

# MAGAMBA ECO FOREST LODGE

## FEASIBILITY STUDY FOR THE ESTABLISHMENT OF ECOTOURISM FOREST LODGE AT MAGAMBA, IN LUSHOTO DISTRICT, TANGA REGION, TANZANIA

### 1.0 PROJECT BACKGROUND

#### 1.1 Company Information

- (i) Name of the Company : A new separate Company known as  
"MAGAMBA  
ECO FOREST LODGE" will manage and  
operate the proposed Eco Forest Lodge.
- (ii) Postal Address : P.O. Box 1321, Dar es Salaam
- (iii) Office Telephone No : 2863122/2360336
- (iv) Email : [timsale@timbersalesltd.com](mailto:timsale@timbersalesltd.com)
- (v) Location of Office  
Premises : Magamba, Lushoto,

P.O. Box 20, Lushoto

Tanga Region

## 1.2 Project Concept

Magamba Eco Forest Lodge will be a new hotel in the area and the first of its kind in a natural forest reserve.

M/s Grewal Sawmills Limited started sawmilling operations at Magamba and Shume Forest in Lushoto District, Tanga Region, in 1948 based on forest concessions.

Since 1980, M/s Grewal Sawmills Limited has been working in sustainable plantations with natural forest conservation of the utmost in mind.

M/s Grewal Sawmills Limited has contributed in many ways in helping the local community with road construction, supply of timber for building schools and school desks, building a private wing for the Lushoto District Hospital and providing transport and support whenever needed for any kind of emergency in the Lushoto District.

The relationship between M/s Grewal Sawmills Limited and the local communities has been very cordial for over the last 60 years.

Since 2009, M/s Grewal Sawmills Limited has been working on setting up an Ecotourism Lodge at the present sawmill site of Magamba, since tourism is the future for preservation of Tanzania's natural forests.

M/s Timber Sales (EA) Ltd has been established since 1952 in Dar es Salaam dealing in timber products and furniture.

The expertise of Timber Sales (EA) Ltd in wooden components will facilitate the building of the proposed Eco Lodge cottages to the required standards.

Furthermore, the company will assist in advertising in Dar es Salaam and neighbouring regions. It will also provide office premises in Dar es Salaam for promotion of tourism for the lodge.

## 1.3 Project definition

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# MAGAMBA ECO FOREST LODGE

The total invested outlay of the proposed Magamba Eco Forest Lodge project is estimated at Tshs. 1,900,326,526 Billion including initial working capital and is expected to be financed out of own contribution (shareholders Equity Participation) of Tshs 1,296,576,000 Billion, a medium-term loan amounting of Tshs 575 million and a Bank O/D Facility of Tshs. 28.75 million as shown below.

An initial working capital requirement of Tshs. 28.75 million will be financed out of a Bank Overdraft facility.

The operations of the Eco Lodge are expected to realize sales revenue of Tshs. 645.180 million during the 1st year of operations rising to Tshs. 701,700,000 million during the 2nd year of operations, onwards. Projected figures given are as best case scenario with no real understanding of actuals as this project will be the first of its kind in the country.

## 2.0 CAPITAL INVESTMENT STRUCTURE AND FINANCING PLAN

### 2.1 Location and Infrastructural Facilities

The proposed Magamba Eco Forest Lodge will be constructed at the present site of the former M/s Grewal Sawmills Ltd, which is located in the Magamba Forest.

All the sawmill machinery has been removed except existing staff houses some of which would be refurbished to be used for the Eco Forest Lodge.

The site for the proposed Eco Forest Lodge lies approximately 15 km from Lushoto Township which itself lies some 360 km from Dar es Salaam.

The site is not connected to the National Electricity Grid. The forest lodge will therefore have to depend on self-generated electricity. Clean and fresh water is easily available from the streams of the Usambara Mountains.

### 2.2 Buildings and civil works

It is proposed to construct an Eco Forest Lodge, which will consist of 10 small timber cottages each ideal for sleeping 2 people. Other facilities of the lodge will include reception area, sauna and swimming pool area and staff facilities.

The Magamba Eco Forest Lodge will consist of 10 small timber cottages which could be easily removable and re-allocated to any other desirable site should the need arise.

The services offered at the Eco Lodge will consist of 10 upmarket double bed, ensuite, timber cottages, and a dining room, bar and lounge facilities with open glass-views to the forest.

All the building materials will be sourced locally to enhance the beauty of the lodge. Most of the building materials would be timber and the roof would be shingled in some areas. There will also be use of local stone.

