

Public Summary of the management plan

GLOBAL-WOODS AG, KIKONDA FOREST RESERVE



global-woods AG
P.O. Box 290
Hoima / Uganda
Kikonda Central Forest Reserve



1. Who we are

global-woods AG is a shareholding company with a branch office registered under the laws of Uganda. In 2002 the state of Uganda issued a tree farming license for the entire Kikonda Forest Reserve to global-woods with a duration of 50 years.

global-woods AG in Kikonda develops high-quality timber plantations in balance with social and ecological demands and standards. global-woods AG is committed to the principles promoted by the Forest Stewardship Council (FSC) of environmentally appropriate, socially beneficial and economically viable management of forests as well as the principles of the GoldStandard Foundation (GS). To achieve these objectives a comprehensive management system is in place to ensure:

- Issues are identified through plantation planning and management processes;
- An effective community consultation process is implemented including complaints resolution and feedback processes;
- Involvement and input of workers is valued; and
- Effective monitoring and auditing processes are in place to confirm standards and values are being met and to provide the basis for continual improvement.

Any claims that global-woods AG does not meet the standards will be formally investigated. A Complaints Log will be maintained to confirm the complaints made and actions taken.

2. A brief description of:

- Our location and forest resource

Kikonda Forest Reserve (FR) is located in Butemba and Nsambya Sub-counties of Kiboga County in Kyankwanzi District. It covers an area of 12,186 hectares and is located on both sides of the Kampala-Hoima highway. The reserve encloses settlements (villages) of Kasambya, Kitangwa, Kihigikwa, Kyakabuga and Wadaaga. It is about 38 km east of Hoima and 40 km west of Kiboga towns respectively, and about

Figure 1: The location of the Kikonda Forest Reserve within Uganda

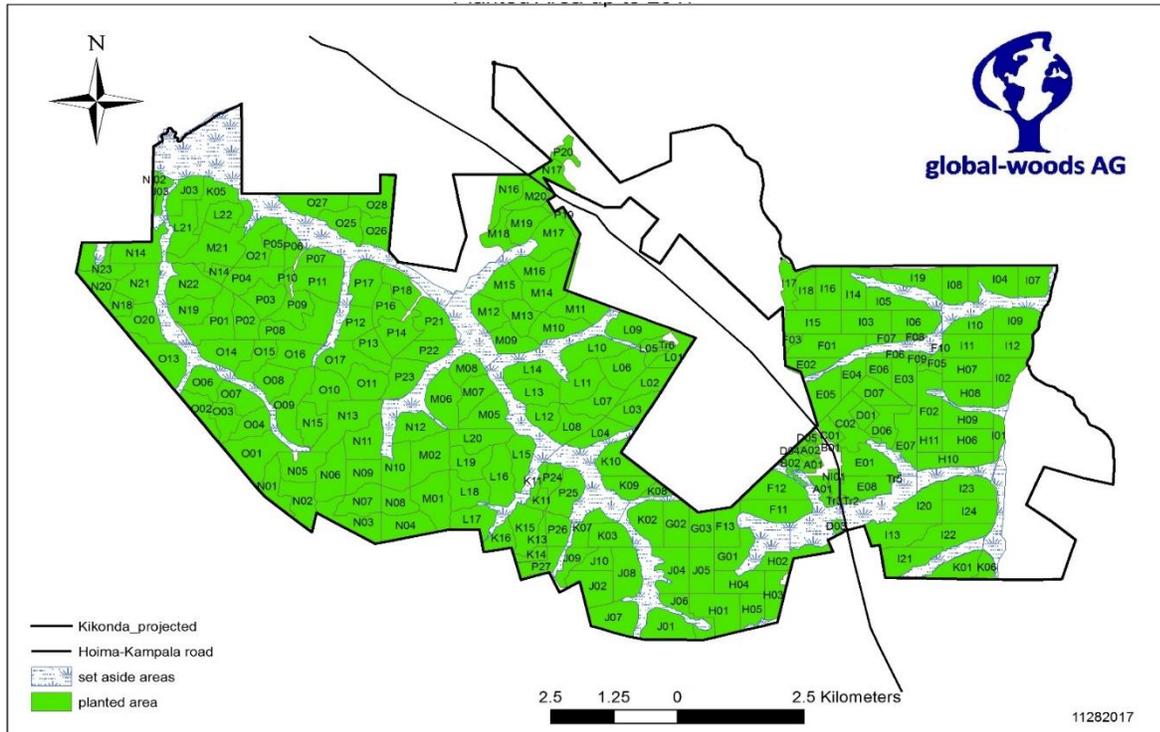


Figure 2: Map of Kikonda Forest Reserve showing the reserve boundaries as well as area planted.

