

<b>Project Title</b>
EcoMakala Virunga Reforestation project
<b>Gold Standard ID</b>
GS5618
<b>Type of Certification</b>
<input checked="" type="checkbox"/> Initial Certification <input type="checkbox"/> Performance Certification <input type="checkbox"/> New Area Certification
<b>Dual Certification</b>
<input type="checkbox"/> FSC - Dual certification  If the project is certified according the Forest Stewardship Council (FSC), the certification status replaces the completion of this template. Please provide the 'FSC Audit Report' in the <i>supporting documents</i> of section '3. Sustainability' and provide a reference to this <i>supporting document</i> in this template: ...

Copy the table for each

- mitigation measure identified in the chapter '3.1 Do-No-Harm Assessment' with the risk rating of 'medium' or 'high', AND
- indicator identified by the Sustainable Development Assessment in the chapter '3.2 Local Stakeholder Consultation' rated as positive (+1) or negative (-1) , AND
- mitigation measure identified by the Sustainable Development Assessment in the chapter '3.2 Local Stakeholder Consultation' that will neutralize the negative indicators

## 3.5 Sustainability Monitoring Plan

<b>Sustainability Monitoring ID</b>	<b>01</b>
Indicator for	<b>Water resources (DNH assessment)</b> <b>Water quality and quantity (SD assessment)</b>
Mitigation measure	It is believed that eucalyptus plantations have a greater demand for water, therefore, as a preventive measure, it is not planted within 20 meters of watercourses/-sources Further, the minimum distance of 20 metres will be respected by all other tree species used in the project too.
Chosen parameter	Distance of eucalyptus and other plantations to watercourses/-sources
Current situation of parameter	Currently, there are no eucalyptus plantation less than 20 metres to watercourses/-sources. However, there might be some of the already realized plantations of other species less than 20 metres distance to watercourses/-sources. This is due to the fact that the 20 metres criterion for other species than Eucalyptus has been introduced by WWF only in 2016, i.e. after several years of planting activities.
Estimation of baseline situation of parameter	No plantations are present in baseline
Target for parameter	No plantations of any species within 20 meters distance from watercourses/-sources
Monitoring	How will it be monitored and documented? Each forest plantation of the EcoMakala project is georeferenced and superposed with watercourses layer (GIS database) and distances from plantation to watercourses are measured over GIS. Those plantations which are closer than 20 m to a watercourse are classified as non-eligible.

		<p>However, there might be some smaller watercourses/-sources (like e.g. small streams, protected springs) which are not covered by the GIS database. Hence, before planting an analysis and assessment on available watercourses/-sources is carried out by WWF foresters.</p> <p>In the case of already realized plantations, each of the growers is asked again for any watercourses/-sources at the time of signing the contract attachment. This contract attachment is necessary in order to re-define the contract period (now until 2045) and due to the change of the entity claiming the carbon credits (now CO2logic).</p> <p>Further, the presence of any watercourse/-source will be checked at the time of carrying out the forest inventories. In case that some of the plantations are identified which are closer than 20 m to a watercourse/-source, that proportion found in the inventories will be extrapolated to the overall population and no carbon credits will be claimed from that proportion.</p>
	<p>Who is responsible for monitoring and documentation?</p>	<p>WWF Goma</p>
	<p>When will it be monitored (duration and frequency)?</p>	<ul style="list-style-type: none"> <li>-Before planting, an analysis on land eligibility is done (once)</li> <li>-At the time of signing the contract attachment for already realized plantations (once)</li> <li>-At the time of carrying out the forest inventories (at least once every 5 years)</li> </ul>

<b>Sustainability Monitoring ID</b>		<b>02</b>
Indicator for		<b>Soil condition (SD assessment)</b>
Mitigation measure		-Retention of bark and leaves on the site and/or -Mulching  Eucalyptus foliage and bark contains a large amount of nutrients, and the retention of foliage and debarking of logs at the felling site is therefore a good management practice in order to retain a sufficient amount of nutrients at the site (see: <a href="http://www.fao.org/docrep/005/ac777e/ac777e0a.htm">http://www.fao.org/docrep/005/ac777e/ac777e0a.htm</a> ).
Chosen parameter		Soil cover
Current situation of parameter		Almost 100% of growers leave litter (e.g. leaves, needles, small branches and pieces of bark falling to the ground) on the plantations (as per the survey results of 153 growers (see excel file 'BS_Soil_Carbon_Analysis...').)
Estimation of baseline situation of parameter		No plantations are present in baseline
Target for parameter		100% of growers leaving litter on the plantations
Monitoring	How will it be monitored and documented?	Random on-site inspections (and surveys with growers if needed; e.g. mulching practices might not be visible during the site visit) on Eucalyptus plantations to verify if one or more of the abovementioned mitigation measures have been implemented
	Who is responsible for monitoring and documentation?	WWF Goma
	When will it be monitored (duration and frequency)?	At the time of carrying out the forest inventories (at least once every 5 years)

