MID-TERM REVIEW OF BUILDING DROUGHT RESILIENCE PROJECT, KENYA & UGANDA

FINAL REPORT

Submitted to

International Union for Conservation of Nature (IUCN)
Eastern and Southern Africa Regional Office (ESARO)

By
Dr. Ingrid Hartmann and Dr. Washington Ochola

Commissioned through
ESIPPS INTERNATIONAL LTD,
PLOT 7/9 CLEMENT HILL ROAD, KAMPALA, UGANDA.

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Lower Tana sub-catchment (Kenya)

Khorweyne, Balambala, Garissa County
Al-Amin Moju, Tana North, Tana River County
Saka, Balamabala, Garissa County
Tula, Tana North, Tana River County

Upper Aswa-Agago sub-catchment (Uganda)

Lira District
Otuke District
Alebtong District

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ACRONYMS

APR:	Annual Project Report
ASALs:	Arid and Semi-Arid Lands
AWP:	Annual Work Plan
CBO:	Community Based Organization
CFA:	Community Forest Association
CPA:	Charcoal Producer Association
CECF	Community Environment Conservation Funds
CO:	Country Office
CPAP:	Country Program Action Plan
CSO:	Civil Society Organization
DLG:	District Local Government
FaIDA:	Fafi Integrated Development Association
FY:	Financial year
GEF:	Global Environment Facility
GoK:	Government of Kenya
GoN:	Government of Norway
GoU:	Government of Uganda
IDP	Internally Displaced People
IUCN:	International Union for Conservation of Nature
KARI:	Kenya Agricultural Research Institute
KEFRI:	Kenya Forest Research Institute
KFS:	Kenya Forest Service
KTB:	Kenya Tourism Board
KWS:	Kenya Wildlife Service
LC:	Local Council
LATF:	Local Authority Transfer Fund
MoA:	Ministry of Agriculture
MoLD:	Ministry of Livestock Development
MoL:	Ministry of Lands
MoE&MR:	Ministry of Environment and Mineral Resources
MoE:	Ministry of Education
MoPHS:	Ministry of Public Health and Sanitation
MoPV:	Ministry of Planning and Vision 2030
MoPW:	Ministry of Public Works
MoR:	Ministry of Roads
MoWI:	Ministry of Water and Irrigation
M&E:	Monitoring and Evaluation
MOU:	Memorandum of Understanding
MTR:	Mid-Term Review
NDMA:	National Drought Management Authority
NEMA:	National Environment Management Authority
NGO:	Non-Governmental Organization
NPM:	National Program Manager
PC:	Project Coordinator
PES:	Payment for Ecosystem Services
PM:	Project Management
SCMP:	Sub-catchment Management Plan
ToR:	Terms of Reference
ToTs	Training of Trainers
WRMA:	Water Resource Management Authority
WRUA:	Water Resource Users Association

EXECUTIVE SUMMARY

Introduction

This mid-term review was for a 3-year (2012-2014) Austrian Aid funded IUCN Eastern and Southern Africa Regional Office (ESARO) project entitled "*Building Drought Resilience through Land and Water Management in Kenya (Lower Tana sub-catchment) and Uganda (the Upper Aswa-Agago sub-catchment)"*. The aim of the project is to improve resilience of dryland communities within a river catchment to the impacts of increasingly severe and frequent drought, through strengthened ecosystem management and adaptive capacity. The project is applying a framework of strengthening societal and ecological resilience in the face of changing climate and increasing intensity of drought. The total funding of the project is 1 Million euros with a co-financing of 100,000 euros.

The scope of the mid-term review focused on evaluating the project's performance to date in terms of effectiveness, efficiency, relevance, sustainability and impacts; document lessons learned and make recommendations for consideration for the remaining project period as well as for future work.

Project result areas and performance

The project is designed with five result areas matched to the resilience pillars as a mechanism for resilience enhancement. Result area1 focuses on improving the integrity and functioning of catchments through ecosystems based actions that are gender sensitive and diversify livelihood assets. This is hoped to increase the diversity of options to invest into livelihoods and ecosystems and build sustainable infrastructures and technologies. Result area 2 focuses on improving the capacity of traditional and formal resource management institutions to sustainably manage natural resources within the catchment area. It is expected that this will enhance self-organisation at community level. Result area 3 focuses on mobilizing and improving the knowledge and skills of local communities to implement adaptation and innovation. Through this process, the resultant diversification of livelihoods and learning are hoped to strengthen the resilience of communities. Result area 4 focuses on greater coordination between multi-sectoral institutions improves harmonisation of plans and interventions. Through this strategy, self-organisation and learning processes are hoped to be strengthened. Finally, Result area 5 addresses raising awareness among policy makers on catchment management approaches to be increased through learning based on project experiences. This is essentially hoped to strengthen learning under the resilience building process.

Effectiveness

i. Most activities have been implemented according to the project plan, some of them ahead of scheduled time, except market chain development and GIS mapping, which will be done during the remaining phase.

ii. The project has made excellent achievements in the area of wetland and riverbank protection, water development and management and sustainable land management in both countries. Particular merits of the project lie also in the integration of the poorest and most vulnerable segments of the rural population and prioritizing their needs. Specifically the following has been achieved:

- The outputs achieved in the area of livelihood diversification are mainly related to tree planting and irrigation agriculture; for Kenya also gums, resins and aloe production. Further outputs on livelihood diversification are envisaged in the areas of small scale business and trade in the coming phase;
- Sustainable technologies have mainly been installed for water development, including the provision of water harvesting structures, ponds, wells, pans and hand pumps in Uganda. Water supply and water resources management has been effectively integrated into rangeland management, so that an optimal balance between pastures and water resources has been achieved;
- The project has harmonised successfully traditional laws with modern formal law, so that some of the by-laws can be legally enforced. However some of the by-laws still require harmonization with other sectors;
- Outputs in the area of marketing and knowledge management are still under development and will be accomplished during the remaining period; and
- The project has used Community Environment Conservation Fund (CECF) to catalyse natural resource management and conservation efforts especially in Uganda. In Kenya, empowerment of communities

through revitalization of customary institutions and by-laws has energized sustainable management of land and water resources. The CECF in Uganda has attracted funding from the government budget.

iii. However, the scale taken in the sub-catchment management plans is not sufficient to balance upstream with downstream user needs. Therefore, under Result Area 4, the envisaged strengthening of platforms should also aim at producing water management plans to link with the larger river catchment scale, including downstream and upstream users because ecology is a matter of nested cycles. Balancing of interest might also require the introduction of compensations and Payment for Ecosystem Services (PES) for water services, which might be funded by international funding agencies.

iv. It is suggested that Result Area 3 - knowledge management and learning, could be mainstreamed into other Result Areas as a cross-cutting issue, and to formulate Result Area 4 towards more tangible outputs, such as balancing user interests on multi-sectoral and river catchment level. A sound revision of the logframe is recommended to capture all levels of monitoring that is necessary.

v. The resilience approach has been instrumental in laying the cornerstone for the high effectiveness of project implementation. Out of the four pillars of the resilience approach, "*Diversification of ecosystems and incomes*" and "*sustainable technologies*" are components which activate the five types of capital in a community, that is, social, natural, financial, physical and human capital, while "*self-regulation*" and "*adaptive learning*" enhance the connectivity of communities among each other and the outside world. Within this, it is obviously the element of self-regulation, which in particular added value to the effectiveness of the project. The most important element to improve self-regulation was the implementation of the Community Environment Conservation Funds (CECF) in Uganda, and the development and implementation of adapted sub-catchment management plans in Kenya.

vi. While the implementation approach turned out to be highly successful, there are still options for improvement. In particular, the resilience approach alone is inadequate in the face of long-term climate change impacts, and should be integrated into long-term climate adaptation approach. If climatic conditions will become drier and warmer in the long run, land and water use structures and settlement patterns might need to change substantially. For this purpose working closely with meteorological and climate organizations is recommended for establishing synergies and value addition.

vii. The project works well with all partners, who collaborate effectively. The collaboration is highly appreciated by all partners. The geographical focus that the project took is appropriate, though it should also include a perspective to link with the larger river catchment scale, including downstream and upstream users because ecology is a matter of nested cycles at catchment level.

Efficiency

i. The project has managed to acquire co-funding and created awareness to the governments. As a result, the governments have integrated certain community prioritized actions into their own budgets. With respect to the overall enthusiasm and what the project itself has created in the communities, it is suggested to use the momentum and enhance the current funds for community prioritized actions to increase the number of activities on the ground and to further stimulate the current high motivation of communities.

ii. All funds have been spent in accordance with project plans and in the right procedure.

iii. There were initial organizational problems, such as getting access to a project car in Uganda, but they have been overcome. CECF contributed in getting communities participate, own and accept the project activities.

iv. In Uganda the initial idea of partnering with Joy Drilling, an NGO for the implementation of the project activities was abandoned because of their lack of capacity. Currently, the project activities are being efficiently implemented with and through the District Local Governments of Lira, Abletong and Otuke as well as the Directorate of Water Resources Management (DWRM) in Uganda; and Water Resource Management Authority (WRMA), Water Resource Users Associations (WRUAs), Fafi Integrated Development Association (FaIDA) and other various relevant Government agencies in Kenya. However, the need for capacity building of partners, especially of WRUAs on financial issues was raised during the stakeholder consultations.

v. The logframe is feasible to monitor project management as initially planned. It, however, overlooks, that de facto monitoring of the project takes place on three other levels as outlined below:

- There is the resilience approach divided into four pillars, which is kind of a shadow logframe
- There are community prioritized actions, which substantially determine the shape and success of the project and could be addressed by a separate framework to be produced ad-hoc after community prioritized actions have been identified. While partly the community prioritized actions are captured through the impact indicators, their management is not. Furthermore, the log-frame and work-plan only foresaw community prioritized actions for Result Area 1, but what happened on the ground is that community prioritized actions took place in Result Area 1 – 3, which is the appropriate consequence of the self-regulation pillar of the resilience approach and was adequately taken up by the project management.
- Furthermore, matrices of baselines and impact indicators are not identical. Respectively, baselines relate only to management and not to impacts. The division into sub-activities is partly not necessary, Result Area 3 should be mainstreamed and Result Area 4 should be reformulated in a more targeted and tangible way.

Relevance

i. The design and approach of the project was found to be very relevant in addressing the identified needs, issues and challenges, as far as building drought resilience is concerned in Arid and Semi-Arid Lands (ASALs). It is however, doubtful, if the drought resilience as a target itself is relevant and not rather be replaced by long-term adaptation to drier conditions, while resilience building should be linked to disasters and hazards. This is because long-term adaptation to drier conditions is different from drought resilience. Resilience allows going back to old structures while adaptation moves to new structures.

ii. The project is highly relevant to the strategic policies and programs of IUCN and its partners by contributing successfully to improve traditional and modern natural resources management and governance for wetland protection, biodiversity conservation and support to rural livelihoods in drylands. The relevance could be improved by including in particular pastoralism in Kenya and fishery in Uganda. A stocktaking exercise of the carrying capacity of rangelands and an economic valuation of rangeland and marine ecosystem services would add further value. The relevance could also be improved by revitalization of traditional knowledge for other purposes, such as for early warning, livestock keeping (mixed farming, pastoralism and all other systems where livestock is kept), and water development.

iii. Through the project interventions, unsustainable coping strategies such as cultivation in wetlands or the cutting of the Shea tree for charcoal in Uganda were abandoned because the project was able to fill the income gaps, except for charcoal production, behavioural change was not so much an issue in Kenya, but rather the adaptation to new, sedentary conditions under climatic changes. The project also addressed some unsustainable coping strategies such as illegal charcoal burning.

Sustainability

i) The project introduced many activities, which from the beginning laid the ground for sustainability that will reach far beyond its lifetime. The major highlights of sustainability are the many multi-stakeholder dialogues and community vision plans which activated and motivated communities enhanced their connectivity and improved their self-confidence. Furthermore, the well-elaborated Sub-Catchment Plans in Kenya provide guidance for a multitude of activities to be continued beyond the end of the project as well as involvement of multi-stakeholder platforms. Most significantly, the CECF in Uganda allowed community members to decide and plan their own future under full consideration of environmental protection, thereby considerably laying the ground for sustainability.

ii) The fact that in Uganda the project is in addition working with DWRM also working with and/or through the District Local Governments ensures that they will continue with the activities beyond the end of the project once they have mainstreamed them into their development plans. Similarly, in Kenya the collaboration with WRMA and other established government agencies will ensure support to the initiatives after the project has ended.

iii) The project activities laid the ground for involving all stakeholders. Particular emphasis was on ensuring a well-proportioned representation according to gender, ethnicity and geographical location, and furthermore developed appropriate mechanisms to target the poor in particular.

iv) Inclusiveness and involvement of all stakeholders has promoted ownership of the initiatives. All stakeholders were very satisfied with the project progress, impacts and their participation. Some of the communities which could not be covered by the project yet, requested also their inclusion.

Impacts

i. The project has improved livelihoods and environmental health through natural resources management and protection, land and water management plans, as well as income diversification. It has also numerous positive unintended impacts and outcomes, in particular, the improved self-confidence and independence of communities, the interest in learning of new skills and technologies, the improvement of capabilities in general such as the capability to ensure one's own access to water, food, traditional medicine, and the ability of communities to manage their own resources. The project had additional positive benefits in Uganda such as reducing alcoholism, domestic violence and small-scale criminality, which were previously consequences of rampant poverty and the former status as internally displaced people.

ii. A scenario without the project would be mainly a situation, where wetlands and water resources get further degraded on the cost of sustainable livelihoods. All positive impacts of the project would not have occurred. It is recommended that the planned project impact assessment be focused on measuring impact of the interventions on improved community resilience and sensitivity to drought shocks and ecosystem resilience. The specific key indicators/ issues for measuring improved resilience will include: improved food production and security; improved nutrition; diversified livelihoods and increased incomes; reduced sensitivity to water scarcity and conflicts; reduction in water borne and related diseases; reduced deforestation (especially protection of the shea butter tree on the Uganda side); and extent to which conflict mitigation and prevention was a result of by-laws, governance structures and other measures undertaken by the project. Since gender roles and responsibilities affect land and natural resources use, the impact assessment should also focus on gender issues such as labour input by women in collecting water, economic empowerment, improved nutrition and food security for the families; and level of uptake of the practices by the neigbouring communities. Impact assessment for the ecosystem resilience could be measured by the quantity and quality of water in the river (for Agago-Aswa catchment) over the seasons and indicator species of wetland ecosystems. Resilience being a socio-environment interaction, the impact assessment should also look at social resilience by examining the levels of social cohesion and functional networks.

Based on the above criteria, the performance of the project is, therefore, rated as excellent. Most targets have already been achieved and in most cases been over-fulfilled, except in the area of market chain development, which is to be finalized in the remaining period. The other exception to this process has been the GIS mapping that is also expected to be undertaken in the remaining period of time.

All evaluated outputs therefore score very highly as follows:

Contribution of Outputs to Overall Project Goal

Output	Contribution
Output 1	100%
Output 2	100%
Output 3	60-70% (includes market chain development, to be implemented in the next phase)
Output 4	90%
Output 5	80–90%

Final Rating Effectiveness: (Highest score 6, lowest score 1, not assessable 0)

Issue	Score
Output 1	6
Output 2	6
Output 3	4
Output 4	5-6
Output 5	5-6

Final Rating Efficiency: (Highest score 6, lowest score 1, not assessable 0)

Output	Score
Output 1	6
Output 2	6
Output 3	4-5
Output 4	5-6
Output 5	5-6

Sustainability, Relevance and Impacts

Output	Sustainability (4 = negligible risks, 1 = severe risks)	Relevance 2. Relevant (R) 1. Not relevant (NR)	Impacts 3. Significant (S) 2. Minimal (M) 1. Negligible (N)
Output 1	4		3
Output 2	4	2	3
Output 3	3	2	3-2
Output 4	4	2	3
Output 5	4	2	3

In both countries, more resources were allocated to Outputs 1 and 2; therefore, the importance of the performance within these Result Areas is higher than for the other results.

Recommendations

The main recommendation for the project is that the initial 3 years period should run to its completion and that phase 2 should be designed building on the lessons learned from phase 1; and the Austrian Development Cooperation be requested to support further implementation. The following are the specific recommendations:

- Activities proposed in the Sub-Catchment Management Plans should be implemented in phase 2;
- Self-regulation, adaptive learning and community planning should also guide the implementation of Result Area 3;
- The success stories in each country could be replicated in other areas;
- Both the project approach as well as project activities could be up-scaled to any other area, where resilience plays a role; and
- Involvement of science and the establishment of a knowledge management project could enhance the learning pillars of the project.

Centrality of livelihood options is also recognized. It is recommended that more options that have the capacity to make alternative livelihood options more profitable (e.g. re-establishing traditional livestock use in Uganda) be considered as interventions with high potential positive impacts. Furthermore, the provision of better water supply directly to the users, improved soil and water conservation at catchment level, linking water supply with wetland protection, enhancing agricultural extension in particular on nutrient re-cycling, irrigation, management of invasive species; better market and value chain development; and the establishment of alternative livelihoods for pastoralists have potential to not only strengthen resilience but also ensure environmental sustainability and enhanced adaptation to the vagaries of drought. Finally, it is essential that resilience pillars in the future be considered in more detail within the monitoring framework and adaptive learning made a cross-cutting issue.

1. CONTEXT AND BACKGROUND

1.1 Organization

The International Union for Conservation of Nature (IUCN) supports pragmatic solutions to the most pressing environmental and development challenges. The institution's work focuses on valuing and conserving nature, ensuring effective and equitable governance of its use, and deploying nature-based solutions to global challenges on climate, food and human development. IUCN supports scientific research, develops and disseminates conservation 'knowledge products', manages field projects demonstrating practical interventions all over the world, and brings governments, NGOs, CSOs, the UN and the private sector together to develop policy, laws and best practice. IUCN is the world's oldest and largest global environmental organisation, with more than 1,200 government and NGO members and almost 11,000 volunteer experts in some 160 countries. IUCN's work is supported by over 1,000 staff in 45 offices and hundreds of partners in the public, NGO and private sectors around the world.

1.2 The Project

IUCN's Eastern and Southern Africa Regional Office (ESARO) covers twenty four countries in the Horn of Africa, Eastern Africa, Southern Africa and the Western Indian Ocean and has thematic programs (including Water and Wetlands, and Drylands) with projects in a number of these. One such intervention is a 3-year (2012-2014) Austrian Aid funded project entitled *Building Drought Resilience through Land and Water Management in Kenya (Lower Tana sub-catchment) and Uganda (the Upper Aswa-Agago sub-catchment).* These sub-catchments are located in arid (Kenya) and semi-arid (Uganda) areas. Communities living in arid and semi-arid areas of East Africa face multiple challenges including recurrent droughts that trigger and exacerbate land degradation and hinder development and livelihood strategies. Interventions that enhance resilience and adaptive capacity of both ecosystems and the communities reliant upon them are, thus, of paramount importance. The overall objective of the project was to improve resilience of dryland communities within river catchments to the impacts of increasingly severe and frequent droughts through strengthened ecosystem management and adaptive capacity.

The project was also to build lessons for the periphery drought areas in Eastern Africa, specifically northern Kenya and Uganda, which could be applied to a wider context in the Horn of Africa. The project areas in Kenya and Uganda have inter-connected realities to deal with these are; the environmentally trans-boundary water resources and socially and culturally linked movements of people across international borders within the region. The project was designed on the basis of the IUCN Resilience Framework and building upon the existing or previous initiatives that were implemented by IUCN and partners within the area(s). Resilience is defined as the ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning through self-organization and adaptive learning, which enables socio-ecological systems to adapt to stress and change. The essential quality of resilience is the capacity to withstand shocks and rebuild when necessary.

1.2.1. Location of the Project and Beneficiaries

In the Upper Aswa-Agago sub-catchment in Uganda, the project is being implemented in partnership with the Directorate of Water Resources Management in the Ministry of Water and Environment, as well as the three District Local Governments (DLGs) that cover the sub-catchment, namely: Lira, Otuke and Alebtong. The geographical focus here is primarily on the upstream part of the sub-catchment, as catchment degradation here is likely to adversely impact on populations downstream. . The project targeted 151,780 people residing in the Upper Aswa-Agago Sub-catchment area and approximately 375,880 people in Abim, Agago, Alebtong, Amuria, Lira and Otuke districts.

System and natural resource management is one of the major elements of the project. This is largely because state governance systems within these areas are often weak, lacking resources and capacity, while many communities are recognizing and relying more on indigenous traditional governance institutions to provide conflict and resource management, and judicial functions. Whilst these institutions are recognized and legitimate, they are also weakening under the pressure of the State as well as the complex challenges now facing them. Within this governance vacuum, insecurity is often rife and traditional means of managing group relationships and the natural resources upon which they live, are increasingly eroded.

