national government partner organisations and research facilities. Additional importance will be placed to facilitate upscaling and replication of lessons learned as quickly as feasible.

32. Land degradation, declining agricultural productivity and rural poverty are interrelated problems that require an integrated approach to effective planning, monitoring and decision making. Therefore the M&A of ecosystem services and climate resilience will aim at evaluating the synergies among interventions for food production, poverty alleviation and SLM. Therefore, the rationale for component 3 is three-fold:

- (a) to improve community, county and national institutions' capacities to measure and follow-up on local and global environmental benefits;
- (b) to capture, document and disseminate UTNWF's lessons learned and foster policy dialogue on the interlinkages between implementation for multilateral environmental agreements' (MEA) and food security goals; and
- (c) to provide critical inputs to the FSIAP so as to facilitate comparison and aggregation of overall programme results, contributing to common elements among the national project approaches.

33. Community, county and national institutions will be trained and enabled to measure and continuously follow-up on local and global environmental benefits (output 3.1.1). Comprehensive assessment tools, such as the Land Degradation Surveillance Framework (LDSF) will be applied in 5 sub-watersheds, in close collaboration between local, county and national partners with ICRAF. These, in combination with the layered modelling approach for the baseline, will allow for periodic assessments of the state and trends in ecosystem health and will be integrated into partner organisations' monitoring procedures. Existing simple hydrometric gauging stations will be upgraded and their numbers increased to improve data availability of water quality and quantity, and the new data sets will be integrated into the existing water database at WRMA.

34. The Monitoring and Assessment (M&A) framework will be implemented to also strongly support the national capacity to monitor land degradation, climate resilience and ecosystems functions within relevant government agencies, research and academic institutions. This approach will foster their capacities in collating information to meet Kenya's reporting obligations under the three Rio Conventions (UNFCCC, CBD and CCD, see also Attachment 4.1). For instance, monitoring climate vulnerability and resilience will contribute directly to the Kenya National Climate Change Action Plan (2013), Kenya National Climate Change Response Strategy (2010), and the draft National Climate Change Framework Policy (2014) (compare with Attachment 4.2 for further detail) and the objectives of developing and maintaining a robust and up-to-date climate change knowledge management system. In addition, the LDSF will contribute to improving the land use change assessments as part of the national GHG inventory, through: a) the development of a digital land use database using remote sensing and field validation; b) digital soil maps; c) estimation of the carbon content for different land cover and land use categories.

35. To allow for the M&A of socio-economic parameters (output 3.2.1), including for gender disaggregated livelihoods, IFAD's Multidimensional Poverty Assessment Tool (MPAT) will be integrated into the Project's M&E framework as well as into the institutional structure and processes of the WF. The MPAT tool kit will be expanded to account for an appropriate gender analysis and will include the Women's Empowerment in Agriculture Index (WEAI). Further, to incorporate indicators and monitoring tools for resilience and adaptation, tools and concepts from the STAP's Resilience, Adaptation Pathways and Transformation Assessment Framework (RAPTA) will be incorporated into the MPAT.

36. To disseminate and share its results and lessons to be learned (output 3.3.1), the Project aims at establishing an information centre at the national level in close collaboration with the National Museums of Kenya, including a standing exhibition on the concept of water funds and its application in the Upper Tana. Another information centre at county level will provide learning materials and information tools appropriate to the subsidiary level of sub-catchments. Furthermore, to allow for the water fund concept to take hold in the public arena, a school awareness programme will be developed and linked to the ongoing Green School Programme. Taking into account the need to increase traction at the other end of the spectrum – policy making – an UTNWF information centre at the Ministry of Environment (MENR) will support the mainstreaming of water fund concepts and lessons learned into national policies and programmes.

37. Lessons and experiences in establishing the WF's public private partnership and in establishing successful payment for ecosystem services mechanisms will be brought to at least two other water towers in Kenya to assess the feasibility of replication and adaptation of the approach (output 3.3.2). The UTNWF will also support the consolidation of experiences for further advocacy within the IAP network of countries in sub-Saharan Africa, through MEA processes such as convention reporting and strategies (NBSAP, NAP, NAPA), and in MEA fora such as UNREDD or IPBES to promote wider application.

