

Portuce Moçambique

A SUSTAINABLE FORESTRY AND INDUSTRIAL PROJECT

CONTRIBUTING TO THE PROSPERITY OF MOZAMBIQUE

ABOUT PORTUCEL





Portucel Mozambique is developing a forestry project integrated with a paper pulp production industry in Mozambique, ensuring it shares value that improves a sustainable social and economic development of the **communities** and enhances awareness and respect for the environment.

ABOUT PORTUCEL Big picture





Investment agreement with the Mozambican Government in **2009**, for a project worth **USD 2.5 billion**.

Memorandum of understanding with Mozambican Government in **July 2018**, defining the conditions precedent for implementing the project in two phases.

Land use licenses (DUAT) for **50 parcels** (for the plantation of up to 246.000 ha) in Zambézia and Manica provinces, awarded by the Mozambican Government for 50 years.

Integrated forestry and industrial project:

- Job creation More than 2 000 direct and indirect (1st phase) and more than 8 000 in the 2nd phase;
- Export industry More than USD 100 million / year (1st phase) and USD 1 billion / year (2nd phase);
- Support for social and economic development of local communities – USD 40 million;
- Strategic partnership with IFC, a World Bank member, unlocking know-how and capital.



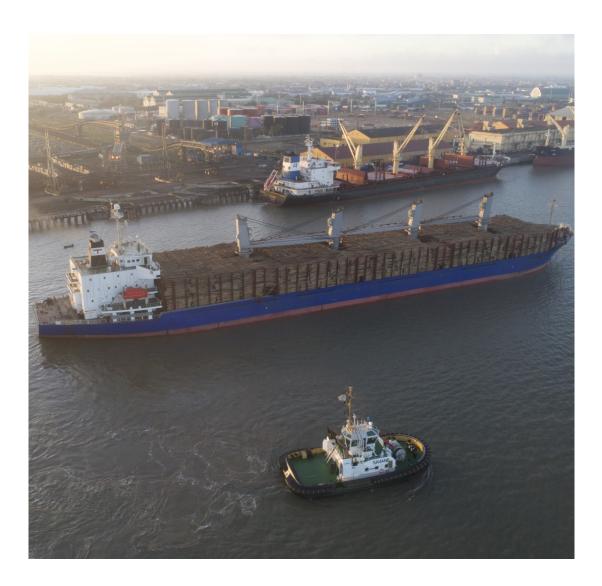
Pulp Mill

InvestmentUSD 280 millionPlantations40 000 ha eucalyptus forestProduction1 million tons / yearExportsMore than USD 100 million / yearOperational startup2025-2026InfrastructuresPort and roads

Investment Plantations Production Exports Operational start-up Infrastructures USD 2.5 billion Plus 120 000 ha eucalyptus forest 1.5 million tons / year More than USD 1 billion / year 2032-2034 Port, roads, railway

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ABOUT PORTUCEL Harvesting & Export



Harvesting started in 2020, from trials of plantations about 8 years old in the province of Manica.

First roundwood export of eucalyptus trees in 2021, sourced from responsibly managed forests and with **Control wood certification**.

The export operation positions the Company and Mozambique in the **international market** of sustainable wood exporters.

Exports of **USD 10 million in 2021. Two vessels**, out of 3 planned in 2021, left the Port of Beira in June and October, with a total cargo of **45 thousand tons of wood**.

Building a **Cluster of a forestry-based industry**, supported by favourable soil and climate conditions and good geographic location for exporting to the main markets.

