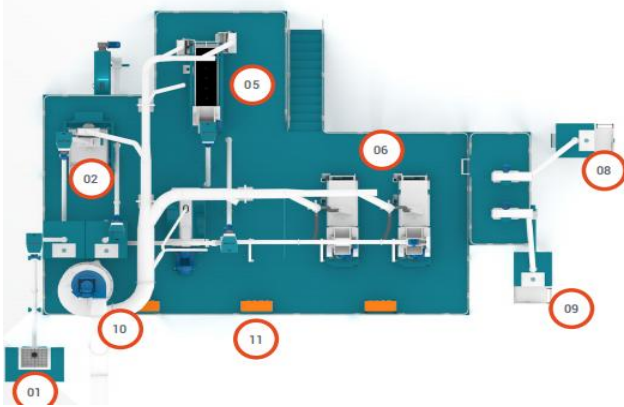
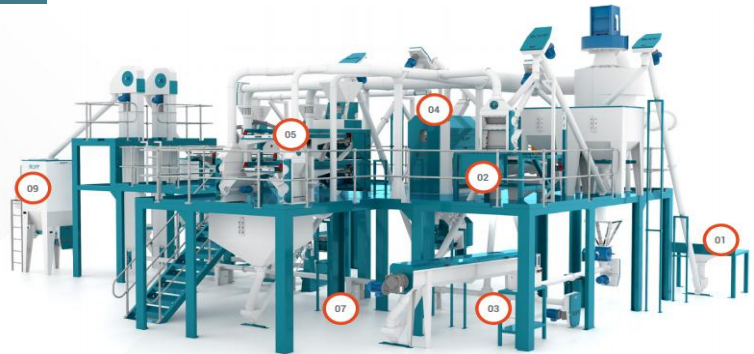


# MAIZE MILLING BUSINESS PLAN FOR

- 01 Bag feed (where maize is received in bags)
- 02 Pre-cleaning
- 03 Conditioning
- 04 Degermination
- 05 Grading
- 06 Milling
- 07 Fortification
- 08 Final product bin
- 09 Bran bin
- 10 Central aspiration line
- 11 Electric panels (MCC)



**AMI Agrofarming Investment Limited**

**of PLOT NO 1928 KAUNDA DRIVE**

**75564 in Dar es Salaam**

**BUSINESS PROPOSAL TO THE TANZANIA**

**INVESTMENT CENTRE**

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## Executive Summary

This project document provides the particulars of an investment proposal put forth by AMI Agrofarming Investment Limited for the establishment of a maize milling facility in Dodoma, Tanzania. It is intended to produce meal flour, specifically both sembe and dona, on a 15,929 square meter piece of land situated on Plot No. 2, Block “LX” at Vikonje “B” street, Mtumba ward, Dodoma city, within the Dodoma region of Tanzania. The plot on the proposed project area is surveying, and legally owned by AMI Agrofarming Investment Limited, as evidenced by title deed No. 82927-DLR, which was issued on the 2<sup>nd</sup> of June, 2022; the establishment of the factory is planned in alignment with the investment parameters outlined below:

<b>PROJECT INVESTMENT in TZS</b>		<b>Exchange rate</b>	1.00	157.82
<b>ITEM</b>	Units	<b>Area in m2</b>	<b>Value Rand</b>	<b>Value in TZS</b>
Land & Buildings (Factory)		15,929		2,200,000,000
Roff Milling Plant			SAR 5,017,723.71	791,897,156
AGI Silos			SAR 5,750,000.00	907,465,000
Vehicles- SHACMAN H3000 8X4 cargo truck	5	\$68,500.00	\$342,500.00	933,312,500
Furniture & fittings				50,000,000
Pre-operational expenses				30,000,000
Initial Working Capital				300,000,000
<b>TOTAL ASSETS</b>				<b>5,212,674,656</b>

The above investment is to be financed through a term loan facility over a projected horizon of 5 years and AMI company equity contribution. It is proposed that the term loan will attract an interest rate not exceeding 18% in TZS terms per annum.

AMI Agrofarming Investment Limited is therefore applying for a Certificate of Incentives from the Tanzania Investment Centre (TIC) under Section 17 of the Tanzania Investment Act and Part IV of the Investment Regulations 2002 to fulfil its goals.

AMI Agrofarming Investment Limited is formally submitting an application for the certificate of incentives in order to qualify for the various investment incentives as stipulated in the Investment Act of 1997, in regard to the acquisition of machinery and equipment and vehicles from outside the country.

### **1.1 Business Concept**

Maize mills hold the potential to be business “hubs” within communities. Centrally located within urban, semi-urban and rural areas, maize mills provide a valuable service to communities by grinding maize (and other grains/roots) into flour/meal. The process saves women valuable time that they would otherwise spend pounding maize, and it produces a superior tasting product that consumers prefer. Maize flour also provides the highest profit margin to mill owners and distribution agents who want to sell maize flour, and is a gateway for vertical integration into larger-scale trading and storage schemes, allowing millers to hedge against certain agricultural risks and use the seasonality of maize production to their advantage.

AMI Agrofarming Investment Limited through its long time experience in business, have found and chosen to install a maize milling plant on Plot No. 2, Block “LX”

at Vikonje “B” street, Mtumba ward, Dodoma city in Dodoma region, to have the following characteristic: [1] the mills will run on electricity. [2] The mills will have hulling machines that remove the fibrous outer hull and produce finer, whiter flour inform of sembe and donna when hulling machines will not be used. Although this process of producing sembe costs a fraction more per kilogram, consumers prefer this flour and will almost always choose this option if available; [3] consequently the mill operator AMI will have the ability to incorporate technology and engage in vertical integration (i.e. trading, storage) in order to respond to consumer demands and remain competitive. [4] the maize mill plant will have a capacity to process 5 tons of maize per hour while the silos will each have a 1,000 tons storage capacity. Taken together, the above characteristics of the maize mill plant mark a larger transition from household economy to an emergent commercialization. AMI Agrofarming Investment Limited intends to have a commercial maize mill installation that services its clients in Dodoma, the capital city of Tanzania, the districts around Dodoma, Morogoro and the Dar es Salaam metropolitan city in the country and elsewhere in the country where AMI will establish distribution agents. The AMI maize milling facility shall procure maize from agricultural producers situated in the maize cultivation regions of the nation, including areas such as Sumbawanga, Songea, Kibaigwa, Njombe, Songwe, and Kilindi etc, in order to process into maize flour, with bran serving as a by-product. Current maize available in those areas can see as much as a 15% cost increase due to transportation surcharges from the maize farmers in the rural areas if and when available. Peak sales season is from April through September when maize is readily available in those areas.

## **1.2 Financial Features**

AMI Agrofarming Investment Limited's primary objective is to establish a maize milling plant that will process 5 tons of maize per hour continuously for a duration of 24 hours, which equates to an annual processing capacity of 36,000 tons of maize, operating six days per week, at an estimated expenditure of Tshs 750,000 per ton of maize ex Dodoma, thereby facilitating the production per annum of 1,183,104 bags of 25 kg of maize flour/sembe and dona. The products will be marketed at a wholesale price of Tshs 25,000 per 25 kg bag. The plant will also produce 7,862 tons of bran as byproducts per year that will sell at Tshs 355,000 per ton. To accomplish this project with diligence, the promoter will be required to secure a term loan amounting to **Tshs 2,932,674,656**

from commercial institutions, which will be allocated for the procurement of maize mill machinery and equipment, silos as well as the acquisition of maize from farmers, traders, and various open markets in the aforesaid places throughout the year, particularly during the peak seasons that extend over approximately eight months.

## **1.3 Management**

The milling project will benefit from an experienced entrepreneurial-based management team comprising of the following staff:

Plant Manager

Finance officer/Accountant

Human Resources officer

IT Specialist

Mill operators

Security Guards

Maintenance Technicians

Procurement officers

Sales and Marketing officer

Warehouse and inventory staff

Cleaning and sanitary staff

All of the them will have a firm knowledge of the local economy and experience in agricultural produce management and project infrastructure development, to run the day-to-day operations of the maize mill. AMI Agrofarming Investment Limited shareholders will bring to the business years of milling industry expertise and industry connections.

#### **1.4 Partnerships**

AMI Agrofarming Investment Limited will strive to form mutually beneficial partnerships with maize traders as well as local farmers in the maize producing regions such as Sumbawanga, Songea, Kibaigwa, Njombe, Songwe, and Kilindi. Farmers and maize traders will receive more favorable prices for their crops which AMI Agrofarming Investment Limited will buy from them ex Dodoma as a significant market outlet for their produce.

