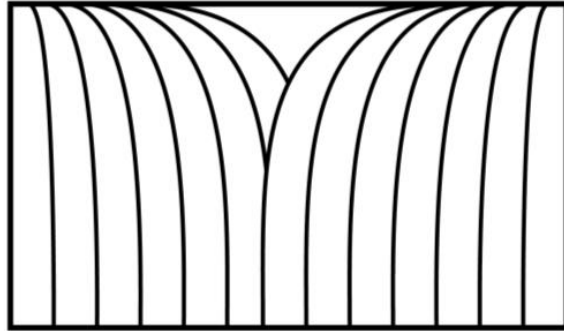


MAPINGA



premium foods

MAPINGA PREMIUM FOODS LIMITED

Business Plan/Feasibility Study

August 2023

Table of Contents

1. Introduction 3

2. Project objective 3

3. Project Justification 4

4. Scope of the Project 6

5. Investor profile 6

6. Details of investment costs 7

7. Financing 7

8. Sources of technology 8

9. Project financial and economic analysis 8

10. Market study 9

11. Project capacity 10

12. Expected employment generation 10

13. Proposed implementation schedule 11

1. Introduction

This business plan and feasibility study (the **Business Plan**) is submitted by Mapinga Premium Foods Limited (**Mapinga/the Company**) in support of its application for a certificate of incentives under the Tanzania Investment Act, 1997.

It has been prepared exclusively for the benefit and internal use of the Tanzania Investment Centre (**TIC**) to whom it is directly addressed and delivered in order to assist the TIC in evaluating Mapinga's application.

This Business Plan contains information that is confidential and proprietary to Mapinga and its shareholders. Accordingly, neither this document nor any of its contents may be disclosed or used for any other purpose without the prior written consent from Mapinga.

2. Project objective

2.1 Introduction and project concepts

Mapinga was registered in Tanzania on 15 March 2023 pursuant to and in accordance with the provisions of the Companies Act, 2002 under registration number 164335917. The copy of certificate of incorporation has been annexed hereinafter marked as Annex I.

The Company has also been registered with the Tanzania Revenue Authority (**TRA**) and awarded a Taxpayer identification Number (**TIN**) No. 164335917. The copy of the TIN certificate has been annexed and hereinafter marked as Annex II.

2.2. Services to be provided

The Company intends to establish a potato processing facility in Mapinga area, in an existing industrial building along Bagamoyo road. Mapinga intends to invest in two phases to develop a potato processing facility near Dar es Salaam in Tanzania. During the first phase, Mapinga intends to invest EUR 4.6 million, which amounts to USD 5.0 million at the current exchange rate, and will mainly focus on renovating existing building and infrastructure, constructing potato cooling and installing machinery in order to start (small scale) production.

The Company aims to install a batch processing line, which is locally sourced in Tanzania. Mapinga is able to fully commit to this Phase 1 investment. Only in case the required commercial scale has been reached and relevant approvals have been obtained, Mapinga has the ambition to do a follow-up investment. In case this follow-up investment will take place, the Company will communicate this to the TIC.

The main objective of the proposed project is to manufacture high-quality Tanzanian processed potato crisps that substitute expensive imports and fill hidden local demand for affordable, high-quality crisps.

The project hopes to kick-start a flywheel that will generate more investments, improved product quality and higher productivity in the Tanzanian potato sector. The company will also

create a variety of jobs, ranging from operational jobs within the factory, to commercial jobs and management jobs.

By importing modern equipment as well as boosting the import of high-quality potato seeds, the Company will also transfer valuable technology to Tanzania. The proposed project will support the Country's industrialisation policy, and also support ambition to become a middle-income economy by 2025.

2.3 Location and project coverage

Establish head office in Mapinga, Bagamoyo to cover the entire United Republic of Tanzania.

3. Project Justification

The implementation of the proposed investment project has several justifications including its impacts on food security, in terms of food availability, food affordability and food chain stability. Tanzanians would benefit from a more productive, more fair and more resilient potato value chain.

At the core of its strategy is that Mapinga will take an active position across the entire potato value chain from potatoes to selling crisps. The Company will directly and indirectly positively impact food security in the country.

