

# CCB Project Implementation Report

## Natural High Forest Rehabilitation Project on degraded land of Kibale National Park, Uganda



|                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project Name                                            | Natural High Forest Rehabilitation Project on degraded land of Kibale National Park, Uganda                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Project Location                                        | Kabarole district, Uganda                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Project Proponent                                       | Face the Future. Contact: Martijn Snoep, +31202170370, m.snoep@facethefuture.com<br>Uganda Wildlife Authority. Contact: Wilfred Chemutai, +256775400517, chemutaikapture@yahoo.com                                                                                                                                                                                                                                                                                                                                                       |
| Auditor                                                 | RINA Services. Contact: Rita Valoroso, +390106021711, Rita.Valoroso@rina.org                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Project Start Date                                      | 15 <sup>th</sup> May 1994                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| GHG accounting period and lifetime                      | GHG accounting period: 1 <sup>st</sup> January 2009 to 31 <sup>st</sup> December 2068<br>Project lifetime: 15 <sup>th</sup> May 1994 to 31 <sup>st</sup> December 2068                                                                                                                                                                                                                                                                                                                                                                   |
| Project Implementation Period and GHG Monitoring Period | 2 <sup>nd</sup> January 2011 to 1 <sup>st</sup> March 2014                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| CCB Status History                                      | Undergoing initial validation and verification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| CCB Standards Edition Used                              | CCB Standards, Third Edition, December 2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| CCB Benefits Summary                                    | The project has planted an area of 373 hectares with a total of about 150,000 indigenous tree seedlings. The project has continued to carry out fire protection measures with an average of 34 kilometers of firelines maintained each year. As part of the exotic eradication strategy the project has removed or debarked about 16,000 trees. The planting and maintenance activities have created on average 260 jobs per month. The project has measured the dispersion of 19 indigenous tree species in the permanent sample plots. |
| Gold Level Criteria                                     | Biodiversity: the project has planted 373 hectares of forest that potentially develops into High Conservation Value Forest. The project has maintained the areas planted and regenerated since 1994, which have developed into a closed canopy forest, providing a habitat for important forest species. The forest has been established as part of the wider Kibale National Park landscape that holds High Conservation Value Forest.                                                                                                  |
| Date of PIR Completion                                  | 23 November 2015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| PIR Version Number                                      | V2.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Expected Verification Schedule                          | 25 – 29 May 2015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |



## 1 Introduction

Data have been collected based on the CCB Monitoring Plan for the UWA-Face project. This Project Implementation Report includes the results for the monitoring variables related to community and biodiversity. The carbon monitoring results (covering the Climate Section of the CCB Standards) are covered in a separate Carbon Monitoring Report 2011 – 2014. The CCB Monitoring Plan has been devised in such a way that it covers all the relevant indicators for project implementation activities and processes and for project impacts. All other relevant information is included in the PDD and there are no deviations applicable. Therefore, this report does not provide new information separately for all the CCB Standards indicators.

## 2 Addressing the Human Wildlife Conflict

The presence of the National Park with its wildlife and the cultivation of crops up to the boundary of the park leads to crop raiding incidences of wildlife. This is mainly caused by elephants. Two interventions have been identified to address the human wildlife conflict. The most important solution is the creation of elephant trenches along the park boundary. The Park management has experience with realising those trenches in collaboration with the local community. The second solution is planting crops that are not attractive for wildlife (unpalatable crops), e.g. tea. Up to now no unpalatable crops have been planted along the boundary of the project area. This is part of the future activities of the project. Elephant trenches have partly been funded by the project and the project will continue to do so (see the UWA-Face Plan of Activities 2015 – 2024).

Since 2008, UWA staff monitors human-wildlife conflict by collecting data on the crop raiding incidents that are reported by the villagers around the borders of Kibale National Park, including the borders of the project area. Till date, there is however no complete list of villages/settlements (which can sometimes be just a couple of dwellings) that are present in close proximity of the park and moreover their coordinates are not yet all known. Also as there seems to be a relation between human population density and human-wildlife conflict, an estimation of the number of people living in a village/settlement may provide better insight in the underlying dynamics (see PDD section CM2.1). Furthermore, in some cases problems occur with natural obstacles (i.e. swamps, rocks etc.) and trench maintenance, which can undermine the effectiveness of the trenches. The quality of trenches and maintenance is monitored to function as a management tool, guiding maintenance prioritisation and application of other wildlife averting strategies.