Attachment 4.1 - Convergence of UTNWF outcomes and outputs with MEA obligations and reporting requirements

MEA	UTNWF Component 1: Water Fund Management Platform institutionalised	UTNWF Component 2: Improved Upper Tana catchment ecosystems that support livelihoods, food security and economic development	UTNWF Component 3: Robust knowledge management and learning systems implemented to direct UTNWF management and share lessons both nationally and regionally
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CBD	UTNWF Component 1	UTNWF Component 2	UTNWF Component 3
Aichi Target 1	UTNWF known as a PES scheme beyond the project area	Upper Tana smallholders aware of the ES values and conservation and sustainable use options	UTNWF known as a PES scheme beyond the project area nationally and internationally
Aichi Target 2			Reference of local and national development plans and planning processes to UTNWF lessons
Aichi Target 3	Positive conservation incentive schemes	Positive conservation incentive schemes applied at local levels	Lessons learned for outscaling of incentive schemes
Aichi Target 4	Water Fund adopted as business model in other catchment areas		
Aichi Target 5		UTNWF contributing to sustainable ecosystem protection in project area	Lessons learned from UTNWF influencing sustainable ecosystem management in other areas
Aichi Target 7		UTNWF contributing to sustainable and climate-smart agricultural practices in project area	
Aichi Target 11	UTNWF enhancing investments for conservation of water resources in project area	UTNWF contributes to conservation of inland water systems	
Aichi Target 14	Water fund as a facilitator of improved livelihoods, including poverty reduction, while also safeguarding the environment	UTNWF interventions in improved agriculture, water management and ecosystems protection contributes to improved livelihoods for people in the project area	
Aichi Target 15		UTNWF conservation (of land, water and biodiversity) initiatives recover degraded lands and help mitigate climate change	
Aichi Target 17			UTNWF contributes to meeting national targets of Kenya's NBSAP (particularly strategic actions # 5, 7, 10 and 20)
Aichi Target 19			UTNWF facilitates improved knowledge and technologies facilitating sustainable

CBD	UTNWF Component 1	UTNWF Component 2	UTNWF Component 3
			management of biodiversity in project area
Aichi Target 20	UTNWF facilitates mobilisation of financial resources to upscale the successes of the project to other areas		Knowledge shared widely to facilitate replication of UTNWF model in other areas and countries

Note: Targets used were based on CBD Aichi Biodiversity Targets (<https://www.cbd.int/sp/targets/>)

UNFCCC	UTNWF Component 1	UTNWF Component 2	UTNWF Component 3
GHG		Carbon stock measurements and increase in project area	Research and systematic observation; Lessons learned
LULUCF		Monitoring of LUC and changes in agroforestry	Research and systematic observation; Lessons learned
Mitigation		Tree planting and ecosystem restoration interventions increase terrestrial storage of carbon (sequestration).	Research and systematic observation; Lessons learned
Adaptation		SLM and climate smart agricultural practices; disaster risk reduction activities	Research and systematic observation; Lessons learned
Agriculture	UTNWF leverages finances to support sustainable agriculture	SLM and climate smart agricultural practices result in sustainable agriculture	Research and systematic observation; Lessons learned
Water Resources	UTNWF leverages finances to support water resources protection	SLM, climate smart agriculture and ecosystem restoration interventions increase environmental flows in preserving water resources	Research and systematic observation; Lessons learned

Note: Targets used were based on Reporting on Climate Change. User Manual for the Guidelines on National Communications from Non-Annex I Parties. http://unfccc.int/national_reports/non-annex_i_natcom/guidelines_and_user_manual/items/2607.php

UNCCD	UTNWF Component 1	UTNWF Component 2	UTNWF Component 3
Indicator CONS-O-1 Information events organised on the subject of desertification, land degradation and drought (DLDD) and/or DLDD synergies with climate change and biodiversity	√	√	√
Indicator CONS-O-3 Civil society organisations (CSOs) and science and technology institutions (STIs) participating in in DLDD-related programmes/projects	√	√	√
Indicator CONS-O-4 DLDD-related initiatives of CSOs and STIs in the field of education		√	√
Indicator CONS-O-7 Initiatives for synergistic planning/programming of the three Rio	√	√	

