

CPC CONSULTING LIMITED

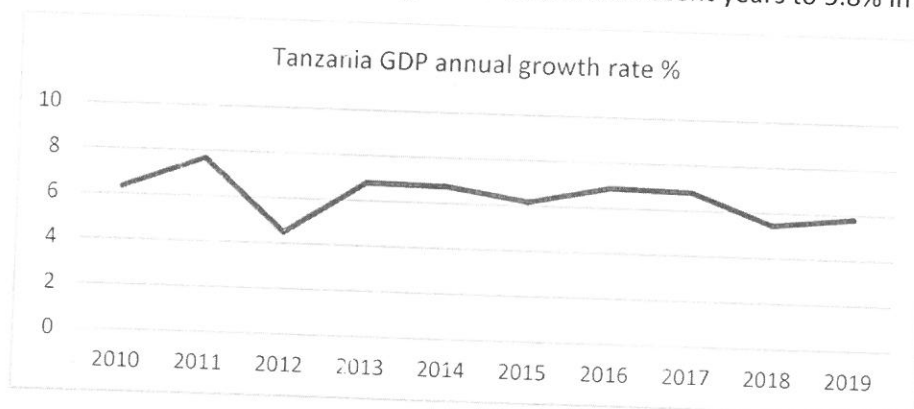
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Businessplan Transmission Poles

1. Background and business rationale

Even with slightly decreasing population growth rates, the population of the United Republic of Tanzania is projected to grow from 57.7m in 2020 to 77.5m in 2030¹. This equals to an annual population growth rate of 3.0%. In 2013, the annual growth rate was 3.1%.

Accordingly, the Tanzanian economy has been constantly growing at average annual growth rates of the GDP around 6.3%, with a slight decrease in the recent years to 5.8% in 2019.

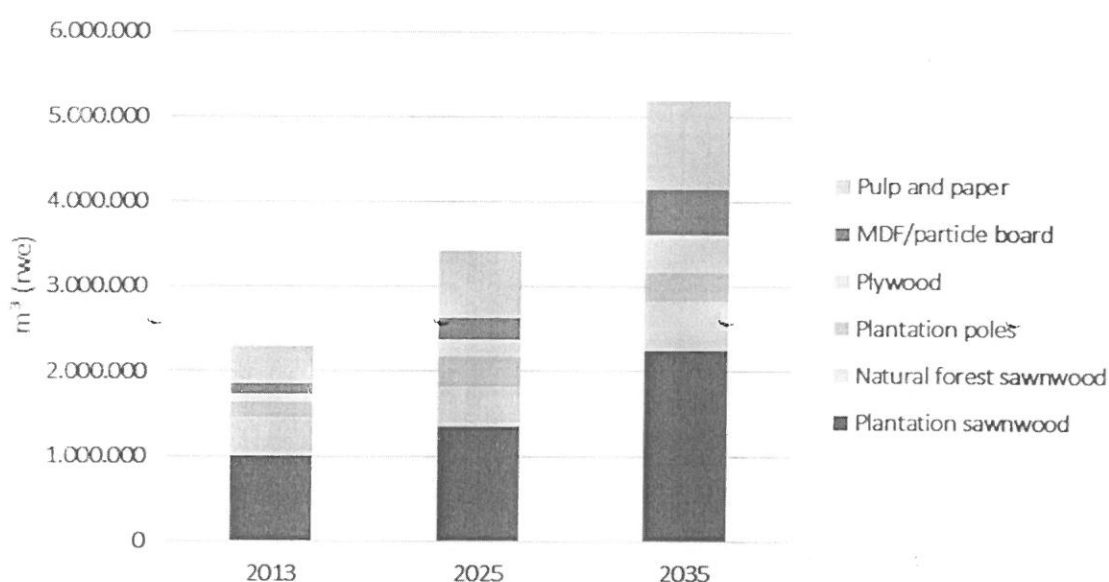


Reflecting strong income growth over the past decade, on July 1, 2020 the World Bank announced that Tanzania's gross national income (GNI) per capita increased from \$1,020 in 2018 to \$1,080 in 2019, exceeding the threshold for lower-middle income status. The year 2020 is projected to see a GDP growth rate of 2.5% due to the current global economic downturn caused by the reactions to the

¹ URT National Bureau of Statistics, Population Projection Report
<https://www.nbs.go.tz/nbs/takwimu/census2012/Projection-Report-20132035.pdf>

COVID 19 pandemic. A recovery of the economy and a return to the previous levels of growth rates until 2022 seems to be possible². In its Development Vision 2025³, the Tanzanian government aims at creating a sound economy with annual growth rates of 8%. This, of course, depends on the creation of conducive business environments as well.