In future, to ensure effective monitoring of the effectiveness of established trenches and the planting of unpalatable crops as well as their joint effects, a data will be collected of: the location of established trenches, the location of planted crops, the weak spots in the trenches, location of surrounding villages and associated estimates of human population size.

| Objectives                                                                                                                                                              | Indicators                                   | Result              | Comment                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|---------------------|---------------------------------|
| By 2024, 10% of the H/H along the park boundary near the project area would have planted un palatable crops to reduce human wild life conflict                          | -No. of awareness meetings and training held | 0                   | Activity is not yet implemented |
|                                                                                                                                                                         | -No. of seedlings procured by H/H.           | 0                   | Activity is not yet implemented |
|                                                                                                                                                                         | -No. of crop raiding incidences reported     | see separate tables |                                 |
| By 2024, 70% of the park boundary where people are living along the project area, should have effective elephant deterrent trenches to contain animals in the Protected | -No. of meetings held with communities       | 4                   |                                 |
|                                                                                                                                                                         | -No. of people employed to dig the trench    | 150                 |                                 |

|                                                     |                                            |                    |  |
|-----------------------------------------------------|--------------------------------------------|--------------------|--|
| Area in order to reduce the Human Wildlife Conflict | -No. of kilometres of trenches dug         | 30                 |  |
|                                                     | -No. of kilometres of trenches maintained. | 28                 |  |
|                                                     | -No. of crop raiding incidences reported   | see separate table |  |

Number of crop raiding incidences around the project area in the period 2008 – 2014.

| Year | Elephants | Baboons | Chimps | Lions | Others |
|------|-----------|---------|--------|-------|--------|
| 2008 | 8         | 0       | 4      | 2     | 0      |
| 2009 | 25        | 1       | 1      | 0     | 0      |
| 2010 | 17        | 0       | 1      | 0     | 0      |
| 2011 | 29        | 0       | 1      | 0     | 0      |
| 2012 | 74        | 1       | 4      | 4     | 1      |
| 2013 | 92        | 0       | 0      | 0     | 0      |
| 2014 | 61        | 3       | 0      | 0     | 1      |

Length of trenches dug and maintained along the project area (expressed in kilometres).

| Year  | Trench dug | Trench maintained |
|-------|------------|-------------------|
| 2004  | 2          |                   |
| 2005  | 6          | 2                 |
| 2007  | 10         | 6                 |
| 2008  | 6          | 10                |
| 2009  | 6          | 10                |
| Total | 30         | 28                |

Crop raiding incidences between 2011 and 2014 by elephants in parishes along the project area borders

| Parish      | Total incidences | Incidences with trench present | Incidences with no trench present | % of parish with trench along the park border    | Year trench established (+ quality comments) |
|-------------|------------------|--------------------------------|-----------------------------------|--------------------------------------------------|----------------------------------------------|
| Isunga      | 55               | 46                             | 9                                 | 95%                                              | 2007 (poor quality) and 2008                 |
| Nyabweya    | 1                | 1                              | 0                                 | 98%                                              | 2008                                         |
| Kadindimo   | 5                | 0                              | 5                                 | no need for trenches, a hill is blocking passage | n.a.                                         |
| Rwimi       | 14               | 0                              | 14                                | 0%                                               | n.a.                                         |
| Kakooga     | 20               | 0                              | 20                                | 10%                                              | n.a.                                         |
| Bigodi      | 8                | 1                              | 7                                 | 50%                                              | 2010                                         |
| Bujongobe   | 33               | 33                             | 0                                 | 95%                                              | 2008 and 2010                                |
| Rugonjo     | 23               | 14                             | 9                                 | 60%                                              | 2007 (partly established), 2008 and 2010     |
| Kyanbandara | 58               | 0                              | 58                                | 0%                                               | n.a.                                         |
| Busingye    | 0                | 0                              | 0                                 | 0%                                               | n.a.                                         |
| Kiziba      | 32               | 29                             | 3                                 | 40%                                              | 2008 and 2008 (partly established)           |
| Rwenkuba    | 0                | 0                              | 0                                 | 0%                                               | n.a.                                         |

|       |     |     |     |               |     |
|-------|-----|-----|-----|---------------|-----|
| Total | 249 | 124 | 125 | Average = 37% | n.a |
|-------|-----|-----|-----|---------------|-----|

### 3 Revenue sharing funds for income generating projects for communities

The project aims to support income generating projects for local communities. The funding will be based on the revenues from the sale of carbon credits. Examples of these kind of projects are keeping of animals (goats, chicken, pigs), handicraft projects and ecotourism activities. The sharing of revenues from carbon credits starts in 2015 and proposals will be considered during the coming period. Through the project funding has been made available to create shallow wells and protected springs in the period 2007 – 2009. Other activities were funded through, but not as part of the revenue sharing of the project. These activities include trench digging and maintenance and goat rearing. Goat rearing was supported in two parishes of Nkongoro and Kyabandara.

| Objectives                                                                                                                                          | Indicators                      | Results | Comment                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------|--------------------------------|
| Fund income generating projects for community groups along the boundary of the project area in the period 2015 – 2024 for a total value of 280M UGX | - No. of proposals approved     | 0       | Activities not yet implemented |
|                                                                                                                                                     | - Value of proposals approved   | 0       | Activities not yet implemented |
|                                                                                                                                                     | - No. of projects implemented   | 0       | Activities not yet implemented |
|                                                                                                                                                     | - Value of projects implemented | 0       | Activities not yet implemented |

| Parish    | Villages     | Shallow wells | Protected Spring |
|-----------|--------------|---------------|------------------|
| Bujongobe | Mabono       | 1             |                  |
|           | Kyagagunga   | 2             |                  |
|           | Kachamakaido | 1             |                  |
| Bigodi    | Nyabubale    | 1             |                  |
| Rurama    | Kyagabusi    | 1             |                  |
|           | Kaitanjojo   | 1             |                  |
|           | Rwetera      | 2             |                  |
| Isunga    | Isunga       |               | 1                |
|           | Iruhura B    |               | 1                |
| Nyabweya  | Nyabweya B   |               | 1                |
|           | Nyabweya C   | 1             |                  |
|           | Nyabweya A   |               | 1                |
|           | Kanyante     |               | 2                |
| Total     |              | 10            | 6                |

