

PUBLIC SUMMARY 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. 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. It is about 38 km east of Hoima and 40 km west of Kiboga towns respectively, and about 15 km to Kafu River along Hoima-Kiboga main road. It is found at latitudes between 1⁰⁰' and 1⁰⁵' north and longitudes of 31⁰ 30' and 31⁰ 45' east.

The external boundaries of the reserve were surveyed and its boundaries fixed and approved in July 1968.



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

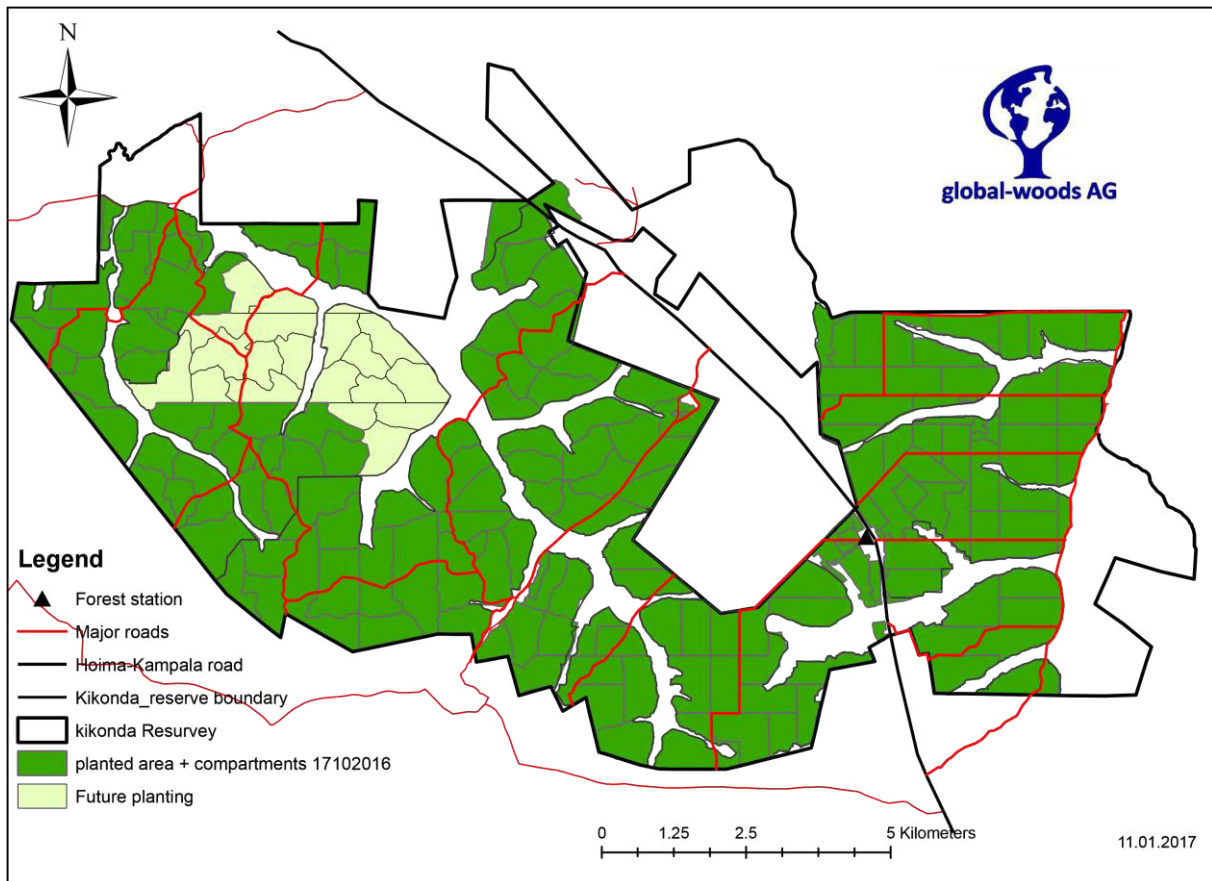


Figure 2: Map of Kikonda Forest Reserve showing the reserve boundaries as well as area planted and planned for planting.

- 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 planted 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 aware of its impact and, straight from the beginning of the project, has entered into an intensive communication process with the surrounding villages.