Food availability in Tanzania will increase as a direct result of increased productivity and reduced losses:

- There is an increasing demand amongst smallholders for quality potato seed, but commercial seed multipliers only invest in multiplication in case off-take is guaranteed. The Company will play a pivotal role in the value chain by entering into supply and off-take agreements and will contribute to a stable value chain.
- Therefore, the investment will accelerate the adoption of high-quality potato varieties that are suitable for potato crisp processing, leading to higher yields among smallholder farmers.
- Trials of such varieties in Tanzania have already led to improved yields among smallholder farmers (from 5-10 ton per hectare to up to 20 ton per hectare) and large-scale commercial farmers (from 15 ton per hectare to up to 30 ton per hectare).
- Over time, the Company aims to also train cooperations or smallholder farmers in how to grow higher yields other broader agronomic practices such as rotation of crops in collaboration with (local) partners.
- Moreover, the investment in potato storage will reduce losses in the potato supply chain.

Food affordability will increase both through increased incomes and reduced food prices:

- Company staff (over time >100) will be paid fair salaries. Smallholder farmers income will increase through higher yields and fair prices. A stable income will allow them to spend more on food and will allow them to plan and invest. Expensive import will be substituted by locally produced potato crisps. At the same time, higher yields will result in lower cost per kg in the long term.
- Another factor that will improve food affordability is the increased transparency and access to market for smallholder farmers. Smallholders currently access the market through middlemen that form the only link between the farmers and the wider market. Middlemen regularly exploit farmers by offering lower prices, using the information gap to their advantage and pocketing the difference. By sourcing from farmers directly or via cooperations, the Company will try to circumvent these middlemen, which will lead to higher income and lower food prices.
- Most potatoes produced in Tanzania currently go straight to the table – hardly any processing takes place. By organizing processing at scale in Mapinga, the Company will add local value to primary crops, which is an important development in the country's transition into agribusiness.

Food value chain stability is the most important lever for this investment project to improve food security in the region.

- The investment strengthens the entire potato value chain by increasing connectedness among value chain participants. The Company will indirectly create market demand for quality seed, motivating large-scale commercial farmers to invest in potato seed multiplication capabilities (storage capacity, irrigation and equipment). Smallholder farmers will benefit from higher quality seed, guidance on agronomic practices, stable offtake and fair prices throughout the year.
- The Company itself aims to take care of raw potato transport, storage, all processing activities, commercialization of the finished products and distribution to relevant outlets. In this way, a modern and stable value chain is created in which substantial value is added to the primary product. The goal is to operate the processing facility at par with international efficiency and food safety standards, thereby creating a competitive local market. As a result, self-reliance through import substitution will also increase.

4. Scope of the Project

As mentioned in the introduction, the implementation of the project will consist of a two phased approach. During the first phase Mapinga aims to invest USD 5.0 million and will mainly focus on renovating existing structures, constructing potato cooling and new infrastructure, and installing machinery in order to start (small scale) production. The Company aims to install a second-hand batch processing line, which is locally sourced in Tanzania.

Only in case the required commercial scale has been reached and relevant approvals have been obtained, Mapinga has the ambition to do a follow-up investment and will communicate this to the TIC. This investment would mainly consist of buying new equipment with higher capacity and upgrading site utilities such as a Waste Water Treatment Plant and power (e.g., generator). Furthermore, the company might invest in a construction of a new brick wall around the plot and any other minor additional infrastructure if needed.

Mapinga is leasing the proposed site and its infrastructure from its current owners. Mapinga is in the process of acquiring the plot in the near future. This application for a Certificate of Incentives from the TIC is one of the steps in the regulatory process to obtain a derivative title through TIC.

5. Investor profile

Mapinga is owned 99.9% by Mapinga Premium Foods B.V. and 0.1% by 7HILLS Holding B.V.

5.1 Mapinga Premium Foods B.V.

Mapinga Premium Foods B.V. is a Dutch holding/financing company, in the form of a private limited liability company (B.V.), which was incorporated by Veris Investments B.V. (**Veris**). The Customer is wholly owned by Veris. Mapinga Premium Foods Limited is its sole subsidiary company. Mapinga Premium Foods B.V. will hold 99,999 shares in Mapinga Premium Foods.