## 4 Illegal extraction of resources inside the national park

| Objectives                                                         | Indicators                              |
|--------------------------------------------------------------------|-----------------------------------------|
| By 2024, have an effective trench dug adjacent to the project area | See Human wildlife conflict focal issue |
| Protection against poaching and overextraction of NTFP's           | See table below                         |

|                                                    | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------------------------------------------|------|------|------|------|------|
| Poachers arrested                                  | 21   | 12   | 0    | 9    | 4    |
| Traps discovered                                   | 278  | 279  | 179  | 345  | 329  |
| Arrests for firewood, polewood and other resources | 22   | 8    | 27   | 66   | 34   |
| Agreements (MOU) with communities for resource use | 2    | 3    | 2    | 2    | 3    |
| No. of written requests for resource use approved  | 0    | 0    | 0    | 10   | 2    |

No records of written requests for resources are available before 2013.

## 5 Wildfires

Fires are especially a threat to the young planted compartments. When the elephant grass is still abundant within the compartment, it's prone to fire coming in from outside. The data on fire management activities are provided in the tables below.

| Objectives                                                                                              | Indicators                                              | Result              | Comment                        |
|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------|---------------------|--------------------------------|
| To have proper elephant deterrent trenches dug in 12 neighbouring parishes by the year 2024.            | See Human wildlife conflict focal issue                 |                     |                                |
| To support establishment of woodlots at household in the 12 neighbouring Parishes by 2024.              | -No. of households with woodlots from the project       | 0                   | Activities not yet implemented |
|                                                                                                         | -No. of seedlings distributed by project                | 0                   | Activities not yet implemented |
|                                                                                                         | -No. of people trained in woodlot management by project | 0                   | Activities not yet implemented |
|                                                                                                         | -No. of wildfire incidences                             | See separate table, |                                |
| By 2024 external fire lines to be opened and maintained along the fire risky areas of the project area. | -Length of fire lines established and maintained.       | See separate table  |                                |
|                                                                                                         | -No. of fires incidences reported in the project area.  | See separate table  |                                |

### 5.1 Length of firelines established and maintained

| Year | 2010 | 2011 | 2012 | 2013 | 2014 |
|------|------|------|------|------|------|
|------|------|------|------|------|------|

|             |    |    |    |    |    |
|-------------|----|----|----|----|----|
| Length (km) | 32 | 37 | 34 | 37 | 28 |
|-------------|----|----|----|----|----|

The table shows the length of the firelines. The firelines are maintained twice per year, one round of slashing in each dry period.

## 5.2 Number of fire incidences reported in the project area

| Year        | 2010      | 2011      | 2012    | 2013      | 2014                |
|-------------|-----------|-----------|---------|-----------|---------------------|
| Season      | Dec-March | Dec-March | Jun-Aug | Dec-March | Dec-March           |
| Compartment | 301       | 701       | 403     | 410       | 1002, 901, 206, 501 |
| Area (ha)   | 2         | 3         | 5       | 2         | 157                 |

## 6 Exotic/Invasive species

Since the project is located in a National Park, UWA's policy is to remove exotics from the project area. The project has already been working on the removal of Eucalypt and Cassia trees. The tables below provide an overview of the achievements so far. No uprooting of Lantana camara has taken place in this monitoring period.

| Objectives                                                                        | Indicators                                                               | Result |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------|
| To have 65% of the exotic/invasive species removed from the project area by 2024. | -Number of trees removed or debarked 2011-2014                           | 15.981 |
|                                                                                   | -Area (m2) uprooted of lantana camara.                                   | 0      |
|                                                                                   | -Number of compartments where exotic/invasive species have been removed. | 44     |

### 6.1 Number of trees removed or debarked

| Year         | No. of exotics |
|--------------|----------------|
| 2013         | 1.653          |
| 2012         | 8.245          |
| 2011         | 6.083          |
| 2010         | 5.813          |
| 2009         | 30.784         |
| 2008         | 16.510         |
| <b>Total</b> | <b>69.088</b>  |

## 7 Biodiversity

The project aims to protect biodiversity values in the project area and restore unique habitats for Kibale's 13 primate species, amongst others. The tables below show the measurement results of biodiversity values and what has been achieved in terms of forest establishment and ecological succession. During the Project Implementation Period a total of 373 hectares of forest has been planted, with a total of 149,200 seedlings. The total area of planted forest since the project start until the end of the first Project Implementation Period (3,993 ha) and the naturally regenerated area (2,593 ha) is developing into a High Conservation Value forest, providing a habitat for unique forest biodiversity, as part of the wider Kibale National Park landscape.