- Environmental factors

The KFR occurs on a flat plain formed by weathering of Singo series type of rock which still remains in the east as prominent projections in the form of hills such as Kawuka and Kikonda to the north-west. The plain has been dissected by valleys that serves as drainage of water to the river Kafu during the rainy seasons. For most of the year these valleys are dry. These valleys are not established with commercial trees but are set aside and maintained as biodiversity corridors to aid in the protection and re-establishment and safe haven for the indigenous fauna, avifauna and flora Kawuka and Kikonda hills rise to 1,295m and 1,265m respectively above sea level (asl). The rest of

the KFR lies between 1,067m and 1,127m asl. The land rises gently to the east and north-east. There are no significant environmental limitations that prevents the establishment of trees on the Kikonda Forest Reserve. The climate is favourable throughout the Estate and adverse phenomena such as floods or mudslides does not present a threat as a result of tree establishment.

- Land use and ownership status of the Kikonda Forest Reserve

The land on which global-woods is planting trees in Uganda, the Kikonda Central Forest Reserve is owned by the State of Uganda through Uganda Land Commission and administered by the NFA (National Forest Authority). global-woods AG, since 2002, is holding a Tree Farming License that allows the company to plant and harvest trees for a period of 50 years.

- global-woods AG and its neighbours

A project of the size of Kikonda affects the lives of a large number of people living in the area. global-woods AG is fully aware of such risk and therefore straight from the beginning has entered into an intensive communication process with the surrounding villages. Doing that, the company constantly learns more about the needs of the communities which is the baseline of making the project a success not only for the company but for the region as such.

More than four different languages are spoken among the workers giving an impression of the cultural heterogeneity at place. It is the intention of the company to promote and facilitate intra-cultural communication amongst the workforce also in order to serve as a role model for a strong cooperation between people with different cultural backgrounds. Social responsibility is a term that is used in various ways having different understandings. For global-woods AG, social responsibility refers to kinds of actions that are taken by the company addressing the global and national (Ugandan) society and natural environment influenced by the actions taken of g-w AG. The company considers itself as responsible and accountable for its actions and its decisions.

In contrast to the traditional approach to Corporate Social Responsibility, which only integrates the three columns environmental, economical and social concerns into business, global-woods AG's is following an strategic CSR approach, which shift from a tactical and responsive to a long term relationship which is mutually beneficial. global-woods AG integrates this strategic corporate social responsibility (CSR) into its business strategy of its core business objectives and further uses its core competencies to create business values and positive social/environmental values, and embeds this approach into its day-to-day business culture and its day-to-day operations. The strategic CSR of global-woods AG is designed to produce profits *and* social benefits for the environment and the communities rather than just profits *or* social benefits.

To assure the effectiveness, the strategic CSR is aligned with two main things, which are the

- core business objectives of global-woods AG
- and the core competencies of the company.

The tangible definition of the core business objectives of global-woods AG, as well as the precise core competencies of the company is defined in the Standard Operation Procedures (SOP's), guidelines and instructions of the company's operational management.

- The land surrounding global-woods AG

The land next to the Kikonda Forest Reserve is a mixture of public land, customary land and private mailo land. The most common land use is small scale agriculture of crops such as maize, beans, cassava combined with rearing of cows and goats. Large flocks of cattle predominantly belong to migrating cattle keepers. The land is flat as the reserve itself but entirely stripped off its natural vegetation and fauna.

3. The rate of annual harvest and commercial species selection at the Kikonda Forest Reserve

The rate of annual harvest at the Kikonda Forest Reserve

With a rotation age of 18 years the annual cut area will only be 5.6% of the total planted area. This amounts to an area of 476ha. This is to bring the plantation into rotation and allow a sufficient flow of logs to the projected mill and processing facilities. However in the event of a loss of growing stock like (fire pests or diseases) where it is required to deviate from the plan, the maximum annual clear cut area shall be no more than 10% of the total planted area (850ha). This level of clear cut area would not pose a high erosion risk since the plantation lies on a relatively flat area. Furthermore aesthetical aspects should be respected in such a way that large-scale clear cut areas shall be avoided next to major roads or settlements.

Species selection, distribution and optimisation at the Kikonda Forest Reserve

Pine (*Pinus caribaea var. hondurensis*) is intended to be planted on at least 70% of the plantable area. The initial stocking is 1111 trees per ha. The expected harvest age is 18 years. Until then two thinnings and two pruning operations will be conducted. Weed control is administered through both mechanical and chemical means.

Eucalyptus (*Eucalyptus grandis*, hybrids) is intended to be planted on up to 30 % of the plantable area. The initial stocking is 1111 trees per ha. Thinning, pruning and harvest schedule will be optimised as more data on the local growth rates are available. Weed control is administered through both mechanical and chemical means.

Matching species to site was done based on guidelines and surveys conducted by the National Forestry Authority and the Sawlog Production Grant scheme.