The Eco Lodge will be constructed in such a way that it will have the minimum possible impact on the environment.

The Eco Lodge will offer bird watching and nature hikes in the already existing forest trails. Lushoto has been described as the Switzerland of Africa with its pristine and unspoiled natural beauty.

The Eco Lodge will target a limited clientele, unlike the larger game reserves in the northern circuit for example. There has been no international acknowledgement of the beauty of this area, as there have for place like Ngorongoro and Serengeti and there are no Big 5 to draw tourists from overseas. The people interested in visiting Lushoto are those who are already familiar with its historic town and only those with a passion for bird watching and a curiosity in flora and fauna. Until Magamba Eco Forest Lodge can establish itself as a cool country retreat from the bustle of city life, can we expect to operate at a higher capacity occupancy. The initial running of this enterprise is expected to be at a loss, with the view to found itself as an eco-friendly, nature retreat to expose and educate people to the beauty of the forest and the need to conserve.

The awareness and facilities will develop over time as the market grows but one must have a realistic expectation to begin with. In order to assess the projections based on the current tourist figures available at TFS offices, Magamba (number of visitors) and those who can afford to pay upwards of \$200 per night (other than backpacker tourists, who can pay a higher price point). A financial and occupancy structure can be used based on tourist activity at other Nature Forest Reserves such as Chome, Nilo or Uzungwa.

The existing buildings including stall houses, staff changing rooms, sauna and swimming pool are valued at US \$ 150.000 which is equivalent to Tshs. 345 Million. The new buildings and civil works are estimated at Tsh 611.63 million. The total cost of buildings and civil works is therefore Tshs. 956.63 million (see Appendix-1 for details)

### **2.3 Plant and Machinery**

The plant and machinery to be purchased for the Forest Lodge will include a 120 KVA Genset and a 10 KVA Genset for self-generated electricity, solar panels for cottages, electrical installation and water system installation. Other equipment will be used for compound, garden and road maintenance. The cost of plant and machinery is estimated at Tsh 232.875 million (see Appendix II for details)

### **2.4 Motor Vehicles**

Existing motor vehicles include a 6 ton truck and a small tractor for maintenance of roads. Two new 4 WD Land Cruiser special wagons shall be purchased for tourism and administrative use. The cost of motor vehicles is estimated at Tshs. 478.4 million. (See Appendix-III for details).

### **2.5 Furniture and Fittings**

Furniture and Fittings to be purchased for the Forest Lodge will include the following: -

(i) Bedroom Area: Beds, mattresses, bed sheets, pillows, pillow covers, towels, easy chairs, bedside tables, centre tables, curtains, carpets, bathroom and toilet unit and fire extinguishers.

(ii) Reception Area: Lounge sofas imported, computers, intercom system for all the rooms, first aid cubicle, bathroom and toilet unit and fire extinguishers.

(iii) Guest Lounge: Leather sofas imported, centre tables, carpets, fire place, necessary decorative items, bathroom and toilet unit and fire extinguisher.

(iv) Dining Room: Tables (for 4 people), chairs, table clothes, cutlery, crockery, side serving tables, necessary decorative items, fire place, wash room unit.

(v) Kitchen: All necessary utensils and equipment to be used for preparing food for up to 40 people, industrial fridge, industrial freezer, industrial gas cooker, kitchen cabinet, serving tables, large cabinets for storing fresh fruits and vegetables, washroom unit and fire extinguisher.

## 2.6 Pre-Operating Expenses

There are some intangible expenses which the company will have to incur before the project can start commercial operations. Such expenses include feasibility study and preparation of project proposal and business plan, environmental impact assessment, company administrative and promotional expenses.

Pre-Operational expenses for this project have been estimated at Tshs. 18.20 million.

## 2.7 Total Investment in fixed assets.

The total capital investment cost is estimated at Tshs. 1,900,326,250.00 and broken down as follows: -

### TOTAL CAPITAL INVESTMENT COST SCHEDULE

#### TOTAL CAPITAL INVESTED SCHEDULE

No.	ITEM	AMOUNT (TSHS)	AMOUNT (US \$)
1	Buildings and Civil Works	956,627,500.00	415,525.00
2	Plant and Machinery	232,875,000.00	101,250.00
3	Motor Vehicles	478,400,000.00	208,000.00
4	Furniture and Fittings including kitchen equipment, utensils, cutlery and linen	185,475,000.00	80,642.50
5	Pre- operational expenses	18,198,750.00	7,912.50
6	TOTAL INVESTMENT IN FIXED	1,871,576,250	813,328.80
7	Add: Initial Workers Capital Requirement	28,750,000.00	12,500.00
	<b>TOTAL CAPITAL INVESMENT COST</b>	<b>1,900,326,250</b>	<b>825,830.00</b>

## 2.8 Financing Plan.

The total capital investment cost of the project including initial working capital, is expected to be financed out contribution (Shareholders Equity Participation) of Tshs. 1,296,576,250 a medium-term loan amounting to Tshs 575 million and a Bank O/D Facility of Tshs. 28.75 million as shown below.

