

HIGH CONSERVATION VALUE FOREST PUBLIC SUMMARY

DENNEBOS SURINAME N.V.



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2 Introduction

This report is the result of a High Conservation Value Forest (HCVF) assessment conducted on behalf of the Forest Management Enterprise (FME) Dennebos Suriname NV (DBS) as part of its preparations for FSC forest management assessment. The report is designed to meet the requirement of Principle 9 of the FSC Interim Standard for Suriname (Rainforest Alliance) and has been produced according to the HCVF National Guidelines for Suriname (2011) and guided by the Proforest toolkits. This assessment and report complements the earlier HCVF report conducted by FSC-certified sister company E-Timberindustry Suriname for the Mapane cluster of concessions. The conclusions presented cover both reports and all of the concession areas under the administration of DBS.

3 High Conservation Value Forest

Every forest has some environmental and social value. The values it contains may include rare species, recreational sites or resources harvested by local residents. Where these values are considered to be of outstanding significance or critical importance, the forest can be defined as a High Conservation Value Forest. The key to the concept of HCVFs is the identification of High Conservation Values (HCVs):

| | |
|-------|--|
| HCV 1 | Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia) |
| HCV 2 | Forest areas containing globally, regionally or nationally significant large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance |
| HCV 3 | Forest areas that are in or contain rare, threatened or endangered ecosystems |
| HCV 4 | Forest areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control) |
| HCV 5 | Forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health) |
| HCV 6 | Forest areas critical to local communities' traditional cultural identity (e.g. areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities) |

4 Methodology

The methodology adopted in this assessment follows closely the guidance provided by Proforest in its suite of publications on identifying and managing HCVF. More recently, WWF-Guianas led a project to develop national guidelines for HCVF which resulted in a draft report completed in 2011. Even though this report is not a formal national standard it was developed with inputs from a wide range of stakeholders and therefore provides very useful general and country-specific guidance to the HCVF process.

4.1 HCVs

4.2 *Globally, regionally or nationally significant concentrations of biodiversity values*

The nearest Protected Areas to the FME concessions are Copi Nature Reserve and Brownsberg National Park – though neither is within 30 km of the concession boundary. To the south-west of the concession there is a part of “protected forest” in a buffer around the Brokopondo Lake. A small area of sub-montane forest (“special protected forest”) exists in concession 38d to the west of the cluster and in the far south-east of concession 714b. Within the concession, the FME has identified an area of submontane and slope forest as a preliminary (interim) bio-diversity reserve in the south-east where logging will not take place.

4.3 *Critically threatened and endangered species*

An assessment using the Class I and Class II rare, threatened and endangered (RTE) species ranges identified in the National Guidelines indicates the likely presence of focal species occurring in the concession. In addition, the list

developed for the company ESIA of IUCN-listed (CR, EN, VU and NT) and CITES-listed (Appendix I and II) species likely in the concession is also considered.

4.4 Endemic species

None of the true Suriname endemics (Class I) identified in the National Guidelines are likely to be found in the concession according to range maps. However, there are several species of Class II endemics likely present. Currently, there is reliable field data based on observations (sightings, tracks, nests, scats etc) for many of the identified Class I RTE species though the FME concession is not thought to contain any unusual geological or special habitats (see below) and though the area is largely intact it is not pristine having been logged in the past and regularly traversed humans. The terrestrial RTE species that may be found there are wide-range (and therefore less vulnerable to extinction) and do not include any of extreme global conservation concern. The status of the fish endemics is less well known, however, and it is possible that there are narrow-range endemics occurring only locally and are therefore as a species most vulnerable to any change in habitat that may be caused by DBS operations. Therefore, on balance and following the precautionary principle, based on the number of Class I and Class II species found and the possible narrow-range of adjacent fish species the HCV element “threatened and endemic species” can be considered present across the concessions.

4.5 Forest areas containing globally, regionally or nationally significant large landscape level forests

The FME concession forms part of a largely intact forest landscape that covers more than 80% of Suriname’s land area; in addition, the concession falls within the Guianan Moist Forest Ecoregion, one of the WWF’s Global 200. However, given the relatively small scale of the operations (the total area of the concessions is less than 0.2% of the total forest area in Suriname) coupled with the area’s lack of noted regional or national significance, the fact that it does not directly connect or have influence on protected areas, and has historically been affected by human influence, “globally, regionally or nationally significant large landscape level forests” is probably not an HCV present in the DBS concession.

