



PART OF
THE NAVIGATOR
COMPANY

Portucel Moçambique

A SUSTAINABLE FORESTRY AND INDUSTRIAL PROJECT

CONTRIBUTING TO THE PROSPERITY OF MOZAMBIQUE

MAY 2022

ABOUT PORTUCEL



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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 Zambezia 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.

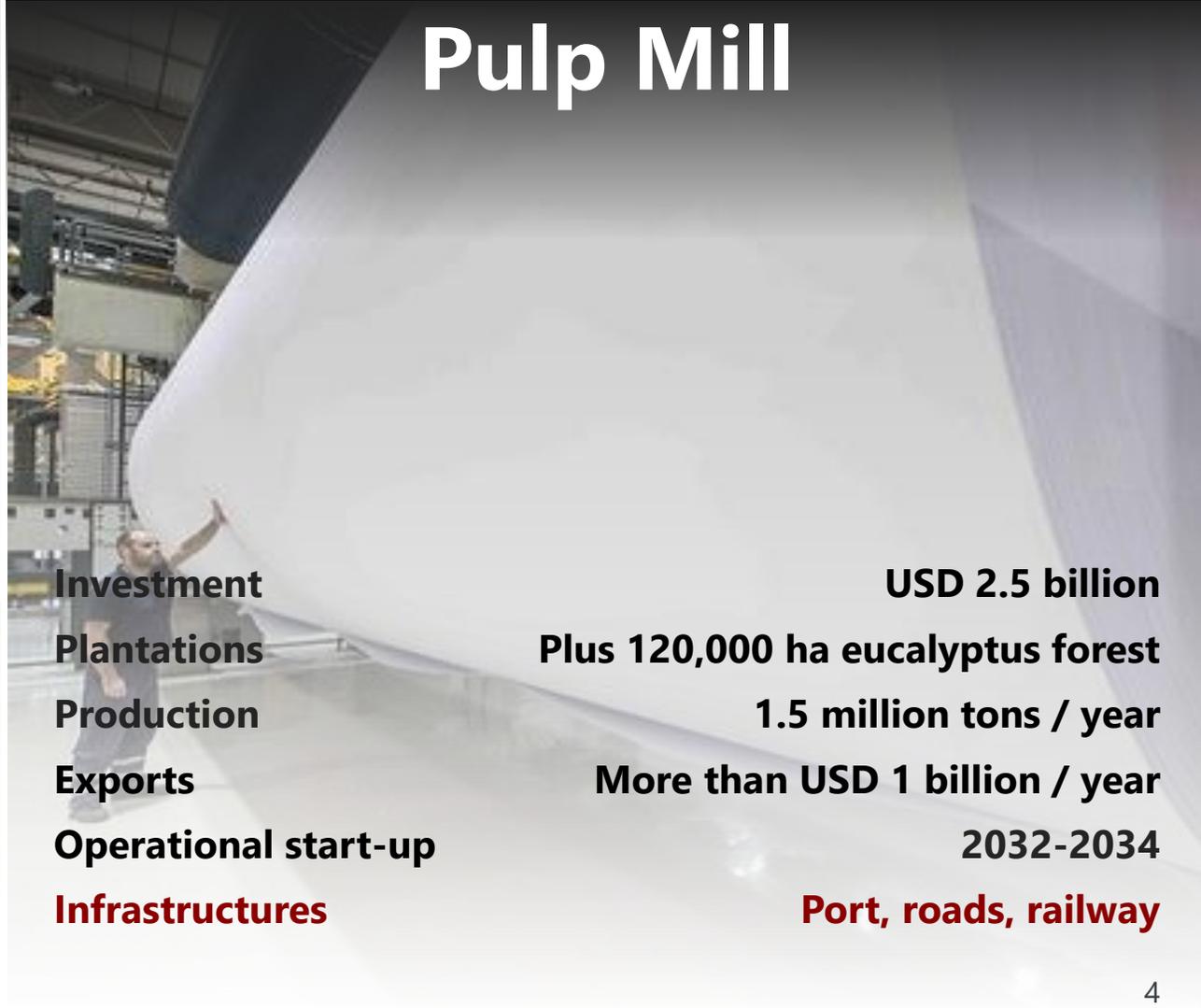
ABOUT PORTUCEL Industrial projects

Woodchip Mill



Investment	USD 280 million
Plantations	40,000 ha eucalyptus forest
Production	1 million tons / year
Exports	More than USD 100 million / year
Operational startup	2026-2027
Infrastructures	Port and roads

Pulp Mill



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

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. Three vessels**, two of which in 2021 a one in January 2022, left the Port of Beira, with a total cargo of **70 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.

