



DN PRODUCTS LIMITED

BUSINESS PLAN

FOR

POLES AND TIMBER TREATMENT PROJECT

1.0. SUMMARY

1.1 PROJECT CONCEPT

This project document presents a proposal by **DN PRODUCTS LIMITED**, a locally registered company with certificate of Incorporation No.18523 dated 15th September 1990, seeking to establish a poles and timber treatments project at **Kidomole, Bagamoyo, Coast Region and Plot No. 100 Mbezi Industrial area, Dar es Salaam**, the project will enhance timber utilization of the locally available abundant softwood and hardwood timber products from our forests. In essence, the project will involve setting up and purchasing new machines, construction of industrial building, warehouse, showroom etc at both locations. The 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 business plan report lays down the financial and economic viability of the intended project.

1.2 PROJECT INVESTMENT COST

The proposed project on completion is estimated to cost about US\$ 275,258.00. The US\$175,258 of this investment is from owner's equity and cash generated from business while the rest of US\$ 100,000 will be sought from local banking institutions.

DN PRODUCTS LIMITED COST STRUCTURE

PARTICULAR	US\$
Land and Buildings	101,519.00

Machinery & Equipment	66,207.00
Motor Vehicles	10,000.00
Furniture & Fixtures	2,532.00
Pre exp	5,000.00
Others	10,000.00
Working Capital	80,000.00
TOTAL	275,258.00

1.3 THE PROJECT PROMOTERS

The share capital of the company is Tsh 1,200,000,000 divided into 2000 shares, the shareholders of this project are four Tanzanians, namely: -

Name	% of Shares	Nationality	Date of Birth
Richard Donacian Njau P. O. Box 31868 Dar es Salaam, Tanzania Email: dnproducts2011@gmail.com Tel: +255 754308178	45	Tanzania	28/11/1960
Philip Njau P. O. Box 31868 Dar es Salaam, Tanzania Email: dnproducts2011@gmail.com Tel: +25522718610397	10	Tanzania	06/12/1956
John Bahati P. O. Box 31868 Dar es Salam, Tanzania	10	Tanzania	08/03/1958

Email: dnproducts2011@gmail.com Tel: +25522658365655			
Irene Kuringe P. O. Box 31868 Dar es Salaam, Tanzania Email: dnproducts2011@gmail.com Tel: +25522754566556	10	Tanzania	07/04/1954
Unallotted shares	25	Tanzania	

1.4 MANPOWER AND ORGANIZATION STRUCTURE

The project will be managed by a Board of Directors. The Board, like all other boards is responsible for the formulation and supervision of company policies and guidelines. The project's day to day operations will be under the supervision of Managing Director

The project's employee requirement is estimated to be 30 people in number, as shown below: -

Employees Distribution Summary

Employment	Foreign Skilled	Local Skilled	Local Unskilled	Total
Women	NIL	4	6	10
Men	NIL	6	14	20
TOTAL		10	20	30

To ensure timely delivery of consignments, provision of goods service to customers, Management will provide on the job training in the field of motor vehicle maintenance and will provide bonus and other incentives as a means of instilling and boosting employee work moral.

1.5 **OVER VIEW OF ENERGY SECTOR DEVELOPMENT**

The implementation of development plans in the energy sector has achieved various achievements including:

- Increase in electricity production in the country that by April 2020 the power generation capacity of the country has increased to a total of 1,601.84 MW from 1,308 MW in 2015;
- Completion of Electricity Generation Projects Kinyerezi I MW 150 and Kinyerezi II MW 240. Construction of projects was completed 100% in 2016 and in 2018 respectively, of which a total of 398.22 MW was included in the National Grid;
- Continuing Construction of the Julius Nyerere Hydro Power Project (JNHPP) MW 2,115 whose implementation has so far exceeded 85% in accordance with the planned work plan;
- The implementation of the 80 MW Rusumo Project which to date been completed by 61%
- Connection of Lindi, Mtwara, Njombe and Ruvuma Regions into the National Grid which enabled the termination of electricity production using heavy fuel plants which cost TANESCO an estimated TZS 15.3 billion per year;

