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Project Location	Kenya, Taita Taveta County, Coast Province
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GHG Accounting/Crediting Period	01 January 2005 – 31 December 2034; 30-year total period
Monitoring Period of this Report	01 January 2015 – 31 December 2017
History of CCB Status	CCB Validation: 22 December 2009 CCB Verification M1: 3 February 2011 CCB Verification M2: 29 November 2012 CCB Verification M3: 23 May 2013 CCB Verification M4: 01 November 2016
The Edition of the CCB Standards Being Used for this Verification	This project is being verified under the 2nd Edition of the CCB Standard.
Gold Level Criteria	The Kasigau Corridor REDD+ Project Phase I - Rukinga Sanctuary has achieved Gold Level for both its provision of Climate Change Adaptation Benefits and its Exceptional Biodiversity Benefits. **Climate Change Adaptation Benefits** There is overwhelming evidence in the literature that there will be significant negative effects from climate change and increased climate variability on the communities in the Project Zone. Traditionally, these communities have depended heavily on subsistence agriculture in an area that is one of the least fertile areas for agriculture in Kenya. In addition, the rains have failed far more frequently in recent years, and even when they have come, have been unpredictable. This has led to missed opportunities for sowing seeds at the appropriate time within the growing season, which would have ensured a harvest even in seasons with low rainfall. These issues are expected to increase given the likelihood of more severe climate change impacts in the future. The resulting food insecurity causes farmers to continue shifting, clearing more land in the hope they will find a better plot on which the

variable and highly localized rains will fall. In the baseline scenario, we therefore anticipate even higher deforestation rates in the future. Another detrimental impact of failed crops is the triggering of increases in poaching for bushmeat. The native wildlife populations are drought specialists. However, they do experience higher stress levels in years with lower rainfall and higher median temperatures. This in turn leads to wildlife populations with less resiliency to increased stress from poaching.

As of this Monitoring Period the Project has implemented the following activities:

- Reduce community dependence on livestock and land through alternative IGAs, promote cultivation of drought resistant crops, improve storage facilities and management of crops, water harvesting and water storage, raise awareness of danger of fires.
- Increase support of local institutional structures including the norms and rules of governance to help develop adaptive strategies, increase literacy levels, diversification of livelihood activities and income generation projects, involve women to a greater degree in decision making processes, increase general participation in decision making at the local level.
- Help to maintain intact and interconnected ecosystems through protection of ecosystems, ensure landscape connectivity to allow migration, regeneration activities using indigenous, drought-resistant trees.

Exceptional Biodiversity Benefits

- KCRPI has a resident population of Grevy's zebra (*Equus grevyi*) which is an IUCN Red List – Endangered. In fact, the 35-60 individuals in Rukinga based on 2015 estimates may constitute up to 2-3% of the global population.
- KCRPI is part of the home range of at least two packs of African Wild Dogs (*Lycaon pictus*) (Endangered) with active breeding dens recorded on the sanctuary.
- KCRPI also supports several vulture species including White-backed vulture *Gyps africanus* (Critically Endangered) and Lappet-faced vulture *Torgos tracheliotos* (Endangered).
- KCRPI has stable resident populations of several other High Conservation Value (HCV) species classified as Vulnerable including cheetah (*Acinonyx jubatus*), lion (*Panthera leo*), African elephant *Loxodonta africana*, Secretarybird *Sagittarius serpentarius* and Martial eagle *Polemaetus bellicosus.*
- The larger Project Zone contains the Taita Hills which are part of the Eastern Arc Mountain Global Hotspot as defined by Conservation International, and harbour two Critically Endangered bird species: Taita Apalis (*Apalis fuscigularis*) and Taita Thrush (*Turdus helleri*).
- During this monitoring period the primary activity implemented providing exceptional biodiversity benefits is the protection of the Project Area from deforestation and degradation. This has preserved and enhanced the native habitat for the biodiversity

	present. This Project Area also provides key connectivity for biodiversity, linking important habitat regions, and providing a protected route that reduces conflict with area communities. • Additional activities implemented include the provision of and maintenance of water holes, providing vital sources of water to the biodiversity of the Project Area in this drought stricken region.