UNCCD	UTNWF Component 1	UTNWF Component 2	UTNWF Component 3
conventions or mechanisms for joint implementation			
Indicator CONS-O-8 National/subregional/regional monitoring system for DLDD		√	√
Indicator CONS-O-13 Building capacity to combat DLDD on the basis of the National Capacity Self-Assessment (NCSA) or other methodologies and instruments	√	√	√
Indicator CONS-O-14 Integrated financing strategy (IFS) devised by the Global Mechanism (GM) or within other IFSS, reflect leveraging national, bilateral and multilateral resources to combat DLDD	√	√	
Indicator CONS-O-18 Resources and type of incentives which have enabled access to technology	√	√	√

Note: Based on the UNCCD- Performance Review and Assessment of Implementation System (GEF) fifth reporting cycle, 2014-2015 leg

Attachment 4.2

Matrix of UTNWF Convergence with Kenya Policies & Strategies

Project Goal: The Upper Tana-Nairobi Water Fund as a Public-Private-Partnership increases investment flows for sustainable land management and integrated natural resource management in the Upper Tana catchment

Policy documents

- **Constitution of Kenya 2010: Article 42.** Every person has the right to a clean and healthy environment, which includes the right (a) 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 **Article 43.** (1) Every person has the right (d) to clean and safe water in adequate quantities;
- **Forest Policy, 2014: Policy Objectives 3.2 (a)** Increase and maintain tree and forest cover of at least ten percent of the land area of Kenya; (b) Establish an enabling legislative and institutional framework for development of the forest sector, and (d) Promote public, private and community participation and partnership in forest sector development.
- **Kenya Vision 2030 (2010). Article 4.6 Environmental Management; Natural Resources Conservation:** The country will intensify conservation of strategic natural resources (forests, water towers, wildlife sanctuaries and marine ecosystems) in a sustainable manner without compromising economic growth. Kenya intends to have achieved 10 per cent forest cover by 2030.

Project Objective: A well-conserved Upper Tana River basin with improved water quality and quantity for downstream users (public and private); maintaining regular flows of water throughout the year; enhancing ecosystem services, specifically food security, freshwater and terrestrial biodiversity, and improving human well-being and quality of life for upstream local communities.

Policy documents

- **Constitution of Kenya 2010: Article 69.** (1) The State shall (a) ensure sustainable exploitation, utilisation, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits; and (b) work to achieve and maintain a tree cover of at least ten per cent of the land area of Kenya
- **The Environmental Management and Coordination Act, 1999 No 8 of 1999 (EMCA),** covering **Article 47.(1)** on measures for the sustainable use of hill tops, hill slides and mountainous areas, and **47 (2) (f)** for the protection of water catchment areas;
- **Forest Policy, 2014: Policy Objectives 3.2 (a)** Increase and maintain tree and forest cover of at least ten percent of the land area of Kenya; (d) Promote public, private and community participation and partnership in forest sector development, (f) Enhance management of forest resources for conservation of soil, water biodiversity and environmental stability.
- **National Climate Change Response Strategy (2010): 4.1 Adaptation Interventions:** addressing land degradation by building soil and stone bunds, creating grass strips and contour levelling as well as incorporating trees or hedgerows.
- **Agriculture, Fisheries and Food Authority Act (AFFA) - No. 13 of 2013:** Section 4. (d): AFFA shall promote best practices in, and regulate, the production, processing, marketing, grading, storage, collection, transportation and warehousing of agricultural and aquatic products excluding livestock products as may be provided for under the Crops Act, and the Fisheries Act;
- **Crops Act no.16 of 2013:** Preliminary part 3. The objective of this Act is to accelerate the growth and development of agriculture in general, enhance productivity and incomes of farmers and the rural population.
- **Environmental Management and Coordination Act, 1999. Conservation of biological diversity; Article 50.** The Authority shall, in consultation with the relevant lead agencies, prescribe measures necessary to ensure the conservation of biological diversity in Kenya and in

this respect the Authority shall (among others) (d) undertake measures intended to integrate the conservation and sustainable utilisation ethic in relation to biological diversity in existing government activities and activities by private persons.

