Department for Environment Food & Rural Affairs

DARWIN INITIATIVE

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**Darwin Initiative Main Project Annual Report**

To be completed with reference to the "Writing a Darwin Report" guidance: (http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms). It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

**Submission Deadline: 30th April 2018**

**Darwin Project Information**

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| Project reference | 24-002 |
| Project title | Cattle, water and wildlife: enhancing socio-ecological resilience in Laikipia |
| Host country/ies | Kenya |
| Contract holder institution | Fauna and Flora International |
| Partner institution(s) | Ol Pejeta Conservancy & Laikipia Wildlife Forum |
| Darwin grant value | £399,383 |
| Start/end dates of project | 01/04/2017-30/03/2021 |
| Reporting period (e.g., Apr 2017 – Mar 2018) and number (e.g., Annual Report 1, 2, 3) | Apr 2017- Mar 2018, Annual report 1 |
| Project Leader name | Rob Small |
| Project website/blog/Twitter | www.fauna-flora.org |
| Report author(s) and date | Rob Small, Ann Komen & Moses Muthoki, 30th April 2018 |

## 1. Project rationale

A number of conservation organisations in Laikipia County have transitioned from colonial-era cattle ranches to mixed-use cattle/game systems, encouraging increasing wildlife populations outside formal protected areas. Preeminent amongst these is Ol Pejeta Conservancy (OPC), holding a Key 1 population of black rhinoceros, and species in general decline including African lion and wild dog. However, on OPC, these populations are nearing ecological carrying capacity (e.g. very low survivorship, due to predation, among Thomson's gazelle offspring in 2015-16), creating an urgent need for range expansion and connectivity to wider dispersal areas.

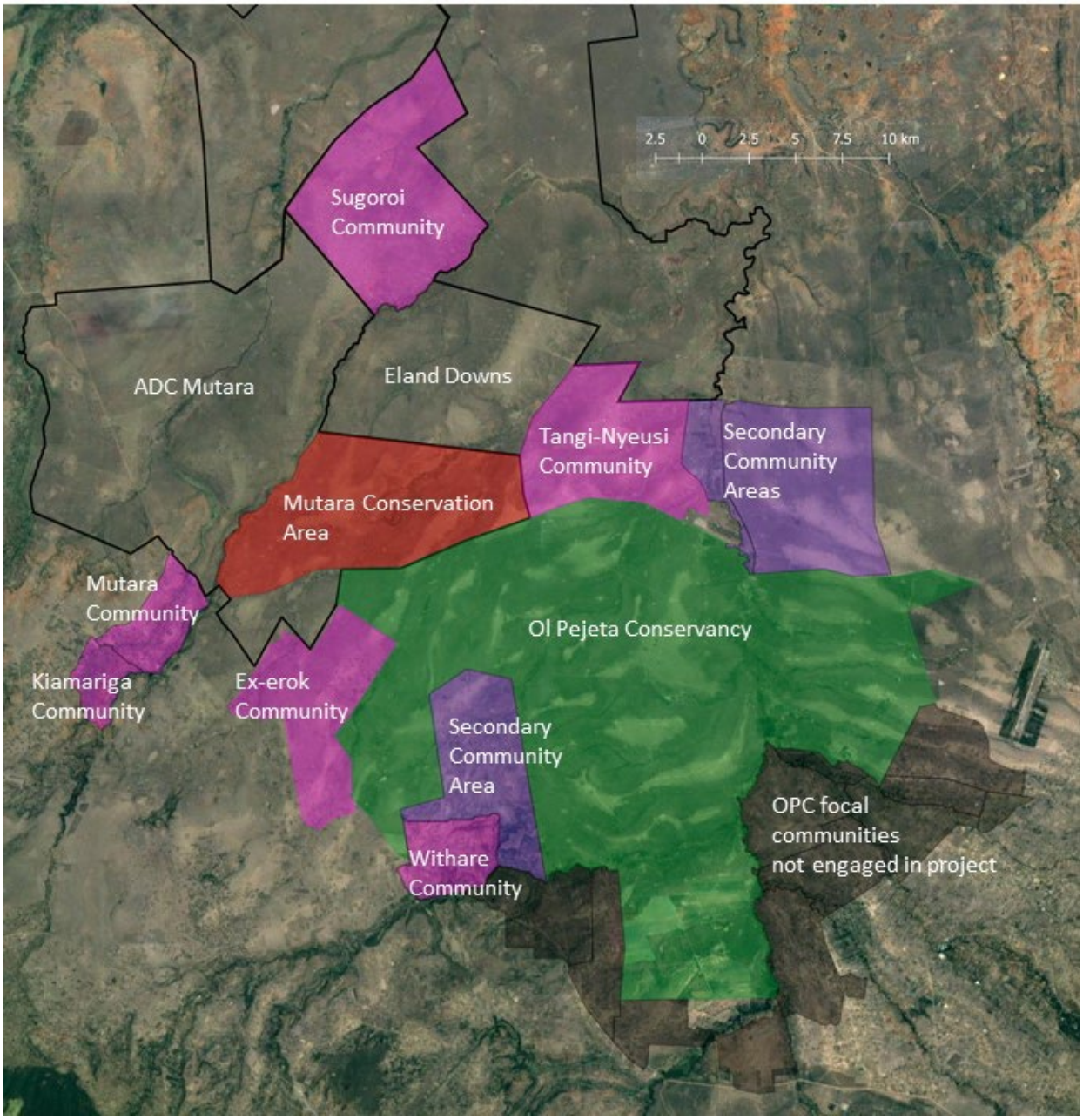
OPC's sustainability depends on safeguarding the wellbeing and livelihoods of neighbouring smallholder farmers and pastoralists. The greater OPC landscape, a boundary point between settled agriculture and mobile pastoralism with unclear user rights for grazing and water, is increasingly impacted by overgrazing, soil erosion, periods of drought and climate change which negatively affect the wellbeing of the poorest farmers and marginalised pastoralists. As resources become depleted or unavailable, conflicts occur between pastoralists and private cattle ranchers, as well as between people and wildlife.

Recently a government cattle ranch, ADC Mutara, set aside 8000ha of its land bordering OPC for conservation, livestock and wildlife management – the Mutara Conservation Area (MCA). Balancing equitable access to the resources of MCA, whilst expanding habitat for continentally important wildlife populations, is a critical opportunity to address the challenges above. However, without transparent, inclusive and accountable processes, exclusionary practices and

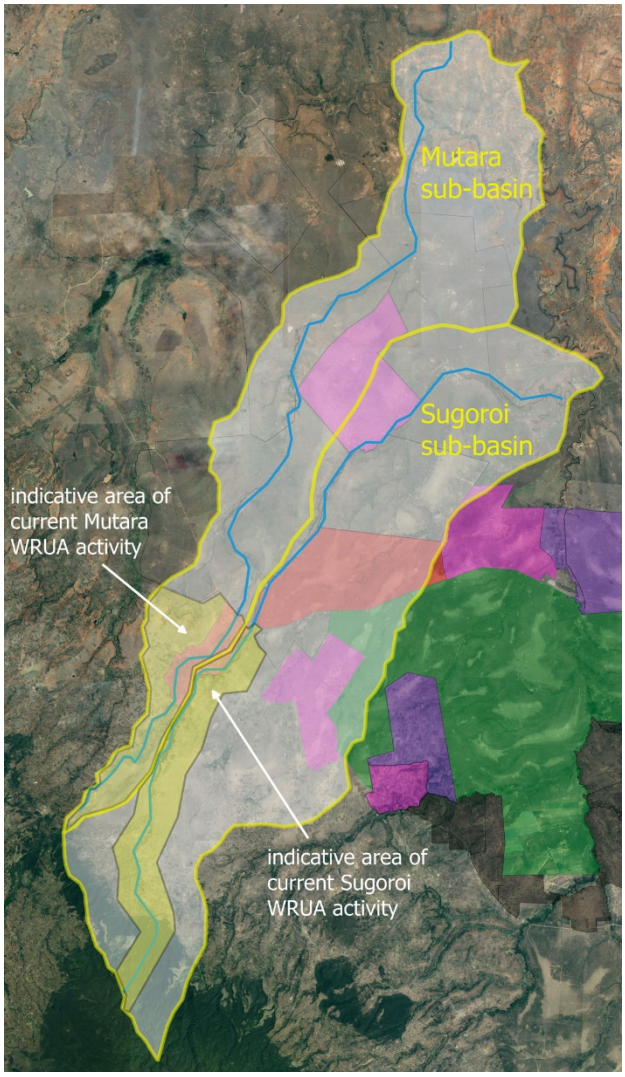
policies will act against the poorest livestock owners, threatening any conservation and livelihood gains across the landscape.

This project draws on Fauna & Flora International's (FFI) long-term engagement with these local partners, plus research including the Darwin-funded Social Assessment of Protected Areas (SAPA) project, to engage with five key population's dependant on MCA natural resources. The partners have identified a comprehensive programme of work with local stakeholders across multiple landholdings, to build peace and sustainability by balancing grazing, water and wildlife use.

The project is centred on the MCA, an 8000ha area of rangeland which is in the sub-basins of Mutara and Sugoroi river and that lies immediately north of the 37,000ha OPC. In addition the project is engaging with six key community's dependant on MCA and Mutara and Sugoroi sub-basin natural resources: Tangi-Nyeusi and Sugoroi communities who are purely pastoralists; Mutara, Kiamariga, Ex-erok and Withare communities who are agro pastoralists and farmers. It is anticipated that benefits and project engagement could expand during the project lifespan to potentially 3 more community areas to the east of the current project site. Please see Maps 1 and 2 (below).




**Map 1:** Project area map including Mutara Conservation area and adjacent community areas




**Map 2:** Project area map showing Mutara and Sugoroi sub-basins, rivers and associated WRUAs

## 2. Project partnerships

The partnerships between FFI, as the lead institution, and its implementation partners LWF and OPC have developed in the first year of the project through joint implementation of a number of project activities: establishing project socio-economic baselines surveys; engaging and capacity building Water Resource User Associations (WRUA) and farmers; reviewing the MCA management plan; information sharing. This has helped to synergize unique experiences and technical capacity that exist in these organisations and individual staff members. For example, the capacity needs assessment of the Mutara and Sugoroi WRUAs was jointly conducted by the three organizations (see Activity 2.6). This exercise prioritized capacity development needs which were subsequently addressed by the three project partners with responsibility being dependant on available resources and expertise within each organization.

New working partnerships were established with a number of organisations: Community Forest Associations; Kenya Forest Service; the Water Resource Authority (WRA) for Ewaso Nyiro North catchment; Mutara and Sugoroi WRUAs; the Ministry of Agriculture (MOA). With these partners the project has been able to more effectively work towards the restoration of water sub catchments upstream of the MCA (see Annex 5.1: Restoration of Mutara and Sugoroi riverine habitat report and Annex 5.2: Dialogues and consultation meetings with WRUAs report) and build the capacity of small scale farmers on climate smart agriculture (see Annex 5.6: Dialogue and engagement with farmers on climate smart fodder farming report).

The project's partnerships allow avoiding duplication of effort and will help ensure long-term sustainability of project interventions. The housing of FFI project coordinator in the OPC offices

facilitated joint planning, implementation and monitoring of project activities between the three implementation partners (FFI, OPC and LWF); there were monthly meetings to share updates and plan. Efforts have been made to involve our partners in project planning, monitoring and evaluation and decision making. This has included working on the ground with government agencies who previously did not have the means to undertake field based monitoring or assessments (particularly of water resource use and management). The project plans and findings have been shared with partners and these has resulted in their support by sharing lessons from their past experiences as well as contributing to implementation, monitoring and evaluation of the project (see Annex 4.2: Baseline findings and socio ecological monitoring guidance sharing workshop Activity report).

The continuing development of robust partnerships and day-today engagement over Y1 has allowed the project to achieve a significant number of Y1 targets within the shorter implementation period caused by the delayed start of round 24 projects.

## 3. Project progress

### 3.1 Progress in carrying out project Activities

Output 1: Output 1: 8000ha of restored rangeland under active sustainable management that meets the grazing needs of community livestock and wildlife:

**Activity 1.1 -** Establish baseline population estimates of key indicator game species using 2015 HD aerial survey imagery (Y1 Q2-4):
HD aerial dataset for 2015 survey data (ca. 16,000 images) acquired by project consultant and analysed (see Annex 6.1 - Aerial Survey Report) as baseline against which to measure the impact of project interventions on key indicator game species populations.

**Activity 1.2 -** Assessment and identification of key locations for restoration activities through field surveys and GIS analysis (Y1 Q2-4):
Field assessments conducted in MCA through field surveys and GIS analysis in January 2018 and key locations for restoration identified and mapped (see Annex 6.2: MCA Bio-monitoring Assessment Activity report).

**Activity 1.3 -** Y2-4 activity

**Activity 1.4 -** Implementation of ecological restoration measures - restoration of riverine habitat through tree nursery development and planting on Mutara and Sugoroi Rivers upstream of MCA (Y1 Q4 to Y2 Q2):
Trees species selection of appropriate tree species[1] for Mutara and Sugoroi riparian areas has been conducted and seeds sourced with the support of WRUAs. A total of 57 (30 male & 27 female) community members were trained on tree nursery establishment and management with 2 tree nurseries subsequently established in each of the two sub-catchments. 800 and 550 trees were planted in Mutara and Sugoroi sub catchments respectively with the onset of rains in March 2018 (see Annex 5.1: Mutara and Sugoroi sub–catchments riverine habitat restoration activity report).

