PUBLIC SUMMARY

GREEN RESOURCES NIASSA

Mozambique

2021 – 2026

INTRODUCTION

Green Resources AS (GRAS) owns and manages a group of forest companies in Mozambique, Tanzania and Uganda. The group operates under the same set of principles and objectives across all its companies. Green Resources' goal is to be a leading East African Forest Industry Company. It aims to generate attractive returns for its shareholders and to provide a conducive working environment for its employees, protect the environment and generate social economic development in the areas where it operates. The Company's products include sawn timber, electricity poles and other wood-based building materials, as well as energy related products such as briquettes and sustainable firewood and biomass. Industrial operations are key to maximise the value of the forest.

Green Resources believes in the interests of stakeholders, including customers, employees, local communities, the environment, host countries, creditors and the shareholders are best served by creating a financially strong and profitable Company. The Company believes that a business based on sustainability and social responsibility, using renewable, green resources, will yield attractive long-term returns.

Green Resources Niassa (GRN SA) in short GRN is one of GRAS forestry companies. It is based in Mozambique, Lichinga and was formed in 2020 through a merger of three companies Chikweti, Niassa Green Resources (NGR), Floresta Do Planalto (FDP) and Niassa Green Resources. Green Resources Niassa (GRN) leases and manages 51 DUATS, strategically managed as forest plantations. The 51 DUATS, which were acquired according to the relevant national laws of Mozambique. The DUATS are at various levels of processing and some in the process of being returned to the government in the process of land rationalised. However, not all plantations are under FSC. These duats are at different levels of processing including the remaining land holdings.

A Forest Management Plan is prepared to control the management and development of plantation forests within GRN. The working plan covers the period from 1 July 2021 to 30 June 2026. The forest management plan establishes long-term objectives and strategies for plantation area and forest management. The plan outlines the forest operations essential to meet objectives, while at the same time, minimizing undesirable environmental impacts. The company's planning exercise is done through the use of five-year Management Plans. This is an adaptive planning process that enables the management team to learn from the monitoring exercises. The plan is dynamic and revision of the plan is done as when necessary. Polices and guidelines assist on how plans, operations and activities are carried out

Stakeholders are allowed to supply information, identify concerns, comment on issues. Therefore, a public summary of the management plan is always be made available in English and Portuguese safeguarding the confidentiality of some specific information.

This summary should be produced upon request from any interested party and its aim is to briefly inform stakeholders of our activities and plans, so their active involvement and participation can improve GRN's planning process.

GREEN RESOURCES NIASSA,
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Management Objectives

Through the use of best sustainable forestry practices, GRN strives to optimise the site potential of its plantations and return on its land holdings.

Specific objectives include to:

- Obtain sustainable and periodic revenue from timber production
- Produce quality hardwood and softwood for use as poles, pillar logs and sawlogs
- Maintain and when possible, enhance the ecological values of each land unit.
- Provide social benefits to communities surrounding the forest estates.
- Plant species that optimise site potential and yield,
- Sustain the potential yield for economic, social and environmental benefits,
- Manage optimally to realise potential of sites,
- Regulate yield in order to sustain production,
- Conserve biological diversity, ecosystems and habitats,
- Conserve natural resources, especially soil and water,
- Conserve heritage resources and promote aesthetic, cultural and spiritual value

Site Description

Location: Lichinga plateau, Niassa province in the north of Mozambique

- 2.5 million ha
- Average population density of 8.5/km2
- Altitude: 950m - 1700m
- Mean annual rainfall: 1100mm and
- Mean annual temperature: 19℃
- Ecosystem: woodland, shrubland/shrub savanna and grassland