#### **1.5 Loan Requirement**

AMI Agrofarming Investment Limited will have a need for a long-term loan of **Tshs 2,932,674,656** from reputable commercial institutions. AMI Agrofarming

Investment Limited will leverage this funding with **Tshs 2,280,000,000** of in-kind contributions in the form of the land and as equity contributions in form of preoperational expenses, furniture and fittings-facilities and expertise. Commercial institution's funding will be applied towards procurement of maize plant and silos and other related operating costs such as packaging materials. Consequently commercial institutions funding will greatly reduce the financial operational expenses burdens and provide for a much quicker path to profitability.

## **1.6 Economic Impact**

With current high maize flour prices and frequent shortages, AMI Agrofarming Investment Limited Mill will provide a cheaper product and assure year round availability. Local farmers and traders will also save costs by delivering their crops to a reliable local mill. Similarly more local land owners would be able to farm knowing that there is a local mill that can buy their product. This will stimulate the local economy and increase the business and its promoters' cash flow.

## **2 Business Profile**

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### **2.1. Goals and Objectives**

*Mission Statement* – AMI Agrofarming Investment Limited will produce maize flour in Dodoma city in Dodoma District in order to reduce the retail price of maize flour in the new capital city of Tanzania and its outlying areas.

*Vision Statement* - AMI Agrofarming Investment Limited strives to stimulate and support long term economic growth and increased cash flow in the maize milling business.

**0-12 months** goals – This phase marks the start of the establishment of the milling infrastructure. This includes the construction of facilities, the procurement and installation of the maize milling machinery and equipment, the installation of electrical connections, the sourcing of maize supplies, and the training of personnel on operational procedures and maintenance protocols. Comprehensive operations are anticipated to initiate during the harvesting season of 2025.

**3 year goals** – With positive cash flow AMI Agrofarming Investment Limited will turn its focus on growth through community involvement. AMI Agrofarming Investment Limited will work with non farming local property owners to encourage commerce and thus gaining additional maize sources.

**5 year goals** – Malnutrition, particularly among children, presents a pervasive challenge in Dodoma region and across Tanzania. AMI Agrofarming Investment Limited will in future aim to address this issue directly with nutritionists to develop maize flour enriched with soy protein. Furthermore, AMI Agrofarming Investment Limited will seek to partner with the World Food Programme and other United Nations entities to facilitate the provision of affordable food for school-aged children. AMI Agrofarming Investment Limited will actively engage and persist in its efforts with suppliers and distribution intermediaries to promote commercial activity and subsequently secure additional maize sources.

## **2.2 Products and Service**

AMI Agrofarming Investment Limited Mill will purchase maize and produce maize flour for sale. Maize will be purchased from local farmers and traders in any quantities. The maize is typically received bagged in 100kg bags.

Maize shall be received and subjected to pest control measures within AGI silos until it undergoes processing. Following the processing phase, the flour meal will be packaged in 25kg bags or any other suitable size and made available for sale to the neighboring districts and towns within the Dodoma region, as well as in other adjacent regions and within the metropolitan city of Dar es Salaam. The grade of the meal is determined by the finished product's fineness. Finer meal is typically used for porridge with a runny consistency "uji" while coarse meal is used for a firm and pasty stiff porridge "ugali" which is the main dish in almost every home in the country.

The milling process

## **2.3. Company Description**

AMI Agrofarming Investment Limited is a limited liability company which is the promoter of the project is registered in Tanzania under the company Act 2002, with a certificate of incorporation number 166953243 dated 14<sup>th</sup> of July 2023. The company is registered with the Tanzania Revenue Authority and was assigned with tax identification number (TIN) 166-953-243. AMI Agrofarming Investment Limited intends to establish a maize milling plant on Plot No. 2, Block "LX" at Vikonje "B" street, Mtumba ward, Dodoma city, within the Dodoma region of Tanzania. During the initial operation the mill will require about 20 workers during peak season to run at capacity. The aforementioned employees, some of whom possess considerable experience, shall be recruited and trained to operate the facility. The sales will

be approximately partitioned into 90% and 10% between wholesale and retail, respectively, with wholesale transactions predominantly conducted on credit for a maximum period of 30 days.

## **2. The Industry**

### **3.1 Flour Milling Sector Description**

Tanzania experienced the predominance of state-owned enterprises (SOEs), particularly the National Milling Corporation (NMC) and the National Distributors Ltd (NDL), in the milling and distribution of maize flour within urban areas from 1967 until the late 1980s. The network of silos and milling machinery belonging to the NMC throughout the nation was subsequently privatized and acquired by various corporations, including three prominent private sector entities engaged in grain marketing and milling: Salim Salim Bakhresa (SSB), Mohamed Enterprises Tanzania Ltd (METL), and Export Trading Group (ETG).

#### **3.1.1 *Dodoma Milling Sector History -***

Given that the prices of maize flour are determined by market forces in Dodoma, similar to other regions in the country, the milling sector, like many other sectors, has benefited from a significantly more competitive market framework, wherein smaller milling enterprises have increasingly challenged former monopolistic entities. Following the decline of the prominent National

Milling Corporation in Tanzania, a multitude of smaller milling operators has emerged within the industry.

As an economic crop, maize accounts for 74.3% of cereals production and 66% of all crops harvested annually. It contributes about 40% of calorific foods consumed. Maize flour is used to make a meal popularly known as 'ugali'. SMEs play a major role in the midstream of the maize value chain.

Micro and small-scale maize millers are particularly prominent in rural settings and small trading centres but they also operate in larger towns and cities. The maize milling business has also attracted medium and large scale investors with national and regional market outreach for their milled and packaged products. These operators, dominated by firms such as Mohamed Enterprises Ltd (METL) (the "Mo Sembe" brand) coexist with small-scale millers (2-20 mt/day). The small-scale millers also produce maize flour of different grades and textures. Flour for human consumption includes dona - milled from whole grain, and sembe - made from dehulled grain. Millers of all scales also supply by-products known as bran that is used to make livestock feeds, a sector that is growing rapidly in Tanzania.

In addition to the big five millers: SSB, METL, ETG and CPB, there have been new entrants in the maize milling industry, but most of the new entrants have medium and small-scale milling facilities. There are also many micro-milling machines located in almost every village with ability to process less than one metric ton a day.

The rural electrification programme encouraged the establishment of electric-powered mills, replacing diesel powered facilities. It is now possible to establish milling machines of slightly higher capacity than the traditional hammer mills. The government has introduced a programme for micronutrient fortification in maize flour. While medium and large-scale millers have adopted fortification, it is

not yet widespread amongst small and micro scale millers. While the number of small millers that have adopted fortification is growing, some millers believe that fortified flour is less popular with customers compared to the unfortified flour.

### **3.2. Competition**

There are two categories of mills in Dodoma: small scale mills that only serve their immediate communities and large scale mills that sell their product throughout Dodoma city and beyond.

Bhakresa Company and other large milling companies in Dodoma will be the main competitors who have outlets in areas where AMI Agrofarming Investment Limited operates. Deliveries are sporadic at times. These medium scale milling companies are able to spend significantly on marketing and enjoy customer brand recognition. They are located in areas of established infrastructure and have strong relationships with maize producers, grain traders and outlets.

These relatively larger milling companies do however struggle to serve semi-urban locations due to transportation costs. They also process such high volumes that quality is often neglected. Minor establishments are often overlooked, and the provision of customer support is nearly absent; this is a domain in which AMI shall demonstrate its capabilities.

### **3.3 Competitive Advantage**

AMI Agrofarming Investment Limited Mill offers the following advantages over its competitors:

*Location* – AMI Agrofarming Investment Limited's maize milling facility is to be

established within a designated industrial area along the Dodoma-Morogoro Highway and shall have a production capacity to process maize into Sembe and Dona, which are expected to attract both clients and distribution agents to visit the establishment for the acquisition of flour and bran consignments sometimes on credit according to a client's creditworthiness, consequently incurring the transportation costs independently. The location of the envisaged milling plant will have some of the following features: The location is near maize-producing areas that can benefit the plant in several ways. Proximity to raw materials reduces transportation costs, lowers spoilage risks, and improves profit margins. The location has access to skilled labor in agriculture and food processing industries which can also maintain efficient operations. The Dodoma city being centrally located is close to key markets and distribution points that enables faster and cheaper delivery of raw materials and finished products. In addition, its access to reliable infrastructure like roads, electricity from TANESCO, and water from DUWASA ensures smooth operations of the maize milling plant. Furthermore, Dodoma is the capital city of Tanzania being near densely populated areas and high-demand markets can help reach consumers quickly and at a lower cost. By cutting down costs through proximity to raw materials and markets, the maize plant can offer more competitive pricing and potentially increase its market share.

