

Darwin Initiative Main Project Annual Report

Important note: *To be completed with reference to the Reporting Guidance Notes for Project Leaders:*

It is expected that this report will be no more than 10 pages in length, excluding annexes

Submission Deadline: 30 April

Darwin Project Information

Project Reference	21-015
Project Title	Balancing development and conservation in Kenya's largest freshwater wetland
Host Country/ies	Kenya
Contract Holder Institution	Nature Kenya
Partner institutions	The Royal Society for the Protection of Birds (RSPB) The Inter-ministerial Technical Committee for the sustainable management of Kenya Deltas (IMTC) Kenya Wildlife Service (KWS) National Environment Management Authority (NEMA) The Yala Wetland Environmental Volunteers (YAWEV)
Darwin Grant Value	
Funder (DFID/Defra)	DFID
Start/end dates of project	1 April 2014 to 31 March 2017
Reporting period (e.g., Apr 2015 – Mar 2016) and number (e.g., Annual Report 1, 2, 3)	Apr 2015 – Mar 2016, Annual Report 1
Project Leader name	Serah Munguti
Project website/blog/Twitter	
Report author(s) and date	Serah Munguti, April 30 2016

1. Project Rationale

The Yala Delta covers an area of 17,500 ha on the north-eastern shore of Lake Victoria. It is Kenya's largest freshwater wetland, and is of great importance both for biodiversity and ecosystem services. It is a key site for the Sitatunga (*Tragecephalus spekeii*) antelope and several other mammals; wetland birds, including the globally threatened Papyrus Yellow Warbler; and for cichlid fish endemic to Lake Victoria, many of which have been exterminated in the main lake by introduced Nile Perch. In addition, it acts as a 'filter' for water flowing into the lake, and provides the people who live around it with vital resources such as fish, Papyrus and wood. These people number approximately 250,000 and many are extremely poor. The Yala Delta is threatened by establishment of a large-scale rice-farming operation there, and to a lesser extent by over-exploitation of its natural resources. The American company Dominion Farms Limited has already converted 1,700 ha of the delta to rice fields, and proposes to convert a further 15,000 ha. Local communities have also encroached into the swamp for subsistence crop farming. The conversion work carried out to date has not only destroyed natural habitats directly, but – together with earlier engineering schemes – has also caused detrimental hydrological changes over a wider area. Wildlife within the swamp is faced by mounting pressure primarily from habitat loss and degradation and poaching especially of Sitatunga, wild pigs and otters. The main aim of the project is to take key steps to secure the future of the Yala Delta, recognizing both development and conservation needs. **(See attached Annex 1-Map of Yala swamp)**

2. Project Partnerships

Project Partner	Progress over the last year (Achievements lessons, strengths or challenges)	Evidence
<p>Project indicator 1: Records of communications and linkages with partners</p> <p>Project indicator 2: Publicly available records of discussions within and between these bodies – e.g. meeting minutes</p>		
<p>The County Governments of Siaya and Busia</p>	<p>Siaya County government recognizes Nature Kenya as a key partner in conservation and development and is represented in the project's Site Advisory Committee. To support the ongoing Land Use Planning for the Yala Swamp Siaya and Busia county governments formed an Intercountry Steering Committee for Land Use Planning for Yala (Annexes 2, 3 and 4).</p>	<p>Annex 2-Report on Consultative Meetings with County Executives on Yala Swamp SEA-LUP Aug 2015</p> <p>Annex 3-Minutes of Consultative Discussions with County Executives on Land Use Planning process Nov 2015</p> <p>Annex 4 – proceedings of IMTC meetings held in March 2016 to formulate a land use plan for the Yala Swamp, informed by a strategic Environmental Assessment</p>
<p>The National Environmental Management Authority (NEMA)</p>	<p>NEMA is a member of the project's National Advisory committee and is also represented in the Inter Ministerial Technical Committee (IMTC) for sustainable management of Kenya Deltas. The IMTC is working with Nature Kenya and county governments of Siaya and Busia to formulate a Land Use Plan for the Yala Swamp. The Land use plan is informed by a Strategic Environmental Assessment.</p>	

Project Partner	Progress over the last year (Achievements lessons, strengths or challenges)	Evidence
Yala Ecosystem Site Support Group	<p>At the beginning of the project the project was working with the Yala Environmental Volunteers (YWEV) as the local SSG. Out of popular demand from CBOs working around and within the Yala Swamp we reconstituted the SSG to bring on board more than 20 groups covering all areas of the swamp and the lower River Yala catchment (annex 5). This has enabled us to step up delivery of project activities and reach more beneficiaries therefore consolidating gains.</p> <p>Yala Ecosystem Site Support Group, were involved in actual mobilization, community sensitization and co-ordination of more than 20 CBOs to plant papyrus in 300ha within Yala swamp (annex 6).</p>	<p>Annex 5: Yala Swamp Site Support Group reconstitution and induction workshop report – November 2016</p> <p>Annex 6: Yala Ecosystem Site support Gourp Progress report on papyrus planting</p>
The Royal Society for the Protection of Birds (RSPB)	RSPB's Dr. Rob Field guided the training of government officers, Nature Kenya staff and government officers in data collection for the ecosystem service assessment and report writing.	
Kenya Forest Service (KFS)	Kenya Forest Service is currently hosting Nature Kenya in Siaya county. KFS is providing technical support in habitat restoration working with 14 CBOs to provide hands on training through field demonstrations in tree and bamboo nursery establishment and management, swamp rehabilitation using papyrus, field visits to monitor tree growth progress; at no cost to the project. KFS in collaboration with Kenya Forestry Research Institute (KEFRI)-Maseno provided input to develop a methodology for planting papyrus within Yala swamp (annexes 7).	Annex 7: Methodology for Papyrus Propagation
Kenya Forestry Research Institute (KEFRI)	KEFRI-Maseno in collaboration with KFS provided technical advice in selection of the most suitable native trees for riverine rehabilitation and also provided certified seeds for tree nursery establishment.	
Water Resources Management Authority (WRMA)	WRMA shared data for input in the on-going land use planning process and developing a 'business case' for the sustainable management of Yala swamp. This data includes data on trends in the flow of R. Yala at the swamp, amount of water entering Yala swamp, water demand and uses, amount of water abstraction by various users, Sub Catchment Management Strategies for Yala.	
National Museums of Kenya	National Museums of Kenya is represented in the IMTC team in charge of formulating Yala Swamp Land use plan informed by Strategic Environmental Assessment	
Dominion Farms Limited	Dominion Farms Limited has agreed to collaborate with Nature Kenya and utilize the ecosystem service business case and regime for regulating water flows and restoration of wetland. Dominion Farms Limited is also represented in project's Site Advisory Committee.	

Project Partner	Progress over the last year (Achievements lessons, strengths or challenges)	Evidence
Inter-Ministerial Technical Committee for Deltas in Kenya (IMTC)	IMTC is represented in the national project advisory committee. Nature Kenya facilitates IMTC experts drawn from the Ministry of Land, Kenya Public Policy Research and Analysis, Ministry of Environment, National Land Commission, NEMA, Ministry of Water and the National Museums of Kenya to prepare a land use plan for the Yala Swamp on behalf of and in consultation of the county governments of Siaya and Busia Counties. The land use plan (LUP) is informed by a strategic environmental assessment (SEA). The IMTC has finalized the Strategic Environmental Assessment (SEA) Scoping report (annex 8); land use planning framework (annex 9). Formulation of draft LUP and SEA is in final stages. In November 2015 and March 2016 IMTC experts presented this information to 167 participants in workshops in Busia and Siaya counties (annexes 10, 11, 12 and 13).	Annex 11: SEA report Annex 12: LUP framework report Annex 13: Technical Committee meeting report Annex 14: Stakeholders Consultative meeting on report Annex 15: Inter-county Steering Committee meeting report Annex 16: Yala land use plan advisory committee meeting report
Pathfinder International	Nature Kenya is a collaborator working to strengthen the environment components and integrate the Population Health Environment (PHE) approach into livelihood activities	

3. Project Progress

3.1 Progress in carrying out project activities

Progress of activities under the outputs

Output 1: A clear, evidence-based 'business case' is developed for the sustainable management of the Yala Delta		
Project Activity	Activities carried out in the manner and time planned?	Evidence to support progress towards activities.
Activity 1.1 :Conduct a start-up workshop to agree methodologies and provide training in protocols for the Ecosystem Service Assessment	Activity completed in Year 1 A 15 member Site Advisory Committee was also constituted but is yet to hold a meeting (annex submitted with previous report))	
Activity 1.2:Carry out consultations needed to assess ecosystem services (e.g. discussions about utilization of natural resources)	Activity completed in Year 1	
Activity 1.3: Carry out fieldwork needed to assess the ecosystem services provided by the delta (e.g. studies of water regulation and carbon storage)	Ecosystem services surveys we conducted in year 1 (reports submitted with Year 1 report) On 9 th -13 th November 2015 a team from Nature Kenya and the National Museums of Kenya carried	5