Uganda

In Uganda, the project is aligned to key policies and strategies that underpin the decentralization of water governance, particularly, the National Constitution (1995), the decentralization policy (1995), the Local Government Act (1997), the National Environment Policy (1995), the Water Policy (1999) and Water Act (2000). The water sector has been prioritized for Uganda's overall national development in the National Development Plan (NDP) of 2010, including the key objective of promoting sustainable use of the environment and natural resources. This includes a focus on restoration of degraded ecosystems and improvement in the management of environmental resources in agriculture and pastoralism, for livelihood benefits. The project was built on the National Adaptation Program of Action (2007) objective of enhancing the adaptive capacity of the vulnerable communities in drought prone parts of Uganda. By building drought resilience through land and water management, it is assumed that the planned intervention will contribute towards achievement of MDG 1, 4, 5 and 7.

In Uganda, the project was implemented within the context of resettlements of local communities after almost 20 years of civil strife, which had forced thousands of people from their homes into displacement camps. Since 2009 security has significantly improved and the government of Uganda has finally completed resettling most people back in their homes, though with a number of challenges including the deterioration of environment and natural resources.

Kenya

In Kenya, the project builds on the opportunity to improve natural resources governance and empower communities in the Lower Tana sub-catchment. This activity also supports the implementation of the government's Vision 2030 i.e. development blueprint from 2008 to 2030 and the recently launched Climate Change Action Plan. In the Lower Tana River Basin in Kenya, the project is being implemented in partnership with Fafi Integrated Development Association (FaIDA) and the Water Resource Management Authority (WRMA). Other partners include the Government institutions and departments such as National Drought Management Authority, Water, Forest and Wildlife, Livestock, Agriculture, Irrigation, National Environment Management Authority (NEMA) and County Governments of Garissa and Tana River. The project is focusing initially on 4 sub-catchments, namely: Khorweyne, Saka, Tula and Al-Amin Moju.

The project interventions are consistent with the new Constitution of Kenya which provides for devolution of governance (beginning 2012) in particular to achieve enhanced provision of social services and natural resources planning and management. The project aligns to the priorities of the Ministry of Devolution and Planning to:

- protect citizens by effectively managing risks such as conflict, drought, and climate change;
- improve the enabling environment for growth and development by investing in public goods and services, including infrastructure, energy, human capital development, and environmental management; and
- promote a socially just and inclusive society, in which the rights of all are protected.

Furthermore, the project works within the institutional framework for water resources established by the Kenya Water Act 2002, including building linkages to customary institutions focusing on pastoralism. Finally, the project is making contribution to the generation of evidence needed to guide implementation of the National Climate Change Response (NCCR), which has been developed to address adaptation and mitigation measures at an annual average cost of about US$ 3bn over the next 20 years.

2. PURPOSE AND OBJECTIVES OF THE MIDTERM REVIEW

The aim of the midterm review was to assess the progress, performance, achievements and lessons learnt to date and to use these to ensure that the project is adjusted as and where necessary in order for it to have maximum impact by the end of its lifespan.

The overall purpose of this review was threefold:

i. Learning and improvement as a building block for future work: It was intended that the outcomes of this mid-term review provide useful and relevant information to the on-going work; explore why implemented actions and interventions have been successful, or not and to provide guidance on how to better implement new work, possibly as a new project, after the current phase of the project has been completed;
ii. Accountability: The mid-term review was also an accountability instrument for the project. Consequently, the review was used to assess whether or not project plans have been, or will be, fulfilled and also determine the extent to which the project's resources have been used in a responsible and effective manner.
iii. Sustainability: The outcomes of the mid-term review assist IUCN and her partners in assessing the sustainability (or otherwise) of the activities, approaches, and structures initiated or supported by the project, and crucially, provide recommendations for the future.

The specific objectives of the mid-term review were to:

1) Assess the effectiveness and efficiency of project implementation, including assessing the institutional arrangement, partnerships, risk management, M&E and project implementation;
2) Determine the extent to which the project and its associated actions are relevant to the existing and likely future needs of its stakeholders and the environment/s in which it is being implemented;
3) Evaluate the outputs, and any outcomes of the project already delivered, and determine and assess their contribution to delivery of the project's overall aims and objectives;
4) Provide guidance on aspects or specific issues that will be useful in undertaking the planned project impact assessment through the use of scenario thinking to be done at the end of the project, i.e. how would the situation look like on the ground without this project;
5) Assess the long term sustainability of project interventions;
6) Assess the effectiveness and efficiency of the project set-up in terms of (i) institutional anchorage within IUCN and (ii) geographical focus.
7) Identify key 'lessons learnt' to date, particularly with regard to strategic processes and the mechanisms chosen to achieve the project's objectives to date, and
8) Make clear, specific and implementable recommendations to improve the project in its last year and provide guidance on the scope of future work.

3. STRUCTURE OF THE REPORT

This report is arranged as follows: Section 4 presents the information on the project design. The information goes far beyond the logframe, since activities for this phase were only formulated during project implementation. section 5 discusses the project activities and/or results; section 6 presents the assessment of the project performance. After this, the general performance of the project is presented according to the evaluation criteria of overall feasibility, relevance, coherence, effectiveness and efficiency. Section 7 contains policy recommendations.

4. PROJECT DESIGN

4.1. Project Approach and Purpose

The project approach is based upon the implementation of four resilience pillars. Figure. 1 highlights resilience and describes a particular socio-ecological interaction based on five types of capital (natural, political, physical, social and financial), which allows the particular socio-ecological system to switch back to an original state after having been exposed to certain shocks and stressors. The capacity of systems to bounce back depend on their original vulnerability and sensitivity, the exposure to particular shocks and stressors and their adaptive capacities.

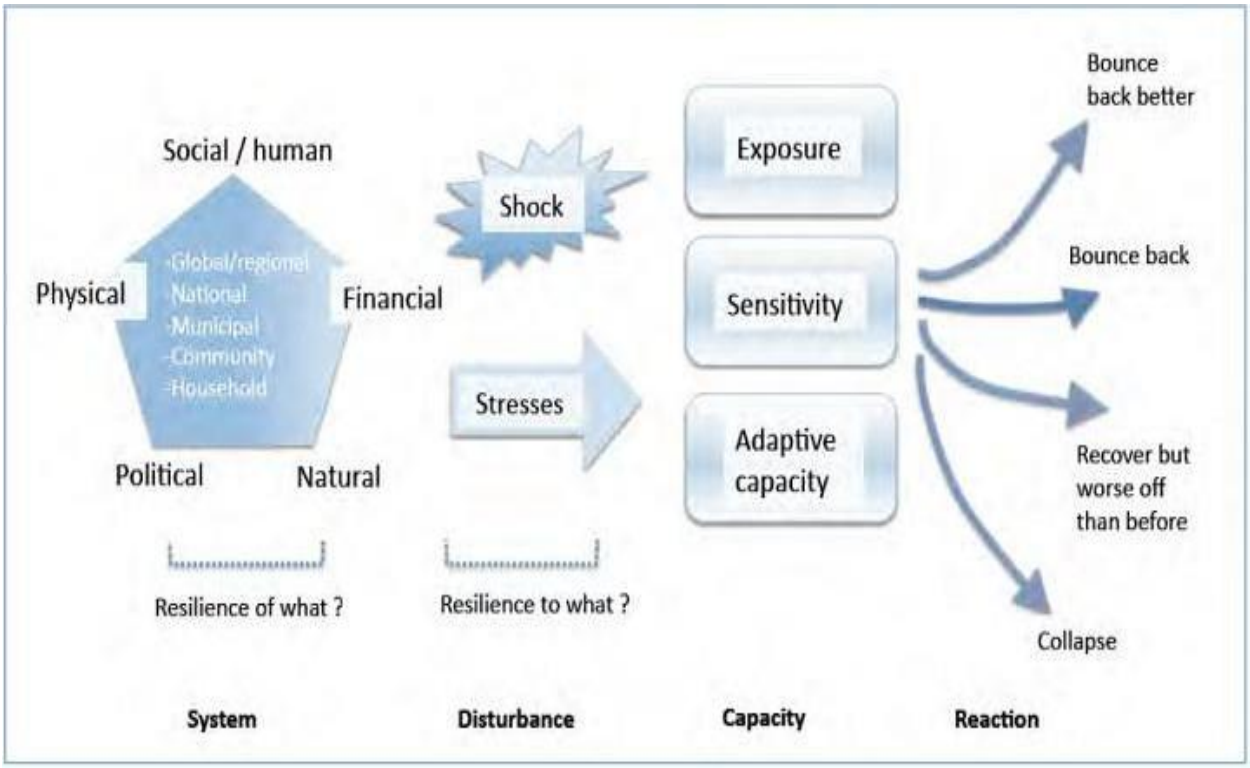

Figure 1: Livelihood Framework

In this sense, strengthening resilience means in particular focussing on those elements, which enhance sensitivies or exposure of the system or decrease their adaptive capacities.This is ensured within the project through the following four pillars: Diversity of ecosystems and livelihoods, self organization, learnng and sustainable infrastructure, and technologies as highlighted in Box 1**:**

Box 1: The four pillars of resilience within the project

Diversity of the economy, livelihoods and nature – Diversifying livelihoods and the use of natural resources can provide people living in drought affected areas with the alternatives they need to be adaptive to a changing environment. This can include improving access to markets to buy and process livestock, diversifying crops and livestock to include varieties less prone to drought, and conserving biodiversity to ensure the availability of ecosystem services such as storage of water in wetlands, which are vital during drought periods for livestock and agricultural needs, as well as human consumption.

Sustainable infrastructure and technology – Using approaches that integrate ecosystem services and combine appropriate design and operation of engineered infrastructure and the 'natural infrastructure' of ecosystems. This can include rehabilitation of existing water points combined with investment in natural infrastructure such as maintaining the river, but they need to be planned in a way that does not result in mal-adaptation.

Self-organization – Strengthening the rights of local people and their representative institutions to effectively manage and utilize their own resources results in more sustainably managed resilient ecosystems. This includes special attention to women and the needs of vulnerable groups who often rely heavily on natural resources for their livelihoods. Bringing together traditional and regional institutions can provide a platform to recognize the priorities of the people dependent on dryland areas for their livelihood, and how the ecosystems that provides key goods and services can be sustained.

Learning – Improved land and water management can be achieved through a variety of learning approaches including raising awareness and ensuring that individuals and institutions can use new skills and technologies needed to adapt to a changing environment. Lessons can also be used to influence policy especially if a demonstrated approach is practical, replicable and has the potential to be scaled up.

These elements are interventions into the feed-back loop of resilience as designed by Holling, which consists also of four stages: **Growth**, where the Socio-Ecological System is enhancing productivity, **Release**, where these products are released, either by harvests, or by change of seasons, or on the socio-economic side by expenses etc. This can be exploitative as a stress or a shock or non-exploitative as the normal turn of seasons.

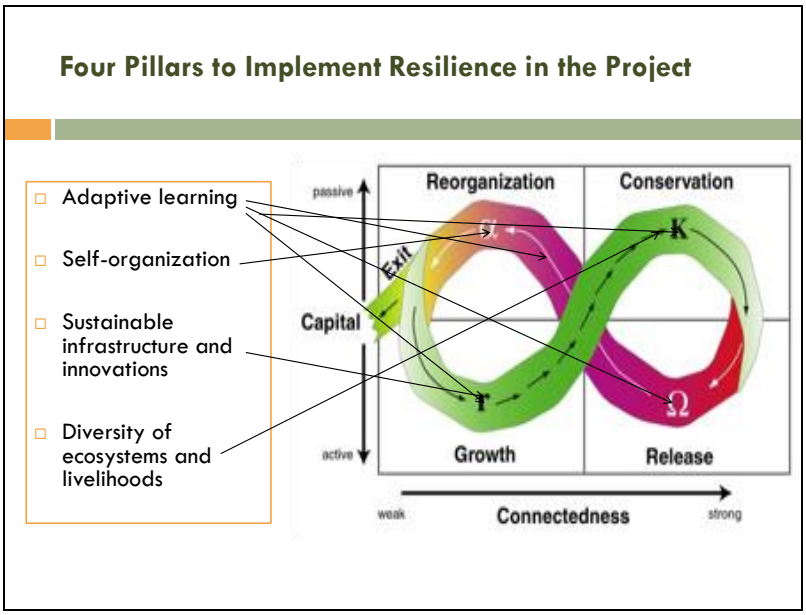

Figure 2: Resilience Framework related to the IUCN Resilience Pillars

Adaptive learning plays mainly a role after the release (exploitation) of the system to ensure the necessary knowledge base for the following reorganization phase of the system, which is captured by the self-organization activities of the project, however also in other phases. Sustainable infrastructures and technologies play a major role to support the growth phase, while it is the diversity of livelihoods and ecosystems, which ensure the conservation of the system. The two other elements are **Connectedness** and **Capital**, which are impacted in the different stage of the loop.

4.2 The Logframe

The overall objective of the project is:
"Improved resilience of dryland communities within a river sub-catchment to the impacts of more and more severe droughts through ecosystem management and strengthening of adaptive capacities."

The purpose of the project is that:
"Ecosystems in Kenya and Uganda are effectively and sustainably managed through coordination of local and formal institutions".

The project aims to achieve five key results which are aligned with the resilience goals as shown in Table 1.

Table 1: Result Areas and Resilience Pillars

Result Area	Resilience Pillars
Result 1: Integrity and functioning of catchments improved through ecosystem-based actions that are gender sensitive and diversify livelihood assets	Diversity of options to invest into livelihoods and ecosystems Sustainable infrastructures and technologies
Result 2: Improved capacity of traditional and formal resource management institutions to sustainably manage natural resources within a catchment area	Self-organization
Result 3: Knowledge and skills of local communities to implement adaptation, innovation and change within institutions are mobilized and improved	Diversifying livelihoods and learning
Result 4: Greater coordination between multi-sectoral institutions improves harmonization of plans and interventions	Self-organization and learning
Result 5:Awareness among policy makers on catchment management approaches are increased through learning based on project experiences	Learning

5. PROJECT ACTIVITIES

5.1 Introduction

The project activities are presented according to activity, sub-activities and their scheduling for each of the five result areas of the project. For each result area, a discussion of progress on outputs and prioritized actions in the two areas of implementation on the Kenya and Uganda side is presented.

Result 1: Integrity and functioning of catchments improved through ecosystem-based actions that are gender sensitive and diversify livelihood assets

Activity	Sub-activity	Quarter
Activity 1.1 – Participatory mapping with stakeholders on the use and access of natural resources through visioning and dialogue approaches	**Sub-activity 1.1.1**. Facilitate community consultations to develop rangeland resource use maps using appropriate technologies which provides input into development of a vision for future resource management **Sub-activity 1.1.2** – Produce rangeland resource management maps of the catchment area using GIS data with an overlay of community visioning information	1 and 2/12 4/12
Activity 1.2 – Sub-catchment and community environmental plans are developed by natural resource governance institutions to identify ecosystem governance issues, threats and opportunities	**Sub-activity 1.2.1** - Awareness raising workshop with local government and other relevant stakeholders to increase knowledge on natural resource related issues within the catchment areas **Sub-activity 1.2.2 –** Stakeholder meeting to develop sub-catchment plans including EMPs using resource mapping	2 and 3/12 4/12 and 1/13
Activity 1.3– Ecosystem based priority actions within management plans that will strengthen social and ecological resilience, and diversify livelihoods are identified and implemented. This includes restoration of riverbanks, zoning, re-vegetation, rangeland restoration etc.	**Sub-activity 1.3.1** Stakeholders identify priority actions from sub-catchment management plans to improve social and ecological drought resilience **Sub-activity 1.3.2** Facilitate stakeholders in hotspot areas to implement ecosystem based priorities in hotspots (e.g. bylaws for protection of water sources, planting windbreaks, water harvesting)	1/13 2/13-3/14

Activities1.1. and 1.2: The major outputs; Rangeland Resource Management Maps, Awareness Raising workshops, Adapted Sub-Catchment Management Plans (ASCMPs) and EMPs have been produced in both countries, although in Uganda the focus was rather on Community Vision Maps. ASCMPs in Kenya are highly elaborated and of excellent quality, which guided continuously the implementation of the project.

Box 2: Elements of the SCPs

Major elements of the SCPs in Kenya are the mapping of water and land management units and the current status of resources and existing management practices. They contain an overview on population and settlements within the respective sub-catchment and a community ranking of major environmental problems. To establish in particular drought resilience building, the SCPs contain a participatory conservation approach to achieve drought resilience. The final parts of the SCMPs are related to resource availability and use, under the aspects of equitability of access, efficiency of use and conservation aspects. At the end, the way forward is` illustrated for future capacity building, infrastructure development for resource conservation and disaster management and mitigation, stakeholder analysis for right-based approaches and poverty reduction, as well as the development of a participatory monitoring and evaluation, mainstreaming and up-scaling approach.

A particular merit of the sub-catchment plans is that they also support communities to assess the resource balance status within the sub-catchment, by accounting current reserves versus future demands and needs for conservation. From this information, resource allocation plans could be developed by communities to identify deficit and surplus areas for improvement and for the mitigation of resource deficits and uses, as well as balancing conflicting demands and pressures on seasonal and permanent resources.

Overlaying community maps with GIS tools has not yet been possible in the reporting period and has been shifted to the second project period in both countries, to be conducted by consultants. All other activities were accomplished according to the work plan.

Prioritized Community Actions in Sub-Activity 1.3

Both countries put a very high emphasis on Activity 1.3: *"Identification of Priority Actions by Stakeholders, and giving support to stakeholders in their implementation",* which led to a high number of activities being implemented in both countries, but are not defined in the logframe and are therefore illustrated below in more detail.

Activities conducted **in Uganda** were:

- Improving Access to Safe Water through the development of new water points as well as guaranteeing safe water through the provision of hand pumps, shallow wells and animal troughs
- Demarcation of buffer zones along riverbanks within a distance of 30 m from the river and protecting them against degradation by prohibiting their cultivation for agricultural purposes.
- Development of the CECF, which due to its importance is illustrated below in Box 3.

Box 3: Management and Benefits of the CECF in Uganda

The original idea for the fund was adapted from CARE International, which was implementing village banks as a saving mechanism. The innovation by IUCN was to make it a revolving fund, accessible to everybody by establishing a system to prioritize the poorest and most vulnerable ones in special but simple ways. For example, the chairperson of the committee cannot be part of the management activities directly, but is entitled also to borrow money.

Controlling Repayment

The feasibility of such a fund is highly dependent on the repayment rate. Up to now, the repayment rate of the fund is 100%. This is owed to the very smart accessibility mechanisms for the fund established by communities through linking the access to the fund with participation in community activities, partly also to by-laws and by success criteria. As for instance, if people do not participate in communal activities, such as clearing water sources on Saturdays, manage nurseries well, or if they do not comply with the by-laws, respect boundary demarcations, cut trees or burn charcoal, if they do not have pit latrines at home or do not send their children to school, they cannot access the fund.

Additionally, communities have incorporated a success criterion into the CECF, which requires, that the money borrowed for certain investments should result in higher returns than the interest rate. This motivated communities to become even more successful, leading for instance to a demand for better trainings to achieve new or better skills, so that community members became better eligible to access the funds.

Utilization of the Fund

While initially the CECF was meant to provide a safety net on climate related issues, very soon the scope was broadened to also serve as poverty ascendency through business development. While still the satisfaction of basic needs for medicine, education and food have been priorities in the utilization of the funds, many community members used the fund also for investments into agriculture, for instance buying crop seeds, tree seedlings, poultry, goats and inputs for crop cultivation, while others invested into small-scale business. Food processing played a major role for income generation, above all baking pancakes, followed by investments into petty trade, and alcohol brewing, Shea butter extraction/processing, phone charging, etc.. Some communities have developed a vision to make larger amounts accessible from the fund. This is rather a positive development as long as it is ensured, that poorer segments are not marginalized indeed and full repayment rate can still be guaranteed.

The role of communities within the prioritized actions were to oversee river bank management, form an upper catchment management group to support better farming methods, form a group that looks at the domestic water facilities, involve in river bank buffer restoration along hydrological units, and plant seedlings in particular of *Grevillea robusta.*

Community Prioritized Actions in Kenya

Water development and management: Due to the high pressure on water sources, which are moreover frequently very saline, humans and animals compete for the few water points, resulting into various conflicts between different water user groups as well as contamination of water by livestock. The project has addressed this challenge by protecting existing water sources against contamination and developing new ones, which contain soft and safe water, such as ponds and shallow wells, and by managing water use in an equitable, conflict-free manner. For instance, the project has fenced the water pan in Tula, established shallow wells in Boka, and roof water harvesting structures in Al-Amin Moju, Khorweyne and Saka with water tanks of 10,000 litres capacity each. Additionally, two hydro-meteorological stations in Boka and Saka have been established and two River Gauging Stations (RGS) in Hola and Garsen rehabilitated. Feasibility studies were conducted for 2 RGS (Bura Bridge and Saka Habarow).