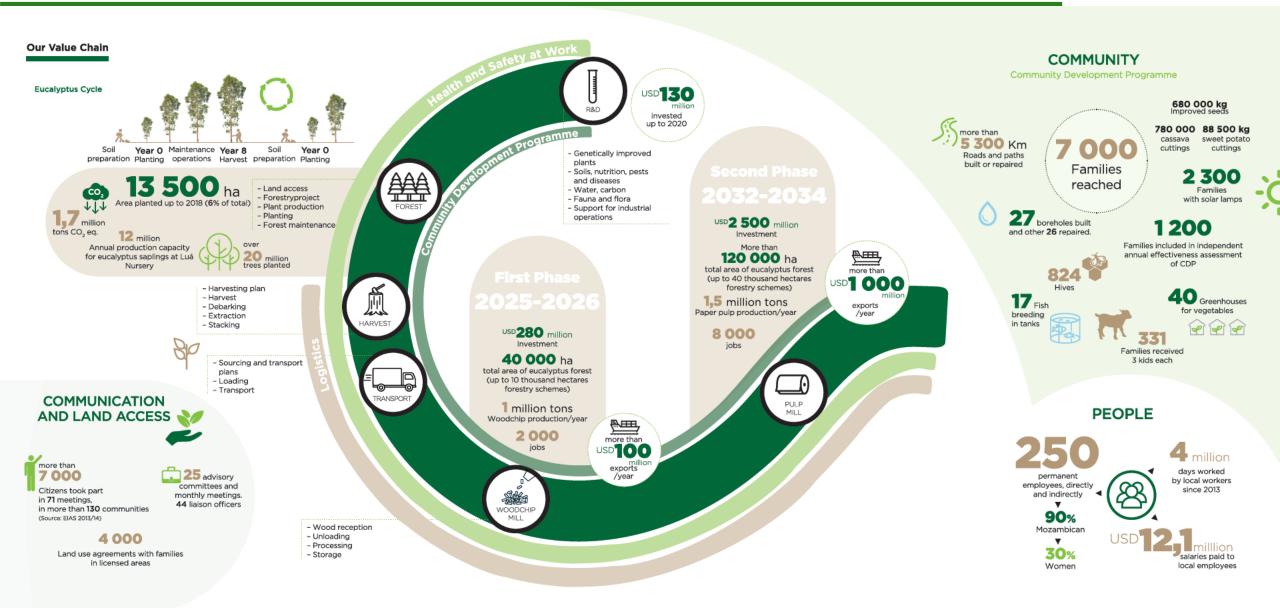
Consolidates **positive returns along the value chain**:

- Qualified **employment** and professional development;
- Generating wealth and **added value** in Mozambique;
- Environmental protection;
- Investment in the Communities;
- Continuous **communication** with interested parties.

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VALUE CHAIN

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PORTUCEL part of The Navigator Company







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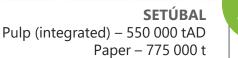
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CACIA Pulp (Market) - 350 000 tAD Tissue paper – 55 000 t of finish product



VILA VELHA DE RÓDÃO Tissue Paper – 65 000 t of finish product 60 000 t converting





THE NAVIGATOR COMPANY

Annual turnover of USD 1,660 million in 2020.

4 mills in Portugal producing:

- 1.6 million tons of uncoated woodfree (UWF) printing and writing paper
- 1.6 million tons of paper pulp (BEKP)
- 130,000 tons of tissue paper
- 2,5 GWh of electricity sold

Leading European manufacturer of office (UWF) paper and eucalyptus pulp.

2.4% of Portuguese exports of goods (1% of GDP). First company in national added value.

5,665 suppliers in Portugal.

107 thousand hectares of forestry under management **certified** by PEFC[™] and by FSC[®].

3,232 skilled Employees. Over 30 thousand jobs, either direct, indirect and along the value chain.

Commitment to **carbon neutrality** in 2035.

FIGUEIRA DA FOZ Pulp (integrated) – 650 000 tAD Paper – 790 000 t

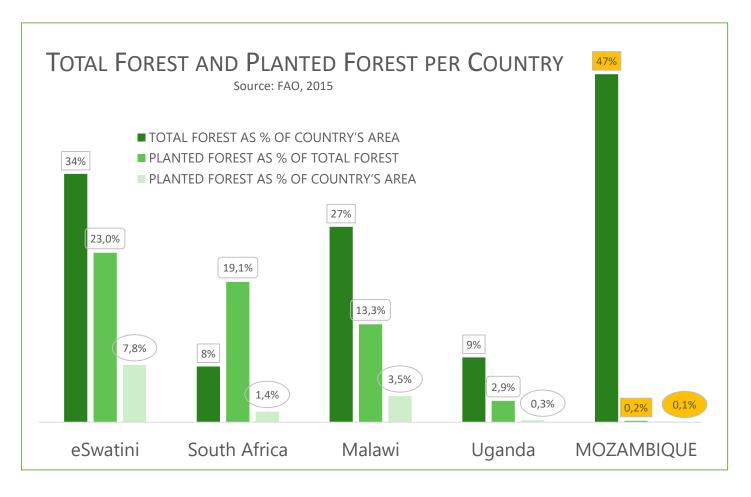


Almost **half** of Mozambique is covered by **forest**, but only **0.2% are planted forests**. Portucel planted forests are installed only in appropriate available areas.