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.

The company runs a comprehensive program that caters for matters of Corporate Social and Environmental Responsibility. Apart from policies that govern the day-to-day company management, this program includes livelihood improvement and grievance redress interventions in the neighbourhood of the forest.

These activities are based on a strategic CRS approach, which shift from a tactical and responsive to a long term relationship which is mutually beneficial.

- 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 app. 6 % of the total planted area. This amounts to an area of app. 500 ha. 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 (e.g. 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 1,111 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 1,111 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 will be covered in the year 2017.

Year	Area planted
2002-2010	2624
2011	600
2012	800
2013	800
2014	800
2015	800
2016	800
2017	800

Table 1: Planting timeline for the Kikonda Forest Reserve

4. Monitoring 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.

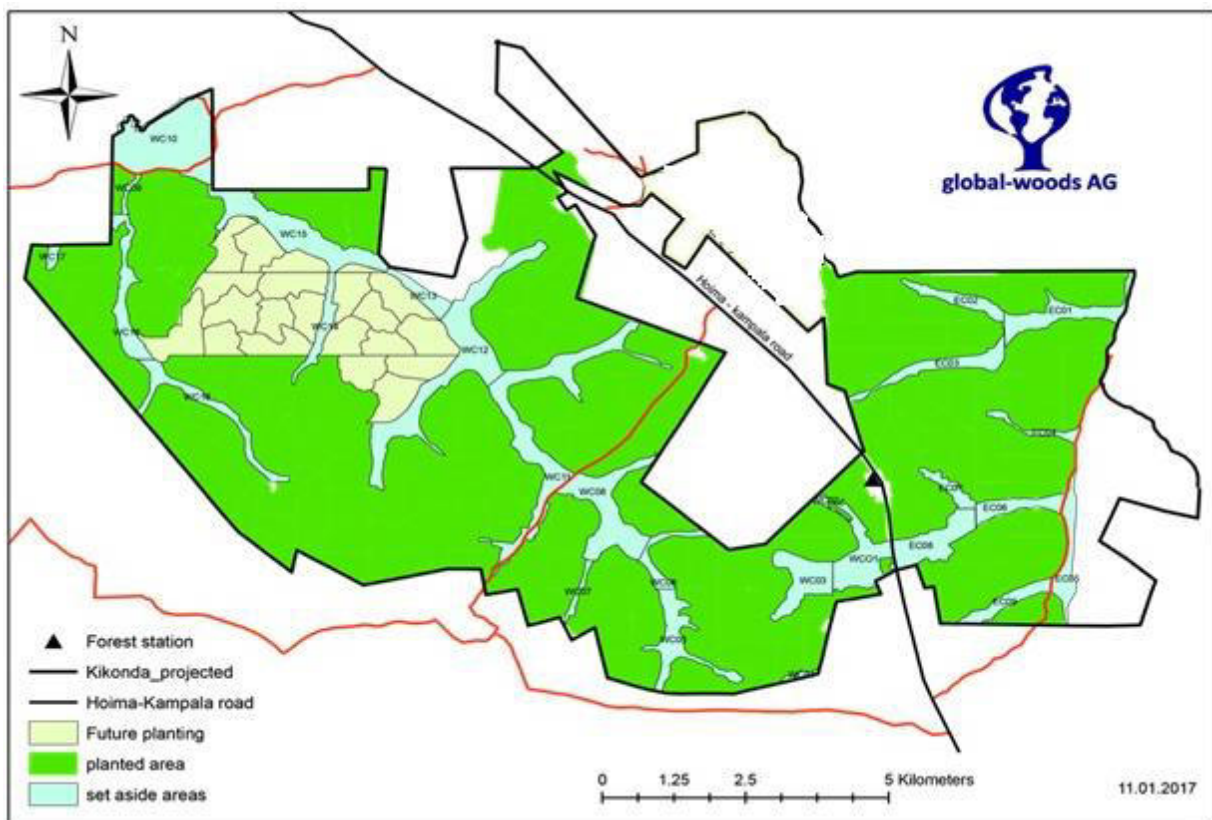


Figure 4: Map showing set aside areas within the Kikonda Forest Reserve

6. 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 are 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.

7. 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.

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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.