1.1 Unique Project Benefits

Outcome or Impact	Achievements during the Monitoring Period	Section Reference	Achievements during the Project Lifetime
1) GLOW (Girls Leading our World)	Held in school trainings on sexual health and sanitation: 15 school meetings held, each attended by 30-50 students	2.1.1	Held in school trainings on sexual health and sanitation: 15 school meetings held, each attended by 30-50 students
2) Hadithi	Provided marketing and sales support to 31 craft groups, comprising over 800 women. About USD100,000 paid to the groups from 2015-2017	2.1.1	Provided marketing and sales support to 31 craft groups, comprising over 800 women. About USD100,000 paid to the groups from 2015-2017
3) Eco-tourism	4-10 staff, almost 500 guests annually to Kivuli Camp, and a net profit of USD 3000 and 7000 in 2016 and 2017	2.1.1	4-10 staff, almost 500 guests annually to Kivuli Camp, and a net profit of USD 3000 and 7000 in 2016 and 2017
4) Eco-charcoal production	8 permanent staff, setting up a long-term monitoring system for a rotational harvest plan at new production site. Leveraging R&D funds towards scaling up	2.1.1	Pioneered and tested the sustainable charcoal production using finger-sized twigs. Now on the verge of scaling up production to commercial level

1.2 Standardized Benefit Metrics

Category	Metric	Achievements during Monitoring Period	Monitoring Report Section Reference	Achievements during the Project Lifetime
GHG emission reductions & removals	Net estimated emission removals in the project area, measured against the without-project scenario	0		0
	Net estimated emission reductions in the project area, measured against the without-project scenario	744,707 tCO_2e	3.2.4.5	2,751,773 tCO_2e
Forest[1] cover	For REDD[2] projects: Number of hectares of reduced forest loss in the project area measured against the without-project scenario	Not Applicable – Project baseline model does not calculate hectares		Not Applicable – Project baseline model does not calculate hectares
	For ARR[3] projects: Number of hectares of forest cover increased in the project area measured against the without-project scenario	Not Applicable		Not Applicable
Improved land management	Number of hectares of existing production forest land in which IFM[4] practices have occurred as a result of the project's activities, measured against the without-project scenario	Not Applicable		Not Applicable
	Number of hectares of non-forest land in which improved land management has occurred as a result of the project's activities, measured against the without-project scenario	Not Applicable		Not Applicable

[1] Land with woody vegetation that meets an internationally accepted definition (e.g., UNFCCC, FAO or IPCC) of what constitutes a forest, which includes threshold parameters, such as minimum forest area, tree height and level of crown cover, and may include mature, secondary, degraded and wetland forests (*VCS Program Definitions*)

[2] Reduced emissions from deforestation and forest degradation (REDD) - Activities that reduce GHG emissions by slowing or stopping conversion of forests to non-forest land and/or reduce the degradation of forest land where forest biomass is lost (*VCS Program Definitions*)

[3] Afforestation, reforestation and revegetation (ARR) - Activities that increase carbon stocks in woody biomass (and in some cases soils) by establishing, increasing and/or restoring vegetative cover through the planting, sowing and/or human-assisted natural regeneration of woody vegetation (*VCS Program Definitions*)

[4] Improved forest management (IFM) - Activities that change forest management practices and increase carbon stock on forest lands managed for wood products such as saw timber, pulpwood and fuelwood (*VCS Program Definitions*)

Category	Metric	Achievements during Monitoring Period	Monitoring Report Section Reference	Achievements during the Project Lifetime
Training	Total number of community members who have improved skills and/or knowledge resulting from training provided as part of project activities	426 (includes school groups) visiting Greenhouse	2.1.1	>1,0000
	Number of female community members who have improved skills and/or knowledge resulting from training provided as part of project activities of project activities	About 200 (including two Women's Groups that have established community greenhouses)	2.1.1	>500
Employment	Total number of people employed in of project activities,[5] expressed as number of full time employees[6]	326 (of which close to 90% are from the Project Zone and Taita Taveta County)	2.1.1, 4.3	Long-term average of about 305 employees at the KCRPI with close to 90% always local
	Number of women employed in project activities, expressed as number of full time employees	87 (about 27%)	2.1.1	Long-term average between 20 and 30% of workforce
Livelihoods	Total number of people with improved livelihoods[7] or income generated as a result of project activities	Approximately 33% of households indicate they have received some benefit from the KCRPI including Bursary, Employment and Water	2.1.1	Approximately 33% of households indicate they have received some benefit from the KCRPI including Bursary, Employment and Water

[5] Employed in project activities means people directly working on project activities in return for compensation (financial or otherwise), including employees, contracted workers, sub-contracted workers and community members that are paid to carry out project-related work.