| Objectives | Indicators                          | Result      |
|------------|-------------------------------------|-------------|
|            | -No. of wildlife censuses conducted | 3, see §7.1 |

| Objectives                                                                       | Indicators                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Result                            |
|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| To conduct animal census in Kibale National Park to establish trends by 2024     | -No. of each animal species counted (chimps, elephants, buffalos, duikers and primates)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | See separate table, §7.2          |
| To have all the degraded areas in KNP restored by 2024.                          | -No. of hectares planted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | See separate table, §7.3          |
|                                                                                  | -No. of seedlings planted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | See separate table, §7.3          |
|                                                                                  | -No. of tree species planted                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | See separate table, §7.4          |
|                                                                                  | -Amount of forest carbon sequestration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | See carbon monitoring report      |
| To eliminate and control the exotics/ invasive species in KNP by 2024.           | -Number of exotic trees and tree species removed or debarked                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | See table Exotic/Invasive species |
|                                                                                  | -Size of area (m2) cleared for specific species such as <i>Lantana camara</i> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | See table Exotic/Invasive species |
| To monitor the change of tree species composition in the restoration area        | No. of new tree species dispersed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | See separate table, §7.5          |
| To monitor the ecological succession of the planted and natural regenerated area | <ul style="list-style-type: none"> <li>- Tree regeneration per stratum in the project area.</li> <li>- Species composition in tree regeneration per stratum in the project area.</li> <li>- Tree biomass growth (above and below ground) per stratum in the project area for all trees above 50mm in DBH.</li> <li>- Tree species composition per stratum in the project area for all trees above 50mm in DBH.</li> </ul> <p><i>A tree is classified as regeneration only if the DBH is less than 50 mm and height is more than 10 cm. The stratum is defined by planting year and regenerated area.</i></p> | See §7.6                          |

### 7.1 Wildlife censuses conducted

Wildlife censuses have been undertaken in KNP since 2001 at five year intervals. Only the censuses conducted in 2005 and 2010 by UWA allow for the extraction of observation data that overlap with the project area (planting compartments and regeneration area). The below figure shows the established transects in KNP (left) and specific observations from transects that overlap with the planting compartments and regeneration areas (right).



|                       |    |     |     |     |
|-----------------------|----|-----|-----|-----|
| Chimpanzee nest       | 72 | 85  | 37  | 39  |
| Civet cat             | -  | -   | 2   | 2   |
| Elephant              | -  | -   | 5   | 23  |
| Elephant dung         | 82 | 82  | 137 | 137 |
| Giant forest hog      | -  | -   | 1   | 3   |
| Giant forest hog dung | -  | -   | 1   | 1   |
| Grey cheeked mangabey | 7  | 42  | 9   | 86  |
| Red colobus           | 13 | 172 | 22  | 235 |
| Red duiker            | -  | -   | 8   | 9   |
| Red tailed monkey     | 24 | 192 | 20  | 182 |
| Squirrel              | -  | -   | 2   | 2   |
| Vervet monkey         | -  | -   | 2   | 36  |

### 7.3 Number of hectares and seedlings planted

| Phase        | Planted (ha) | Seedlings planted |
|--------------|--------------|-------------------|
| Phase 1      | 1.410        | 564.000           |
| Phase 2      | 979          | 391.600           |
| Phase 3      | 354          | 141.600           |
| Phase 4      | 388          | 155.200           |
| Phase 5      | 81           | 32.400            |
| Phase 6      | 105          | 42.000            |
| Phase 7      | 100          | 40.000            |
| Phase 8      | 105          | 42.000            |
| Phase 9      | 97           | 38.800            |
| Phase 10     | 370          | 148.000           |
| Phase 11     | 3            | 1.240             |
| Phase 12     | 3            | 1.040             |
| <b>Total</b> | <b>3.995</b> | <b>1.597.880</b>  |

### 7.4 Number of tree species planted

| Pioneer               | Intermediates        | Climax                  |
|-----------------------|----------------------|-------------------------|
| Bridelia micrantha    | Cordia africana      | Chrysophyllum albidum   |
| Croton megalocarpus   | Cordia millenii      | Diospyros mespiliformis |
| Croton macrostachyus  | Mimusopsis bagshawei | Funtumia elastica       |
| Sapium ellipticum     | Prunus africana      | Uvariopsis congensis    |
| Spathodea campanulata | Warburgia ugandensis | Lova brownii            |
| Albizia gummifera     | Markhamia platycalyx | Strombosia scheffleri   |
| Erythrina abyssinica  | Ficus natalensis     | Newtonia buchananii     |
|                       | Fagara angolensis    | Blighia unijugata       |
|                       | Monodora myristica   | Aphania senegalensis    |
|                       | Phoenix reclinata    | Trichilia drageana      |
|                       | Olea lochsterteri    | Antiaris toxicaria      |
|                       |                      | Morus lactea            |
|                       |                      | Balanites wilsoniana    |
|                       |                      | Aningeria altissima     |
|                       |                      | Teclea nobilis          |
|                       |                      | Parinari excelsa        |