- Completion of 220 kV electric transit project from Makambako to Songea which was completed in September, 2018 and enabled all 122 villages to be connected;
- Continuous construction of a 220 kV electric transit system for the Speed Train Project (SGR) phase one (Lot I) stretching 160 km from Dar es Salaam to Kingolwira, Morogoro;
- Continuation of the Comprehensive Rural Electricity Distribution Plan while by April, 2020 a total of 9,112 villages were connected to electricity compared to 2,018 villages that were connected to electricity in 2015 equivalent to an increase of 351.54 percent;
- Continuing to have no electricity supply in the country and have an average electricity supply of 325 MW per day; including columns, cylinders, cables and LUKU meters locally and thus facilitating access to the equipment. The production has also contributed to the increase in employment in the country;
- Connecting electricity to 1,293,528 new customers and making the total number of customers connected to electricity by April, 2020 to be 2,766,745 compared to 1,473,217 customers in June, 2015 equivalent to an increase of 88 percent;
- Increasing electricity supply (Overall Electricity Access rate) in the country from 67.8 percent in 2016 to 84.6 percent in 2020;
- Increase natural gas discovered from 55.27 trillion cubic feet in 2015 and reached 57.54 trillion cubic feet in 2020 equivalent to an increase of 2.27 trillion cubic feet;

1.6 OVERVIEW OF TREATED WOODEN TIMBER AND POLE INDUSTRY

- Pole industry is a major economic activity providing employment and income to communities in rural and urban areas.
- Business opportunities for pole suppliers, pole dealers, transporters, chemical suppliers, equipment suppliers and government taxation.
- REA target increases rural access to electricity from 36% to 75% by 2025.
- Telephone communication industry requires to reach 85% of the population and therefore requires huge amounts of poles.
- Transmission poles are required for new connections as well as for replacement of old poles.
- Increasing regional demand for both the communication industry and also the energy industry.
- Increase of furniture requirements has even called for use of modified means such as aluminum and other steels. However people need natural products made from timber and as a result use of improved or treated softwood worldwide will continue to increase.

1.7 OVERVIEW OF DEMAND AND SUPPLY

- The treated wooden utility pole industry is dominated by eucalyptus poles purchased for electricity and telephone distribution (not transmission).
- Rural electrification programme is major driver of demand. Domestic market includes TANESCO and REA (sponsored by development partners projects).

- Market demand in Tanzania around 350,000 poles per annum, installed capacity around 544,000 poles per annum, and utilisation capacity around 110,000 poles per annum.
- Export markets include Kenya (imports \approx 45,000 poles annually from Tanzania out of total estimated annual demand of 480,000 poles in 2010), Uganda (estimated demand 250,000 poles), Burundi (estimated demand 20,000), Rwanda and DRC.
- Competition from substitutes (concrete poles) and imports (mostly from South Africa).
- Raw poles sourced from Government plantations (Sao Hill Forest Plantation), tea companies (Unilever, Mufindi Tea Company), tree growers (individual woodlots, TGAs), private forest companies (Green Resources Limited, New Forests Company (once mature), TANWAT, Jilanjo, Fox Farm), faith-based organisations, schools, District Councils and prison plantations.
- Due to the limited and insufficient supply of furniture and timber as aforementioned, no stiff competition is foreseen. However, there are stiff competitions from cheap furniture imported from China 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.
- The company expects to establish its own show rooms to facilitate distribution of its products. The company is setting up of a special unit which will be provided with resources to enable it efficiently undertakes the treatment of softwood for both furniture and

construction industry and thus the need for robust distribution function of the company. The company will also consider appointing dealers in neighboring countries when it reaches the stage of exporting both improved softwood, treated timber and produced furniture to such countries.

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

1.8 TREATMENT

- Quality testing needs to cover pole strength, chemical strength, penetration and retention.

Pole treatment:

Tanzania: 8 pole treatment companies, total capacity >500,000 poles per year

Kenya: 17 pole treatment companies, total capacity >1,000,000 poles per year

Uganda: 5 pole treatment companies, total capacity 340,000 poles per year

- Treatment of timber is done by fewer companies and there are a lot of unprofessional people treating timber for construction. The quality is very poor and there are a lot of complains already from the users on the non-availability of professional timber treatment companies.

- Treatment of timber for furniture use is not practiced in Tanzania and even in the region and Africa in general. It is envisaged that our softwood timber treatment plant will be the first in Africa to process timber for furniture to replace the historically known hardwood furniture such as mninga, mkongo etc.