*Product Quality* – Larger mills than our planned installation do occasionally produce poor quality meal due to negligence or simply as a result of processing large volumes of product. Given the manageable size of the AMI Agrofarming Investment Limited mill, such quality control can be performed

regularly as needed without any difficulties.

*Shareholder's Local Knowledge* – Traditional maize marketing channels in Dodoma consists of: Producer → Grain Trader → Milling Agent → Wholesaler or Retailer → Consumer. Due to the close ties of AMI Agrofarming Investment Limited's shareholders with local enterprises and organizations in Dodoma and Dar es Salaam, the maize milling facility will occasionally procure maize directly, circumventing the necessity for grain traders, as well as market approximately 90% of its output to places like institutions in Dodoma independently of retail vendors.

### **3.4. Market Characteristics**

*Dodoma city and region in general* - Maize flour is the staple diet of Tanzania including Dodoma region and the whole of East Africa. An average adult in Dodoma will consume around 120kg of maize flour per year. Most Dodoma city and its surrounding districts, nearby regions such as Pwani, Singida, Morogoro and Dar es Salaam city etc dwellers where the project will have its product distribution agents will eat maize flour porridge for breakfast, stiff porridge "ugali" for lunch and dinner with various side dishes. In rural parts of Dodoma and other regions that will surround AMI Agrofarming Investment Limited Mill, a bag of maize flour means food security for an average family for two weeks and is their first priority when receiving a salary or other source of income.

### **3.5 Local Target Market**

The agriculture industry dominates the economy of the Dodoma region, with subsistence farming as well as commercial farming. A total of 376,924 out of 450,305 private households in the area (84 percent) were involved in agriculture according to the 2012 population and housing census. These homes were primarily located in Chamwino district council (68,162 households). The percentage of households engaged in agriculture in districts within the Dodoma region ranged up to 90% in Kondoa and Mpwapwa, and 93 percent in Bahi and Chemba district councils, while in Dodoma city 54% of households are employed in agriculture.

According to the 2022 national census, the region had a population of 2,083,588. The region represented 4.8 percent of the total population of the Tanzanian mainland which was 43,625,354 in 2012. In 2012, it was the seventeenth most densely populated region, with 50 people per square kilometer. Dodoma District has the largest population at 410,956 in 2012. According to the population census provided by the National Bureau of Statistics (NBS), the city of Dodoma recorded a total population of 2,312,141 in the year 2017, comprising 1,126,309 males and 1,185,833 females. The average annual population growth rate is estimated at 2.1 percent. This demographic scenario guarantees a consistent market for the proposed maize milling enterprise by AMI.

Other Outlets - There are several small shops in Dodoma city where the mill will be located along the Dodoma - Morogoro Highway that can serve as whole sale and retail outlets and who will benefit from AMI Agrofarming Investment Limited's delivery as they rely on public transportation to Dar es Salaam to buy stores. From the Mill to the Public - AMI Agrofarming Investment Limited

will also incorporate a small outlet at the mill to supply the immediate surrounding customers especially those with needs of 5 to 10kg bags .

### **3.6 Population Growth and Migration**

It can be accepted that 90% of the population in Dodoma city consume maize flour as their staple diet. The nationwide market for maize flour sales can therefore be directly connected with population figures and growth rates. The current estimated population of Dodoma according to the 2022 census is 3.086 million, and grows with 2.1% annually.

Although it is difficult to quantify this fact without the proper censuses, AMI Agrofarming Investment Limited is confident that the populations of the areas that will trade its products are constantly on the increase. This is evident in the rapid expansion of housing areas, new businesses and lodges in upcoming towns and settlements. New businesses stimulate employment and a steady flow of villagers from rural areas. In these towns however, people are no longer able to farm their own crop and they solely rely on commercial meal.

### **3.7 By-product Market**

A maize mill produces bran as a by-product that is not fit for human consumption, however maize bran is a nutritious component of livestock feeds and is even used by some farmers as a complete replacement for expensive livestock feeds. From a 1 ton of maize, bran produced after hulling is 0.21 tons and sells at Tshs 355,000 per ton, which is around 36% of the price of the same weight in maize flour. AMI maize mill plant will produce a

total of 9,000 tons per year. The demand for this product is always high in Dodoma and Dar es Salaam cities and other towns in the country as animal feeds are very expensive and there are many livestock feed manufacturers who need it as a raw material.

### **3.8 Industry Dynamics**

#### Sales Fluctuations

*Seasonal Fluctuations* - Throughout Dodoma region and other parts nearby people buy maize flour which is ground with small diesel powered milling units called hammer mills. This practice effectively removes these sustenance consumers from the commercial maize flour demand. However, every year between December and May there is again a sharp increase in demand for commercially milled maize as these sustenance consumers once again start relying on commercial meal. This is due to the following two reasons:

- Sustenance consumers do not have access to adequate storage facilities for their maize.
- Many sustenance consumers simply did not grow enough.

During the peak months of April through August most milling companies look at producing twice as much maize flour per month as they would during the rest of the year because of the readily availability of raw materials.

*Annual Fluctuations* - The milling industry in Dodoma has enjoyed a very stable environment over the last few years. The main reasons for this

stability are:

- Dodoma has one of the most stable and favorable supplies of maize from the maize growing districts in the region and other nearby regions in the country. Droughts and occasional floods in some years do occur which can impact national maize production negatively. On average however, Dodoma has been receiving more and more maize every year.
- During times of less maize production, and even in times of shortages, maize allocated for human consumption receives priority above other maize consuming business sectors like breweries and of course exports. Prices do increase but are simply reflected in higher maize flour pricing. This leaves the milling operators largely unaffected by less availability of maize.

### **3.9 Trends**

#### Government Allocation of Maize

In times of maize shortage the Tanzanian government typically first cuts all exports and then reduces the allocation to other business sectors such as stock feed producers and breweries. National Food Reserve Agency (NFRA) is always allocated a portion of maize to keep a buffer in place in case food aid programs might need to be implemented during natural disasters like floods or drought. This guarantees a sustained commercial engagement for maize milling enterprises such as AMI.

## **4. The Market**

### **4.1. Target Market**

The target market is the immediate Dodoma city and the surrounding towns in the districts of the Dodoma region. Others are in route towns and settlements on Dodoma - Morogoro highway and of course the Dar es Salaam city, Singida town, Arusha and other nearby places where AMI Agrofarming Investment Limited will have established reliable distribution agents who will come to her facility to get the flour meal products sometimes on credit for not more than 30 days. These parts of the population will make up a big part of the company's consumer base throughout the year. The providers of the majority of these families earn their money through employment by local businesses like daladala operations, bodaboda and bajaj transportation, urban farming or at any of the private or public institutions that richly line the nearby regions and Dar es Salaam city in the country. Some towns in the areas also will serve as the district headquarters which bring with them the presence of many council employees as well as representatives of government departments such as Education, Welfare, Fisheries, Agriculture etc. These government departments make up a large part of the more affluent section of this society.

## 3.2 Marketing Plan

**Product Use and Benefit:** AMI Agrofarming Investment Limited Mill will be filling an immediate need within the Dodoma city and surrounding towns and settlements in the Dodoma region and other nearby regions. AMI Agrofarming Investment Limited Mill will provide a lower priced product as it will be locally or in proximity produced and also ensure a high quality product with consistent availability.

**Price Point:** Maize flour (meal) currently retails at more than Tshs 25,000 per 25kg bag in Dodoma. As a local mill AMI Agrofarming Investment Limited will provide maize flour to this market at the same price to start with and will also offer a wholesale price of slightly more than Tshs 25,000 per 25 kg bag depending on the distance of delivery and allow for a typical 8% retail markup. At this price point with a quality product market acceptance is assured.

**Sales Channels:** Sales will be divided into roughly 90% / 10% between wholesale and retail. As mentioned before all retail sales will be mostly cash sales and wholesale sales will receive net 30 days payment terms.