4.6 Forest areas that are in or contain rare, threatened or endangered ecosystems

This value is designed to ensure that threatened or endangered forest ecosystems, communities or types are maintained. According to the national vegetation classification, the DBS concession consists mainly of mesophytic high dryland forest with areas of mixed marsh forest and creek forest. Though some of these forest types are known to support particular species assemblages none of them is considered rare or threatened in Suriname and biodiversity indicators (Both Fisher’s α and Shannon H) have been found to be within normal ranges for the forest type. The HCVF Guidelines recognize other potentially important ecosystems as sub-montane, bleached or unbleached (white or brown) sand, inselberg formations or rare or unique characteristics. According to nationally available data none of these ecosystems are present in the DBS concession with the exception of small areas sub-montane forest (also covered by the special protected forest classification). Therefore, the HCV “rare, threatened or endangered ecosystems” is not likely to be present in the DBS concession.

4.7 Forest areas that provide basic services of nature in critical situations

The FME concessions lie within the watersheds of the Suriname and Commewijne Rivers and cover around 3% of them by area. The catchment is largely forested and not considered critical for collection of potable water and/or regulating water flow to an urban area or a RAMSAR site; further, it is not thought to play a direct role in maintenance of fishing areas though a small part of the concession is within 2km of an artificial lake used for hydro-electric generation. Therefore, the HCV “basic services of nature in critical situations” is unlikely per se to be present, though the importance of water quality and flow into the Brokopondo Lake and local fisheries is recognized.

4.8 Forests Critical to Erosion Control

An analysis of topography derived from Landsat elevation models indicates that at the macro scale in the southern concessions there are many areas of slope greater than 30% in the concessions. Localized areas that may be

susceptible to erosion along water courses will be protected with the required buffer zones identified in active harvest areas.

4.9 Forest areas fundamental to meeting basic needs of local communities

The methodology applied for the baseline study was a rapid appraisal of local communities and invitation to engage and comment to relevant environmental NGOs. The following steps were taken: Preliminary identification of stakeholder communities; Engagement with local District Commissioner/s; Final identification of stakeholder communities; Meeting with stakeholder communities (as appropriate); Correspondence sent to national NGOs with possible interest in the forestry operations (as part of the HCVF stakeholder engagement process). An initial screen was conducted based on proximity, accessibility, downstream watercourse connection, known use of the forest concession, any historical linkages, the 10 km buffer around communities described in the National Guidelines and talking with local forest managers and workers.

In the south as a result of this initial screening the indications are that there are no communities fulfilling the geographical or other criteria and thus there are prima facie no critical local stakeholder communities to the Nassau concession cluster for the purposes of identifying HCVs. Furthermore, the concessions were not within traditional Maroon areas as mapped. Nevertheless, following the precautionary principle, the nearest gazetted settlements were identified as potential stakeholder communities. These predominantly Maroon communities are located along the Suriname River (Brokopondo, Balingsoela, Tapoeripa, Dreipada and Boslantie) and along the Marowijne River (Langatabbetje and Nason) all some 15 km or more (as the crow flies) from the nearest concession boundary. Since no local communities are directly impacted by the project engagement was initiated with the District Commissioners of Brokopondo and Sipaliwini Districts under whose jurisdiction the nearest communities fall. The DCs indicated that the communities along the rivers had no direct involvement with the Nassau concessions of DBS but were appreciative of the initiation of contact and looked forward to continued engagement in the future with the prospect of opportunities of mutual benefit. Furthermore, there was no indication that the concessions form part of any traditional lands claimed by the communities or that there was any dispute over forest operations. It therefore seems that there is a prima facie case for indicating that “fundamental to meeting basic needs of local communities” is not an HCV present in the southern DBS concessions.

However, as a result of the Tropenbos-led MLA assessment all of concession 219 and part of concession 218b are found to be used by the communities of Cassipora, Redi Doti and Pierre Kondre for hunting, fishing and NTFPs.