[6] Full time equivalency is calculated as the total number of hours worked (by full-time, part-time, temporary and/or seasonal staff) divided by the average number of hours worked in full-time jobs within the country, region or economic territory (adapted from UN System of National Accounts (1993) paragraphs 17.14[15.102];[17.28])

[7] Livelihoods are the capabilities, assets (including material and social resources) and activities required for a means of living (Krantz, Lasse, 2001. *The Sustainable Livelihood Approach to Poverty Reduction*. SIDA). Livelihood benefits may include benefits reported in the Employment metrics of this table.

Category	Metric	Achievements during Monitoring Period	Monitoring Report Section Reference	Achievements during the Project Lifetime
	Number of women with improved livelihoods or income generated as a result of project activities	Two Women groups with greenhouses for agri-business	2.1.1	Two Women groups with greenhouses for agri-business
Health	Total number of people for whom health services were improved as a result of project activities, measured against the without-project scenario	Voi Diagnostic Lab: ≈36,000 patients from 2015-2017	2.1.1	Voi Diagnostic Lab: ≈46,000 – at least 1000 patients per month since start in March 2014
	Number of women for whom health services were improved as a result of project activities, measured against the without-project scenario	Based on County statistics, about 50% of those seeking services at the Lab would be women, and all the GLOW participants	2.1.1	Based on County statistics, about 50% of those seeking services at the Lab would be women, and all the GLOW participants
Education	Total number of people for whom access to, or quality of, education was improved as a result of project activities, measured against the without-project scenario	• Bursary recipients: 2,899 • Classroom: 1 with 40 students • Furniture: in 1 school, ≈40 students	2.1.1	• Bursary recipients: 5,432 • Classrooms: 7 each with 40 students • Furniture: in 11 schools, each ≈40 students
	Number of women and girls for whom access to, or quality of, education was improved as a result of project activities, measured against the without-project scenario	For bursaries, almost half of the recipients were girls	2.1.1	For bursaries, about 47% of the recipients have been girls
Water	Total number of people who experienced increased water quality and/or improved access to drinking water as a result of project activities, measured against the without-project scenario	Almost 3% of households surveyed indicated they received some water-related benefit from KCRP like Dams and Rock Catchments;	2.1.1	Almost 3% of households surveyed indicated they received some water-related benefit from KCRP like Dams and Rock Catchments;

Category	Metric	Achievements during Monitoring Period	Monitoring Report Section Reference	Achievements during the Project Lifetime
		2 community water projects: ≈2000 people each 2 schools with improved water: ≈350 students each		13 community water projects with more than 10,000 people 5 schools with improved water: ≈300-350 students each
	Number of women who experienced increased water quality and/or improved access to drinking water as a result of project activities, measured against the without-project scenario	Based on County statistics, about 50% of the water users in the community and schools would be women and girls	2.1.1	Based on County statistics, about 50% of the water users in the community and schools would be women and girls
Well-being	Total number of community members whose well-being[8] was improved as a result of project activities	In addition to the livelihoods, health, education and water-related improved wellbeing above, there are also three community organs (LCC, Bursary Committees and Community-based Organizations) that have either been created or strengthened through the KCRP. Through these committees, the communities have a stronger sense of self-determination	2.1.1, 4.1.2	In addition to the livelihoods, health, education and water-related improved wellbeing above, there are also three community organs (LCC, Bursary Committees and Community-based Organizations) that have either been created or strengthened through the KCRP. Through these committees, the communities have a stronger sense of self-determination

[8] Well-being is people's experience of the quality of their lives. Well-being benefits may include benefits reported in other metrics of this table (e.g. Training, Employment, Health, Education, Water, etc.), but could also include other benefits such as empowerment of community groups, strengthened legal rights to resources, conservation of access to areas of cultural significance, etc.

Category	Metric	Achievements during Monitoring Period	Monitoring Report Section Reference	Achievements during the Project Lifetime
	Number of women whose well-being was improved as a result of project activities	At least 33% of the committee members are women	2.1.1	At least 33% of the committee members are women
Biodiversity conservation	Change in the number of hectares significantly better managed by the project for biodiversity conservation,[9] measured against the without-project scenario	30,168.66	5	30,168.66
	Number of globally Critically Endangered or Endangered species[10] benefiting from reduced threats as a result of project activities,[11] measured against the without-project scenario	4 – Grevy's zebra (breeding), African wild dog (breeding), White-backed and Lappet-faced vultures)	5.1.2	4– Grevy's zebra (breeding), African wild dog (breeding), White-backed and Lappet-faced vultures)