- **Kenya Vision 2030 (2010). Article 4.6 Environmental Management;** the vision for the environmental sector is “a people living in a clean, secure and sustainable environment”. The vision is inspired by the principle of sustainable development and by the need for equity in access to the benefits of a clean environment.
- **Kenya Green Economy Strategy and Implementation Plan (GESIP) (2015). Article 4.1.3 Strategic Area 3: Sustainable Natural Resource Management.** Objective 3.3: To increase per-capita water by 200 m³ availability by 2025; Strategic Actions: Reduce non-revenue water by half and promote rain water harvesting (at household and institutional) level through increased water collection and storage.
- **Tana Catchment Management Strategy (2014-2022):** Mission to manage, regulate, protect and equitably allocate water resources, involving stakeholders for economic development and environmental sustainability.

Component 1

Water Fund Management Platform institutionalised

Policy documents

- **National Environment Policy, 2013. Article 4.2 Freshwater and Wetland Ecosystems.** *The Government will:* 2. Promote and institutionalize payment for environmental services schemes to support catchment protection and conservation.
- **The Natural Resources (Benefit Sharing) Bill, 2014: Revenue sharing ratio Article 26:(2)** The monies paid into the sovereign wealth fund under subsection (1) (c) shall be paid into the following funds constituting the sovereign wealth fund as follows (a) sixty per cent of the monies shall be paid into a futures fund; and (b) forty per cent of the monies shall be paid into a natural resources fund.
- **Environmental Management and Coordination Act, 1999. Fiscal incentives; Article 57.(1)** Notwithstanding the provisions of any relevant revenue Act, the Minister responsible for finance may, on the recommendation of the Council, propose to Government tax and other fiscal incentives, disincentives or fees to induce or promote the proper management of the environment and natural resources or the prevention or abatement of environmental degradation, (2) Without prejudice to the generality of subsection (1) the tax and fiscal incentives, disincentives or fees may include; (d) user fees to ensure that those who use environmental resources pay proper value for the utilisation of such resources.
- **Kenya Green Economy Strategy and Implementation Plan (GESIP) (2015). Article 4.1.3. Strategic Area 3: Sustainable Natural Resource Management.** This focus area covers sectors such as agriculture, forestry, water, fisheries, wildlife, land use, fossil fuel extraction and mining. The key priority areas include strengthening natural resource governance institutions; ensure fair and transparent taxation and sharing of natural resources rents; improving natural capital accounting through resource mapping; supporting standards and certification of natural resource products; and promoting sustainable land and water resource management practices.

Outcome 1.1 - Multi-stakeholder and multi-scale platform supports policy development, institutional reform and upscaling of INRM

Policy documents

- **Constitution of Kenya 2010: Article 69.** (1) The State shall (d) encourage public participation in the management, protection and conservation of the environment;
- **Forest Conservation and Management Bill, 2015, Part VI - Incentives for Increasing Forest and Tree Cover - Incentives and benefit sharing, Article 56 (2)** Subject to Article 66 of the Constitution, private investments in forests shall benefit local communities and investors shall

provide such benefits by applying various options including but not limited to infrastructure, education and social amenities.

- **Draft National Climate Change Framework Policy (Sept 2014), Section 10.3.3:** This Policy underscores the government's commitment to increase the PPP initiative to strengthen sustainability of actions undertaken to achieve low carbon climate resilience development.
- **National Land Reclamation Policy, Feb 2013 (Final draft) 3.2.7 Investment Environment:** Create an enabling environment increasing private sector investment, more so through Public-Private-Partnerships (PPPs) arrangements.
- **Kenya Green Economy Strategy and Implementation Plan (GESIP) (2015). Article 4.1.3 Strategic Area 3: Sustainable Natural Resource Management. Objective 3.2:** To catalyse the achievement of 10% tree cover by 2020, Strategic Actions: (i) Roll out "trees for pay" programme for youth, and (ii) Enhance the reforestation of degraded lands
- **National Policy for Disaster Management in Kenya (2009). Sub-section 3.2.3.3. Disaster Preparedness.** The Government will facilitate the establishment of a comprehensive National Early Warning System that will encourage the involvement of all stakeholders. In addition baseline vulnerability analyses will be prepared on a continuous basis to assess the impact of the problem on the affected population. Based on the Early Warning System and the continuous analysis of vulnerabilities, response activities including the active use of strategic stockpiles of food and non-food items, will be undertaken in a manner that ensures that the most vulnerable groups are specifically targeted.