5.2 7HILLS Holding B.V.

7HILLS Holding B.V. is also a Dutch holding/financing company, in the form of a private limited liability company (B.V.), which was incorporated by Veris. It is also wholly owned by Veris. 7HILLS Holding B.V. holds 1 share in Mapinga Premium Foods, due to the requirement for a Tanzanian Private Limited Company to have two shareholders.

The Company's two shareholders are thus both wholly owned by Veris, which is an independent investment company from the Netherlands that invests in projects in the food value chain in Sub-Saharan Africa. Its mandate allows Veris to invest in companies that improve food security in Sub-Saharan Africa and this investment falls within that mandate (see section 2).

Among other things, Veris has previously successfully set up a potato processing company in Ethiopia which is now the market leader in that country. By now, Veris has fully exited that business to PepsiCo, who recently announced a substantial further investment in the company. Veris Investments' portfolio currently consists of a dairy company in Ethiopia (Holland Dairy) and an aquaculture company that is active in Zambia and Uganda (FirstWave Group).

6. Details of investment costs

The total investment requirement for Phase 1 is EUR 4.6 million, which amounts to USD 5.0 million at the current exchange rate. This consists of USD 3.3 million capex including the land and buildings, USD 0.7 million working capital and USD 1.0 million loss financing, this investment would allow the Company to operate the batch processing line until mid-2024.

Investment breakdown	Amount in EUR	Amount in USD at current rate
Land/Building	1,640 k	1,788 k
Plant	985 k	1,074 k
Vehicles	300 k	327 k
Furniture and Fittings	75 k	82 k
Pre-expenses	945k	1,030 k
Others	0	0
Working capital	630 k	687 k
TOTAL	4,575 k	4,987 k

A capex investment of EUR 7.4 million (for Phases 1 and 2) has been communicated as total capex investment in the Company's EIA report, since the Company is applying for the relevant permits that would be required in Phase 2 as well.

At this stage, for purposes of TIC registration the Company only has commitment from its shareholders for the investment required for Phase 1. In the event that the Company decides to invest for Phase 2, this will be communicated to the TIC.

7. Financing

All of the required funding for this project will be provided by Veris through equity contributions to the Company's two shareholders: Mapinga Premium Foods B.V. and 7HILLS Holding B.V., both of which are wholly owned by Veris.

The Annual Accounts of Veris show that its shareholders have committed sufficient funds to fund this project (Annex III, page 11). Its shareholder Veris Holding B.V. has sufficient funds available to fund this project, as is confirmed by the bank statement of Veris Holding B.V., which is annexed as Annex IV, and a supporting letter from its bank (Annex V). Phase 1 of the investment project in Tanzania was approved by the Investment Committee of Veris Investments B.V. on 1 December 2022. The copy of minutes of the IC/SB meeting has been annexed and hereinafter marked as Annex VI.

8. Sources of technology

The company will import various types of equipment that are required to operate its potato processing business and which are not available within Tanzania.

- In Phase 1 of the project, the company will invest in potato storage equipment supplied by a Dutch company and lease a batch processing and packaging line that is already in Tanzania. A suitable sandwich panel structure to cover the potato storage will also be imported.
- In Phase 2 of the project, the Company will invest in a modern and continuous potato processing line, most likely from a Dutch or U.S. supplier. This processing line will need to be supported by a state-of-the-art packaging line that is also imported and likely originates from the Netherlands as well.

9. Project financial and economic analysis

Based on the actual performance of its crisp processing company in Ethiopia, Veris has developed its financial projections for the Company in Tanzania (see financial projections below).

By sourcing key inputs such as potatoes, oil and packaging material locally, and investing in high quality potato processing equipment, the Company is expected to achieve attractive gross margins.

The Company plans to ensure a steady growth in sales volumes through an affordable branded product that has good availability in relevant outlets. Please note that the financial projections below include both Phase 1 and Phase 2 of the project, even though the Company currently only commits to Phase 1. Phase 2 is included below to provide realistic estimates until 2027. After getting the relevant approvals, the Company plans to implement Phase 2 of the project, which would lead to a positive net income by 2026.