Tanzania has a high demand in industrial wood, due to its constantly growing economy and population. Wood product demand is driven largely by the construction, furniture and paper sectors. Other sectors using wood are power transmission, using eucalyptus poles and the transport sector consuming wood in the form of pallets and boxes. The total wood product demand is expected to grow strongly, more than doubling in round wood equivalent (rwe) between 2013 (national consumption of 2.3 million m³ rwe) and 2035 (5.2 million m³ rwe), driven primarily by the construction sector and paper consumption⁴.



On the supply side, the forecast estimated volume is 3.2 million m³ rwe by 2035. Main supply gaps in this scenario are seen in the large diameter sawlogs and wood fibre subsectors.

2. Investment in producing transmission poles

2.1. Market

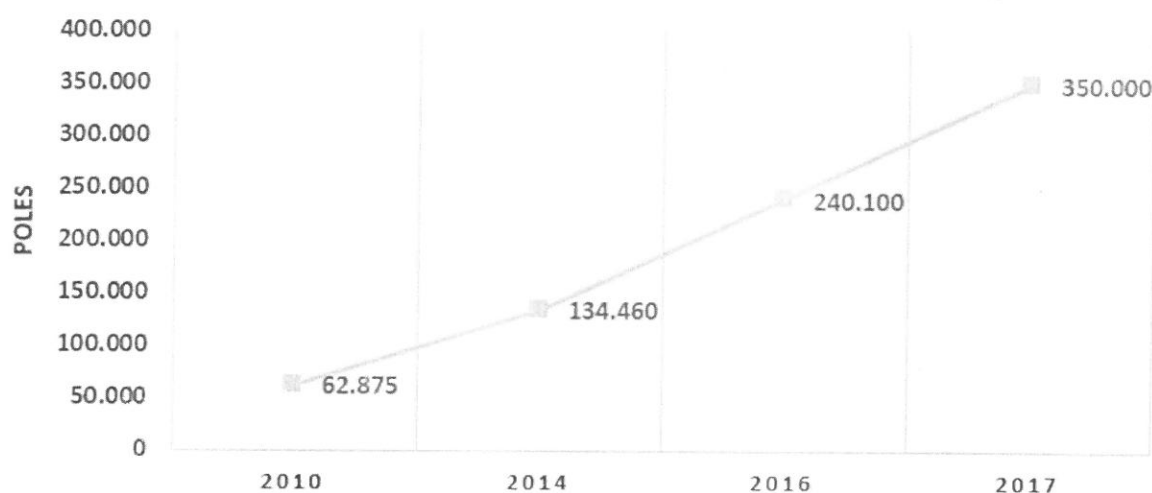
As its first investment in the forestry sector, CPC Consulting intends to invest in the production of eucalyptus trees for electricity transmission poles.

² World Bank <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=TZ>; <https://www.worldbank.org/en/country/tanzania/overview>

³ <https://www.mof.go.tz/mofdocs/overarch/Vision2025.pdf>

⁴ http://forestry-trust.org/wp-content/uploads/2018/01/2017_UNIQUE-Tanzania-Wood-Market-Study-FINAL.pdf

The rural electrification in Tanzania is ongoing. The demand for transmission poles in Tanzania by TANESCO and REA (Rural Electrification Agency) have been steadily increasing. Latest available figures show that TANESCO's annual average demand for treated wooden poles has increased from 62,875 poles in 2010 to 134,460 poles in 2014, while 240,100 were projected for 2016 and 350,000 for 2017.



The rising demand of wooden poles is attributed to the increase in customer connections from 100,000 to 250,000. The Tanzanian government targeted an increase in connection levels to 30% by 2015, 50% by 2025 and at least 75% by 2033⁵. TANESCO is considering using concrete poles to a certain extent, but the demand for wooden poles is still forecasted to increase.

On the supply side, in 2013 Tanzania still needed to import 40% of the transmission poles mainly from South Africa in order to meet the local demand. In 2016, only 20% of the forest plantations in Tanzania were eucalyptus trees, which are the species used for producing transmission poles.