Districts: Lago, Lichinga, Muembe, Sanga, Chimbunila,

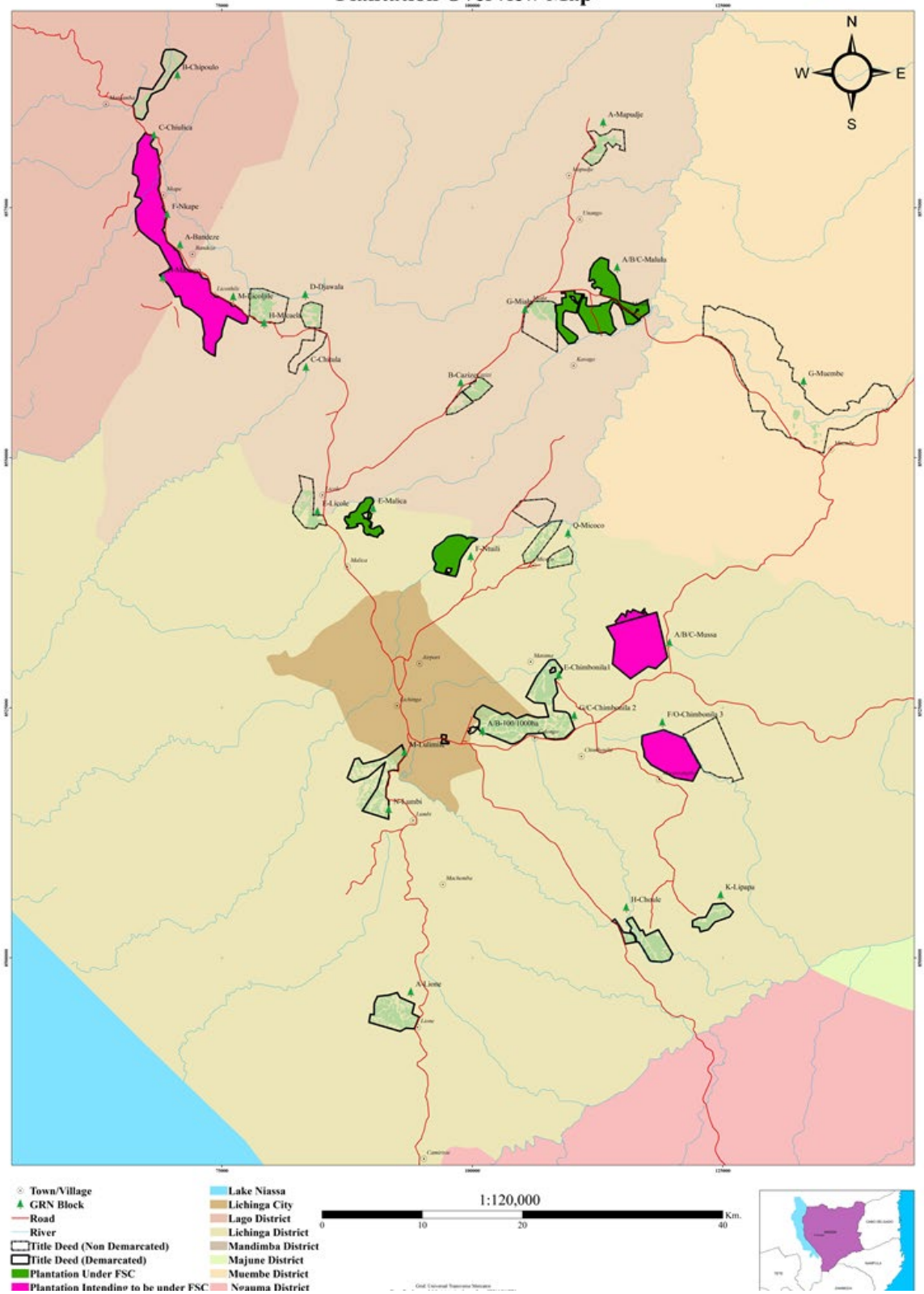
Landholding: 41,793ha

Plantable area: 24,741ha

FSC™ (FSC C107952) Certified area: 4358 ha

Niassa,
Mozambique.