Table 1: Financial projections 2023-2027

P&L	2023	2024	2025	2026	2027
<i>All numbers are estimated projections in TZSk</i>					
Revenues	37,696	2,112,864	7,178,477	18,824,837	26,936,602
Cost of goods sold	(18,773)	(1,048,702)	(3,561,736)	(9,362,524)	(13,433,594)
Gross profit	18,924	1,064,161	3,616,741	9,462,313	13,503,007
SG&A	(1,705,676)	(3,362,699)	(4,062,716)	(5,961,479)	(6,824,489)
Operating income	(1,686,752)	(2,298,538)	(445,974)	3,500,834	6,678,519
Depreciation	(109,489)	(1,313,864)	(2,289,902)	(3,265,940)	(3,265,940)
Amortization	-	-	-	-	-
EBIT	(1,796,241)	(3,612,402)	(2,735,876)	234,895	3,412,579
Other income	-	-	-	-	-
Profit before tax	(1,796,241)	(3,612,402)	(2,735,876)	234,895	3,412,579
Tax	-	-	-	(98,706)	(1,064,179)
Net income	(1,796,241)	(3,612,402)	(2,735,876)	136,189	2,348,401

Table 2: Balance Sheet

Balance Sheet	2023	2024	2025	2026	2027
<i>All numbers are estimated projections in TZSk</i>					
Property, plant and equipment	7,554,720	6,240,856	15,338,059	12,072,119	8,806,180
Goods in transit	-	4,748,907	(0)	(0)	(0)
Non-current assets	7,554,720	10,989,763	15,338,059	12,072,119	8,806,180
Inventories	51,274	151,771	932,249	1,479,765	1,643,426
Accounts receivable	12,768	53,011	188,349	318,808	430,535
Advance and prepayments	110,988	74,595	178,778	264,322	273,509
Cash and cash equivalents	-	(0)	(0)	4,510,192	12,345,824
Current assets	175,030	279,377	1,299,376	6,573,086	14,693,294
Total assets	7,729,750	11,269,140	16,637,435	18,645,206	23,499,474
Issued capital	10,915,278	18,796,961	27,321,669	27,321,669	27,321,669
Retained earnings	(1,796,241)	(5,408,643)	(8,144,520)	(8,008,331)	(5,659,930)
Equity	9,119,037	13,388,318	19,177,149	19,313,338	21,661,739
Loans	-	-	-	-	-
Other long-term liabilities	-	-	-	-	-
Non-current liabilities	-	-	-	-	-
Trade and other payable	3,586	9,444	59,194	92,303	96,037
Tax payables and other accruals	(1,392,873)	(2,128,621)	(2,598,909)	(760,435)	1,741,698
Current liabilities	(1,389,286)	(2,119,177)	(2,539,714)	(668,132)	1,837,735
Total liabilities	7,729,750	11,269,140	16,637,435	18,645,206	23,499,474

Table 3: Cash flow statement

Cash Flows	2023	2024	2025	2026	2027
<i>All numbers are estimated projections in TZSk</i>					
Net income	(1,796,241)	(3,612,402)	(2,735,876)	136,189	2,348,401
Depreciation of property, plant and equipment	109,489	1,313,864	2,289,902	3,265,940	3,265,940
Amortization	-	-	-	-	-
Change in working capital	(1,564,316)	(834,238)	(1,440,536)	1,108,063	2,221,292
Cash from operations	(3,251,069)	(3,132,776)	(1,886,511)	4,510,192	7,835,632
Investing activities					
Purchase of property, plant and equipment	(7,664,209)	(4,748,907)	(6,638,198)	-	-
Cash from investing	(7,664,209)	(4,748,907)	(6,638,198)	-	-
Financing activities					
Capital injection	10,915,278	7,881,683	8,524,708	-	-
Cash from financing	10,915,278	7,881,683	8,524,708	-	-
Cash increase / decrease	-	-	-	4,510,192	7,835,632

10. Market study

Tanzania has a population of 60,000,000 and Dar es Salaam is the largest city in East Africa, with an estimated population of 7,000,000 (greater Dar es Salaam). Urban areas are expected to continue to grow fast, driven by high population growth of 2.9% and an urbanization rate of 5.0% (World Bank). This constitutes a large and growing local market for the Company.