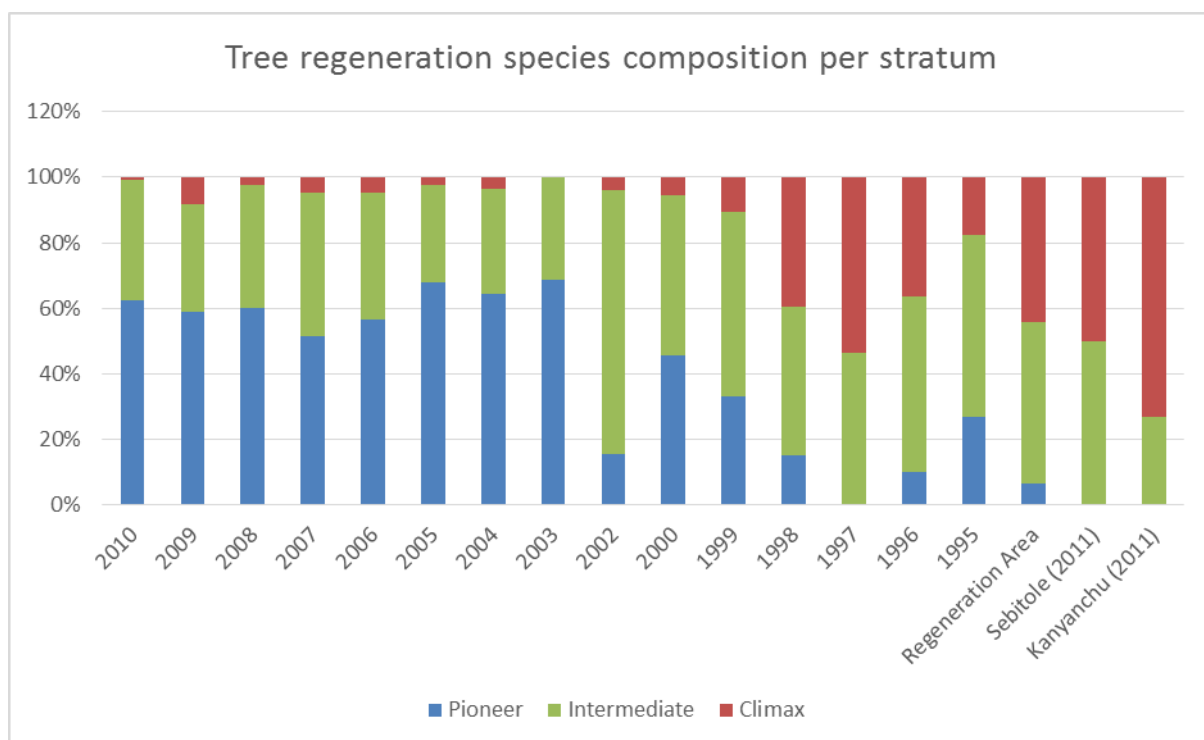
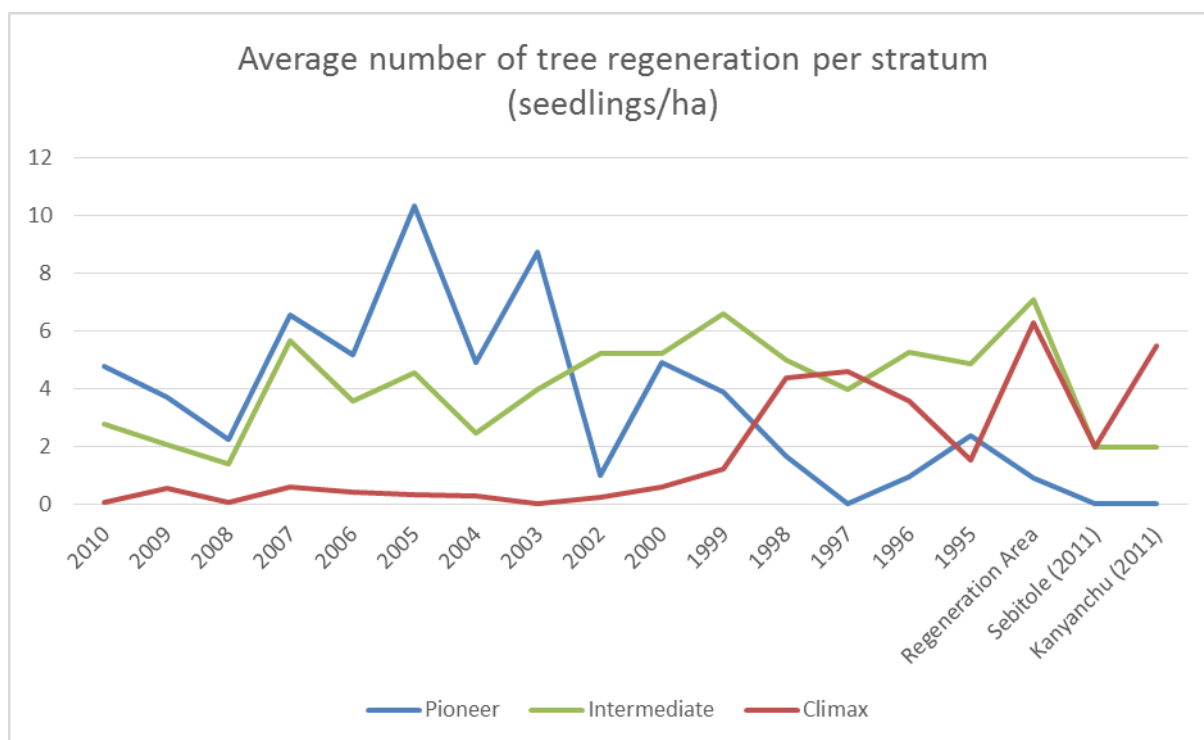
### 7.5 Number of new species dispersed in PSPs for the last five years