Outcome 1.2 - Policies and incentives support climate-smart smallholder agriculture and food value chains in financially viable and sustainable watershed stewardships

Policy documents

- **Agriculture, Fisheries and Food Authority Act (AFFA) - No. 13 of 2013:** Section 4. (d): AFFA shall promote best practices in, and regulate, the production, processing, marketing, grading, storage, collection, transportation and warehousing of agricultural and aquatic products excluding livestock products as may be provided for under the Crops Act, and the Fisheries Act;
- **National Climate Change Response Strategy (2010): Sub-section 4.1.3** - Protecting and conserving water catchment areas, river- banks, and water bodies from degradation and contamination e.g., by imposing a water levy to generate funds for investment in conservation of water catchment areas,
- **National Land Reclamation Policy, Feb 2013 (Final draft) 3.2.5 Community Participation:** Put in place appropriate incentives for active community participation of all stakeholders in land reclamation efforts.
- **National Environment Policy, 2013. Article 4.2 Freshwater and Wetland Ecosystems.** *The Government will:* 6. Ensure rehabilitation and restoration of degraded wetlands, riverbanks and lakeshores and, as appropriate, promote and support establishment of constructed wetlands

Component 2:

Improved Upper Tana catchment ecosystems that support livelihoods, food security and economic development

Policy documents

- **Forest Conservation and Management Bill, 2015: Guiding Principles 4 (f)** wherever possible, an —ecosystem approach shall be adopted in the conservation and management of forests and counties shall collaborate in managing forests falling in more than one county within the same ecosystem;
- **Forest Policy, 2014:** Policy Objectives 3.2 (d) Promote public, private and community participation and partnership in forest sector development, (e) Promote investment in commercial tree growing, forest industry and trade, and (f) Enhance management of forest resources for conservation of soil, water biodiversity and environmental stability.

- **National Environment Policy, 2013. Article 4.2 Freshwater and Wetland Ecosystems.** *The Government will:* 8. Involve and empower communities in the management of fresh water and wetland ecosystems.
- **Kenya Vision 2030 (2010). Social Pillar; Water and Sanitation:** The 2030 vision for Water and Sanitation is to ensure that improved water and sanitation are available and accessible to all. This will be realised through specific strategies, such as: (i) raising the standards of the country's overall water, resource management, storage and harvesting capability; (ii) rehabilitating the hydro-meteorological data gathering network; (iii) constructing multipurpose dams and (iv) constructing water and sanitation facilities to support a growing urban and industrial population.
- **Agricultural Sector Development Strategy (2010–2020); Improving Land Use and Crop Production.** To achieve food security, initiatives will be up-scaled that involve developing appropriate technologies for the various agro-ecological zones, particularly in the ASALs where drought-resistant and new and emerging crops will be promoted alongside irrigation, water harvesting and farm forestry.

Outcome 2.1 - Increased land area, freshwater, and agro-ecosystems under INRM and SLM

Policy documents

- **Kenya Vision 2030 (2010). Social Pillar; The Environment:** Kenya aims to be a nation that has a clean, secure and sustainable environment by 2030. This will be achieved through: (i) promoting environmental conservation to better support the economic pillar's aspirations; (ii) improving pollution and waste management through the application of the right economic incentives; (iii) commissioning of public-private partnerships (PPPs) for improved efficiency in water and sanitation delivery; (iv) enhancing disaster preparedness in all disaster-prone areas and improving the capacity for adaptation to global climatic change.
- **National Environment Policy, 2013. The Government will:** 3. Promote integrated watershed management and alternative livelihood opportunities to enhance community participation and empowerment in the conservation and management of mountain ecosystems.
- **Flood Mitigation Strategy (MWI, 2009);** Lists among the **specific interventions for the Tana Basin** as to “develop an on-farm community water pan conservation programme for the basin to encourage extended improved drainage and crop season in the upstream, med and lower catchment areas”.
- **The Kenya National Biodiversity Strategy and Action Plan (2000). 4.3.3 Protection of ecosystems and natural habitats. (c) Forests:** Integrate and improve the management of forest resources by regulating access to forests and promoting benefit sharing, promoting the re-use and recycling of forest resources, encouraging the use of forest resources for ecotourism, and drawing up management plans for each forest area.
- **Draft National Irrigation Policy, 2015, Article 1.5. Objectives;** (c) increase agricultural water harvesting and storage capacities, and (d) promote water harvesting, use of wastewater, and exploitation of groundwater for irrigation.
- **Agricultural Sector Development Strategy (2010–2020). Conserving River Banks, Water Bodies and Catchments.** The regional development subsector will carry out feasibility studies to protect and conserve the environment, and will formulate and implement programmes and projects that promote protection and conservation of river banks, water bodies and catchments areas in collaboration with communities and stakeholders.