Market research in Dar es Salaam has confirmed that the Tanzanian market is currently underserved by the existing product offering. There is currently no local industrial producer of potato crisps that produces high quality branded crisps at scale in Tanzania. Most potato crisp brands are imported and relatively expensive due to high distribution costs and import duties. The Company will initially target the market in Dar es Salaam.

As in other East African markets, the retail landscape in Tanzania can be separated into modern (supermarkets, minimarkets) and traditional retail. Average-income Tanzanians shop for most of their daily purchases in traditional markets and kiosks – small corner shops that sell staple foods and some basic branded food and hygiene products.

Based on input from a local FMCG company, the estimated number of kiosks in Dar es Salaam is circa 12,000. There are circa 35 supermarkets, which are mainly visited by wealthy Tanzanians and expats, and circa 400 minimarkets, which have a mixed clientele depending on the neighbourhood they are located in. The Company plans to set up a distribution system that supplies both traditional and modern retail in Tanzania.

11. Project capacity

The Company is committed to achieving high standards for hygiene, food safety, employee safety and environmental impact.

Initially, during phase 1, the production capacity of this manufacturing plant will be 500-600 ton of potatoes per annum. During phase 2, the Company plans to import new and high-end processing equipment with a total capacity processing 8000-13,000 ton of potatoes per annum. The factory will gradually increase its utilization rate over the period 2023-2031.

The goal is to source all potatoes in Tanzania. The Company will only source raw materials (i.e. potatoes) from vendors that are locally registered in Tanzania. Potatoes will be transported on road from the farms to the proposed processing facility, where the Company will process the potatoes into packaged potato crisps.

12. Environmental Impact Assessment

Mapinga will aim to mitigate the impact that its operations have on the environment and there are not expected to be any adverse environmental impacts from the project as follows:

- Implementing and enforcing rules and regulation laid down in with all types of waste handling; and
- Adhering to OSHA regulations and procedures, providing all necessary safety equipment for protection of employees.

13. Expected employment generation

The Company was incorporated on 15 March 2023, and currently has 2 employees:

- the Chief Operational Officer; and
- a Legal Counsel.

By the end of this year, the Company plans to have 40-50 employees and over time the company is expected to grow to 150-250 employees.

Employees will enjoy on-the-job training and will develop their professional skills by being employed in a positive and structured corporate environment. The organization will provide operational roles in the factory, opportunities for agronomic specialists that focus on ensuring a reliable supply chain, a sales and distribution team staff will commercialize the products and corporate functions such as Finance, HR and Legal.

14. Proposed implementation schedule

The implementation of the project in phases is presented in Table 4. Some activities repeat in each implementation phase, as production continues.

The project implementation is divided into five activities, namely the pre-construction/mobilisation phase, construction/rehabilitation, commissioning, operation and decommissioning activities. Activities to be conducted in each phase as described hereunder:

13.1 Pre-Construction / Mobilization Phase Activities

This is the planning phase of the project. After having its scoping report approved, the Company has now filed its Environmental Impact Assessment (**EIA**) and is currently waiting on feedback from National Environmental Management Council (**NEMC**).

After approval by NEMC, the project will be awarded an EIA certificate. In this phase, Mapinga will also apply for other relevant permits and procurement a contractor(s).

13.2 Mobilization Phase Activities

This phase will commence after procurement of the contractors and acquirement of EIA certificate from NEMC. This phase may last for about a month, and will involve the following activities:

- Procurement of service providers and suppliers of various goods and services for project development.
- Procurement of the workforce (skilled & unskilled) for execution of various project activities.
- Mobilization and transportation of material required for renovation works, including cement, reinforcement bars, times, roofing materials, paints, etc.

- Application for various permits, including EIA certificate, building permit and waste water discharge permit from Wami Ruvu Basin Water Office.
- This step will also include obtaining a permit from Tanroads to install a wastewater piping on the Bagamoyo road, road-reserve, from the facility to Mpiji River. Tanroads is in scope as stakeholder for this project.

Table 4: Indication of the planning of the project and the two phased approach.