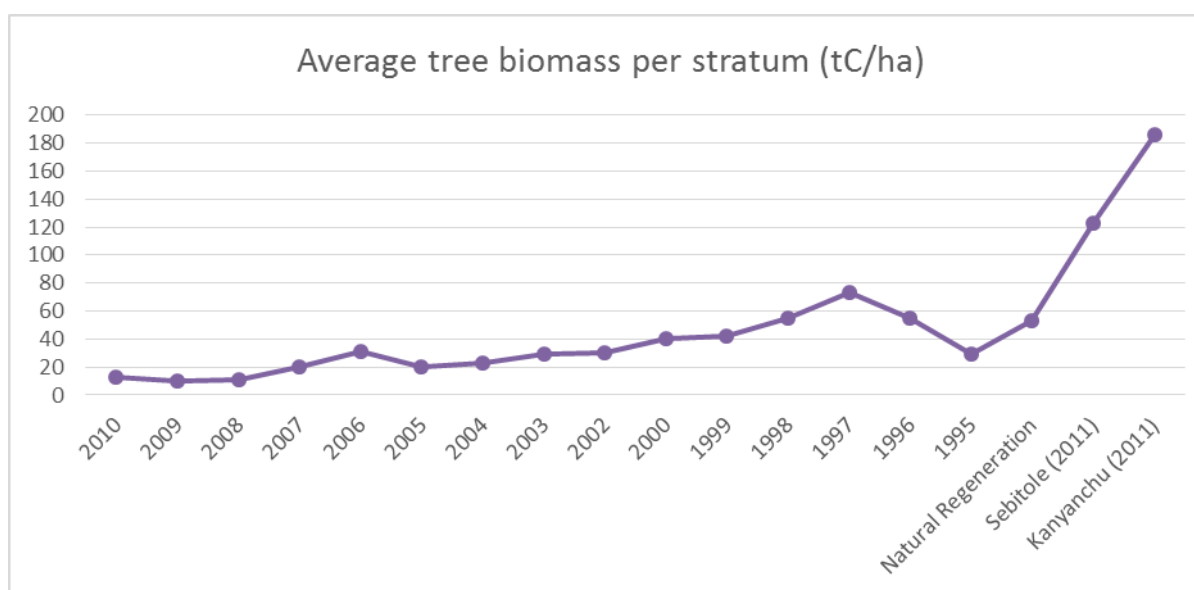
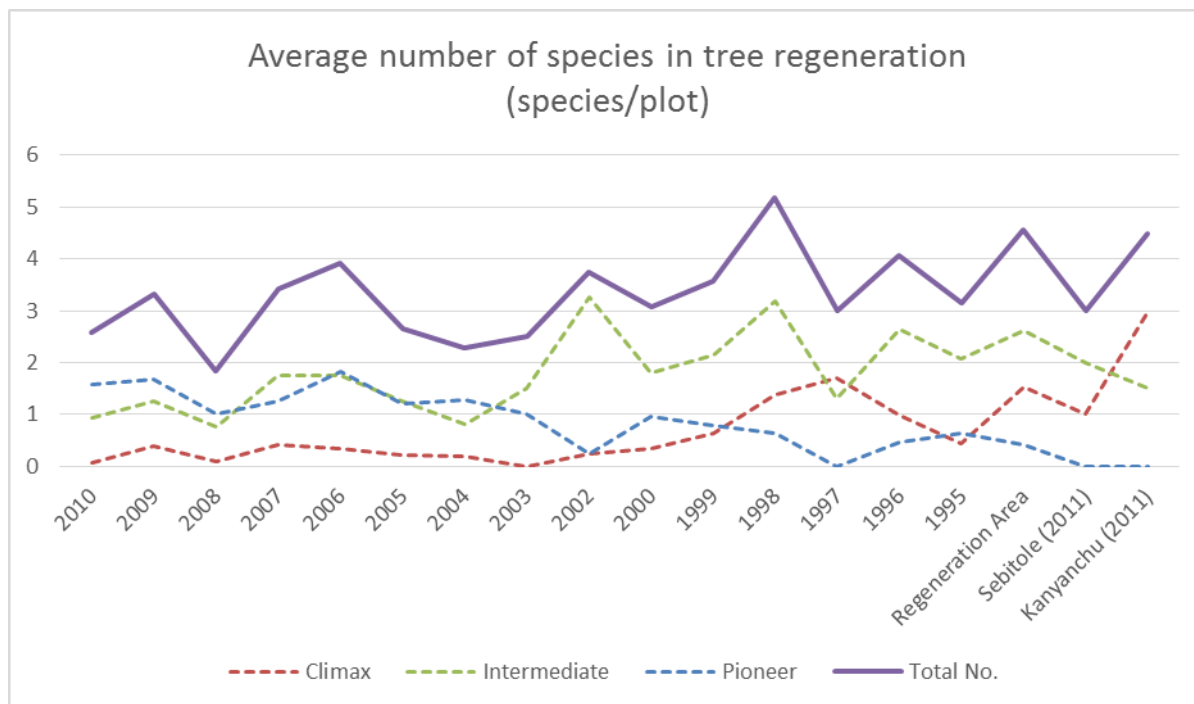
| Year | Species                                                                                                                  |
|------|--------------------------------------------------------------------------------------------------------------------------|
| 2014 | Eudenia spp, Afromamas spp, Maesa lanceolata, Diospyros mesp, Funtumia africana, Sapium ellipticum                       |
| 2013 | Antidesima lanceolata, Albizia zygia, Spathodea campanulata, Celtis africana, Diospyros mesp, Funtumia africana, Eudenia |
| 2012 | Prunus africana, Bridelia micr, Funtumia africana, Maesa lanceolata, Albizia zygia, Melitia dura                         |
| 2011 | Rauvolfia vomitoria, Mimusopsis spps, Erythrina abyssinica, Maytenus lanceolata, Arisona spp.                            |
| 2010 | Ficus natalensis, Tabonamondana spp, Bridelia micr, Sapium ellipticum, Blighia spp, Antidesima lanc.                     |