1.3 Project Summary

The Kasigau Corridor REDD+ Project Phase I – Rukinga Sanctuary is estimated to avoid the emission of over 7 million metric tonnes of CO_2e that would have been emitted due to slash and burn deforestation over the 30-year project life. The Project is located in Southeastern Kenya, in Taita Taveta County, Coast Province. It is approximately 150 km northwest of the city of Mombasa. The Project Area covers all the land known as Rukinga Sanctuary, with a total of 30,168.66 ha (74,516 acres). The land was originally known as LR 12263, which had historically been reduced by subdivisions 12263/1 and 12263/2 at dates prior to the start date of this project. The Project Start Date is January 1st, 2005. The project crediting period (GHG accounting period) started on January 1st, 2005 and will end on December 31st, 2034. The Project has a lifetime of 30 years. This fifth VCS monitoring period (project implementation period) (M_5) is the third CCB monitoring period and started on January 1st, 2015 and ended on December 31st, 2017. This document is a summary of the Project Monitoring Report/Project Implementation Report v2, issued on May 11th, 2018.

The Kasigau Corridor REDD+ Project Phase I – Rukinga Sanctuary aims to leverage the financial support of the global carbon marketplace to achieve the following goals:

[9] Biodiversity conservation in this context means areas where specific management measures are being implemented as a part of project activities with an objective of enhancing biodiversity conservation.

[10] Per IUCN's Red List of Threatened Species

[11] In the absence of direct population or occupancy measures, measurement of reduced threats may be used as evidence of benefit

- Prevent the gross CO_2e emission of approximately 7,000,000 tonnes over the 30-year crediting period of the Project by preventing any further deforestation of the Project Area and surrounding Project Zone.
- Add financial sustainability to the expansion of the world class conservation project that has been protecting biodiversity, avoiding deforestation on Rukinga Sanctuary and providing substantial community development benefits in the Project Area, so that we may continue through the project crediting period and hopefully well beyond to protect the area's magnificent biodiversity.
- Prevent the loss of spectacular biodiversity and protect the area as a wildlife corridor for important indigenous species such as African elephant (Loxidonta africana), Cheetah (Acinonyx jubatus), Grevy's zebra (Equus grevyi), African hunting dog (Lycaon pictus), Lion (Panther leo) and 50 other large mammal species both by direct protection of our Rangers within the Project Area and through our influence in the Project Zone.
- Expand the influence of Wildlife Works into the surrounding dryland forests within the Kasigau Corridor that are under similar threat to Rukinga Sanctuary. These ranches are generally community owned, and not currently in a position to make the investments that Wildlife Works has made in biodiversity protection by co-venturing with those community landowners in Phase II of the Kasigau Corridor Project.
- Manage the protection of 30,168.66 ha of dryland forest in the Kasigau Corridor to maximize biodiversity values and provide substantial co-benefits to community members who in some cases have never received any financial income from their forested lands.
- Invest the proceeds of the carbon project back into alternative livelihood creation for people in the surrounding areas so that pressure on the forest is removed.
- Ensure long term community support for the conservation of the forests and wildlife through educational outreach in issues such as alternatives to slash and burn etc.
- Expand our organic greenhouse to implement community-based nurseries to provide agricultural and fuelwood growing alternatives that remove the need of the local people to deforest the land and surrounding areas.
- Identify, educate and implement community woodlots in the community lands with the aim of avoiding deforestation and enriching areas in the Project Area.
- Jojoba – initializing a campaign to introduce jojoba as a non-conflict cash crop into the existing largely agricultural communities.
- Implement education and awareness programs through existing and new women's groups, schools and other existing community forums such as Marungu Hills Environment Association.
- With increasing biodiversity, research, construct and market Kasigau Corridor ecotourism projects.
- Expand our innovative Eco-charcoal project to provide a viable cost-effective substitute to firewood and lump wood-based bush charcoal to meet the fuel consumption needs in the local communities surrounding the Kasigau Corridor REDD+ Project.

The Kasigau Corridor REDD+ Project Phase I - Rukinga Sanctuary has achieved Gold Level for both its provision of Climate Change Adaptation Benefits and its Exceptional Biodiversity Benefits.