Sn	Activities to be done	2023 (phase 1 – batch production line)												2024 (phase 2 – continues production line)				2025 (phase 2 – continues production line)			
		1	2	3	4	5	6	7	8	9	10	11	12	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	Renovation and (small) construction works					X	X	X	X	X	X							X	X		
2	Procurement of machinery, equipment and other fixed assets			X	X	X						X	X	X							
3	Installation of machineries									X	X							X			
4	Recruitment of employees					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	Training of employees					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	Commencement of operation												X								

13.3 Construction Phase Activities

During Phase 1, the proponent will engage in renovations and installation of machinery required to start (small scale) production. Activities will include:

- Renovation of the current office area and washing rooms.
- Renovation of existing fence around the plot.
- Renovation of the factory roof, floor, walls, some windows and doors.
- Installation of a used batch processing line and packaging machine, which is locally sourced in Tanzania.
- Installation of a quality control laboratory unit and its testing equipment.
- Construction of a cold room to store 300 ton of potato.
- Installation of ancillary equipment, including a gas tank, safety devices, laboratory instruments, water pumps for distribution, electric switchboard, etc.
- Upgrading of the landscape and access roads and parking space.
- Construct any necessary other infrastructure and equipment.

Only if the required commercial scale has been reached and relevant approvals have been obtained, Mapinga would initiate Phase 2. Activities during this phase will include:

- Installation of a new larger processing line and packaging line (and associated equipment).
- Installation of ancillary equipment, including a thermal boiler, safety devices, laboratory instruments, water/oil pumps for distribution, electric switchboard, etc.
- Upgrading site utilities, including construction of
- A new Waste Water Treatment Plant and.
- Installation of a modern generator.
- Potentially install piping for drainage of excessive water from the onsite WWTP to Mpiji River, 1.0 km from the plot.
- Potentially contract a brick wall around the plot.
- Construct any necessary other infrastructure and equipment.

13.4 Demobilization Phase Activities

In this phase, the contractor will hand over the building, and the infrastructure will be tested for technical aspects before operations commence. Suppliers of various equipment and machine will test the installed machines and equipment and perform other technical assistance including process validation.

Further, the contractor will rehabilitate all disturbed working areas, and removal of soil stockpiles and construction wastes. The phase may take about 1-2 weeks.

13.5 Operation Phase Activities

The operation phase of the facility will involve purchasing of potatoes from vendors, transportation in trucks to the facility. The industrial production process for high-quality potato crisps involves several stages, including raw material selection, preparation, slicing, frying, flavouring, and packaging.

The process that the Company will follow in Phase 2 of the project is described below and highlighted in Figure 1 as well:

- **Raw material selection:** The first step is to select high-quality potatoes suitable for making crisps. Varieties with low sugar content and high solid content are preferred as they result in crispier crisps. Potatoes should be free from defects, such as rot or green spots, to ensure consistent quality.
- **Preparation:** The potatoes are thoroughly washed and peeled to remove any dirt or outer skin.
- **Cutting:** The peeled potatoes are sliced into thin, uniform slices using specialized cutting machines. The thickness of the slices depends on the desired final product and can vary from 1 to 3 millimetres.
- **Blanching:** The potato slices are blanched briefly in hot water or steam to partially cook them. Blanching helps remove excess starch and prepares the slices for frying.

- **Frying:** The blanched potato slices are fried in vegetable oil at high temperatures (around 175-190°C or 347-374°F). The frying time is carefully controlled to achieve the desired level of crispiness and golden colour. The continuous frying system will ensure a consistent frying process.
- **Flavouring:** The plain potato crisps are then seasoned. The seasonings will be applied through a drum tumbler that evenly distributes the seasoning over the crisps.
- **Packaging:** The final step involves packaging the potato crisps. The crisps are typically packed in airtight bags or containers to maintain freshness and extend shelf life. Packaging will likely involve nitrogen flushing to remove oxygen and prevent oxidation. The bags are sealed, labelled, and prepared for distribution.

The packaged products will be distributed and sold across various commercial outlets across Bagamoyo and Dar es Salaam.

Figure 1: Process flowchart of crisps processing