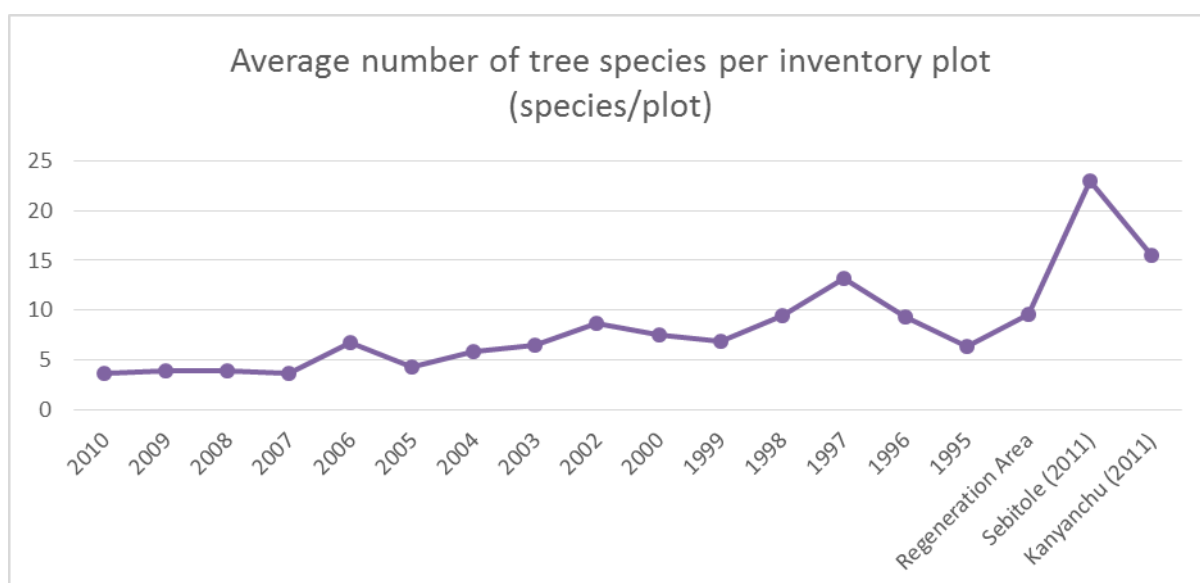
### 7.6 Ecological succession of the planted compartments and natural regenerated areas

The five graphs below gives an overview of the ecological succession per stratum in the planted compartments, the regenerated area and the reference plots in Sebitole (natural forest restored 70 years ago in Kibale NP) and Kanyanchu (pristine natural forest in Kibale NP). The data for these graphs is derived from the VCS carbon monitoring campaign during which tree growth and tree regeneration have been assessed on 379 different permanent sample plots distributed over the project area. The data for the planted and regenerated areas comes from the carbon inventory 2014, while the the Sebitole and Kanyanchu reference plots were assessed during the carbon inventory in 2011.

Some clear trends can be seen in the presented data indicating that the tree biodiversity in the project area is increasing as the planted forests grow older. The obvious increase of the natural regeneration of shade tolerant climax species and the decrease in tree regeneration of pioneer species gives an indication that the forest canopy is closing and that the planted forests are developing into natural forests as it is growing older. Also the species composition, the increase in number of tree species and the overall increase in tree biomass gives a clear indication that the planted and natural regenerated areas moving gradually towards its original natural state with similar high conservation values as the surrounding natural forests in Kibale NP.