**Marketing:** Due to availability of advertising media, AMI Agrofarming Investment Limited will promote its product through direct sales calls to businesses and retails outlets, the radio and television advertisements. Maize flour is a staple food and product of importance and word of mouth advertising will account for a large portion of the general public's product awareness. By providing a quality product at a cheaper price, AMI

Agrofarming Investment Limited will virtually remove all barriers to product acceptance. A good brand name and logo will introduce the product in the market, that will eventually be a common sight throughout the entire central regions of Tanzania and something that consumers are proud of.

## **5. Description of Product and Business Operations**

### **5.1 Product Manufacture/Service Provision**

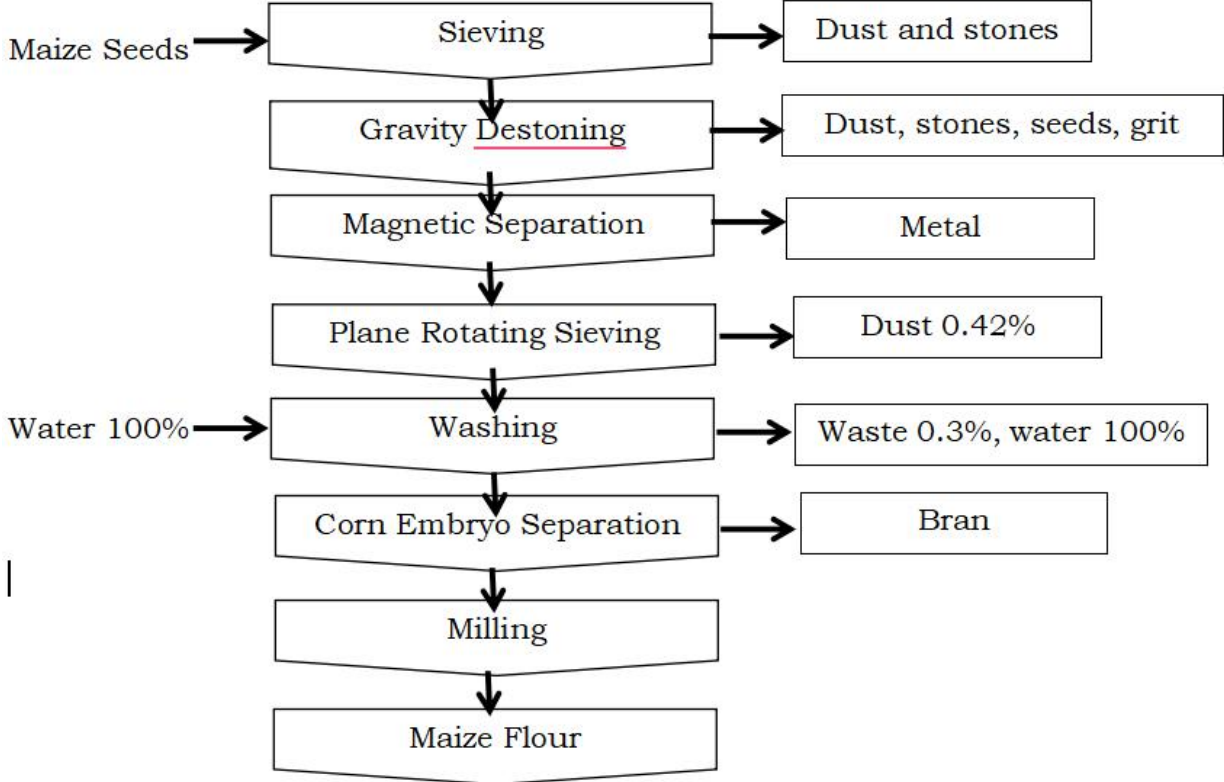
Maize milling is the process where dried maize kernels are refined to maize flour. The maize milling process is a mechanical process and consists of cleaning, grinding and sieving operations. After each sieving operations, product of a particular quality is drawn and the residue is recycled for further grinding or milling.

#### **5.1 Equipment / Facilities:**

The maize flour machinery and equipment that will be used by AMI maize mill will be Roff Milling Plant and AGI Silos, which the company is importing from international markets. The R-40 mill has a small footprint of 15m(L) x 9m(W) x 6.6m(H), and takes up floor space of about 135m<sup>2</sup>. It comes with a support structure and as such, no special structures or buildings are required. The only condition is that the roof should be at least 7 metres high. Standard industrial concrete floors will suffice; no special flooring is required. The R-40 boasts an extraction rate of about 69 to 74% for super “sembe” flour, or 79 to 84% for “dona” flour, allowing the company to produce and/or export both these products with ease.

The mill is constructed of various parts each responsible for performing functions such as cleaning, de-husking, conditioning, grinding, sieving,

dressing, purifying, and bagging. The flow diagram below summarizes the milling process.



The proposed maize mill factory will have a warehouse with installation of 2 production machines (silos) of 1,000 tons each will be erected in an area that contains all of its operations. There is enough space available for the milling equipment, the silos for storage for the daily finished maize flour products and bran prior to being delivered to the market; and with another for surrounding working space. Stand alone buildings with an additional space will be available for office purposes.

**5.2 Raw Materials:**

The main food crops grown in the Dodoma region where the maize mill plant will be installed are maize and sorghum, primarily in the districts of Kongwa, Chemba, Kondoa, Mpwapwa, and Chamwino. In terms of maize production,

Kongwa is the top district, followed by Kondoa and Chemba.

The only raw materials required to produce maize flour are dried maize and water. Maize will be purchased in various quantities bagged in 100kg bags. AMI Agrofarming Investment Limited will give all local farmers first priority before purchasing from commercial growers. AMI Agrofarming Investment Limited will purchase maize from farmers, traders and open markets in the mentioned areas at a maximum price of Tshs 750 per kilogram ex-Dodoma city.

### **5.2.1 Power Supply**

The maize mill plant will be connected to a three phase power supply from Tanzania Electric Supply Company Limited (TANESCO). Power supply will be determined based on production process and management has approached the authority for this. Electricity is the second major expense at the mill which is estimated to cost Tshs 6,667 per ton of hulled and milled maize.

### **5.2.2 Water Supply**

Water for all uses in the plant premises and operation will be sourced from the Dodoma Urban Water Supply and Sewerage Authority (DUWASA). It is expected that 5,000 liters of water per month will be used during the operation. As such the company is also considering about drilling a borehole as another alternative source of water in case there are shortages from DUWASA.

On the other hand packaging materials for maize flour will be obtained locally at a price of Tshs 350 per bag.

## **5.3 Logistics and transportation**

AMI Agrofarming Investment Limited will purchase and own 5 trucks for transporting raw materials and finished products which is deemed beneficial for the envisaged commercial maize milling plant. The reason is owning trucks

provides more control over delivery schedules, ensuring timely transportation of maize and finished products without relying on third-party availability.

While the initial investment in trucks is high, owning them may be more economical over time, especially because the maize mill plant will be located in Dodoma region far from most raw material sources such as Mbeya, Iringa and Sumbawanga or finished products' distribution points like Dar es Salaam city etc.

Furthermore trucks on standby allow for quick responses to urgent orders or supply chain disruptions, minimizing operational delays. The company will train drivers on control loading and unloading processes, thus reducing potential damage to maize and finished goods. As far as marketing is concerned trucks can carry the company logo, providing brand visibility during deliveries, which is valuable in competitive markets.

In general owning trucks will be ideal because most of the raw materials will come from rural or remote areas with poor transport options and the maize mill plant will have a high demand consistency, with significant volumes of maize or finished products moving regularly. Since reliable, timely delivery is crucial at the envisaged maize mill plant, and the fact that third-party logistics are sometimes unreliable or costly owning a fleet for the company would be ideal. In conclusion, owning trucks can be advantageous for the maize milling plant when delivery control, reliability, and long-term savings are priorities.

#### **5.4 Quality Control:**

AMI Agrofarming Investment Limited will continue to maintain a strict quality control of both incoming raw materials as well as the finished processed maize flour products which are sealed by an electric stitching

machine. The AMI Agrofarming Investment Limited Mill will abide by all the relevant policies and government agencies such as the National Environmental Management Council (NEMC), Occupational Safety and Health Authority (OSHA) and Tanzania Bureau of Standards (TBS) regulations.

## **5.5 Key Operational Responsibilities**

The duties of the shareholders will include strategic business and financial planning. This includes all fundraising such as grants, in-kind contributions and investments. Also includes all budgets and overall project management. They are also responsible for managing the statutory payments of water and electricity.

Other responsibilities include oversight of building installations and negotiations with government departments for sales of its products as well as responsible for strategic planning for sourcing maize supplies. Managing administration, workers and training of workers, sales calls and procuring a customer base.