<b>Sustainability Monitoring ID</b>		<b>03</b>
Indicator for		<b>Quality of employment (SD assessment)</b>
Mitigation measure		Not applicable
Chosen parameter		Training/workshops provided to growers related to forest management (including planting, harvesting and maintaining the plantations)
Current situation of parameter		115 capacity building meetings/events since 2007 References: „2013_Rapport final V3_TL_MVG_clean v2_MVG_18_09.pdf“, table 5, pages 10/11 (86 capacity building events) „Final Technical Progress Report EcoMakala IFDC 2009_2012.pdf“, Table 13& 14, page 17-18 (15 capacity building events) „20161018_Rapport final_DIOBASS.pdf“, table 1, page 2 (6 capacity building events) „20170331_FCCC CIFOR-EU Rapport Technique Final Mars 2013_Decembre 2016.pdf“, table 14, page 15 (7 capacity building events) and table 15, page 16 (1 capacity building event, see row 7)
Estimation of baseline situation of parameter		No training/workshops provided
Target for parameter		At least 15 workshops/capacity building events related to reforestation until 2021

		(Nota Bene: Technical skills have been already developed in the past through the 115 training events indicated above, hence the future target is lower than the current situation of the parameter).
Monitoring	How will it be monitored and documented?	Participation lists, training reports, training certificates, photos
	Who is responsible for monitoring and documentation?	WWF Goma along with associations
	When will it be monitored (duration and frequency)?	At least biennially

<b>Sustainability Monitoring ID</b>	<b>04</b>	
Indicator for	<b>Livelihood of the poor (SD assessment)</b>	
Mitigation measure	Not applicable	
Chosen parameter	Income from wood products, bee keeping activities associated with the plantations and value creation of lands which were considered previously as low fertile lands	
Current situation of parameter	567 ton renewable charcoal (reference: Rapport mensuel Mars 2017 Aspects communautaires - Copy.pdf, page 2) 1,150 m3 firewood (reference: Rapport mensuel Mars 2017 Aspects communautaires - Copy.pdf, page 2) 4,050 litres honey (reference: 20160223_Apiculture - rapport final.pdf, table 7, page 18)	
Estimation of baseline situation of parameter	No income since no plantations existed in the baseline	
Target for parameter	170,000 ton renewable charcoal by 2021 5,000 m3 firewood by 2021 19,500 litres honey by 2021	
Monitoring	How will it be monitored and documented?	Cooperatives'/WWF reports/statistics informing about sold products (charcoal, firewood, honey and others if any)
	Who is responsible for monitoring and documentation?	WWF Goma along with cooperatives
	When will it be monitored (duration and frequency)?	At least once every 5 years

<b>Sustainability Monitoring ID</b>	<b>05</b>
Indicator for	<b>Human and institutional capacity (SD assessment)</b>
Mitigation measure	Not applicable
Chosen parameter	Proportion of women in nurseries Number of associations managed by women
Current situation of parameter	7% (Proportion of women in nurseries) Reference: "UE_Rapport final V3", table 5, page 11 (206 women), 20161018_Rapport final Diobass  7 associations managed by women (Number of associations managed by women) Reference: Partenaires Ecomakala 24042017_ with highlighted associations managed by women
Estimation of baseline situation of parameter	No growers associations existed in the baseline

Target for parameter		7% of women in nurseries 7 associations managed by women
Monitoring	How will it be monitored and documented?	List of women working in nurseries List of associations managed by women Reports with information on proportion of women working in nurseries/managing associations
	Who is responsible for monitoring and documentation?	WWF Goma along with associations
	When will it be monitored (duration and frequency)?	At least biennially

<b>Sustainability Monitoring ID</b>		<b>06</b>
Indicator for		<b>Quantitative employment and income generation (SD assessment)</b>
Mitigation measure		Not applicable
Chosen parameter		Number of employees/workers (e.g. foresters, service providers) due to the project activity
Current situation of parameter		7 foresters (reference: 29 .01.2016- Energie programme organizational chart Janvier 2016.ppt)  15 service providers
Estimation of baseline situation of parameter		No employment prior to project start date
Target for parameter		7 foresters  15 service providers
Monitoring	How will it be monitored and documented?	List of employees/temporary workers, payments slips, contracts
	Who is responsible for monitoring and documentation?	WWF Goma
	When will it be monitored (duration and frequency)?	At least biennially