MAIN ACHIEVEMENTS



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

14,000 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 reaching over 7,000 people and 120 communities.

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 – 4.3 million working days performed by local workers since 2013.

Wages – USD 12.7 million paid to local workers since 2013 (over 570 million meticaís).

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

600 national suppliers who have been paid more than USD 73 million since 2010 (3.3 billion meticaís).

Taxes and charges paid to Mozambican State: **USD 5.4 million** (270 million meticaís).

More than USD 6 million (300 million meticaís) **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: USD140 million (6.7 billion meticaís).

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, Zambezia 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.

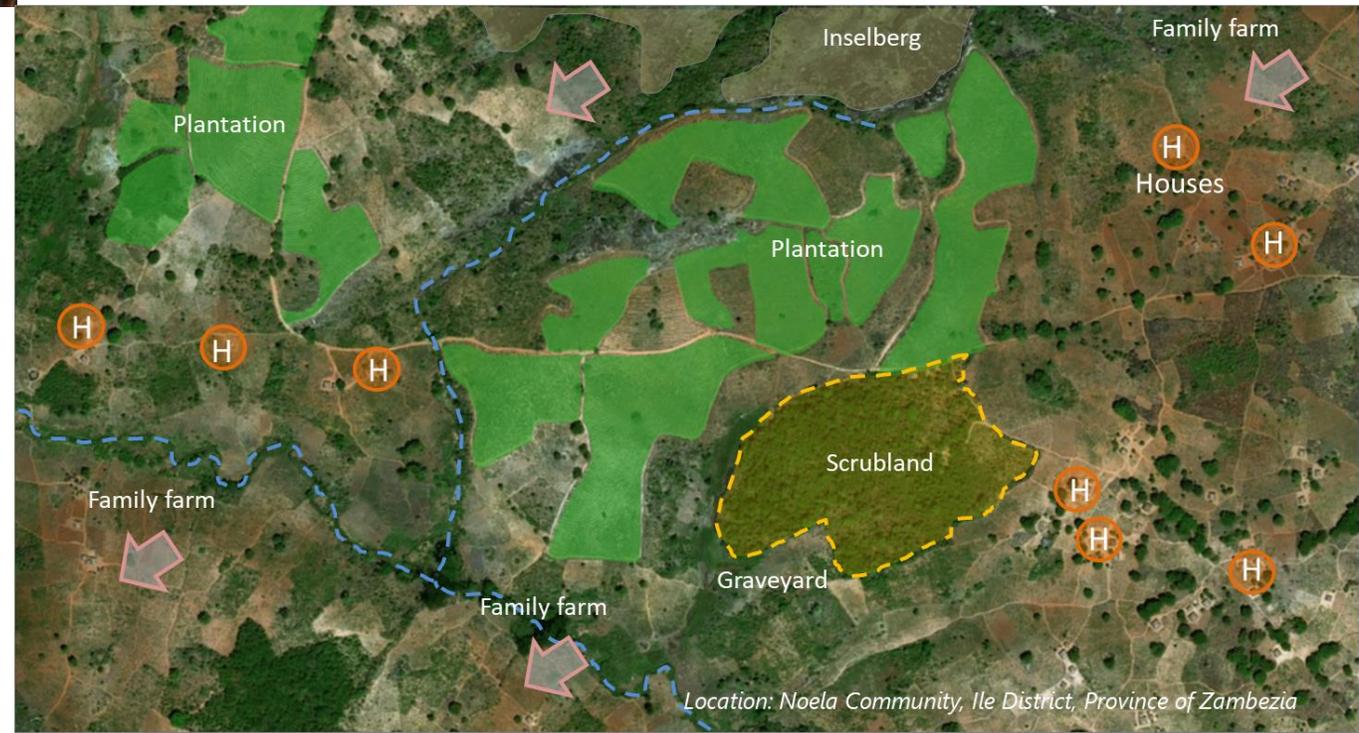
4. Regular community consultation.