*The Plant Manager or Industry Specialist* responsibilities will be sourcing and managing the running of the maize mill as well as the maintenance and repair of the facilities. This includes research on appropriate spare parts from viable materials and supplier sources.

## **5.6 Workforce**

During normal operation the mill will require about 20 laborers especially so during the peak season to run at capacity. Operations management will

consist of overseeing milling operations, labor, maintenance, quality control and product delivery. Financial management will consist of sales, marketing and administration. Workers are will be trained on location and are responsible for running the maize mill efficiently.

## **5.7 Business Capacity**

The mill has a throughput capacity of 5 tons of maize per hour. The down time on a mill is about 15% with 10% idle time. Hence it is estimated that the maize will operate for a total of 312 days in a year. A 24 hour milling period will result in roughly 95 tons of maize flour per day.

## **5.8 SWOT Analysis**

**Strengths:** As the milling industry is a well-established industry, AMI Agrofarming Investment Limited is able to efficiently implement a maize mill in the in Dodoma city along the Morogoro-Dodoma Highway. Information and expertise is readily available on the subject. Failure modes as well as recommended fixes are well documented. Parts are standard and easy to keep in stock. Similarly there are a number of mills in other parts of Dodoma and Dar es Salaam and elsewhere in the country that are successfully fulfilling the same service in their immediate community as AMI Agrofarming Investment Limited will provide in Dodoma city. These mills much as there will be competitors in the business they might as well always be willing to lend a helping hand.

Maize flour is the staple food of Tanzania and Africa in general and is always in high demand, especially in the semi -urban outlying areas. Due to the vast distances on less than ideal roads, these outlying areas are often

neglected by the larger prominent meal producers from Dar es Salaam. However, even when they are serviced, the added transportation costs are typically reflected in the flour prices. These conditions provide AMI Agrofarming Investment Limited with easy running conditions to the market with potential for quick more market penetration. AMI Agrofarming Investment Limited will strive to gain a very loyal consumer base by offering better prices and maintaining a consistent inventory. Local knowledge and firm relationships with many of the surrounding commercial businesses and institutions in Dodoma and or Dar es Salaam will be instrumental in the market penetration and overall product acceptance. Many of these businesses and institutions will feed a workforce of between 80 and 200 workers on a daily bases and collectively account for roughly 45% of all sales. Having the capacity to deliver maize flour directly to retailers and businesses will allow AMI Agrofarming Investment Limited to create and sustain healthy relations with customers. This is an important aspect in ensuring repeat business.

**Weaknesses:** The maize industry, as with all agriculture, is one that is at the mercy of Mother Nature. Although Dodoma enjoys one of the most stable maize supply in the country e.g. from Kibaigwa, nature still remains unpredictable from time to time. International imports from countries with surplus could drive prices down drastically if the government fails to step in and apply the appropriate import duties to protect the local producers.

**Opportunities:** There is sufficient fertile land across the country to supply the maize needed to produce the annual maize flour quota in th country.

**Threats:** TANESCO sometimes could fail to provide the electricity power to the AMI Agrofarming Investment Limited Mill within the needed time frame.

Failing weather could directly influence AMI Agrofarming Investment Limited’s maize supply.

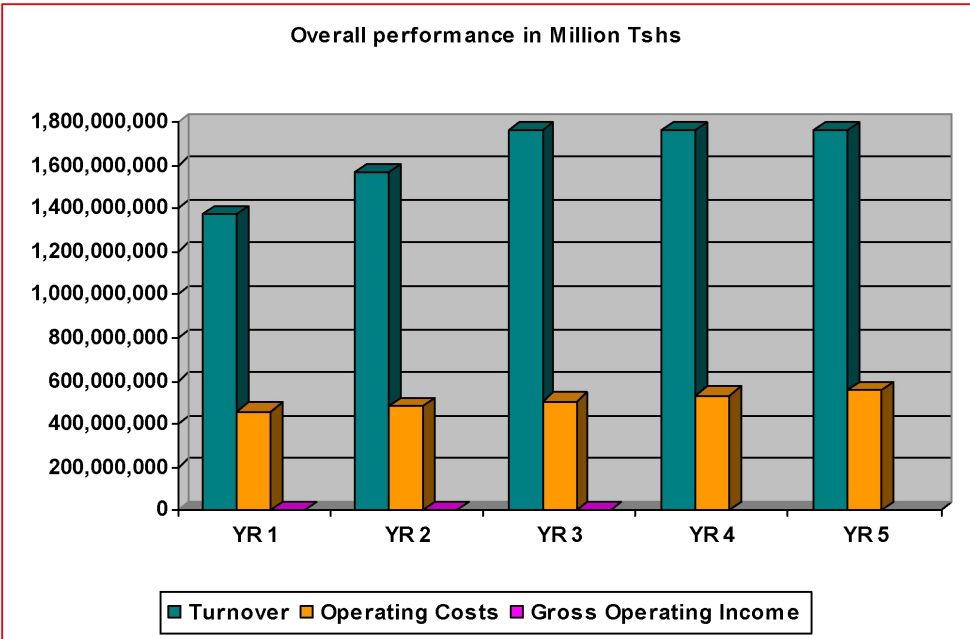
The ability for larger competitors to lower their prices to match or undercut AMI Agrofarming Investment Limited’s is a potential threat. However, due to the costs involved, it is unlikely that the competitors will fight to maintain this market.

**6. Financial Analysis**  
**Revenue and Profitability Projections**

The income generated from *the sales of maize flour sembe and dona* is projected at Tshs 26,619,840,000 in the first year and Tshs 28,098,720,000 in the second year and in the subsequent years as indicated in **Appendix 4A**.

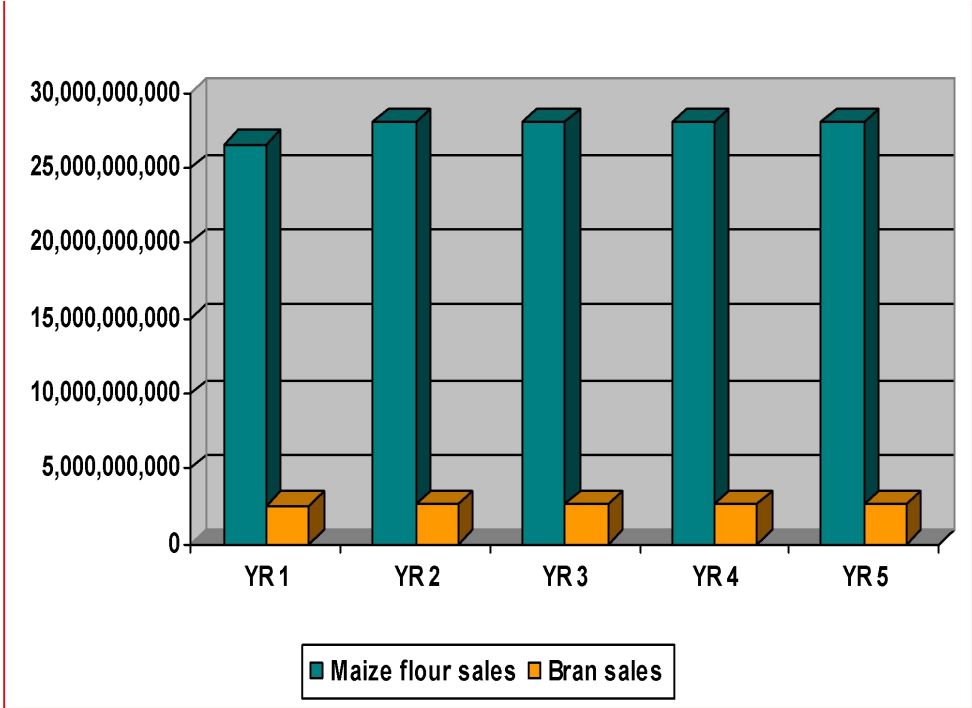
The income generated from *the maize bran* is projected at Tshs 2,512,036,800 in the first year and Tshs 2,651,594,400 in the second year and subsequent years as indicated in **Appendix 4A**.