Mozambique has a **low level** of planted forests in comparison with other **SADC*** countries.

Zambézia province has around 5 million ha of arable land available, of which less than 20,000 ha are forest plantations (11,500 ha by Portucel). eSwatini's kingdom is 10 times smaller than Zambezia and has 140,000 ha of planted forest.

Portucel Moçambique's long term project envisages planting up to 160.000 ha of forests, representing 0.96% of the combined area of Zambézia and Manica provinces.



ABOUT PORTUCEL Main achievements

MAIN ACHIEVEMENTS





4 000 land use agreements with families in the licensed areas.

13 500 hectares planted.

Nursery with annual production capacity of 12 million plants.

Permanent dialogue with Communities by:

- 25 advisory committees
- Monthly meetings with communities
- 45 liaison officers
- Grievance mechanism

Social Development Programme investing more than USD 6 million (since 2015).

Independent **Advisory Council**, supporting a Civil Society initiative (under revision).

Main obstacles identified, focus on resolving preconditions for resuming project in 2 phases.

ECONOMIC IMPACT





Local employment – 4.2 million working days performed by local workers since 2013.

Wages – USD 12.2 million paid to local workers since 2013 (over 550 million meticais).

More than **250 permanent direct and indirect employees** – 90% Mozambican and 30% women.

600 national suppliers who have been paid more than USD 70 million since 2010 (3 billion meticais).

Taxes and charges paid to Mozambican State: **USD 4.6 million** (250 million meticais).

More than USD 6 million **invested in Community Development Programme** since 2015, reducing food insecurity and increasing household income.

Carbon Stock: 1.7 million tons CO₂ eq.

Investment to date: USD130 million (6 billion meticais).

PUBLIC CONSULTATION Transparent processes



Four phases of public consultation implemented, to provide local communities and families full disclosure:

1. Community consultation by **Government institutions**, as required by Mozambique's Land Law.

2. Environmental and Social Impact Assessment (2013-14): systematic consultation in DUAT areas of over **7 000 citizens** at 71 meetings in **130 communities**, in Manica, Zambézia and Maputo provinces.

3. Land Access Procedure:

- Compliance with Mozambican law and assurance of free, prior and informed consent;
- Transparency: agreements are witnessed by family members and local leaders, both administrative and traditional;
- Simplified processes: land boundaries are mapped in a comprehensive way, and a written agreement is signed, shared and archived.

4. Regular community consultation.

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PROJECT INTEGRATED WITH COMMUNITIES – MOSAIC MODEL

Promotes economic and social development and longterm inclusion, between **communities**, **environmental conservation areas and Forest plantations**.

Portucel's investment in **eucalyptus Forest plantations** uses the Mosaic Model, where blocs of Forest are interspersed with houses, agricultural land, high value conservation areas and other protected uses, of religious interest or special value for communities.

Thus, within the licensed areas, **families and their areas for agriculture remain in the same site**, avoiding resettlements.



FOREST MANAGEMENT Nursery



The **Eucalyptus clones nursery** has a production capacity for 12 million plants each year.

Located in Luá, lle district, Zambézia province.

60 Mozambican employees, most of whom are skilled and **50% are women**.

Production of other species, for **agriculture** and **native species**, for the community and to restore conservation interest areas.

Benchmark for **good employment practices** in the region: provides a **library**, staff vegetable garden, **adult literacy** classes and medical centre. Schooling provided since 2015 in three shifts, from first to fifth grade, which has reached **more than 200 employees**.