**Activity 1.5 -** Development of an ecological & bio monitoring system linked to existing monitoring across the landscape (including indicator species plan) (Y1 Q3-Q4):
Biomonitoring protocols have been developed for MCA and harmonised with existing protocols within OPC. They include: a pasture assessment protocol; abandoned boma monitoring; predator call back protocol; current boma protocol; herbivore monitoring; corridor monitoring (see Annex 7.1: MCA Ecological Monitoring Training Manual).

**Activity 1.6 -** Publication of ecological & bio monitoring training manual (Y1 Q4):
A final draft of the ecological and bio monitoring manual was completed in February 2018. The testing and sharing with partners of the biomonitoring protocols has been initiated to allow

[1] Yellow thorn Acacia, Moringa, Red Sting wood, Albizia gumifera, and Bamboo.

further reviewing before publishing and widely sharing in year (see Annex 7.1: Mutara Conservation Area ecological monitoring training manual).

**Activity 1.7 -** Training of field staff in ecological & bio monitoring methodology using training manual (Y1 Q4):
A total of 10 OPC field assistants who were already conversant with bio-monitoring methodologies were given a refresher training and participated in the implementation of Activity 1.8 in Y1 Q4. An additional one day training was conducted on 30th March 2018 on bio-monitoring protocols for 35 participants who had little previous experience on bio-monitoring methodologies (23 Men; 12 Women). Participants comprised students from national universities, OPC patrol rangers and OPC research assistants (see Annex 4.1: Training of field staff in ecological & bio monitoring methodology report).

**Activity 1.8 -** Implementation of an ecological & bio monitoring system linked to existing monitoring across the landscape (Y1 Q4 to Y4 Q4):
Baseline Surveys have been completed in MCA on pasture, habitat utilisation, wildlife population, spoor corridor monitoring, wildlife sightings and rainfall. The exercise was completed with support from OPC's Ecological and Monitoring Unit (see Annex 6.3: Year 1 annual MCA ecological and biomonitoring report).

**Activity 1.9 -** Publication of annual MCA ecological report (Y1 Q4):
Annual ecological report for Y1 was finalised and shared with project partners (see Annex 6.3: Year 1 annual MCA ecological and biomonitoring report). Following a review period full publication has been rescheduled to Y2 Q1.

**Activity 1.10 -** Development of Mutara Conservation Area Management Plan (Y1 Q2-4):
The lapsed management plan for MCA was accessed, reviewed and updated (see Annex 8.1: MCA management plan 1st draft May 2011 and Annex 8.3: reviewed MCA management plan 2nd draft March 2018). One stakeholder review was conducted as part of the MCA coordination meeting (see Activity 5.1). More time is required for adequate participatory review and validation of the plan, as a result publication has now been rescheduled for Y2 Q1. This postponement will also allow for the inclusion of baseline ecological and social data gathered during Y1 to be included in the management plan.

**Activity 1.11 -** Publication of Mutara Conservation Area Management Plan (Y1 Q4):
The revised draft was published and shared with project partners, MCA stakeholders and community representatives adjacent to MCA. The feedback provided by these parties will be used to improve the draft and allow for full publication in Y2 Q1.

**Activities 1.12 to 1.15 -** Not in Y1 work-plan.

Output 2: Improved water availability for domestic use, livestock and wildlife in MCA and 75% of households in 6 focal community areas that is managed by representative local institutions

**Activity 2.1 -** Development of socio-economic monitoring guidance (approach, ethics & methods) (Y1 Q1-2):
A socio-economic monitoring guidance document, including sections on the need for comprehensive engagement of communities, standard project operating procedures, gender and links to appropriate participatory rural assessment tools has been developed by FFI and OPC staff (see Annex 7.2: Socio-economic monitoring guidance). This output has greatly benefitted from the input of an intern who worked on the project between August and September 2017 on intermission from his PhD studies on conservation and cattle markets in Laikipia.

Please note that Activities 2.1, 3.1 and 4.1 reflect the development of the same overarching document that will inform delivery of activities for each respective output

**Activity 2.2 -** Publication of socio-economic monitoring guidance (approach, ethics & methods) (Y1 Q2):
The socio-economic monitoring guidance was published and shared with project implementation partners and other relevant stakeholders. It is a live document, and will be

updated during the course of project delivery to capture evolving project approaches, methods and lessons learned. In Y1, the document was disseminated to a total of 31 people (17 men & 14 women) drawn from Laikipia-based conservation and development organizations[2] and county government at a one-day workshop meeting held on 27th March in Nanyuki. Another meeting was held on 28th March 2018 at Wiyumire town to reach out to the government officers and stakeholders at the grass roots level where the project is being implemented (see Annex 4.2: Baselines findings and socio-ecological monitoring guidance sharing workshop Activity report).

Please note that Activities 2.2, 3.2 and 4.2 reflect the publication of the same document that will inform delivery of activities for each respective output.

**Activity 2.3 -** Training on socio-economic survey methods with OPC staff and 12 enumerators (6 men, 6 women) drawn from focal communities (Y1 Q2-3):
In Y1 Q2 a two day training on socio-economic survey methods for 15 (7 male & 8 female) enumerators drawn from four focal communities ( Kiamariga, Mutara, Tangi Nyeusi and Ex Erok). This included use of Open Data Kit (ODK) collect to conduct smart phone/tablet based household surveys, GPS training and communication skills for conducting household surveys (see Annex 9.1: Training of enumerators on socio-economic survey methods attendance list).

A total of 10 OPC staff (6 male & 4 female) received training on gathering an analysing household survey data; and 10 OPC staff (7 male & 3 female) were also trained on integrating social issues into conservation for project design, implementation and monitoring (see Annex 9.2: Training of OPC staff on socio-economic survey methods attendance list).

**Activity 2.4 -** Conduct baseline household surveys to establish current water accessibility and demand by WRUA members on Mutara and Sugoroi rivers (Y1 Q2-3):
A total of 291 baseline household surveys were conducted in four focal communities (Tangi-Nyeusi, Ex-erok, Kiamariga and Mutara). This identified the main water sources are the Sugoroi and Mutara rivers, whether for domestic (50.68%), livestock (53.25%) or agricultural use (57.56%) (see Annex 6.4: Baseline household survey report).

Six community inception meetings and focus group discussions were conducted at Kiamariga, Mutara, Ex-erok and Tangi-Nyeusi (see Annex 9.3: Focus Group Discussion attendance lists). These meetings gave an overview of the project to the community representatives and enabled the project to gather baseline information on natural resource use, natural resource conflicts, communities perceptions of boundaries, identify organizations working within the communities and understand variability of livelihood activities and events in a calendar year (see Annex 6.5: Focus Group Discussions activity report).

**Activity 2.5**: Stakeholder dialogue and consultation meetings with WRUA members (with both women and men including leaders to promote positive attitudes towards women's participation in project activities) (Y1 Q2 to Y4 Q4):
A total of four dialogue meetings were conducted with the Sugoroi and Mutara WRUAs where a total of 181 members were engaged (87 male & 94 female), key outputs of the meetings were:

1) A membership survey of the two WRUAs was conducted with membership of Mutara WRUA comprising of 136 households and a total of 1045 members registered through six[3] water projects. The Sugoroi have on 49 registered members currently.
2) Initial development of an overall plan to addressing common emerging issues in regard to river water use in the project target area.

Other issues discussed during the dialogue meetings include; enforcement of WRUAs bylaws, WRUA governance, updating and renewal of WRUAs membership to ensure inclusivity, awareness on conservation agriculture to reduce pressure on the rivers, emphasize on female

[2] Laikipia Wildlife Forum, Ol Pejeta Conservancy , IMPACT, KWAHO, CETRAD, ASDSP Laikipia county , Mount Kenya Ewaso Water Partnerships , Kenya Forest Service , National Drought Management Authority , Water Resource Authority, County Government of Laikipia , KPLRP, LAIOKONAR Network, Water Resource Users Associations, National Government Local Administration chiefs
[3] Hakingae irrigation project, Munanda irrigation project, Mutara irrigation project , Gatitu / Muthaiga ,Raya/Kiamariga project and Kiangoru irrigation project

participation, sustainable water use, conflict resolution and resource mobilization (see Annex 5.2: Stakeholder dialogues and consultation meetings with WRUA members activity report).

**Activity 2.6**: Capacity needs assessment for Mutara and Sugoroi Water Resource Use Associations (WRUA) (Y1 Q2):
FFI and WWF capacity assessment tools were adapted to assess the capacity needs of the WRUAs and track change though the project cycle. In Y1 Q3, 18 members' representing Mutara and Sugoroi WRUAs participated in a two day capacity needs assessment facilitated by staff from LWF, FFI and OPC. Areas assessed included: Vision, strategy and management; financial planning; External relations; Engagement, Inclusion, and impact; Programme planning and sustainability; Advocacy strategy; Monitoring, Evaluating and Reflecting (see Annex 6.6: Capacity needs assessment for Mutara and Sugoroi Water Resource Use Associations (WRUA) report).

**Activity 2.7**: Capacity development of Mutara and Sugoroi Water Resource Use Associations (WRUA) informed by needs assessment (Y1 Q3-4):
A two day capacity building workshop (based on the findings of Activity 2.6) was held in Q4 for 19 (10 male & 9 female) from the two WRUAs. The main areas of training included: Water sector reforms with emphasize on roles of WRA, WRUA and County Government; Leadership, communication and conflict resolutions; Tree nursery establishment; Catchment and riparian protection/rehabilitation; Water permitting processes; WRUA procedures and enforcement; Water conservation as a way of curbing water scarcity during dry spells; Revisiting the individual WRUAs' constitutions and analysing areas that are rarely followed in order to strengthen the WRUAs operations; Importance of office space was emphasized to secure documents and increase accountability and confidence of members and stakeholders. An action plan was developed by each WRUA in in building on and applying the knowledge acquired (see Annex 4.3: Capacity development of Mutara and Sugoroi WRUAs report).

**Activity 2.8**: Assessment of existing infrastructure within and upstream of MCA (Y1 Q4):
Assessment of water infrastructure within and upstream of Mutara was completed in Y1Q4. There is extensive degradation of riparian upstream to create room for more land. The presence of farmlands very close to the river banks has led to siltation of rivers. It was note that there were a lot of water intakes upstream both legal and illegal with some directly channelling water to nearby farmlands and water pans. There exist natural springs and wells along the two rivers but most are degraded.
As at January 2018, only one of four boreholes was operational supplying one trough and a watering hole near the Jambo Mutara lodge. The GPS coordinates of all water structures were collected. The information is now being used to advise restoration measures and strategies to improve water availability (see Annex 6.2: MCA Bio-monitoring Assessment Activity report).

**Activities 2.9 to 2.12 -** Not in Y1 work-plan.

**Activity 2.13**: Quarterly web and media updates on water management activities to broader Laikipia audience through MKEWP (Y1 to Y4):
Updates to the project published during the project period on the Laikipia Wildlife Forum website and are as listed below -

https://www.facebook.com/LaikipiaWildlifeForum/posts/1891254174280990
http://laikipia.org/category/forum-focus/
http://laikipia.org/important-updates-mount-kenya-ewaso-water-partnership-mkewp/
http://laikipia.org/rethink-know-womens-conservation-groups/

**Activity 2.14**: Bi-annual upstream-downstream water user meeting for Mutara and Sugoroi rivers (Y1 Q3 to Y4 Q4):
A total of 67 WRUA members from Mutara, Sugoroi and Pesi rivers were engaged through a meeting facilitated by LWF. The output of the meeting were formation of Mutara-Sugoroi-Pesi sub-catchments cluster, plans agreed on and guided implementation rationing plans and awareness on sustainable water use which sustained river flows during the December to

February 2018 dry season. The next plans include formalization of the cluster (Annex 5.3: Bi-annual upstream-downstream water user meeting activity report).

**Activities 2.15 to 2.17 -** Not in Y1 work-plan.

Output 3: A community cattle to market system, that supports pastoralist livelihoods and reduces stocking densities in 4 focal community areas, is in place on MCA

**Activity 3.1**: Development of socio-economic monitoring guidance (approach, ethics & methods) (Y1 Q1-2):
See Activity 2.1

**Activity 3.2**: Publication of socio-economic monitoring guidance (approach, ethics & methods) (Y1 Q2):
See Activity 2.2

**Activity 3.3**: Delivery of training on socio-economic survey methods with OPC staff and 12 enumerators (6 men, 6 women) drawn from focal communities (Y1 Q3):
See Activity 2.3

**Activity 3.4**: Baseline socio-economic survey conducted including wellbeing indicators (material, subjective and relational) and cattle price in 4 participating community areas (Y1 Q3):
Done concurrently with Activity 2.4

**Activity 3.5**: Stakeholder dialogue and consultation meetings with focal pastoralist communities (with both women and men including leaders to promote positive attitudes towards women's participation in project activities) (Y1 Q3 to Y4 Q4):
Consultation meetings have been held in two pastoral communities (Tangi-Nyeusi and Sugoroi community) and two predominantly agro-pastoralist communities (Ex-erok and Mutara). In Tangi-Nyeusi and Sugoroi communities, both which are predominantly Samburu and heavily patriarchal, there were 9 and 3 meetings respectively. Tangi-Nyeusi had 388 men and 22 women and Sugoroi had 75 men participate in the meetings. Due to weak representation of women in the meetings, a separate meeting of women only was conducted in Tangi-Nyeusi with 17 women attending. In Ex erok, there were a total of 126 women and 59 men participating in 3 consultation meetings. This reflected a usual trend among agro-pastoralist communities where more women than men attend meetings (see Annex 5.4 - Livestock Communities consultation meetings report).

