

# **PINGTOUGE CO. LIMITED**

## **Business Plan**

**for**

**Manufacturing of plywood, Medium Density Fiber Board (MDF)**

**and**

**Timber Related Products for Export**

Presented for;  
PINGTOUGE CO. LIMITED  
P. O. Box 1046 Makambako, NJOMBE

## **2.0. AN OVERVIEW OF THE FORESTRY SECTOR IN TANZANIA**

### **1.0. SUMMARY**

#### **1.1 Project Concept**

This project document presents a proposal by **PINGTOUGE CO. LIMITED**, a locally registered company with certificate of Incorporation No. **154026827** dated 5<sup>th</sup> November, 2021, seeking to establish enhanced timber utilization project which will especially utilizing the locally available valuable abundant softwood and hardwood for manufacturing of Plywood, Medium Density Fiber Board (MDF) and Timber Related Products for Export. In essence, the project will involve construction of industrial building, office, store, purchasing new machines, construction of showrooms.

The company projects will be fed by raw material acquired from authorized dealers in the country.

The project will adopt state of the art manufacturing technology to be acquired from abroad. This feasibility study report lays down the financial and economic viability of the intended project.

#### **1.2 Location**

The projects will be located at Idofi street , Mlowa area , Makambako - Njombe District, region. The premises will serve as the production unit and showrooms.

The major products will be:

- Plywood,
- Medium Density Fiber Board (MDF)
- Any timber related products

The project promoters expect to enter into export markets where they anticipate exporting to China.

#### **1.3 The Sponsors**

**PINGTOUGE CO. LIMITED** will be sponsoring this project. The Company is jointly owned by two shareholders.

<b>Names Subscribers</b>	<b>% of Shares</b>	<b>Nationality</b>
HUI JIE CUI	21	China
HUI JUAN ZHAO	20	Tanzania

#### **1.4 Project Management**

**PINGTOUGE CO. LIMITED** will be managed by the competent and professional management who have experience in managing timber related products manufacturing. Under his management, **PINGTOUGE CO. LIMITED** is expected to grow steadily from medium to big company producing high quality timber related products serving international markets.

#### **1.5 Raw Material Base**

The Plywood, Medium Density Fiber Board (MDF) Any timber related products manufacturing project will strictly adhere to the timber utilization policy of the country's Forestry Department of the Ministry of Natural Resources and Tourism. As stated above, the major supplying areas for this manufacturing project have been identified in Iringa region. The major raw materials expected to be soft wood to be sourced locally from Iringa region where the raw materials are readily available.

### **2.0. An Overview of The Forestry Industry In Tanzania.**

#### **2.1 Forest Distribution:**

Tanzania is endowed with vast forest resources. The country has 33.5 million hectares of forests and woodlands (Table 1).

Table 1: Forest distribution by area and cover type

<b>Type</b>	<b>Area ('000 hectares)</b>	<b>Percentage</b>
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Closed forests	1,400	4.18
Mangroves	115	0.34
Woodlands	31,985	95.48
Total	33,500	100.00
Used of forest land		
Net productive area	23,755	78.04
Unproductive area	9,745	21.96
Total	33,500	100.00
Legal status		
Forest reserves	13,059	38.98
Forest/woodlands within parks	2,000	5.97
Public forest lands	18,441	55.05
Total	33,500	100.00

The Forestry and Beekeeping Division is responsible for administering a total of 13 million hectares of forest reserves and 20.2 million hectares forest resources in general lands. These forests contain many potential wood and non-wood products and a number of outstanding scenery sites.

## 2.2 Forest Plantations.

Tanzania has 16 plantations covering a total planted area of 80,000 hectares. Tree species planted include: *Pinus patula*, *Pinus elliottii*, *Cuppressus lusitanica*, *Cedrela odorata*, *Tectona gandis*, *Terminalia spp*, *Podocarpus species*, *Juniperus procera* and various *Eucalyptus species*. Most of these plantations are mature and ready for harvesting.

Table 2 presents a summary of the industrial forest plantation resources.