**Figure 3: Projected Income from various sources in Tshs**



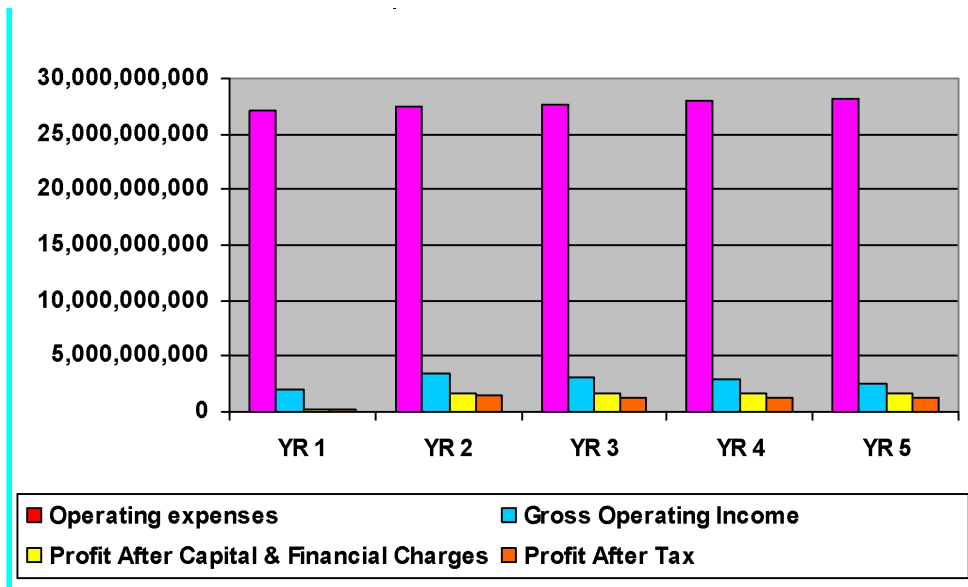
Operating expenses are projected at Tshs 84.9 million during the first year, Tshs 95.6 million in the second year and Tshs 100.8 million during the third, fourth and fifth years. Gross operating income is projected at Tshs 203.0 million during the first year, Tshs 228.4 million during the second year and Tshs 241.1 million during the fourth and fifth years as shown in **Appendix 6**.

**Figure 4: Overall performance in Tshs**



Overall gross operating profit is projected at Tshs 154.3 million in the first year, Tshs 174.4 million in the second year, Tshs 181.8 million in the third year. Profits after capital and financial charges (interest payment for the short term loan facility and depreciation) but before taxation are projected at Tshs 116.6 million during the first year, Tshs 161.9 million in the second year, Tshs 171.8 million in the third year. Profits after taxation are projected at Tshs 81.6 million during the first year, Tshs 113.4 million in the second year, Tshs 120.3 million in the third year, as shown in the Projected Income Statement (**Appendix 6**).

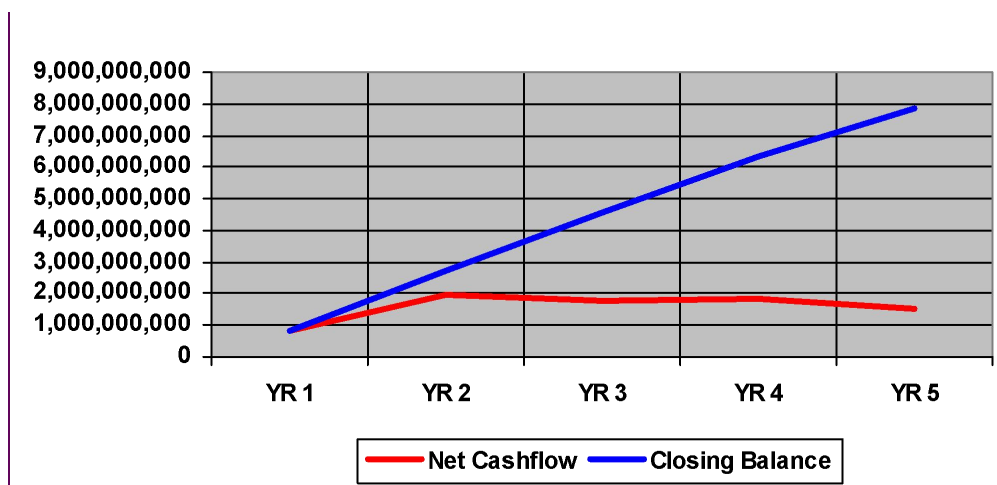
**Figure 5: Projected financial performance in Tshs**



### 6.1 Business Liquidity

The proposed business is profitable. It generates cash from the first year of operations with a net cashflow of Tshs 795,444,903. Positive net cashflow are projected to be recorded in each year during the projected period of five (5) years. At the end of the projected period of five years the business is projected to have a total closing balance of Tshs 7,867,821,358, thus being capable of investing in new ventures and further opening up the installation of similar milling units and probably animal feed manufacturing in other locations as a future strategy. Cash flow projections are shown in **Appendix 9**.

**Figure 6: Liquidity projections in Tshs**



The business is projected to attain an attractive payback period of 3 **years and three months** as indicated in **Appendix 8**. Break-even revenue is

projected at Tshs 25,792,625,688 with a break-even capacity utilisation of **88.54%** as indicated in **Appendix 11**.

## **6.2. Internal Rate of Return and sensi**

Through the Discounted Cashflow (*DCF*) method the business realizes an Internal Rate of Return (**IRR**) of **51.56%** which is above the current cost of capital in the economy, implying that the business is financially viable.

Since financial projections are only as good as the assumptions on which they are built, an analysis of the impact of changes in some of the major assumptions used has been undertaken. The project has been subjected to **sensitivity analysis** to observe the impact of changes in revenue and operating expenses.

It was observed that the proposed business is therefore more sensitive to changes in operating expenses than to similar changes in revenue. **Efforts should be made to control operating costs at all times, or adjusting selling prices to reflect changes in operating expenses.**

## **7.0 Implementation Plan**

No	Activity	Time	Status
1	Business Plan Preparation	October 2024	Completed
2	Application submission to TIC	October 2024	Not yet
3	Roff Milling Plant and AGI Silos procurement	September 2024	Process started
4	Roff Milling Plant and AGI Silos shipment	October 2024	In transit
6	Construction of buildings	December 2024	Not yet
5	Electricity connection and start up	November 2024	Not yet
10	Installation of Machines Roff Milling Plant and AGI Silos	January 2025	Not yet

11	Mobilization of Raw Materials	January 2025	Not yet
	Trial runs	February 2025	Not yet
12	Full throttle Production	March 2025	Not yet
13	Sales Promotion	April 2025	Not yet

## **8. Economic and Social Benefits**

The successful operation of the business of purchasing maize, hulling and grinding into maize flour both sembe and dona at AMI Agrofarming Investment Limited Mill on Plot No. 2, Block "LX" at Vikonje "B" street, Mtumba ward, Dodoma city, within the Dodoma region by **AMI Agrofarming Investment Limited** will have significant economic and social benefits to the surrounding areas and the whole country in general including the following:

- (i) Creation of employment opportunities for women and the youth in Dodoma and various regions in the country by being engaged in purchasing, hulling, winnowing, grinding, packaging and selling the maize flour/sembe or dona and bran. The proposed business is therefore in line with the government policy of job creation as a means of poverty alleviation. About 20 employees will be directly involved in the business.
- (ii) Expanded tax base to the Treasury and Local Government authorities and generation of substantial income to the Government. It is projected that by the end of the projected period of five (5) years, the business will contribute a total of Tshs 971,230,033 in corporate tax, an annual average of Tshs 194,246,007.

## **9. Conclusions and Recommendations**

This document has provided details on a business proposal by **AMI Agrofarming Investment Limited** for the establishment of a maize milling plant in Dodoma city along the Morogoro-Dodoma Highway where the company will operate a maize flour mill whose capital investment is **Tshs**

**5,212,674,656** to be financed through a ***term loan facility*** and company equity contribution.

The company is now applying for a Certificate of Incentives from the Tanzania Investment Centre (TIC) under Section 17 of the Tanzania Investment Act and Part IV of the Investment Regulations 2002 to fulfill its goals. AMI Agrofarming Investment Limited is particularly applying for a certificate of incentive in order to qualify for the various investment incentives as stipulated in the Investment Act of 1997, in regard to the acquisition of machinery and equipment and vehicles from outside the country.

Through the various parameters, which have been considered, it has been established that the proposed project is technically feasible, financially viable, and economically and socially beneficial.

In view of the above, it is hereby recommended that the project as conceived by AMI Agrofarming Investment Limited be supported by the Tanzania Investment Centre by providing the requested Certificate of Incentive.