GRN Operational Area
Plantation Overview Map



- Town/Village
- GRN Block
- Road
- River
- Title Deed (Non Demarcated)
- Title Deed (Demarcated)
- Plantation Under FSC
- Plantation Intending to be under FSC
- Lake Niassa
- Lichinga City
- Lago District
- Lichinga District
- Mandimba District
- Majune District
- Muembe District
- Ngauma District

Land Uses and Land Use Planning

The project started as a 'greenfield' project, where plantations are established on degraded or abandoned land. GRN uses its plantations to grow on commercial scale plantations of pine and eucalypts species, and to conserve significant ecological and social values. Non-commercial areas within plantations include riparian zones, wetlands, woodland and shrubs, Areas of Special Interest (ASI) and special management zones.

Commercial plantation area is planted with various valued commercial species for the production of various poles, eucalyptus pillar-log and pine saw-logs. These areas are consolidated as far as possible in the best interests of production, fire prevention, weed control and access. Softwoods and hardwoods are grown on a technical rotation of 15 - 16 years and 8 - 12 years respectively. Forest normality, pests and environmental conservation of natural assets act as constraints to the main objective.

Land use planning is done through a combination of desktop GIS system using satellite images and drone images followed by field verification. The GIS system is linked to the forest database. Within the DUAT areas surveys should be conducted in regards to soils, Areas of Special Interest (ASI), High Conservation Value Forest (HCVF) and other protected areas as defined in national legislations, or other applicable international standards.

Description of Resources to be Managed

Assessment, analysis and mapping of Land use and land cover (LULC) are carried outin the plantation area prior commencement of any operation and activity. grasslands (incl. disturbed wooded grasslands), shrub savanna, miombo woodlands, rocky outcrops, wetlands, rotational crop cultivation mosaic (agriculture and grassland mosaic), water bodies and riparian zones (along water courses) are some of the land covers identified in the plantation.

Environmental Assessments

Plantation areas are mostly dominated by 3 different ecosystems/vegetation strata namely: (i) woodland, (ii) shrubland/shrub savanna, and (iii) grassland. The ESIAs described grassland and shrubland separately in ecological terms and these are considered suitable for the development of forest plantations as they do not fulfil the forest definition set for the country. Miombo woodland and wetlands are regarded as the most important floral habitats which present the highest species richness and also higher diversity compared with the other habitats and these will be managed according to the SOPs.

Biodiversity and High Conservation Value FORESTS

Biodiversity assessments carried out at the company operations identified the existing flora & fauna species as well as their conservation status. No RTE mammals and birds were observed during the surveys. However, more studies will be carried out. Further fauna and flora biodiversity studies are planned to cover the whole project area focusing more on the northern and southern parts of the project areas because the previous studies carried out predominantly covered the central parts of the project area and concluded that no HCVFs exist. However, in the surveyed areas although areas of Special Interests (ASIs) such as cemeteries, medicinal plant sites and traditional or religious areas which are of significance to the local communities should be mapped out and protected.

Environmental & risk assessments

GRN has carried out Environmental and Social Impact Assessments (ESIAs) along with the development of Environmental Management Plans (EMPs) for all the project areas, complying with requirements of the national legislation. The EMPs provide for the monitoring of environmental and socio-economic aspects and is used as basis for the monitoring of the project implementation with the purpose of recording the project performance and mitigating any potential adverse impacts. Additionally, apart from the ESIAs required by law, Site Specific Environmental Impact Assessments (SSEIAs) are also carried out internally, Green Resources Niassa SA. General/broad risk assessments have been carried out as part of the project ESIAs. Additionally, specific risk assessments are carried out internally using the risk assessment procedures developed for the company.

Socio-economic description

GRN's areas of interest 5 districts and 8 Administrative posts with a total of thirty-eight (38) villages. The economy of the districts is characterised by agriculture and small-scale animal breeding mainly goats, sheep and chicken, practiced by the family sector. There are informal trade activities linked to the agricultural activity (e.g. sale of agricultural produce). In addition, there is also forest exploitation, fishing and hunting taking place in some parts of these districts. The project and adjacent areas are characterised by inefficient access routes with roads that are difficult to use in the rainy season and low availability and unreliability of electric power.