Table 2: Forest Plantations

<b>SN</b>	<b>Plantation</b>	<b>Location</b>	<b>Major species</b>	<b>Area (Ha)</b>	<b>Estimated Allowable Cut (m<sup>3</sup>)</b>
1	Shume	Lushoto-Tanga	Pines, Cypress	3,388	54,209
2	Magamba	Lushoto-Tanga	Pines, Cypress, Cedar	523	8,368
3	Ukaguru	Kilosa, Morogoro	Pines	2,396	38,336
4	Rondo	Lindi	Teak, Pines	2,664	42,624
5	Matogoro	Songea, Ruvuma	Pines	1,764	28,224
6	Kawetire	Mbeya	Pines	1,764	28,224
7	Kiwira	Mbeya	Pines	2,627	42,032
8	Rubare	Kagera	Pines	285	
9	Rubya	Ukerewe, Mwanza	Pines	1,816	29,056
10	Buhindi	Mwanza	Pines	3,206	51,296
11	Meru	Arusha	Cypress, Pines, Eucalyptus	6,885	110,160
12	West Kilimanjaro	Pines, Cypress	Pines, Cypress	4,653	74,448
13	North Kilimanjaro	Kilimanjaro	Pines, Cypress	5,588	89,409
14	Longuza	Muheza, Tanga	Teak, Eucalyptus	40,529	648,464
15	Sao Hill	Mufindi, Iringa	Pines, Eucalyptus	40,529	648,464
16	Mtibwa	Turiani, Morogoro	Teak, Cedrela	1,773	28,369
	<b>Total</b>			<b>80,508</b>	<b>1,288,128</b>

### 2.3 Natural forests

These forests have numerous valuable indigenous tree species suitable for industrial wood production such as *Dalbergia melanoxylon* (E.A. Blackwood), *Pterocarpus angolensis* (mninga), *Khaya anthotheca* (African mahogany), *Paurosa* etc. These species are suitable for construction timber, joinery and furniture production, carving, flooring and general-purpose construction wood.

Soft wood and hardwood plantations offer good opportunities to invest in establishment of wood-based industries, which may include:

- Sawmilling (saw wood) industry
- Chipboard (Particle board) factories
- Fiberboard (Hard boards) manufacturing plants.
- Furniture and joinery woodwork
- Prefabricated structures and other industrial wood use.
- Pulp and paper industries.

The government encourages trading of manufactured and semi-manufactured wood products. With the exception of Teak (*Tectona grandis*) and *Paurosa* (*Swartzia madagascariensis*), export of round logs is prohibited. Other wood products that are also allowed for export include; flooring strips, Clarinet sets, Scottish pipes, wood carvings, doors, windows and Zanzibar chest.

### 2.4 Non- Wood Forest Products

The high biodiversity of Tanzania's natural forests offers a wide range of non-wood products such as Gum arabic from *Acacia Senegal*. The natural forests have many plants, which can produce dyes the forests have many useful medicinal plants such as *Balanites aegyptiaca*, *Azadirachta indica* etc. The forests are a source of food. They harbour numerous species of mushrooms that have high nutrition value. Mushrooms have a very good domestic market.

The forests have useful fruit trees such as ***Uapaka kirkiana***, ***Vangueria infausta***, ***Syzygium*** species and ***Tamarindus indica*** just to mention a few. Fruits from these trees

are delicious and have a good domestic market. **Sclerocarya birrea** (Marula) is popular for making an internationally recognized liqueur (Amalura drink), which is sold in many departmental stores in Southern Africa. One can also make juices and jams from the fruit. The nuts have high protein - rich oil. Fruits of **Adansonia digitata** are rich in vitamin C while leaves for the species, used for soups and sauces, are rich in vitamin A. Neem can be used for the production of insecticides for controlling agricultural pests.

Some of the tree species have leaves that can be used for the production of beautiful mats that can be sold on the local and export markets. Sandal wood (*Osyris compressa*) are famous for the perfume industry and have a high demand on the export market. *Trichijia enietica*, seed has potential for the manufacture of soap. This wide range of non-wood products from the forests offers investors many options for investing in the forest sub sector.

### **Eco-tourism**

The natural forests in Tanzania have a variety of scenic areas which are suitable for eco tourism and development of recreational sites. Some of the sites are in mountain rain forests,

Coastal and riverine forests. Investors could develop recreational facilities such as lodges and hotels in exclusive natural environments.

The Eastern Arc Mountains which range from North Pare, The Usambaras, Uluguru and Uungu mountains and mangrove forests in Mtwara, Lindi, Coast and Tanga regions are potential sites for eco-tourism.

### **Sale of plants**

As indicated earlier, Tanzania is endowed with high biodiversity. The natural forests have many different endemic plants which have high value on the export market. The East African Violet (*Saint Paulia*) for instance has commanded the flower market in Europe.