Restoration of Dry and Wet Pastures and Balancing Land and water Resources:
Climate and social change led to the disruption of traditional rangeland governance, which used to partition rangelands into dry and wet pastures. This had caused a situation, where some rich pastures were under-utilized due to lack of water resources, while others with a proliferation of water points were degraded. The project has addressed this problem by:

a) Revitalizing customary institutions and by-laws to sustainably manage and use water and pasture resources.

b) Ensuring water conservation & protection is in the ASCMPs/SCMPs.

c) The project has also advocated and lobbied the Government and partners through different for a such as sub-county and county steering group meetings for and/or to:

   i) Support and/or provide emergency water trucking in drought times so as to support pastoralists in dry season grazing areas

   ii) Construction of strategic boreholes and water pans for use only in dry seasons

Through the complementary integration of water management issues into rangeland management within the sub-catchment management plan, the project is successfully on the way of restoring the traditional grazing systems of wet and dry pastures.

Result 2: Improved capacity of traditional and formal resource management institutions to sustainably manage natural resources within a catchment area

Activity	Sub-Activity	Quarter
Activity 2.1 – Integrate Local Knowledge and customary governance strategies into formal natural resource management planning of how ecosystems / landscapes are managed to improve drought resilience, and build consensus on prioritisation of implementation activities	**Sub-activity 2.1.1**. Consolidate local rules, customary regulations and bylaws on NR planning and management **Sub-activity 2.1.**2 Support dialogue between traditional and formal natural resource institutions to incorporate customary law into by-laws which address issues on access and use of natural resources	3 and 4/12 4/12 and 1/13
Activity 2.2 – Capacity building of traditional institutions and local governance bodies in the areas of financial management, CC, NRM, rangeland planning and management, advocacy etc.	**Sub-activity 2.2.1**– Undertake a capacity needs assessment across NRM institutions to identify gaps in knowledge and skills **Sub-activity 2.2.**2 – Development and implementation of capacity and learning development plan	3 and 4/12 4/12-4/14
Activity 2.3– Empower natural resource institutions (formal and customary) on natural resource rights and responsibilities through training of law enforcement officers.	**Sub-activity 2.3.1** – Train law enforcement officers and community members on the rights and responsibilities of catchment management in the project area	2 and 3/13

Achievements of the project to revitalize by-laws or draft new ones, which match the requirements of sustainable dryland and wetland management under increasing drought conditions, have been substantial, but had a different shape in the two countries.

In Uganda customary law had to a great extent been forgotten due to the civil war, because it was not applicable in IDP camps, therefore, almost all by-laws developed within the project were new and were particularly devoted to three areas:

- Management of water sources, particularly, collection of water
- Land use and environment: issues like tree cutting, burning the bush, community participation, protection of riverbanks and wetlands
- Use and distribution of the CEFC fund.

Finally, the by-laws were transformed into parish laws, which were translated into the local language and approved by the Sub-county local councils. Some of those by-laws became district laws or ordinances and can be enforced through official legislation.

In Kenya, a study on customary institutions and regulations made the following recommendations:

- *Develop a structure for by-laws* and facilitate the four communities to develop their own by-laws in a participatory process based on the common structure;
- *Validate the by-laws* through an elaborate process at the level of each community that may include the production of the by-laws in the local language where appropriate;
- *Develop and implement a strategy to support the county governments to develop regulations* for recognition and enforcement of community by-laws for planning and management of natural resources.
- *Develop and implement a strategy to support communities to have their by-laws* recognized by the county governments as a basis for enforcement

Subsequently some of the recommendations especially 1 and partly 2 above have been implemented, while the 3rd and 4th recommendations will be implemented in phase 2.

Result 3: Knowledge and skills of local communities to implement adaptation, innovation and change within institutions are mobilized and improved

Activity	Sub-activity	Quarter
Activity 3.1 – Knowledge and skills of local communities to implement adaptation, innovation and change within institutions are mobilized and improved	**Sub-activity 3.1.1** Facilitate exchange visits between communities within a catchment area for learning and knowledge exchange	1-2/13
Activity 3.2 – Market and value chain analysis of economically and environmentally sustainable natural resource products that have been identified in management plans	**Sub-activity 3.2.1** Analysis of market and value chains of suitable natural resource products which identified synergies and limitations of operationalisation	2-4/12
Activity 3.3 – Communities facilitated to identify priority business opportunities and training of local business entrepreneurs in business enterprise that focus on environmentally and economically sustainable natural resource products	**Sub-activity 3.3.1** Facilitation of dialogue meetings with key stakeholders across sectors to disseminate and discuss information from market and value chain analysis to identify priority business opportunities **Sub-activity 3.3.2** Learning visits to private enterprises **Sub-activity 3.3.3** Deliver training to local entrepreneurs to facilitate sustainable natural resource business development	1-2/13 3/13-2/14 2/13-1/14

Under this result area, activities conducted in Uganda were the following ones:

Market and Value Chain Development

The project conducted a market analysis in Lira to introduce market and market chain development. The analysis includes the role and capacities of large scale and small-scale dealers, which products and corresponding quantities the market demands in order to effectively link communities with traders and to facilitate market chain development in the coming second phase of the project.

While these linkages with various entrepreneurs and traders are important to establish the connectivity of communities with market players, they should also improve access to market information. However, this activity has not yet progressed as much as activities in other result areas and has been scheduled to be continued in the remaining phase of the project.

Use of CRiSTAL Tool for Project Planning

As part of its knowledge management, the project used the CRISTAL tool for project planning. CRiSTAL stands for "Community-based Risk Screening Tool – Adaptation and Livelihoods." The tool was designed by IISD and helps users design activities that support climate adaptation (i.e., adaptation to climate variability and change) at the community level. It allows screening of a new or an ongoing project against risks or environmental hazards in the course of implementation

Tree Production

For the diversification of income, the project focused on tree production, which has a ready market in the area. It supported Angetta and Arwotngo parishes to establish communally managed nurseries for over 80,000 seedlings, including *Grevillea robusta, Pinus caribae, Maesopsis eminii, Milicia excelsa, Mangifera indica*, and *Citrus sinensis*. In Otuke, tree nurseries contain mainly *grevillea*. Musizi (*Maesopsis eminii)* did not germinate well, but communities have an interest to grow the species as it fetches high prices on the market. Transplanting the indigenous tree seedlings into the fields faced various difficulties, such as termite attacks, therefore the communities prefer pines which are easier to maintain, resistant to termites and grow fast. Also due to the early onset of the dry season as for instance observed in Otuke, transplanting could not take place, therefore the seedlings remained in the nursery.

Improvement of Agricultural skills in collaboration with the Agricultural Department (NAADS)

Once the interest into agriculture was raised, communities also expressed their wishes of gaining more skills in improved farming technologies. They showed interest in improving soil management and climate smart agriculture, especially crops varieties, which are better adapted to drought conditions, revived ox-ploughing as cultivation with ox-ploughs keeps more moisture in the soils. To satisfy these interests, the project supported collaboration with the Agricultural Department, which provided communities with the required knowledge and skills.

In Kenya activities for this result area are related to supporting small scale irrigation of fruit trees:

Enhancing Agro-Biodiversity through small-scale irrigation in Balambala

The project supported the establishment of small-scale irrigated fruit farming near river banks as part of riverbank stabilization. The fruits grown were mainly bananas, mangoes, pawpaw and passion. In some farms, Sudan grass was grown, which was used for fodder supply.

The farmers are arranged in groups of 40-70 members; mostly women, with farm sizes ranging from 100 - 200ha. The main challenges are conflicts with wildlife such as elephants, baboons and many others. Another challenge is the low familiarity with agriculture in general and irrigation in particular since members are predominantly from pastoralism background. Despite the challenges, the produce - vegetables, bananas and papaya had already matured into fruiting and communities already received their first income earning between KShs 50,000 and KShs 70,000 from the harvest. The fruits were also used for subsistence consumption thus, improving the nutritional level of households. In some of the group farms women exclusively owned the fruit and vegetable farms in collaboration with their husbands.

Market Value Chains

Similar to Uganda, establishment of market value chains is lagging behind other activities. Approaches brought in by the project to introduce enterprise principles and business planning to the communities did not result into further activities in marketing or value chain development. Business planning and implementation of the activity should be continued in the remaining phase of the project.

Two exchange visits to Garba Tula, Laikipia and Samburu were organized for the communities to learn bio-enterprise development, in particular establishing value chains from planting and harvesting, processing and marketing of Aloe, honey, frankincense,myrrh and gum arabic.

Conclusion
The interventions in this result area have high synergies with activities under Result Area 1.3 on water management and by-laws on sustainable rangeland management, which eases the pressures on grazing land and therefore conserving it. The positive impacts on land management created by the project may in the long run be effective in restoring former pasture productivity with additional positive impacts on water resources.

The Result area does not really have a focus, and the linking of market and business activities solely with knowledge management appears a little bit casual. Vice versa there is the impression that the various other activities related to knowledge management are miscellaneous. For instance, it is not clear why tree production in Uganda and irrigation agriculture is reported under this result. To solve this confusion, it seems rather to be recommendable to link knowledge management to all Result Areas as a cross-cutting issue, as further elaborated in the Sub-Section on Project Design. It is also not clear, why Activity 3.1 was conducted after Activity 3.2, and Sub-Activity 3.3.2 started later than 3.3.3.

Result 4: Greater Coordination between Multi-Sector Institutions

Activity	Sub-activity	Quarter
Activity 4.1 – Strengthen existing multi-stakeholder dialogues between different natural resource users to mitigate conflicts and prevent exacerbation of drought conditions	**Sub-activity 4.1.1** Train key stakeholders in multi-stakeholder processes to reduce conflict over natural resources within the catchment area **Sub-activity 4.1.2** Facilitate the strengthening of existing catchment dialogue platforms (f.eg. WRUAs) between different natural resources users to mitigate conflicts	3 and 4/12 4/12-4/14
Activity 4.2 – Facilitate exchange mechanisms across sectors and governance levels to improve capacity and exposure of drought resilience through effective catchment management	**Sub-activity 4.2.**1 Facilitate exchange visits within and/or outside catchment areas for improved capacity and exposure **Sub-activity 4.2.2.** Development of action plan to follow up on learning areas identified through exchange visits	3/12-1/14 2-4/13

Activity 4.1*:* In Uganda, the project is partnering with the Directorate of Water Resources Management and routinely participates in joint sector reviews, which ensures the harmonization of plans and interventions at multi-sectoral level. The project participated in two ministerial steering committee meetings for Northern Uganda Regional Learning Forum to organize a multi-stakeholder learning forum on how to implement water related projects and programs, drawing participants from civil society organizations. The project also played a major role in linking the six districts (Lira, Otuke, Ayago Alebtong and Aswa) within the sub-catchment to mitigate upstream-downstream user conflicts and facilitated the Upper Nile Water Management Zone - a government agency in-charge of water resources management within a river basin to hold the first Upper Aswa Sub-Catchment Management Committee Meeting.

In Kenya, the project works mainly with Local Partner Organisations, NGOs, Water User Associations, and all line Ministries in the NRM sector. This ensures that the project is well embedded and integrated from local to central government level. The major partners are:

- Fafi Integrated Development Association (FaIDA) – local NGO;
- Water Resource Management Authority (WRMA);
- Water Resource Users Associations (Saka, Khorweyne, Tula and Al-Amin Moju);
- Line Ministries (Livestock, Water, Agriculture, National Drought Management Authority - NDMA, Kenya Forest Services - KFS, Kenya Wildlife Service - KWS, Lands, National Environmental Management Authority - NEMA, Administration, Education (schools), health (dispensaries); and
- County Governments of Garissa and Tana River.

The project used WRUAs as an entry point for its water and land management activities to build upon the experience of the associations in sustainable management of water resources and merged it with the resilience approach. The strengthening of the WRUAs was` instrumental in taking the project forward and ensuring the multi-sectoral and multi-disciplinary linkages, since the WRUAs work closely with various government agencies in particular with WRMA, Ministries of Water and Irrigation (MoWI), Livestock Development and Agriculture, FaIDA among others. The project participated in District and County Steering Group meetings for both Tana and Garissa counties – these are coordination meetings for all agencies and actors working on water, environment and sanitation.

Activity 4.2: **In Uganda** the project hosted a learning exchange visit of participants from Kigezi Diocese and the Albert Nile Water Management Zone – an IWRM project team with funding from DANIDA. The agenda was lesson sharing and visit of BDR project sites in Lira and Otuke districts. The visitors appreciated the CECF approach, which they wish to replicate at their sites in South West Uganda. **In Kenya** the project organized an exchange visit to Garba Tula and Isiolo and visits of the community initiatives e.g. Bisan Adhi Eco-cultural Village and Moliti Shallow Wells including a multi-stakeholder workshop on NRM and governance. As a result of the exchange visit, the communities identified the following activities to be implement in their respective sub-catchment to improve resilience to droughts:

- Khorweyne sub-catchment: management of shallow wells and revitalization of three (3) water corridors (Malkas) to facilitate access of livestock to the river;
- Saka sub-catchment: Marking of water corridors (Malkas) along the river using permanent beacons, strengthening and protection of dry/drought season fodder reserve, market and value chain development for Doum palm products targeting the building and construction sector (thatches is of particular interest);
- Al-Amin Moju sub-catchment: strengthen natural resource management committee, management of Boka springs and establish an eco-cultural village Tula sub-catchment: strengthening of the natural resources management committee to conduct adequate sensitization and effective management of natural resources and planting of indigenous tree species in schools and around water pans.

Conclusion

In conclusion it can be confirmed, that the project has effectively established multidisciplinary linkages with all relevant sectors, which expresses and supports the integrated nature of the project in adequate ways and allows the implementation of NRM successfully through a multi-sectoral approach by bringing the available knowledge in different disciplines, institutions and agencies together and mitigating and balancing successfully the diverse and sometimes contrasting interests of the different sectors.

Result 5: Awareness among policy makers on catchment management approaches to improving resilience and adaptation are increased through learning based on project experience

Activity	Sub-Activity	Quarter
Activity 5.1 – Involvement of project stakeholders in key policy dialogues dealing with drought resilience to communicate results and influence decision making at catchment, national and cross-regional levels	**Sub-activity 5.1.1** Engage and participate in key forums at national and regional levels and provide input into the implementation guidelines, legislation and policy **Sub-activity 5.1.2**. Support involvement of key project stakeholders in high level policy for a such as World Water Week, Word Water Forum, etc.	1/12-4/14 1/12-4/14
Activity 5.2 – Key stakeholders aware of project progress and offer steering and guidance to implementation	**Sub-activity 5.2.1** Inception meeting to determine work plan details and modes of implementation **Sub-activity 5.2.2.** Involvement of project representatives in project coordination meetings and project advisory committees	1/12 2/12-4/14
Activity 5.3 – Documentation of lessons from the project are compiled and translated into popular languages in different media formats and disseminated	**Sub-activity 5.3.1** Packaging and dissemination of information from the project to local and national decision makers to improve natural resource management	1/13-4/14
Activity 5.4 – Development and implementation of a learning, monitoring and evaluation strategy to measure efficacy and efficiency of project outputs	**Sub-activity 5.4.1** Development and implementation of a learning, monitoring and evaluation strategy	2/12-4/12

This result area was to promote the involvement of project stakeholders in key policy dialogues as well as influencing of decision making at catchment, national and cross-regional levels. In **Uganda**, the following activities were conducted under this result area:

- Support to World Environment Day celebrations on the 5th June 2012 at Otuke district headquarters. The theme was: “Green Economy: Our Action Counts”;
- Planting of 500 seedlings;

- Hosting a national stakeholder awareness creation workshop on Integrated Water Resources Management;
- Choosing BDR project site of Ating parish in Otuke District by the 4th Joint Technical Review Committee of the Ministry of Water and Environment as a learning site for IWRM;
- Participation in the October 2012 Joint sector review meetings between the Government of Uganda, the Donors and Ministry of Water and Environment;
- Orientation of project staff to a new DANIDA-funded IWRM project;
- Support to two UWASNET IWRM workshops to draft the Otuke district NRM ordinance;
- A team from the Austrian Development Cooperation (ADC) in Uganda and Journalists from Austria visited the Uganda project sites in May 2013 for learning and understanding project progress in resilience building of communities to drought and the project's contribution towards piloting the government' s new ecosystem-based approach to Water Resource Management; and
- Participation in World Water Day in Lira District.

The project conducts monthly community meetings to which policy makers are invited, where all current and emerging issues are discussed. The meetings are appreciated by communities, since they enhance connectivity and allow mutual adaptive learning, which empower the communities and create awareness among the politicians. Prior to the project, the communities felt they were less important and let alone acknowledged by governmental officials and therefore did not dare to call the officials for community meetings. The project has helped the communities to completely overcome the problem of feeling too inadequate. Currently, communities have gained confidence and can compel district officers to listen to their problems: *"The people are no longer shy and they are also very vocal*." as it was said by one of the local project officers.

The impression gained during the evaluation was, that the project has raised substantial awareness on its mandate among policy makers.

In Kenya, a strong focus was put into the production and dissemination of outreach documents, which are:

- The production of three (3) policy briefs pamphlets on local rules & customary regulations on NRM; adapted SCMP plan for ASALs; and advocacy and policy influencing strategy for water resources management;
- A ToT participatory training video on sustainable NRM. Thirty three (33) participants were trained;
- Production of three (3) participatory videos on: charcoal burning and land degradation; water scarcity and management; and pasture scarcity and management inTula;
- Sensitization of partners on roles of IUCN/BDR at county (Tana River & Garissa) & national levels through different forums; and
- Co-financing of Livestock stakeholder (71 participants) forum for Garissa. The forum was on sustainable livestock production for improved livelihoods and biodiversity conservation in changing environment and governance.

In addition, the project produced the following outreach products:

A Website on drought resilience building in the project:

- http://www.iucn.org/about/union/secretariat/offices/esaro/?10008/IUCN-to-build-drought-resilience-in-Kenya-and-Uganda-through-sound-land-and-watermanagement.

Video on Participatory training conducted in Garissa in June 2012 - http://www.iucn.org/about/union/secretariat/offices/esaro/_news/?10150/Government-staff-and-community groups-hone-skills-in-participatory-video

Three community videos on water pasture and land management issues and awareness creation among stakeholders in arid and semi-arid areas:

- http://youtube/Gdwb-WTlpUA;
- http://youtube/mMnBQWOukoo;
- http://youtube/JSIsksG57SE

- *Documents:*
  - "The Adapted Sub-catchment Management Plan for Arid and Semi-Arid Lands of Kenya" (ASCMP). A briefing note compiled from the process of developing the management plans for Tula and Saka sub-catchments also highlighting the merging of two planning processes; i.e. for the sub-catchment management plan and rangeland management plan;
  - "Local rules and customary regulations on natural resource management in Lower Tana catchment, Kenya". A briefing note summarizing a study report on consolidation of local rules, customary regulations, laws and by-laws on natural resource planning and management in Lower Tana catchment.

Conclusion

The achievements of the project are substantial and have led to the high visibility of the project in both countries. Awareness of policy makers from all sectors could be confirmed during the stakeholder meeting in Kenya, where policy makers from all sectors were present thus, confirming the high performance and visibility of the project and its contribution to higher awareness on drought resilience and environmental issues. In general, the project managed from the beginning to secure political support. Politicians have shown solidarity with the project and community participation, which enlisted strong ownership of the project from the beginning. Project priorities have also been well integrated into sectoral and governmental policies. For instance, the district governments in Uganda integrated the needs expressed by the community into district planning and budgeting, such as the enforcement of by-laws for wetland protection, the supply of extension services for agriculture etc.

6. PROJECT PERFORMANCE

6.1. Effectiveness

In terms of effective delivery of the outputs and activities most of the activities have been implemented in accordance with the project plan, some of them ahead of schedule, except GIS mapping, which is still outstanding and is scheduled to be implemented during the remaining period of the project. Other activities scheduled to be accomplished before the project ends includes bio-enterprise development under Result Area 3.

The project has excellent outputs in the area of riverbank protection, water development and management and sustainable land management in both countries. Particular merits of the project lie in integrating the needs of the poorest and most vulnerable segments of the rural population in project activities and targets. The outputs achieved in the area of livelihood diversification are mainly related to rehabilitation of degraded areas, promotion of small-scale irrigation agriculture, gums, resins and aloe production.