Forest Management Regimes

Pine and eucalyptus stands are assigned to the different regimes depending on stocking, whether operations are on time or not, and if they the operation is economically justified for delayed operation. However, regime operations are only guiding but not seen as an absolute. The final decision must always be done after considering several factors such as the stands development, budgeting etc. The forest management regime to be adopted is influenced by these key factors such as, Initial stocking at planting; Thinning or coppice reduction intensity; Timing of thinning or coppice reduction; Pruning height; Time of pruning; and Desired product (s) as per market requirements.

Forest management policies such as timing of thinning is based on age, timing of pruning is based on age and maximum pruning height not exceeding the knotty free core diameter for the species shall be considered. Eucalypts shall have only one coppice regime, thereafter a seedling crop shall be established.

Pine Regime Options

Currently there is a lot of variation in the pine stands, especially with regards to stocking and MAI in areas mainly established during the start-up phase. Therefore, the stands have been assigned to the different regimes. If stocking is low a compartment is assigned a one thinning or no thinning. Compartments with delayed thinning may have one thinning if it is economically justified and if it can result in diameter growth of the trees before final felling.

Eucalyptus Regime Options

Currently, all eucalyptus stands are being managed for fibre and poles with 2 different regimes. One for pole/pillar logs with 2 thinning and a shorter rotation age with the objective of primary producing poles / pillar logs. The other regime with no thin is for production of mainly fibre and some poles at a longer rotation. Rotation length is 8 - 10 years for poles and 8 - 14 years for pillar logs.

Species Selection

The plantation will contain the usual fast-growing conifers and hybrids i.e. Pinus patula, PxT High, PxH Low, P. tecunnumani and P. maximinnoi (and other pine species that may prove more site suitable, as identified through research and are grown on a 15-year rotation. It will also plant fast growing eucalypts and hybrids of Eucalyptus grandis, E. saligna and E. cloeziana (and other eucalypts species that may prove more site suitable, as identified through international research eg CAMOCORE). Rotation length is 8 - 10 years for poles and 8 - 14 years for pillar logs.

Nursery and Planting Material

All planting material is raised at a central nursery in Lichinga. GRN has a nursery with a capacity of +- 10,000,000 seedlings and has an irrigation system. All seed for local planting are obtained from reputable national or regional seed suppliers. The sowing times vary between pine and eucalyptus but are recommended that pine seedlings should be sown between July and August of each year. Eucalypts should be sown around September each year. Only hardy quality rooted seedlings are recommended for planting.

Land Preparation

Delineation is considered in all compartments prior to planting. Mechanical land preparation is done on cleared felled (de-stumping and ripping) areas and on burnt areas and / or remnants of degraded miombo regrowth on new sites (expansion sites). On burnt areas and degraded sites, land clearing is done manually or mechanically. Mechanical soil amelioration through ripping is required whereby the abrupt transition from top- to subsoil, as well as blocky structure to 60 cm soil depth is shattered, allowing root penetration to lower soil profile depth. Where ripping is not required, deep pitting and formation of fine tilth should is required to achieve good conditions for survival and good growth.

Plantation Establishment

Planting holes must be free of roots, branches and rocks and should have fine tilth. A spacing audit and the necessary corrective action is carried out prior to planting. Planting must be done as soon as the first effective rainfall (70mm) because the rain season is very short (3 months). It is recommended to maximise survival by planting when rains are heavier and most frequent–between December and February of each year, planting outside that window period, although allowed is discouraged.

Fertilizer application is done to boost the initial growth on the tree hence ensuring a better survival and shorter time to canopy closure.