### FINANCIAL PLAN

No.	SOURCE OF FUNDS	AMOUNT (TSHS)	AMOUNT (US \$)
1	M/s Grewal Sawmills Ltd	402,451,250.00	174,980.00
2	M/s Timber Sales (EA) Ltd	434,125,000.00	188,750.00
3	Mr. Harmeet Grewal	115,000,000.00	50,000.00
4	Mr. Harjeet S. Grewal	345,000,000.00	150,000.00
5	Medium - Term Loan	575,000,000.00	250,000.00
6	Bank O/D Facility	28,750,000.00	12,500.00
	<b>TOTAL SOURCE OF FUNDS</b>	<b>1,900,326,250</b>	<b>826,230.00</b>

## 3.0 SELLING PRICES AND PROJECTED SALES REVENUE

### 3.1 Hotel Capacity and Projected Room and Bed occupancy

#### 3.1.1 Hotel capacity

The Magamba Eco Forest Lodge is designed to have 10 double room cottages. The Eco Forest Lodge will, therefore have a total of 20 beds.

#### 3.1.2 Room and Bed Occupancy

Room Occupancy Rates have been assumed at 50% during the first year of operations. From the second year onwards, the Room Occupancy Rate will steady at 60%.

The Bed Occupancy is also assumed at 50% during the first year of operations and steadies up at 60% from the second year of operations onwards. As mentioned previously this is a projection only, more accurate numbers cannot be established due to its unique position.

### 3.2 Accommodation Tariff

A tariff rate of US\$ 200.00 per double room has been assumed. This rate includes bed and breakfast and is net of hotel levy and service charges are assumed bed and breakfast and is net of hotel levy and service charge.

### **3.3 Food**

The price for lunch and dinner excluding hotel levy and service charge are assumed as follows :

**Lunch :** Tshs. 20,000 per customer

**Dinner:** Tshs. 30,000 per customer

### **3.4 Tea and Snacks**

Income from tea and snacks has been assumed at 10% of food sales.

### **3.5 Bar sales**

#### **(i) Beer sales**

It is assumed that the lodge will maintain average sales of 3 bottles of beer per guest per day. A selling price of Tshs 5,000 per bottle has assumed.

#### **(ii) Soft Drinks**

It is assumed that the lodge will maintain average sales of 3 bottles of soft drinks per guest per day. A selling price of Tshs 2,000 per bottles has been assumed.

#### **(iii) Squashes and Juices.**

Income from the sales of squashes and juice is estimated on the basis of 20% of soft Drinks sales.

#### **(iv) Hard Drinks**

It is assumed that the lodge will maintain an average of 1 (one) bottle of Gin and 1(one) bottle of whisky per day. Each bottle contains 26 Tots and the selling price is assumed at Tshs 5,000 per tot.

### **Laundry**

Income from Laundry is estimated at Tshs .2,000 per guest per day.

#### **3.5.1 Consolidated Projected sales Revenue**

The estimates for the various sales generating activities are shown at Appendices X to XII and the consolidated sales revenue are shown at Appendix XIII.

## 4.0 OPERATION COSTS

### 4.1 Project Operating Cost Assumptions

Projected operating cost estimates have based on norms pertaining at existing lodge of similar capacity and characteristics operating in Tanga and Kilimanjaro Regions. The constant cost and constant prices principle has been employed when projecting operating costs assuming that any increase in cost during the projected period will be absorbed by corresponding increase in the selling prices.