Sustainable technologies were mainly related to water development, and included the provision of rain water harvesting structures, construction of ponds, wells and pans. Water supply was effectively integrated into rangeland management, so that an optimal balance between pastures and water resources was achieved, to avoid both under-utilization as well as overuse of rangelands and restored earlier systems of the division between wet and dry grazing seasons. In addition to sustainable technologies, the project was successful in developing local rules and regulations of NRM into by-laws that can be legally enforced. . Furthermore, the project was highly successful in making multi-sectoral linkages and producing outreach materials which made governments aware of community needs, to an extent, that the newly established CECF has attracted funding from government budget.

However, the sub-catchment management plans are not sufficient to balance upstream with downstream user needs. Therefore, under Result Area 4, the strengthening of platforms should also aim at producing water management plans on a wider catchment scale. This might also require the introduction of compensations and PES for water services, which could be financed from international funding agencies.

Nevertheless, in total all outputs and targets have been fully met according to schedule and match the objectives as is shown in Table 2.

Table 2: Achievements of the Project versus Targets

Result Area	Output Targets	Achievements
Overall Objective	Improved resilience of dryland communities within a river sub-catchment to the impacts of more and more severe droughts through ecosystem management and strengthening of adaptive capacities.	➢ Ability of communities to improve their resilience to droughts though all these indicators could be confirmed in all cases
Project Purpose	Ecosystems in Kenya and Uganda are effectively and sustainably managed, through the coordination of strong representative local institutions who are supported by an enabling positive environment.	➢ Awareness raising for ecosystem management conducted, priority activities by communities identified, support by local institutions generated.
Result 1: Integrity and functioning of catchments improved through ecosystem-based actions that are gender sensitive and diversify livelihood assets	1.1.1. Two (2) consolidated maps by end of first year 2 maps with GIS overlay by end of the year 1 – stakeholders in project area (500) and organizations (50) access and use maps by middle of year 2 1.2.1. Five hundred (500) stakeholders (50%) women participate in awareness raising events across project areas by end of year 1. 100 stakeholders across project area (50% women) are involved in developing sub-catchment management plans by middle of Year 2 1.3.1. 100 stakeholders across project area (50% women) are involved in selecting priority actions by middle of Year 2 1.3.2. at least 4 ecosystem based priority actions are implemented across project areas by end of Year 3	➢ Required number of maps was provided, though no GIS overlay ➢ All stakeholders interviewed confirmed involvement into awareness raising and prioritizing of activities, very high percentage of women. More than 100 stakeholders involved in SCMPs in both countries, more than 50% women More than 4 ecosystem based activities already prioritized by end of Year 3

Result Area	Output Targets	Achievements
Result 2: Improved capacity of traditional and formal resource management institutions to sustainably manage natural resources within a catchment area	2.1.1. 200 stakeholders across project area (50% women) provide input and guidance to consolidation of local rules etc. by end of Year 1 Appropriate legal documentation in Kenya and Uganda is consulted by end of year 1 2.1.2. 4-6 dialogue events across project areas by middle of Year 2/ 200 stakeholders across project area involved in dialogue process by the middle of year 2.2.1. Capacity gaps in technical, financial and overall management specified by end of Year 1 60 people across project areas (50% women) involved in capacity training by end of Year 3 2.2.2. 60 people across project areas (50% women) involved in capacity training by end of Year 3 2.3.1. – 50 law enforcement officers trained across project area (30 – 50% women) by end of Year 2	➢ 8 Dialogue sessions for input into customary laws and further discussion. (at least 360 stakeholders, 30% women) ➢ Documentations of customary laws established ➢ Customary frequently considered as more powerful than formal law ➢ Capacity gaps identified and addressed ➢ Law enforcement achieved in different ways
Result 3: Knowledge and skills of local communities to implement adaptation, innovation and change within institutions are mobilized and improved	3.1.1. Two (2) exchange visits by end of the year 3.2.1. Two (2) market chains analyses 3.3.1. Two (2)multi sector dialogue meeting across project areas by end of Year 2 3.3.2. 50 people from communities in project areas (50% women) participate in learning visits by end of year 3 3.3.3. 40 local entrepreneurs (50% women) are trained by middle of Year 3	➢ Exchange visits conducted ➢ Market chain analyses performed ➢ Multi-sector dialogues conducted and learning areas defined
Result 4: Greater coordination between multi-sectoral institutions improves harmonization of plans and interventions	4.4.1. 100 stakeholders from different sectors (30 – 50% women) trained by end of Year 1 4.1.2. Two (2) multi-stakeholder dialogue platforms strengthened at the catchment level 4.2.1. Two (2) exchange visits between catchments by end of Year 2 - 20 people from different sectors and governance levels (30 – 50% women) by end of Year 2 4.2.2. 10 actions items are followed up by start of Year 3	➢ Many sectors involved in resource management plans. ➢ Particular importance of DRWM and Agricultural Ministry in Uganda, ➢ Particular importance of WRMA and KFS in Kenya ➢ Action items to be followed up in remaining period of project in accordance with the workplan
Result 5: Awareness among policy makers on catchment management approaches are increased through learning based on project experiences	5.1.1. Ten (10) project stakeholders (50% women) participate by end of Year 3 5.1.2. Eight (8) project stakeholders participate in forums (50% women) by end of Year 3 5.2.1. 100 people (30 – 50% women) take part in inception meetings by end of first quarter, Year 1 5.2.2. Three (3) coordination meetings (1 per year) 5.3.1. Two- four (2 – 4) policy briefs, 2 videos. 2 pamphlets, 2-4 posters all by end of Year 3	➢ A high number of policy briefs and information material produced ➢ High replication effect of the project

6.1.1 User Satisfaction

User satisfaction was another measure for project effectiveness, as well as a qualitative assessment of achieving the results and goals, which was used to triangulate the above findings. In general almost all stakeholders ranked the performance of the project as excellent, as well as the single interventions, as the table below highlights. The scores given are listed in Table 3.

The quality in particular of Sub-Catchment plans in Kenya was very high, as well as all documents for awareness rising, so were all infrastructural and technological interventions.

Table 3: Scores given on different interventions by Stakeholders in Stakeholder Meeting, Kenya

Intervention/Score	1	2	3	4	5
Tree Planting	6	1	4		
Malkas	5	2	1		
By-Laws	8	1	1		
Exchange visits	2	1			
Water Management	6	3	2		
Overall Satisfaction with the Project	***16***	***1***			

(The numbers indicate the number of stakeholders, who gave the respective score
Scores: 1 = Excellent, 2 = very good, 3 = good, 4 = satisfactory, 5 = non-satisfactory)

IUCN was highly appreciated by stakeholders in both countries for the following reasons:

- IUCN has properly understood and addressed the environmental challenges within the community
- IUCN has effectively combined environmental work with livelihood needs of the communities through the CECF.

Above all, it was mostly appreciated by communities, that IUCN shows a strong commitment to work directly with communities, indeed IUCN is considered as the only organization in the area, which really do work at the grassroots.

6.1.2. Effectiveness of the Monitoring Framework

The project developed three frameworks for performacnce evaluation and progress reporting that is; - the Logframe, the Workplan and the Monitoring Plan. Activities defined in the **Logframe** allow high flexibility of interventions undertaken by communities but were very well designed to capture the spirit of resilience for exampleSub-Activity 1.3.1 which provides for prioritising actions in the sub-catchment plans. The logframe contains indicators to measure the impacts of the project and are named as "*impact indicators*". Their verification is complemented by a corresponding list of "*means of verification*" in the logframe. The impact indicators are very well designed to capture the possible impacts of the project. However, some of them are not easy to measure, for instance the impact indicator for Result Area 2a: *"% change in perceptions of capacity in natural resource governance institutions and (b) % change in number of local people in the project area who have good knowledge and understanding of their rights and responsibilities*". To verify the two indicators it would considerably require to conduct surveys among the whole communities, which involves substantial financial investement and time. Nonetheless, it is exactly this type of indicators which are necessary to capture the nature of resilience. However, for the mid-term evaluation, verification of the respective indicators was possible by interviewing a high number of stakeholders who were considered large enough to be representative to confirm project success.

Indicators in the **Workplan** are called "*output indicators*". They are managemet related and refer mainly to the mobilization of communities and the number of products provided within the various activities, such as "*number of maps produced*" or "*number of documents produced, detailing customary rules*" etc. The output indicators are complementary to the indicators in the logframe, and are further complemented by targets defined in the workplans, which ultimately indicate the exact targeted number of counts expressed by the indicators, for example, "*2 consolidated maps by end of the year".*

Impact indicators are again defined the **Monitoring Plan**, which furthermore lists the sources of verification in more detail. The Monitoring Plan also adds a **Baseline** to each Indicator. However, the units of measure of the baselines are different from the units of the indicators. Therefore, the indicators do not correspond well to the baselines. While impact indicators are well designed from one timeframe to the next report period on project progress and have also been used appropriately in reporting, the comparison to the baseline situation is not possible. For instance, the baseline for Result Area 5: "*Approach to adaptation and resilience often centred around construction of engineered infrastructure, changes in management systems rather than building and enhancing existing structures and approaches including the use of ecosystem management*", should have been expressed as *"almost 0*" in order to correspond to the impact indicators;

"a*. % change in extent to which resource management as a means to improve adaptation and resilience is incorporated into policy discussion*s" and" b. *% change in the number of references to ecosystem management as an approach to drought in policy forums*". This would enable comparison of the impact changes with the baseline situation. .

Nevertheless, the information given by the baseline indicators as they are now, can be maintained to give additional information, which allows qualitative comparisons between the baseline and project achievements for the mid-term review and end of project evaluation. .

The evaluation also noted that impacts Indicators are not very detailed and some of them are mixed with management indicators

Targets are only mentioned for output indicators and correspond adequately to the indicators, but as mentioned above, are only provided in the work plan, while for better consistency, they should also be listed in the Logframe and particularly in the Monitoring Plan. But it would be preferable to have a progress plan or matrix, which would indicate the percentage to be reached within each reporting period to facilitate easy monitoring and evaluation in future.

The project needs to consider whether detailed subdivision of **activities** into sub-activities is really necessary, because in many cases neither sub-activities within one activity are not very much different from each other nor from the main activity. For instance, *"**Sub-activity 5.1.1 -** Engage and participate in key forums at national and regional levels and provide input into the implementation guidelines, legislation and policy"* and **"*Sub-activity 5.1.2*. *Support involvement of key project stakeholders in high level policy fora such as World Water Week, Word Water Forum, etc.*" have similar outputs, which are: "*Reports detailing sharing of information on drought resilience so as to influence regional and national policies*" for Sub-activity 5.1.1., while it is; *"to influence and inform high level policy meetings*" for Sub-activity 5.1.2. This shows that both activities are actually the same, but it is just informing different stakeholders, which could be captured through different indicators. This applies for many other activities. Activity 5.4, better illustrates the redundancy of sub-activities; only one sub-activity is related to the main activity. Other problems with activities occur with regard to exposure visits, which are both foreseen in Result Area 3 and 4, without clarifying their different objectives. In general, the Result Areas seems to be hazy and therefore needs to be formulated in a more targeted way. For the future, the logframe could be simplified and redundancies removed.

On the other hand, community prioritized actions captured as Activity 1.3 need to be more differentiated, if possible in a separate framework. Currently there is lack of a framework to capture community prioritized actions as some of the activities were reformulated during implementation. Therefore the bulk of the hardware activities is not adequately monitored which is not good for the project as these activities are the very ones highlighting community ownership should be adequately captured and reported on.

Furthermore, in both Kenya and Uganda, there was no logical flow of activities between mapping and development of by-laws. As a result, during the process of mapping, issues of by-laws for defining mapping units arose. The case was different in Result Area 1 where conflict resolution activities were incorporated prior to establishment of management plans, which is consistent with normal planning steps; conflicts have to be solved before planning to avoid their perpetuation. Therefore, for the remaining project period and future phases it is recommendable to address conflict resolution, mapping and by-laws in one result area first; diversification of incomes and sustainable technologies and marketing in another result area, Adaptive learning could be considered as a cross-cutting issue as well as inter-sectoral collaboration. This is suggested, because borders within the different result areas during reporting were fuzzy. This could be made clearer if the project amends the logframe as suggested in Table 4, if considered appropriate.

The project could improve the effectiveness of its monitoring framework by considering, that there are actually three different levels of monitoring which include; the resilience pillars, the activities conducted by the project, and the activities prioritized by communities.

While the project currently monitors, output and impact indicators of project activities, it could add value by monitoring the different resilience pillars and outcomes of community prioritized actions which are key aspects of interest for the project. For monitoring the implementation of the resilience pillars, the indicators could be:

- For **self-regulation**: Degree of self-reliance in management of rangeland, water resources, market interventions etc;

- For **Adaptive Learning**: Improvement of skills and knowledge gained from trainings communities requested or from lessons learnt;
- For **sustainable technologies**: Type and number of new technologies and innovations developed or introduced (linking up with innovation initiatives in IFPRI etc., best practices by WOCAT etc.);
- **Diversification of livelihoods**: Agro-biodiversity indices, diversity of income generating activities etc. This could be linked to different output and impact indicators which also capture social and psychological conditions, such as reduced alcoholism, absence of depression etc.

Impact indicators for **cross-cutting issues** could then be:

- **Connectivity:** Improved connectivity of communities with as for instance market institutions and private sector, policy institutions, governmental institutions and among each other and the project management;
- **Active and passive capital**: Capital in all its forms, financial, political, social, natural, physical is activated in the communities and can be regenerated after experiences of shocks and stress.

On the other hand, the activities which are defined as community priorities could then also be monitored through management and impact indicators such as:

- ha of irrigated farms;
- ha of rangeland conserved by communities etc..

However, this requires that the logframe and other monitoring frameworks are updated. Table 4 shows a suggested logframe updated after prioritisation of activities by the communities.

Table 4: Suggested amendments on the Log-frame

Results			Activities
Activities: Trainings on diversification of livelihoods, ecosystems, water management, infrastructures, self-organization. Revival of traditional knowledge of land and water management and merging with modern knowledge	Adaptive Learning: Initiated to enable communities to identify needs and gaps in current water anal ala management governance technologies for livelihood improvement	Area 1: Self organization enhanced to improve governance on land and water resources	Develop governance structures. maps and management plans for land, water, livelihoods, which ensure that these gaps are filled
		Area 2:Sustainable infrastructure and technologies supplied for improved land and water management	Install infrastructures and technologies as identified below (for land, water, livelihoods)
		Area 3: Diversification of Livelihoods and Ecosystems improved through improved water and land management with a particular focus on gender issues	Implement diversification in land use, ecosystems, livelihoods and markets along whole value chains
		Area 4: Enhanced visibility of the project and political support achieved	Enhancing awareness Improving inter-sectoral linkages

6.1.3 Reporting

The reports highlight accurately and in detail the activities and progress made in both countries on a bi-annual basis and make full use of the frameworks for monitoring the project. There are no overlaps, repetitions, exaggerations or omissions, which makes it very easy to follow up the project implementation. Besides excellent reporting to fulfill the required project routine, the project in both countries did a lot of additional work especially on interventions which were prioritized by communities, but not foreseen in the logframe or monitoring framework. For instance, in Uganda, the use of CECF has been monitored, evaluated and documented meticulously. In Kenya, the project has produced rich and clear documentation on most interventions, in particular the ASCMPs.

Recommendation: Within all the excellent reporting, manifold activities, achievements of the project and levels of analysis; it would facilitate the overview if all achievements, in particular stakeholder participation, area coverage by the project e.t.c. would be listed along a timescale in a progress matrix.

6.1.4 Factors which enhanced the effectiveness of the project implementation

Implementation Approach
While the implementation approach turned out to be highly successful, there are still options for improvement as outlined below:

The four pillars of the resilience approach are generically distributed to certain desired outcomes. This has to be revisited and instead all elements of ecosystems and livelihoods including the various components of value chains, should be linked to all four pillars of the resilience approach. The need for this is particularly true for market development, which is only linked to the adaptive learning pillar and submerged under knowledge management. This could be implemented more effectively, if it were also linked to self-regulation, sustainable infrastructure and diversification elements. As in the other result areas – it is not only knowledge which is limiting the marketing potential of communities, but diversification, competence in planning and management, and access to different types of capital as well. In the same way, learning is as relevant for diversification of ecosystems and livelihoods as well as in the establishment of sustainable infrastructures, and therefore needs to be mainstreamed in these elements.

Under result area 3, communities were not as actively involved as in Result Areas 1 and 2. While in the first 2 Result Areas communities developed their management plans and by-laws and even priority actions, in Result Area 3, activities are mainly conducted on the Project management level such as establishing linkages to markets, and market studies while communities are only involved in learning visits. While these visits have been highly appreciated by community members and first attempts to establish value chains have been made, few members participated as compared to other activities. It is therefore suggested that for further implementation of Result Area 3, the project should try to learn from its own successes in Result Area 1 and 2 and apply the same procedures. This could involve: establishing a common management plan for value chain development and marketing, defining its own by-laws, integrating its traditional knowledge, defining and implementing priority actions in the area of value chain and market development supported by training and information provision.

For Result Area 4, resilience is established within the project management level, and relies very much on the personal integration of the project staff into inter-sectoral policy environment. In both project components inter-sectoral integration is excellent and highly effective, though with differing characters. In Uganda it is focused mainly on agriculture and water sectors, and the district local governments, while the inter-sectoral integration in Kenya is more encompassing with almost all sectors involved.

Community involvement is very prominent again in Result Area 5, though the activities are rather steered by the project management. The achievements were considerable, in particular in Kenya. It is recommended that Result Area 5 should be harnessed to create synergies with Result Area 4.

The project works in great harmony with all partners, who collaborate effectively with the project, which is highly appreciated by all of them. The geographical focus the project takes is perfect.

In general, however, it is doubtful whether the resilience approach alone is appropriate in the face of long-term climate change. If climatic conditions become drier and warmer in the long-run, land and water use structures and settlement patterns might need to change substantially. It is therefore recommended to embed the resilience approach into a long-term climate adaptation approach as well as work closely with meteorological organizations.

Political and inter-sectoral linkages and partnerships
In both countries, the political and inter-sectoral linkages were established from the beginning of the project and very good synergies were created in particular with the water sector through DWRM in Uganda, as well as WRMA in Kenya. Also the linkages to NAADS in Uganda and the Agricultural Ministry and FAO in Kenya were very successful in improving livelihoods through provision of agricultural inputs

The involvement of all WRUA Committee members in community mobilization has been a cornerstone in effective project implementation in respect to trainings, selection of technologies and sites for the implementation. The involvement of WRUAs in the inception stage enhanced ownership of the project as well as providing an effective platform for the project to promote its activities.

Co-funding and Synergies:
The project managed to ensure additional financial support from the government, as well as from the Howard G. Buffett Foundation through Global Water Initiative in Kenya and many others, and new proposals are in the pipeline, while in Uganda the project managed to be incorporated into the budgets of Local District Government. .

One of the highlights that the project managed to establish are the new synergies of integrating dry-land issues with water issues through merging of the SCMP and RMP, which also achieved better harmonization between the objectives of the Ministries involved (Water and Irrigation and, Northern Kenya and Arid Lands as well as with Global Water Initiative (GWI).

6.1.3 Remaining Feasibility Constraints

Besides the high effectiveness of the project, there are some feasibility constraints, which should be addressed in future and these include the following.
Irrigation agriculture: Irrigation agriculture was professionally performed, but there are minor issues, where the project could benefit from extension work, such as the removal and replanting of banana suckers in Kenya.

Biased access to irrigation: The evaluation found that water for farm irrigation is dependent upon the economic power of individual/group farmers. Similarly, piped water in settlements like Saka is accessed only by those who can afford connection and monthly charges. This has resulted into skewed access towards the wealthier segments of the community. Secondly, not all costs of the irrigation system are known. A cost-benefit analysis should be conducted, taking into account all environmental costs, to assess, whether a less wasteful irrigation system, such as drip irrigation, would be more feasible.

Roof water harvesting: Up to now, the project uses only one side of the roofs for water harvesting in schools. The water tanks used are plastic, which have a lifetime of only 3 – 4 years. While the storage capacity itself is very high with 10,000 litres, it is recommended nevertheless to install two tanks for each school (a tank on each side of the roof structures) and use brick tanks that are more durable.

Technological on-farm challenges and human-wildlife conflicts: In Kenya planting of banana suckers, management of banana plants, harvesting process of bananas is poorly carried out. Another problem is human-wildlife conflicts, particularly crop-raiding by baboons, which would require the provision of extension services to address the problem, preferably in collaboration with the Ministry of Agriculture and KWS.

Discontinued water supply and water wastage: Water is still a challenge, in particular since the pumping machinery broke down, and there is a lack of spare parts and lack of skills in maintenance of the pump. Therefore the project should provide the necessary redundancy (meaning a reserve of spare parts and maintenance tools), so that continued irrigation particularly in the dry season can be guaranteed. This affected in particular, the establishment of nurseries. Furthermore, the pumping of water and *current canal based irrigation leads to a lot of waste water*, therefore as mentioned above other low cost and less wasteful irrigation systems should be explored. Complementary water harvesting for irrigation should also be considered.