Sale of plants

is an area, which is yet to be fully exploited.

## **2.5 Trading conditions and license procedures for forest products.**

The Government of Tanzania has simplified procedures for trading in wood and wood products to encourage trading in these products. In order to facilitate trading in wood and

wood products, the procedures to be followed by investors and traders who wish to engage in the trade are as follows:

## **2.6 Trade in wood and wood products within the country**

Traders in wood and wood products are expected to register with the Ministry of Natural Resources and Tourism. Any trader is expected to have a trading business license and an Income tax Clearance certificate from Tanzania Revenue Authority. Where one has to enter into a forest reserve and fell/remove timber from the forests, it is necessary to have a licence to fell and remove timber and any other wood products from the forests from relevant forest authorities, timber and wood products harvested from the forests must be certified by a forestry official and marked with a hammer (for the case of timber) before they are removed from the forest. The trader needs to obtain a transit pass, which allows them to move the products from the forest to the market.

## **2.7 Trade in wood and wood products outside the country.**

Before one engages in trade on wood and wood products on the export market, it is necessary to do the following:

Complete export forms and attach the following documents;

- Copy of registration certificate for his or her company
- Business license
- Income tax Clearance
- An order from Importer
- Produce evidence of Export returns for previous years
- Be registered by the Ministry responsible for Natural Resources and Tourism.
- Obtain approval for export (each year)
- Prepare Invoice, Pay fees for grading certificate per consignment of 20 m<sup>3</sup>/tonnes and pay an additional fees for export permit issued by the Ministry of Natural Resources and Tourism

## **2.8 Incentives for Investors in Forestry Sector:**

(a) Monetary incentives

- Corporate tax 30%
- Custom duty on capital goods 0%
- Value Added Tax on capital goods 0%

- Capital allowance deduction in the Years of income 50%
- Withholding tax on dividends 10%
- Withholding tax on interest 0%
- Free repatriation of earned income, profits and dividend

**(b) Immigration quotas**

Any business enterprise granted a certificate of incentives is entitled, by law, to an initial automatic maximum immigration quota of up to 5 people during the start up period. A request for additional experts can be considered upon presentation of a request to the Executive Director for Tanzania Investment Centre (TIC). Visas are issued at points of entry to Tanzania. Multiple entry visas to Tanzania are provided to investors on request and where there is evidence that it is necessary to make frequent visits to Tanzania.

**2.9 Pricing**

The pricing policy for the project will be based on the service cost and competition levels considering various variables namely:

- Service positioning
- Gain market share from competitors
- Stimulating and increasing demand and
- Achieving profitability and liquidity financial performance goals
- The average price of 4x8-foot sheet of construction-grade plywood costs roughly \$10 a sheet

**2.10 Production Capacity**

The average annual production of 4x8-foot sheet of construction-grade plywood is 120,000sheets

**2.11 Financing pattern**

The project will be financed by equity US\$ 510,000

**2.12 Project operating costs**

In order to realize its intended objective, the project will have to meet the operating costs which have been budgeted to be 80% of total revenue to cover expenses such as Salaries and Wages, Utilities Motor vehicle running Expenses, Insurance Marketing cost, Depreciation cost, Pension, Communication, Administrative cost, Maintenance cost, Loan interest, Donation etc.

### 2.13 Aspect of Project Sustainability

The project sponsors having studied market conditions and the infrastructure in Tanzania are convinced that the project will be able to operate undisturbed.

### 2.14 Monitoring and Evaluation

The monitoring and evaluation tools will be applied in running this project as well, the project sponsors are determined to cooperate fully with the government and other stakeholders for smooth business running.

### 2.15 Projected Risks

This is a plywood manufacturing industry-based investment; no major unpredictable event foreseen which might affect business so far. Unless a change in the country's political and economic stability occurs, the project is more likely to prosper very fast for a very long period

## 3.0. Project's Investment Capital Investment

The estimated capital investment cost of the project is US\$510,000

### PINGTOUGE CO. LIMITED IMPORT AND EXPORT CO. LIMITED US \$

Land and Building	15,000
Plant and Machinery	200,000
Motor vehicles	70,000
Furniture and Fittings	5,000
Others	20,000
Working capital	200,000

<b>Total</b>	<b>510,000</b>
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#### **4.0 The Products**

The main products of the proposed project consist of the followings:

- Plywood,
- Medium Density Fiber Board (MDF)
- Any timber related products

#### **4.1 The Markets**

The products are for export market. Through well established market channels the company is assured of having sustainable market.