## 8 Project Impact on employment

The main social impact of the project is providing employment to the local people. An overview of the number of people employed for the project is provided in the table in this section. The data are presented on a monthly basis for the last 12 years. For the years 2011 – 2013 the average monthly employment figure is 262 jobs.

| Objectives                                                  | Indicators                                                                |
|-------------------------------------------------------------|---------------------------------------------------------------------------|
| Create employment for local communities around project area | -No. of people employed from the communities adjacent to the project area |

| Year | Month |     |     |     |     |     |     |     |      |     |     |     |       |
|------|-------|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-------|
|      | Jan   | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Total |
| 2013 | 180   | 159 | 146 | 151 | 156 | 159 | 181 | 170 | 150  | 162 | 170 | 150 | 1.934 |
| 2012 | 188   | 274 | 327 | 354 | 336 | 266 | 197 | 174 | 166  | 165 | 195 | 229 | 2.871 |
| 2011 | 159   | 180 | 263 | 252 | 210 | 250 | 325 | 380 | 394  | 742 | 666 | 807 | 4.628 |
| 2010 | 218   | 254 | 326 | 320 | 215 | 220 | 225 | 157 | 279  | 307 | 345 | 280 | 3.146 |
| 2009 | 388   | 286 | 264 | 271 | 294 | 334 | 289 | 170 | 178  | 365 | 368 | 386 | 3.593 |
| 2008 | 342   | 353 | 388 | 337 | 395 | 310 | 311 | 272 | 319  | 369 | 365 | 359 | 4.120 |
| 2007 | 319   | 383 | 396 | 338 | 325 | 284 | 294 | 258 | 274  | 323 | 319 | 299 | 3.812 |
| 2006 | 102   | 75  | 286 | 401 | 447 | 479 | 463 | 427 | 419  | 502 | 507 | 538 | 4.646 |
| 2005 | 278   | 301 | 342 | 380 | 387 | 250 | 231 | 250 | 378  | 502 | 492 | 538 | 4.329 |
| 2004 | 106   | 185 | 235 | 242 | 195 | 245 | 227 | 111 | 262  | 254 | 248 | 247 | 2.557 |
| 2003 | 334   | 361 | 334 | 294 | 290 | 307 | 293 | 299 | 233  | 254 | 283 | 309 | 3.591 |
| 2002 | 507   | 494 | 506 | 485 | 424 | 413 | 399 | 387 | 385  | 411 | 379 | 425 | 5.215 |

## 9 Other Project Impacts

| Objectives                                                    | Indicators                                               | Result           |
|---------------------------------------------------------------|----------------------------------------------------------|------------------|
| Enhance tourism opportunities by establishing native forest   | -Number of jobs for UWA tourism staff                    | See tables below |
| Local sourcing of project inputs to benefit the local economy | -Number of park visitors<br>-Value of purchased supplies | See tables below |

|                                                                                                                      |                                                                                                                                                                                                                         |                  |
|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| Provide skills to workers and employees in order to increase local business development and employment opportunities | -No. of people trained on nursery management, planting, maintenance, fire management<br>-No. of people trained on first aid skills<br>-No. of Contracts with farmers to supply seedlings<br>-No. of new local nurseries | See tables below |
|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|

### 9.1 Tourism

|                         | 2011 | 2012  | 2013   | 2014   |
|-------------------------|------|-------|--------|--------|
| UWA tourism staff       | 16   | 15    | 17     | 17     |
| Number of park visitors | NA   | 9.723 | 11.361 | 12.314 |

The number of UWA tourism staff remained stable throughout the monitoring period. The number of park visitors increased. Unfortunately no visitor data is available for 2011.

### 9.2 Local sourcing of project inputs

|                     | 2011           | 2012           | 2013           | 2014          | Total           |
|---------------------|----------------|----------------|----------------|---------------|-----------------|
| Food                | €17.340        | €18.830        | €5.326         | €1.060        | €42.555         |
| Services            | €2.035         | €1.495         | €337           | €264          | €4.130          |
| Fuel and car repair | €17.399        | €14.206        | €8.013         | €6.025        | €45.643         |
| Other               | €18.705        | €45.629        | €4.881         | €1.025        | €70.240         |
| <b>Total</b>        | <b>€55.477</b> | <b>€80.161</b> | <b>€18.556</b> | <b>€8.374</b> | <b>€162.568</b> |

Within the monitoring period a total value of €162.568 worth of local supplies and services were sourced for the project. The main expenses were on fuel and vehicles repair and servicing and on food for the workers.

### 9.3 Skills

| Indicators                                                                   | 2011 | 2012 | 2013 | 2014 |
|------------------------------------------------------------------------------|------|------|------|------|
| People trained in nursery management, planting, maintenance, fire management | 0    | 0    | 0    | 0    |
| People trained on first aid skills                                           | 0    | 25   | 0    | 0    |
| No. of contracts with farmers to supply seedlings                            | 12   | 5    | 0    | 5    |
| No. of new local nurseries                                                   | 1    | 1    | 0    | 0    |

The number of people trained on nursery management, planting, maintenance and fire management is zero within this monitoring period. All the workers that were employed during this monitoring period, received their training in the period before. The last training session was held in 2010, when 16 persons were trained.

The seedlings for planting the forest are sourced from local farmers. The peak in the number of contracts in 2011 coincides with an increase in planting and maintenance activities in that year.

Two new local nurseries were established as a private initiative by former workers of the project. The first nursery has a size of 2 acres and the second nursery about half an acre.