On top of that trials were conducted with Pine and Eucalyptus as well as other species (*Maesopsis eminii*, *Araucaria cunninghamii*, etc.). These trial are still ongoing and integrated into a nation-wide scheme. It is the intention of global-woods to increase the share of species other than the main Pine and Eucalyptus.

The annual planting target of global-woods is 1,500 ha but may vary according to the climatic conditions for the specific season. Based on an assumption of setting at least

app. 10% of the total area aside for nature conservation, the entire plantable area has been covered in the year 2017.

Year	Area planted
2002-2010	2624
2011	600
2012	1500
2013	1500
2014	1500
2015	1500
2016	1500
2017	1458
2018	28

Table 1: Planting timeline for the Kikonda Forest Reserve

4. Monitoring our forest growth and dynamics

Forest growth is monitored via a system of over 200 permanent sample plots. The results from the inventories which are conducted on an annual basis are extrapolated via a growth model designed for Uganda.

5. Environmental safeguard based on environmental assessments and the monitoring thereof

The plan for the protected areas at Kikonda Forest Reserve (KFR) is guided by the vision to provide a safeguard for those plant and animal communities that are threatened in the greater Kikonda area. To set a baseline in early 2010 an assessment of the flora and fauna of the KFR was conducted by EACL environmental consultants, Kampala and in mid 2011 this assessment was refined and analysed by Dr. James

Kalema, Botanist and Conservation Specialist of Makerere University, Kampala. The major result of the assessment was that no High Conservation Value Forest can be found in the KFR. Core findings of their assessment are integrated into this document, the full reports can be made available on demand. The areas identified as being the most vulnerable to disturbance outside the reserve were natural forests, wetlands and hill slopes. As a voluntary contribution, samples of such areas are earmarked for protection in the KFR, especially if they are a habitat for endangered species. Inside the KFR natural forest only exists in small patches and in a highly degraded state due to continued illegal logging and grazing unhindered by the authorities. Wetlands in the Kikonda context are areas that are slightly lower than the neighbouring sites and in consequence wet after heavy downpours. They are rated as seasonally flooded or moist wood- or grassland. They are not to be confused with permanent wetlands like Papyrus-swamps, which only exist at a boundary corner of the KFR.

Protection is implemented by delineation, education and enforcement.

Biodiversity corridors cater for a connectivity of the protected zones allowing exchange and spread of species. The impact of the protection activities is monitored by a revolving survey of transects counting plant and animal species in regular intervals.

All aspects of the plan for the protected areas are constantly discussed with stakeholders such as environmental authorities, local people, scientists and NGOs. Their feedback will continuously form part of the plan to make it a lasting success.

6. Identification and protection of Rare Threatened and Endangered (RTE) Species

a. Identification of RTEs

- An Environment Impact Assessment that was done in 2010 gave the results of general status of the forest management unit in regards to birds mammals and plants, the RTEs were identified, this document came up with many recommendations and the biodiversity monitoring being one of them, this is done in collaboration with experts in those fields
- The annual biodiversity assessments that to identify changes in the flora and fauna and this also captures the data in the RTE species

- The IUCN REDD data list is used to determine the conservation status of all the species found during the biodiversity assessment
- Pictures of the RTEs are printed and displayed on the noticeboards to help everyone to easily identify these species

b. Protection of RTEs

- When RTEs are encountered in the areas of operation, the worker must immediately report it to the supervisor who later notifies the forester in charge, and this may be an RTE of any Nature for example; the actual bird or animal sited or a nest.
- Operations in such an area must be discontinued pending clearance from the supervising forester in collaboration with the line manager.
- The area in question is then cordoned off with a reflector tape to prevent accidental destruction of the habitat, of which once it is confirmed that the RTE has moved out then shall the operation continue