	<p>out biodiversity monitoring in the Yala Swamp. This included training of monitors from the local community to undertake detailed monitoring of the Important Bird Area (IBA) (annex 14). This was a follow up monitoring event within the transects that were set up in December 2014.</p> <p>In November 2015 the project supported a team from the Ichthyology department of the National Museums of Kenya to conduct fish sampling in the Yala Swamp (annex 15)</p>	<p>Annex 14: Bird survey report – November 201</p> <p>Annex 15: Fish and water quality survey report – November 2015</p>
Activity 1.4: Compile findings into a detailed report on ecosystem services, and summarize this report into a paper for submission to a peer-reviewed journal	Ecosystem Services Assessment report was finalized and presented to stakeholders in August 2015 (annex 16)	Annex 16 Ecosystem Service Assessment final report
Output 2: Vital wildlife habitat is restored and protected, in part by means of a ‘payment for ecosystem services’ scheme		
Project Activity	Activities carried out in the manner and time planned?	Evidence to support progress towards activities
Activity 2.1: Develop a ‘payment for ecosystem services’ (PES scheme) scheme to incentivize farmers upstream of the delta to plant native trees and bamboo, and carry out a baseline study of selected wildlife in the area to be planted	<ul style="list-style-type: none"> Based on the Ecosystem Services Assessment report Nature Kenya has drafted initial ideas towards a payment for ecosystem services (PES) scheme (annex 17) 	Annex 17 draft payment for ecosystem services (PES) report
Activity 2.2: Implement the PES scheme, providing advice and support to farmers as needed	<ul style="list-style-type: none"> Fourteen Community based organizations (CBOs) were trained in principles of tree nursery establishment (Annex 18). The farmers were supported to raise 139,678 indigenous tree seedlings in nurseries; collect 33,386 wildings and 1,200 bamboo seedlings. The seedlings will be planted to restore 67 (1,000ha) kilometers of the riparian zone on the lower River Yala (15m width on both sides of the river). 	Annex 18 – workshop training report on principles of tree nursery establishment

<p>Activity 2.3: Identify in a fully participatory manner degraded areas covering 1,000 ha to be set aside as Papyrus regeneration zones, and carry out a baseline study of selected wildlife (e.g. Papyrus endemics and Sitatunga) in these zones</p>	<ul style="list-style-type: none"> • Criteria for selection of Community Conserved Areas (CCAs) finalized (annex 19) and GIS mapping of degraded areas within the CCAs done (annex 19). • Action plan for rehabilitation of degraded areas within CCAs was done in consultation with communities (annex 20) <p>The project facilitated the Yala Ecosystem Site Support Group to oversee 18 CBOs to plant 300ha of papyrus in degraded areas within CCAs with 86 hectares planted so far (annex 21)</p>	<p>Annex 19 – criteria for selection of community conservation areas and degraded areas</p> <p>Annex 20 – workshop report on rehabilitation of degraded areas within CCAs with papyrus – February 2016</p> <p>Annex 21 – Memorandum of understanding between Nature Kenya and Yala Ecosystem SSG on rehabilitation of community conservation areas</p>
<p>Output 3: Poor people living around the Yala Delta are empowered to improve their livelihoods in ways that contribute to or are consistent with the long-term conservation of the delta’s natural resources</p>		
<p>Project Activity</p>	<p>Activities carried out in the manner and time planned?</p>	<p>Evidence to support progress towards activities.</p>
<p>Activity 3.1: Identify households to be provided with fishponds, and carry out a baseline study of diet in these households</p>	<p>In July 2015 Nature Kenya worked with officers from the Fisheries Department and local communities to develop criteria for identification of fish pond sites (annex 22). We then worked with communities and Fisheries department to identify 17 suitable sites for establishment of fish ponds (annex 23).</p> <p>On 16th and 17th November 2015 Nature Kenya and Fisheries Department held a two day meeting with fish farmers to train them on the basics of fish farming, form a governance structure for the groups and prepare an action plan to guide their activities (annex 24).</p> <p>Fish farming Community based organizations agreed to excavate fishponds as their contribution to the venture. This ensured community buy-in and ownership of the ponds</p>	<p>Annex 22- criteria for fishpond sites selection</p> <p>Annex 23 – sample progress report on fishponds March 2016</p> <p>Annex 24 Fish pond Beneficiaries CBO Meeting Report</p>

<p>Activity 3.2: Create fishponds</p>	<p>10 CBOs beneficiaries supported to establish 17 (30mX10mX1m) fishponds each stocked with 1,000 fingerlings of either native tilapia (<i>Oreochromis niloticus</i>) or catfish (<i>Clarias gariepinus</i>). Additional ponds are supported by USAID and McArthur Foundation.</p>	
<p>Activity 3.3: Identify households to be provided with training in the creation and marketing of high-value Papyrus products, and carry out a baseline study of income in these households</p>	<ul style="list-style-type: none"> • A training manual for papyrus products development was drafted (annex 25) • In May-July 2015 we trained 22 papyrus product weavers (14 women, 8 men) in 3 different workshops. Each workshop represented a more advanced level of training from basics to weaving complex products e.g. chairs (annexes 26, 27, and 28). • In October 2015 Nature Kenya facilitated 26 papyrus product weavers to form an umbrella organization – Yala Swamp Weavers Umbrella (YAWU) with a constitution, and an action plan. YAWU is registered and operates a bank account (annex 29). YAWU was formed to get weavers organized and provide a platform for bulking and marketing high end papyrus products. YAWU successfully lobbied the Siaya County government to allocate them office space and a retail outlet (annex 30). • On 25th September 2015 a 1 day exchange visit was organized for weavers to visit more groups that are more advanced in product development in Kisumu (annex 31). • In September 2015 we conducted a workshop for papyrus product weavers to formulate an action plan (annex 32). • YAWU has already sold papyrus products worth Ksh. 17,650 (£120). 	<p>Annex 25 Training Manual for Papyrus Product Development Annex 26: Papyrus Product Development Training Report level 1 Annex 27 Papyrus Product Development Training Report level 2 Annex 28 Papyrus Product Development Training Report level 3 Annex 29-: YAWU constitution Annex 30: Action Plan Papyrus Product Development- October 2015 Annex 31: Papyrus Product Development Exchange Visit Report Annex 32 Papyrus product development beneficiaries meeting report</p>

Activity 3.5: Identify individuals to be provided with training in wildlife guiding, and carry out a baseline study of ecotourism activity and income in the delta	5 individuals trained in fundamentals of ornithology in April 2015, a further 4 individuals trained in fundamentals of ornithology in April 2016	
Activity 3.6: Deliver training in this area	26 community guides from Yala Delta were trained in tourism business administration (annex 34) and supported to form and register a Community Tourism Based Organization (annex 35)	Annex 33 Tourism Business Administration and Management training Report Annex 34: Entrepreneurship for business training report Annex 35: Community Tourism Based Organization constitution
Output 4: Lessons learned from the project are disseminated effectively to all relevant stakeholders		
Project Activity	Activities carried out in the manner and time planned?	Evidence to support progress towards activities
Activity 4.1: Compile findings and recommendations from the project at the end of each project year	<ul style="list-style-type: none"> Half year and End year reports duly compiled and submitted 	
Activity 4.2: Present these to the Inter-ministerial Committee, the Ministry of Water, Environment and Natural Resources, NEMA and other key bodies through face-to-face meetings and other appropriate channels	<ul style="list-style-type: none"> The Ecosystem Service Assessment was presented to the IMTC, the Governor and County Executives Siaya County in August 2015. 	
Activity 4.3: Monitor records of discussions within and between these bodies, and the content of policy and planning documents, to ensure that the lessons shared are taken into account	<ul style="list-style-type: none"> Information within the ecosystem service assessment has informed the Yala Swamp Land Use Plan and Strategic Environmental Assessment. Monitoring records of discussions on-going, <i>see details in page 2 above on Project Partnerships</i> 	
Activity 4.4: Carry out broader dissemination activities aimed at non-specialist audiences	<ul style="list-style-type: none"> Dissemination activities on-going with publication of project activity updates in the Nature Kenya monthly newsletter (July 2015, November 2015 and February 2016), Darwin Newsletter (February 2016) and Kenya Birding 	Annex 36: Nature Net July 2015 issue Annex 37: Nature Net August 2015 issue Annex 38: Nature Net November 2015 issue Annex 39: Darwin newsletter February 2016 issue Annex 40: Kenya Birding magazine issue 9

	Magazine (August 2015 Issue No. 9) (annexes 36, 37, 38, 39 and 40)	
Activity 4.5: Advocate to KWS for the designation of Yala swamp as a Ramsar site.	Discussions with KWS and Siaya County Government on designation of Yala Swamp as a Ramsar Site.	