Siltation of rivers and canals: According to community estimations, currently only 30% of the river banks under the mandate of the project are properly rehabilitated, 70% still lack proper management. For example within Mbalambala, the major problems are soil erosion, which leads to siltation of the river. There are also various pressures from the upstream catchment resulting into flooding and frequent changes in the river course. Sustainable infrastructure for proper soil and water conservation in uphill areas to prevent erosion and control flooding is an important intervention to consider. However, this requires engagement of stakeholders at higher political level and appropriate interactions between the downstream and upstream users. Furthermore, communities recommended increasing surveillance and enrolment into WRUAs. They also recommended implementing more strictly the 30 m boundary rule from rivers within the catchment and planting of the 'Jebi' grass (Sporobolus helvolus) along the river banks.

Market and Infrastructure challenges: Currently there is no sufficient market and value chain development for the agricultural products. Secondly the road access is poor and the project areas are mainly accessible during the dry season, when the major harvest is over. The knowledge and skills in packaging and storing is lacking and have to be developed.

6.2 Efficiency

6.2.1 Project Staff

The project staff in both countries have an appropriate and rich educational background to manage the project. The evaluation found that the project staff are highly dynamic, engaging, competent and well informed, as well as extremely active, committed and well coordinated.

6.2.2. Initial Unforeseen Problems

Initially the project transaction costs in Uganda were higher than anticipated. This is because the project had no vehicle and the old IUCN office car which was allocated attracted high repair and maintenance costs. In addition staff travel costs increased as they stay in Lira where accommodation is available. The other district town headquarters lack accommodation as they are newly established districts.

6.2.3 Financial Efficiency

The project total budget over the 3 years is 1 million euros, out of which more than 70% have been spent as at the time of the Midterm Review, which is appropriate. About 60% of the expenses were used for salaries, monitoring and travelling, while the rest was allocated directly to the project activities. The project conducted many activities and demonstrates high achievements with a high output/input ratio.

Therefore, the financial efficiency of the project was extremely high. For example with only 50,000 euros per catchment allocated to priority actions identified by communities, an extremely high number of hardware activities on the ground were established. Because of the high success of the community prioritized actions; it is suggested, to raise the budget allocated for community actions.

The adoption of the resilience framework, in particular the elements of self-organization and connectedness contributed substantially to the high efficiency of the project, since they enabled communities to replicate and up-scale various interventions themselves. Also the institutional arrangement on management level, by working through the district and sub-county staff in Uganda, for example saved costs for transport and personnel and in this way improved the financial efficiency of the project.

6.2.4 Time Efficiency

During MTR, most envisaged activities except Result Area 3 had already been accomplished to a very high degree, even some that were supposed to be completed after the MTR. The project is therefore very likely to achieve the intended activities and objectives and finish in time. Again, besides the efficient project management, it appears that the resilience approach substantially accelerated project implementation, because it created dynamism within the community which integrated more and more community members into project activities out of their own initiative.

6.2.5 Conclusion

In general, the review confirms that the efficiency of the project was very high. One factor for this is the high technical capacity, as well as social and good communication skills by the project staff.

6.3 Relevance

6.3.1 Relevance to IUCN's and ADC's policies

The overall project goal to demonstrate implementation of national policies around improving drought resilience in river catchments in Uganda and Kenya is relevant to general IUCN policies and the priorities set out in the Austrian Development Cooperation's (ADC's) Country Strategy for Uganda, specifically to support 'Outcome Focus Area 1' of Uganda's National Development Plan, namely the "protection and sustainable use of water resources contribute to conflict prevention and reduced vulnerability to climate change". The project's focus on improving ecosystem health and integrity contributes to one of the major goals of IUCN policy.

Through its inter-sectoral approach on water, the project has adequately recognized the ADC water policy by emphasising harmonization and integration of water, agriculture and health issues and creating inter-sectoral linkages for implementation of interventions.

The project is also successfully aligned to key policies and strategies in Uganda and Kenya that underpin the decentralization of water governance and the Nairobi principles, which state that urgent actions are needed to use land and water resources for development and livelihoods improvement in particular to address vulnerability to climate change through integrated approach by working within specific catchments and addressing natural resource management encompassing both land and water.

6.3.2 Relevance to Community Needs

Project interventions were found to be relevant to community needs in as far as they are coherent with IUCN Policies. For instance, at the district levels, the project has been relevant to relieve major environmental problems such as the protection of wetlands and riverbanks in both countries, the protection of the Shea tree in particular in Uganda, and the mitigation of environmental problems linked to higher sedentarism of pastoralists in Kenya.

The PM has shown a very high understanding of closing the gaps in the human-environmental systems, which disrupted resilience. For example, the loss of resilience addressed in **Uganda** was due to an unsustainable response to a reduction of the rainy season and general amounts of precipitation and increased temperatures, which stimulated the cultivation of riverbanks and wetlands, which are capable of holding soil moisture longer. Cultivation of wetlands and riverbanks led to loss of environmental resilience through deterioration of water sources in the catchment for house-holds use, which again affected negatively the well-being and economic resilience of households. On the other hand, the loss of economic resilience triggered destruction of the Shea tree for charcoal burning, which otherwise was protected for its high economic value of the Shea butter. Despite lower revenues from charcoal burning than from Shea butter, people were forced to sacrifice long-term incomes to meet short-term needs for cash to meet their daily subsistence, leading to a breakdown of resilience of the human-ecological system, which the project has successfully addressed through is livelihood interventions and catchment management plans.

In **Kenya**, the loss of resilience had been due to a reduction of land productivity and unsustainable coping mechanisms such as higher sedentarism, which had dismantled the validity and applicability of traditional institutions. The change in environmental and social conditions also increased the pressure on water systems, further exacerbating the imbalance between pasture and water resources, while increased settlements in pasture lands fuelled conflicts between different types of land users. The management plans and customary laws and by-laws have been mostly relevant towards solving these issues. The project also addressed the problem of saline water unfit for human consumption and contamination of scarce fresh water sources with coli bacteria through providing fresh and safe water.

All interventions within Result Areas 1 and 2 have been relevant in addressing wetland degradation, reducing water pollution and water-borne diseases, combating land degradation through adequate grazing management and recovery of tree cover.

Structures and technologies were in particular considered relevant to enhance water supply and to protect river banks. All activities related to self-organization, such as the formulation of by-laws through merging of customary with formal institutions and mapping activities have substantially added value by activating and empowering communities as well as stimulating incentives to engage in new activities and initiatives. The self-organisation activities were also considered highly relevant to conservation of rangelands, wetlands and riverbanks.

Therefore, the project is fully relevant to the initial goal of the project to build resilience of communities towards water stress, economic stress and other shocks and stressors

6.3.3. Relevance of Drought Resilience as an issue to be addressed

While the project is relevant to enhance resilience towards environmental and economic stressors, it is doubtful whether resilience to drought is relevant. Climatic droughts are defined as the negative deviation from long-term precipitation averages. Assuming that future climate will become warmer with lower precipitation, then deviations from the long-term average will become lesser, since dry periods will become the long-term norm, and periods, defined as droughts, will decline. Therefore, in the long run if a climax is

reached at higher temperatures and lower precipitation, then an approach which supports the human-ecological system to restore its original structure might not necessarily be appropriate because the original structure will no more be adapted[1] to the long-term change and instead, the underlying structure itself will need to be totally changed by implementing no-regret approaches towards long-term adaptation to drier conditions. This situation would require rather a long-term adaptation strategy. Therefore resilience approaches make more sense with respect to disasters and extreme events than climatic change.

6.4 Sustainability

The project identified lack of political support as the only risk which did not happen. Due to the approach of the project to involve partners from different sectors and at different levels, support to the project has been very high. Indeed, sustainability within the project is high and is expected to continue even after end of project as highligted below:

6.4.1 Sustainability building through the resilience approach

Resilience has a lot in common with sustainability; therefore, through resilience building also sustainability of an intervention is established. The step from resilience to sustainability only requires a further transition from just being able to restore the original conditions from a shock towards maintaining these conditions in future. On management level this requires that the project processes be maintained and managed through the communities. This is achievable, since all components which stimulate self-regulation of communities also enhance capabilities and therefore sustainability at management level. By the MTR undertaking, communities had already acquired the necessary skills and knowledge to manage their own funds and resources and to replicate some of the interventions.

6.4.2 Ecological Sustainability

Ecological sustainability was covered by all activities related to ecological resilience and is captured by project targets which include management of wetlands and related improvement of biodiversity, rangelands, management plans, and diversification of crop varieties.

6.4.3 Economic Sustainability

All interventions, which improved livelihoods and income generation through participation of community members, enhanced the economic sustainability of the project, in particular diversification of production and the establishment and improvement of value chains. While the latter still needs to be developed in the coming project phase it is hardly expected that diversification of production will face any risks. However the CECF could be affected in future if not effectively integrated within existing relevant institutions for sustainability and protection from corruption.

6.4.4 Institutional Sustainability

The project has fully built institutional sustainability through its major activities and targets which include strengthening customary laws and institutions and, formalizing them into legal frameworks; high inter-sectoral integration and effective partnerships in particular the collaboration with the DRWM in Uganda and WUAs and WRMAs. The project combined effectively bottom-up and top-down approaches to create demand for service delivery at the local level, thus enhancing the sustainability of outcomes. A significant step would be to institutionalise management of CEFC through official formalisation of its establishment.

6.4.5 Involvement of Stakeholders

There have been manifold events, where communities were involved into designing and planning, which enhanced their understanding of types and quantity of resources available to them, and how to share and manage them objectively.

[1] It needs to be emphasized that dry conditions or periods are not droughts. Desert climate for instance is dry, but there are hardly any droughts, because the dry conditions do not deviate from long-term averages.

The motivation of stakeholders was created through their involvement in management plans and vision maps right from the beginning. Continuity of stakeholder's involvement was ensured through by-laws and incentives through access to the CECF. In Uganda, stakeholders initially had resisted to collaborate with the project without the fund. More on this is elaborated in the section on "Lessons Learnt".

6.4.6 Conclusions

The approach is most likely to ensure continued benefit after the end of the project, since ecological sustainability and sustainability at management level are well integrated in the project. However, in the remaining period the project has to address mainly economic sustainability.

6.5. Project Impact

6.5.1. Project Impacts

In general, the project has closed the gaps which were needed to build or restore resilience. As a consequence unsustainable coping strategies, such as cultivation of wetlands or cutting of the Shea tree for charcoal in Uganda were abandoned because the project was able to fill the income gaps, supported by establishment of respective by-laws. The project had additional positive benefits such as reducing alcoholism, domestic violence and small-scale criminality, which were all consequences of rampant poverty in Uganda IDPs. Behavioural change was not so much an issue in Kenya, but rather the adaptation to new, sedentary conditions under climatic change. But the project also addressed some unsustainable coping strategies such as illegal charcoal burning.

The project has numerous positive unintended impacts and outcomes, such as improved self-confidence and independence of communities, interest in learning of new skills and technologies, improvement of capabilities in general such as the capability to ensure one's own access to water, food, traditional medicine, the self-confidence of communities to be able to manage their own resources and many others.

In detail, impacts related to impact indicators are listed in Table 5. Although impact indicators are not easy to measure and were also not all monitored by the project qualitatively, the achievements were confirmed on the basis of interviews conducted in the field visits during the MTR. Other indicators such as improved water quality could not yet be measured since the monitoring kits are not yet available

Table 5: Project Impacts

Result Area	Impact Indicators	Impacts and Achievements
Overall Objective	➢ % change in ability of communities to deal with drought /health, water, livelihood indicators	➢ Ability of communities to improve all these indicators could be confirmed in all cases
Project Purpose	➢ Measurable changes in ecosystem health – vegetation, fish, water quality, flows ➢ Number of functioning and strong representative institutions ➢ % change in the extent to which ecosystem-based actions to strengthen resilience and support adaptation, informs debates and policies within the country, and within the development and conservation community at large scale	➢ Improvements of ecosystem health could be confirmed qualitatively ➢ Number of functioning institutions substantially improved ➢ IUCN approach was debated widely and institutions try to replicate it
Result 1: Integrity and functioning of catchments improved through ecosystem-	➢ % increase in the number of respondents claiming improvements to the integrity	➢ Gender sensitivity was substantially enhanced

Result Area	Impact Indicators	Impacts and Achievements
based actions that are gender sensitive and diversify livelihood assets	and function of the ecosystem. ➢ % increase in number of women respondents who claim satisfaction at the gender appropriateness of ecosystem based livelihood plans. ➢ Number of organizations and people that access and use maps for reference and decision making.	➢ Women confirmed they were equitably involved into all project activities and benefitted substantially ➢ All stakeholders interviewed confirmed improved integrity and functioning of ecosystems in many aspects, such as improved pasture and water availability, better water quality, improved land productivity etc. ➢ Procedure of mapping at least as useful as maps themselves
Result 2: Improved capacity of traditional and formal resource management institutions to sustainably manage natural resources within a catchment area	➢ % change in perceptions of capacity in natural resource governance institutions ➢ Change in number of local people in the project area who have good knowledge and understanding of their rights and responsibilities	➢ Very high revitalization of customary laws or new community established NRM by-laws in both countries ➢ Documentations of customary laws established ➢ Customary laws frequently considered as more powerful than formal law ➢ High knowledge and awareness of these laws among all stakeholders ➢ High law enforcement rate ➢ Traditional law is formalized by councils and becomes parish or district law ➢ Management plans established ➢ Skills of community members to manage their resources and general understanding of available resources and their management substantially enhanced. ➢ CECF in Uganda established and used to ensure compliance with by-laws
Result 3: Knowledge and skills of local communities to implement adaptation, innovation and change within institutions are mobilized and improved	➢ Number of activities implemented showing application of new skills in adaptation	➢ First value chains starting to develop, such as aloe in Kenya, small-scale business in Uganda ➢ Options for development of gums and resins in Kenya identified and tree development of some other species
Result 4: Greater coordination between multi-sectoral institutions improves harmonization of plans and interventions	➢ % change in extent to which multi-sectoral resource management plans are being developed by partners	➢ Many sectors involved into resource management plans. ➢ Particular importance of DRWM and Agricultural Ministry in Uganda, ➢ Particular importance of WRMA and KFS in Kenya ➢ Action items to be followed up in coming phase according to Work Plan
Result 5: Awareness among policy makers on catchment management approaches are increased through learning based on project experiences	➢ Change in extent to which resource management as a means to improve adaptation and resilience is incorporated into policy discussions ➢ % change in the number of references to ecosystem management as an approach to drought in policy forums	➢ A high number of policy briefs and information material produced ➢ High replication effect of the project

In general the impact of the project on improving resilience and reducing sensitivities to shocks and stress was high. The interventions in the water sector reduced sensitivity to water scarcity and low precipitation level through improved availability and accessibility to water resources. Economic sensitivity of livelihoods to economic losses caused by lower land productivity declined due to higher incomes from irrigation agriculture, fruits and milk production, which was successfully coupled with riverbank stabilization. Sensitivities to conflicts, which are usually exacerbated when resources become scarcer during droughts, were reduced due to the conflict mitigation and prevention measures the project undertook namely; establishment of by-laws, and demarcation and widening of malkas.

In Kenya improved water availability (with full support from the Government and partners) on rangeland led to improved conservation of pastures throughout the seasons and therefore improved land productivity so that the system did not collapse under drought conditions by forcing pastoralists too early to graze in dry reserves. The major impacts were recorded in the following areas:

Mapping and Resource Planning

- Resource mapping empowered communities and facilitated sustainable management, so that earlier conflicts about resources were prevented;
- Community members now are enabled to distinguish between individual and common resources.

Improved Governance and Conflict Resolution

- Pasture and grazing control is ensured through the revitalization of the traditional management plan and enforcement of penalties. For instance cutting one tree is penalized by charging goats or camels from the transgressor;
- Land ownership management is regulated;
- Wildlife meat and poaching is limited.

Successes in Conflict Mitigation

- The project brought pastoralists and agro-pastoralists to successfully work together on addressing and mitigating conflicts through the establishment of watering corridors to improve livestock and wildlife access water sources especially along the River Tana;
- Resource mapping empowered communities and facilitated sustainable management, so that earlier conflicts about resources have been prevented.

Livelihoods

- Improved forage due to improved land management, enhancing livestock health and milk production;
- Improved water harvesting and reduced tracking distances and costs;
- Improved incomes through fruit trees and irrigation farming.

Environment

The vegetation is recovering and the former separation into dry and wet pastures can almost be restored, since through the regulations dry pastures are now conserved for the full period they need to recover. Due to the improved conservation, *Acacia tortilis*is one of the major livestock feeding sources is protected long enough that pods mature and fall off on their own. They are no longer interrupted through shaking the trees to force them to drop. Also dry pastures can now regain their full potential. This intervention has a particularly positive impact on women who are responsible for identifying feed stocks.

6.5.2. Project Impacts Uganda

In Uganda in particular, the empowerment of communities strengthened political positions of community members. Also, communities were much more confident to manage their livelihoods without the need to receive support, as they were used to during their time in the IDPs. Communities were even confident that they would be able to create their own jobs now. Safety nets were built and economic growth was achieved, and interest into agricultural skills and methods expanded. By-laws were followed and enforced and water management capacities of community members were enhanced, leading to reduction of conflicts.

In detail the following impacts were mentioned

- *Policy influence:* BDR was considered so important and relevant, that some sub-counties agreed to include BDR in their future annual budgets;
- *Governance arrangements* were strengthened through by-laws and other interventions of Result Area 2;
- *Conflict resolution:* Conflicts among water users were solved.

Water management

- Reduction of stream water turbidity and higher water retention of rivers was observed which is attributed to introduction of the river bank buffer zones by the project;
- Trained staff are able to conduct quick biological monitoring using species indicators and recording water levels.

CECF
Most interesting are the lessons, which the Ugandan PM extracted about the social and ecological benefits accrued through the CECF and what would have happened without the fund. The results are very clear:

Ecological resilience would have been botched; first through continuation of charcoal production and cultivation of wetlands. Furthermore, many communities would not have collaborated within communal work for environmental protection, like the clearing of water sources and establishment of buffer zones. Secondly, ***food security*** would have broken down, since communities would have had lesser incomes. Thirdly, children's **education** would have been impacted, since many parents would not have been able to continue paying school fees. Fourthly, **poverty-related conflicts** would have increased within families and communities. Fifthly, and most interestingly, **poverty related psychological problems** would also have increased, such as depression and, hopelessness. Finally, **hygienic issues** and related health problems would have worsened. In summary, the fund led to:

- Improved connectedness of the community members through the monthly village meetings;
- Improved peace in families;
- Improved hygienic conditions;
- Re-vegetation of wetlands, cleaner and safer water, reduced cases of water borne diseases;
- Positive changes of people's attitude towards environmental conservation;
- Income generation for majority of community members;
- Confidence and psychological well-being; and
- Improved management of land resources and conservation of wetlands.

6.5.3. Project Impact on Gender Issues within the two Countries

Project components where women have benefited in **Kenya** were:

- Water harvesting which substantially reduced the labour inputs of women in fetching water;
- Fruit tree farming enhanced incomes and nutrition, it also empowered women;
- The conservation of acacia trees enhanced incomes of women; and
- Women and youth form 30% and 20% respectively of all new NRM based community committees.

In **Uganda**, the project had in particular positive impacts on

- Cash income and empowerment of women;
- Reduced gender-related conflicts in households due to higher food security (before men used to steal sesame seed from women – a crop produced by women – to sell for cash for their own use); and
- Higher incomes from agriculture and shea-butter.

In both countries:
- Reduction of water-borne diseases and reduced work load in water collection, reduced mortality of children below 5 years enhanced maternal health.

6.5.4. Scenario analysis of issues of significance to project impact assessment

This section presents a scenario analysis of selected project interventions and provides guidance on issues of significance to project impact. The analysis responds to Objective 4 of the assignment "to provide guidance on aspects or specific issues that will be useful in undertaking the planned project impact assessment through the use of scenario thinking to be done at the end of the project (i.e. how would the situation look like on the ground without this project). This analysis will raise awareness of policy makers and stakeholders of possible outcomes of key project interventions; help to frame strategies and alternatives around the key issues. The sections below elaborate the selected interventions in Uganda and in Kenya, issues, scenarios and guidance on key issues of significance to future project impact assessment.

a) Scenario Outcomes

Under a Business-as-usual-scenario, the issues of **land degradation** pastoral and agro-pastoral ecosystems, both drylands and wetlands, would have been even more critical. In Uganda, through the disruption of the original wetland management with increasing droughts, the uplands would have become

drier and people would have started to cultivate the wetlands, to compensate for the losses of yields. U Under this pressure, the erosion of riverbanks would have been further increased, leading to a loss of land, floods and further changes of the riverbed. The same would have happened in Kenya without the implementation of the SCPs. Therefore, the resilience of dryland ecosystems would have been undermined by continued unsustainable natural resource exploitation, widespread environmental degradation, emergence of non-compatible land use systems and inappropriate coping mechanisms for livelihood support e.g. clearing wetlands and riverine areas for cultivation and rampant deforestation for charcoal burning as alternative livelihood. Without the project interventions, all the above would result into extreme poverty levels and break down of social and ecological resilience thus rendering the communities more vulnerable to climate shocks.

