

PROJECT SUMMARY

Jattoo's Lumber Yard and Sawmills Logging Project

Project Title

Jattoo's Lumber Yard & Sawmills (JLYS) Logging Operations

Contact Details

Mahendra Jattoo
Lots 10 – 13 Derooy & Lombard Streets
Georgetown

Telephone Number(s): 225 5341/ 223 5491 Fax: 226 2756

Email: jettolumberyard@yahoo.ca

Location of Project:

The forest concession is location within the Mazaruni-Puruni Triangle in the Mazaruni Potaro District, Region 7 and is found on the Left Bank of the Mazaruni River, Left Bank of the Morabisi River and on the Right Bank of the Taparau River.

The area is covered in State Forest and was issued to the Company under a State Forest Exploratory Permit (SFEP) 01/2010.

Description of the Project Site:

The project site consists of an area of State Forest of 33,853 hectares (83,651 acres). This area of prime forest was allocated through a SFEP which was approved by the Government of Guyana and issued by Guyana Forestry Commission (GFC). The forest concession is situated at the Left Bank of Mazaruni River, Left Bank of Morabisi River, Right Bank of Taparau River.

The Concession comprised primarily of mixed forests and is situated on undulating, hilly and flat terrain, with alluvial flats along the streams. The forest comprises of species such as *Mora*, *Greenheart*, *Kabukalli*, *Purpleheart*, *Locust*, *Wamara*, *Bulletwood*, *Crabwood*, *Baromalli* and *Wallaba*.

There are no Amerindian Lands within or in close proximity to the concession. Mining activities dominates the area surrounding the concession.

Non-Technical Description of Project:

JLYS primary goal is to develop a viable, integrated and composite timber business venture of logging and sawmilling operations on the principles of sustainable forestry practices to create the maximum value possible. The Company has already established a significant sawmilling operation and is now in the process of acquiring the forest concession which would facilitate a more efficient operation and allow the Company to increase its market share locally and on the international market.

The primary purpose of this logging operation is to secure raw materials needed for the existing sawmilling operation and other downstream processing plants located on the East Bank of the Demerara River at Coverden. The first phase of the project is to construct the main road to access the concession

and to establish a base camp within the concession. The base camp will consist of housing facilities for workers, workshop, warehouse and log yard.

Once the facilities are in place logging will commence. Logs will be harvested from the approved harvesting blocks and transported to a log yard for grading. The logs will then be transported by logging trucks to Kartabu Point where it will be loaded onto barges for shipment via river to the processing facilities at Coverden. A 4.5% of the productive forest will be set aside as a Biodiversity Reserve.

Project Rationale

JLYS is an established sawmill operator and has over two decades experience in the forestry sector. The Company has been exporting rough and dressed lumber to overseas markets for approximately fifteen (15) years. Over the last five years JLYS has exported more than 4000 m³ of lumber to overseas markets in the Caribbean, Europe and North America. To sustain its operations the Company is currently sourcing rough chain cut lumber from SFPs holders and logging communities as well as TSA holders. However, the fluctuation in the provision of raw materials and quality of material from these suppliers has been affecting the efficiency of the Company's operation and the ability to meet market obligations.

At the same time, the Government of Guyana has tasked the Guyana Forestry Commission (GFC) with promoting sustainable management of Guyana's forest resources. As part of its mandate, GFC has been encouraging sustainable forest operations for the promotion of social and economic development while at the same time safeguarding the integrity of forest resources. JLYS has responded to this effort by GFC to implement a project based on a 'sustained yield management programme and to operate in accordance with GFC's Code of Practice for Forest Operations.

As such, JLYS is pursuing the establishing of a logging operation within the concession to supply logs for the existing sawmilling and downstream processing operations and to produce high quality lumber for both the domestic and overseas markets.

Detailed Description of the Operational Phase:

The Project will entail the extraction of timber within the forest and transportation to the processing facility along the East Bank of the Demerara River. Logs will be harvested from the approved harvesting blocks and transported to a log yard for grading. The logs will then be transported by logging trucks to Kartabu Point where it will be loaded onto barges for shipment via river to the processing facility. Currently the Company is in the exploration phase where the Environmental and Social Impact Assessment (ESIA) and the Forest Inventory are being conducted and the Five Year Management Plan/Annual Operation Plan being prepared. Once this phase is successfully completed the Company will pursue the Timber Sales Agreement (TSA) from the GFC which would allow for project implementation. The implementations aspect of the Project includes:

Construction Phase

- Mobilising and acquiring of equipment/machinery
- Road location survey, block demarcation and timber inventory
- Conduct of 100% pre-harvest inventory
- Road, bridges and culverts, drainage construction
- Building of skid trails and log markets
- Construction of forest camp including workshop, skid houses, housing and power plant

Operation Phase

- Felling and bucking of logs
- Stumping and skidding of logs

- Grading and transport of logs to Kartabu Point by logging trucks
- Transportation of logs to existing sawmill along the Demerara River

Capital investment in the Project:

The Company intends to invest in excess of US\$2,000,000 within the first five (5) years of the operation.