3.2 Progress towards project outputs

Output 1:	A clear, evidence-based 'business case' is developed for the sustainable management of the Yala Delta			Comments (if necessary)
	Baseline	Change recorded by 2016	Source of evidence	
<p>Indicator 1.1 A detailed assessment of the ecosystem services provided by the delta is carried out, in consultation with local communities, by December 2014.</p> <p>Change to: By end Year 1 A detailed assessment of the ecosystem services provided by the delta has been carried out, in consultation with local communities</p>	Data collected for a detailed ecosystem services assessment and a draft report produced.	Ecosystem services assessment report refined	See Annex 16	This output is on track and will be fully completed by end of the project
<p>Indicator 1.2 Based on the findings from this assessment, together with findings from other relevant work carried out previously, a 'business case' for the sustainable management of the delta is prepared by March 2015.</p>	Preparation of a 'business case' to be done based on the Ecosystem Service Assessment findings.	The Ecosystems Services Assessment report has provided evidence that the conservation of significant areas of the Yala swamp is crucially important for ecosystem services that support economy, biodiversity and livelihoods. The Yala Swamp use land use plan has adopted arguments provided by the Ecosystem Service assessment.	See Annex 16	

<p>This business case will show that a multi-use approach is preferable to wholesale conversion for farming for social and economic as well as ecological reasons, and will propose in detail how a multi-use solution should be achieved in practice</p> <p>Change to: By end Year 1 a 'business case' for the sustainable management of the delta is available</p>		<p>The ongoing strategic environmental assessment has conducted three scenarios – development oriented, conservation oriented and balanced development. The SEA is almost complete with the pursuit of balanced development already discussed and agreed upon by the governor Siaya County, the Inter-county land use Steering Committee and the Yala Swamp Planning Advisory Committee</p>		
<p>Output 2:</p>	<p>Vital wildlife habitat is restored and protected, in part by means of a 'payment for ecosystem services' scheme</p>			
	<p>Baseline</p>	<p>Change recorded by 2016</p>	<p>Source of evidence</p>	
<p>Indicator 2.1: Bamboo and native trees are planted over an area of 100 ha within the Watershed Protection Zone along the Yala River upstream of the delta, as a result of incentives offered to 100 local farmers through a 'payment for ecosystem services' scheme. This planting will reduce harmful run-off into the river, provide habitat for wildlife, and create a source of fuel and construction materials, thus reducing pressure on</p>	<p>Preliminary meetings held with CBOs, sensitization of riparian land owners, local leaders; training conducted in tree nursery establishment and management</p>	<ul style="list-style-type: none"> 14 Community based organizations were supported to raise 139,678 indigenous tree seedlings in nurseries; collect 33,386 wildings and 1,200 bamboo seedlings. Community mobilization is ongoing in readiness for planting in April/May 2016 <p>This output is on track</p>	<p>Annex 43 – habitat restoration action plan</p>	

<p>the delta. It will be carried out at a rate of 50 ha per year during Years 2 and 3 of the project.</p> <p>Change to: By end of Year 2 50 ha, and by the end of Year 3, 100 ha of land within the Watershed Protection Zone along the Yala River, upstream of the delta, planted with bamboo and native trees</p>				
<p>Indicator 2.2: Degraded parts of the delta covering a total area of 1,000 ha are 'set aside' so that Papyrus is able to regenerate there naturally. These regeneration zones will be identified in consultation with all relevant stakeholders, and will be set aside by March 2015</p> <p>Change to: By end Year 1 Degraded parts of the delta covering a total area of 1,000 ha are 'set aside' so that Papyrus is able to regenerate there naturally.</p>	<p>Land cover map draft done and being further refined</p>	<ul style="list-style-type: none"> Community conserved areas identified GIS mapping of degraded areas done 80 ha of degraded areas rehabilitated with papyrus (annex 41) 	<p>Annex 41-Map of degraded areas</p>	

<p>Indicator 2.3: Pristine Papyrus stands covering a total area of 1,000 ha are designated as Community Conservation Areas, meaning that local communities have control over them but are also responsible for safeguarding them.</p> <p>The designation process will again be carried out in a participatory manner, and will be complete by March 2016.</p> <p>Change to:</p> <p>By end Year 2 Pristine Papyrus stands covering a total area of 1,000 ha are designated as Community Conservation Areas,</p> <p>By EOP Communities are fully engaged in management/protection actions</p>	<p>Community conservation areas to be established in the next project year.</p>	<ul style="list-style-type: none"> • Criteria for establishment of Community conservation areas was formulated, Community conservation areas identified and mapped (see annex 19) • Three interconnected Community Conservation Areas with a total of more than 7,000ha were identified using the criteria described below. There are degraded areas within the CCAs with a total area of 443.8 ha. • Action plans for each land use zone and catchment will be developed and agreed communities, county governments and other stakeholders as part of the ongoing land use planning process. • Community groups have already rehabilitated 86 ha of degraded areas within the community conservation areas 	<p>See annex 19</p>	<p>This output is on track.</p>
<p>Indicator 2.4: A water control regime is established that ensures that flows into Lake Kanyamboli in the east of the delta, the main refuge in the area for threatened Lake Victoria cichlids, are</p>	<p>Monitoring protocol including water quality was drafted.</p>	<ul style="list-style-type: none"> • Monitoring protocol to be agreed within the framework of the Yala Swamp land use plan 		

<p>sufficient to maintain the area of this lake.</p> <p>This regime will rely primarily or exclusively on existing control infrastructure, and will be in place by March 2016.</p> <p>Change to: By end Year 2 a water control regime is established to ensure that sufficient water is flowing into Lake Kanyaboli to support cichlid population</p>				
<p>Output 3:</p>	<p>Poor people living around the Yala Delta are empowered to improve their livelihoods in ways that contribute to or are consistent with the long-term conservation of the delta's natural resources</p>			
	<p>Baseline</p>	<p>Change recorded by 2016</p>	<p>Source of evidence</p>	
<p>Indicator 3.1: The total weight of high-quality protein (i.e. fish and meat) consumed by 100 of the poorest households in the area increases by 25% between baseline and the end of the project, as a result of the creation of fishponds for these households.</p> <p>Households around the delta have an average of five members each, and their gender balance is more or less even. Therefore, the fishponds will benefit approximately</p>	<ul style="list-style-type: none"> • A draft Strategy for livelihood support developed • Household socio economic baseline data collected and report writing ongoing 	<ul style="list-style-type: none"> • 10 CBO beneficiaries supported to establish 17 fishponds with a total of 17,000 fingerlings 	<p>See annex 23</p>	

<p>250 males and 250 females.</p> <p>Change to: By the end of the project the weight of high-quality protein (i.e. fish and meat) consumed by 100 of the poorest households (500 people; 50% male, 50% female) in the area increases by 25% compared to the baseline</p>				
<p>Indicator 3.2: The income of another 100 poor households increases by an average of 15% between baseline and the end of the project, as a result of training these households receive in the creation and effective marketing of Papyrus products such as mats and baskets.</p> <p>These households will again consist of approximately 250 males and 250 females, but the training will be delivered primarily to the roughly 100 adult women they contain.</p> <p>Change to: By the end of the project 100 households (50% male; 50% female)</p>	<p>10 SSG households already involved in papyrus product development identified and more to be identified</p>	<ul style="list-style-type: none"> • 26 SSG households already involved in papyrus product development and mentorship training ongoing for more households to be involved. Sale and marketing of products ongoing with more than £120 	<p>See Annexes 26-32</p>	

increase their income from marketing Papyrus products by 15% compared to the baseline.				
<p>Indicator 3.3: The total income generated by ecotourism in the delta increases by 25% between baseline and the end of the project, as a result of the training of 20 individuals from 20 different households as wildlife guides. At least six of these individuals will be women.</p> <p>Change to:</p> <p>By the end of the project the total income generated by 20 households through ecotourism has increased by 25% compared to the baseline</p>	20 community guides trained in wildlife guiding. 60 bird guides bought and being used by community guides	<ul style="list-style-type: none"> 20 community guides from Yala wetland further trained in wildlife guiding, avi-tourism, tourism administration & management; 4 more trained in fundamentals of ornithology 	See Annex 33	
Output 4.	Lessons learned from the project are disseminated effectively to all relevant stakeholders			
	Baseline	Change recorded by 2016	Source of evidence	
Indicator 4.1: Findings and recommendations from the project are shared with the Interministerial Technical Committee on Deltas, the National Environment	Draft recommendations from ecosystem services assessment is will be shared with all stakeholders	<ul style="list-style-type: none"> Recommendations from ecosystem services assessment shared with 62 stakeholders in a meeting held in Siaya between 19th- 20th August 2015 (annex 42); 	See Annex 8; Annex 42-Yala ecosystem service assessment PowerPoint August 2015	This output is on track

<p>Management Authority, the Office of the Prime Minister, and all other relevant bodies at least annually throughout the project (i.e. at the end of each project year)</p> <p>No change proposed</p>		<p>recommendations shared on mail with County executives and technical officers</p>		
<p>Indicator 4.2: Records of subsequent discussions within and among these target groups demonstrate that this dissemination work is effective and that the lessons and recommendations communicated are being taken into account during relevant policy formulation and decision-making processes</p> <p>Change to: By end of project stakeholders are communicating lessons and recommendations from the project into relevant policy formation and decision making processes.</p>	<p>Project activities were published in Nature Net -a monthly newsletter</p> <p>An article was published in the East African newspaper</p>	<ul style="list-style-type: none"> • Project activities were published in the Darwin Newsletter –February 2016 Issue (Annex 20) • Nature Kenya monthly newsletters (July 2015, August 2015, November 2015) Kenya Birding Magazine (August 2015 Issue No. 9) 	<p><u>See</u> annexes 36-40</p>	