It is moreover envisaged that there would be a significant increase in **land** degradation and **water stress** for example in the middle Aswa-Agago catchment, where the human populations are higher than in the upper catchment, ultimately impacting on the lower catchment areas through silting and flooding. Other occurrences would be high rates of diarrheal diseases attributable to lack of access to safe drinking water and poor hygiene practices.

The **vulnerability of the pastoral and agropastoral communities** in the lower Tana and the Aswa-Agago catchments would increase without the project, if business as usual would have been continued, as the trends of natural resources would all be on the downward.

Furthermore, without certain interventions in land management, such as the introduction of malkas in Kenya, conflicts between pastoralist and farmers would have been exacerbated, since pastoral mobility is increasingly restrained as land is converted for agriculture, both under business-as-usual conditions as well as through project interventions, thus reducing availability of the wet and dry season pasture, but the project is reducing possible conflicts.

Infrastructural interventions: Infrastructure for clean water such as boreholes, protected water sources, for domestic use, dams and valley tanks for livestock have been lacking or minimal, there has been access to roads and low market integration. Without the project interventions communities would have been trapped in these conditions.

Lack of **alternative livelihoods** has been the driver for continued deforestation for charcoal burning as a source of livelihoods and destruction of wetlands, accompanied by the breakdown of traditional laws and institutions in natural resources management which originally had controlled resource management and prevented conflicts. Therefore, the provision of alternative livelihood options, in particular through the provision of the CECF in Uganda and the fruit farm activities in Kenya, has laid the financial basis for rehabilitation and conservation of wetlands, which in another positive feedback loop have put land-based livelihoods now on a sustainable ground.

b) Guidance on issues of significance to project impact assessment

The planned project impact assessment should focus on measuring impact of the interventions on improved community resilience and sensitivity to drought shocks and ecosystem resilience. The specific key indicators/ issues for measuring improved resilience will include: improved food production and security, improved nutrition, diversified livelihoods and increased incomes, reduced sensitivity to water scarcity and conflicts, reduction in water borne and related diseases, reduced deforestation (especially protection of the shea butter tree on the Uganda side); extent to which conflict mitigation and prevention was a result of by-laws, governance structures and other measures undertaken by the project.

Since gender roles and responsibilities affect land and natural resources use, the impact assessment should also focus on gender issues; such as labour input by women for example in collecting water, economic empowerment, improved nutrition and food security for the families; level of uptake of the practices by the neigbouring communities.

Impact assessment for the ecosystem resilience could be measured by the quantity and quality of water in the river (for Agago-Aswa catchment) over the seasons and indicator species of wetland ecosystems.

Resilience being a socio-environment interaction, impact assessment should also look at the social resilience by examining the levels of social cohesion and functional networks

6.6. Lessons Learnt

Lessons learnt in the following are perceived as certain evidence and conclusions drawn by the evaluators based on certain outcomes of the project.

6.6.1 Implementation Approach

Overall implementation and impact
The project staff in both countries understood well and implemented the resilience approach of IUCN by carefully identifying and filling existing or emerging gaps within the human-environmental system. While the resilience approach in total seems to be a great success, it is in particular the strengthening of elements of self-regulation and connectivity and their integration with prioritized activities by communities on the ground, which have mainly been instrumental in generating the success and positive impacts observed in the MTR.

Livelihood support to ensure environmental protection
The impact of the CECF on project success and resilience building can hardly be overestimated, since it has been the core intervention which made the project to be accepted by communities. In the first year of the project before introduction of the CEDF, communities did not show any interest and commitment into project implementation at all. The important lesson to be drawn from this is that environmental interventions, which require initial sacrifices from communities and lead to indirect or long-term benefits, are hardly accepted by communities below a certain poverty level, if they are not accompanied by simultaneous direct and immediate support to their livelihoods. Accordingly, compliance with by-laws has been well accepted by community members, after it was coupled with access to the fund.

Psychological Co-Benefits of enhanced Connectivity
Another lesson to be learnt is the high impact on psychological well-being and motivation through the elements of self-regulation and adaptive learning, therefore of connectivity in general. The major instrument of connectivity in Uganda has been the CECF, in Kenya the SCP, in both countries the CEMPs and dialogue sessions.

The introduction of the CECF co-produced many other benefits, which had positive impacts far beyond the immediate goals of the project of positive environmental impacts and improved livelihoods which included reduced idleness especially among men, domestic violence, crime, and alcoholism which were major social problems among former IDPs.

Dialogue sessions brought communities and officials closer together and strengthened the network between them, therefore improving connectedness and mutual adaptive learning. This enabled communities to also express their needs and priorities more frankly.

Success stories in Kenya were mainly rooted in the targeted linkage of mapping and planning activities with by-laws and community prioritized activities on the ground, which substantially enhanced ownership, motivation, self-confidence, and capabilities of communities.

Synergies
The combination of different elements of the resilience approach has also created a lot of synergies. As for instance, diversification of ecosystems through the introduction of fruit trees in Kenya combined with irrigation from the Tana River created synergies also with the goal of developing water resources as well as with diversification of livelihoods, improved riverbank stabilization and income generation.

Linking access to the CECF with compliance to the by-laws resulted into 100% repayment of the CECF borrowing, which is a success story for the project.

Merging conflict resolution with management
Having changed from the original project design, the PM in Kenya merged conflict resolution mechanisms into SCPs and CEMPs. This change of procedure turned out to be very feasible and successful, as conflict resolution needs to precede management planning, otherwise the underlying conflicts may interfere with implementation of the management plans. Therefore, future logframes should draw lessons from this positive experience.

In Uganda the conflict-mitigation interventions of the project contributed to effective compliance with the by-laws, so that transgressions were prevented. Most conflicts used to occur around cultivation of wetlands – in particular, when people were afraid to lose their livelihoods or did not know any alternative but cultivating

the wetlands. The conflict mitigation mechanisms contributed to identification of appropriate solutions and were therefore as important for wetland protection and environmental sustainability as the CECF.

Equality issues addressed in the SCPs through balancing the different stakeholder interests have effectively laid the cornerstones for poverty reduction, since the reduction of inequalities is the pre-requisite for poverty reduction and economic growth of the poorer segments of the society. This also paves the way for better implementation of marketing and value chain development as this will not be hampered by unsolved social conflicts and inequalities.

6.6.2 Result Areas

Result Area 1

Community maps have turned out to be an important tool to aid **in understanding** landscape level planning and management in pastoral set-ups. The community maps have also proven to be an important tool to illustrate successful application of **bottom-up approach.**

Result Area 2

The drafting of by-laws was obviously more successful in communities where traditional NRM governance systems were still in place and perceived by communities as better than modern systems, such as the Borana customary law.

The impact on resolution of conflicts between crop farmers and pastoralists was substantial, such that almost no conflicts occurred, where the malkas were demarcated.

Result Area 3

Result Area 3 is weakest out of all Results by design, since it seems that on the one hand miscellaneous activities are related to knowledge management, which do not necessarily have to do with knowledge management, such as the establishment of tree nurseries. On the other hand it is not clear why the sub-activities under Result area 3, were not merged under the knowledge management activities such as the exposure visits, which are actually part of Result area 4.

Nonetheless, there is one lesson learnt from the Uganda side of the project. The involvement of the whole village establishing and maintaining a nursery bed proved not to be practical in most cases, only few members showed commitment to maintain the trees. Termite attacks and far off water sources from the nursery beds discouraged many community members from participating. Involving the whole community in establishing and maintaining a tree nursery bed therefore does not seem to be feasible, and therefore in future, the focus should lie in supporting individuals or groups willing to invest time and resources and thereafter the rest of the community can buy seedlings from the nursery operators.

Result Area 4

Result Area 4 created synergies in implementing other result areas. For instance consensus building in drafting of by-laws was overcome by backstopping the drafting process through representatives from the Departments of Livestock, Agriculture, WRMA, IUCN, FaIDA, KFS, KWS and NDMA.

6.7 Overall Performance

Table 6: Performance Matrix

Contribution of Outputs to Outcomes

Output	Contribution
Output 1	100%
Output 2	100%
Output 3	60 - 70 % (includes market chain development, which still has to be implemented in next phase)
Output 4	90%
Output 5	80 – 90%

Final Rating Effectiveness: (Highest score 6, lowest score 1, not assessable 0)

Issue	Score
Output 1	6
Output 2	6
Output 3	4
Output 4	5-6
Output 5	5-6

Final Rating Efficiency: (Highest score 6, lowest score 1, not assessable 0)

Output	Score
Output 1	6
Output 2	6
Output 3	4-5
Output 4	5-6
Output 5	5-6

Final Rating: Feasibility

Output	Score
Output 1	6
Output 2	6
Output 3	4-5
Output 4	6
Output 5	6

Output	Sustainability (4 = neglible risks, 1 = severe risks)	Relevance 2. Relevant (R) 1. Not relevant (NR)	Impacts 3. Significant (S) 2. Minimal (M) 1. Negligible (N)
Output 1	4	2	3
Output 2	4	2	3
Output 3	3	2	3-2
Output 4	4	2	3
Output 5	4	2	3

In both countries more resources were allocated to Outputs 1 and 2, therefore, the importance of the performance within these Result Areas is higher than for the other results. In particular, Result Area 4 is only a supporting activity for the other Outputs.

7. RECOMMENDATIONS AND CONCLUSIONS

7.1 Project Design and Monitoring Framework

The project should revise its logframe according to the suggestions made in 6.1.2 by mainstreaming all knowledge and learning related activities throughout the other results. Result Area 4 should be formulated in a more targeted way, mainly referring to inter-sectoral harmonization and policy support, and in particular targeting downstream-upstream user harmonization. Result Area 5 is not part of the resilience pillars.

7.2. Implementation Approach

The resilience approach should be mainstreamed into a long-term climate change adaptation approach, since dry conditions might become the norm rather than an exception in future. Therefore, the project might consider the introduction of no-regret policies in future.

Alternative Livelihoods

Even though previous grazing management structures might be successfully restored, still the carrying capacity of rangeland might be reduced, leading to livelihood drop-outs from pastoralism. Also persons who were previously engaged in charcoal burning and selling building materials (poles) might have lost their income opportunities due to the new regulations by the new by-laws. This requires therefore not only the diversification of livelihoods, but also the creation of alternative livelihoods. The re-integration into sustainable charcoal production within CPAs under REDD schemes, was recommended as one option during the stakeholder meeting. Urban camel milk farming is also a new emerging option for Kenya. However, these are only few suggestions and a new program should be established beyond resilience building targeting the creation of alternatives, if possible non-land-based livelihoods.

Scaling up and Addressing Trade-Offs

There is a need to scale up the project and expand it to cover the entire sub-catchments surrounding current project areas to address pressures emerging from communities which are not yet involved in the project during the remaining project life cycle –like adjacent parishes where pressure is already building up.

7.3. Recommendations for Different Result Areas

Result 1: Livelihood and Ecosystem Diversification

- Communities **in Uganda** used to be agro-pastoralists; but site surveys show that the area is not particularly suitable for crop agriculture, hence the BDR & CECF strategy could include livestock introduction, so that communities may practice mixed farming to complement production.

- It should be considered, how the lessons learnt on CEFC can influence development and management of a CEFC at higher level for large scale integrated of water resources/environment management. Roles, responsibilities and accountabilities should be clear. For CECF at higher/large scales, NGOs could advocate for incorporation into policy, build capacity and sensitize stakeholders. The primary partners would be local governments, mandated government institutions and the beneficiaries. Performance assessments can be done by other partners teamed up with mandated monitoring and government oversight institutions. **For Kenya**, the sharia compliant CECF could be introduced, as already envisioned by the Project Management (PM) there.

- *Up-scaling CECF*

The introduction of a revolving fund **in Kenya**, similarly to the CECF in Uganda, was considered as highly desirable, so that community members would have credit facility to participate in these activities. This requires, however, harmonization of the fund with Islamic sharia rules, a process that is already pursued by the PM in Kenya. The PM needs to be supported in taking the process forward during the second phase of the project.

Under the existing MoU arrangements the CECF **in Uganda** could be managed on behalf of DWRM which could help to roll out and upscale CEFC in other districts in the catchment. This would also help to trigger policy reviews at national and local government levels.

Creation of synergies between wetland protection with livelihood issues and income generation

While the current national law of Uganda and Kenya prohibits developments within 30 meters from the riverbank for medium river bodies and wetlands,this is perceived as an income loss for potential or former users of these areas. For the reduction of losses, and the creation of incentives to comply with laws and by-laws it is recommended, to use buffer strips and wetlands in a way that create synergies between wetland conservation and income generation as it is already partly done in Kenya. For example the vegetation planted in buffer strips under the project (sisal in Uganda and fruit trees in both countries) already have laid the ground to create conditions, where communities already benefit from these buffer zones rather than feel losses. This has to be accompanied by awareness campaigns to highlight the differences between uses, that are in compliance with the protection of wetlands and others, which are not, as people might get confused, why they are prohibited from cultivating crops but are allowed to grow fruit trees. Furthermore, this should be accompanied by an equitable benefit-sharing scheme of products from the buffer zones.

Water management and quality monitoring

Water quality monitoring: The Ugandan project part received a bio-monitoring kit, and this should also be made available to the Kenyan part particularly in Tula, where the project protected water pans through fencing. Despite the value of bio-monitoring, where there is a suspect of chemical or microbiological pollution through industrial contamination, high nitrate input (animal dung) and coli bacteria, chemical analyses and microbiological analyses should be conducted. For this, monitoring kits should also be made available to the project and results should be included in the reporting framework.

Management of buffer zones and the type of vegetation cover planted should be tailored to the major problems in water quality, which should be adequately monitored as well. Grasses are mainly effective, where the turbidity of water is high, trees are more effective against higher nitrate concentrations, and therefore, the project should design its interventions according to the results from water quality monitoring in future, while creating also synergies with protection against soil erosion through the vegetation selected.

Establishing components which solely address pastoralists

"The world has always been interpreted from a sedentary point of view, never from a nomadic one" is a statement by French philosopher Giles Deleuze. The statement is applicable almost worldwide, and it is also almost applicable everywhere for all pastoral projects, which in general prefer to focus on agro-pastoralists rather than on nomadic pastoralists, which are much more difficult to target. To avoid these bias, special project components should be created which solely target pastoralists, such as there are projects which solely focus on women. These projects should also refer to the valuation of pastoralism in Kenyan ASLAs, which has been provided by IUCN earlier, to enhance awareness of the economic importance of mobile pastoralism. It also could integrate components of horizontal integration of water development, balancing trade-offs between mobile pastoralism and sedentarism, and pastoralism and irrigation.

Market and Value Chain Development

Market and Value chain development could be better linked to the resilience pillars of the project, which would imply that communities will be better, involved in planning, prioritizing and regulating the intervention. The CECF can also play a major role here to lay the cornerstone for these initiatives. Activities already started under the CEFC should be diversified such as value chains in food and fibre processing, gums and resins, livestock and crop products. The identification of appropriate partners as well as product development, as originally envisioned for this part of project activities should be continued.

Value chain development is important for sisal, fruit and livestock in Uganda, and for fruits, aloe, livestock, gums and resins in Kenya as well as establishment of camel milk marketing. Product development meeting the modern market quality requirements might be beyond the capacities of the communities and therefore, it is recommended to assign an extra consultancy for product and market development in the next phase. Furthermore, gum and resin production in Kenya should be embedded into the labour economy of pastoralism so as to avoid impeding the livestock productivity. .

While in Kenya pastoralists already received training in cosmetic production for aloe, this has to be supported with marketing of the products.

Tree Development

On tree development, certain changes were suggested for future phases. In Uganda, tree nurseries should be established under the supervision of few interested individuals instead of the entire community.

Fruit trees which yield in the first year, like banana, pawpaw should be given priority in the beginning, to motivate community members to participate in the activities.

In Kenya, in general better exploration of the economic potential of Non-timber forest products (NTFP) and valuable wood trees should be focused upon, but since NTFP also often turn out to be a poverty trap, development of NTFP value chains should be incorporated. The development of commercial trees such as *Marer – Cordia quercifolia*, *Ohio – Cadaba sp*. *Tira – Clerodendrum* were recommended by communities during the MTR, in addition to the common gum and resin trees *Acacia Senegal*, *Commiphora* and *Boswella*.

Soil and water conservation on catchment level

Stone lines and soil bunds in hilly areas are sustainable technologies which protect riverbanks on catchment level against siltation. Trenches, *zai* culture, half-moons, *fanjaa juu* systems can improve the soil water storage capacity within rangelands which will further enhance rangeland productivity. Where considered as feasible, these should be included into future sub-catchment plans in collaboration with communities and installed in future phases, particularly in Kenya.

Replacing water, where wetlands are protected

Wetlands are used as safety nets for water during dry seasons where wetlands are protected, these water sources for human and livestock consumption and agricultural production are not available for people, which therefore have to be replaced to enhance livelihoods and well-being of project beneficiaries and the sustainability of the project.

Water harvesting and diverting water to the people in sustainable way would therefore, be a necessary intervention for the future. Obviously, traditional knowledge will not be sufficient to ensure that, therefore, in particular for Uganda, it is recommendable to hire a hydrological specialist as a consultant who will optimize the water supply system in the catchments under conditions of full wetland protection.

- *Groundwater prospecting*

Groundwater prospection was highly recommended by communities to enhance the available water sources in the region.

- *Using water efficient crop varieties, where water scarcity remains*

Where water scarcity remains, more water efficient crops can be used, such as sorghum instead of rice, where culturally accepted.

- *Nutrient recycling for agricultural production*

If not yet provided through the existing agricultural extension services, nutrient cycling methods such as composting of animal manure and organic wastes to enhance agricultural productivity and minimize nutrient losses from ecological cycles will also enhance agricultural livelihoods.

- *Management of invasive species*

Land degradation has led to the proliferation of invasive species, such as *Prosopis juliflora* in Kenya and acacia varieties, spear grass etc. in Uganda. It would be recommended to create knowledge bases and corresponding skills on how to manage invasive species, if possible in collaboration with other partners within East Africa, since this problem affects the whole region.

Result 2: Institutions

- *Protection and Restoration of Riverine Forests*

Where riverine forests already exists they should be protected as part of the project activities, otherwise, where riverine forests have existed before or there are areas which would be suitable as riverine forests according to the knowledge of communities or the National Forest service, these could be rehabilitated as part of the riverbank protection.

Result 3: Knowledge Management

- *Study on Rangeland Carrying Capacity in Kenya*

A detailed economic and ecological analysis should be conducted to determine the current livestock and livestock-people carrying capacity of present rangelands in Kenya. While it is evident, that the declining carrying capacity of rangeland is unable to support as large numbers of livestock and humans as before, issue of supporting pastoral dropouts and their future, should be considered in future *Hydro-Meteorological Information.*

All SSA have chronic deficits in meteorological information, any additional hydro-meteorological station therefore will help to fill the related gaps. However, it was not clear during the evaluation, how the data collected are used for land management.

To make full use of the stations the project should create synergies with other meteorological information, from local HydroMet on the other hand; the project could request the HydroMet Service to provide them with weather forecasts, seasonal forecasts and drought and flood warnings, if available. Furthermore, the project could interact with the Regional Climate Prediction and Application Centre (ICPAC), based in Nairobi.

- *Traditional Knowledge*

Meteorological data should also be used to inform early warning systems, as well as integrating with the traditional early warning systems which are highly relevant accurate and effective. Therefore, they could also be made part of project segments, which combine traditional with modern knowledge and institutions.

Traditional knowledge could also be used to revitalize meteorological knowledge for early warning and identification of pasture as well as for the development of water sources, since pastoralists have been developing water sources on their own since centuries.