### 4.2 Cost of Sales

Cost of sales has been calculated as percentage of the sales turnover of the respective cost functions as follows: -

Food	:	50%
Tea and Snacks	:	50%
Beer	:	50%
Soft Drinks	:	25%
Squashes and Juices	:	25%
Hard Drinks	:	60%

(Details of the cost of Sales are given at Appendix-XIV)

### 4.3 Salaries and Wages

Salaries and wages to be paid to employees of the Eco Lodge are attractive and well above the minimum existing scales set by the Tanzanian Government. A provision has been made for Social Contributions at 25% of basic salaries (For details see Appendix-XV. A and Appendix-XV. B)

### 4.4 Maintenance and Spares

The cost of maintenance and spares has been estimated as a percentage of the value at cost for the following investment items:

Building and Civil works	:	1%
Plant and Machinery	:	10%
Motor Vehicles	:	10%
Furniture and Fittings	:	5%

### 4.5 Insurance

The cost of Insurance has been assumed at 1.5% of the Total Investment Cost in Fixed Assets excluding Pre-operational Expenses,

#### **4.6 Other Operating Costs**

Other operating costs include, fuel for Gensets, tractor and vehicles, consumables and toiletries, replacement of cutlery, utensils and linen, gas for kitchen use as well as administrative and general office expenses.

#### **4.7 Total Operating Costs**

Total operating costs are estimated at Tshs. 574.890 million during the first year of operations rising to Tshs. 604.890 million during the second year of operations, onwards. The estimates of the magnitudes of the different operating cost functions are given at Appendices XIV to XVIII and the Total Operating Costs are shown at Appendix XIV.

#### **4.8 Economic Depreciation**

The cost of Annual Economic Depreciation has been estimated as a percentage of the value at cost for the following investment costs.

#### **4.9 Working Capital requirement**

Some operating costs have to be incurred before sales revenue and realize. These operating cost for this project include purchase of food and beverages, salaries and wages, fuel for genets and vehicle, gas for kitchen use and administrative expenses.

The project will require an initial working capital of Tshs. 35.068 million during the first year of operations rising to Tshs. 35.645 million during the second year of operations onwards.

The estimates for the working capital requirements are given at Appendix -XX.

### **5.0 FINANCING ANALYSIS**

#### **5.1 Consideration and Assumptions**

(I) The total investment outlay for the proposed Magamba Eco Forest lodge project of Tshs. 1,900.326 million, including initial working capital, is expected to be financed out

of own contribution (shareholders Equity Participation) of Tshs. 1,296.576 million, and a medium-term loan amounting to Tshs.575 million. The initial working capital requirement of Tshs. 28.75 million will be financed out of a Bank Overdraft facility.

(ii) The medium-term loan of Tshs. 575 million is assumed to be repaid in equal yearly instalments over a period of 5 years and bears an interest rate of 15 % per annum.

Interest payments have been computed based on the reducing balance principle.

A grace period on both principal repayment and interest payment of the medium-term loan has been assumed during the project's construction period of 20 months.

## 5.2 Income Projections

Financial projections conducted over a period of 5 years indicate that the project is viable and profitable as it makes reasonable profits throughout projected period.

**Net loss is projected for the first two years of operation and profit is projected from third year of operation onwards**

## 5.3 Cash Flow Projections

Projected cash flows indicate that the project will generate enough cash to meet financial obligations.

**The medium-term loan of Tshs. 575 million will be fully repaid by the end of the 4<sup>th</sup> year of operations and the Bank Overdraft Facility of Tshs. 28.75 million will be fully retired at the end of second year of operations**

## 5.4 Projected Balance Sheet

The balance sheet projections show a strong cash balance. The current liabilities are adequately covered by current assets through the projected period.

## 5.5 Security Analysis

The proposed security for the medium-term loan of Tshs. 575 million is a first charge on all movable and immovable non-current assets of the new Magamba Eco Forest Lodge. If net fixed assets of the project are to be taken as security for the medium-term loan, then the position develops as follows

No.	NET FIXED ASSETS(TSHS)	LOAN AMOUNT DUE (TSHS)	SECURITY COVER (TSHS)	RATIO
0	1,871,576,250.00	575,000,000.00	1,296,576,250.00	2.25
1	1,682,790,125.00	455,000,000.00	1,227,790,125.00	2.70
2	1,494,004,000.00	335,000,000.00	1,159,004,000.00	3.46
3	1,305,217,875.00	215,000,000.00	1,090,217,875.00	5.07
4	1,116,431,750.00	95,000,000.00	1,021,431,750.00	10.75
5	927,645,625.00	-	-	-

The above security cover analysis shown that the net fixed assets of the new lodge adequately cover the security for the proposed medium-term loan

## 6.0 MANAGEMENT ORGANISATION AND MANPOWER REQUIREMENT

### 6.1 Management

The Magamba Eco Forest Lodge Project will be headed by a Hotel Manager, who will be experienced and conversant with management, operational, financial and marketing practices of the hotel and Ecotourism industry activities.

The Hotel Manager will be in charge of the day-to-day activities of the hotel and ecotourism operations and will report directly to the Board of Directors which is vested with the overall policy management of the company.