3.3 Progress towards the project Outcome

Project Outcome:	Key steps are taken to secure the future of Kenya's Yala Delta, recognizing both development and conservation needs, and to promote similar work in other Kenyan deltas.			Comments (if necessary)
Outcome indicators	Baseline	Change by 2016	Source of evidence	
<p>1. The populations of key wildlife species increase significantly between baseline (i.e. the pre-intervention situation) and the end of the project in areas where habitat is created (100 ha) or allowed to regenerate (1000 ha).</p> <p>Change to: Candidate species to be monitored include East Africa's 'Papyrus endemic' bird species (e.g. Papyrus Yellow Warbler, Carruthers' Cisticola, White-winged Warbler and Papyrus Canary) and Sitatunga.</p> <p>By End of project populations of 6 key wildlife species (e.g. Sitatunga, the Papyrus endemic' bird species Papyrus Yellow Warbler, Carruthers' Cisticola, White-winged Warbler and Papyrus Canary) have increased significantly</p>	Land cover map, ecosystem services assessment and site advocacy strategy were drafted which will inform better habitat management	<ul style="list-style-type: none"> • Land cover map finalized and refined (Annex 45) • GIS mapping of degraded areas done • Site assessment of actual areas for planting done 	Annex 45 – Yala swamp land use land cover map.	The project is well on its way to achieving the intended outcomes. In year 3 we will focus more on consolidating the gains made so far

<p>compared to the baseline in areas where habitat is created or allowed to regenerate</p>				
<p>1. The populations of key species are no lower at the end of the project than at baseline in areas where habitat is protected (i.e. 1,000 ha of pristine Papyrus stands, where monitoring will focus on birds, and Lake Kanyamboli, where monitoring will focus on cichlid fish).</p> <p>Change to: By mid project 300 ha Papyrus regenerating By end of project the populations of 6r indicator species in areas where habitat is protected (i.e. 1,000 ha of pristine Papyrus stands) have not fallen below the baseline level</p>	<p>Community conservation areas to be establish in the next project year.</p>	<ul style="list-style-type: none"> Designation of CCAs is ongoing within the Yala Swamp land use planning process. Habitat rehabilitation is ongoing within the swamp and lower River Yala catchment 	<p>See annexes 19 and 20</p>	
<p>2. The quality of the water flowing from the Yala Delta into Lake Victoria increases measurably between baseline and the end of the project, in terms of pollutant and sediment loads, due to increased</p>	<p>Monitoring protocol including water quality was drafted. In year one of the project baseline data on water quality was collected</p>	<p>Monitoring of water quality was repeated in November 2015. There was generally no change in the water quality from the baseline (see annex 15)</p>	<p>See annex 15</p>	

<p>'watershed protection' upstream of the delta.</p> <p>Change to:</p> <p>By end of project the pollutant levels in the water flowing from Yala Delta into Lake Victoria have reduced from the baseline towards the national benchmark due to increased 'watershed protection' upstream of the delta.</p>				
<p>3. A total of 1,100 (50% male; 50% female) extremely poor people report significant improvements in their diet and/or increases in income in comparison to the between baseline and the end of the project.</p> <p>Approximately half of these people will be male and half will be female, and details of the livelihood benefits they will derive from the project are provided below under Output 3.</p> <p>Change to:</p> <p>By mid term 1,100 people (50% male, 50% female) of target group engaged in project activities.</p>	<p>A Strategy for livelihood support was developed</p> <p>Training on tour/wildlife guiding done, criteria for fish pond site selection done and identification of households to benefit from papyrus product creation and marketing ongoing.</p>	<ul style="list-style-type: none"> • 10 CBO beneficiaries supported to establish 17 fishponds • 26 SSG households already involved in papyrus product development and mentorship training ongoing for more households to be involved • 20 community guides from Yala wetland further trained in wildlife guiding, avi-tourism, tourism administration and management; and entrepreneurship 4 more trained in fundamentals of ornithology • 800 households were installed with energy saving devices with a further 700 households 	<p>See annexes 6, 22,24 See Annex 26</p>	

<p>By end of project A total of 1,100 (50% male; 50% female) extremely poor people report significant improvements in their diet and/or increases in income in comparison to the baseline.</p>		<p>targeted in the final year of the project</p>		
<p>4. By end of project a further 250,000 'delta-dependent' people benefit indirectly from the project, as it secures the long-term future of the natural resources on which they rely.</p> <p>Change to:</p> <p>A further 250,000 'delta-dependent' people benefit indirectly from the project, as it secures the long-term future of the natural resources on which they rely.</p>	<p>socio economic and biodiversity baselines done at the beginning of the project and ecosystem services assessment</p>	<p>When the Yala Swamp is better managed it will benefit all the people that live around it.</p>		
<p>5. By the end of the project, policies and plans governing the management of other Kenyan deltas incorporate lessons learned from the project clearly and explicitly.</p> <p>No change proposed for this outcome</p>	<p>Recommendations to inform policy will be continuously documented and made available to decision makers.</p>	<ul style="list-style-type: none"> Recommendations from ecosystem services assessment are informing the Yala Swamp land use plan and strategic environmental assessment. The report was shared with 62 stakeholders in a meeting held in Siaya between 19th- 	<p>See annexes 10, 36,37,37,38,39,40 and 42</p>	

indicator		<p>20th August 2015; recommendations shared on mail with County executives and technical officers</p> <ul style="list-style-type: none"> • Project activities were published in the Darwin Newsletter –February 2016 Issue • Nature Kenya monthly newsletters (July 2015, August 2015, November 2015) Kenya Birding Magazine (August 2015 Issue No. 9) • On 2nd February the project supported Yala Swamp Ecosystem Site Support Group to hold World Wetlands Day celebrations. The group successfully lobbied the County government of Siaya who paid half of the costs. A total of 495 people attended including county government, county assembly, national government, community based organizations and school children. The local guides trained by the project took participants on bird walks along the Yala 	<p>Annex 46: Yala Swamp World Wetlands Day celebrations report 2016</p>	
-----------	--	---	---	--

		Swamp. Awareness materials with project activities included T-shirts and a banner (annex 42).		
--	--	---	--	--

3.4 Monitoring of assumptions

We continue to monitor risks and assumptions. While all risks and assumptions remain relevant they have not materialized

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

This project in its entirety is contributing to expanding the protected area network through community conservation areas and support for listing of parts of Yala Swamp as a Ramsar site, direct habitat restoration (1,100 ha), and direct poverty alleviation for 1,100 households

4. Contribution to SDGs

Goal 1: End poverty in all its forms everywhere

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

The project is supporting 100 households to increase the income they derive from papyrus by training them to process this material into high-value products such as mats and baskets. In addition the project is assisting them to market these products effectively in high end markets. 17 fishponds have also been constructed to improve nutrition and increase incomes for the project's 500 beneficiaries whilst reducing the pressure on wild fish. Furthermore, 20 selected individuals have been trained to work as wildlife guides, taking advantage of the ecotourism opportunities offered by the Delta.

Goal 5: Achieve gender equality and empower all women and girls

The Strategy for livelihood Support in Yala Swamp (Annex 47) outlines a selection criteria for beneficiaries including the following selection of the poorest households, women headed households and vulnerable households. Specifically, the project is supporting 5 women groups with 120 active members (i.e. 3 groups in habitat restoration; 1group in fish farming and 1group in advocacy)

Goal 13: Take urgent action to combat climate change and its impacts

Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Habitat restoration is ongoing with a target of planting native trees and bamboo for rehabilitation of 1,000ha along 30m riparian zone of River Yala upstream of the delta; planting of papyrus in degraded areas (300ha) is ongoing; designation of CCAs (1000ha) of pristine papyrus stands will be done concurrently with the on-going land use planning process. The upstream planting will protect the watershed zone, conserve biodiversity, capture carbon dioxide (carbon

sequestration) and yield fuel and construction materials. 800 households were installed with energy saving cookers saving trees needed to provide wood fuel. A further 700 households are targeted in year 3 of the project.

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

CBD: The project will contribute to the achievement of many CBD objectives, especially those described under Articles 6 (general measures), 8 (in situ conservation), 10 (sustainable use), 14 (minimizing adverse impacts), 17 (exchange of information) and 18 (technical cooperation). In addition, it will contribute to the attainment of several Aichi Biodiversity Targets, including 2 (integration of biodiversity into development strategies), 4 (sustainable production), 5 (habitats), 7 (agriculture), 12 (threatened species), 14 (ecosystem services) and 15 (ecosystem resilience).

CMS: The Yala Delta, the project site, is believed to support the near-threatened Great Snipe. This is a migratory member of the family Scolopidae, and as such is included in Appendix 2 of the CMS.

Nature Kenya is recognized as a significant contributor to the implementation of the Convention on Biological Diversity (CBD) in Kenya and is usually included in Government Delegations during COP conferences. Nature Kenya is also included in the CBD National Reporting Committee for Kenya. The National Environment Management Authority (NEMA) has identified Nature Kenya to lead on reporting on biodiversity monitoring and indicators within the CBD programme of work. Nature Kenya is therefore ideally positioned to share the findings and lessons from this project with the national CBD programme.