QUALITY BODIES AND STANDARDS

- Tanzania Bureau of Standards,
- National Environmental Management Council,
- Societe Generale de Surveillance (SGS),
- Ministry of Works and Employment

QUALITY STANDARDS(SPECIFICATIONS)

- TZS 685: 2002(E) Wood preservation by means of pressure creosoting
- TZS 686: 2002(E) Wood poles and blocks for power and telecommunication lines

QUALITY ISSUES

Eucalyptus originally grown for domestic and industrial fuel purposes, not utility poles. Grown from low quality seed and trees not always managed for pole production. Cracks tremendously after felling and during seasoning. Shortage of raw material resulting in harvesting of immature poles. Sub-standard pole treatment affecting durability. Strength properties uncertain (strength tests needed for 8m, 9m, 10m poles).

1.9 BUYER PERSPECTIVES

- Treated eucalyptus poles are purchased by TANESCO for electricity distribution, with 12m poles used for 11kV and 33kV lines and 10m poles for lower voltage lines (0.23 and 0.4 kV). Longer poles (13-15m) are used for road crossings.
- TANESCO's annual average demand for treated wooden poles estimated to be not less 350,000 per year. The rising demand of wooden poles is attributed to the increase in customer connections. The Tanzanian government targets an increase in connection levels to 50% by 2025 and at least 75% by 2033.
- In addition, the Rural Energy Authority (REA) also has its own annual requirement,
- TANESCO reports an estimated 80% of treated wooden poles failing before the age of 10 years. The replacement costs are substantial, with TANESCO spending around TSH 10 billion annually. Most poles are failing within ten years due to a combination of low chemical retention due to poor treatment practices (recommended preservative retention is 20kg/m³ for copper/chrome/arsenic (CCA) treated poles and 160 kg/m³ for creosote) and poor seasoning due to inadequate drying.
- The short life span of most wooden poles has prompted TANESCO to embark on the use of concrete poles as a substitute for wooden poles for medium-voltage lines. It is expected that concrete poles use will start within two years, although demand for wooden poles will continue.
- As regards timber treatment for construction and furniture use, demand is large and there is no competition especially for furniture

related treated timber. The Government has restricted purchase of furniture from abroad and this has indeed pushed the demand for the envisaged timber furniture treatment process as this will be the first of its kind in Africa.

1.10 POLE PRODUCER PERSPECTIVE

- Sao Hill Forest Plantation was established 1939 and is the largest amongst 16 public forest plantations in Tanzania, covering 48.3 % of the nation's plantation area. The plantation has a total of 135,903 ha, of which 54,070 ha is planted with exotic tree species, mainly pines (mostly *Pinus patula* with also *P. caribaea* and *P. kesiya*) and eucalyptus (mostly *E. saligna* with also *E. madeni* and *E. grandis*). • It was established primarily to meet the domestic demand for sawn timber and pulp and paper, particularly for Sao Hill Sawmill and Southern Paper Mill (now Mufindi Paper Mill). Emerging demand for eucalyptus wood poles has been a challenge as most compartments are second and third coppice generation of low quality and quantity.
- The allowable cut for eucalyptus is 175,000 m³ per year (saw logs and poles), however the availability of utility poles is less than 50% of the allowable cut. This poses a challenge to buyers since sale of eucalyptus products is in terms of standing volume per plot.
- The plantation has started to improve the quality of eucalyptus trees for poles by establishing a special eucalyptus poles scheme and acquisition of other improved genetic materials such as improved seed and clones. Moreover, the plantation is embarking

on establishing new compartments rather than maintaining the existing compartments with coppices.

1.11 POLE TREATMENT OPERATOR PERSPECTIVES

- Major challenges include the informal market (locally fabricated treatment facilities lacking pressure pumps and using low concentration of chemicals), and hazardous waste management.
- Stressed the importance of an association for non-commercial promotion of the industry, provide a collective voice to lobby key stakeholders, and promote industry best practice.

1.12 TREE GROWER PERSPECTIVES

- Main challenges include availability of quality seed, lack of market information, poor perception of eucalyptus water consumption, low technical knowledge, and traders buying at low prices.
- Importance of private growers underlined by situation at Sao Hill Forest Plantation, where only 3,567 ha of 54000 ha planted are eucalyptus (about 7%), out of which 1250ha are in harvesting age. Given 50% meets specifications for poles, most of the factories (90%) are getting supplies from small holder woodlots. It would be useful for tree growers' planning purposes if pole buyers (such as TANESCO and REA) can develop ten-year demand projections. It may be possible to partly derive the demand using the projected increases in customer connections (currently 32% access to electricity, aiming for 75% by 2033).