<b>Sustainability Monitoring ID</b>		<b>07</b>
Indicator for		<b>Fire damage (risk assessment – see template 3.6 Land use and forests risks and capacities)</b>
Mitigation measure		-Training/Sensitization for growers  -Maintenance of plantations during dry season and firewalls around the plantation (in particular plantations exposed to increased risk of fire like plantations bordering the bush)
Chosen parameter		-Number of training/sensitization sessions provided and/or leaflets distributed to growers building awareness and sensitize them to keep the plantations well maintained and clean during the dry season and to create 5 meter firewalls around the plantation (at least for plantations bordering the bush)  -Number of contracts signed between associations and growers

Current situation of parameter		<p>-115 capacity building meetings/events since 2007</p> <p>References:</p> <p>„2013_Rapport final V3_TL_MVG_clean v2_MVG_18_09.pdf“, table 5, pages 10/11 (86 capacity building events)</p> <p>„Final Technical Progress Report EcoMakala IFDC 2009_2012.pdf“, Table 13&amp; 14, page 17-18 (15 capacity building events)</p> <p>„20161018_Rapport final_DIOBASS.pdf“, table 1, page 2 (6 capacity building events)</p> <p>„20170331_FCCC CIFOR-EU Rapport Technique Final Mars 2013_Decembre 2016.pdf“, table 14, page 15 (7 capacity building events) and table 15, page 16 (1 capacity building event, see row 7)</p> <p>-3,522 signed contracts</p> <p>-0 leaflets distributed</p>
Estimation of baseline situation of parameter		No trainings/leaflets
Target for parameter		<p>-Around 15 workshop/trainings by 2021</p> <p>-Around 10,000 leaflets by 2025</p> <p>-Around 10,000 signed contracts by 2025</p>
Monitoring	How will it be monitored and documented?	<p>-Participation lists, training/awareness raising reports, certificates, photos</p> <p>-Distributed leaflets</p> <p>-Contracts between growers and associations: The grower will be sensitized when signing the contract with association</p> <p>-Random on-site inspections during the dry season to check if plantations are maintained and firewalls established</p>
	Who is responsible for monitoring and documentation?	WWF Goma along with associations
	When will it be monitored (duration and frequency)?	Annually

Sustainability Monitoring ID	<b>08</b>
Indicator for	<b>Natural disturbance from animals (risk assessment – see template 3.6 Land use and forests risks and capacities)</b>
Mitigation measure	<p>-Training/Sensitization for growers</p> <p>-Maintenance of young plantations</p>
Chosen parameter	<p>-Number of training/sensitization sessions provided and/or leaflets distributed to growers building awareness and sensitize them to keep the plantations well maintained, to monitor the movement of animals in the plantation areas and respect others' plantations. Further, growers will be informed about the use of repellents (like e.g. a mixture of water with animal excrements)</p> <p>-Number of contracts signed between associations and growers</p>

		-Sensitization sessions with local authorities for application of the law on the wandering of animals
Current situation of parameter		-115 capacity building meetings/events since 2007 References: „2013_Rapport final V3_TL_MVG_clean v2_MVG_18_09.pdf“, table 5, pages 10/11 (86 capacity building events) „Final Technical Progress Report EcoMakala IFDC 2009_2012.pdf“, Table 13& 14, page 17-18 (15 capacity building events) „20161018_Rapport final_DIOBASS.pdf“, table 1, page 2 (6 capacity building events) „20170331_FCCC CIFOR-EU Rapport Technique Final Mars 2013_Decembre 2016.pdf“, table 14, page 15 (7 capacity building events) and table 15, page 16 (1 capacity building event, see row 7)  -0 leaflets distributed  -3,522 signed contracts
Estimation of baseline situation of parameter		No trainings/leaflets
Target for parameter		-Around 15 workshop/trainings by 2021  -Around 10,000 leaflets by 2025  -Around 10,000 contracts by 2025
Monitoring	How will it be monitored and documented?	-Participation lists, training/awareness raising reports, certificates, photos  -Distributed leaflets  -Contracts between growers and associations: The grower will be sensitized when signing the contract with association  -Random on-site inspections on animal disturbance in plantations
	Who is responsible for monitoring and documentation?	WWF Goma along with associations
	When will it be monitored (duration and frequency)?	Annually

<b>Sustainability Monitoring ID</b>	<b>09</b>
Indicator for	<b>Natural disturbance from droughts (risk assessment – see template 3.6 Land use and forests risks and capacities)</b>
Mitigation measure	Provision of surplus of seedlings to growers (if needed)
Chosen parameter	Number of seedlings produced at the nurseries
Current situation of parameter	20% surplus of seedlings
Estimation of baseline situation of parameter	In the baseline no seedlings were distributed

Target for parameter		20% surplus of seedlings
Monitoring	How will it be monitored and documented?	Nursery reports
	Who is responsible for monitoring and documentation?	WWF Goma along with associations
	When will it be monitored (duration and frequency)?	Annually