



MW STRATEGIC INVESTOR STATUS SUBMISSION

MW RICE MILLERS LTD

Strategic Investor Status Submission

28th June 2022



IMPORTANT NOTICE

This strategic investor status project document presents a qualitative and quantitative analysis of MW Rice Millers Limited ("the Company") and is prepared as part of the Company's application for a **Strategic Investor Status** from the Tanzania Investment Center (TIC).

This document will accompany the Company's application for strategic investor status to TIC who in turn will submit the same to the National Investment Steering Committee (NISC) for approval.

The information contained in this document has been obtained from the Directors and Management of MW Rice Millers Limited and other independent sources.

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The conclusions, findings, and opinions expressed in this document are those of the Directors and Management of MW Rice Millers Limited unless identified as those of other parties.

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ABBREVIATIONS

<i>The Company</i>	<i>MW Rice Millers Limited</i>
<i>MT</i>	<i>Metric tons</i>
<i>TBS</i>	<i>Tanzania Bureau of Standards</i>
<i>USD</i>	<i>United States Dollars</i>
<i>Factory</i>	<i>MW Rice Millers Limited</i>
<i>FDI</i>	<i>Foreign Direct Investment</i>
<i>MWT</i>	<i>Mega watts</i>
<i>TZS</i>	<i>Tanzanian Shillings</i>
<i>GAP</i>	<i>Good Agricultural Practices</i>
<i>FBS</i>	<i>Farming as a Business</i>
<i>TFDA</i>	<i>Tanzania Food and Drugs Authority</i>
<i>AIB</i>	<i>American Institute of Baking</i>
<i>VAT</i>	<i>Value Added Tax</i>
<i>TIC</i>	<i>Tanzania Investment Centre</i>
<i>EAS</i>	<i>East African Standard</i>
<i>GDP</i>	<i>Gross Domestic Product</i>
<i>NRDS</i>	<i>National Rice Development Strategy</i>
<i>ERPP</i>	<i>Expanding Rice Production Project</i>
<i>CSA</i>	<i>Climate Smart Agriculture</i>

CHAPTER 1 : EXECUTIVE SUMMARY

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MW Rice Millers Ltd has prepared this project documentation to support the Company's application for strategic investor status (SIS) with the Tanzania Investment Centre (TIC).

The Company plans to implement a project that involves installation of a new paddy milling line and expansion of the existing paddy milling line. The project will also include construction of storage and rice husk silos as well as acquisition of additional land for warehousing facilities of finished goods.

The project will make the cumulative capital invested to date by MW Rice Millers Limited to reach USD 51.35 million. This investment decision will increase the Company's overall daily paddy milling capacity from 288 MT to 1,150 MT. The project aligns with the Government of Tanzania's plans to maintain rice self-sufficiency and become a regional leader in rice production.

Below are the positive implications of the project to the Tanzanian National Economy:

- ❖ A total of 360 new direct jobs will be created after completion of the project.
- ❖ Creation of additional 1,000 indirect jobs.
- ❖ A total of TZS 974 billion will be paid to farmers for paddy purchase in the next seven (7) years.
- ❖ Paddy buying centers shall increase from the current number of twenty (20) centers to thirty-eight (38) centers. The new paddy buying centers will be located in additional six (6) regions.
- ❖ Total taxes and government revenue are projected to increase from the current TZS 3.0 billion to TZS 18 billion annually by the year 2028.
- ❖ Attraction of innovative technologies into Tanzania that will further develop the paddy milling industry. The project implementation supports the Industrialization Agenda of the Nation.
- ❖ Foreign currency earnings from rice exports are expected to reach USD 290.7 million by 2028.
- ❖ Multiplier effect to the economy is expected to increase especially for Companies involved in the rice value chain including fertilizer companies, seed companies, spare parts dealers, packaging sellers and financiers. Most of these are sourced locally resulting into expansion of local businesses.
- ❖ The Company will continue to invest in community development projects as well as environmental conservation initiatives.

MW Rice Millers Ltd request the Government to **award the Company with Strategic Investor Status and to provide fiscal and non-fiscal incentives** as indicated in **Chapter 6 (Request for Strategic Investor Status)** of this submission.

It is the expectation of the Company that the request for approval for the Strategic investor Status will be favorably considered.

CHAPTER 2 : COMPANY OVERVIEW

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INCORPORATION AND LOCATION

MW Rice Millers Limited was incorporated in 2016 as a paddy milling company to take advantage of the vast opportunities present in the Tanzanian rice sub-sector. The Company is the largest paddy miller in East and Central Africa, offering premium high-grade rice grain that is sold in the local as well as international markets.

The Company paddy milling factory occupies an area of 7 acres in Kihonda, Morogoro Industrial Area. The Company's Mission is to use integrated business processes and technology to achieve significant value addition to customers, whilst being sensitive to environmental and social responsibility.