#### **4.2 Supply Position**

Apparently, there is limited availability of plywood in China that is why the company has managed to get established market in china. State of the art technology to be employed will enable the company produce very high-quality products

#### **4.3 Competition**

Due to the limited and insufficient supply as aforementioned, no stiff competition is foreseen. However, it must be cautioned that the targeted market is very conscious regarding quality. Hence, production of sub-standard products or selling at prohibitive prices will immediately shift customers to substitute products.

#### **4.4 Distribution**

The company has already established business contact in China. The company will set up of a special unit which will be provided with resources to enable it efficiently undertakes the distribution function of the company. The company will also consider appointing dealers in neighboring countries.

#### **4.5 Promotion**

Appropriate promotion means will be employed after consultations with promotion experts to enable the company properly promote its products to the target market.

## 5.0 Manpower Requirements.

The management team will be supported by additional staff of **34** will be employed on permanent basis. Casual laborers will also be employed on a daily or weekly payment basis.

### The summary of employees is as following

Employment	Foreign Skilled	Local Skilled	Local Unskilled	Total
Women	2	4	5	11
Men	3	5	15	23
<b>TOTAL</b>	<b>5</b>	<b>9</b>	<b>20</b>	<b>34</b>

## 6.0 Financial Analysis

### 6.1 Considerations and Assumptions:

The corporate tax charged is 30% of the profits. Capital investment allowance is 50%. The capital assets are exempted from custom duty and Value Added Tax. The straight-line method to depreciate the project's capital items has been applied.

Revenues have been conservatively estimated based on experience of the promoters and trends in the industry.

### 6.2 Projected Revenue

For projection purposes, it is assumed that the economic life of the project is five years, and that revenue from business commence from the first year of operation.

### PINGTOUGE CO. LIMITED REVENUE "US\$"

	1	2	3	4	5
Revenue	1,200,000	1,296,000	1,303,680	1,304,294	1,304,344

### 6.3 Projected Profit and Loss Statement

The Income and Expenditure Statement shows the projected income for the 5 years period. The position depicted is that the project earns profit throughout its life. Accumulated after tax profits grow from. **US \$164,465** in first year to **US \$ 882,640** in the 5 year

## PINGTOUGE CO. LIMITED PROJECTED INCOME & EXPENDITURE STATEMENT (US\$)

	1	2	3	4	5
Revenue	1,200,000	1,296,000	1,303,680	1,304,294	1,304,344
Operating cost	960,000	1,036,800	1,042,944	1,043,436	1,043,475
Profit before Depreciation &Interest	240,000	259,200	260,736	260,859	260,869
Depreciation	5,050	2,800	2,800	5,050	5,050
Net Profit before Tax	234,950	256,400	257,936	255,809	255,819
Tax (30%)	70,485	76,920	77,381	76,743	76,746
Profit After Tax	164,465	179,480	180,555	179,066	179,073
Accumulated Profit	164,465	343,945	524,500	703,566	882,640

### 6.4 Projected Cash Flows

This is shown in the financial statements. The project has a positive end of year cash flow from year 1st, i.e., **US\$ 169,515** of operation to the 5th year i.e., **US \$903,389**

### PINGTOUGE CO. LIMITED PROJECTED CASH FLOW US\$

SOURCES:		1	2	3	4	5
Profit before interest and depreciation	-	240,000	259,200	260,736	260,859	260,869
Owners' Equity	510,000					
<b>Total Sources</b>	<b>510,000</b>	<b>240,000</b>	<b>259,200</b>	<b>260,736</b>	<b>260,859</b>	<b>260,869</b>
Applications:						
Capital expenditure	290,000	-	-	-	-	-
working Capital &Others	220,000	-	-	-	-	-
Cash	-	169,515	182,280	183,355	184,116	184,123
Tax	-	70,485	76,920	77,381	76,743	76,746
<b>Sub total</b>	<b>510,000</b>	<b>240,000</b>	<b>259,200</b>	<b>260,736</b>	<b>260,859</b>	<b>260,869</b>
<b>Total applications</b>	<b>510,000</b>	<b>240,000</b>	<b>259,200</b>	<b>260,736</b>	<b>260,859</b>	<b>260,869</b>
Accumulated cash		169,515	351,795	535,150	719,266	903,389