Plantation Maintenance

This operation includes both manual (ring / ridge weeding and slashing) and or chemical (coning and broadcast) treatment of weeds. The objective is to suppress all weeds and not necessarily eradicate them and thus reduce competition. Weeding (slashing) is also carried out before the planned operations like pruning, thinning and sometimes clear felling. This will prevent restrictions for later access and execution of work to be done. Chemical weeding is recommended and has to be adopted as the most effective method to control weeds prior to canopy closure. However, the frequency of chemical spray should reduce from 0 to 3 years in an effort to reduce the amount of chemicals used. Keeping the seedlings growing free from competition until canopy closure is crucial in order to achieve the best possible growth. This is particulary important for the eucalyptus stands

since it is less forgiving than pine. Particular attention should be taken to control problem alien weeds such as lantana camara, bug weed and vernonia.

Pruning

The objectives of pruning are to limit the defect (knotty) core to the minimum and to maximise the formation of clear wood around the core. Other objectives include increasing the quality the bottom logs and reducing the risk of fire and create access in the plantation. The eucalyptus does not have a thick bottom branch in the same way as pine since they die off quicker as the canopy closes and light becomes restricted. Brashing could be done for access prior in pole compartments. However, since the regime for poles is now combined with pillar logs, therefore pruning is required.

Forest Health and Protection

Fire remains the biggest threat to the company forests. Therefore, the treat of fires is treated with respect and urgency that equals or exceeds the risk it poses to the Company's survival. Plantations are expected to comply with the Fire Management Procedure. Firebreaks are made by a combination of different activities such as, Grading, Slashing / Chem Application and Burning. Fire fighting teams are put on standby during the fire season.

Gall wasp (*Leptocybe invasiva*) has already established itself in Northern Mozambique. Others such as the lerp psyllid (*Glycaspis brimblecombei*) and the bronze bug (*Thaumastocoris peregrinus*) followed. These pests will need serious attention and particularly biological control interventions will be the most effective means of dealing with these pests. Termite attack (*Odontotermes spp.* and *Macrotermes spp.)* is also rampant in the plantation and is especially important during the early stages of growth. A Chemical control program (using a suitable FSC approved termiticide) before planting is employed. Local management continuously monitor and assess the forest resource for any harmful agencies.

Harvesting Equipment and Techniques

The company is using ground-based harvesting system comprised of purpose build skidder, tractors and loggers. Loading to the customer is done by use of a Bell three-wheeler. This is a very versatile machine in the sense that it operates under different road, weather, and other ground and space conditions with few handicaps. Transportation by means of 30-ton trucks of contractors. These trucks have limitation because they cannot withstand the rugged terrain, which is characteristic of most of roads on the plantations. The harvesting method will also have to be taken into consideration on the clear-fell areas as in compartment processing which usually have much less impact on the soils as little/no machinery is used for extraction. A harvesting plan, a harvesting map (showing felling direction, extraction routes, landings and SMZs) and a preharvest checklist are done before a harvesting or thinning operation. When a compartment is finished a post harvesting checklist is done.

Thinning

Due to the various espacements that were used in the past and delayed thinnings, there are now numerous thinning options. The primarily objective of the thinning is to create better growing conditions and increase the volume of the remaining trees hence creating a more valuable crop a clear-fell. The situation with the thinning is similar to the pruning, there is a backlog causing a lot of the stands to be out of sync with their regimes. The decision whether to thin or not will have to be taken based on the stand development and stocking.

Clearfelling

Clear-felled areas may have negative impacts which should be considered when planning the harvesting of a compartment. Care should be taken not to open excessively large clear-felled areas leading to negative effect of bare land such as erosion. Clear-felled connected areas with the same characteristics (slope, soils etc.) where watershed is not split by roads or natural boundaries is discouraged.

Clear-felled pines intended either for roadside sales or delivered sales are skidded in full length and cross cut at either roadside or infield landings. Standing sales are usually processed in the compartment and only the products are extracted from the compartment. The harvesting waste is stacked inside the compartment and later burnt as part of the land prep.

Roads

The road network needs to be carefully planned in order to facilitate logistics hence reducing cost and time of extracting timber from the plantations. It also serves as an important part of the fire protection acting as both internal breaks and trace belt for external (perimeter) breaks. When planning roads fire-fighting is always kept in mind and dead-end roads avoided as much as possible and, if occurring, are clearly mapped and indicated in field. In an attempt to minimise any potential environmental mishaps, careful attention is given to environmental considerations such as runoff into watercourses, drainage and proximity to wetlands when constructing and maintaining roads.