## AMI Agrofarming Investment Limited

### BUSINESS PROPOSAL FOR ESTABLISHMENT OF A MAIZE MILLING PLANT

PROJECT INVESTMENT in TZS		Exchange rate	1.00	157.82
ITEM	Units	Area in m2	Value Rand	Value in TZS
Land & Buildings (Factory)		15,929		2,200,000,000
Roff Milling Plant			SAR 5,017,723.71	791,897,156
AGI Silos			SAR 5,750,000.00	907,465,000
Vehicles- SHACMAN H3000 8X4 cargo truck	5	\$68,500.00	\$342,500.00	933,312,500
Furniture & fittings				50,000,000
Pre operational expenses				30,000,000
Initial Working Capital				300,000,000
<b>TOTAL ASSETS</b>				<b>5,212,674,656</b>

APPENDIX 1

#### DEPRECIATION SCHEDULE in TZS

APPENDIX 2

ITEM	RATE	Year 1	Year 2	Year 3	Year 4
<b>Land and Buildings</b>	4% DV				
Opening Balance		2,200,000,000	2,112,000,000	2,027,520,000	1,946,419,200
Additions		-	-	-	-
Annual Depreciation	4.0%	88,000,000	84,480,000	81,100,800	77,856,768
Closing Balance		2,112,000,000	2,027,520,000	1,946,419,200	1,868,562,432
<b>Plant &amp; Machinery</b>	12.5% DV				
Opening Balance		1,699,362,156	1,486,941,886	1,301,074,151	1,138,439,882
Additions		-	-	-	-
Annual Depreciation	12.5%	212,420,269	185,867,736	162,634,269	142,304,985
Closing Balance		1,486,941,886	1,301,074,151	1,138,439,882	996,134,897
<b>Vehicles</b>	25% SL				
Opening Balance		933,312,500	699,984,375	466,656,250	233,328,125
Additions		-	-	-	-
Annual Depreciation	25.0%	233,328,125	233,328,125	233,328,125	233,328,125
Closing Balance		699,984,375	466,656,250	233,328,125	-
<b>Office Equipment, Furniture and Fittings</b>	12.5% DV				
Opening Balance		50,000,000	43,750,000	38,281,250	33,496,094
Additions		-	-	-	-
Annual Depreciation	12.5%	6,250,000	5,468,750	4,785,156	4,187,012
Closing Balance		43,750,000	38,281,250	33,496,094	29,309,082
<b>Pre operational expenses</b>	20% DV				
Opening Balance		30,000,000	24,000,000	19,200,000	15,360,000

Additions			-	-	-	-
Annual Depreciation		20.00%	6,000,000	4,800,000	3,840,000	3,072,000
Closing Balance			24,000,000	19,200,000	15,360,000	12,288,000
<b>Working Capital</b>		20% DV				
Opening Balance			300,000,000	240,000,000	192,000,000	153,600,000
Additions			-	-	-	-
Annual Depreciation		20.00%	60,000,000	48,000,000	38,400,000	30,720,000
Closing Balance			240,000,000	192,000,000	153,600,000	122,880,000
<b>Total Depreciation</b>			<b>605,998,394</b>	<b>561,944,611</b>	<b>524,088,350</b>	<b>491,468,890</b>

TERM LOAN FACILITY REPAYMENT SCHEDULE in TZS

APPENDIX 3

					<b>TZS</b>
Total Investment					5,212,674,656
Company Equity				-	2,280,000,000
Term Loan					2,932,674,656
Interest Rate per Annum					18%
Annual Instalments					5
Grace Period (Years)					0
Loan Duration (years)					5
		<b>Principal</b>	<b>Balance</b>	<b>Interest</b>	<b>Total</b>
YEAR 1		586,534,931	2,346,139,725	527,881,438	1,114,416,369
				-	-
YEAR 2		586,534,931	1,759,604,794	422,305,150	1,008,840,082
				-	-
YEAR 3		586,534,931	1,173,069,862	316,728,863	903,263,794
					-
YEAR 4		586,534,931	586,534,931	211,152,575	797,687,506
					-
YEAR 5		586,534,931	-	105,576,288	692,111,219
<b>TOTAL</b>		<b>1,759,604,794</b>		<b>1,266,915,451</b>	<b>3,026,520,245</b>

SCENARIO 1: THE BASE CASE

			APPENDIX 4 A			
Production Plan			Year 1	Year 2	Year 3	Year 4
Quantity of Maize milled (Metric Tons) per hour		5				
Maize to Flour Machine conversion Ratio		79%				
Quantity of Flour produced per hour (MT)		3.95				
Working hours per day		24				
Quantity of Maize Flour produced per day (Metric Tonnes)		95				
Number of Effective Operational days per Annum		312				
Quantity of Maize Flour produced per Annum (Metric Tonnes)		29,578				
No of 25 kg bags Maize Flour packed per Ton		40				
Quantity of 25 kg Bags of Sembe or dona produced per annum		1,183,104				
Price of a 25 Kg whole sale in Tshs		25,000				
<b>Annual Sales of 25 kg sembe</b>		<b>29,577,600,000</b>				
			90%	95%	95%	95%
			<b>26,619,840,000</b>	<b>28,098,720,000</b>	<b>28,098,720,000</b>	<b>28,098,720,000</b>
Bran Produced per annum in MT		7,862				
Price per MT of Bran		355,000				
<b>Annual Sales of Bran</b>		<b>2,791,152,000</b>	<b>2,512,036,800</b>	<b>2,651,594,400</b>	<b>2,651,594,400</b>	<b>2,651,594,400</b>
<b>Total Annual Sales Revenue</b>		<b>32,368,752,000</b>	<b>29,131,876,800</b>	<b>30,750,314,400</b>	<b>30,750,314,400</b>	<b>30,750,314,400</b>

Production Costs in TZS	APPENDIX 6					
	Tshs		Year 1	Year 2	Year 3	Year 4
Procurement of Maize in TZS per Metric Tonne Ex Dodoma	750,000	Per Ton	25,272,000,000	25,524,720,000	25,779,967,200	26,037,766,872
Electricity	6,667	Per Ton	240,012,000	242,412,120.00	244,836,241.20	247,284,603.61
Water	80000	Per month	24,960,000	25,209,600.00	25,461,696.00	25,716,312.96
Packaging materials	350	Per bag	414,086,400	418,227,264.00	422,409,536.64	426,633,632.01
Repair and Maintenance (Machinery & Equipments)	4.0%	Turnover	1,165,275,072	1,176,927,823	1,188,697,101	1,200,584,072
<b>Total production costs in TZS</b>			<b>27,116,333,472</b>	<b>27,387,496,807</b>	<b>27,661,371,775</b>	<b>27,937,985,493</b>

#### SCENARIO 1: THE BASE CASE

#### Admin Expenses in TZS

#### APPENDIX 7

#### Management Salaries & Wages

Salaries & Wages	Number	TZS	Year 1	Year 2	Year 3	Year 4
			TZS	TZS	TZS	TZS
Plant Manager	1	1,000,000	12,000,000	12,000,000	12,600,000	13,230,000
Finance officer/Accountant	1	850,000	10,200,000	10,200,000	10,710,000	11,245,500
Human Resources officer	1	850,000	10,200,000	10,200,000	10,710,000	11,245,500
IT Specialist	1	750,000	9,000,000	9,000,000	9,450,000	9,922,500
Mill operators	4	300,000	14,400,000	14,400,000	15,120,000	15,876,000
Drivers	5	500,000	30,000,000	30,000,000	31,500,000	33,075,000
Security Guards	2	200,000	4,800,000	4,800,000	5,040,000	5,292,000
Maintenance Technicians	2	350,000	8,400,000	8,400,000	8,820,000	9,261,000
Procurement officers	2	350,000	8,400,000	8,400,000	8,820,000	9,261,000
Sales and Marketing officer	1	450,000	5,400,000	5,400,000	5,670,000	5,953,500
Warehouse and inventory staff	1	350,000	4,200,000	4,200,000	4,410,000	4,630,500
Cleaning and sanitary staff	3	100,000	3,600,000	3,600,000	3,780,000	3,969,000
Subtotal			120,600,000	120,600,000	126,630,000	132,961,500
<b>Add: 10% Social Benefits</b>			12,060,000	12,060,000	12,663,000	13,296,150
<b>Total Salaries &amp; Wages in TZS</b>	<b>24</b>		<b>132,660,000</b>	<b>132,660,000</b>	<b>139,293,000</b>	<b>146,257,650</b>