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COMMUNITY DEVELOPMENT



FAMILIES in the project area



	Zambézia	Manica
Number of families in licensed area (est.)	12 754	11 401
Food insecurity	32%	32%
No-income families	22%	13%
Families with annual income below 57 USD	62%	34%
Stable production of cassava / corn	93% / 76%	
Families owning livestock	22%	42%
Adult illiteracy	52%	32%
Schools with access to drinking water	23%	55%
Cases of malaria per child (0-4 years) per year	2.2	2.7

Source: EIAS, 2011-2014

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PRIORITIES Community Development Programme





PRIORITIES

- Food security
- Opportunities for economic growth and income generation
- Support for household wellbeing

REACH (to date)

More than 7 000 families (out of an estimated total of 25 000 in the project areas) and **120 communities** in Manica and Zambézia provinces.

Programme started to be implemented in 2015.

Investment over project lifetime: USD 40 million.

FARMING SCHEMES From 2015







Capacity building of 7 000 households for adopting more efficient agricultural techniques through conservation farming/smart agriculture practices.

Implementation of 210 demonstration plots.

2 800 families have benefited from training in **horticulture** (more than 2 million seedlings produced since 2017).

795 000 kilos of improved seeds – corn, beans, soya and sesame.

840 000 cassava cuttings.

98 500 kilos of sweet potato cuttings.





HONEY PRODUCTION

Distribution of **881** beehives in the provinces of Manica and Zambézia.

Honey production **improves income generation** and promotes the **protection of the forest**, as some beehives are located close to the plantations, leading communities to protect this source of income.

LIVESTOCK FARMING SCHEMES

433 families received **3 goatlings each** (**1 299** animals), in order to **breed and share** the first two offsprings.

Increases availability of **protein** and boosts income, based on principle of **sharing value** with neighbours.



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FISH TANKS

Construction of **22** fish tanks and training for families. Important to improve intake of protein and for aditional income generation.



CHICKEN VACCINATION

Vaccination of chickens against Newscastle disease in collaboration with public veterinary services.

More than **375 000** doses administered since 2015.



Portuce Moçambique DRINKING WATER

27 boreholes built and 28 non-operational boreholes repaired.

Some communities access drinking water for the first time.

Independent laboratory analyses confirm that the water is fit for human consumption.





ENERGY

3 000 families have received solar lamps since 2015.

Solar lamps bring light to communities without electricity, allowing people **to charge devices such as telephones** and **children no longer depend on daylight to study**.



ACCESS ROADS

Rehabilitation and building of roads and rural paths with **length of more than 5 300 kilometres**.

Better roads and rural paths facilitate **access to public transports**, **healthcare** and to **selling** products.





BRIDGES

Construction or rehabilitation of more than **20 small rural bridges** (Zambezia and Manica)

Very significant impact on the livelihoods of the communities and in the company's operations by reducing the distances.

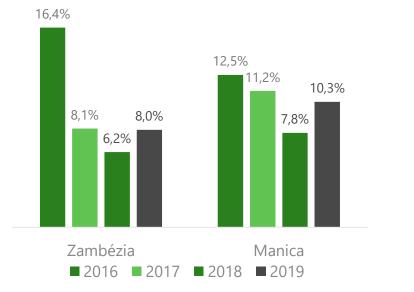
RESULTS Better Food security and diversity

First priority of the Community Development Program



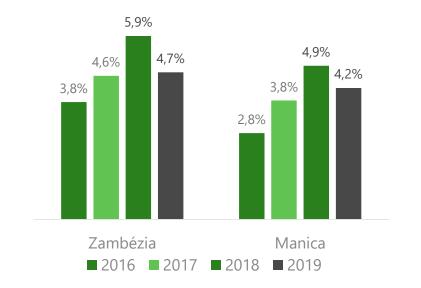
HFIAS – Household Food Insecurity Access Scale

Degree of difficulty of the family in accessing food in the 30 days prior to the survey. Lower values mean greater food security



HDDS – Household Dietary Diversity Score

Number of food groups eaten by the family in the last 24 hours. Higher values mean greater food diversity



Food security and diversity indicators improved between 2016 and 2018, in the areas covered by the project, in the provinces of Zambézia and Manica. In 2019 there was a partial reversal, due to the impacts of cyclone IDAI.