2.2. Business Case

CPC Consulting will invest in purchasing agricultural land in order to grow eucalyptus trees. The company identified a 105 acre plot at Nyororo Mufindi District, Iringa suitable for this project. The plot is in vicinity of Sao Hills (one of the largest forest areas in Tanzania), is bordered on one side by a small river and is at approx. 5 km distance from the TanZam Highway. It is in the General Land category.

The total planned investment is TZS 1.514 bn, equal to approx. USD 660,000. The duration of the project from planting to selling is 10 years, from 2021 until 2030.

⁵ http://forestry-trust.org/wp-content/uploads/2018/01/20150731_Wooden-utility-pole-industry-meeting-report.pdf

The investment breakdown is as follows (TZS):

Purchase of plot	Purchasing price	52,000,000
	Purchasing cost	19,000,000
	Fees and licenses 10 years	65,000,000
	Annual land tax 10 years	52,000,000
Plot preparation, planting and growing		75,000,000
Harvesting and selling cost		1,251,000,000
Total investment		1,514,000,000

Main purchasers in Iringa for raw poles are Sao Hill Industry and New Forests Company. The prices of Sao Hill Industry for purchasing raw poles in 2020 range from TZS 55,000 to 120,000 per pole, depending on the size and diameter of the poles. Assuming the project will yield 45,000 poles (approx. 450 per acre), the final revenue can be projected with TZS 2.5 bn.

2.3. Financing

CPC Consulting Ltd is a company incorporated in Tanzania in 2016. Shareholders are Dr. Christian Pfleiderer and Christina Pfleiderer, both with 50% of the shares. The company's capital is TZS 19,800,000. For the realisation of the investment, Dr. Christian Pfleiderer will give a loan to CPC Consulting Ltd in the amount needed for the project. The capital necessary to start the project has already been transferred to Tanzania. The proof of sufficient capital is attached.

2.4. Operations

The main part of operations occurs in the beginning and at the end of the project.

Main operations in the beginning include

- clearing of the land and preparing the plot	21,000,000
- purchase of seedlings	22,000,000
- planting and fertilizing	10,000,000
- weeding in the first two years after planting	12,000,000
- farm management	10,000,000
Total	75,000,000

Material input comprises the seedlings, fertilizer and herbicides (TZS 28,000,000). All the operations will be implemented by local labour force on a work contract basis (TZS 47,000,000).

Harvesting and selling of the poles after 10 years includes

- tree cutting	16,000,000
- loading	284,000,000
- transport to factory	950,000,000
- farm and process management	1,000,000
Total	1,251,000,000

These activities will be implemented by hiring skilled and unskilled workers on a work contract basis, as well as machinery (mainly lorries and their drivers).

2.5. Cash Flow Projection

	Purchase of plot	Licenses and fees	Planting and growing	Harvesting and selling	Total Expenses	Revenues selling poles	total cash flow
2020	71,000,000				71,000,000		- 71,000,000
2021		11,700,000	54,000,000		65,700,000		- 65,700,000
2022		11,700,000	7,000,000		18,700,000		- 18,700,000
2023		11,700,000	7,000,000		18,700,000		- 18,700,000
2024		11,700,000	1,000,000		12,700,000		- 12,700,000
2025		11,700,000	1,000,000		12,700,000		- 12,700,000
2026		11,700,000	1,000,000		12,700,000		- 12,700,000
2027		11,700,000	1,000,000		12,700,000		- 12,700,000
2028		11,700,000	1,000,000		12,700,000		- 12,700,000
2029		11,700,000	1,000,000		12,700,000		- 12,700,000
2030		11,700,000	1,000,000	1,251,000,000	1,263,700,000	2,598,750,000	1,335,050,000
Total	71,000,000	117,000,000	75,000,000	1,251,000,000	1,514,000,000	2,598,750,000	1,084,750,000

2.6. Cumulative Balance Sheet

Cumulative balance sheet 2030, before selling the trees

Current assets		Liabilities and equity	
Cash	-	Capital stock	19,800,000
Non-current assets		Shareholder liability	1,494,200,000
Plot	52,000,000		
Trees	2,546,750,000	Retained earnings projected	1,084,750,000
Total assets	2,598,750,000	Total liabilities and equity	2,598,750,000

3. Outlook

Given the remarkable projected supply deficit in Tanzania for industrial wood (see above), CPC Consulting Ltd is considering further investments in producing poles and timber for infrastructure and construction markets. As the supply-demand gap is a driver for deforestation in Tanzania, the investments of CPC Consulting Ltd contribute as well to the preservation of the ecology of the country.

C. Mwach.

Dar es Salaam, 21 December 2020