PROJECT INTEGRATED WITH COMMUNITIES – MOSAIC MODEL

Promotes economic and social development and long-term 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.





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

Located in Luá, Ile district, Zambezia province.

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

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

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

COMMUNITY DEVELOPMENT



FAMILIES in the project area



	Zambezia	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%	68% / 99%
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

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 Zambezia 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 Zambezia.

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.



FISH TANKS

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



CHICKEN VACCINATION

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

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



DRINKING WATER

27 boreholes built + **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.**

HEALTH

Supporting with **USD 150,000** the construction of the Surgical Block at the hospital in Ile, Zambezia province.

The new infrastructure will benefit several tens of thousands of people in the district and surrounding areas.



ACCESS ROADS, BRIDGES

Rehabilitation and building of roads and rural paths of over **5,300 kilometres**. Rehabilitation of more than **20 small rural bridges** and other road infrastructures.

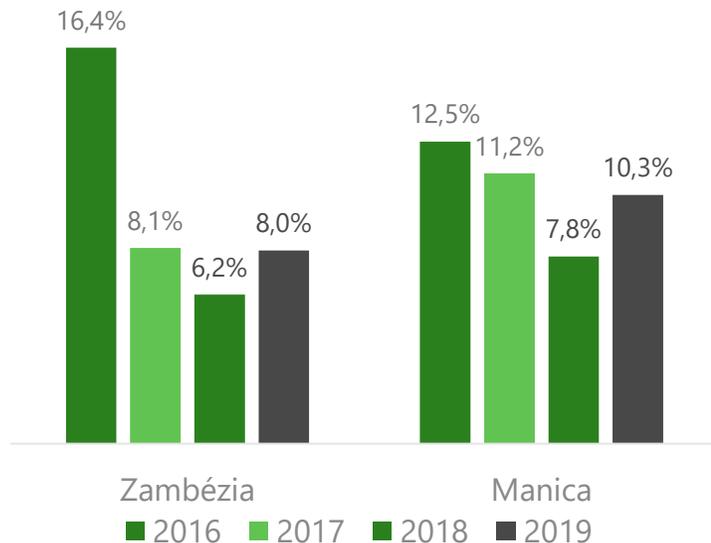
Better roads and rural paths facilitate **access to public transports, healthcare** and to **selling products**

RESULTS Better Food security and diversity

First priority of the Community Development Program

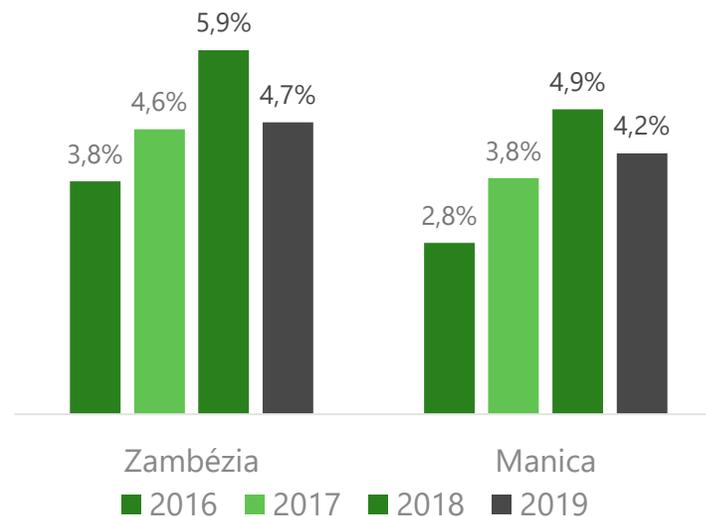
HFIAS – Household Food Insecurity Access Scale

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 Zambezia 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 PORTUGAL 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**.
- 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 know-how 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. [World Bank](#)



What **PORTUCEL** can offer Mozambique



3. **INCREASING EXPORTS AND FOREIGN CURRENCY INCOMING**

- Portucel Moçambique's output is intended primarily for export:
 - 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**
Turnover of USD 10 million in 2021.

4. **INCREASING TAX REVENUES**, direct and indirect, thanks to project value chain.

5. **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 acquisition : 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 micro basins.

8. **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**.



Portuçcel

Moçambíque

www.portucelmocambique.com