Management of Conservation Areas

GRN is committed to conducting its forestry operations in a sustainable manner, which protects and safeguards the environment, which includes the non-commercial open areas. Non-commercial open areas are classified into two main categories *i.e* infrastructure (buildings, roads and maintained areas) and indigenous areas i.e. high conservation value forest (HCVF) closed forest, open forest, woodland, grassland/shrubland, wetland, rocky outcrops, gulleys and transitional / buffer zones. These conservation areas have different management regimes.

The following areas should be set aside by GRN for conservation purposes which will be managed according to the established standard procedures.

- Natural Forests: which offer habitats for a wide range of animals and birds (Miombo woodland).
- Riverine forests: characterized by high species diversity
- Wetlands which form an important ecological component that regulate the water systems and are also important for the fauna diversity.

If identified, areas with high concentration or abundance of rare or endangered species will be set aside and conserved. More ecological assessments will be conducted and if there will be any identified HCVF in the area, the management prescription will be developed for conservation and protection.

Management of Community and Social Relations

GRN is committed to conducting its forestry operations in a sustainable manner, which protects and safeguards its people, communities and the environment. GRN also recognises other stakeholders in areas where its forestry operations are located and operating. GRN engages these stakeholders on issues that affect or are of interest to both. GR is aware that the success of its business is largely dependent on the relation with

stakeholders particularly the local communities living in and around its project areas as such, these relations will continue to be reinforced through meetings, gatherings and discussions.

GRN has created its own mechanism for consultation and information dissemination to local communities and other stakeholders. According to the procedure, local communities are kept informed, through regular meetings held between the Community Committee and the company, about the company objectives, plans and developments as well as achievements and shortfalls.

Complaints, Grievance and Conflict Resolution Mechanisms

Stakeholders are free to complain and contribute to the success of GRN. Concerns and disputes may arise during the implementation of plantation activities. Stakeholders are free to complain and contribute to the success of GRN project activities. Therefore, anyone inside or outside GRN, can disagree and make objection actions on documents, activities undertaken by the company, the certification process and even on the forest management operations. As such, apart from the locally existing mechanisms for conflicts resolution within the local communities in the different project areas, GRN has also established internal mechanisms to guide the disputes, grievance and conflict resolution with the different stakeholders.

Research and Development

The success of the forest plantation projects is largely dependent on the knowledge of species, site species matching, pests and diseases, growth rates, performance and management regimes and techniques to maximize future returns. Therefore, Research and Development (R&D) Programmes are being developed in collaboration with the relevant organizations and research institutions. Research will focus on tree improvement, Species-site matching, fertilization, chemical usage and soil content. The results of the R&D program contribute towards the use of good forestry practices and information dissemination.

Planning and Budgeting

Planning is the integral part of the forest management. It applies both to both silviculture and harvesting with specific reference to planting (species and density), pruning (height and age), thinning (spha and age) and clear fell (age). Long term planning refers to 20 years and medium term to 5 years. These plans include compartment level planning for silviculture, harvesting and the maintenance of conservation areas. In addition, GRN is required to maintain an up-to-date Fire Protection Plan, Roads Plan and Environmental Management Plan (EMP). The 5-year plans are updated annually if necessary. The company uses a forest database system called Microforest. The system allows for capturing, storage, visualisation through GIS and analysis of forest data, planning, budgeting & phasing based of activities, capturing of work standards, supply packages, work orders and tickets and resource cost.

Harvesting and Yield Regulation

Microforest Harvesting Scheduling System is used to generate the log and pole supply schedule. Microforest utilises a multi-component growth and yield system to estimate future sawlog volumes. The motivation behind this type of system is to obtain the best possible yield estimates from the most easily measured or estimated stand characteristics. Estimates are generally more accurate when enumeration data is available. Direct estimates, based on Site Index (dominant height at 20 years of age for pine sawlog and 10 years for poles) are

used in compartments for which inventory data is not available. The Microforest harvesting simulation module (HSS) is applied to generate the pine sawlog, eucalyptus pillar log and pole supply schedules for the required rotational period of 15, and 8-12 years respectively.