**Activity 3.6**: Develop awareness scheme for holistic management (wildlife-livestock integration and optimal stocking densities) (Y1 Q4):

An awareness scheme for holistic management was developed jointly between the project team and Ol Pejeta's Livestock department based on Ol Pejeta's livestock and wildlife integrated model and culminated in exposure of some community members to this learning. OPC runs a successful wildlife-livestock integrated model that has proven substantially beneficial from both an ecological and economic perspective. A similar approach, with a livestock scheme is to be agreed and finalised with the communities in YR2. Initially, it will be preferred to pilot this plan with a limited number of livestock proposed at 1200 head of cattle with the potential of increasing the number over time but only as informed through ecological lessons. The awareness scheme conducted in YR1 included education and awareness exposure visits on wildlife and livestock management as operated by Ol Pejeta. The model observes regulation of livestock numbers, rotational grazing and use of night time predator proof boma corrals that also support generation of pasture hotspots and structured livestock management for disease control and feeding regime. Once agreed with the communities for implementation on MCA, there will be deterrence of potential side incursions by livestock outside of the grazing plan and outside of the focal communities (see Annex 7.3: Biodiversity education module).

**Activity 3.7**: Deliver awareness scheme for holistic management (wildlife-livestock integration and optimal stocking densities) (Y1 Q3):
The delivery of the awareness scheme for holistic management has continued to happen in various fora arranged with the communities and including in meeting discussions and

awareness education for integrated wildlife and livestock model. In December community groups from focal areas were conducted on exposure visits to Ol Pejeta, there were 13 men and 14 women from Tangi-Nyeusi on 22 December 2017, 14 men and 14 women from Ex-erok on 19 December 2017, 17 men and 10 women from Mutara community on 20 December 2017 and 14 men and 15 women from Kiamariga on 21 December (see Annex 9.5: Biodiversity exposure visits attendance lists and Annex 5.7: Biodiversity exposure visits activity report).

**Activity 3.8**: Develop eligibility criteria (Annex 8.2: community cattle eligibility criteria) community cattle project using participatory approaches with pastoralists from focal community areas (including women's groups) (Y1 Q4):

In Mutara two meetings were conducted to discuss the eligibility criteria for community livestock in the MCA with 24 men and 20 women participating. There was one meeting conducted in Tangi-Nyeusi with 22 men while in Ex-erok community 9 men and 7 women participated in one meeting. The factors considered varied but overall a sense of belonging in the community was a cross cutting point. Agro-pastoralist communities of Mutara and Ex-erok cited proof of land ownership as a strong criterion for consideration as well as formation of committees to assist with vetting eligibility based on factors proposed. In Tangi-Nyeusi, the meetings considered options to keep out 'foreign' pastoralists because they were conversant with one another and would easily pick out those outside of the community as non-eligible (see Annex 5.5 - Livestock Eligibility Criteria and Scheme for Holistic Management Activity Report).

**Activities 3.9 to 3.20**: **-** Not in Y1 work-plan.

Output 4: Women and men in 2 target communities adopt a community-based fodder production system that supports the diversification of small-scale farmer livelihoods in at least 200 households.

**Activity 4.1**: Development of socio-economic monitoring guidance (approach, ethics & methods): (Y1 Q1-2):
See Activity 2.1

**Activity 4.2**: Publication of socio-economic monitoring guidance (approach, ethics & methods) (Y1 Q2):
See Activity 2.2

**Activity 4.3**: Delivery of training on socio-economic survey methods with OPC staff and 12 enumerators (6 men, 6 women) drawn from focal communities (Y1 Q3):
see activity 2.3

**Activity 4.4**: Baseline socio-economic survey conducted included wellbeing (material, subjective and relational) and agricultural production in participating community areas (Ex-Erok and Withare) (Y1 Q3):
Done concurrently with Activity 2.4

**Activity 4.5**: Stakeholder dialogue and consultation meetings with focal communities (with both women and men including leaders to promote positive attitudes towards women's participation in project activities) (Y1 Q3-4):
A total of 20 (10 men and 10 women) farmers from the five villages were selected to be supported with inputs for the production of climate smart fodder crops and their farms are to act as demonstration sites for other farmers to learn. The beneficiaries were selected based on the level of vulnerability as informed by: wealthy ranking (during focus group discussions in respective communities), land availability, interest in hay farming and, inclusivity (disability, orphaned, widowed). The selection of the vulnerable beneficiaries was done during the consultation meetings in the target villages by stakeholders identified in the community during FGD meetings they; self-help groups, youth groups, churches, WRUAs, local administration chiefs, farmers and pastoralists (see Annex 5.8: Stakeholder dialogue , consultation and engagement on innovative climate smart fodder crops).

**Activity 4.6**: Engage with smallholder farmers in focal communities to promote innovative climate-smart fodder crops (primarily hay, as a safeguard against drought) (Y1 Q3-4):

A total of six consultation and engagement meetings held at Withare, Mutara, Ex-erok and Kiamariga communities where a total of 99 community members (49 male & 47 female) were engaged on fodder production (see Annex 9.1: Innovative climate smart fodder crops dialogue and attendance lists).

A total of 91[4] households have established fodder crops (Rhode grass) as a result of these engagements. A total of 25 vulnerable farmers were identified in each community (5 in each) and supported with drought resistant seeds[5]. Beneficiaries were selected based on the level of vulnerability as informed by wealthy ranking exercise carried out in the communities and interest in hay farming. Average acreage ranges from 2.5 acres to 10 acres in the 4 communities. The targeted beneficiaries were trained on: Land preparation, hay sowing and tendering fertilizer application and weeding (see Annex 5.8: Stakeholder dialogue, consultation and engagement on innovative climate smart fodder crops).

**Activities 4.7 to 4.15 -** Not in Y1 work-plan.

Output 5. Vulnerable and endangered species are under effective protection on MCA

**Activity 5.1**: Co-ordination meetings between OPC, AWF, Eland Downs and KWS to improve the quality and extent of wildlife corridors in the greater OPC landscape (Y1 Q4):
One coordination meeting was held in Y1 Q4 on 29th March 2018 to share views on improving the MCA management plan. The 15 stakeholders (8 men and 7 women) who participated were from the Laikipia Wildlife forum, OPC, Space for Giants, Water Resource Authority, WRUAs and community representatives from Tangi-Nyeusi, Mutara and Kiamariga (see Annex 5.6: stakeholder review on MCA management plan activity report and Annex 9.12 MCA management review attendance lists).

**Activity 5.2**: Biodiversity conservation education 1-day module developed (Y1 Q2):
The biodiversity conservation awareness module has been developed and has been used during Activity 5.3. The module will be reviewed throughout the project cycle to capture the capacity needs of the target beneficiaries (see Annex 7.3: Biodiversity education module)

**Activity 5.3**: Biodiversity conservation exposure visits by participating households to OPC (Y1 Q3 to Y4 Q4):
A total of 112 community members from four communities participating in the project (Kiamariga, Ex-erok, Tangi-Nyeusi and Mutara) visited OPC in Y1 Q3 (see Annex 9.5: Biodiversity exposure visits attendance lists). The focus on the visits was an explanation of the OPC holistic conservation model. The visiting teams learned about keeping livestock and wildlife side by side and livestock management including breeding, feeding and management for commercial use. In addition to these groups from project communities, an additional 579 people from other non-focal project communities around Ol Pejeta including Sweetwaters, Debatas, Chuma and Ngobit visited the conservancy for similar awareness learning (see Annex 5.7: Biodiversity exposure visits activity report).

**Activity 5.4**: Monthly camera trapping of wildlife corridors to monitor wildlife movement between OPC and MCA (Y1 Q2 to Y4 Q4):
Camera traps at wildlife corridors were established prior to the start of the project and this activity is on-going. A comprehensive camera trap analysis is produced annually by OPC. Daily monitoring is conducted by rangers at the corridor using animal marks and monthly analysis reports are compiled (see Annex 6.3 - Year 1 annual MCA ecological and bio-monitoring report).

[4] Ex erok 45 Household 80kgs of Rhode seeds, Mutara 16 Household 30 kgs of Rhodes seeds ., Kiamariga 5 household 12 kgs of Rhodes seed , Withare 25 household 65 kgs of Rhodes seed

[5] Boma Rhodes grass 66kgs, cow candy – 5 kgs, Columbus grass- 5kgs, Sudan grass -5kgs, silage sorghum- 5kgs.

**Activity 5.6**: Expansion of wildlife ranger patrol units (90% locally recruited) (Y1 Q2-Q4):
A total of twenty two rangers had been deployed prior to the start of the project by OPC with additional support from an anti-stock theft unit and the Kenya Police Reserve (KPR). All rangers and KPR have been locally recruited from communities[6] adjacent to Mutara Conservation area.

## 3.2 Progress towards project Outputs

Output 1: 8000ha of restored rangeland under active sustainable management that meets the grazing needs of community livestock and wildlife

The baseline condition of the 8000ha of rangeland on the MCA has been established using GIS and field-based assessments which has identified degraded areas for on-going restoration activities (see Annex 6.2: MCA Bio monitoring Assessment Activity report). In parallel an ecological monitoring system linked to existing monitoring programmes used by OPC has been developed and implemented to generate baselines against which to measure subsequent change in rangeland improvement (see Annex 6.3). A lapsed, and unpublished, MCA Management Plan has been accessed, reviewed and revised by project staff. Broader stakeholder reviews of this document has been initiated through the first review meeting that brought together representatives from WRUAs, community representatives, OPC and Space for Giants (see Annex 8.1: Draft MCA Management Plan). In order to conduct a broader process of stakeholder review and validation the publication of the MCA Management Plan will be completed in Y2Q1.

As part of the household survey that was conducted in four of the project's focal communities during the course of Y1 a gender disaggregated baseline on satisfaction regarding access to grazing for their livestock established. 56% of respondents reported that they were not satisfied with the current access to grazing (see Annex 6.4 Baseline household survey report). Those who reported the least satisfaction to access to grazing were the pastoralists compared to agro-pastoralist and farming households.

In Y2 onwards the indicator for this output will be measured through the success of the implementation and adaption of the MCA management plan alongside on-going ecological surveys for rangeland quality and household satisfaction on grazing access. These indicators are still the most suited to assess progress towards this output. Given baseline assessments the feasibility of attaining this output is high.

O-2: Improved water availability for domestic use, livestock and wildlife in MCA and 75% of households in 6 focal community areas that is managed by representative local institutions.

Progress toward achieving this output in Y1 has been good and baseline conditions have been established.

A capacity needs assessment for the WRUAs directly upstream of MCA (Sugoroi and Mutara) was conducted (see Annex 6.6: Capacity needs assessment for Mutara and Sugoroi Water Resource Use Associations (WRUA) report). Identified needs included; awareness on WRUAs structure and Governance, need for Sub catchment management plans to integrate climate change and inclusivity including gender ; and awareness on the revised water act and; roles of county and national governments in the Kenyan devolved governance (See Annex 4.3: Capacity development of Mutara and Sugoroi WRUAs report).

Data on WRUA membership has been gathered for Mutara and Sugoroi WRUAs and awareness/ dialogue meetings conducted to encourage inclusivity and a representation of cross-sector of the society (at least 33% women). Baselines on WRUA member awareness of committee structure and awareness have been acquired during the WRUA dialogue and

[6] Mutara, Kiamariga and Tangi-Nyeusi (Pois)

consultation meetings. Mutara WRUA has 136 members (individual (13 women and 123 Men) who and a total of 1045 members registered through water projects[7] (see Annex 9.11: Mutara WRUA membership list), Sugoroi WRUA has only 49 registered members (9 women and 40 men) (see Annex 9.12: Sugoroi WRUA membership list and Annex 5.2 Stakeholder dialogues and consultation meetings with WRUA members activity report).

Baseline water availability for domestic, livestock and agricultural has been established through socio-economic household surveys. This data will be used to compare changes in water availability in the subsequent years through the project cycle (Annex 6.4: Baseline household survey report). An assessment on current water availability on MCA was completed to ascertain its adequacy to meet the demands of wildlife (Annex 6.2: Year 1 annual MCA ecological and biomonitoring report). The information is currently informing project implementation to improve water availability within the MCA to meet the demands of wildlife. Biomonitoring and ecological monitoring surveys have been conducted and detailed (see Annex 6.3: Year 1 annual MCA ecological and biomonitoring report) to act as a benchmark to access MCA health of indicator populations and health of vegetation / erosion in regard to project interventions.

There has been improved functionality of the WRUAs through being able to link to higher level stakeholder and decision makers (through the LWF/MKWEP partnership) and by the end of Y1 making practical steps for water resource planning (meetings were held by the two WRUAs to develop water rationing plans for the January/February 2019 dry season). This initial improvement in the functionality of the two WRUAs in the project area gives us confidence that key stakeholders for water management in Laikipia are engaging well with the project and that this output remains achievable by end of Y4.

In Y2 onwards the indicator for this output will be measured against the baselines that have been established on WRUA functionality, governance and representativeness; implementation of WRUA sub-catchment management plans; household reports on availability of water. These indicators are still the most suited to assess progress towards this output. Given progress achieved in Y1 the feasibility of attaining this output is good.

O-3: Community cattle to market system, supporting pastoralist livelihoods and reducing stocking densities

Progress toward this output, against the project timeline and workplan, has been satisfactory during the course of Y1. This output is expected to the most challenging to achieve during the course of the full term of the project as it directly engages with the sensitivities of community access to grazing land (see section 10). In line with the workplan, the activities to achieve this output have been phased as to not to rush the process of community engagement. This is in order to develop a shared understanding of what a community cattle scheme could constitute – both from the viewpoint of project implementers and focal communities. Detailed analysis of pastoralist systems in Laikipia has been conducted and included in the project's socio-economic guidance (see Annex 7.2). The co-authorship of this document by FFI and OPC staff has been a learning point in itself and continuing to develop a nuanced understanding of the risks and opportunities relating to pastoralist livelihoods will be key to ensure the success of this element of the project.