1.13 QUALITY CONTROL PERSPECTIVES NATIONAL ENVIRONMENT MANAGEMENT COUNCIL

- Established pursuant to Environment Management Act (Cap 191 of 2004). Undertakes enforcement, compliance and monitoring of EIAs, environment research and awareness raising.
- Certifies EIA prior to construction of pole treatment plants. Possible environmental issues in poles production are mostly related to processing, Mobilization phase, Noise pollution due to movement of construction materials; Air pollution due to smoke from earth moving equipment; Increased solid waste; Safety and health risks. Operation phase: Inadequate management and operations; Maintenance of machinery and structures; Water supply for wood poles treatment plant facility hygiene; Electrical Energy; Personnel supervision and monitoring; Fire break out in wood poles treatment plants; Generation of chemical waste in form of sludge; Noise pollution; Solid waste; and Socio economic impacts-employment, workers safety, HIV/AIDS spread. SGS TANZANIA

- Inspection (preparation, treatment, loading), verification (conformity to buyer specifications), testing (strength and chemical penetration) and certification (inspection reports). Inspecting treated poles at the time of loading from the plant premises into a road truck covers length, diameter, moisture

content, chemical retention, straightness, presence of rot, knots and splits, presence of insects and fungi, diameter of drilled holes.

- Stock monitoring of the treated and untreated poles on a weekly basis. Traceability possible using the serial numbers attached to poles from Sao Hill Forest Plantation.
- TANZANIA BUREAU OF STANDARDS (TBS).The Standards Act (1999) and 'TBS' Mark Certification Scheme regulations. Provides inspection, sampling and testing of locally manufactured and imported commodities. Quality control of products of all description and to promote standardization in industry and commerce. Undertakes calibration of pressure gauges and testing rig gauge and issues a certificate of conformity.
- MINISTRY OF WORKS AND EMPLOYMENT Conducts workplace inspections for ensuring employees meet minimum requirements of the Occupational Health and Safety Act (No. 5 of 2003).

1.14 **RAW MATERIAL BASE**

The poles and timber treatment 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 for both timber and poles have been identified as Iringa, Njombe, Tanga, Tabora, Kilimanjaro, Songea, Lindi, etc.

2.0 **AN OVERVIEW TO THE FORESTRY INDUSTRY.**

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

Type	Area ('000 hectares)	Percentage
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*, *Cupressus lusitanica*, *Cedrela odorata*, *Tectona gaudis*, *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

SN	Plantation	Location	Major species	Area (Ha)	Estimated Allowable Cut (m ³)
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,	Teak, Eucalyptus	40,529	648,464

		Tanga			
15	Sao Hill	Mufindi, Iringa	Pines, Eucalyptus	40,529	648,464
16	Mtibwa	Turiani, Morogoro	Teak, Cedrela	1,773	28,369
	Total			80,508	1,288,128

2.3 NATURAL FORESTS

This forest have numerous valuable indigenous tree species suitable for industrial wood production such as *Dalbergia melanoxylon* (E.A. Blackwood), *Pterocarpus angolensis* (mninga), *Khaya anthotheca* (African mohigany), *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 (Partial board) factories
- Fiberboard (Hard boards) manufacturing plants.
- Furniture and joinery woodwork
- Timber and Poles treatment plants
- 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 madagascarensis*),

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*, *Azadiradita 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**, **Syzigiuflia** 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 U&ungWa 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:

2.5.1 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 license 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.

2.5.2 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 m³/tonnes and pay an additional fees for export permit issued by the Ministry of Natural Resources and Tourism

2.6 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.

4.0 ASPECTS OF PROJECT SUSTAINABILITY

The project sponsors having studied weather conditions and the infrastructure in Tanzania are convinced that the project will be able to operate undisturbed with most of the timber and poles processing being carried out at the factory. The growing demand for quality treated poles and timber gives them assurance of a steady market. The peace and tranquility that exist in Tanzania is another aspect of assured business sustainability.

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.

5.0 FINANCING PATTERN

The project will be financed both by equity and loan. Equity contribution will constitute US\$ 175,258 while the remaining amount will be in the form of a loan. This loan amount is expected to be the equivalent of US \$ 100,000.

The loan will be negotiated and acquired from one of the foreign banks operating in the country at bank interest of 8% per annum.