The Microforest modelling allows one to analyse growth at compartment level. Stand level growth is defined by dominant height, basal area and survival (stems per ha).

Annual Allowable Cut

APO compartments and volumes are matched to the yearly orders. They are then split into monthly budget orders. Compartments are then phased throughout the year to ensure that volumes are constantly available. The forest management system called, Microforest, is used to evaluate the annual cut. The growing stock is evaluated on an annual basis and the final allowable cut is determined annually, during budgeting.

Forest Development Plan

GRN will continue growing pine saw-logs on 15-year rotation and eucalyptus poles on 8 - 12 year rotation. Total planted area is aimed at 20,000 – 22,000ha. Pine plantations will grow mainly *Pinus maximinoii, P. patula*, PxT L, PxTH, and any hybrids and clones recommended for the region by world renounced research bodies. Eucalyptus plantations will grow mainly *E. grandis and GU* and any hybrid and clones recommended for the region by world renounced research bodies.

Strategies to Improve Yields and MAI and Return to Investment

GRN should continue getting information from world research bodies to improve on MAI, getting species of good quality fibre and those resistant to disease and pests. It aims at introducing trials of alternative high altitude pine species. There are plans in the future to introduce other alternative fast-growing pine and eucalypts hybrids and eucalypts clones recommended by renounced world research bodies. Management regimes are being reviewed in an effort to increase return on investment.

Continuous Improvement Strategies

The aim is to improve the quality of silviculture and harvesting methods and practices on forest estates by measuring against established international benchmarks. The strategies include implementation of BOPs, periodic systems and operation audits, research and development.

Sustainability Strategies

The aim is to normalise the plantations and ensure adequate supply of resource to mills and markets by reducing TUP from 17% to 5%, buying seed from recommended seed suppliers and nurseries and intensive weed control of young stands. There is need to find a market for species not suitable for pole and eucalyptus pillar-log production and fell the current stand and replant with recommended species for the recommended regimes.

Plantation Monitoring & Reporting

GRN has put in place a system for monitoring and reporting the project activities. The system will assist the management team in evaluating operations and performance as well as suggest any needed adjustments. MF has monitoring capacity such as APO progress, Work Order progress, comparison of volumes harvested against plans etc. Stocking and growth of trees is monitored through enumeration data collected and processed

through the same forest database system (MF). Temporary sample plots for enumeration and thinning control are the source of data for monitoring growth. However, plans are there to establish permanent sample plots.

Environmental Monitoring and Evaluation

The monitoring of Environmental and biodiversity conditions as well as the assessment of plantation impacts is carried out as outlined in the ESMPs and the monitoring procedures and guidelines. Local knowledge and participation in the monitoring work is important and must not be underestimated. The outcome or results of the various monitoring exercises will be analysed and reports prepared for use by the management to respond to changing environmental conditions raised in the monitoring reports. These results will also help to determine the effectiveness of the management prescriptions under implementation and to identify the areas where improvement measures should be considered and adjust the company operations accordingly. Summaries of these monitoring reports will be made available for relevant stakeholders upon request. Parameters to be monitored include, among others: wastes, changes to Land use, biodiversity & conservation status, water quality & quantity, soils, climate, pests and diseases and the spread of exotic plantation species.

Community Monitoring

The impacts of GR projects activities to the local communities will be monitored and the recommendations from the EMP to avoid or mitigate negative impacts will be adhered to by the company. The results of the socio-economic assessments will be used to set up the baseline scenario that will be used to monitor changes that occur at the community level.

Management Plan Updates

The management plan is valid for 5 years, starting from July 2021 to Jun 2026. The management plan is liable for revision and amendment depending on prevailing conditions.