Component 3

Robust knowledge management and learning systems implemented to direct UTNWF management and share lessons both nationally and regionally

Policy documents

- **National M&E Policy, 2012; Monitoring and Evaluation Framework for Kenya, 2014 (draft):** Emphasis on the importance of results-based management, transparency, accountability and efficiency as fundamental principles for managing public programmes and projects in Kenya
- **Forest Conservation and Management Bill, 2015: Guiding Principles 4. (a)** The implementation of this Act shall be guided by the following principles - (a) good governance and access to public information, and a participatory approach to forest conservation and management shall be enshrined to ensure the effective involvement of stakeholders in forest conservation and management;
- **The Kenya National Biodiversity Strategy and Action Plan (2000). 4.3.3 Protection of ecosystems and natural habitats. (d) Wetlands:** Enhance knowledge about wetlands and awareness of seasonal wetlands among local communities, decision-makers, and the public.

Outcome 3.1 - Institutions capacitated to monitor GEBs

Policy documents

- **Forest Policy 2014: Article 6.1 Forestry Education and Training.** *The Government will: (i) strengthen capacity of training institutions to develop and implement education and training programmes on forestry*
- **The Water Bill, 2014. Part III - Regulation of the management and use of water resources; establishment and functions of Water Resource Users Association. Article 27.** (1)Water resource users associations may be established as associations of water resource users at the sub-basin level in accordance with regulations prescribed by the Authority; and (2) a water resource users association shall be a community based association for collaborative management of water resources and resolution of conflicts concerning the use of water resources.

Outcome 3.2 – M&A framework supports the integration of climate resilience into policy making

Policy documents

- **Forest Policy 2014: Article 2.4 Resource Mobilization** - To leverage resources for forestry development, there is need for greater integration of forestry issues into other sectoral development programmes.
- **Devolution in Kenya: Opportunities and Challenges for the Water Sector. Water and Sanitation Program: Policy Note, September 2013.** Under devolved government, recognition of the right of communities to manage their own affairs and to further their development is clearly advocated, while emphasizing the need for equitable sharing of the national and local resources

Outcome 3.3 - Knowledge management and sharing of lessons learned is facilitated

Policy documents

- **National Environment Policy, 2013Article 4.4. Mountain Ecosystems:** *The Government will: 1. Generate and strengthen knowledge about the ecology and sustainable management of mountain ecosystems.*
- **Forest Policy 2014: Article 6.2 Forestry Research and Development.** *The Government will: (b) develop mechanisms to link forest research findings to users, and encourage private sector participation, and the incorporation of indigenous knowledge systems.*
- **The National Museums and Heritage Act, No. 6 of 2006. Part II - Establishment, Functions and Powers of the National Museums of Kenya, Article 4.** The National Museums shall: (b) serve as places where research and dissemination of knowledge in all fields of scientific, cultural, technological and human interest may be undertaken.

List of legal, policy & strategy documents quoted

- Constitution of Kenya 2010:
- Kenya Vision 2030 (2010).
- Kenya Green Economy Strategy and Implementation Plan (GESIP) (2015)
- Agriculture, Fisheries and Food Authority Act (AFFA) - No. 13 of 2013
- Crops Act no.16 of 2013
- Agricultural Sector Development Strategy (2010–2020).
- Forest Conservation and Management Bill, 2015
- Forest Policy 2014
- The Natural Resources (Benefit Sharing) Bill, 2014:
- The National Museums and Heritage Act, No. 6 of 2006
- National Climate Change Response Strategy (2010):
- The Water Bill, 2014
- The Kenya National Biodiversity Strategy and Action Plan (2000)
- Draft National Irrigation Policy, 2015
- Flood Mitigation Strategy (MWI, 2009)
- National Environment Policy, 2013.
- National Land Reclamation Policy, Feb 2013
- Forest Conservation and Management Bill, 2015,
- National Policy for Disaster Management in Kenya (2009).
- The Environmental Management and Coordination Act, 1999 No 8 of 1999 (EMCA)
- Draft National Climate Change Framework Policy (Sept 2014)
- Monitoring and Evaluation Framework for Kenya, draft 2014
- National M&E Policy, March 2012