Pastoralist and agro-pastoralist communities that bound the MCA are the focus for this output (Sugoroi, Tangi-Nyeusi, Mutara and Ex-erok). Stakeholder and dialogue meetings have been held regularly in each of these communities during the course of Y1 (see Annex 5.4: Livestock

[7] Hakingae irrigation project – 217 members, Mutara irrigation project – 150 members, Munanda irrigation project – 70 members, Kiangoru irrigation project – 150 members, Raya/Kiamariga project – 204 members and Gatitu / Muthaiga – 254 members

Communities consultation meetings report). Household surveys and focus group discussion have been conducted where consent for these processes has been given in Mutara, Kiamariga and Tangi-Nyeusi (see Annex 6.4: Baseline household survey report). An awareness scheme for holistic management has been developed and delivered as part of 'exposure visits' made by community members to OPC during Y1 (see Annex 5.3 Biodiversity education module).

One indicator for this output referred to Y1 activities (Eligibility Criteria for Community Cattle Project Developed) initial criteria have been established through participatory processes but this will be an on-going undertaking (see Annex 8.2: community cattle eligibility criteria). Y2 will be a critical year for the success of this output and indicators for this output remain the best to be using.

O-4: Community-based fodder production system supporting the diversification of small-scale farmer livelihoods

Progress towards achieving this output has been good in Y1 with broad interest in related activities by members of farming communities (see Annex 5.5: Agricultural extension Office annual report). Engagement of households has focused on two community areas upstream of MCA and one agro–pastoralist community. 99 farmers (49 men and 47 women) have been directly supported through training, extension services for climate-smart conservation agriculture, emphasising the importance of diverse planting schemes with inclusion of fodder crops as a safeguard against drought (see Annex 5.8 and Annex 9.4 Innovative climate smart fodder crops dialogue and attendance lists).

The following baselines have been established through a household survey conducted in Y1: Baselines on local buyers contractually linked to households producing fodder (primarily hay); contribution of availability of fodder markets to household well-being; current level of agriculture related income (see Annex 6.4: Baseline household survey report). Repeated household surveys conducted during the project implementation cycle will monitor change against these baselines.

These indicators are still the most suited to assess progress towards this output. Given the progress made in Y1, the feasibility of attaining this output is good.

O-5 Vulnerable and endangered species under effective protection

Overall progress toward achieving this output has been good and this will be improved further with the publication of the MCA Management Plan in Y2 Q1 (Activity 1.11) (see Annex 8.1 and Annex 8.2). OPC patrol rangers employed by OPC are conducting daily patrols throughout MCA and the data collected has been used to generate baselines on wildlife movement between OPC and MCA have been established through collection of spoor data at corridors , aerial survey data and corridor camera traps (see Annex 6.3: Year 1 ecological-bio monitoring report).

112 people from 4 focal communities (Kiamariga, Ex-erok, Tangi-Nyeusi and Mutara) have visited OPC in Y1 for one-day biodiversity education trips following a course developed by the project and delivered by OPC staff (see Annex 5.7: Biodiversity exposure visits activity report and Annex 7.3: Biodiversity education module).

With baselines established the project is in a position to track its effectiveness in supporting the effective protection of vulnerable and endangered species from Y2 onward. The indicators used to track this output are the most suitable and the likelihood of achieving this output within the lifespan of the project is currently high.

### 3.3 Progress towards the project Outcome

**Outcome:** 8,000ha of dispersal area secured for rhino, elephant and predators; grazing and water resources managed for local community and pastoralist wellbeing; and resource conflict reduced across the wider OPC landscape.

Baselines on populations of key species of predators[8], large herbivores[9] and birds[10] have been attained using mixed methodologies (see Annex 6.3: Year 1 ecological-bio monitoring report and Annex 6.1: Aerial Survey Report). This will enable the monitoring of population trends through the project cycle using daily bio-monitoring patrol patrols and a repeat aerial survey in Y4.

A baseline for rangeland vegetation productivity has been established by using Pasture Disk Meter (PDM)[11] for grass biomass and vegetation cover using satellite imagery (see Annex 6.3: Year 1 ecological-bio monitoring report).

Baselines on wellbeing of both male and female respondents from project focal communities' households has been collected and analysed as a standard to measure change to track the effect of project interventions in Y2-4 (see Annex 6.4: Baseline household survey report). Baselines on the levels of natural resource conflict in MCA, OPC and focal community areas have also been established through household surveys (see Annex 6.4: Baseline household survey report).

Overall progress toward achieving the project outcome has been good and given the project has completed the first 9 months of a 45 month implementation period we feel confident that it will still be able to achieve the intended outcome over this timeframe. However, as previously discussed this will be dependant, in particular, on the project's ability to achieve Output 3 targets in Y2-4.

### 3.4 Monitoring of assumptions

Assumption 1: Continued support from local government
Comments: Still hold true

Assumption 2: Continued support and cooperation from neighbouring communities
Comments: Still hold true

Assumption 3: Political situation around 2017 elections does not unduly affect project implementation
Comments: The project implementation was delayed but this was managed by forging relevant partners with grassroots organization to fast track activities hence the set objectives for year has been met to a large extent.

Assumption 4: MOU between Monarch Group Ltd and OPC for management of MCA remains in place
Comments: Still hold true

Assumption 5: Human in-migration into MCA that puts pressure on natural resources beyond the scope of this project and number of beneficiaries, does not happen
Comments: Still hold true

[8] Lion, cheetahs, lions, wild dogs, leopard, hyenas, jackals
[9] Rhinos, elephant, hartebeest, Oryx
[10] Ostrich and vultures
[11] On each plot five biomass measurements are taken using a pasture disc meter (PDM), one at the centre of the plot and four others 10 meters from the centre radiating to the four cardinal points. A general remark is thereafter given for the dominating grass species in the vicinity

Assumption 6: Increasing predator numbers do not impact viability of herbivore populations
Comments: Still hold true

Assumption 7: Sustained drought conditions do not occur during the course of project implementation
Comments: Still hold true

Assumption 8: Drought conditions do not result in additional pastoralists and their livestock using the area before conditions exist that can support increased
Comments: Still hold true

Assumption 9: Upstream water use levels remain constant or if changes occur, there is consultation with downstream users
Comments: Still hold true

Assumption 10: Pastoralist households in focal community groups are willing to participate in cattle scheme after FPIC process
Comments: Still hold true (see section 11)

Assumption 11: Domestic markets for beef in Kenya remain vibrant and expanding
Comments: Still hold true

Assumption 12: Livestock owners engaged by the project have influence or control on movements and make decisions on sales
Comments: Still hold true

### 3.5 Impact: achievement of positive impact on biodiversity and poverty alleviation

The contribution of the project to a higher impact of biodiversity conservation and poverty alleviation are clearly articulated in the project's outcome statement (please see section 3.3 and sections 5 and 6).

## 4. Contribution to the Global Goals for Sustainable Development (SDGs)

The project contributed to the **Global Goals for Sustainable Development** as outlined below:

**SDG 2 (Zero hunger):** By initiating the development of a community cattle scheme (assuring purchase prices for well managed cattle and developing hay-fodder markets), the project has begun to contribute toward SDG 2.

**SDG 5 (Gender equality):** In Y1 the project has supported community dialogues to ensure women's participation (in particular regard to their roles, responsibilities, needs and aspirations). A good understanding of gender relations has been developed by disaggregation of all data collection and analysis in the reporting period. Separate meetings for women were held while using the participatory approaches to capture the unique preferences of different genders. In pastoralist communities, it was noted by the project in its engagement with them that women's role and influence in key issues, including livestock sector, is undervalued. The women groups already established in these localities have been identified and engagements initiated in developing approaches to guarantee women participation in project interventions including cattle grazing and purchasing schemes.

**SDG6 (Clean water and sanitation):** In Y1 the project has identified the capacity needs of the local WRUAs which has informed follow-on capacity development. Degraded areas on the Mutara and Sugoroi water sub catchments have been identified and restoration is ongoing through tree planting initiatives and awareness creation on sustainable water use.

**SDG15 (Life on land)**: In Y1, the project has assessed of degraded areas in MCA and sub catchments up stream of MCA where restoration interventions have begun restoration will increase sustainable use of the wider OPC landscape, reducing rangeland degradation and addressing biodiversity loss. The capacity of local communities to pursue sustainable livelihood

opportunities has been built through trainings on sustainable agriculture and biodiversity conservation exposure visits.

## 5. Project support to the Conventions, Treaties or Agreements

The project supports the core **CBD** objective of conservation and sustainable use of biodiversity by safeguarding key populations of endangered species (including a Key 1 population of black rhinoceros (*Diceros bicornis michaeli*). In Y1 assessments of degraded areas for restoration have been identified and a bio-monitoring system has been developed and implemented for MCA (see Annex 6.3). The restoration of this key ecological area will also increase mobility and dispersal of threatened species, and improve land management for people and wildlife. Capacity building has begun with WRUAs on two sub-catchments up stream of MCA and restoration of degraded areas on riparian habitat have begun through tree nursery development and reforestation of riparian areas. The project has trained and created awareness to farmers and pastoralists communities adjacent to MCA on sustainable agriculture, holistic management (integration of livestock and wildlife) and awareness creation on biodiversity conservation.

Thus the project contributes to CBD strategic Goal C through rangeland restoration and species protection across the wider OPC landscape; by promoting the effective and equitable management of a system of land-based conservation measures (Aichi Target 11); and improving the conservation status of threatened species, helping to prevent extinction (Aichi Target 12). It also supports CBD Strategic Goal D by safeguarding the OPC landscape - a critical ecosystem that provides essential services for local livelihoods - in consideration of the needs of women, local communities and the poor and vulnerable (Aichi Target 14).

## 6. Project support to poverty alleviation

The project is targeting community areas that reported the most negative impacts of conservation activities on their wellbeing during the 2014 SAPA pilot project (Darwin ref 20-010). Most households in these communities are predominantly pastoralist and smallholders, and have limited market access. It was noted during the household survey undertaken by the project that most of the livelihoods in these communities heavily rely on availability of rain water and grazing. Among the set outputs of the project is improved water availability and access to grazing through the project components of community livestock schemes, fodder production and water management which is expected to improve market access (including prices), as well as food and water security for 600 rural poor households in 6 focal community areas. Improved access to cattle markets and increased value through fattening on either MCA or OPC is expected to lead to a 20% increase in value per head of cattle against project baselines of 400 participating cattle-owning pastoralist households.

In the four focal communities which include farmers to the south of MCA, 200 households will have improved livelihood opportunities through sustainable farming practices, water management and access to fodder markets. We expect a 15% increase in the value of crop sales for participating households and a net income of 1,200 KShs per acre of hay. Both agriculture and livestock initiatives will have the potential to be scaled up. Within ten years up to 2000 cattle per annum passing through the community livestock system could provide returns of KShs 80m (USD 800k) to community groups (c. 1000 households) per annum.

Engagement of communities in grazing and water management will address multiple dimensions of poverty beyond material wellbeing. These include increased social cohesion and personal security as a result of decreased conflict over resource access and increased self-esteem and confidence in the future through an active and recognised role in natural resource

management. The targeted inclusion of traditionally marginalised groups, particularly women, in project interventions will ensure their effective and equitable participation.

## 7. Project support to gender equality issues

All the data collected, through household surveys and focus groups, has been gender disaggregated to ensure the voice of women are captured in project decision making (see Annex 6.4: Baseline household survey report). The project has ensured female participation in project activities through the development of gender specific guidance (see Annex 7.2 Socio-economic monitoring guidance), staff training (see Annex 9.2: Training of OPC staff on socio-economic survey methods attendance list) and in practice (see section 4 on SDG5).

## 8. Monitoring and evaluation

In the past year, the project identified appropriate Monitoring and Evaluation tools to facilitate measuring and demonstration of project interventions and has scheduled periodic monitoring activities as well as working with partners in collecting data (see Annexes 6.3 and 6.4 in particular). Collection of information concerning project activities has been standardised through the design and implementation of a project activity report template (see Annex 7.2 Socio-economic monitoring guidance).

Key to this approach has been the FFI staff position of Project Co-ordinator who is solely funded under the Darwin project. The project co-ordinator is based at OPC and shares an office with OPC staff who are delivering project activities. The co-ordinator has lead responsibility for monitoring and evaluation process for the project (including baseline development). The development of project guidance on M&E and associated trainings and timely implementation of baseline surveys shows the importance of the lead project organisation having this field-based role with day to day engage with implementing partners.

The project's measurable indicators, means of verification and means of baseline provision were detailed in the Team Leader's response to the Y1 half-year report (see Annex 10.1: Table detailing baselines for project indicators in response to HYR1 report review). As per Annex 10.1, the set of activities, outputs and associated indicators will enable demonstrable links to the project outcome.

We believe that the approaches used for M&E are robust and will continue as currently implemented by the project staff.

## 9. Lessons learnt

**Partnerships**:
The partnerships with local and government organisations that have been built collaboratively by the project's implementation partners in Y1, particularly in regard to water management and agriculture, have helped with effective implementation of project activities and significantly contributed to the achievement of year targets. The sharing of the project work plan and involvement of stakeholders in monitoring and evaluation has encouraged participation of stakeholders where the project has benefited from their technical support and also in including aspects of project work plans in their respective work plans. Moving forward the project will continue employ a collaborative approach in project activities.