### 6.2 Organisation and manpower requirement

Under the Hotel Manager there will be a Housekeeper and an Accountant / Administrative Officer.

The Hotel Project will employ a total of 36 employees out of whom 17 will be in the Administration section. The remaining 19 employees will be in direct production employment including room assistants, porters, chefs and kitchens staff, dining room servers, barman and waiters and tourist guides.

## **7.0 MARKETING ASPECTS.**

The proposed Magamba Eco Forest Lodge will cater mainly for tourists on their way from Dar es Salaam to the Northern Circuit and a good get away for local residents from the heat, pressure, stresses and strains of city life.

Lushoto Township has presently a few hotels which offer reasonable accommodation.

The Magamba Eco Lodge would provide decent and acceptable service. Furthermore, the location of the Lodge would make all the difference for people to enjoy and appreciate the serene beauty of the Forest Lodge and the cooler mountain air is extremely conducive for tourists business.

The new Eco Lodge is therefore not expected to face any insurmountable marketing problems.

## **8.0 ENVIRONMENTAL IMPACT**

The proposed Magamba Eco Forest Lodge Project will not generate any obnoxious or intoxicating gases that might be released to the atmosphere; neither will it generate any poisonous effluent that might be disposed to the surrounding streams and rivers which could be harmful to the health of the community living in the surrounding neighbourhood.

The proposed Magamba Eco Forest Lodge project is therefore environmentally friendly and local community friendly.

## **9.0 IMPLEMENTATION SCHEDULE**

Implementation have already started after the proposed Eco Forest Lodge at Magamba, Lushoto District in Tanga Region has been approved by the ministry of Natural Resources and Tourism and we have the Certificate of National Environment Management council (NEMC) and other Government Ministerial Departments, as well as finance for the project has been mobilized.

Taking into consideration the time involved in negotiation and approval for government permits and bank loans, the following schedule of implementation is considered to be realistic:

<b>ACTIVITY</b>	<b>PERIOD</b>
Approval by Ministry of Natural Resources and Tourism, Forest Division	March 2022
Approval by Lushoto District Authority	Approved
Approval of medium – term loan by lending bank	April 2022
Construction of Eco Forest Lodge and external works	July 2022
Purchasing and installation of Eco Forest Lodge machinery and equipment including furniture fittings, linen and cutlery	Dec 2022
Trial runs of Forest Lodge operations Commencement of commercial operation of the Eco Forest Lodge.	July 2023

## **10.0 ECONOMIC ASPECTS**

The establishment of the proposed Magamba Eco Lodge has the following social economic benefits: -

- (i) The sponsor's (M/S Grewal Sawmills Limited) time spent in the area, which is over 60 years, has earned them good reputation and cordial relations with local residents.
- (ii) Experience gained during the sponsor's stay in the Usambara will help them to function efficiently and effectively.
- (iii) Their knowledge of the area will also allow them to protract to the visitors the true beauty and heritage of the Usambara Forests.
- (iv) All the building materials will be sourced locally to enhance the beauty of the Lodge.

(v) Most of the workforce to build and operate the Lodge will be from the nearby villagers. This will create employment for 60 people.

(vi) Most of the fresh foods, vegetables, fruits, poultry, meat, eggs and milk will be sourced from nearby villages. This in turn will increase house hold income for the local residents.

(vii) Local economy will get boost from the increased jobs and sale of their product and increased tourist spending.

(viii) The District Government and Forest Division will get revenue in the form of taxes and levies.

(ix) The location of the Eco Lodge in the Forest area would safeguard against illegal logging and pouching in the forests. Furthermore, in the event of fire, the manpower from the Lodge will help the forest Division staff whenever the need arises.

(x) Since, the sawmill has existed in the same site for more than 60 years, it would be merely a change of use of facility putting into consideration that all the sawmill machinery has been removed except existing staff houses some of which need to be refurbished for use in the Eco Lodge.

(xi) The sponsors of this project would like to emphasize and ensure that there would be no negative environmental impact on the surrounding area as a result of the establishment of the Magamba Eco Forest Lodge.

## **11.0 CONCLUSIONS AND RECOMMENDATION**

(1) The Magamba Eco Forest Lodge project will provide both the local and foreign tourists visiting Lushoto District with appropriate up market accommodation of acceptable and decent standard.

(ii) The project is technically feasible, financially viable and economically justifiable provided it is backed by management and personnel who are qualified and experienced in the activities of the hotel and tourism industry.

(iii) It is recommended that the project be implemented and be given the necessary support by all parties concerned.