Attachment 4.3 - Matrix of UTNWF Convergence with the UN Sustainable Development Goals (SDGs) and respective targets

SDG and relevant target(s)	Related UTNWF outcome and target
1. End poverty in all its forms everywhere Target 1.5: By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters	Outcome 2.1: Increased land area, freshwater, and agro-ecosystems under INRM and SLM Target: 21,000 households engaged in SLM, climate risk reduction and disaster risk reduction activities
2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality	Project Goal: The Upper Tana-Nairobi Water Fund as a Public-Private-Partnership increases investment flows for sustainable land management and integrated natural resource management in the Upper Tana catchment Target: 21,000 smallholder farmer households with improved food-security, climate change adaptation and resilience capabilities (gender- and age disaggregated)
5. Ensure availability and sustainable management of water and sanitation for all Target 6.5: By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate Target 6.6: By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	Outcome 1.2: Policies and incentives support climate smart smallholder agriculture and food value chains in financially viable and sustainable watershed stewardships Target: Coordinated watershed management policies at county and federal levels Target: SLM implemented on 337,000 ha and 663,000 ha influenced to adopt SLM
12. Ensure sustainable consumption and production patterns Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources Target 12.8: By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature	Outcome 2.1: Increased land area, freshwater, and agro-ecosystems under INRM and SLM Target: 21,000 households engaged in SLM, climate risk reduction and disaster risk reduction activities Outcome 3.3: Knowledge management and sharing of lessons learned is facilitated Target: Information sharing platforms established
13. Take urgent action to combat climate change and its impacts Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	Outcome 2.1: Increased land area, freshwater, and agro-ecosystems under INRM and SLM Target: 21,000 households engaged in SLM, climate risk reduction and disaster risk reduction activities Outcome 3.1: Institutions capacitated to monitor Global Environmental Benefits (GEBs)

	GEB monitoring tools and protocols integrated with partner institutions
<p>15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</p> <p>Target 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements</p> <p>Target 15.3: By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world</p> <p>Target 15.4: By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development</p> <p>Target 15.9: By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts</p>	<p>Outcome 2.1: Increased land area, freshwater, and agro-ecosystems under INRM and SLM</p> <p>Target: 21,000 households engaged in SLM, climate risk reduction and disaster risk reduction activities</p> <p>Outcome 3.2: M&A framework supports the integration of climate resilience into policy making</p> <p>Target: Assessment results referenced in county development plans</p>
<p>17. Strengthen the means of implementation and revitalize the global partnership for sustainable development</p> <p>Target 17.9: Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation</p> <p>Target 17.16: Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries</p> <p>Target 17.17: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships</p> <p>Target 17.18: By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts</p>	<p>Outcome 3.1: Institutions capacitated to monitor Global Environmental Benefits (GEBs)</p> <p>Target: GEB monitoring tools and protocols integrated with partner institutions</p> <p>Outcome 1.1: Multi-stakeholder and multi-scale platform supports policy development, institutional reform and upscaling of INRM</p> <p>Target: WF operational</p> <p>Outcome 3.2: M&A framework supports the integration of climate resilience into policy making</p> <p>Target: Assessment results referenced in county development plans</p>

Appendix 5: Institutional aspects and implementation arrangements

1. This appendix describes the UTNWF institutional framework and implementation arrangements, including oversight, project management structures and coordination measures, as well as an outline of the various institutions, organisations and stakeholder groups involved, including their envisaged roles and responsibilities in project implementation.

Project execution, management and administration

2. During the initial project design mission from August 3 - 15, 2015, the Government of Kenya (GoK) as the recipient of GEF funding and represented by the Ministry of Environment and Natural Resources (MENR), delegated the principle responsibility for project execution to The Nature Conservancy (TNC), recognizing its pivotal role in aligning public and private sector partners for the UTNWF, in providing baseline investments, gathering necessary information, piloting implementation activities in the Upper Tana catchment, and TNC's vast expertise and experience in establishing and running water funds, mainly in Latin America. The delegation of executing authority and further implementation arrangements are laid down in an Aide Memoire, signed by the GoK and IFAD on August 20, 2015.