Map of Kikonda Forest Reserve showing planted area, set aside area

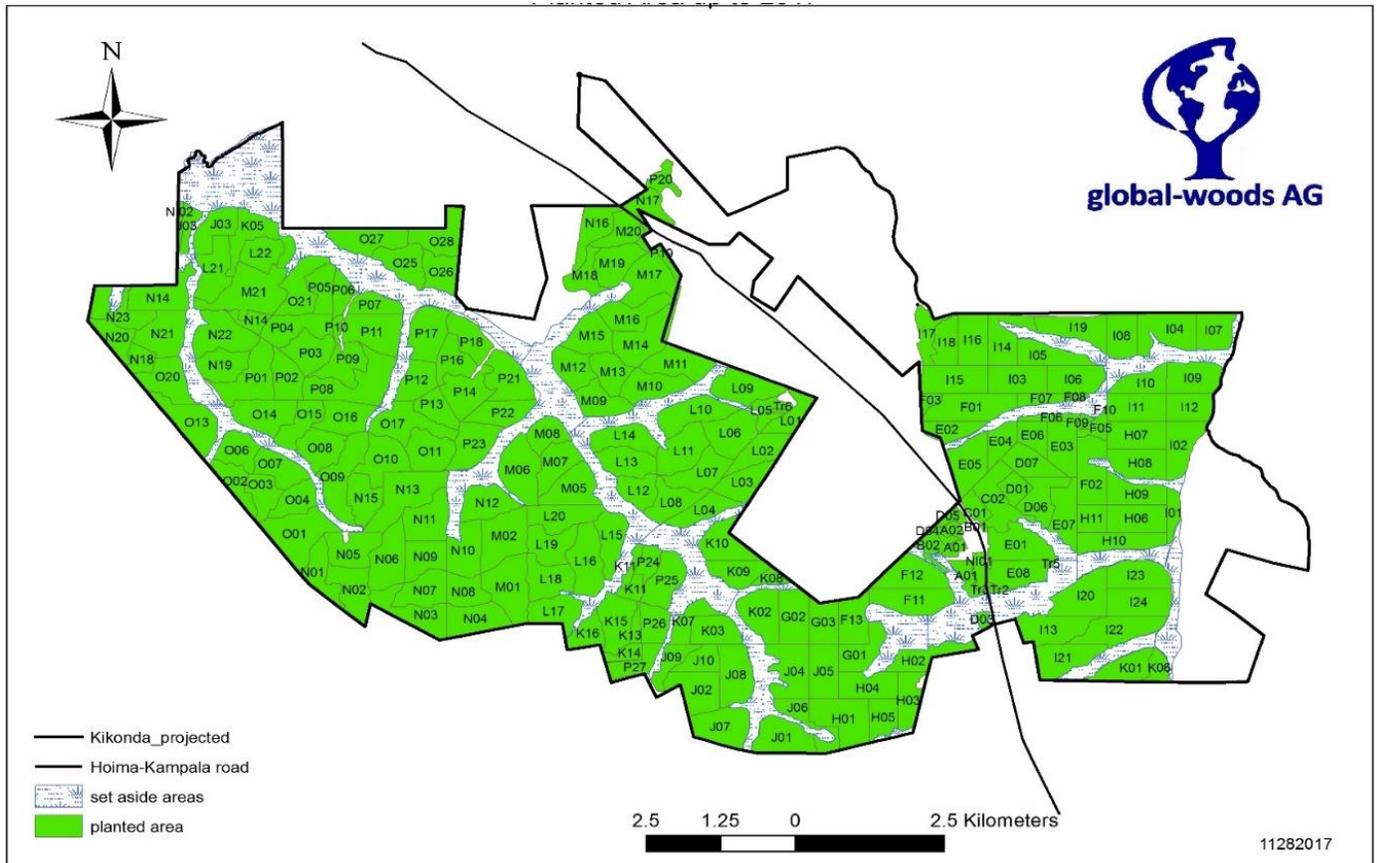


Figure 4: Map showing set aside areas within the Kikonda Forest Reserve

7. Harvesting at the Kikonda Forest reserve

In Kikonda, no forest of High Conservation Value will be logged. The rotation period aimed for is 18 years for Pine and 12 years for Eucalyptus. A cut to length harvesting method, is used. Trees ready for harvesting is felled, debranched, cross cut into dimensions and topped in the compartment. This is done for both Eucalyptus (Poles, and saw timber) and Pine (saw timber). This type of system is called a cut to length system and is the preferred method, because of its reduced environmental impacts

when compared to other harvesting systems. The following operational systems have been selected for different harvesting regimes at Kikonda Forest Reserve:

- **Manual Operations**

This makes use of manual labour and is applied in small dimension timber usually from thinning operations. Hand tools for cutting is used to fell, debranch, crosscut and /or top trees. Extraction of timber is also done manually with hand tools or a sulky which is a small skidding machine that is pushed manually.

- **Motor manual Operations**

This system involves use of equipment such as chainsaws, tractors, and tractor trailers in the harvesting operations. It's characterized with a reduced manpower requirements and gives an increased productivity, although it requires some modest level of equipment capital input in comparison to manual operations above. This system is largely be employed in harvesting and thinning of larger dimension timber.

8. Management plan revision

The Management plan is to be fully revised every three (3) years. On a continuous basis, the plan is updated whenever deemed necessary. Updates frequently come from changed/improved field work, new scientific input or new requirements from certification schemes.

All data obtained from monitoring in terms of tree growth, weather, social impact, environmental impact and any other monitoring shall be integrated into the revision. The same applies for data obtained from review of scientific papers and communication and knowledge exchange with the professional community.

Revisions are co-ordinated by the Estate Manager and have to be approved by the CEO.