Climate Change Adaptation Benefits

There is overwhelming evidence in the literature that there will be significant negative climate change and climate variability impacts on the communities in the Project Zone. Traditionally these communities have depended heavily on subsistence agriculture in an area that maybe one of the least fertile areas for agriculture in Kenya. In addition, the rains have failed far more frequently in recent years, and even when they have come have been unpredictable. This had led to missed opportunities for sowing seeds at the right time in the season, which would ensure a harvest even in seasons with a low amount of rain. This problem will most

likely only increase given the likelihood of more severe climate change impacts in the future. The result of the resulting food insecurity causes farmers to continue moving, clearing more land in the hopes that they will find a better plot on which the variable and highly localized rains will fall. In the Baseline scenario, we therefore anticipate even higher deforestation rates in the future. The other impact of failed crops is that it triggers an increase in poaching of bushmeat. The native wildlife populations are drought specialists, however, they do experience higher stress levels in years with lower rainfall and higher median temperatures. This means the wildlife populations may be less able to withstand increased stress from poaching.

Exceptional Biodiversity Benefits

- Rukinga has a resident population of Grevy's zebra (*Equus grevyi*) which is an IUCN Red List – Endangered. In fact Rukinga may have up to 3% of the global population, which is estimated at 750 in 2008.
- The Rukinga Sanctuary is part of the home range of a pack of African Hunting Dogs (*Lycaon pictus*) that have been photographed on the sanctuary - which is IUCN Red List – Endangered.
- Rukinga has a significant resident population of both cheetah (*Acinonyx jubatus*) and lion (*Panthera leo*) that are IUCN Red List – Vulnerable. The population is believed to be greater than 30 individuals. If the greater Project Zone is included then the populations are definitely greater than 30.
- The Project Area is part of the Eastern Arc Mountain Global Hot Spot as defined by Conservation International, and in the Project Zone, outside the Project Area, are several other qualifying species such as:
  - Taita Apalis (*Apalis fuscigularis*) – IUCN Critically Endangered
  - Taita Thrush (*Turdus helleri*) – IUCN Critically Endangered

During the current M_5 monitoring period (January 1st, 2015 – December 31st, 2017) through the continued protection of the Project Area the Project had a gross emission of 744,707 t CO2e, for a total of 2,751,773 t CO_2e gross emission reduction since the Project Start Date.

The Project ecosystem is home to a fantastic diversity of mammals (over 50 species of large mammal, more than 20 species of bats), birds (over 300 species) and important populations of IUCN Red List species such as Grevy's zebra (*Equus grevyi*), Cheetah (*Acinonyx jubatus*), Lion (*Panthera leo*) as well as over 500 African elephants (*Loxidonta africana*) seasonally. The Project has continued to protect and enhance this biodiversity through anti-poaching patrols by the Wildlife Works Rangers and specific human-wildlife conflict alleviation programs. During this monitoring period the Wildlife Works Rangers were held at a force of about 100 individuals, about 10% of which are females. Also, a second gyrocopter was added to assist in patrolling the Project Area. The data during this monitoring period has shown a decline in poaching and in general incidents in the Project Area, suggesting that the patrolling, especially the increased aerial patrolling, is having a significant effect.

Since the Project Start the Project has provided significant community benefits. This includes serving as major source of local employment through both the clothing Eco-Factory, the Wildlife Works Rangers and general Project employment. Additionally, the Project has provided thousands of school bursaries to community children each year, and provided significant funding for school building construction, renovation and improvements to improve the learning facilities of community children. The Project has developed several programs for the growth and supply of both fruit trees and indigenous tree species for the re-forestation of the area. The Project has additionally started several other programs to supply employment and reduce resource pressure on the Project Area, such as the soap factory and the Eco-Charcoal program. During the current M_5 monitoring period (January 1st, 2015 – December 31st, 2017) the Project has provided significant community benefits. As a summary of a small number of these benefits, this includes providing full time permanent employment to over 300 people during the monitoring period, with many additional people hired on a casual

daily basis. The Project has provided significant educational community benefits, including school bursary's to over 62 primary, secondary and University students, for a total expenditure of about KES 5,393,601 during the monitoring period. Over KES 14 million was spent on community projects selected by the LCCs. During this monitoring period the Project also funded 5 community water projects and provided over 33,493 fruit and indigenous tree species to be planted in the communities. Providing education primarily to local girls on sexual health and personal sanitation. Lastly, WWC has provided sales and marketing assistance to 30 women's groups and 1 disabled people's group to build their capacity in the production and sale of crafts. During the monitoring period, they received almost KES 1 million in sales.