Finally, using traditional knowledge alternative options should be identified to develop water sources in wet pastures as alternatives to water trucking, where these are lacking. *Training and Capacity Building needs*

Training needs were identified for the following issues:

<u>Water</u>

- Exposure tours to other WRUAs
- Training on environmental conservation and management
- Training on participatory monitoring and evaluation
- Training on data collection and monitoring on water levels and meteorological station
- Training on management and protection of water sources

<u>Agriculture</u>

- Training on integrated pest management
- Training on management of farm pumps and irrigation infrastructure
- Marketing and value addition of farms produce
- Post harvesting techniques
- Diversification of crops and making it a business e.g. agro-forestry
- Crop husbandry
- Establishment of co-operative societies

<u>Livestock</u>

- Training on pest and disease control and administration of vet drugs
- Training of overstocking and its impacts on environment
- Training on marketing and values addition of livestock
- Establishment of livestock groups to assist in marketing
- Training on pasture /fodder production
- Training on beekeeping, fish and bird farming

Wildlife

- Training on conservation of wildlife
- Training on data collection on signs and symptoms of outbreak of diseases for early reporting and action plan
- Life-saving skills from attacks of wildlife
- Sensitization of community and by-laws creation on land use and management (all sectors)
- Training on proposal writing and development

Minerals

- Training on exploitation and use of minerals
- Training on marketing of ballast, building blocks and cement
- Entrepreneurial training
- Education tour to Matuu and Thika
- Sensitization on the impacts of the exploitation process

Pasture and fodder production

- Sensitization on use of wet and dry season fodder during different periods
- Training on pasture and fodder production and storage e.g. hays farms
- Sensitization on dangers of causing wildfire
- Training on pasture and fodder seeding and re-seeding in rainy season
- Training on pasture/fodder marketing
- Training on control of *Prosopis juliflora* and other encroaching bush

- *Involving Science*

To enhance the vibrancy of the learning part of the project, it is recommended to implement a CB-2 project for knowledge management. The project could support establishing the GIS data base for improving the available data base on water and natural resources, better access of these data to planners, policy makers and for project implementation, improved access to methods and results on the interpretation of these data through scientists. Main research should focus on the questions of trade-offs between mobility and sedentarism, trade-offs between agricultural land resources and rangeland, the balancing of land with water resources, integrated water development, control and handling of invasive species, and alternative livelihoods. A research component on the value of the resilience approach is also highly recommended.

Result 4: Multi-Sectoral Linkages on River Catchment Scale

Taking a broader catchment approach

In the view of communities, up to now only 30% of the river banks are well managed, the remaining 70% are poorly managed. This is due to challenges, which up to now have not yet been fully addressed by the project interventions, which are

- Upstream river pollution (Kenya), deforestation (Uganda)
- Hydropower (Kenya)
- Riverine agriculture (Kenya)

While these problems are partly addressed through the ongoing upstream-downstream user dialogues, they could be tackled by an overarching catchment approach in future.

- *Balancing of interests between upstream and downstream users*

On political level, partnerships with institutions have to be created. These institutions are already in place, such as the Water Resources User Associations and WRMA in Kenya, as well as DWRM and the new emerging Water Zones in Uganda should try also to focus on mitigating upstream- downstream user interests. This would require an overarching catchment plan for water management, which would either focus on stopping negative impacts from upstream areas or compensating the downstream catchments.

Compensation fees would be necessary for

- Loss of water energy through hydro-power
- Source point pollution through industrial wastes

Generating of Payment for Ecosystem Services and Tapping of Climate Funds

Both, the current rangeland management activities in Kenya and in particular the wetland protection in both countries create ecosystem services for local and global users through active work by communities and therefore qualify for payments for ecosystem services. Also opportunity costs between upstream and downstream users occur which require compensations. Since it is doubtful, if PES could really be generated on national or district level under the current economic pressures of stakeholders in both countries, international funds could be raised for water services from the international communities.

The project would need then to identify the mechanisms and partners, preferably international ones, like the stakeholders within the RAMSAR convention, or small grant programs under GEF, to ensure these payments.

On national level, PES could be created through taxes and their redistribution to the wetland managers.

Result 5*: Awareness raising*:

In the view of the project team, though the project really generated a sound understanding of the concept and principles of IWRM, there is still more awareness creation needed to ensure the protection of the wetlands and riverbanks. Although a lot has been done on the ground the major challenge is to establish better documentation of all these activities, in order to reach larger audiences. IUCN is currently documenting the outcomes for dissemination, and should use the outcomes to advocate for informing policy reviews through policy briefs and other means.

Stakeholders also emphasized, that increased awareness raising is necessary for upstream users to inform them about possible impacts of interventions within the upstream catchment on the downstream catchment. Improved awareness raising could also be achieved through linkages with RAMSAR.

Other recommendations are:

- Hiring a communication expert, and regularly broadcasting through community radio.
- Future focus on disaster risk management
- Highlight the project on the World Environment Day – to inform the wider public and other stakeholders of what the project is doing in terms of management of water resources, approaches, lessons, etc.
- Participate in the celebrations of the World Day of Desertification

Annex I. TABLES

Table 7: Utilization of Funds

Activity, for which the fund was used	Number of districts, where CECF was used for prioritizing the respective activity
Basic Needs	
Paying medical bills	6
Paying of school fees and school materials	6
Buying food for home consumption	3
Buying items for basic domestic needs like soap	1
Business / Agricultural Investments	
Buying of seeds	5
Small scale poultry	5
Baking pancakes	5
Small scale produce buying (and selling)	5
Buying goats	4
Planting of seedlings	3
Buying food items for sale	2
Starting small scale business	1
Brewing Alcohol	2
Village savings	2
Cultivation of crops like soy beans, rice	1
Planting of trees	1

Table 8: Community Actions in the Case of Absence of the Fund

Community Perceptions of What Would Happen in the Absence of CECF	Number of Districts, in which the respective answer was given
Environmental Impacts	
Cutting trees for Charcoal burning	6
Wetland cultivation	6
No communal demarcation of wetlands	4
Community would not cooperate to clean water sources	3
Food Security	
Lack of food and hunger in homes	6
Education	
Children's education would be poor with bad performance in schools, drop-outs	5
Conflicts	
Children would be rebellious	4
Domestic Violence	3
Disunity among community members	2
Stealing, Borrowing, Idleness	
Rate of stealing would be high	3
Children would become thieves in homes because of lack of food	2
Borrowing money from friends and relatives	1
Idleness and playing cards of the youth	1
Psychological Problems	

Excessive alcohol consumption	2
Feeling hopeless and useless	1
Depression	1
Hygienic / health issues	
Dirty homes	1
Poor coverage of pit latrines in the village	1

Table 9: Budget

Item No.	Cost items according to the contract	Approved Budget in Euro	Difference (Reallocation) in Euro	Reallocated Budget (May 2012) in Euro
1.	***Expected Result 1 according to Logical Framework***	102.445		90.587
	Technical support	15.041		20.000
	Sum Expected Result 1	**117.486**	6.899	**110.587**
2.	***Expected Result 2 according to Logical Framework***	36.626		42.427
	Technical support	9.041		7.000
	Sum Expected Result 2	**45.667**	-3.760	**49.427**
3.	***Expected Result 3 according to Logical Framework***	34.715		32.195
	Technical support	9.400		16.112
	Sum Expected Result 3	**44.115**	-4.192	**48.307**
4.	***Expected Result 4 according to Logical Framework***	24.785		24.785
	Technical support	8.500		10.000
	Sum Expected Result 4	**33.285**	-1.500	**34.785**
5	***Expected Result 5 according to Logical Framework***	75.697		80.289
	Technical support	75.000		80.000
	Sum Expected Result 5	**150.697**	-9.592	**160.289**
6	***Costs of project implementation on site (a.) (b.)***			
6,1	Personnel costs (a.) (b.)	383.320		378.921
6,2	Transport costs (a.) (b.)	33.972		33.968
6,3	Logistic and operational costs (a.) (b.)	15.331		15.331
	Sum item No. 6	**432.623**	4.403	**428.220**
7	***Consulting services (b.)***	55.894		37.765
	Sum item No. 7	**55.894**	16.695	**39.199**
8	***Investments (b.)***	35.279		35.274
	Sum item No. 8	**35.279**	5	**35.274**
9	***Evaluation (b.), (g.)***	29.762		29.762
	Sum item No. 9	**29.762**		**29.762**
10	***Documentation and public relations (b.), (g.)***	30.677		30.677
	Sum item No. 10	**30.677**	0	30.677
11	***General measures of organizational development (c.), (g.)***	0	0	0
	Sum item No. 11	**0**	0	0
			0	0

Item No.	Cost items according to the contract	Approved Budget in Euro	Difference (Reallocation) in Euro	Reallocated Budget (May 2012) in Euro
12	*Contingency (d.)*	33.606		33.606
	Sum item No. 12	**33.606**	0	**33.606**
I.	***DIRECT COSTS (Items No. 1.-12.)***	**1.009.091**	10.392	**998.700**
II.	**Indirect costs (e.)**	**90.909**	-10.391	**101.300**
	TOTAL (f.)	**1.100.000**		**1.100.000**

Annex II. METHODOLOGY AND APPROACH TO THE EVALUATION

The achievements of the different results were evaluated with respect to each of the five outputs.

Principles and Good practice
In order to achieve the objectives and to effectively answer the key evaluation questions the consultants used the following principles and good practice:

i) **Evidence-based analysis**. Evidence-based information that was credible, reliable and useful to compilation of findings and elicitation of conclusions and recommendations was utilised. Credible and reliable information was determined by review of the relevant and available project documents, relevant literature, interviews and consultation meetings with relevant stakeholders and beneficiaries. The level of subjectivity in interpreting and assessing the degree to which the project achieved its planned results, including dimensions of relevance, effectiveness, efficiency, sustainability and impact was minimized and overcome by assessing outcomes based on measurable performance indicators and criteria provided in the project log frame, monitoring and evaluation, and progress review framework.

ii) **Participatory and consultative approach.** This approach ensured that all concerned stakeholders, partners and beneficiaries had an opportunity to make input into the evaluation process thereby enriching the evaluation outputs, level of acceptance and ownership. The consultative process ensured close engagement with IUNC (Kenya and Uganda) Country Offices, project team, and key stakeholders including local groups, Local governments for participating districts and counties.

iii) **Balanced and forward looking.** In this approach the consultants examined what worked and what did not work well and why in regard to the models and approaches of project implementation. The evaluation process considered the continuum of the initiatives over time so as to better understand the constraints that needed to be addressed and the opportunities that were built on or missed. The consultants endeavoured to address all the evaluation questions and criteria fairly and frankly; they further ensured that for the evaluation to be of maximum usefulness it had to be forward looking as well as retrospective, providing the client with the benefit of a set of lessons learned as well as identifying good policy and practice that can be incorporated in new program designs and/or shared with project stakeholders.

Methodology
According to the ToR, the evaluation was conducted on the basis of a desktop review of all relevant documentation, field visits, face-to-face interviews and discussions with all key stakeholders involved in the Project and electronic interviews through teleconference or written comments e.g. email. An evaluation of the success of the project including relevance, effectiveness, efficiency, impact, quality, sustainability and indications of impact was conducted through the approach highlighted in the framework shown in Figure. 1 and by illustrating it along a suggested Output/Outcome Matrix as highlighted in the Annex. Finally, the project performance was rated according to the framework given in the ToR in accordance with the project log-frame and indicators.

The particular significance of the single components within this framework is described as follows:

- **Relevance** is concerned with the question, whether the results, purpose and overall objectives of the intervention were in line with the needs and aspirations of the beneficiaries, other stakeholders and prevailing need for drought resilience, and with the policy environment of the intervention, within the context of this project, mainly how research topics, objectives and activities are relevant to building individual, operational and technical, national research and institutional drought resilience.

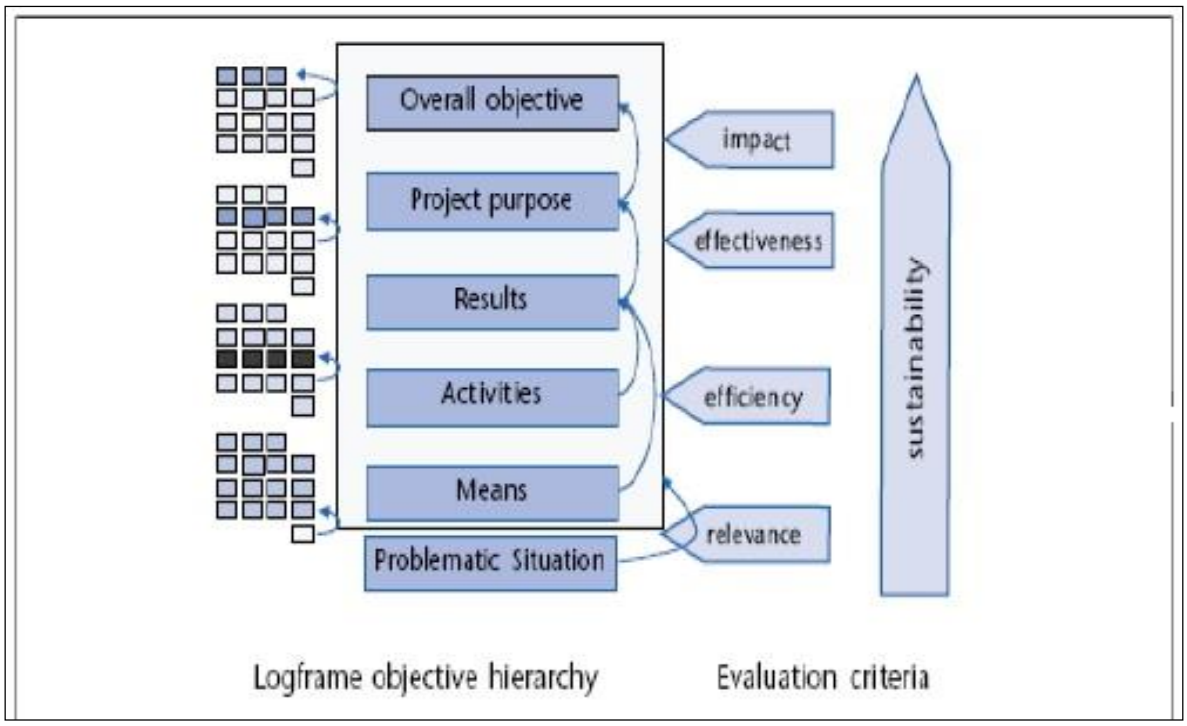

Figure 3: Framework for MTR

- **Feasibility** indicates the Strengths, Weaknesses, Risks and Opportunities of project features with regard to building drought resilience.
- **Impact** describes the effect of the project on its wider environment, here in particular on livelihoods and its contribution to the wider sector objectives summarized in the project's overall objective, and on the achievement of the overarching policy objectives of the district/county policies, national institutions, and the various partners involved. Impact includes positive and negative, primary and secondary effects produced by a development intervention on its beneficiaries, directly or indirectly, intended or unintended. This in effect helps to track changes in the socio-economic, institutional and environmental conditions with respect to the problem and baseline as at start of the project.
- **Effectiveness** measures the contribution made by the project's results/outcomes to the achievement of the project purposes. Effectiveness describes how well the results achieved have furthered the attainment of the intervention purpose both in quality and in quantity. It includes also catalytic and synergistic effects among project components, as well as political, institutional, natural, social economic/financial, cultural factors which supported or impeded project implementation. Effectiveness is related to the project design and implementation activities. It relates to questions, to which extents targets are met. It also assesses the appropriateness and capacities of indicators to measure and monitor project progress. In regard to the particular project, it also measured in which way the IUCN project interventions undertaken contribute to improved livelihoods of the rural population through building of drought resilience.
- **Efficiency** assesses, if the results are obtained at reasonable cost and resource inputs, including; how well means and activities were converted into results, and the quality of the results achieved. Efficiency helps to describe the relationship between the produced outputs and the utilized resources.
- **Sustainability** is the likelihood of a continuation in the stream of benefits produced by the project after the period of external support has ended. Key factors that impact on the likelihood of sustainability that were assessed include: (i) ownership by beneficiaries; (ii) policy support/consistency; (iii) appropriate technology; (iv) environment; (v) socio-cultural issues; (vi) gender equity; (vii) institutional management capacity; and (viii) economic and financial viability. It includes analyses, whether interventions undertaken contribute to ecological and socio-economic sustainability on a larger ecosystem and economic level.

The **framework** illustrated in Figure 3 is integrated into an Output/Outcome Matrix suggested by the consultants in regard to the major outputs, activities and levels of analysis to be conducted during the evaluation, as shown in Tables 4.1 and 4. 2 below.

The **major tools during** the evaluation were: the review, assessment and comparison of documents as well as a consultative process with a number of concerned stakeholders, using qualitative focused interviews with individuals or groups for assessing stakeholders satisfaction and closed questionnaires for the analyses of project achievements according to indicators and indicative activities and in comparison to targets to be reached.

Team Composition and Collaboration during the Review: The National consultant including support staff (team) and International Consultant conducted the consultations jointly in close collaboration with IUCN Kenya and Uganda, with the support of additional staff for data collection and analysis, where needed.

Annex III: TORs

Terms of Reference for Mid-Term Review of Building Drought Resilience Project, Kenya and Uganda

1. Background

The International Union for Conservation of Nature (IUCN) helps the world find pragmatic solutions to the most pressing environmental and development challenges. The institution's work focuses on valuing and conserving nature, ensuring effective and equitable governance of its use, and deploying nature-based solutions to global challenges on climate, food and human development. IUCN supports scientific research, develops and disseminates conservation 'knowledge products', manages field projects demonstrating practical interventions all over the world, and brings governments, NGOs, CSOs, the UN and the private sector together to develop policy, laws and best practice. IUCN is the world's oldest and largest global environmental organisation, with more than 1,200 government and NGO members and almost 11,000 volunteer experts in some 160 countries. IUCN's work is supported by over 1,000 staff in 45 offices and hundreds of partners in the public, NGO and private sectors around the world.

IUCN's Eastern and Southern Africa Regional Office (ESARO) covers twenty four countries in the Horn of Africa, Eastern Africa, Southern Africa and the Western Indian Ocean and has thematic programmes (including Water and Wetlands, and Drylands) with projects in a number of these. One such intervention is a 3-year (2012-2014) Austrian Aid funded project entitled *Building Drought Resilience through Land and Water Management in Kenya (Lower Tana sub-catchment) and Uganda (the Upper Aswa-Agago sub-catchment)*. These subcatchments are in arid (Kenya) and semi-arid (Uganda) areas. Communities living in arid and semi-arid areas of East Africa face multiple challenges including recurrent droughts that hinder development and livelihood strategies. Interventions that enhance resilience and adaptive capacity of both ecosystems and the communities reliant upon them are, thus, of paramount importance. The overall objective of the project is to improve resilience of dryland communities within a river catchment to the impacts of increasingly severe and frequent drought, through strengthened ecosystem management and adaptive capacity. The project was designed on the basis of the IUCN Resilience Framework and also to build on the existing (now previous) initiatives that have been implemented by IUCN and partners within the area(s). Resilience is defined as the ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organisation, and the capacity to adapt to stress and change.

The essential quality of resilience is the capacity to withstand shocks and rebuild when necessary.
The project aims to achieve the following five key results:

1) Result 1: Integrity and functioning of catchments improved through ecosystem-based actions that are gender sensitive and diversify livelihood assets;
2) Result 2: Improved capacity of traditional and formal resource management institutions to sustainably manage natural resources within a catchment area;
3) Result 3: Knowledge and skills of local communities to implement adaptation, innovation and change within institutions are mobilized and improved;
4) Result 4: Greater coordination between multi-sectoral institutions improves harmonization of plans and interventions;
5) Result 5: Awareness among policy makers on catchment management approaches are increased through learning based on project experiences.

In the Lower Tana River Basin in Kenya, the project is being implemented in partnership with Fafi Integrated Development Association (FaIDA) and the Water Resource Management Authority (WRMA). Other partners include the Government institutions and departments such as National Drought Management Authority, Water, Forest and Wildlife, Livestock, Agriculture, Irrigation, National Environment Management Authority (NEMA) and County Governments of Garissa and Tana River. The project is focussing initially on 4 sub-catchments, namely: Khorweyne, Saka, Tula and Al-Amin Moju.

In the Upper Aswa-Agago sub-catchment in Uganda, the project is being implemented in partnership with the Directorate of Water Resources Management in the Ministry of Water and Environment, as well as the three District Local Governments (DLGs) that cover the sub-catchment, namely: Lira, Otuke and Alebtong. The geographical focus here is primarily on the upstream part of the sub-catchment, as catchment degradation here is likely to adversely impact on populations downstream.

2. Aim and Objectives of the Mid-term Review

The aim of the mid-term review is to assess the progress, performance, achievements and lessons learnt to date and to use these to ensure that the project is adjusted as and where necessary in order for it to have had maximum impact by the end of its lifespan.
The overall purpose of this review is threefold:

I. Learning and improvement as a building block for future work: It is intended that the outcomes of this mid-term review will provide useful and relevant information to the on-going work; explore why implemented actions and interventions have been successful, or not and to provide guidance on how to better implement new work, possibly as a new project, after the current phase of the project has been completed;

II. Accountability: The mid-term review is also an accountability instrument for the project. Consequently, it will be used to assess whether or not project plans have been, or will be, fulfilled and also determine the extent to which the project's resources have been used in a responsible and effective manner.