## 6.5 Projected Balance Sheet

The projected Balance Sheet of the project is shown in the financial statements under same heading. Owner equity of the project increases from US\$**510,000** in the first year of operation to **US \$ 1,392,640** in the 5<sup>th</sup> year

### PINGTOUGE CO. LIMITED PROJECTED BALANCE SHEET US \$

<b>Fixed Assets</b>	-	1	2	3	4	5
Opening balance	-	<b>290,000</b>	<b>284,950</b>	<b>279,900</b>	<b>274,850</b>	<b>269,800</b>
<b>Total Long-term Assets</b>	-	<b>290,000</b>	<b>284,950</b>	<b>279,900</b>	<b>274,850</b>	<b>269,800</b>
<b>Less depreciation</b>	-	5,050	5,050	5,050	5,050	5,050
<b>Closing balance</b>	-	<b>284,950</b>	<b>279,900</b>	<b>274,850</b>	<b>269,800</b>	<b>264,750</b>
Working capital	220,000	220,000	220,000	220,000	220,000	220,000
Accumulated cash	-	169,515	351,795	535,150	719,266	903,389
<b>Total assets</b>	<b>220,000</b>	<b>674,465</b>	<b>851,695</b>	<b>1,030,000</b>	<b>1,209,066</b>	<b>1,388,139</b>
Financed by						
Equity	510,000	510,000	510,000	510,000	510,000	510,000
Accumulated Net profit	-	<b>164,465</b>	<b>343,945</b>	<b>524,500</b>	<b>703,566</b>	<b>882,640</b>
Total equity	510,000	674,465	853,945	1,034,500	1,213,566	1,392,640
<b>Total equity and debts</b>	<b>510,000</b>	<b>674,465</b>	<b>853,945</b>	<b>1,034,500</b>	<b>1,213,566</b>	<b>1,392,640</b>

## 6.6 Projected payback period

Total investment is **US \$ 510,000**, cash accumulation in year 3 is **US\$ 539,650**. Which is more than the initial investment by **US\$ 29,650**, the project payback Period is exactly 3 year, only. The project has a relatively short payback period.

## **PINGTOUGE CO. LIMITED PROJECTED PAY BACK PERIOD**

<b>Year</b>	<b>Profit After Tax</b>	<b>Depreciation</b>	<b>Total Cash Flow</b>	<b>Accumulated Cash Flow</b>
<b>1</b>	<b>164,465</b>	<b>5,050.00</b>	<b>169,515.00</b>	<b>169,515.00</b>
<b>2</b>	<b>179,480</b>	<b>5,050.00</b>	<b>184,530.00</b>	<b>354,045.00</b>
<b>3</b>	<b>180,555</b>	<b>5,050.00</b>	<b>185,605.00</b>	<b>539,650.00</b>
<b>4</b>	<b>179,066</b>	<b>5,050.00</b>	<b>184,116.00</b>	<b>723,766.00</b>
<b>5</b>	<b>179,073</b>	<b>5,050.00</b>	<b>184,123.00</b>	<b>907,889.00</b>

### **7.0 Economic Aspects**

Implementation of this project will have the following social and economic values

- Processing of wood products particularly manufacturing of Plywood, Medium Density Fiber Board (MDF) Any timber related products will greatly add value to wood products. At present most of wood products are mainly exported in the form of logs and timber.
- The project will involve transfer of technology in timber related products manufacturing.
- The project will create additional employment for 34 people on permanent contract basis as well as on temporary basis.
- It will create more business opportunities to local suppliers of timber and logs, which will also have a trickledown effect in the timber sub sector and related forestry industries.
- It will generate substantial revenue to the government in the form of corporate tax, value added tax and royalties.
- The project will earn substantial amounts of foreign exchange.

### **8.0 Implementation**

Project implementation is expected to be relatively very short once project has been approved: -

	<b>ACTIVITY</b>	<b>PERIOD</b>
1	Processing TIC Certificate of Incentive	January 2024
2	Funds Mobilization	Jan-April 2024
3	Rehabilitation	May -August2024
4	Ordering of plant and machineries and Vehicles	September-December 2024
5	Arrival of Plant, Machinery and Vehicles	February 2025
6	Commercial Operations	March 2025

### **9.0. Conclusion and Recommendations**

The project is technically feasible, financially viable, and economically sound, provided the sponsors will manage it efficiently. It is recommended that the project be approved by Tanzania Investment Centre and be granted the TIC Certificate of Incentives with its associated privileges and benefits as provided for under the Tanzania Investment Act, 1997.