Google Picture showing the location of the MW Rice Millers Limited's paddy milling plant in Morogoro.

BUSINESS OPERATIONS

MW Rice Millers Limited procures paddy from farmers through its paddy buying centers (PBCs). Currently the paddy buying centers are in four regions namely Morogoro, Shinyanga, Mbeya and Tabora. The paddy is then transported from the PBCs to the plant for milling into rice grain. The paddy buying centers act as focal point for collection of paddy from farmers where they are able to sell their paddy directly to the Company.

THE KORIE RICE BRAND

Rice produced by MW Rice Millers Limited is sold under the KORIE RICE brand. The rice is premium quality aromatic rice and is a preference to most of the consumers.



CHAPTER 3 : TRANSFORMATION OF THE RICE INDUSTRY

CHAPTER 3: TRANSFORMATION OF THE TANZANIA RICE-INDUSTRY

OVERVIEW

In Tanzania, rice is the second most important food and commercial crop after maize, with significant national importance as a source of employment, income and food security for millions of rural and urban households.

An estimated 2.2 million MT of rice is produced annually, making Tanzania the second biggest rice producer in Eastern and Southern Africa after Madagascar.

The Government of Tanzania has long identified the rice sub-sector as a strategic priority for agricultural development due to its potential for improving food security and income.

The GoT envisions to transform the existing subsistence-dominated rice sub-sector into a commercially viable production system, with the aim of sustaining food security and rice self-sufficiency.

NATIONAL RICE POLICIES AND PROJECTS

The Government of Tanzania has launched various strategies, projects, and policies to boost the rice sub-sector.

The Government has begun the second phase of National Rice Development Strategy (NRDS-II; 2019/30). The strategy is aimed at sustaining rice self-sufficiency, contribute to the regional self-sufficiency, and become a rice market leader. The strategy focuses on further enhancement of quality, quantity, and value of locally produced rice.

The Government of Tanzania and its partners have also instituted other policies and projects including "Expanding Rice Production Project (ERPP)", and adoption of 75% tariff on imported rice.

SUCCESS OF THE TANZANIAN RICE INDUSTRY

Paddy production in Tanzania has increased year on year. The growth is attributed to the increase in the area planted with paddy. The increase in paddy production has resulted to impressive progress in rice production to 2.2 million tons in 2017/18. Consistently, the trend shows that Tanzania has also attained surplus output of paddy over the past seasons.



CHALLENGES FACING THE TANZANIA RICE INDUSTRY

High Rice Prices

- ❖ Rice produced in Tanzania is not price competitive compared to other Asian rice producing countries. Research indicates that farm-gate prices of paddy in Tanzania are double the prices of paddy in Asian producing Countries that are exporting paddy to East African Countries.
- ❖ For instance, in some cases transport could make up over 15% of consumer price of rice. These costs added to the relatively very high farm-gate prices, translate to very high prices of locally produced rice.

Too Many Taxes and Levies

- ❖ Many taxes and levies are charged on paddy produced by farmers discouraging commercialization of paddy farming.
- ❖ Cases occur where the produce cess is charged more than once when the goods cross one district to another and/or change of ownership of the same produce posing challenges to farmers, aggregators, middle-man and millers (Including MW Rice Millers Limited) who must transport/change of ownership of paddy across the value chain.

Limited Access to Finance

- ❖ Majority of paddy producing farmers are small households with little or no collateral hence considered high risk by banks and other lenders. For these farmers finding money or trying to get a loan to make or pay for inputs is almost impossible. Without finance, farming remains on small scale.

Low Yields and Milling Inefficiency

- ❖ Due to most of the paddy being grown using traditional methods and in rainfed conditions yields are generally low (1-1.5 tons per hectare) compared to 4-6 tons per hectare in Asian Countries.
- ❖ The paddy produced locally is milled by small-scale mills with outdated technology resulting into low paddy to rice grain conversion ratio.
- ❖ The old small-scale mills also deliver low quality as they do not have de-stoning, polishing and grading capabilities. Therefore, a high proportion of locally produced milled rice is of poor quality reducing its market competitiveness even further.

Poor Access to Markets Particularly where Mills are Absent

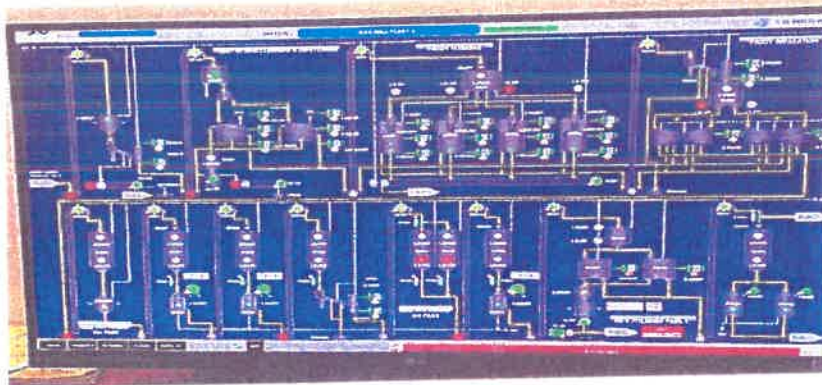
- ❖ Limited access to markets reduces smallholders' appetite for "farming as a business (i.e., taking risks with productivity-enhancing inputs and other good agricultural practices).