The results of the engagement indicate that the forest areas in the DBS concessions do not have cultural significance nor are used for special purposes such as burials. Therefore, based on current evidence the HCV “Forest areas critical to local communities’ traditional cultural identity” is not an HCV present in the DBS concessions. Nevertheless, continued engagement with the communities will be pursued as part of the DBS monitoring program and any changes to the current circumstances as regards community use of the DBS concessions will be integrated into forest management via Appendices to the HCVF report.

4.10 Summary of the HCVs identified in the forest

| Generic HCV | Description/Location | Location |
|--|---------------------------------|---|
| 1.1 - Protected Areas | Special protected forest | In Brokopondo Lake buffer zone On mountain plateau |
| | Biodiversity reserve | See map |
| 1.2 - Critically Threatened/Endangered Species | Presence of Class I RTE species | Presumed all over |
| | Presence of Class II RTE | Presumed all over |
| 1.3 - Endemic Species | Presence of Class II endemic | Presumed all over |
| 4.1 - Forests critical to water catchments | Catchment drainage | Creeks draining into Brokopondo Lake |
| 5.0 – Forests critical to basic needs | Hunting, fishing, NTFPs | 219, 218b |

5 Managing and Monitoring HCVs

Knowledge of the location and geographical extent of the HCV within the forest allows for more precise targeting and therefore effective management. Special protected areas are spatially defined and can be mapped and marked on the ground as appropriate; areas of extreme slope can be estimated at a gross level and determined precisely during field operations. The location of the HCV “rare, threatened and endemic species” is considered, with present knowledge, to be universal across the concessions.¹ As part of normal monitoring, and special monitoring of the HCV, it may be possible in the future based on recorded occurrence of species to refine the distribution of the HCV.

| Generic HCV | Description | Management measures |
|--|--------------------------------|---|
| 1.1 - Protected areas | Buffers and biodiversity zones | Mapping of protected area boundary Incremental marking of boundaries Prohibition of logging activities in protected areas |
| 1.2 – RTE and endemic species | Presence of Class I/II species | Record signs of Class I and II species in inventory Enforcement of hunting policy Liaison with research institutes |
| 4.1 - Forests critical to water catchments | Catchment drainage | RIL No logging in creek buffers Water quality assessment |
| 5.0 – Forest meeting basic needs | Hunting, fishing and NTFPs | Inventory of NTFPs and wildlife RIL Unrestricted access to communities |

The monitoring of HCVs will be integrated by DBS into its wider programme of Adaptive Management. Specifically, the maintenance and enhancement of the HCVs present will become part of normal management and targeted monitoring will fall under the aegis of the wider management and monitoring programmes developed by DBS.

| Generic HCV | Description | Monitoring measures |
|--|--------------------------------|--|
| 1.1 - Protected areas | Buffers and biodiversity zones | Boundary marking Encroachment Permanent Sample Plots |
| 1.2/1.3 – RTE and endemic species | Presence of Class I/II species | Wildlife monitoring Report on signs of Class I and II species in inventory Enforcement of hunting policy Logging register Post-harvest bruinhart reports |
| 4.1 - Forests critical to water catchments | Catchment drainage | RIL Maintenance of creek buffers and water quality assessment |
| 5.0 – Forest meeting basic needs | Hunting, fishing and NTFPs | Inventory of NTFPs and wildlife Community consultation |

¹ The three tree species identified as Class I or Class II occurring in the concession that are listed as threatened on the IUCN Redlist are: *Vouacapoua americana* (bruinhart) is a commercial species used locally in Suriname for lantern posts and exported for veneer. It is listed as “critically endangered” by IUCN across its range (Brazil, Peru and the Guianas) though it is noted that it is still “relatively common” in Suriname. Due to its commercial value and it is harvested by the FME and subject to special management and monitoring considerations. *Virola surinamensis* (baboonwood) is “endangered” across its range, but it is not currently a commercial species and is neither inventoried nor cut by the FME. *Aniba roseaodora* (rozenhout) is IUCN “endangered” across its range; it is inventoried by the FME but cutting is prohibited by national regulations. *Bertholletia excelsa* (Ingi noto) has not been encountered during inventory in the FME concessions and anyway is nationally prohibited.

6 Map of geographically specific HCVF in the DBS-administered concessions