6. Project support to poverty alleviation

As indicated in the Strategy for livelihood support (**see annex 47**), the selection criteria includes targeting to support the poorest and vulnerable households. The project will bring direct benefits to at least 1,100 people living around Yala Swamp. Of this total of 1,100 people, 500 will benefit from the creation of fishponds, 500 will benefit from training in the creation and marketing of high-value Papyrus products, and 100 will benefit from training in wildlife guiding. We expect that the total weight of high-quality protein consumed by the first group will rise by 25%, that household income in the second group will rise by an average of 15%, and that total income from ecotourism in the delta will rise by 25%. These benefits will accrue more or less equally to males and females, although the training in Papyrus marketing will be delivered mostly to women. Some noticeable achievements this year include establishment of 10 fishponds, mentorship training of 16 more SSG households in papyrus product development, training 20 community guides and training a further 4 out of the 20 in a Certificate Course for bird guides and birders.

7. Project support to Gender equity issues

We drafted a gender strategy for the project (submitted with past reports), we are applying one third gender rule in implementation of project activities.

8. Monitoring and evaluation

Monitoring and evaluation is done through weekly reports and work plans by field staff; discussions with stakeholders especially the local community and beneficiary feedback. Every month the site based project manager fills and submits a score card on performance of the project. (Samples submitted with past reports)

9. Lessons learnt

Key Lessons learnt from this project are:

- Poverty, like in many other parts of Kenya remains a key driver to environment destruction in Yala swamp. Poverty has driven people to exploit natural resources to fulfil their immediate human needs like food with less regard of the consequences of uncontrolled overexploitation of resources which ironically threatens their very own future existence and the existence of other organisms within the Yala swamp ecosystem.
- Community involvement is pertinent in all aspects of sustainable management planning. When consulted and fully involved in key decision making processes, their wealth of traditional knowledge on conservation can be valuably utilized in natural resources management and biodiversity conservation
- Innovative methods of project delivery create enthusiasm among beneficiaries and produce catalytic effects among whole communities. For the energy saving devices we trained 10 artisans, then required each one of them to install 10 devices and train 10 other artisans in the process. Over a few weeks, the incremental effect saw over 800 households installed with energy saving devices.

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

Yes. We have reviewed the proposal output and outcome indicators and made them sharper. See annex 48 the revised indicators which was also submitted with the midyear report in October 2015

11. Other comments on progress not covered elsewhere

None

12. Sustainability and legacy

The project enjoys support at local, county and national levels. Hands on training of communities in fish farming, installation of energy saving devices etc mean that skills imparted by the project will remain with the community. The Yala Ecosystem Site Support Group brings together many CBOs in the Yala Swamp ecosystem and has already successfully lobbied the county government to provide an office and retail outlet to the papyrus product weavers as well as partnering with the county government of Siaya in world wetlands day celebrations, and coordinating community groups to restore degraded habitats within the swamp. The Site Support Group is a legacy for the project as it will continue to function after the project.

13. Darwin Identity

The Darwin Initiative logo has been used in all publicity materials, and reports presented to stakeholders. Most activities are co-funded by USAID, McArthur Foundation and Pathfinder International. Awareness has been created in all meetings on the Darwin Initiative's funding. The Nature Kenya twitter @naturekenya account is linked back to the Darwin account.

14. Project Expenditure

Table 1 Project expenditure during the reporting period (1 April 2015 – 31 March 2016)

Project spend (indicative) since last annual report	2015/16 Grant (£)	2015/16 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)			-1.6	
Consultancy costs				
Overhead Costs			-1.4	
Travel and subsistence			8.9	
Operating Costs			7.9	
Capital items (see below)			4.5	
Others (see below)			0.18	
TOTAL			0.2	

Highlight any agreed changes to the budget and **fully** explain any variation in expenditure where this is +/- 10% of the budget. Have these changes been discussed with and approved by Darwin?

None

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2015-2016

Project summary	Measurable Indicators	Progress and Achievements April 2015 - March 2016	Actions required/planned for next period
<p>Impact</p> <p>Sustainable management regimes are established for deltas throughout Kenya, supported by all relevant stakeholders, and ensuring that the needs of industry, local people and wildlife are met indefinitely.</p>		<p>Ecosystem services assessment has been carried out with a business case for balanced development in the Yala Swamp. The ecosystem services assessment findings are informing a land use plan for the Yala Swamp, informed by strategic environmental assessment. This process is supported by county governments of Siaya and Busia and local communities. We are on the way to establishing a sustainable management regime for the Yala Swamp.</p> <p>Community conserved areas have been identified and communities are already involved in the management of the swamp</p> <p>Concrete measures have been taken</p>	<ul style="list-style-type: none"> • Develop management plans for community conservation areas • Support the development of a management plan for the Yala Swamp ecosystem. • Consultative/briefing meetings with Governors of Busia and Siaya County together with Executive members and members of county assemblies • Finalize the draft land use plan and Strategic Environmental Assessment • Consolidate livelihoods activities
<p>Outcome</p> <p>Key steps are taken to secure the future of Kenya's Yala Delta, recognizing both development and conservation needs, and to promote similar work in other Kenyan deltas.</p>	<ol style="list-style-type: none"> 1. The populations of key wildlife species increase significantly between baseline (i.e. the pre-intervention situation) and the end of the project in areas where habitat is created (100 ha) or allowed to regenerate 	<p>Ecosystem services assessment report finalized</p> <p>A draft land cover/land use map refined</p>	<ul style="list-style-type: none"> • Summarise the ecosystem services report into a paper for submission to a peer-reviewed journal • Develop a 'payment for ecosystem services' (PES scheme) scheme to incentivise

	<p>(1000 ha). Candidate species to be monitored include East Africa's 'Papyrus endemic' bird species (e.g. Papyrus Yellow Warbler, Carruthers' Cisticola, White-winged Warbler and Papyrus Canary) and Sitatunga. (change to: By End of project populations of 6 key wildlife species (e.g. Sitatunga, the Papyrus endemic' bird species Papyrus Yellow Warbler, Carruthers' Cisticola, White-winged Warbler and Papyrus Canary) have increased significantly compared to the baseline in areas where habitat is created or allowed to regenerate)</p> <p>2. The populations of key species are no lower at the end of the project than at baseline in areas where habitat is protected (i.e. 1,000 ha of pristine Papyrus stands, where monitoring will focus on birds, and Lake Kanyamboli, where monitoring will focus on cichlid fish).</p> <p>(Change to: By end of project the populations of 6 or indicator species in areas where habitat is protected (i.e. 1,000 ha of pristine Papyrus stands) have not fallen below the baseline level)</p> <p>3. The quality of the water flowing</p>	<p>Biodiversity monitoring is ongoing to assist detect any changes</p> <p>Land use planning initiated using recommendations and data from the ecosystem services assessment</p> <p>Dominion Farms Limited has agreed to collaborate with Nature Kenya and utilize the ecosystem service business case and regime for regulating water flows and restoration of wetland.</p>	<p>farmers upstream of the delta to plant native trees and bamboo</p> <ul style="list-style-type: none"> • Restore 3,000ha of swamp through natural regeneration and a further 1,000 ha through direct planting of papyrus and to maintain ecosystem services. • Work with Dominion and other stakeholders to design a water control regime that ensures sufficient inflow to Lake Kanyaboli at all times of the year • Conduct annual biodiversity assessment • Implement advocacy strategy for Yala swamp • Facilitate mentorship training for communities in production and marketing of high value papyrus products <p>Continue monitoring biodiversity and water quality</p> <p>Rehabilitate 1,000ha of lower river</p>
--	--	---	---

	<p>from the Yala Delta into Lake Victoria increases measurably between baseline and the end of the project, in terms of pollutant and sediment loads, due to increased 'watershed protection' upstream of the delta. (change to:</p> <p>By end of project the pollutant levels in the water flowing from Yala Delta into Lake Victoria have reduced from the baseline towards the national benchmark due to increased 'watershed protection' upstream of the delta.)</p> <p>4. A total of 1,100 extremely poor people experience significant improvements in diet and/or increases in income between baseline and the end of the project approximately half of these people will be male and half will be female, and details of the livelihood benefits they will derive from the project are provided below under Output 3. (change to: By midterm 1,100 people (50% male, 50% female) of target group engaged in project activities.</p> <p>By end of project A total of 1,100 (50% male; 50% female) extremely poor people report significant</p>	<p>Monitoring reports from November 2015 show no increase in pollutants in the water leaving Yala Swamp</p> <p>800 households around yala Swamp were fitted with energy saving cookers to reduce deforestation</p> <p>10 CBO beneficiaries supported to establish 17 fishponds</p> <p>26 SSG households already involved in papyrus product development and mentorship training ongoing for more households to be involved</p> <p>20 community guides from Yala wetland further trained in wildlife guiding, avi-tourism, tourism administration & management; 4 more community guides trained in fundamentals of ornithology</p>	<p>Yala riparian zone with indigenous species and bamboo</p> <p>A total of 1,500 households fitted with energy saving devices</p> <p>Support fish farmers through the growing season of fish and if need be source for competitive fish markets</p> <p>Support papyrus product weavers to reach wider markets away from the immediate vicinity of the Yala Swamp</p> <p>Build capacity of community tourism based organization</p>
--	--	---	--