Other Admin Expenses						
Insurance	0.02%	Turnover	5,323,968	5,619,744	5,619,744	5,619,744
Distribution Expenses (Fuel costs)	1.50%	Turnover	399,297,600	421,480,800	421,480,800	421,480,800
Local Government Levies	0.10%	Turnover	26,619,840	28,098,720	28,098,720	28,098,720

General Office Expenses	150,000	month	46,800,000	53,820,000	61,893,000	71,176,950
Travelling Expenses	0.05%	Turnover	13,309,920	14,049,360	14,049,360	14,049,360
Marketing Expenses	0.10%	Turnover	26,619,840	28,098,720	28,098,720	28,098,720
<b>Total Other Admin Expenses</b>			<b>517,971,168</b>	<b>551,167,344</b>	<b>559,240,344</b>	<b>568,524,294</b>
<b>Total Administrative Expenses in TZS</b>			<b>650,631,168</b>	<b>683,827,344</b>	<b>698,533,344</b>	<b>714,781,944</b>

SCENARIO 1: THE BASE CASE

PROJECTED INCOME STATEMENT in TZS

APPENDIX 8

	Year 1	Year 2	Year 3	Year 4
<b>Revenue</b>	<b>29,131,876,800</b>	<b>30,750,314,400</b>	<b>30,750,314,400</b>	<b>30,750,314,400</b>
<b>Direct Expenses</b>				
Production Costs (Maize Mill Plant)	27,116,333,472	27,387,496,807	27,661,371,775	27,937,985,493
<b>Total Direct Expenses</b>	<b>27,116,333,472</b>	<b>27,387,496,807</b>	<b>27,661,371,775</b>	<b>27,937,985,493</b>
<b>Gross Operating Income</b>	<b>2,015,543,328</b>	<b>3,362,817,593</b>	<b>3,088,942,625</b>	<b>2,812,328,907</b>
Administration Expenses	650,631,168	683,827,344	698,533,344	714,781,944
<b>Gross Operating Profit</b>	<b>1,364,912,160</b>	<b>2,678,990,249</b>	<b>2,390,409,281</b>	<b>2,097,546,963</b>
Finance & Capital Charges				
Interest Payment (Term Loan Facility)	527,881,438	422,305,150	316,728,863	-
Depreciation	605,998,394	561,944,611	524,088,350	491,468,890
<b>Total Finance &amp; Capital Charges</b>	<b>1,133,879,833</b>	<b>984,249,761</b>	<b>840,817,213</b>	<b>491,468,890</b>
<b>Profit before Tax</b>	<b>231,032,327</b>	<b>1,694,740,488</b>	<b>1,549,592,068</b>	<b>1,606,078,074</b>
Taxation (18%)	41,585,819	305,053,288	278,926,572	289,094,053
<b>Profit after Tax</b>	<b>189,446,509</b>	<b>1,389,687,200</b>	<b>1,270,665,496</b>	<b>1,316,984,020</b>
<b>Accumulated Retained Earnings</b>	<b>189,446,509</b>	<b>1,579,133,709</b>	<b>2,849,799,205</b>	<b>4,166,783,225</b>

SCENARIO 1: THE BASE CASE

PROJECTED CASHFLOW STATEMENT in TZS

APPENDIX 9

	Year 0	Year 1	Year 2	Year 3	Year 4
Cashflow from Operations:	-	189,446,509	1,389,687,200	1,270,665,496	1,316,984,020
Equity	2,280,000,000				
Loan	2,932,674,656	-			
Add non Cash Items:					
Depreciation	-	605,998,394	561,944,611	524,088,350	491,468,890

<b>Total Inflows</b>		<b>5,212,674,656</b>	<b>795,444,903</b>	<b>1,951,631,811</b>	<b>1,794,753,846</b>	<b>1,808,452,910</b>
Investment		5,212,674,656				
Normal replacement		-	-	-	-	-
Loan Repayment			586,534,931	586,534,931	586,534,931	-
<b>Total Outflow</b>		<b>5,212,674,656</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Net Cashflow</b>		<b>-</b>	<b>795,444,903</b>	<b>1,951,631,811</b>	<b>1,794,753,846</b>	<b>1,808,452,910</b>
Opening Balance		-	-	795,444,903	2,747,076,714	4,541,830,560
Closing Balance		-	<b>795,444,903</b>	<b>2,747,076,714</b>	<b>4,541,830,560</b>	<b>6,350,283,470</b>

**SCENARIO 1: THE BASE CASE**

**PAYBACK PERIOD**

**APPENDIX 10**

	Investment	Net Cashflow	Cumulative
	TZS	TZS	Cashflow
			TZS
INVESTMENT PERIOD	(5,212,674,656)	-	(5,212,674,656)
YEAR 1		795,444,903	(4,417,229,753)
YEAR 2		1,951,631,811	(2,465,597,942)
YEAR 3		1,794,753,846	(670,844,096)
YEAR 4		1,808,452,910	1,137,608,814
YEAR 5		1,517,537,888	2,655,146,702
<b>PAYBACK PERIOD (Years)</b>	<b>3.25</b>		

**SCENARIO 1: THE BASE CASE**

**BREAK EVEN ANALYSIS BASED ON YEAR 1**

**APPENDIX 11**

COMPONENT	TZS
<b>Revenue</b>	<b>29,131,876,800</b>
<b>FIXED COSTS</b>	
General Administration	624,011,328
Interest	527,881,438
Depreciation	605,998,394
Marketing Expenses	26,619,840
<b>TOTAL FIXED COSTS</b>	<b>1,784,511,001</b>
<b>VARIABLE COSTS</b>	
Production Costs	27,116,333,472
<b>TOTAL VARIABLE COSTS</b>	<b>27,116,333,472</b>
<b>Contribution Margin</b>	<b>2,015,543,328</b>
<b>Contribution Margin Ratio</b>	<b>0.07</b>

<b>Break Even Revenue</b>	<b>25,792,625,688</b>
<b>Break Even Capacity</b>	<b>88.54%</b>

SCENARIO 1: THE BASE CASE

DISCOUNTED CASHFLOW PROJECTIONS INTZS

APPENDIX 12

	<b>NPV</b>	<b>Year 0</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>
Net Cashflow		(5,212,674,656)	795,444,903	1,951,631,811	1,794,753,846	1,808,452,910
PRESENT VALUE AT 19%	2,655,146,702	(5,212,674,656)	795,444,903	1,951,631,811	1,794,753,846	1,808,452,910
PRESENT VALUE AT 20%	17,089,782,349	(5,212,674,656)	795,444,903	2,747,076,714	4,541,830,560	6,350,283,470
<b>Internal Rate of Return (IRR)</b>	<b>51.56%</b>					

<b>Year 5</b>
1,868,562,432
-
<b>74,742,497</b>
1,793,819,935
996,134,897
-
<b>124,516,862</b>
871,618,034
-
-
-
-
29,309,082
-
<b>3,663,635</b>
25,645,447

12,288,000
------------

-
<b>2,457,600</b>
9,830,400

122,880,000
-
<b>24,576,000</b>
98,304,000
<b>229,956,595</b>

**Year 5**

95%
<b>28,098,720,000</b>
<b>2,651,594,400</b>
<b>30,750,314,400</b>

Year 5	
	26,298,144,541
	249,757,449.65
	25,973,476.09
	430,899,968.33
	1,212,589,913
	<b>28,217,365,347</b>

Year 5	
TZS	
	13,891,500
	11,807,775
	11,807,775
	10,418,625
	16,669,800
	34,728,750
	5,556,600
	9,724,050
	9,724,050
	6,251,175
	4,862,025
	4,167,450
	139,609,575
	13,960,958
	<b>153,570,533</b>

	5,619,744
	421,480,800
	28,098,720

81,853,493
14,049,360
28,098,720
<b>579,200,837</b>
<b>732,771,369</b>

<b>Year 5</b>
<b>30,750,314,400</b>
28,217,365,347
<b>28,217,365,347</b>
<b>2,532,949,053</b>
732,771,369
<b>1,800,177,684</b>
-
229,956,595
<b>229,956,595</b>
<b>1,570,221,089</b>
282,639,796
<b>1,287,581,293</b>
<b>5,454,364,518</b>

<b>Year 5</b>
1,287,581,293
229,956,595

<b>1,517,537,888</b>
-
-
-
<b>1,517,537,888</b>
6,350,283,470
<b>7,867,821,358</b>

<b>Year 5</b>
1,517,537,888
1,517,537,888
7,867,821,358