Employment by the Project:

It is expected that the Company will employ approximately 150 persons once the project is in full operation.

Life of the Project:

The project will have an initial life span of twenty five (25) years.

Predicted Impacts to the Environment and Mitigation Actions to be Taken

The following is a prediction of possible social and environmental impacts of the project and the mitigation measures JLYS will adopt.

1. Impacts to **Land/Soil**:

Construction of roads, bridges log yards and drainage will require the removal of topsoil and vegetation. Removal of vegetation will expose soil to the elements of erosion.

Mitigation measures:

Since this is a standard operating procedure for forestry operation the GFC has developed a Code of Practice (CoP) to guide these activities. The company will comply with the requirements of the CoP. Vegetation removal will be limited and logging will not be done of steep slopes.

2. Impacts to **Air**:

Impacts to air could result from fumes from exhaust for vehicle and machinery and dust from roads.

Mitigation measures:

These are not expected to be significant and will be localized. Measures would be implemented to minimize these potential effects.

3. Impacts to **Surface Water**:

Surface water could be impacted by the construction of roads, bridges, skid trails and from surface runoff especially during the rainy season. Contamination can also occur from spillage and improper disposal of both liquid and solid waste and fuel and chemicals.

Mitigation measures:

The GFC Code of Practice has established guidelines and procedures to be followed as it regards layout and construction of roads and drains in relation to water bodies as well as logging operations. JLYS will comply with these. Additionally, during the rainy season, there will be restricted use of roadways to avoid

impacts to water resources from run-off. Management plans will be developed for waste and fuel and chemical handling and use.

4. **Noise:**

Noise associated with the operation from logging equipment, transport vehicles and generator will be unavoidable. However, this is expected to be insignificant and localized as well as below the EPA limit for industrial operations of 100 dB during the day.

Mitigation measures:

Efforts would be made to ensure noise level do not exceed the levels specified by the EPA. Personal Protective Equipment will be provided to employees. Equipment and machinery will be equipped with the requisite muffler devices and generator would be enclosed.

5. **Impacts on plant and animal species**

Given the nature of the proposed operation it is expected that it will have some impact on the flora and fauna within the concession. In the initial stages, there can be expected animal movement/migration away from construction zones and during the logging operations as well. This, however, is not expected to be permanent and will be localized since only selected logging will be practiced, leaving most of the forest intact. Also, only commercial species will be targeted as part of the operations. A detailed forest inventory of the concession will be done which will provide more information on the species types within the concession. A Forest Management Plan is being prepared which will identify species quantities to be harvested.

Mitigation measures:

GFC has stringent guidelines for biodiversity protection within forestry concessions, requiring a portion of the area to be protected as a biodiversity reserve. For this project, more than 1524 hectares (3766 acres) of productive forest will be established as a biodiversity reserve within the concession and the operations will comply with the stringent GFC Code of Practice. In addition, the Company will implement reduce impact logging (RIL) techniques. Areas of unproductive forests and areas where logging activities would be difficult will not be disturbed, thus contributing to the areas maintained.

6. **Impacts on present land use:**

The area is covered in state forest. However, other timber concessions border some parts of the SFEP. Also, the wider area is dominated by mining activities. Nevertheless, the project may contribute to a change in land use within the concession area. Construction of the road to the concession can increase access to the area, increasing the potential for other activities to occur.

Mitigation measures:

The impact of change in land use within the concession is not expected to be major. However the Company will engage all stakeholders to ensure that conflicts do not arise. The Company will also collaborate with Government agencies and other stakeholders in the management of the access road.

7. **Impacts on health:**

Operations of this nature could result in accidents and impacts to health and safety of employees and other personnel.

Mitigation measures:

JLYS will undertake to ensure that all requirements under the Occupational Health and Safety Act and other related legislation are in place. The Company will also undertake to provide health facilities on-site, as well as have emergency operational plans to cater to emergencies.

8. Impacts on **income**, both on a local and national level:

The project will have a positive impact on income, principally through direct employment. Also, the provision of goods and services for JLYS operations by local service providers will create indirect employment. The project will directly employ over 150 persons.

Mitigation measures:

None required.

Environmental Compliance

JLYS intends to comply with all national laws, regulations and guidelines as it relates to the environment and to forestry operations of this nature. In particular the operations of the project will be guided by the Environmental Protection Act, the Environmental Permit, the Environmental Management Plan, Conditions of the TSA and the GFC Code of Practice for Timber Harvesting.