	<p>improvements in their diet and/or increases in income in comparison to the baseline.)</p> <ol style="list-style-type: none"> 5. A further 250,000 'delta-dependent' people benefit indirectly from the project, as it secures the long-term future of the natural resources on which they rely. 6. By the end of the project, policies and plans governing the management of other Kenyan deltas incorporate lessons learned from the project clearly and explicitly. 	<p>Habitat rehabilitation, use of energy saving devices, fish farming and all other project activities are expected to benefit the entire delta dependent community.</p> <p>The project activities are informing ongoing formulation of a land use plan for the Yala Swamp informed by strategic environmental assessment</p>	<p>A negotiated and agreed land use plan informing the conservation and development of the Yala Swamp, supported by the county governments, communities, and county assemblies</p>
<p>Output 1. A clear, evidence-based 'business case' is developed for the sustainable management of the Yala Delta</p>	<ol style="list-style-type: none"> 1. A detailed assessment of the ecosystem services provided by the delta is carried out, in consultation with local communities, by December 2014. (change to: By end Year 1 A detailed assessment of the ecosystem services provided by the delta has been carried out, in consultation with local communities) 2. Based on the findings from this assessment, together with findings from other relevant work carried out previously, a 'business case' for the sustainable management of the delta is prepared by March 2015. 	<ul style="list-style-type: none"> • Prepare a 'business case' document for the sustainable management of Yala Swamp 	

	<p>This business case will show that a multi-use approach is preferable to wholesale conversion for farming for social and economic as well as ecological reasons, and will propose in detail how a multi-use solution should be achieved in practice (change to: By end Year 1 a 'business case' for the sustainable management of the delta is available.)</p>	
<p>Activity 1.1 :Conduct a start-up workshop to agree methodologies and provide training in protocols for the Ecosystem Service Assessment</p>		<p>Completed</p>
<p>Activity 1.2:Carry out consultations needed to assess ecosystem services (e.g. discussions about utilization of natural resources)</p>		<p>Completed</p>
<p>Activity 1.3: Carry out fieldwork needed to assess the ecosystem services provided by the delta (e.g. studies of water regulation and carbon storage)</p>		<p>Completed</p>
<p>Activity 1.4: Compile findings into a detailed report on ecosystem services, and summarize this report into a paper for submission to a peer-reviewed journal</p>		<p>Completed</p>
<p>Activity 1.5: Based on this report, produce a detailed 'business case' for presentation to Dominion and the relevant authorities</p>		<ul style="list-style-type: none"> • Planned: Prepare 'business case' document for the sustainable management of Yala Swamp is on-going based on the findings from Ecosystem Services Assessment, baseline surveys, together with findings from other relevant work carried out previously. • Work with Dominion and other stakeholders to design a water control regime that ensures sufficient inflow to Lake Kanyaboli at all times of the year
<p>Output 2. Vital wildlife habitat is restored and protected, in part by means of a</p>	<p>1. Bamboo and native trees are planted over an area of 100 ha within the Watershed Protection Zone along the Yala River</p>	<ul style="list-style-type: none"> • Support communities to plant 1,000ha on the lower River Yala with indigenous tree species and bamboo

<p>'payment for ecosystem services' scheme</p>	<p>upstream of the delta, as a result of incentives offered to 100 local farmers through a 'payment for ecosystem services' scheme.</p> <p>This planting will reduce harmful run-off into the river, provide habitat for wildlife, and create a source of fuel and construction materials, thus reducing pressure on the delta. It will be carried out at a rate of 50 ha per year during Years 2 and 3 of the project. (Change to: By end Year 2 50 ha, and by the end of Year 3, 100 ha of land within the Watershed Protection Zone along the Yala River, upstream of the delta, planted with bamboo and native trees)</p> <p>2. Degraded parts of the delta covering a total area of 1,000 ha are 'set aside' so that Papyrus is able to regenerate there naturally.</p> <p>These regeneration zones will be identified in consultation with all relevant stakeholders, and will be set aside by March 2015. (Change to: By end Year 1 Degraded parts of the delta covering a total area of 1,000 ha are 'set aside' so that Papyrus is able to regenerate there naturally)</p>	<p>1,500 households to be installed with energy saving cookers</p> <ul style="list-style-type: none"> • Identification of degraded areas done; the following identified as priority areas for planting papyrus and riverine rehabilitation; planting on-going and will continue until 300 ha of papyrus is planted. <ol style="list-style-type: none"> 1. L. Sare (Got Ramogi and Usenge Sublocations) 2. L. Namboyo (Barkanyango Sublocation) 3. L. Kanyaboli (Kombo beach, Kaugagi-Hawinga, Gangu-Nyalaji, Ojwando 'A', Kadenge Sublocations) 4. Bunyala (Bulwani island, Lugare, Mabinju Sublocations) 5. Along river Yala (Bar Olengo and Othatch Sublocations) 6. Upstream of R. Yala (Gem Subcounty)
--	---	---

	ensure that sufficient water is flowing into Lake Kanyamboli to support cichlid population)	
Activity 2.1. Develop a 'payment for ecosystem services' (PES scheme) scheme to incentivize farmers upstream of the delta to plant native trees and bamboo, and carry out a baseline study of selected wildlife in the area to be planted		<ul style="list-style-type: none"> Initial baseline studies of biodiversity including birds, fish, wildlife, and water was completed in November 2014; Subsequent annual biodiversity assessment including birds, fish, wildlife, and water was completed in November 2015 Planned: incentivize farmers upstream of the delta to plant native trees and bamboo
Activity 2.2. Implement the PES scheme, providing advice and support to farmers as needed		<ul style="list-style-type: none"> Implement PES scheme once Activity 2.1 has been achieved
Activity 2.3. Identify in a fully participatory manner degraded areas covering 1,000 ha to be set aside as Papyrus regeneration zones, and carry out a baseline study of selected wildlife (e.g. Papyrus endemics and Sitatunga) in these zones		<ul style="list-style-type: none"> Baseline study of selected wildlife completed <i>Refer to progress in identification of degraded areas in Output 2 above</i>
Activity 2.4. Monitor these zones to ensure that they are allowed to regenerate		<ul style="list-style-type: none"> Monitoring to begin once there is an agreement on the zones to be allowed to regenerate
Activity 2.5. Identify in a fully participatory manner pristine areas of Papyrus swamp covering 1,000 ha to be designated as Community Conservation Areas (CCAs), and carry out a baseline study of birds in these areas		<ul style="list-style-type: none"> Please refer to progress in Output 2 above
Activity 2.6. Provide advice and support as needed to communities managing CCAs		<ul style="list-style-type: none"> Support communities to plant 300ha of papyrus in degraded areas
Activity 2.7. Working in collaboration with Dominion, design a water control regime that ensures sufficient inflow to Lake Kanyaboli at all times of the year, and carry out a baseline study of cichlids in this lake		<ul style="list-style-type: none"> Baseline study of selected wildlife completed Planned: Implement recommendations of land use plan and strategic environmental assessment including water control regime that ensures sufficient inflow to Lake Kanyaboli
Activity 2.8. Implement the water control regime		<ul style="list-style-type: none"> Implement water control regime starting in October 2016

<p>Activity 2.9. Carry out end-of-project studies of wildlife and water quality to match the baseline studies described above</p>		<ul style="list-style-type: none"> Continue biodiversity and water quality monitoring that was already conducted in December 2014 and repeated in November 2015.
<p>Output 3. Poor people living around the Yala Delta are empowered to improve their livelihoods in ways that contribute to or are consistent with the long-term conservation of the delta's natural resources</p>	<ol style="list-style-type: none"> The total weight of high-quality protein (i.e. fish and meat) consumed by 100 of the poorest households in the area increases by 25% between baseline and the end of the project, as a result of the creation of fishponds for these households. Households around the delta have an average of five members each, and their gender balance is more or less even. Therefore, the fishponds will benefit approximately 250 males and 250 females. (change to: By the end of the project the weight of high-quality protein (i.e. fish and meat) consumed by 100 of the poorest households (500 people; 50% male, 50% female) in the area increases by 25% compared to the baseline) The income of another 100 poor households increases by an average of 15% between baseline and the end of the project, as a result of training these households receive in the creation and effective marketing of Papyrus products such as 	<ul style="list-style-type: none"> 10 CBO beneficiaries supported to establish 17 fishponds Capacity building is on-going, training has been conducted in entrepreneurship and business management, on-site training is conducted in fish farming based on needs, mentorship training is on-going for papyrus product development; the trained community guides are making progress indicated by; active participation in monthly birding (initially conducted once, now conducted at least twice a month), training in bird identification has also been on-going during bird walks. In addition, based on interest in building a career in Avitourism, 4 more community guides trained in fundamentals of ornithology <p>Planned: Consolidate livelihoods gains by supporting fishermen until fish are fully developed and if need be source fish markets</p> <p>26 SSG households already involved in papyrus product development and mentorship training ongoing for more households to be involved</p> <p>Planned: support papyrus product weavers to set up a workshop and retail outlet/office</p>