**Communication**:
The use of participatory approaches has proved to be useful in facilitating exchange of knowledge between the project and focal communities. The information gathered has gone a long way in advising project implementation to suit unique and specific needs observed in each

of the communities based on cultural as well as socio-economic aspects. The project will continue to identify and modify relevant participatory approaches to facilitate effective communication with the project beneficiaries. In Y1 the project has directly engaged with in excess of 400 individuals in focal pastoralist communities representing ca. 12% of these areas. However, we recognise that the level, frequency and type of communications delivered by the project need continual improvement (especially with communities which have had limited engagement with the OPC Community Development Programme in the past). In Y2 Q1 the project will be developing and implementing a broader reaching communication strategy to ensure better information sharing, dialogue development and a mechanism for any grievances to be flagged and addressed by senior project staff.

This is a complex project that not only engages with a diverse set of communities, land users and interest groups but also cuts across implementing partners' programmatic structures (e.g. Livestock, Wildlife and Community Development programmes at OPC). Maintaining frequent and productive lines of communication between the project partners has been key to keeping it on track. This has been facilitated through the housing of the FFI co-ordinator at OPC alongside weekly tripartite calls between the project's team leader, co-ordinator and the head of OPC's Community Development Programme. Meetings have been held on a quarterly basis between the co-ordinator and LWF/MKEWP staff. Going forward quarterly meetings will be held between lead staff from all project partners.

**Recruitment:**

The recruitment for FFI and OPC was shared between the two organisations with co-development of ToR, sharing of best practice on HR processes and in the case of the FFI project co-ordinator an interview panel of two senior FFI staff and two senior OPC staff. This collaborative approach has allowed for a clear understanding of staff roles and responsibilities between the lead organisation and implementing partners from the start of the project. What the project underestimated was the time taken for recruitment processes to take place especially when project roles were under such high demand (e.g. in excess of 400 applications were made for the FFI Project Co-ordinator role). Resultant delays meant that the co-ordinator was only in place from September 2017 and the wildlife and ecology officer from December 2017. We would recommend blocking a period of several days in senior staff calendars to dedicate to short-listing and interview and scheduling this process from day one of a project.

## 10. Actions taken in response to previous reviews (if applicable)

Response to feedback received when project was funded - submitted as Annex to Y1 half year report (see Annex 10.1: Table detailing baselines for project indicators in response to HYR1 report review).

## 11. Other comments on progress not covered elsewhere

The number and location of project focal communities has been refined and updated during the course of Y1, through ascertaining dependencies on resources within and nearby MCA.[12] These are detailed in Table 1 (below) and in Map 1 (see section 1 of this report).

| Community Name | Predominant Livelihood Type | Pre-existing OPC focal community? |
|---|---|---|
| Mutara | Agro-pastoralist | No - Since start of Darwin project |
| Kiamariga | Agriculture | No - Since start of Darwin project |
| Ex-erok | Agro-pastoralist | Yes - Focal community since 2005 |
| Withare | Agriculture | Yes - Focal community since 2005 |

[12] The number of households targeted by project activities remain the same as per the project application.

| | | |
|---|---|---|
| Tangi-Nyeusi | Pastoralist | Yes - Focal community since 2005 |
| Sugoroi | Pastoralist | No - Since start of Darwin project |

## 12. Sustainability and legacy

The project's implementation partners, OPC and LWF, have long terms commitments in supporting conservation activities in Laikipia. In the reporting period, key collaborations were established with established local community institutions (WRUAs, CFAs), county agencies (Ministry of Agriculture and Livestock) and National government agencies (WRA, KFS) in the project area in implementing project activities. This approach is anticipated to permit the institutionalisation of the projects interventions and sustain project benefits beyond the four years implementation period.

In Y1 the project has built understanding on the socio-ecological aspects of the project beneficiaries using participatory approaches, dialogue meetings and household surveys. The aim was to capture community prioritized needs and views in designing community cattle schemes and supporting climate smart agriculture and encourage community ownership. The community livestock schemes[13] and agricultural production[14] include consideration of market-based factors to ensure sustainability by the end of the project. In Y1 there has been increased interest observed among farmers engaged during the initial meetings who have asked for support in accessing quality seeds and extension services on the production of fodder groups especially among the agro pastoralist communities.

The water components of the project are being coordinated by MKEWP which is anticipated to ensure ongoing support and sustainability of the WRUAs. The findings of the WRUAs capacity needs assessment were disseminated to stakeholders within the reporting period which has already attracted support from towards building capacity of the WRUAs.

A biomonitoring system linked to ongoing assessments at OPC has been developed and OPC patrol rangers based at MCA trained to allow extension of the same to MCA. The initial assessments will be supported by the project and it is anticipated that income from tourism operations from MCA enabled through wildlife expansion will ensure continuity beyond the project life.

The project's planned exit strategy is still valid as originally proposed.

## 13. Darwin identity

The project team made it a standard practice to give an overview of Darwin initiative as the funder of the project through support from the UK Government in all the meetings, trainings and surveys conducted in Y1 (i.e. stakeholder and community inception meetings, household baseline surveys, dialogue meetings, FGD meetings and project findings workshops).

The DI logo has been used in all the documents published and reports developed by the project. Darwin initiative has been mentioned as the donor in all the web updates on the project (see Activity 2.13 in section 3.1).

It is recognized as a distinct project. For our partner OPC, primary responsibility for delivery lies with the staff of their Community Development programme. Darwin initiative is largely understood by the project partners and the stakeholder that have been engaged by the project in the first year of implementation within Laikipia County.

An announcement of the project was uploaded to the OPC website (http://www.olpejetaconservancy.org/darwin-grant-to-secure-habitats-improve-lives-in-new-mutara-conservancy/). In March 2018 the OPC website had 95,144 unique users, project relevant pages will be updated with links back to the Darwin Initiative and social media channels in Y2 Q1 to maximise on this coverage.

[13] Community-cattle schemes will incentivise cattle owners to produce lower numbers of healthy weight cattle, mitigating the boom and bust cycles of cattle production, which directly impacts rangeland health

[14] Agriculture production and conservation agriculture elements will be stable and self-sustaining by the end of the project with participating households supported by market actors identified during the course of the project

## 14. Project expenditure

**Table 1: Project expenditure during the reporting period (1 April 2017 – 31 March 2018)**

| Project spend (indicative) since last annual report | 2017/18 Grant (£) | 2017/18 Total Darwin Costs (£) | Variance % | Comments (please explain significant variances) |
|---|---|---|---|---|
| Staff costs (see below) | | | -10% | |
| Consultancy costs | | | 0 | |
| Overhead Costs | | | 5% | |
| Travel and subsistence | | | 2% | |
| Operating Costs | | | 3% | |
| Capital items (see below) | | | -2% | |
| Monitoring & Evaluation (M&E)[15] | | | | |
| Others (see below) | | | -5% | |
| **TOTAL** | | | | |

[15] Not a distinct line in approved budget

## Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2017-2018

| Project summary | Measurable Indicators | Progress and Achievements April 2017 - March 2018 | Actions required/planned for next period |
|---|---|---|---|
| ***mpact***<br>Natural resources across the Laikipia Plateau are conserved and used sustainably, maintaining environmental integrity for its people and wildlife, and providing a model for other areas. | | | [redacted] |
| ***Outcome: 8,000ha*** of dispersal area secured for rhino, elephant and predators; grazing and water resources managed for local community and pastoralist wellbeing; and resource conflict reduced across the wider OPC landscape. | 0.1 By 2021 populations of elephant, wild dog and lion are increasing or stable against Y1 baselines on MCA<br><br>0.2 By 2021 rangeland vegetation productivity increased on MCA by 50% from Y1 baseline<br><br>0.3 By 2021 KWS authorization given for expansion of rhino range to MCA.<br><br>0.4 By 2021 both male and female (minimum 33%) respondents representing 600 households report increased well-being against Y1 baselines through project interventions | Baselines on populations of key species established ecological bio monitoring patrol surveys (Annex 6.3) and analysis of 2015 aerial surveys( Annex 6.1)<br><br>Rangeland vegetation productivity acquired by measuring grass biomass using Pasture Disk Meter( PDM) and vegetation cover using satellite imagery (Annex 6.3)<br><br>Household Socio-economic surveys established baselines on wellbeing and natural resource conflict within 4 project focal communities' households (Annex 6.4)<br><br>Baselines on Natural resource | |

| | | | |
|---|---|---|---|
| | 0.5 By 2021 reports of natural resource conflict decline by 50% against Y1 baselines in MCA, OPC and focal community areas | conflicts (Human wildlife conflict, farmer pastoralist conflicts, conflicts in relation to pasture access and water access conflicts through household socio economic surveys (Annex 6.4) | |
| **Output 1.**<br>8000ha of restored rangeland under active sustainable management that meets the grazing needs of community livestock and wildlife | 1.1By 2017 MCA Management Plan developed with and validated by stakeholders (with at least 30% women, using inclusive gender inclusive practices)<br><br>1.2Each year the MCA Management Plan is adapted and implemented based on annual ecological monitoring and social surveys.<br><br>1.3By 2021 50% of male and female respondents report increased satisfaction regarding access to grazing for their cattle compared with project baselines. | Degraded areas in MCA identified using GIS analysis (*Annex 6.2*).<br><br>Ecological monitoring system linked to OPC's existing monitoring programmes developed and implementation initiated at MCA to generate baselines (Annex 6.3).<br>Lapsed MCA Management Plan reviewed and one stakeholder review done (Annex 8.3).<br><br>Gender disaggregated baselines on satisfaction regarding access to grazing established for four projects focal through household surveys (Annex 6.4) & ecological bio monitoring surveys done to establish the current health of the Mutara Conservation area( Annex 6.3)<br><br>The activities to be undertaken in the next period are:<br>- subject MCA management plan further stakeholder review, validation and approval by JMC and publication in year2 Q1 in the first quarter of year 2 to facilitate implementation based on the baselines generated from year one ecological monitoring and social surveys. | |
| | | | |

| | |
|---|---|
| 1.1 Establish baseline population estimates of key indicator game species using 2015 HD aerial survey imagery | Aerial dataset analysis for 2015 survey analysis completed as a baseline.(Annex 6.1) |
| 1.2 Assessment and identification of key locations for restoration activities through field surveys and GIS analysis | Key eroded areas within MCA identified using field surveys and GIS analysis( Annex 6.2) |
| 1.3 Implementation of ecological restoration measures - mobile cattle corrals that create ecosystem 'hotspots' to significantly increase populations of browsing wildlife | Scheduled for year 2 |
| 1.4 Implementation of ecological restoration measures - restoration of riverine habitat through tree nursery development and planting on Mutara and Sugoroi Rivers upstream of MCA | 4 tree nurseries established 2 in each of the two sub catchments. A total of 800 and 550 trees planted in Mutara and Sugoroi sub catchments respectively with the onset of rains in March 2018 (see Annex 5.1) |
| 1.5 Development of an ecological & bio monitoring system linked to existing monitoring across the landscape (including indicator species plan) | Biomonitoring protocols developed and harmonised with existing protocols within OPC (Annex 7.1) |
| 1.6 Publication of ecological & bio monitoring training manual | A finalised ecological and bio monitoring manual in place |
| 1.7 Training of field staff in ecological & bio monitoring methodology using training manual | 35 (23Men ; 12 Women) university students, OPC patrol and research assistants trained on bio monitoring protocols (Annex 4.1) |
| 1.8 Implementation of an ecological & bio monitoring system linked to existing monitoring across the landscape | Baseline Surveys completed in Mutara Conservation area on pasture, habitat utilisation, wildlife population, spoor corridor monitoring, wildlife sightings and rainfall( Annex 6.3) |
| 1.9 Publication of annual MCA ecological report | Year 1 annual ecological report in place ( Annex 6.3) |
| 1.10 Development of Mutara Conservation Area Management Plan | An existing management plan (Annex 8.1) for Mutara Conservation Area reviewed and updated. One stakeholder review done. The next steps will be to subject the draft to further stakeholder review , approval of the plan and publication (Annex 8.2) |
| 1.11 Publication of Mutara Conservation Area Management Plan | A reviewed draft in place.<br>Publication rescheduled for year 2 Q1( Annex 8.3) |
| 1.12 Annual review and update of Mutara Conservation Area Management Plan | Scheduled for year 2 |
| 1.13 Drafting of lessons learned & guidance document on sustainable | Scheduled for year 4 |

| | | |
|---|---|---|
| land management and ecological restoration | | |
| 1.14 Publication of lessons learned & guidance document on sustainable land management and ecological restoration | | Scheduled for year4 |
| 1.15 Dissemination of lessons learned & guidance document on sustainable land management and ecological restoration | | Scheduled for year 4 |
| **Output 2.** Improved water availability for domestic use, livestock and wildlife<br><br>In MCA and 75% of households in 6 focal community areas that is managed by representative local institutions. | 2.1 By 2019 Sugoroi and Mutara River Water Resource Use Associations (WRUA) functional with quarterly meetings being held and planned activities being implemented.<br><br>2.2 By 2020 Sugoroi and Mutara WRUAs represent a cross-sector of society (at least 33% women) with 75% of WRUA members aware of committee structure and responsibilities<br><br>2.3 By 2021 Sugoroi and Mutara WRUA sub-catchment management plans (including livestock and agriculture need/use components) being implemented effectively<br><br>2.4 By 2021 75% of both men and women (at least 33%) representing an estimated 1200 households in 6 focal communities report improved water availability for domestic, livestock and agricultural use | The capacity needs assessment for the WRUAs directly upstream of MCA (Sugoroi and Mutara) done (Annex 6.6) and capacity built (Annex 4.3) to water resources management effectiveness.<br><br>Links to the MKEWP established supported by LWF. There has been improved functionality of the WRUAs noted by the end of the reporting period where meetings were held by the two WRUAs to develop water rationing plans during the dry season between January and February 2019. Data on WRUA membership gathered for Mutara and Sugoroi WRUAs and awareness/ dialogue meetings initiated (Annex 5.2).<br><br>Baselines on WRUA member awareness of committee structure and roles; water availability for domestic, livestock and agricultural use established through Socio-economic household surveys (Annex 6.4).<br><br>Assessment on current water availability on MCA completed to ascertain its adequacy to meet the demands of wildlife (Annex 6.2). |

