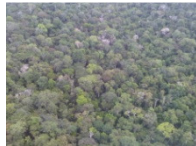


FOREST BUSINESS PLAN

PUBLIC SUMMARY



VERSION 1.0
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Dennebos Suriname N.V.
Dr M L Kingweg no. 61 boven
Paramaribo
SURINAME

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1 INTRODUCTION

Dennebos Suriname (DBS) presents this Forest Business Plan (FBP) to meet in part the requirements of the Government of Suriname for forest exploration and to describe the proposed future development of the forest concessions referred. The FBP provides specific detail of DBS’s plans to exploit in a sustainable, long-term manner the timber resource of concessions (currently named) 38d, 38e, 168 and 714b. It covers a résumé of the organization, description of the forest areas, calculation of sustainable allowable annual cut, production forecasts, description of proposed method of operation and relevant environmental and social aspects.

2 GENERAL COMPANY DATA

Dennebos Suriname N.V. is a limited liability company incorporated on 21 September 2007 in Paramaribo District of Suriname (KKF #46908). The director is Soekhlal, Ruben K. (rubsoek@gmail.com) address ds. Martin Luther King wg. 61 bvn. , Paramaribo, Suriname (Phone: 487 080, Fax: 487088).

3 FORESTRY TECHNICAL DATA

3.1 Location

The Forest Management Unit (FMU) covered by the exploration permit awarded to DBS is located across Districts Sipaliwini and Brokopondo (Exhibit 3-1).

Exhibit 3-1. Location of the FMU (green shade).



3.2 Total land area

The official surveyor’s figurative maps describe four numbered concessions comprising the FMU with a total gross area of 35,285 ha (breakdown by concession indicated in Exhibit 3-2)

Exhibit 3-2. Area of the FMU by concession (from the official land surveyor’s maps).

Concession number	Gross area (ha)
714b + 38e	20,540
38d	10,680
168	4,065

Soils are mainly sand, sandy loams and gravelly clays on slopes, ridges, plateaus and hill tops. Forest type is mainly high dryland mesophytic forest, in places mixed with marsh forest, interspersed along waterways with creek forest.

There is no evidence – from the exploratory inventory and other reconnaissance of the FMU – of any previous commercial logging. Furthermore, there is not known to be any settlements within the FMU and no evidence of any agricultural use or significant exploitation of non-timber forest products. However, in certain areas – most notably in concession 38d to the west and in places to the north of the FMU – there are occurrences of gold-mining. Analysis of satellite imagery suggests that mining activities are concentrated along waterways and involve localized clearing of vegetation and extension of surface water. Further investigation and analysis is planned in the future using high resolution RapidEye satellite technology.

3.3 Production forest and non productive areas

3.3.1 Production forest

For the purposes of forest exploitation planning the whole FMU area is considered **potentially** productive, a position supported by the exploratory inventory recently conducted in the eastern part of the FMU. Once exploitation commences, pre-harvest inventories will provide further information on forest type and productivity at a finer resolution. It is anticipated that in particular the extent of mining activities in concession 38d will be accurately mapped using high resolution satellite imagery accompanied by ground-truthing.

3.4 Non-productive areas

To the far south-east of the concession there is the Nassau plateau which apart from recognised conservation value is also the site of a developing bauxite mining operation. While the general area of mining is known the exact extent of mining activities is currently not determined. Therefore, for the purposes of planning, DBS proposes to excise at this point the SE section of the FMU in part to accommodate the mining activities but also as a potential reserve for biodiversity conservation.

3.4.1 Net operable area

In light of the above the excision for planning purposes of the SE part of the concession (area 4,065 ha) results in a net operable area (NOA) of 32,104 ha.

3.5 Estimated wood stock

The exploratory inventory conducted across part of the FMU estimated a potential gross marketable volume of 5,298 m³ per 100 ha harvest block. Using the NOA indicated above this gives a potential marketable stock across the FMU of 1.7 million m³.

3.6 Historical production

To the company's knowledge there has been no commercial logging previously across the FMU.

4 WOOD EXPLOITATION

4.1 Production forecast

4.1.1 Annual Allowable Cut

Based on an NOA of 32,104 ha, the normal felling cycle of 25 years and the allowable maximum cut of 25 m³/ha the annual allowable cut (AAC) for the FMU is 32,104 m³/yr. The annual allowable area (AAA) based on the same premises is 1,284 ha/yr or approximately 13 harvest blocks (of 100 ha each).

4.1.2 Harvest plan

The harvest plan is presented for the first 8 years of the cycle as this represents the projected logging activity in concession 38d. It is based on a planned road network entering from the NW of the concession (branching from the existing road terminating at Afobaka at the western end). Harvest blocks by year are indicated in Exhibit 4-1.

4.1.3 Projected volume production

The data provided by the company's exploratory inventory in the part of the FMU indicate that for the current potentially marketable species with existing diameter limits the gross production per harvest block is estimated at,

on average, 5,298 m³. However, the existing regulatory limits are set at 2,500m³ per harvest block. Therefore, for harvest forecast purposes the inventory data are prorated to meet the statutory limits (Exhibits 4-2).

Exhibit 4-1. Annual proposed harvest areas 2013-2020 in 38d¹.