	<p>mats and baskets. These households will again consist of approximately 250 males and 250 females, but the training will be delivered primarily to the roughly 100 adult women they contain. (change to: By the end of the project 100 households (50% male; 50% female) increase their income from marketing Papyrus products by 15% compared to the baseline.)</p> <p>3. The total income generated by ecotourism in the delta increases by 25% between baseline and the end of the project, as a result of the training of 20 individuals from 20 different households as wildlife guides. At least six of these individuals will be women.</p>	<ul style="list-style-type: none"> • 20 community guides from Yala wetland further trained in wildlife guiding, avi-tourism, tourism administration & management; and supported to form a community based tourism organization. <p>Planned: Working with the county government of Siaya support community guides by marketing Yala Swamp as a tourist destination.</p>
Activity 3.1: Identify households to be provided with fishponds, and carry out a baseline study of diet in these households		<ul style="list-style-type: none"> • Details same as Output 3 above
Activity 3.2: Create fishponds		<ul style="list-style-type: none"> • Details same as Output 3 above
Activity 3.3: Identify households to be provided with training in the creation and marketing of high-value Papyrus products, and carry out a baseline study of income in these households		<ul style="list-style-type: none"> • Details same as Output 3 above
Activity 3.4: Deliver training in these areas		<ul style="list-style-type: none"> • Details same as Output 3 above)
Activity 3.5: Identify individuals to be provided with training in wildlife guiding, and carry out a baseline study of ecotourism activity and income in the delta		<ul style="list-style-type: none"> • Details same as Output 3 above)

Activity 3.6: Deliver training in this area	<ul style="list-style-type: none"> • Details same as Output 3 above)
Activity 3.7: Carry out end-of-project studies of diet and income to match the baseline studies described above	<ul style="list-style-type: none"> • End-of-project studies scheduled to start in October 2016
<p>Output 4. Lessons learned from the project are disseminated effectively to all relevant stakeholders</p>	<ol style="list-style-type: none"> 1. Findings and recommendations from the project are shared with the Inter-ministerial Technical Committee on Deltas, the National Environment Management Authority, the Office of the Prime Minister, and all other relevant bodies at least annually throughout the project (i.e. at the end of each project year) 2. Records of subsequent discussions within and among these target groups demonstrate that this dissemination work is effective and that the lessons and recommendations communicated are being taken into account during relevant policy formulation and decision-making processes <ul style="list-style-type: none"> • Recommendations from ecosystem services assessment shared on mail with County executives and technical officers • Dissemination of project results ongoing through the Nature Kenya newsletter and Kenya Birding magazine • Project activities were published in the Darwin Newsletter – February 2016 Issue <p>Recommendations of the Ecosystem Services Assessment have informed the Yala Swamp land use plan and strategic environmental assessment</p> <p>Planned: Complete land use plan and agree on management options for the Yala Swamp</p>
Activity 4.1: Compile findings and recommendations from the project at the end of each project year	<ul style="list-style-type: none"> • Completed
Activity 4.2: Present these to the Inter-ministerial Committee, the Ministry of Water, Environment and Natural Resources, NEMA and other key bodies through face-to-face meetings and other appropriate channels	<ul style="list-style-type: none"> • Presentation of findings and recommendations to relevant bodies to be done once activity 4.1 above is complete. Interministerial technical Committee and the county governments of Siaya and Busia are using the recommendations to prepare a land use plan for the Yala Swamp informed by a Strategic Environmental Assessment. • Planned: track land use planning process and its implementation

<p>Activity 4.3: Monitor records of discussions within and between these bodies, and the content of policy and planning documents, to ensure that the lessons shared are taken into account</p>	<ul style="list-style-type: none"> • See 4.2
<p>Activity 4.4: Carry out broader dissemination activities aimed at non-specialist audiences</p>	<ul style="list-style-type: none"> • Dissemination activities on-going with publication of project activity updates in the Nature Kenya monthly newsletter (July 2015, November 2015 Issues) and Kenya Birding Magazine (August 2015 Issue No. 9)
<p>Activity 4.5: Advocate to KWS for the designation of Yala swamp as a Ramsar site.</p>	<ul style="list-style-type: none"> • Discussions ongoing as part of the land use planning process including how the Kenya Wildlife Service (KWS) will support the county government and local stakeholders to set up a conservancy that will supplement the legally protected Lake Kanyaboli on jumpstarting the management planning process for designation of Yala as a Ramsar wetland of international importance.

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
<p>Impact: Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained in resources.</p>			
<p>Outcome: Key steps are taken to secure the future of Kenya's Yala Delta, recognizing both development and conservation needs, and to promote similar work in other Kenyan deltas.</p>	<ol style="list-style-type: none"> 1. The populations of key species are no lower at the end of the project than at baseline in areas where habitat is protected (i.e. 1,000 ha of pristine Papyrus stands, where monitoring will focus on birds, and Lake Kanyaboli, where monitoring will focus on cichlid fish). 2. The quality of the water flowing from the Yala Delta into Lake Victoria increases measurably between baseline and the end of the project, in terms of pollutant and sediment loads, due to increased 'watershed protection' upstream of the delta. 3. A total of 1,100 extremely poor people experience significant improvements in diet and/or increases in income between baseline and the end of the project. 4. Approximately half of these people will be male and half will be female, and details of the livelihood benefits they will derive from the project are provided below under Output 3. 5. A further 250,000 'delta-dependent' people benefit indirectly from the project, as it secures the long-term future of the natural resources on which they rely. 6. By the end of the project, policies 	<ol style="list-style-type: none"> 1. Reports from 'before and after' surveys of target species, as described 2. Reports from 'before and after' surveys of Papyrus birds and cichlid fish 3. Reports from 'before and after' assessments of water quality 4. Reports from 'before and after' surveys on diet and income, as specified under Output 3 below 5. Report produced at end of project (or section of overall final report) detailing long-term plans for the Yala Delta and specifying how these plans will benefit the 250,000 people who live around it 6. Policy and plan documents 	<p>Assumptions:</p> <ol style="list-style-type: none"> 1. Kenya remains politically stable throughout and beyond the project period 2. The Inter-ministerial Technical Committee on Deltas, and the Kenyan government more generally, remain supportive of a balanced and sustainable approach to delta management 3. National policies on safeguards and offsets remain supportive of corporate engagement in 'payment for ecosystem services' schemes, so that Dominion Farms Ltd. remains willing to collaborate in the project

	and plans governing the management of other Kenyan deltas incorporate lessons learned from the project clearly and explicitly.		
<p>Outputs:</p> <p>1. A clear, evidence-based 'business case' is developed for the sustainable management of the Yala Delta</p>	<p>1a. A detailed assessment of the ecosystem services provided by the delta is carried out, in consultation with local communities, by December 2014.</p> <p>1b. Based on the findings from this assessment, together with findings from other relevant work carried out previously, a 'business case' for the sustainable management of the delta is prepared by March 2015.</p> <p>This business case will show that a multi-use approach is preferable to wholesale conversion for farming for social and economic as well as ecological reasons, and will propose in detail how a multi-use solution should be achieved in practice</p>	<p>1a. Report on ecosystem services assessment</p> <p>Published paper on this assessment</p> <p>1b. 'Business case' document</p>	<ul style="list-style-type: none"> Assumptions same as above
<p>2. Vital wildlife habitat is restored and protected, in part by means of a 'payment for ecosystem services' scheme</p>	<p>2a. Bamboo and native trees are planted over an area of 100 ha within the Watershed Protection Zone along the Yala River upstream of the delta, as a result of incentives offered to 100 local farmers through a 'payment for ecosystem services' scheme. This planting will reduce harmful run-off into the river, provide habitat for wildlife, and create a source of fuel and construction materials, thus reducing pressure on the delta. It will be carried out at a rate of 50 ha per year during Years 2 and 3 of the project.</p> <p>2b. Degraded parts of the delta covering a total area of 1,000 ha are 'set aside' so</p>	<p>2a. Report on planting work, including maps and dated photographs</p> <p>2b. Report on regeneration zones, including maps and dated photographs</p> <p>2c. Report on Community Conservation Areas, including maps and dated photographs</p> <p>2d. Report on water control regime, including maps and dated photographs</p>	<ul style="list-style-type: none"> Assumptions same as above

	<p>that Papyrus is able to regenerate there naturally. These regeneration zones will be identified in consultation with all relevant stakeholders, and will be set aside by March 2015.</p> <p>2c. Pristine Papyrus stands covering a total area of 1,000 ha are designated as Community Conservation Areas, meaning that local communities have control over them but are also responsible for safeguarding them. The designation process will again be carried out in a participatory manner, and will be complete by March 2016.</p> <p>2d. A water control regime is established that ensures that flows into Lake Kanyaboli in the east of the delta, the main refuge in the area for threatened Lake Victoria cichlids, are sufficient to maintain the area of this lake. This regime will rely primarily or exclusively on existing control infrastructure, and will be in place by March 2016.</p>		
<p>3. Poor people living around the Yala Delta are empowered to improve their livelihoods in ways that contribute to or are consistent with the long-term conservation of the delta's natural resources</p>	<p>3a. The total weight of high-quality protein (i.e. fish and meat) consumed by 100 of the poorest households in the area increases by 25% between baseline and the end of the project, as a result of the creation of fishponds for these households. Households around the delta have an average of five members each, and their gender balance is more or less even. Therefore, the fishponds will benefit approximately 250 males and 250 females.</p>	<p>3a. Maps and photographs documenting fishpond creation Report documenting findings from 'before and after' studies of the diets of the households targeted</p> <p>3b. Reports from training workshops, including photographs Report documenting findings from 'before and after' studies of the incomes of the households targeted</p>	<ul style="list-style-type: none"> • Assumptions same as above