FINANCING PATTERN

	US\$
Loan	100,000
Equity	175,258
Total	275,258

5.0 FINANCIAL STATEMENTS

5.1 Projected Revenue

For projection purposes, it is assumed that the economic life of the project is 8 years, and that revenue from timber and poles treatment business commence from the first year of operation.

DN PRODUCTS LIMITED PROJECTED REVENUE IN USD

	1	2	3	4	5	6
Revenue	103,497.00	234,315.00	257,746.50	283,521.15	311,873.27	343,060.59

5.3 Projected Profit and Loss Statement

The Income and Expenditure Statement shows the projected income for the 6 years period. The position depicted is that the project earns profit throughout its life. Accumulated after tax profits grow from. US\$ 3,744 in first year to US\$ 668,957 in the 6 year Appendix IV

5.4 Projected Cash Flows

This is shown in the Projected Cash Flows Statement in appendix v. They indicate that the project will meet its entire financial

obligation, the cash flow in the first year **US\$ 19,095** and grow up to **US\$ 232,936** in 6th year, Appendix V

5.5 Projected Balance Sheet

The projected Balance Sheet of the projected is shown in the financial statements under **appendix VI** total Equity of the project increases from US\$ in US \$ **175,258** the first year of operation to US \$ **418,846** in the 6th year. Therefore; balance sheets depict a healthy financial business.

5.6 Projected loan repayments

The loan borrowed from financial institution is expected to be fully paid within 5 years of projection operation, refer **Appendix III**

5.7 Projected Payback Period

The initial investment capital US \$ **275,258**, accumulated cash in 4th year is US \$ **279,448** which is more than initial investment cost by US \$ **4190**, The payback period is within 4 years refer **Appendix VII**

5.8 Projected Risks

This is a real estate investment; no major risks have been identified for this kind of project 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.

6.0. Economic Aspects

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

- The project is an ideal option for poles and timber value addition
- The project will significantly contribute in increase of exports of added value goods from Tanzania
- The project will create direct employment for 30 people on permanent contract basis leave alone temporary employees.
- It will create more business opportunities to local timber suppliers, which will also have a trickledown effect in the Tanzania economy as whole.
- It will generate substantial revenue to the government in the form of corporate tax paid for 8 years, value added tax and pay as you earn etc.
- The project will have transfer of knowledge and skills as far as poles and timber treatment is concerned

7.0 Implementation Schedule

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

Project Implementation

S/N	ACTIVITY	PERIOD
1	Processing TIC Certificate of Incentive	May 2020
2	Processing exemption	May –June 2020
3	Procurement machines other facilities	July- September 2020
4	Machine installations	October 2020
5	Testing business and in-house training	November-December 2020
6	Commercial operations	February 2021

8.0 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.

Appendix I

DN PRODUCTS LIMITED COST STRUCTURE

PARTICULAR	US\$
Land and Buildings	101,519.00
Machinery & Equipment	26,207.00
Motor Vehicles	50,000.00
Furniture & Fixtures	2,532.00
Pre exp	5,000.00
Others	10,000.00
Working Capital	80,000.00
TOTAL	275,258.00

Appendix II

DN PRODUCTS LIMITED FIXED ASSETS US\$

NAME OF ASSETS	1	2	3	4	5	6
Land and Buildings	101,519	101,011	100,506	100,004	99,504	99,006
Machinery, Tools & Equipment	26,207	22,931	20,065	17,557	15,362	13,442
Motor Vehicles	50,000	43,750	38,281	33,496	29,309	25,645
Furniture & Fixtures	2,532	2,216	1,939	1,696	1,484	1,299
Total	180,258	169,908	160,791	152,753	145,659	139,392
DEPRECIATION						
Land and buildings	508	505	503	500	498	495
Machinery tools & Equipment	3,276	2,866	2,508	2,195	1,920	1,680
Motor Vehicles	6,250	5,469	4,785	4,187	3,664	3,206
Furniture & Fixtures	317	277	242	212	186	162
ANNUAL DEPRECIATION	10,350	9,117	8,038	7,094	6,267	5,543

Appendix III

DN PRODUCTS LIMITED PROJECTED LONG-TERM LOAN REPAYMENT

Repayments US\$				
Year	Principle	Loan Interest (6%)	Total Amount Paid	Loan Balance
0				100,000
1	20,000	5000	25,000	80,000
2	20,000	4000	24,000	60,000
3	20,000	3000	23,000	40,000
4	20,000	2000	22,000	20,000
	20,000	1200	21,200	0
		1,200		