III. Sustainability: The outcomes of the mid-term review should assist IUCN and her partners in assessing the sustainability (or otherwise) of the activities, approaches, and structures initiated or supported by the project, and crucially, should also provide recommendations for the future.

The specific objectives of the mid-term review are as follows:
1. Assess the effectiveness and efficiency of project implementation, including assessing the institutional arrangement, partnerships, risk management, M&E and project implementation;
2. Determine the extent to which the project and its associated actions are relevant to the existing and likely future needs of its stakeholders and the environment/s in which it is being implemented;
3. Evaluate the outputs, and any outcomes of the project already delivered, and determine and assess their contribution to delivery of the overall project's overall aims and objectives;
4. Provide guidance on aspects or specific issues that will be useful in undertaking the planned project impact assessment through the use of scenario thinking to be done at the end of the project, i.e. how would the situation look like on the ground without this project;
5. Assess the long term sustainability of project interventions;
6. Assess the effectiveness and efficiency of the project set-up in terms of i) institutional anchorage within IUCN and ii) geographical focus.
7. Identify key 'lessons learnt' to date, particularly with regard to strategic processes and the mechanisms chosen to achieve the project's objectives to date, and;
8. Make clear, specific and implementable recommendations to improve the project in its last year and provide guidance on the scope of future work.

3. Scope of the mid-term review
Within this framework, specific issues (and questions) to be assessed will include, but not be limited to, the following:

Effectiveness
1) Are the activities implemented in accordance with the project plans? If not, why?
2) What outputs have been achieved? To what extent do they contribute to the objectives?
3) How effective are the approaches and structures in delivering the desired outputs?
4) How can they be improved?
5) Do the partner organisations work together effectively? Is the partnership structure and the geographical focus effective in achieving the desired outputs? How can the partnership be improved?

Efficiency
1) Are the available technical and financial resources adequate to fulfill the project plans?
2) Are the funds being spent in accordance with project plans and using the right procedures?
3) Have there been any unforeseen problems in terms of resources (technical and financial) allocation and utilization? How well were they dealt with?
4) Are the capacities of the partners adequate?
5) What have been the roles of the partners and staff and are they appropriate?
6) Is there an effective process, built into the management structure for self-monitoring and assessment, reporting and reflection? How could it be made better?

Relevance
1) Establish whether or not the design and approach of the project are relevant in addressing the identified needs, issues and challenges as far as building drought resilience is concerned in ASALs
2) To what extent is the project contributing to the strategic policies and programmes of IUCN and that of the partners? How could relevance be improved in future?

Sustainability

1) Is the approach used likely to ensure a continued benefit after the end of the project?
2) Are all key stakeholders sufficiently and effectively involved? Are their expectations met and are they satisfied with their level of participation?
3) Are alternative or additional measures needed and, if so, what is required to ensure continued sustainability and positive impact?

Impact
1) Is the project bringing about desired changes in the behaviour of people and institutions?
2) Have there been any unintended positive or negative impacts arising from particular outcomes/results?
3) What could have been the likely situation (of the environment and its management) without the project?

4. Methodology
The consultant should propose a brief methodology to be used to carry out the review in their application, the methodology adopted should update the preliminary issues and questions outlined within the ToRs, specifying the specific review issues, questions, methods of data collection and analysis that will be undertaken. It should encompass a combination of both qualitative and quantitative methods. It should also allow for wide consultation with all interested partners and stakeholders.

It is suggested that the methodology should include, but not be limited to the following, but consultants must propose their own methodology and justify and explain that proposal:

1) A desktop review of all relevant documentation, including (but not limited to):
2) The project document, contracts and related agreements
3) Work-plans and budgets
4) Progress Technical and Financial Reports
5) Face-to-face interviews and discussions with all key stakeholders involved in the project to ensure that the review is carried out in a participatory manner. A list of key partners and stakeholders would be identified at an early stage and a consultation process developed. All stakeholders consulted should be in a position to present their views in confidence to the team and to identify issues, opportunities, constraints and options for the future
6) Electronic interviews through teleconference or written comments e.g. email; where partners cannot be reached for face to face interviews IUCN will assist with the organisation of meetings and discussions, and inform the relevant stakeholders of the review process and their role in it, well in advance.

5. Review Team Composition

The team will consist of two people, an international evaluation expert and an expert from the region (Kenya/Uganda) with natural resources management background as well as experience in climate change adaptation or resilience more so in the ASAL context. The two experts will have complementary skills covering programme design and implementation, programme/project review, natural resources management especially community participation, policy and institutional processes more so in natural resources management in ASAL. The international expert will be the team leader, with considerable prior experience in evaluation methodologies and principles.

The team leader will have the overall responsibility for the design and implementation of the evaluation, writing of the report, and timely submission of the draft and final version of the report. Detailed responsibilities of each team member shall be determined at the beginning of the mission and outlined in the methodology.

6. Reporting outputs

The Consultants will prepare and submit the following reports to IUCN:

1) An inception report outlining the proposed methodology and detailed responsibilities of each team member to be submitted prior to the onset of the assessment process.
2) A findings report, which should include the following:
3) An assessment of the performance of the project, based on the project
4) document, contracts and agreements
5) Identification of the main lessons learnt, and
6) Identification of critical benchmark baselines for impacts assessment to be done
7) at the end of the project through the use of scenario thinking
8) Recommendations and guidance on the future scope of work

7. Timing and Schedule

The consultant should develop and submit a detailed schedule for the review work, taking into account the following general guidance. The review is scheduled to take place in the month of January 2014 and should take a total of approximately 20 working days. The exact number of days must be proposed by the consultant, as must the distribution of days between the different tasks. It is suggested that the tasks may be broken down as follows, but consultants must consider this and propose their own timeline and schedule:

1) Review of background documentation and preparation of the methodology – 2 days
2) Discussion and agreement on proposed methodology with IUCN and project partners – 1 day
3) Assessment of project progress and performance – including field visits and interviews with project partners and key stakeholders – 9 days
4) Analysis of findings and production of draft report – 5 days
5) Debriefing - presentation and discussion of findings to IUCN and project partners – 1 day
6) Finalisation/revisions of the report and submission – 2 day

8. How to apply

Interested individuals/organisations are requested to submit their application clearly demonstrating their suitable skills and experience for the review process, including a brief methodology as well as the review timing and schedule. They should also submit their financial proposal indicating how much the review work will cost. Applications should be sent electronically (email) to **hr@iucnesaro.org by latest November 22nd 2013.** For any clarification on the assignment, please contact **Eliot Taylor** at **eliot.taylor@iucn.org** or **John Owino** at **John.Owino@iucn.org**

Annex IV: TOOLS

QUESTIONNAIRE GUIDELINE FOR FIELD VISIT / DOCUMENT REVIEW

Project Design
Were indicators appropriate to capture mapping and planning harmonization and gender issues

Performance indicators
Effectiveness:

Overall
Has the project visibly enhanced livelihoods, ecosystems and drought resilience?

Landscape / Ecosystem Approach
- Effectiveness of chosen technologies to address landscape/ecosystem approach
- Effectiveness to address gender issues
- Overall Community Satisfaction with the Project
- Effectiveness of action plans for climate change and drought adaptation and byelaws

Stakeholder Involvement
- Has the selection of stakeholders included the most relevant groups? Is equity and fairness in project participation among stakeholders catered for through the project?
- Which difficulties had to be overcome within communities in respect to mapping processes themselves, which difficulties to relate these to resource management?
- Is the mapping approach accepted as an appropriate management tool among communities?
- Which were the most appreciated tools and practices within the project in regard to Ecosystem management and NRM?
- Which are the visible improvements in ecosystem management /NRM in the project up to now?
- Type and satisfaction of stakeholders involved into consensus-building
- How are Water Resource User Associations (WRUAs) linked to other stakeholders like Rangeland User Association, Community Forest Associations (CFAs) Community Conservancy Association in Kenya?
- As how has capacity building been perceived

Quality of established Structures

- Nurseries, riverbanks, water facilities, water points, roof water harvesting, storage tanks. Which challenges overcome, which achievements?
- How is catchment managed? Type and effectiveness of farming methodologies

NRM and Institutions
How effective has traditional resource utilization institutions been integrated into the formal institutions in NRM? Which were the problems, how have they been solved? How is this perceived by communities and governmental institutions?
How effective were merged approaches in NRM and for instance ASCMPs in Kenya? User Satisfaction, what did they change? (Checking briefing note on ASCMP)
Types of byelaws and their effectiveness in NRM?
Status of water baseline data in Uganda

Products / Tools
- Quality of consultancy to produce rangeland resource management maps of the catchment with GIS data
- User Satisfaction with GEO-Data

Markets and Value Chains
- Effectiveness of approaches to bring enterprise principles and business plans to communities.
- Are markets available for all products, and where*?*

Lessons Learnt:
- Best practices?
- Lessons learnt during meetings and exchange visits

Impacts
- Impacts of chosen landscape/ecosystem approach to address livelihood problems
- Impact on water quality and water-borne diseases
- Impacts of byelaws on improved Ecosystem management and Drought Resilience
- Impact of livelihood diversification
- Type and Impact of conflict resolution mechanisms on access to resources during drought (Uganda)
- Does district government to take into account community priorities and needs.
- How much of what was learnt in meetings and exchange visits which was put into practice?

- Impact of awareness creation activities (participation in World Environment Day, awareness creation workshops) etc. on actual awareness and governance and project implementation

Efficiency

- Time requirement to achieve respective results, taking into account all constraints to overcome, such as soil fertility constraints (Uganda), need for harmonization of maps and plans (Uganda)
- Utilization of Community Environment Conservation Funds (CECF)

Feasibility

- Appropriateness of tools and instruments to address the problem, such as mapping, integration of traditional institutions into formal systems, merging of planning approaches etc..
- Feasibility of action plans for climate change and drought adaptation and byelaws

Mapping and GIS

Achievements in finalization of mapping processes and data bases and their use for ecosystem based action and harmonizing of planning approaches, avoided duplication, synergies achieved

- Which modifications have been conducted? Which were the challenges?
- Achievements in using maps for rangeland management and drought adaptation and enhanced resilience

Landscape / Ecosystem Approach

- Feasibility of chosen technologies to address landscape/ecosystem approach
- Feasibility of chosen landscape/ecosystem approach to address livelihood problems

Market and Value Chain

Feasiblity of approaches to bring enterprise principles and business plans to communities.
Feasibility of TOR on market and value chain development for nature-based products

To be clarified during the inception meeting:

- Some activities have been added or change within the course of the project.
- Monitoring and evaluation activities within communities
- Capacity assessment of formal and informal institutions – did it take place?

QUESTIONNAIRE GUIDELINE FOR STAKEHOLDER MEETING IN GARISSA ON STAKEHOLDERS' SATISFACTION

First session
Effectiveness:
Mapping
Describe Mapping Exercises – Sub-catchment / rangeland management plans.
How long did it take?
What was useful – what was not useful? Why?
Have modifications been done later on? Which ones?
For which purposes do you use the catchment plans? Who is using them?

- Which difficulties had to be overcome within communities in respect to mapping processes themselves, which difficulties to relate these to resource management?
- Is the mapping approach accepted as an appropriate management tool among communities?
- Which are the visible improvements in ecosystem management /NRM in the project up to now?

Score – mapping activities – 1 – 5
1 = Excellent
2 = Very good
3 = good
4 = satisfactory
5 = non satisfactory
Recommendations for the future

Landscape / Ecosystem Approaches
List different strategies for landscape management, such as river bank management, nurseries, etc...?
Which problems were overcome?
Which impacts did it have on the livelihoods?
Scoring effectiveness of each ?
Recommendations for the future

- Impact on water quality and water-borne diseases
-
- Impacts of water corridors and pastoralists and farmers

NRM and Institutions (f. Eg. Byelaws)
Which traditional skills, mechanisms, knowledge etc.. have been utilized by the project? And how?
Which were the problems and challenges, how have they been solved? How is this perceived by communities and

- Impacts of byelaws on improved Ecosystem management and Drought Resilience

How effective were merged approaches in NRM (integration of traditional and formal institutions)?
Score – mapping activities – 1 – 5
1 = Excellent
2 = Very good
3 = good
4 = satisfactory
5 = non satisfactory
Recommendations for the future

Markets and Value Chains

- Which approaches were brought in by the project to bring enterprise principles and business plans to communities.
- Are markets available for all products, and where?

Which problems have to be overcome to enhance value chains and marketing of dryland products?
Score effectiveness – what was reached?
Score – 1 – 5
1 = Excellent
2 = Very good
3 = good
4 = satisfactory
5 = non satisfactory
Recommendations for the future
Overall
Has the project visibly enhanced livelihoods, ecosystems and drought resilience? In which way?

Second session

Capacity building
List actors in building capacities on dryland resilience and their area of focus

- How much and what did stakeholders learn during exchange visits and what was put into practice?

Please score satisfaction with exchange visits?
Score effectiveness – what was reached?
Score – 1 – 5
1 = Excellent
2 = Very good
3 = good
4 = satisfactory
5 = non satisfactory
List skills and competencies you or other stakeholders gained within the project capacity building component?
How satisfactory have these skills been achieved?
Score – 1 – 5
1 = Excellent
2 = Very good
3 = good
4 = satisfactory
5 = non satisfactory
Result Area 4: Greater Coordination between Institutions improves harmonization of plans and interventions

List coordination mechanisms and plans and interventions.

Which helped to improve harmonization? And how?
Score Coordination among institutions as achieved by the project
How satisfactory have these skills been achieved?
Score – 1 – 5
1 = Excellent
2 = Very good
3 = good
4 = satisfactory
5 = non satisfactory

Result area 5: Awareness raising of policy makers

Which awareness raising activities were conducted by the project?
Did they raise awareness of policy makers?
How would you score awareness raising activities of the project?
Score – 1 – 5
1 = Excellent
2 = Very good
3 = good
4 = satisfactory
5 = non satisfactory
Stakeholder Involvement

- Has the selection of stakeholders included the most relevant groups? Is equity and fairness in project participation among stakeholders catered for through the project?
- Type and satisfaction of stakeholders involved into consensus-building on certain interventions (f. Eg. Group farming, river bank management etc..?

Type
.Score Satisfaction with equity, fairness and consensus-building
Score – 1 – 5
1 = Excellent
2 = Very good
3 = good
4 = satisfactory
5 = non satisfactory

- How are Water Resource User Associations (WRUAs) linked to other stakeholders like Rangeland User Association, Community Forest Associations (CFAs) Community Conservancy Association

Impacts

- Identify types of conflicts and the resolution mechanisms learnt within the project. .

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Score effectiveness

Score effectiveness – what was reached?
Score – 1 – 5
1 = Excellent
2 = Very good
3 = good
4 = satisfactory
5 = non satisfactory
Gender

From which project components did women benefit in particular?
In which way:

- Income
- Labour
- Social connectivity
- Empowerment

Pls score the project's effectiveness to address gender issues

- Score effectiveness – what was reached?
- Score – 1 – 5
- 1 = Excellent
- 2 = Very good
- 3 = good
- 4 = satisfactory
- 5 = non satisfactory

Pls score overall satisfaction with the project
Score effectiveness – what was reached?
Score – 1 – 5
1 = Excellent
2 = Very good
3 = good
4 = satisfactory
5 = non satisfactory

Plenary
Rapporteurs report from group sessions

- Feasibility of chosen technologies to address landscape/ecosystem approach
- Feasibility of chosen landscape/ecosystem approach to address livelihood problems

Market and Value Chain
- Feasibility of approaches to bring enterprise principles and business plans to communities.
- Feasibility of TOR on market and value chain development for nature-based products

Lessons Learnt:
- Best practices?
- Lessons learnt during meetings and exchange visits
- Sustainability of the project?

Annex V: LIST OF CONSULTED/INTERVIEWED PERSONS

Detailed schedule for the Mid-Term Review of Building Drought Resilience Project, Uganda
Stakeholder consultations and debrief

Schedule for the meeting on District, Sub-County and Community Level: Uganda

Date	Meeting Destination/Institution	Consultancy Team Members	IUCN contact person
Sunday 9th.02.2014	**Afternoon:** Travel to Lira		Moses Egaru, Program Officer IUCN drought resilience project Uganda Tel: +256 7742 75 807
Monday 10th.02.2014	**Morning :** Meeting with IUCN field office staff Meetings at Lira district: With District Environment Officer Meeting with Team Leader Upper Nile Water management Zone (DWRM/Ministry of Water) Sub-county and community meetings **Afternoon:** Visit river bank buffer restoration sites along hydrological units in Orit parish Visit two tree nurseries in Arwotngo and Ating Parishes. Travel back to Lira **Overnight:** Lira	Ingrid Henry Eunice	Moses Egaru, Program Officer IUCN drought resilience project Uganda Tel: +256 7742 75 807 Robert Bagyenda-IUCN Uganda Country Office Lira District Environment Officer Team Leader Upper Nile Water Management Zone (DWRM/Min of Water) Gertrude Ogwok, Project Assistant BDR project
Tuesday 11th.02.2014	**Morning :** Otuke Sub County and community meetings (Arwotngo) Visit community nursery in Arwotngo parish **Afternoon:** Meeting with District Environment Officer/District Forest Officer Visit community nursery in Angetta, Anepkide, and Ating parishes Travel back to Lira. Overnight: Lira	Henry Eunice	Moses Egaru, Program Officer IUCN drought resilience project Tel: +256 7742 75 807 Gertrude Ogwok, Project Assistant BDR project District Environment Officer/District Forest Officer Otuke
Tuesday 11th.02.2014	**Morning:** Ingrid travel back to Kampala-Entebbe **Evening:** Head to Nairobi	Ingrid	Moses Egaru, Program Officer IUCN drought resilience project Tel: +256 7742 75 807 Gertrude Ogwok, Project Assistant BDR project

Tuesday 12th.02.2014	**Morning :** Alebtong District: Meeting with Environment Officer/District Production Officer Sub-county and community meetings **Afternoon:** Visit selected beneficiary villages to the Community Environment Conservation Funds Travel back to Lira **Overnight:** Lira	Jane Henry Eunice	Moses Egaru, Program Officer IUCN drought resilience project Tel: +256 7742 75 807 Alebtong District Environment Officer
Wednesday 13th.02.2014	**Morning :** Reflections at IUCN office Travel back to Kampala		Moses Egaru, Program Officer IUCN drought resilience project Tel: +256 7742 75 807
Thursday 14th.02.2014	**Morning :** Meet IUCN Uganda country office	Jane Henry Eunice	Moses Egaru, Program Officer IUCN drought resilience project Tel: +256 7742 75 807 Robert Bagyenda IUCN Uganda country office
Thursday 18th.02.2014	**Pule John, Upper Aswa Catchment DWRM manager**	Eunice	Robert Bagyenda IUCN Uganda country office
Thursday 14th.02.2014	**IUCN Uganda country office**	Eunice Jane	Robert Bagyenda IUCN Uganda country office
Thursday 5th/03/2014	**Austrian Embassy presentation**	Jane Henry Ingrid	Robert Bagyenda IUCN Uganda country office

Schedule for field visit to Garissa and Tana River Counties and Community Level: Kenya

Date	Meeting Destination/Institution	Consultancy Team Members	Contact person and their contacts
12th.02.2014	**Morning:** Travel to Tana River and visit Al-Amin Moju – installation of roof water harvesting and storage tanks and spring/shallow wells; discuss with communities **Afternoon**: visit Tula water pan and discuss with communities **Overnight**: Garissa – Almond Hotel	Ingrid Ochola Egeru	Ahmed IUCN BDR Project - Kenya +254 721 626 499
13th.02.2014	**Morning:** Visit Khorweyne Sub-catchment – three malkas and fruit farms; discuss with communities on site **Afternoon:** Visit Saka Sub-catchment - installation of roof water harvesting and storage tanks; discussion with communities at Saka Centre	Ingrid Ochola Egeru	Ahmed IUCN BDR Project - Kenya +254 721 626 499
14th.02.2014	Meeting with partners in Garissa – including policy makers (county government representatives from Garissa, Balamabala, Bura and Hola), implementers and beneficiaries (WRUA committee representatives)	Ingrid Ochola Egeru	Ahmed IUCN BDR Project - Kenya +254 721 626 499
15th.02.2014	**Morning:** Travel to Nairobi	Ingrid Ochola Egeru	Ahmed IUCN BDR Project - Kenya +254 721 626 499

17th.02.2013	**Afternoon:** Meet IUCN ESARO Kenya	Ingrid Ochola Egeru	John Owino IUCN ESARO