Fonte: International Finance Corporation survey "Portucel annual livelihood survey, 2019 update"

MOZAMBIQUE AND PORTUCEL Business opportunities



What **MOZAMBIQUE** means to Portucel





Navigator's largest capital project outside Portugal.

An attractive geographical location, close to **Asian markets**.

Historical and cultural affinities with Portugal which strengthen the **reciprocal commitment**.

Significant investment already made in the country:

- Research and development of better adapted eucalyptus species, trial and scale plantations;
- Development of processes that respond to the real needs of the project and of the **local** communities;
- Wide-ranging Community Development Plan.

What **PORTUCEL** can offer Mozambique



1. ECONOMIC DEVELOPMENT AND A STRONGER VALUE CHAIN

 More than 70% of The Navigator Company's exports is value added in the country.

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Moçambique

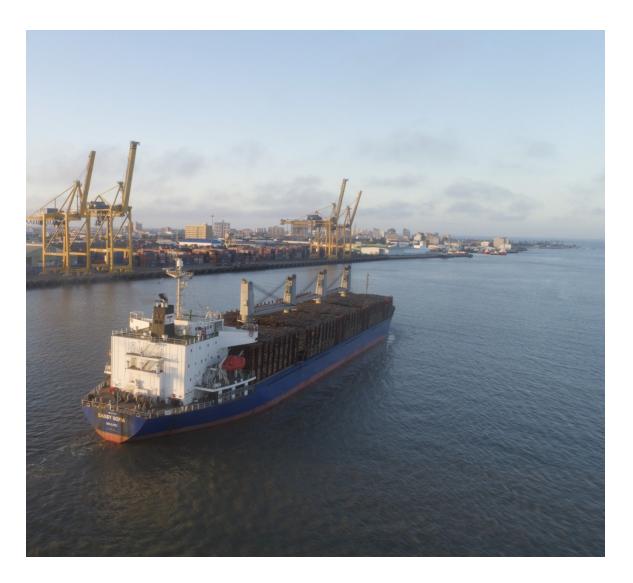
 A large proportion of the export earnings will stay in Mozambique, to stimulate the local economy and encourage new businesses in the value chain.

- 2. JOBS, TRAINING, vocational qualifications and knowhow transfer to Mozambican workers.
 - 2 000 new jobs* predicted in phase one and 8 000 new jobs* in phase two;
 - Research conducted by KPMG concludes that each direct job in The Navigator Company in Portugal generates 15 indirect jobs.

*In line with the international consensus that each 20 ha of plantations results in the creation of one job. Cf. $\underline{World Bank}$



What **PORTUCEL** can offer Mozambique



3. INCREASED EXPORTS AND FOREIGN CURRENCY INCOMING

 Portucel Moçambique's output is intended primarily for export:

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- With the woodchip mill (2025-2026): More than USD 100 million / year;
- With the paper pulp mill (2032-2034): More than USD 1 billion / year.
- **Export starts in 2021 from the Port of Beira** estimated turnover of USD 10 million.
- **4. INCREASED TAX REVENUES,** direct and indirect, thanks to project value chain.
- ANCHOR PROJECT FOR TRANSPORT, COMMUNICATIONS AND LOGISTICAL INFRASTRUCTURES, for the main investors funding development.

What **PORTUCEL** can offer Mozambique





6. DEVELOPMENT OF FORESTRY AND AGRICULTURE

- Forestry Schemes Incentives for independent planting of eucalyptus forests, in line with company standards and securing the wood aquisition : up to 10 thousand ha in Phase I and up to 40 thousand ha in Phase II.
- Agricultural and livestock farming schemes.

7. PRESERVATION OF BIODIVERSITY

- Planted and well-managed forests are a source of biodiversity, good management of resources such as water, natural protection against phenomena like erosion/desertification and fire prevention.
- Water resources protocol for monitoring of water quality in 25 micro basins.
- 8. WIDE SOCIAL DEVELOPMENT PROGRAMME with large number of outreach activities.
 - Partnership with IFC, harnessing its experience in projects involving land access and community rights;
 Investment of 40 million USD

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www.portucelmocambique.com