Appendix IV

DN PRODUCTS LIMITED PROJECTED INCOME & EXPENDITURE STATEMENT (US\$)

	1	2	3	4	5	6
Revenue	103,497.00	234,315.00	257,746.50	283,521.15	311,873.27	343,060.59
Cost of sales (77% of revenue):	79,692.69	180,422.55	198,464.81	218,311.29	240,142.41	264,156.66
Operating Expenses	3,104.91	7,029.45	7,732.40	8,505.63	9,356.20	10,291.82
Gross Profit Before Interest and Depreciation	20,699.40	46,863.00	51,549.30	56,704.23	62,374.65	68,612.12
Depreciation	10,350	9,117	8,038	7,094	6,267	5,543
Interest	5,000.00	4,000.00	3,000.00	2,000.00	1,200.00	-
Gross Profit After Interest and Depreciation	5,349.40	33,746.00	40,511.30	47,610.23	54,907.65	63,069.12
Tax (30%)	1,604.82	10,123.80	12,153.39	14,283.07	16,472.30	18,920.74
Net Profit	3,744.58	37,490.58	78,001.88	125,612.11	180,519.76	243,588.88
Accumulated Profit	3744	41,234.58	119,236.46	244,848.57	425,368.33	668,957.21

Appendix V

DN PRODUCTS LIMITED PROJECTED CASH FLOW US\$

	0	1	2	3	4	5	6
SOURCES:							
Profit before interest and depreciation	0	20,699.40	46,863.00	51,549.30	56,704.23	62,374.65	68,612.12
Equity	175,258.00						
Debt	100,000.00						
Total Sources	275,258.00	20,699.40	46,863.00	51,549.30	56,704.23	62,374.65	68,612.12
Applications:							
Capital expenditure	180,258	-	-	-	-	-	-
Working Capital							
Others	95,000.00	-	-	-	-	-	-
Cash	0	19,095.00	36,740.00	39,396.00	42,421.00	45,592.00	49,692
Tax	-	1,604.82	10,123.80	12,153.39	14,283.07	16,472.30	18,920.74
Sub total	275,258.00	20,699.82	46,863.80	51,549.39	56,704.07	62,064.30	68,612.74
Total applications	275,258.00	20,699.82	46,863.80	51,549.39	56,704.07	62,064.30	68,612.74
Accumulated cash		19,095.00	55,835.00	95,231.00	137,652.00	183,244.00	232,936.00

Appendix VI

DN PRODUCTS LIMITED PROJECTED BALANCE SHEET US \$

	0	1	2	3	4	5	6
Assets							
Opening balance	-	180,258	169,908	160,791	152,753	145,659	139,392
Long-term investments	-	180,258.00	169,908.00	160,791.00	152,753.00	145,659.00	139,392.00
Opening balance	-	180,258.00	169,908.00	160,791.00	152,753.00	145,659.00	139,392.00
Working capital	95,000.00	95,000.00	95,000.00	95,000.00	95,000.00	95,000.00	95,000.00
Accumulated	-	19,095.00	55,835.00	95,231.00	137,652.00	183,244.00	232,936.00
Assets	95,000.00	294,353.00	320,743.00	351,022.00	385,405.00	423,903.00	467,328.00
Financed by							
Equity	175,258.00	175,258.00	175,258.00	175,258.00	175,258.00	175,258.00	175,258.00
Profit	-	3,744.58	37,490.58	78,001.88	125,612.11	180,519.76	243,588.88
Total equity	175,258.00	179,002.58	212,748.58	253,259.88	300,870.11	355,777.76	418,846.88
Long term loan	-	100,000	80,000	60,000	40,000	20,000	-
Total debts	-	100,000.00	80,000.00	60,000.00	40,000.00	20,000.00	-
Total equity and debts	175,258.00	279,002.58	292,748.58	313,259.88	340,870.11	375,777.76	418,846.88

Appendix VII

DN PRODUCTS LIMITED PAYBACK PERIOD

Year	Profit After Tax	Depreciation	Total Cash Flow	Accumulated Cash Flow
1	3,744.58	10,350	14,094.58	14,094.58
2	37,490.58	9,117	46,607.58	60,702.16
3	78,001.88	8,038	86,039.88	146,742.04
4	125,612.11	7,094	132,706.11	279,448.15
5	180,519.76	6,267	186,786.76	466,234.91