3. UTNWF will therefore be executed by The Nature Conservancy, together with several implementation partners, including the Ministry of Environment and Natural Resources, National Museums of Kenya, Water Resources Management Authority and Kenya Forest Services, through a direct grant agreement between IFAD and TNC, with disclosure to the National Treasury.

4. Other partners include the public and private sector partners that will constitute the Board of Trustees of the WF, Research Institutions and County Governments. To exercise its oversight, MENR will work with the executing agency/project management unit to establish a Project Steering Committee and Technical Committees with appropriate representation from UN convention focal points and both national and county levels to ensure alignment of the Project to ongoing programmes and activities of public and private sector partners of the UTNWF. Farmers' interests will equally be integrated and represented in the project management arrangements, e.g. through incorporating farmers associations into the advisory committee; a recommendation for a similar representation in the WF Board of Trustees will be made to the WF constituting members, as appropriate.

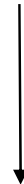
5. To achieve the long-term sustainability of the GEF investment there needs to be a seamless transfer of oversight and management from the GEF-supported project, UTNWF, to a public-private partnership – the Water Fund (see also the diagrammes in Attachment 5.1). Based upon an extensive consultative process with all partners that reviewed the various legal options available in Kenya, the preferred legal constitution of the WF is for a Charitable Trust instead of an NGO or Ltd. Company. The Government of Kenya has embraced public-private partnerships and has since established a Private-Public Partnership Unit at The National Treasury. The WF concept was introduced to the Unit head and the project will further engage with this PPP Unit for synergies and sharing lessons.

6. MENR will maintain its oversight role over the project, while delegating day-to-day management and implementation to TNC, which will set up, coordinate and host a Project Management Unit (PMU) on behalf of the WF Board of Trustees. Here the National Project Manager and technical staffs, as further detailed below, will be supported by TNCs dedicated team comprising a Kenya Programme Director, a Water Fund Director, Freshwater Director, External Affairs Director, Spatial Mapping Specialist, Programme Accountant, and a Procurement Officer.

7. The Project shall establish a Project Steering Committee (PSC) with representation from key line Ministries (MENR, MoA, and The National Treasury), Departments, Agencies, County

Government and Executing Agency. The project managers of UTaNRMP and KCEP-KRAL will also be members of the steering committee to increase project collaboration and linkages. The PSC will (i) review progress and achievements; (ii) provide strategic guidance to project management; and (iii) initiate follow-up actions on lessons and findings from the Project. As such, the PSC will act as the principal conduit between Project experience and national policies and programmes. The Terms of Reference for the PSC shall be jointly elaborated by the Ministry of Environment and Natural Resources and the Executing Agency. The PSC shall meet at least twice a year. The Chair shall be the Principal Secretary and the Co-Chair shall be from either from the Executing Agency or the Private Sector. The Project Manager shall act as the PSC's secretary, and shall ensure that adequate documents and proposals are prepared ahead of each PSC meeting and that notes are taken and duly disseminated.

Figure 3: UTNWF Project Management Organigramme



8. The PMU will include key staff for project management and administration, work plan preparation and implementation and financial control. The unit shall comprise of the GEF Project Manager, Monitoring and Evaluation Officer, Field Conservation Coordinator, three Field Extension Assistants, in addition, junior professional staff and logistics and administrative support will be included in the PMU. It is envisaged that with the full establishment of the WF and increasing achievement of project results, the responsibilities and functions of the PMU will be transferred to the WF, taking over full responsibility toward the end of the 5 year project cycle (see also the organigrammes in attachment 5.1). The Terms of Reference (TOR) for each position shall be drawn and agreed upon by the Ministry of Environment and Natural Resources and the Executing Agency.

9. Monitoring of UTNWF will reflect the convention targets that are relevant to the global environmental benefits supported by GEF-funding as well as socio-economic and food security goals of both the stakeholders in the catchment and the private sector investors. Selection and use of assessment tools, the establishment of a monitoring and evaluation framework and the UTNWF's established linkages with GoK MEA reporting requirements and both IFAD RIMS and GEF GEB indicators are detailed in Appendix 6.