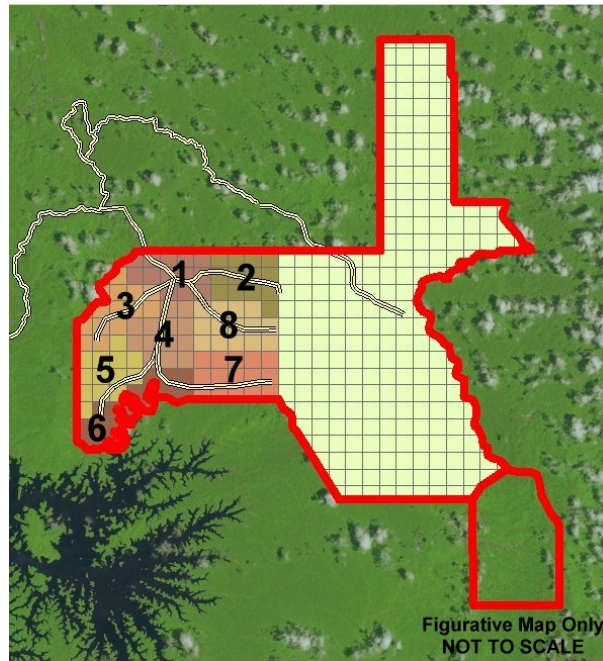


Exhibit 4-2. Projected volume production (m³) project years 1-8

Year	Annual projected area	Projected production
2013	1,277	31,925
2014	1,325	33,125
2015	1,300	32,500
2016	1,257	31,425
2017	1,348	33,700
2018	1,286	32,150
2019	1,400	35,000
2020	1,431	35,775

4.2 Exploitation method

DBS will practice good forest management methods based on its experience already in the sector. In addition, it will adhere to SBB regulations and requirements according to the type of forest management designated. In particular, DBS will respect waterway buffers, spacing restrictions and road/trail density limits as necessary and required. For felling and skidding, in addition to its own staff, DBS will utilize as required local contractors experienced in such activities.

4.3 Equipment

DBS has a full fleet of heavy machinery required for logging and processing. In addition, it has land assets (logpond site of 1.9 ha and processing facility of 4.5 ha), a tug and pontoon, a 150kv generator, two boats and 5 outboard motors.

¹ Coloured and numbered by project year

4.4 Personnel to be employed

DBS currently employs 43 persons directly and three contractors. It projects that once the project commences a further 30 persons will be required.

4.5 Infrastructure

Main roads have been projected into the west of the concession to serve the first 8 years of the project. Secondary and feeder roads will be planned and built following detailed pre-harvest inventory. A base camp is projected to be established on the Anujumara Creek at a suitable location to be established after reconnaissance.

5 WOOD PROCESSING

DBS currently processes logs at a site near Suhoza on the Suriname River. Currently, a new sawmill is being installed to cope with the extra capacity planned. This mill facility will also process logs sourced from the FMU planned in this project. Saw milling will be done with two mills: a 6" Brenta horizontal band saw (with edger, band saw grinding machine and hoist) and a 12" Gillette vertical band saw with all the attributes for full operation. In addition a Lucas portable mill is in operation and a skilled worker is employed to manually cut long squares.

6 ENVIRONMENTAL ASPECTS

In its operations DBS will ensure it will minimize damage to flora and fauna, prepare creek crossings in a low-impact manner and respect buffer zones. DBS will identify boundaries of a biodiversity area in the vicinity of the Nassau plateau. Currently in its operations DBS has a waste management strategy that emphasises hygiene maintenance and recycling where possible; this strategy will continue in the proposed project. DBS will adopt a precautionary approach and will implement certain mitigation measures where there is a significant potential for negative impacts. DBS will adopt a maintenance program for access roads and ensure that all bridges and culverts are kept in good condition to ensure that negative effects of road use (such as erosion and siltation) are minimized. Drainage management on roads, particularly in the vicinity of watercourses, will be undertaken properly and in accordance with best practice and silt traps and outturn drains will be sited correctly and maintained. Efforts will be made to minimize air emissions by ensuring vehicles and equipment are serviced and in good working condition. Sawdust produced at the sawmill site will be collected and stored downwind of any accommodation structure and more than 50 m from any water course or body. Operators of the mills will be provided with dust masks.

7 SOCIAL ASPECTS

There are no villages or settlements inside or in the vicinity of the FMU. The nearest settlements or villages are Brokopondo, Afobaka and Balinsoela, though none of these is within 14 km of the FMU boundary. Nevertheless, DBS will endeavour to maintain contact with neighbouring villages and to offer employment and other opportunities wherever possible. DBS will cooperate with any efforts to identify archaeological and/or cultural sites by local communities or relevant authorities in Suriname (such as the Stichting Surinaams Museum and the National Museum of Suriname) and ensure that its operations do not cause damage to any special sites identified. The medical station at Brokopondo provides the first response facility in the event of a medical emergency. For more serious situations DBS has a policy of evacuation which will be periodically reviewed. DBS also adopts a zero-tolerance policy with regard to occupational health and safety and will ensure that all workers are exposed to basic training for good practices. It will also continue to liaise with Environmental Health Officers as appropriate. DBS will ensure that all employees engaged in operating machinery or equipment are provided with effective ear protection. Also, DBS will ensure that machinery and equipment are working efficiently and have the required muffler devices. Insulation and careful siting will be utilized to prevent harmful levels of noise and minimize nuisance to the camp workers and residents. In general road safety will be increased by adequate road signs indicating turns and dangerous bends and speed limit signs.