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| | 2.5 By 2021 water available on MCA that meets the demands of wildlife | |
| 2.1 Development of socio-economic monitoring guidance (approach, ethics & methods) | | Socio-economic monitoring guidance developed( Annex 7.2) |
| 2.2 Publication of socio-economic monitoring guidance (approach, ethics & methods) | | Published socio-economic guidance ( Annex 7.2) |
| 2.3 Training on socio-economic survey methods with OPC staff and 12 enumerators (6 men, 6 women) drawn from focal communities | | Two day training on Socio-economic survey methods for 15 enumerators( 7 men and 8 women) drawn from four focal on Open Data Kit (ODK) collect to do household surveys, and gaining familiarity with basic functions and use of Garmin GPS Unit and good communication skills while conducting household surveys (Annex 9.1).<br><br>A total of 12 OPC staff (6men: 4 women) received training on gathering an analysing household survey data; and 10 OPC (7 men: 3 women) members were also trained on integrating social issues into conservation for project design, implementation and monitoring (Annex 9.2) |
| 2.4 Conduct baseline household surveys to establish current water accessibility and demand by WRUA members on Mutara and Sugoroi rivers | | 291 baselines household surveys administered in four focal communities; Tangi-Nyeusi, Ex Erok, Kiamariga and Mutara (Annex 6.4).<br><br>Six community inception meetings (Annex 9.3) and focus group discussion done at Kiamariga, Mutara, Ex-erok and Tangi-Nyeusi gather information on natural resource base, Natural Resource conflicts, Natural resource use boundaries; organizations working within the communities; variability of livelihood activities and events in a calendar year (Annex 6.5). |
| 2.5 Stakeholder dialogue and consultation meetings with WRUA members (with both women and men including leaders to promote positive attitudes towards women's participation in project activities) | | A total of four dialogue meetings were held with the WRUAs where a total of 181 members were engaged (87 Men: 94 women) and the output of the meetings were: Formation of Mutara cluster to facilitate a catchment level approach in implementation of water management initiatives.<br><br>The membership survey of the two WRUAs done. The membership of |

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| | Mutara WRUA comprises of 136 individual members (households) and a total of 1045 members registered through six[16] water projects. The Sugoroi have only 49 registered members currently<br><br>Stakeholder dialogue meetings to share WRUAs needs assessment findings , enforcement of WRUAs by laws, WRUA governance, updating and renewal of WRUAs membership to ensure inclusivity, awareness on conservation agriculture to reduce pressure on the rivers, emphasize on women participation, sustainable water use , conflict resolution and resource mobilization (Annex 5.2). |
| 2.6 Capacity needs assessment for Mutara and Sugoroi Water Resource Use Associations (WRUA) | 18 members' representatives from Mutara and Sugoroi WRUAs participated in a two day capacity needs assessment on 8th and 9th November facilitated by representatives from LWF, FFI and OPC. Areas accessed encompassed: Vision, strategy and management; financial planning; External relations; Engagement, Inclusion, and impact; Programme planning and sustainability; Advocacy strategy; Monitoring, evaluating and reflecting (Annex 6.6). |
| 2.7 Capacity development of Mutara and Sugoroi Water Resource Use Associations (WRUA) informed by needs assessment | The initial capacity building was done to address the urgent areas of intervention as informed by the need assessment report. A two day capacity building workshop was held for WRUA Executive committee on 20th and 21st March 2018 for 19 people (10 men: 9 women). The areas trained on were: Water sector reforms; group dynamics; catchment and riparian protection/rehabilitation; permitting processes, WRUA comment procedures and enforcement and Water conservation. An action plan was developed by each WRUA in in building on and applying the knowledge acquired (Annex 4.3) |
| 2.8 Assessment of existing infrastructure within and upstream of MCA | Done concurrently with activity 1.2 |

[16] Hakingae irrigation project ,Munanda irrigation project ,Mutara irrigation project , Gatitu / Muthaiga ,Raya/Kiamariga project and Kiangoru irrigation project

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| 2.9 Review and update existing sub-catchment management plans for Mutara and Sugoroi rivers | Scheduled for year 2 |
| 2.10 Publish revised sub-catchment management plans for Mutara & Sugoroi rivers | Scheduled for year 2 |
| 2.11 Rehabilitate existing water infrastructure within and upstream of MCA | Scheduled for year 2 |
| 2.12 Ensure appropriate water storage infrastructure and conservation technologies are operational within both MCA and neighbouring communities | Scheduled from year 3 |
| 2.13 Quarterly web and media updates on water management activities to broader Laikipia audience through MKEWP | 4 project updates published during the project period on the Laikipia Wildlife Forum website[17] |
| 2.14 Bi-annual upstream-downstream water user meeting for Mutara and Sugoroi rivers | 67 WRUA members from Mutara, Sugoroi and Pesi rivers engaged through a meeting facilitated by Laikipia Wildlife Forum. The output of the meeting were formation of Mutara-Sugoroi–Pesi sub catchments cluster, development of rationing plans and awareness on sustainable water use which sustained river flows during the December- Feb 2018 dry season. The next plans include formalization of Mutara cluster |
| 2.15 Drafting of lessons learned & guidance document on WRUA water management | Scheduled for year 4 |
| 2.16 Publication of lessons learned & guidance document on WRUA water management | Scheduled for year 4 |
| 2.17 Dissemination of lessons learned & guidance document on WRUA water management | Scheduled for year 4 |

[17] https://www.facebook.com/LaikipiaWildlifeForum/posts/1891254174280990

http://laikipia.org/category/forum-focus/

http://laikipia.org/important-updates-mount-kenya-ewaso-water-partnership-mkewp/

http://laikipia.org/rethink-know-womens-conservation-groups/

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| **Output 3.** Community cattle to market system that supports pastoralist livelihoods and reduces stocking densities in 4 focal community areas, is in place on MCA. | 3.1 By 2017 eligibility criteria for community cattle project developed (including targets for inclusion of cattle owned by women's groups), using participatory approaches pastoralists, including women, in 4 focal community areas<br><br>3.2 By mid-2018 grazing plan designed and implemented that takes into account the majority of stakeholder's needs and opinions, while enabling controlled increase of cattle numbers to a maximum of 2000.<br><br>3.3 By 2021, livestock extension services & training provided to men and women (at least 20%) in 400 households in 4 focal community areas<br><br>3.5 By 2021, people representing 400 households, including at least 20% women, have participated in the community cattle to market scheme.<br><br>3.6 By 2021 average price paid for pastoralist livestock grazed on MCA is at least KShs 50,000 | Dialogues between OPC, representatives from two semi-settled pastoralist community areas and two settled agro-pastoralists adjacent to MCA engaged in the development of eligibility criteria (Annex 8.2) and baselines on households currently benefiting from livestock extension services established through household baseline surveys (Annex 6.4). |

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| 3.1 Development of socio-economic monitoring guidance (approach, ethics & methods) | | Refer to 3.1 |
| 3.2 Publication of socio-economic monitoring guidance (approach, ethics & methods) | | Refer to 2.2 |
| 3.3 Delivery of training on socio-economic survey methods with OPC staff and 12 enumerators (6 men, 6 women) drawn from focal communities | | Linked to activity 3.3 |
| 3.4 Baseline socio-economic survey conducted including wellbeing indicators (material, subjective and relational) and cattle price in 4 participating community areas | | Consultation meetings have been held in two pastoral communities (Tangi-Nyeusi and Sugoroi community) and two predominantly agro-pastoralist communities (Ex-erok and Mutara) In Tangi-Nyeusi and Sugoroi communities, both which are predominantly Samburu and heavily patriarchal, there were 9 and 3 meetings respectively. Tangi-Nyeusi had 388 men and 22 women and Sugoroi had 75 men participate in the meetings (Annex 5.4) |
| 3.5 Stakeholder dialogue and consultation meetings with focal pastoralist communities (with both women and men including leaders to promote positive attitudes towards women's participation in project activities) | | Stakeholder dialogue and consultation meetings with focal pastoralist communities (with both women and men including leaders to promote positive attitudes towards women's participation in project activities): Consultation meetings have been held in two pastoral communities (Tangi-Nyeusi and Sugoroi community) and two agro pastoralist communities (EX-Erok and Mutara) (Annex 5.4). |
| 3.6 Develop awareness scheme for holistic management (wildlife-livestock integration and optimal stocking densities) | | An awareness scheme for holistic management was developed jointly between the project team and Ol Pejeta's Livestock department based on Ol Pejeta's livestock and wildlife integrated model and culminated in exposure of some community members to this learning (Annex 7.3). |
| 3.7 Deliver awareness scheme for holistic management (wildlife-livestock integration and optimal stocking densities) | | In December community groups from focal areas were conducted on exposure visits to Ol Pejeta, there were 13 men and 14 women from Tangi-Nyeusi on 22 December 2017, 14 men and 14 women from Ex-erok on 19 December 2017, 17 men and 10 women from Mutara community on 20 December 2017 and 14 men and 15 women from Kiamariga on 21 December. (see Annex 9.5 and Annex 5.7) |

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| 3.8 Develop eligibility criteria for community cattle project using participatory approaches with pastoralists from focal community areas (including women's groups) | In Mutara two meetings were conducted to discuss the eligibility criteria for community livestock in the MCA with 24 men and 20 women participating. There was one meeting conducted in Tangi-Nyeusi with 22 men while in Ex-erok community 9 men and 7 women participated in one meeting (Annex 5.5). |
| 3.9 Establish representative community grazing committees drawn from focal pastoralist communities | Scheduled for year 2 |
| 3.10 Agree assured purchase prices of cattle between OPC and community grazing committees | Scheduled for year 2 |
| 3.11 Purchase of focal community cattle by OPC - fattening of cattle on OPC land | Scheduled for year 2 |
| 3.12 Participatory development and implementation of local grazing plans for MCA (including identification of critical areas and periods where conflict between pastoralist livestock and wildlife is likely) | To start in year 3 |
| 3.13 Integrate local grazing plans with ecological monitoring data and sub-catchment water management plans | To start in year 3 |
| 3.14 Purchase of focal community cattle by OPC - fattening of cattle on MCA with mobile corral system | To start in year 3 |
| 3.15 Develop extension and training services for livestock husbandry participating livestock keepers | Scheduled in year 2 |
| 3.16 Publish training manual for livestock husbandry, in appropriate format(s) to ensure accessibility for all target users (men, women, elderly & youth) | Scheduled in year 2 |
| 3.17 Implement extension and training services for participating livestock keepers | Scheduled in year 4 |
| 3.18 Drafting of lessons learned & guidance document on WRUA water management | Scheduled in year 4 |
| 3.19 Publication of lessons learned & guidance document on WRUA water management | Scheduled in year 4 |

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| 3.20 Dissemination of lessons learned & guidance document on WRUA water management | | Scheduled in year 4 |
| **4.** Women and men in 2 target communities adopt a community-based fodder production system that supports the diversification of small-scale farmer livelihoods in at least 200 households. | 4.1 From 2018 to 2021, agricultural extension services and training, supporting fodder production, provided to 100 men and 100 women representing 200 households in 2 focal community areas<br><br>4.2 By 2021, local buyers are contractually linked to 100 men and 100 women representing 200 households producing fodder (primarily hay)<br><br>4.3 By 2021 men and women (50%) representing 200 households report increased well-being through community fodder markets<br><br>4.4 By 2021 net income of 1200 KShs per acre of hay achieved by participants in fodder production component<br><br>4.5 By 2021 both male and female representatives of 200 households report an increase in agriculture related income of at least 15% | Engagement of households in two community areas upstream of MCA and one agro–pastoralist community, 91 farmers supported through training, extension services for climate-smart conservation agriculture, emphasising the importance of diverse planting schemes with inclusion of fodder crops as a safeguard against drought (Annex 9.4 and Annex 5.5). Baselines on local buyers contractually linked to households producing fodder (primarily hay) established and contribution of availability of fodder markets to household well being established (Annex 6.4). Baselines on current level of agriculture related income established to monitor change in participant's income levels through the project implementation cycle (Annex 6.4). |
| 4.1 Development of socio-economic monitoring guidance (approach, ethics & methods) | | Ref to 2.1 |

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| 4.2 Publication of socio-economic monitoring guidance (approach, ethics & methods) | Refer to 2.2 |
| 4.3 Delivery of training on socio-economic survey methods with OPC staff and 12 enumerators (6 men, 6 women) drawn from focal communities | Linked to activity 2.3 |
| 4.4 Baseline socio-economic survey conducted included wellbeing (material, subjective and relational) and agricultural production in participating community areas (Ex-Erok and Withare, Kiamariga and Mutara) | Linked to activity 2.4 |
| 4.5 Stakeholder dialogue and consultation meetings with focal communities (with both women and men including leaders to promote positive attitudes towards women's participation in project activities | A total of 186 (96 men 90 women) farmers from Withare, Mutara, Ex erok and Kiamariga communities engaged and trained on (Annex: 9.4). A total of 91[18] households have established fodder crops (Rhode grass) as a result of these engagements. A total of 25 vulnerable farmers were identified in each community (5 in each) and supported with drought resistant seeds[19]. Beneficiaries were selected based on the level of vulnerability as informed by wealthy ranking exercise carried out in the communities and interest in hay farming. Average acreage ranges from 2.5 acres to 10 acres in the 4 communities. The targeted beneficiaries were trained on: Land preparation, hay sowing and tendering fertilizer application and weeding (Annex 5.8) |
| 4.6 Engage with smallholder farmers in focal communities to promote innovative climate-smart fodder crops (primarily hay, as a safeguard against drought) | Done concurrently with activity 4.5 |
| 4.7 Develop extension and training services for conservation agriculture (including on-farm water management) in appropriate format(s) to ensure accessibility for all target users (men, women, elderly & | Scheduled for year 2 |

[18] Ex erok 45 Household 80kgs of Rhode seeds, Mutara 16 Household 30 kgs of Rhodes seeds ., Kiamariga 5 household 12 kgs of Rhodes seed , Withare 25 household 65 kgs of Rhodes seed .