	<p>3b. The income of another 100 poor households increases by an average of 15% between baseline and the end of the project, as a result of training these households receive in the creation and effective marketing of Papyrus products such as mats and baskets. These households will again consist of approximately 250 males and 250 females, but the training will be delivered primarily to the roughly 100 adult women they contain.</p> <p>3c. The total income generated by ecotourism in the delta increases by 25% between baseline and the end of the project, as a result of the training of 20 individuals from 20 different households as wildlife guides. At least six of these individuals will be women.</p>	<p>3c. Reports from training workshops, including photographs Report documenting findings from 'before and after' study of ecotourism activity and income in the delta</p>	
<p>4. Lessons learned from the project are disseminated effectively to all relevant stakeholders</p>	<p>4a. Findings and recommendations from the project are shared with the Inter-ministerial Technical Committee on Deltas, the National Environment Management Authority, the Office of the Prime Minister, and all other relevant bodies at least annually throughout the project (i.e. at the end of each project year)</p> <p>4b. Records of subsequent discussions within and among these target groups demonstrate that this dissemination work is effective and that the lessons and recommendations communicated are being taken into account during relevant policy formulation and decision-making processes</p>	<p>4a. Records of communications with the Inter-ministerial Committee and other bodies</p> <p>4b. Publicly available records of discussions within and between these bodies – e.g. meeting minutes</p>	<ul style="list-style-type: none"> • Assumptions same as above

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)

Activity 1.1 :Conduct a start-up workshop to agree methodologies and provide training in protocols for the Ecosystem Service Assessment

Activity 1.2:Carry out consultations needed to assess ecosystem services (e.g. discussions about utilization of natural resources)

Activity 1.3: Carry out fieldwork needed to assess the ecosystem services provided by the delta (e.g. studies of water regulation and carbon storage)

Activity 1.4: Compile findings into a detailed report on ecosystem services, and summarize this report into a paper for submission to a peer-reviewed journal

Activity 1.5: Based on this report, produce a detailed 'business case' for presentation to Dominion and the relevant authorities

Activity 2.1: Develop a 'payment for ecosystem services' (PES scheme) scheme to incentivize farmers upstream of the delta to plant native trees and bamboo, and carry out a baseline study of selected wildlife in the area to be planted

Activity 2.2: Implement the PES scheme, providing advice and support to farmers as needed

Activity 2.3: Identify in a fully participatory manner degraded areas covering 1,000 ha to be set aside as Papyrus regeneration zones, and carry out a baseline study of selected wildlife (e.g. Papyrus endemics and Sitatunga) in these zones

Activity 2.4: Monitor these zones to ensure that they are allowed to regenerate

Activity 2.5:Identify in a fully participatory manner pristine areas of Papyrus swamp covering 1,000 ha to be designated as Community Conservation Areas (CCAs), and carry out a baseline study of birds in these areas

Activity 2.6: Provide advice and support as needed to communities managing CCAs

Activity 2.7: Working in collaboration with Dominion, design a water control regime that ensures sufficient inflow to Lake Kanyaboli at all times of the year, and carry out a baseline study of cichlids in this lake

Activity 2.8: Implement the water control regime

Activity 3.1: Identify households to be provided with fishponds, and carry out a baseline study of diet in these households

Activity 3.2:Create fishponds

Activity 3.3: Identify households to be provided with training in the creation and marketing of high-value Papyrus products, and carry out a baseline study of income in these households

Activity 3.4:Deliver training in these areas

Activity 3.5: Identify individuals to be provided with training in wildlife guiding, and carry out a baseline study of ecotourism activity and income in the delta

Activity 3.6: Deliver training in this area

Activity 3.7: Carry out end-of-project studies of diet and income to match the baseline studies described above

Activity 4.1: Compile findings and recommendations from the project at the end of each project year

Activity 4.2:Present these to the Inter-ministerial Committee, the Ministry of Water, Environment and Natural Resources, NEMA and other key bodies through face-to-face

meetings and other appropriate channels

Activity 4.3: Monitor records of discussions within and between these bodies, and the content of policy and planning documents, to ensure that the lessons shared are taken into account

Activity 4.4: Carry out broader dissemination activities aimed at non-specialist audiences

Activity 4.5: Advocate to KWS for the designation of Yala swamp as a Ramsar site.

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
6A	Number of people trained in tour guiding/questionnaire administration/advocacy/biodiversity monitoring/ leadership and governance/ wildlife guiding/entrepreneurship/installation of energy saving jikos, tree nursery establishment, papyrus planting	185 males and 128 females	Kenyan	83	230			
10	Number of strategies/protocols/guidelines/technical reports developed/drafted	33 males and 21 females	Kenyan	11 (Advocacy strategy, Strategy for livelihood support, Biodiversity monitoring protocol, Guidelines for papyrus product development, Draft of Ecosystems Services Assessment report, Participatory Rural Learning & Appraisal report,	10 (Land use planning framework, SEA scoping report, criteria for selection of community conservation areas, training manual for papyrus development, training manual for ecotourism, training manual for entrepreneurship, a paper towards development of a payment for ecosystem			

				Selection Criteria for: enumerators, tour guiding training participants, Ornithology training participants, papyrus product development training and fish pond site selection)	services, draft land use plan, draft strategic environmental assessment)			
6A	Number of people involved in collection of baseline information (enumerators)	16 males and 8 females	Kenyans	A total of 24 people (Baseline survey, Biodiversity assessment)				
14A	Number of stakeholders consultative meetings and/or workshops held	603 males and 410 females	Kenyans	16 (Ecosystems Services Assessment Workshop, Consultative meeting with the Siaya Governor- July 2014, Consultative meetings with County Executive Committee Members for (CEC) Tourism,	7 (Stakeholders meeting on Yala Swamp land use plan (August 2015); workshop on restoration of River Yala (October 2015); Site Support Group reconstitution workshop (November 2015); Inter-county Land use planning meeting (November 2015);			

				<p>Wildlife Conservation, CEC Agriculture, Livestock & Fisheries in July 2014, Consultative meeting with Governor in January 2015, County Consultative meeting to come up with a development strategy for Yala swamp, Consultative meetings in January 2015 with the County Executive Committee Members for (CEC) Environment, Water & Natural Resources, CEC Lands, Physical Planning & Housing, CEC Agriculture, Livestock & Fisheries,</p>	<p>Stakeholders meeting on land use plan (November 2015); fish ponds beneficiaries meeting (November 2015); papyrus product development workshops (May, June, and July 2015)</p>			
--	--	--	--	---	--	--	--	--

				Stakeholders meetings in Yala (1), Siaya (3), Bondo (1), Kakamega (1). Village meetings with community members for Participatory Rural Learning & Appraisal, County stakeholder meetings for Participatory Rural Learning & Appraisal)				
14B	Number of meetings held with decision makers	8 males & 2 females	Kenyans	10 (5 Meetings with Members of County Assembly (MCAs)- Usonga, Central Alego, East Yimbo, South West Alego, South East Alego, Meeting with the Siaya County Governor, 3 Meetings with	4 (2 meetings with county executives; 2 meetings with Inter-county steering committee)			

				the County Executive Committee Members for (CEC) Environment, Water & Natural Resources, CEC Lands, Physical Planning & Housing, CEC Agriculture, Livestock & Fisheries, Meeting with the National Environment Management Authority-NEMA to draft the Environment Management Plan for Yala swamp)				
23	Value of resources raised from other sources			\$99,219				

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)
Celebrating our environment through clean ups, tree planting and football	newsletter	Emily Mateche, July 2015	Female	Kenyan	Nature Kenya, Nairobi	Nature Kenya office*
Sustainable management of papyrus stock key to conservation of Yala Swamp	Newsletter	Emily Mateche, August 2015	Female	Kenyan	Nature Kenya, Nairobi	Nature Kenya office*
The value of traditional knowledge in Yala Swamp IBA monitoring	Newsletter	Emily Mateche, November 2015	Female	Kenyan	Nature Kenya, Nairobi	Nature Kenya office*
Birding for conservation in Yala Swamp	Magazine	Emily Mateche, August 2015	Female	Kenyan	Nature Kenya, Nairobi	Nature Kenya office*
The mounting threat of burning papyrus at Yala Swamp	Magazine	Simon Shati, August 2015	Male	Kenyan	Nature Kenya, Nairobi	Nature Kenya office*
Balancing development and conservation in Kenya's largest freshwater wetland – Yala Swamp	Newsletter	Emily Mateche, February 2016	Female	Kenyan	The Darwin Initiative, United Kingdom	http://www.darwininitiative.org.uk/assets/uploads/2016/02/February-2016-SDG-Newsletter-FINAL.pdf *