[19] Boma Rhodes grass 66kgs, cow candy – 5 kgs, Columbus grass- 5kgs, Sudan grass -5kgs, silage sorghum- 5kgs.

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| youth) | | |
| 4.8 Publish training manual for conservation agriculture (including on-farm water management) in appropriate format(s) to ensure accessibility for all target users (men, women, elderly & youth) | | Scheduled for year 2 |
| 4.9 Conduct conservation agriculture (including on-farm water management) trainings with participating smallholder households, ensuring that 50% are female participants | | Scheduled for year 2 |
| 4.10 Facilitate market linkages between local fodder producers and local consumers (including MCA community cattle) | | Scheduled for year 2 |
| 4.11 Integrate fodder production with sub-catchment water management plans | | To start in year 2 |
| 4.12 Target agricultural extension to farmer groups who have chosen to participate in increased and sustainable production of fodder | | To start in year 3 |
| 4.13 Drafting of lessons learned & guidance document on conservation agriculture and creation of market linkages | | Scheduled for year 4 |
| 4.14 Publication of lessons learned & guidance document on conservation agriculture and creation of market linkages | | Scheduled for year 4 |
| 4.15 Dissemination of lessons learned & guidance document on conservation agriculture and creation of market linkages | | Scheduled for year 4 |
| **Output 5.** Vulnerable and endangered species are under effective protection on MCA | 5.1 By 2018 onwards wildlife rangers conduct daily patrols throughout MCA<br><br>5.2 By 2021 50% increase in wildlife movement between OPC and MCA<br><br>5.3 By 2021 75% decrease in wildlife poaching incidents on MCA against baseline | The review and updating of a lapsed Mutara Conservation area management plan initiated and draft is in place (Annex 8.1).<br><br>OPC patrol rangers employed by OPC are conducting daily patrols throughout MCA.<br><br>Baselines on wildlife movement between OPC and MCA established using monitoring wildlife movement using spoor data at the corridor and 2017 aerial Mutara census data done by OPC on wild population and distribution acquired (Annex 6.3). |

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| | established in Y1<br><br>5.4 From 2018 onwards data from ecological monitoring used to actively manage herbivores and predators | |
| 5.1 Co-ordination meetings between OPC, AWF, Eland Downs and KWS to improve the quality and extent of wildlife corridors in the greater OPC landscape | | One coordination meeting held to share views on improving the MCA management plan |
| 5.2 Biodiversity conservation awareness 1-day module developed | | Biodiversity conservation awareness module draft in place (Annex 7.3) |
| 5.3 Biodiversity conservation exposure visits by participating households to OPC | | A total of 112 community members from four communities participating in the project (Kiamariga, Ex- erok, Tangi Nyeusi and Mutara) visited the Ol Pejeta conservancy from 19-22 Dec 2017. The understanding of participants build on the Ol Pejeta Conservancy conservation model (Annex 5.7 and Annex 9.5) |
| 5.4 Monthly camera trapping of wildlife corridors to monitor wildlife movement between OPC and MCA | | Spoor data analysed to monitor wildlife movement between OPC and MCA (Annex 6.3) |
| 5.5 Data from ecological monitoring (Activity 1.9) used to actively manage populations of grazing and browsing herbivore and predator species | | To start in year 2 |
| 5.6 Expansion of wildlife ranger patrol units (90% locally recruited) | | A total of twenty two rangers have been deployed by OPC with additional support from an anti-stock theft unit and the Kenya Police Reserve (KPR). All rangers and KPR have been locally recruited. |
| 5.7 Conduct regular wildlife ranger patrols on Mutara Conservation Area | | The OPC patrol rangers daily patrols are ongoing |

**Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)**

| Project summary | Measurable Indicators | Means of verification | Important Assumptions |
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| **Impact:** Natural resources across the Laikipia Plateau are conserved and used sustainably, maintaining environmental integrity for its people and wildlife, and providing a model for other areas. | | | |
| **Outcome:** 8,000ha of dispersal area secured for rhino, elephant and predators; grazing and water resources managed for local community and pastoralist wellbeing; and resource conflict reduced across the wider OPC landscape. | 0.1 By 2021 populations of elephant, wild dog and lion are increasing or stable against Y1 baselines on MCA<br><br>0.2 By 2021 rangeland vegetation productivity increased on MCA by 50% from Y1 baseline<br><br>0.3 By 2021 KWS authorisation given for expansion of rhino range to MCA.<br><br>0.4 By 2021 both male and female (minimum 33%) respondents representing 600 households report increased well-being against Y1 baselines through project interventions<br><br>0.5 By 2021 reports of natural resource conflict decline by 50% against Y1 baselines in MCA, OPC and focal | 1.1 Biomonitoring patrol data collected each year, analysis to generate baselines (Y1) and comparison against baselines (Y2-4), detailed in annual bio-monitoring reports; Aerial survey data (from October 2016) analysed and compared against Y4 aerial survey data<br><br>0.2 Ecological survey data collected each year, analysis to generate baselines (Y1) and comparison against baselines (Y2-4), detailed in annual ecological survey reports<br><br>0.3 Letter of authorisation for rhino range expansion on MCA from KWS<br><br>0.4 Socio-economic survey data on well-being collected each year, analysis to generate baselines (Y1) and comparison against baselines (Y2-4), detailed in annual socio-economic survey report<br><br>0.5 Socio-economic survey data on resource conflict collected each year, analysis to generate baselines (Y1) and comparison against | ● Continued support from local government<br>● Continued support and cooperation from neighbouring communities<br>● Political situation around 2017 elections does not unduly affect project implementation<br>● MOU between Monarch Group Ltd and OPC for management of MCA remains in place<br>● Human in-migration into MCA that puts pressure on natural resources beyond the scope of this project and number of beneficiaries, does not happen<br>● Increasing predator numbers do not impact viability of herbivore populations<br>● Sustained drought conditions do not occur during the course of project implementation |

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| | community areas | baselines (Y2-4), detailed in annual socio-economic survey report; Security incident data from Kenya Police Reserve Laikipia wildlife unit | |
| **Outputs:**<br>**1.** 8000ha of restored rangeland under active sustainable management that meets the grazing needs of community livestock and wildlife | 1.1 By 2017 MCA Management Plan developed with and validated by stakeholders (with at least 30% women, using inclusive gender inclusive practices)<br><br>1.2 Each year the MCA Management Plan is adapted and implemented based on annual ecological monitoring and social surveys.<br><br>1.3 By 2021 50% of male and female respondents report increased satisfaction regarding access to grazing for their cattle compared with project baselines. | 1.1 Stakeholder feedback on draft versions of management plan and validation of final version documented by written feedback and approvals and/or meeting minutes documenting decisions and attendance, gender disaggregated). Published MCA Management Plan acknowledging all contributors.<br><br>1.2 Ecological and socio-economic survey data collected each year, analysis and yearly comparison detailed in annual ecological and socio-economic survey reports, Report detailing decisions, information sources used (survey reports) and reviewers involved in annual review of MCA management plan produced, MCA management plan updated in line with management plan review feedback<br><br>1.3 Ecological and socio-economic data collected each year, analysis to generate baselines (Y1) and comparison against baselines (Y2-4), detailed in annual ecological, biomonitoring and socio-economic survey reports | ● Continued support, as above.<br>● Drought conditions do not result in additional pastoralists and their livestock using the area before conditions exist that can support increased use |

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| **2**. Improved water availability for domestic use, livestock and wildlife in MCA and 75% of households in 6 focal community areas that is managed by representative local institutions. | 2.1 By 2019 Sugoroi and Mutara River Water Resource Use Associations (WRUA) functional with quarterly meetings being held and planned activities being implemented.<br><br>2.2 By 2020 Sugoroi and Mutara WRUAs represent a cross-sector of society (at least 33% women) with 75% of WRUA members aware of committee structure and responsibilities<br><br>2.3 By 2021 Sugoroi and Mutara WRUA sub-catchment management plans (including livestock and agriculture need/use components) being implemented effectively<br><br>2.4 By 2021 75% of both men and women (at least 33%) representing an estimated 1200 households in 6 focal communities report improved water availability for domestic, livestock and agricultural use<br><br>2.5 By 2021 water available on MCA that meets the demands of wildlife | 2.1 Review of published sub-catchment water management plans; quarterly meeting minutes and attendance reports, meeting photos; activity reports.<br><br>2.2 WRUA membership survey data collected, WRUA membership survey report produced<br><br>2.3 Annual review of WRUA sub-catchment management plans; field assessment of WRUA activities<br><br>2.4 Socio-economic data collected, analysed in relation to previous years, detailed in annual socio-economic survey reports.<br><br>2.5 Results of biomonitoring and ecological monitoring surveys detailed in annual MCA Management report showing health of indicator populations and health of vegetation / erosion. | ● Upstream water use levels remain constant or if changes occur, there is consultation with downstream users. |
| **3**. A community cattle to market system, that supports | 3.1 By 2017 eligibility criteria for community cattle project developed (including | 3.1 Documentation of participatory approach taken to develop criteria | ● Pastoralist households in focal community groups |

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| pastoralist livelihoods and reduces stocking densities in 4 focal community areas, is in place on MCA. | targets for inclusion of cattle owned by women's groups), using participatory approaches pastoralists, including women, in 4 focal community areas | (group meeting attendance, gender disaggregated, minutes, and photos), socio-economic data collected and analysis demonstrates participation of representative community groups, results detailed in annual socio-economic reports. Published MCA community-cattle eligibility criteria report acknowledging all involved. | are willing to participate in cattle scheme after FPIC process<br>● Domestic markets for beef in Kenya remain vibrant and expanding<br>● Livestock owners engaged by the project have influence or control on movements and make decisions on sales |
| | 3.2 By mid-2018 grazing plan designed and implemented that takes into account the majority of stakeholder's needs and opinions, while enabling controlled increase of cattle numbers to a maximum of 2000. | 3.2 Documentation of grazing design process including stakeholder participation (records of feedback, attendance). Stakeholder needs and opinions collected and documented. Published grazing plan | |
| | 3.3 By 2021, livestock extension services & training provided to men and women (at least 20%) in 400 households in 4 focal community areas | 3.3 Livestock extension officer annual reports; published training manual; Collection of socio-economic data, data analysis (gender disaggregated), detailed in annual socio-economic survey reports | |
| | 3.5 By 2021, people representing 400 households, including at least 20% women, have participated in the community cattle to market scheme. | 3.5 Annual community-cattle sales reports generated by OPC livestock department | |
| | 3.6 By 2021 average price paid for | 3.6 Annual community-cattle sales reports generated by OPC | |

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| | pastoralist livestock grazed on MCA is at least KShs 50,000 | livestock department | |
| **4.** Women and men in 2 target communities adopt a community-based fodder production system that supports the diversification of small-scale farmer livelihoods in at least 200 households. | 4.1 From 2018 to 2021, agricultural extension services and training, supporting fodder production, provided to 100 men and 100 women representing 200 households in 2 focal community areas | 4.1 Agriculture extension officer annual reports detailing provision of services (location, number and gender of participants, photos);published training manual; Collection of socio-economic data to confirm recipients of extension services, data analysis (gender disaggregated), results detailed in annual socio-economic survey reports | ● Smallholder farming households in focal community groups are willing to participate in hay scheme after FPIC process<br>● Zero-grazing dairy industry continues to grow in Kenya |
| | 4.2 By 2021, local buyers are contractually linked to 100 men and 100 women representing 200 households producing fodder (primarily hay) | 4.2 Collection of socio-economic data to monitor number and gender of participants linked to local buyers, data analysis (gender disaggregated), detailed in annual FFI socio-economic survey reports; | |
| | 4.3 By 2021 men and women (50%) representing 200 households report increased well-being through community fodder markets | 4.3 Collection of socio-economic data to monitor change in wellbeing and cause, data analysis (gender disaggregated), detailed in annual socio-economic survey reports | |
| | 4.4 By 2021 net income of 1200 KShs per acre of hay achieved by participants in fodder production component | 4.4 Collection of socio-economic data to monitor participants income sources, data analysis (gender disaggregated), detailed in annual socio-economic survey reports; Hay sales invoices & receipts from survey participants | |

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| | 4.5 By 2021 both male and female representatives of 200 households report an increase in agriculture related income of at least 15% | 4.5 Collection of socio-economic data to monitor change in participants income levels, data analysis (gender disaggregated), detailed in annual socio-economic survey reports; agriculture related sales invoices & receipts from survey participants | |
| **5.** Vulnerable and endangered species are under effective protection on MCA | 5.1 By 2018 onwards wildlife rangers conduct daily patrols throughout MCA<br><br>5.2 By 2021 50% increase in wildlife movement between OPC and MCA<br><br>5.3 By 2021 75% decrease in wildlife poaching incidents on MCA against baseline established in Y1<br><br>5.4 From 2018 onwards data from ecological monitoring used to actively manage herbivores and predators | 5.1 Daily patrol records, data used to develop monthly wildlife ranger patrol reports<br><br>5.2 Monthly ecological monitoring corridor camera trap report; Change in indices of wildlife species in MCA drawn from biomonitoring patrol data.<br><br>5.3 Daily patrol records, data used to develop monthly wildlife ranger patrol reports<br><br>5.4 Ecological survey data collected each year, analysis detailed in annual ecological survey reports, inclusion of results, and subsequent relevant adaptations to management in annual wildlife management report | ● Ongoing support from national government and the KWS, including facilitating ongoing protection and management operations for wildlife, including endangered species<br>● Ongoing support from local government and security forces |

**Activities** (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

1.1 Establish baseline population estimates of key indicator game species using 2015 HD aerial survey imagery
1.2 Assessment and identification of key locations for restoration activities through field surveys and GIS analysis
1.3 Implementation of ecological restoration measures - mobile cattle corrals that create ecosystem 'hotspots' to significantly increase populations of browsing wildlife
1.4 Implementation of ecological restoration measures - restoration of riverine habitat through tree nursery development and planting on Mutara and Sugoroi Rivers upstream of MCA
1.5 Development of an ecological & bio monitoring system linked to existing monitoring across the landscape (including indicator species plan)
1.6 Publication of ecological & bio monitoring training manual
1.7 Training of field staff in ecological & bio monitoring methodology using training manual
1.8 Implementation of an ecological & bio monitoring system linked to existing monitoring across the landscape
1.9 Publication of annual MCA ecological report
1.10 Development of Mutara Conservation Area Management Plan
1.11 Publication of Mutara Conservation Area Management Plan
1.13 Annual review and update of Mutara Conservation Area Management Plan
1.14 Drafting of lessons learned & guidance document on sustainable land management and ecological restoration
1.15 Publication of lessons learned & guidance document on sustainable land management and ecological restoration
1.16 Dissemination of lessons learned & guidance document on sustainable land management and ecological restoration

2.1 Development of socio-economic monitoring guidance (approach, ethics & methods)
2.2 Publication of socio-economic monitoring guidance (approach, ethics & methods)
2.3 Training on socio-economic survey methods with OPC staff and 12 enumerators (6 men, 6 women) drawn from focal communities
2.4 Conduct baseline household surveys to establish current water accessibility and demand by WRUA members on Mutara and Sugoroi rivers
2.5 Stakeholder dialogue and consultation meetings with WRUA members (with both women and men including leaders to promote positive attitudes towards women's participation in project activities)
2.6 Capacity needs assessment for Mutara and Sugoroi Water Resource Use Associations (WRUA)
2.7 Capacity development of Mutara and Sugoroi Water Resource Use Associations (WRUA) informed by needs assessment
2.8 Assessment of existing infrastructure within and upstream of MCA
2.9 Review and update existing sub-catchment management plans for Mutara and Sugoroi rivers
2.10 Publish revised sub-catchment management plans for Mutara & Sugoroi rivers

2.11 Rehabilitate existing water infrastructure within and upstream of MCA
2.12 Ensure appropriate water storage infrastructure and conservation technologies are operational within both MCA and neighbouring communities
2.13 Quarterly web and media updates on water management activities to broader Laikipia audience through MKEWP
2.14 Bi-annual upstream-downstream water user meeting for Mutara and Sugoroi rivers
2.15 Drafting of lessons learned & guidance document on WRUA water management
2.16 Publication of lessons learned & guidance document on WRUA water management
2.17 Dissemination of lessons learned & guidance document on WRUA water management

3.1 Development of socio-economic monitoring guidance (approach, ethics & methods)
3.2 Publication of socio-economic monitoring guidance (approach, ethics & methods)
3.3 Delivery of training on socio-economic survey methods with OPC staff and 12 enumerators (6 men, 6 women) drawn from focal communities
3.4 Baseline socio-economic survey conducted including wellbeing indicators (material, subjective and relational) and cattle price in 4 participating community areas
3.5 Stakeholder dialogue and consultation meetings with focal pastoralist communities (with both women and men including leaders to promote positive attitudes towards women's participation in project activities)
3.6 Develop awareness scheme for holistic management (wildlife-livestock integration and optimal stocking densities)
3.7 Deliver awareness scheme for holistic management (wildlife-livestock integration and optimal stocking densities)
3.8 Develop eligibility criteria for community cattle project using participatory approaches with pastoralists from focal community areas (including women's groups)
3.9 Establish representative community grazing committees drawn from focal pastoralist communities
3.10 Agree assured purchase prices of cattle between OPC and community grazing committees
3.11 Purchase of focal community cattle by OPC - fattening of cattle on OPC land
3.12 Participatory development and implementation of local grazing plans for MCA (including identification of critical areas and periods where conflict between pastoralist livestock and wildlife is likely)
3.13 Integrate local grazing plans with ecological monitoring data and sub-catchment water management plans
3.14 Purchase of focal community cattle by OPC - fattening of cattle on MCA with mobile corral system
3.15 Develop extension and training services for livestock husbandry participating livestock keepers
3.16 Publish training manual for livestock husbandry, in appropriate format(s) to ensure accessibility for all target users (men, women, elderly & youth)
3.17 Implement extension and training services for participating livestock keepers
3.18 Drafting of lessons learned & guidance document on WRUA water management
3.19 Publication of lessons learned & guidance document on WRUA water management
3.20 Dissemination of lessons learned & guidance document on WRUA water management

4.1 Development of socio-economic monitoring guidance (approach, ethics & methods)

4.2 Publication of socio-economic monitoring guidance (approach, ethics & methods)

4.3 Delivery of training on socio-economic survey methods with OPC staff and 12 enumerators (6 men, 6 women) drawn from focal communities

4.4 Baseline socio-economic survey conducted included wellbeing (material, subjective and relational) and agricultural production in participating community areas (Ex-Erok and Withare)

4.5 Stakeholder dialogue and consultation meetings with focal communities (with both women and men including leaders to promote positive attitudes towards women's participation in project activities)

4.6 Engage with smallholder farmers in focal communities to promote innovative climate-smart fodder crops (primarily hay, as a safeguard against drought)

4.7 Develop extension and training services for conservation agriculture (including on-farm water management) in appropriate format(s) to ensure accessibility for all target users (men, women, elderly & youth)

4.8 Publish training manual for conservation agriculture (including on-farm water management) in appropriate format(s) to ensure accessibility for all target users (men, women, elderly & youth)

4.9 Conduct conservation agriculture (including on-farm water management) trainings with participating smallholder households, ensuring that 50% are female participants

4.10 Facilitate market linkages between local fodder producers and local consumers (including MCA community cattle)

4.11 Integrate fodder production with sub-catchment water management plans

4.12 Target agricultural extension to farmer groups who have chosen to participate in increased and sustainable production of fodder

4.13 Drafting of lessons learned & guidance document on conservation agriculture and creation of market linkages

4.14 Publication of lessons learned & guidance document on conservation agriculture and creation of market linkages

4.15 Dissemination of lessons learned & guidance document on conservation agriculture and creation of market linkages

5.1 Co-ordination meetings between OPC, AWF, Eland Downs and KWS to improve the quality and extent of wildlife corridors in the greater OPC landscape

5.2 Biodiversity conservation awareness 1-day module developed

5.3 Biodiversity conservation exposure visits by participating households to OPC

5.4 Monthly camera trapping of wildlife corridors to monitor wildlife movement between OPC and MCA

5.5 Data from ecological monitoring (Activity 1.9) used to actively manage populations of grazing and browsing herbivore and predator species

5.6 Expansion of wildlife ranger patrol units (90% locally recruited)

5.7 Conduct regular wildlife ranger patrols on Mutara Conservation Area

## Annex 3: Standard Measures

### Table 1 Project Standard Output Measures

| Code No. | Description | Gender of people (if relevant) | Nationality of people (if relevant) | Year 1 Total | Year 2 Total | Year 3 Total | Total to date | Total planned during the project |
|---|---|---|---|---|---|---|---|---|
| 6 | Training of field staff in ecological & bio-monitoring | 23 male<br>12 female | Kenyan | 35 | | | 35 | 35 |
| 6 | Training of OPC staff and enumerators on socio-economic survey methods | 13 male<br>7 female | Kenyan | 20 | | | 20 | 20 |
| 6 | Training of conservation agriculture techniques with small-holder famers | 100 male<br>100 female | | | 200 | 200 | 0 | 0 |
| 6 | Training on livestock husbandry | 100 male<br>100 female | | | | 200 | 0 | 0 |
| 7 | Biodiversity conservation awareness training module | | | 1 | | | 1 | 1 |
| 7 | Conservation Agriculture and on-farm water management training manual | | | | 1 | | 0 | 1 |
| 7 | Training manual for livestock husbandry | | | | 1 | | 0 | 1 |
| 7 | Socio-economic monitoring guidance | | | 1 | | | 1 | 1 |
| 9 | Mutara Conservation Area Management Plan | | | | 1 | | 0 | 1 |
| 9 | Revised sub-catchment management plans | | | | 2 | | 0 | 2 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10 | Ecological & bio-monitoring training manual | | | 1 | | | 1 | 1 |
| 14A | Annual stakeholder dissemination workshop | | | 1 | 1 | 1 | 1 | 3 |
| 20 | Estimated value (£'s) of physical assets to be handed over to host country(ies) | | | 6900 | 17952 | | 6,766.80 | 24852 |
| 23 | Value of resources raised from other sources for project work | | | 61,284 | 51,005 | 52,025 | 61,284 | 164,314 |

**Table 2 Publications**

| **Title** | **Type** (e.g. journals, manual, CDs) | **Detail** (authors, year) | **Gender of Lead Author** | **Nationality of Lead Author** | **Publishers** (name, city) | **Available from** (e.g. weblink or publisher if not available online) |
|---|---|---|---|---|---|---|
| Cattle, Water and wildlife : enhancing Socio-ecological resilience in Laikipia-Socio-Economic Monitoring Guidance | Manual | Small, R., Shaughnessy, S., Anthem, H., Komen, A. & Muthoki, M. | Male | British | FFI, Cambridge | To be uploaded to partner websites in Y2 Q1 |

## Annex 4: Project training and dissemination reports

4.1 Training of field staff in ecological & bio monitoring methodology
4.2 Baseline findings and socio-ecological monitoring guidance sharing workshop activity report
4.3 Capacity development of Mutara and Sugoroi WRUAs report

## Annex 5: Activity reports

5.1 Mutara and Sugoroi sub –catchments s riverine habitat restoration activity report
5.2 Stakeholder dialogues and consultation meetings with WRUA member's activity report
5.3 Bi-annual upstream-downstream water user meeting activity report
5.4 Livestock Communities consultation meetings report
5.5 Livestock Eligibility Activity Report
5.6 stakeholder review on MCA management plan report
5.7 Biodiversity exposure visits activity report
5.8 Dialogue and engagement with farmers on climate smart fodder farming

## Annex 6: Assessment and survey reports

6.1 Aerial survey report
6.2 MCA Bio monitoring Assessment Activity report
6.3 Year 1 annual MCA ecological and biomonitoring report
6.4 Baseline household survey report
6.5 Focus Group Discussions report
6.6 Capacity needs assessment for Mutara and Sugoroi Water Resource Use Associations (WRUA) report

## Annex 7: Training Manuals and other materials

7.1 Mutara Conservation Area ecological monitoring training manual
7.2 Socio-economic monitoring guidance
7.3 Biodiversity education module

## Annex 8: Management plans

8.1 1st draft MCA management plan 2011
8.2 Community cattle eligibility criteria
8.3 Reviewed MCA management plan 2018

## Annex 9: Attendance lists

9.1 Training of enumerators on socio-economic survey methods attendance list
9.2 Training OPC staff on socio-economic survey methods attendance list
9.3 Focus Group Discussions attendance lists
9.4 Innovative climate smart fodder crops dialogue and attendance lists
9.5 Biodiversity exposure visits attendance lists
9.6 Combined attendance lists for eligibility criteria meetings
9.7 Bi annual upstream-downstream water user meeting attendance list
9.8 Restoration of riverine habitat attendance lists
9.9 WRUA dialogue meetings attendance lists
9.10 Mutara WRUA membership list
9.11 Sugoroi WRUA membership attendance list
9.12 MCA management review attendance list

## Annex 10: Responses to previous reports

10.1 Table detailing baselines for project indicators in response to HYR1 report review
10.2 FFI letter of response to Defra (private & confidential)

## Checklist for submission

| | Check |
|---|---|
| **Is the report less than 10MB?** If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line. | N |
| **Is your report more than 10MB?** If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line. | Y |
| **Have you included means of verification?** You need not submit every project document, but the main outputs and a selection of the others would strengthen the report. | Y |
| **Do you have hard copies of material you want to submit with the report?** If so, please make this clear in the covering email and ensure all material is marked with the project number. | N |
| Have you involved your partners in preparation of the report and named the main contributors | Y |
| Have you completed the Project Expenditure table fully? | Y |
| Do not include claim forms or other communications with this report. | |