- ❖ This then limits the development of input supply businesses creating a negative feedback loop that keeps smallholders in a “low- yields trap”.

HOW MW RICE MILLERS LTD HAS TRANSFORMED THE TANZANIA RICE INDUSTRY

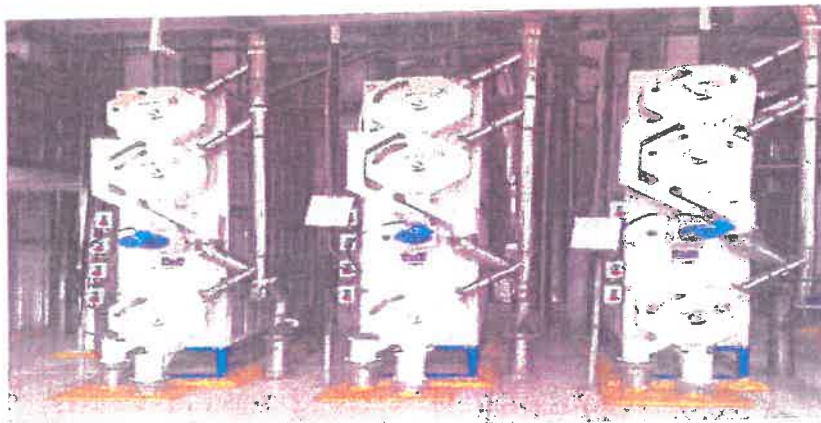
Progressive Modernization of the Paddy Milling Process

- ❖ The Company has introduced state of the art technology in paddy milling process. The entire milling process is done by automated ultra-modern high-tech machinery.
- ❖ With modern technology, milling conversion of paddy to rice grain is higher (greater than 70%) compared to that of less than 50% achieved by millers using traditional technology.
- ❖ Modern technology reduces waste production and minimizes energy consumption. The Company’s mills are fitted with pre-cleaners, de-stoners, de-huskers, milling separators, and length graders. The rice is color sorted, whitened, and then polished using steam unlike traditional mills which use oil to polish the rice.
- ❖ These technologies are critical for production of rice grain that meets international food safety standards.



Computer dashboard showing the automated paddy milling process.

Paddy milling is done and monitored by “click of the mouse”



Photograph of the length grader machine

Upscaling Tanzania Rice Food Safety Standards in Local and International Markets

- ❖ The Company's philosophy is to ensure that rice grain produced meets food safety including international food safety standards. The Company has implemented and maintained a food safety management system, across its operations that conforms to the requirement of Global Food Safety Initiative (GFSI).
- ❖ The Company has installed a laboratory for food testing prior to selling to consumers.

*MW Rice Millers Limited is accredited by TBS and AIB.
AIB certification demonstrates the Company's adherence
to global benchmark standards for food safety*

- ❖ Before entry of MW Rice Millers Limited in the paddy processing business, most of the rice exported from Tanzania was of poor quality, with high percentage of broken grains reducing its market competitiveness even further. As a result, neighboring countries would prefer rice from Pakistan and Thailand which is usually clean with limited proportion of broken rice.
- ❖ Local rice millers use oil on rice grain to make the grain shiny. Furthermore, the rice grain is produced in unsafe and unhygienic environment and hence rejected in international markets.
- ❖ MW Rice Millers Limited is reversing this sentiment on Tanzanian rice which has held poor reputation in international markets due to its low quality. By meeting international standards MW Rice Millers Limited's rice can be sold in the Middle East, America, and Europe.



Laboratory to test the food safety quality has been built inside the plant.

Creation of a Reliable Paddy Market

- ❖ The Company has created a reliable paddy market for farmers. Farmers sell paddy directly to the Company's MW Rice Millers Limited PBCs with no involvement of middlemen. MW Rice Millers Limited buys paddy all days of the year creating confidence among farmers. The elimination of middlemen enables price stability within the market as unnecessary price hikes due to hoarding are also eliminated.
- ❖ Payments for paddy are made instantly during purchase of the paddy with a maximum waiting period of 24 Hours contrary to other players who make payments to farmers after months. Timely payments improve financing among farmers, further contributing to growth of rice sectors.
- ❖ Payments are done through modern day banking solutions (Bank accounts, MPESA, TIGOPESA) hence promoting transparency in the payment process as well as increasing financial inclusion among farmers.
- ❖ The Company also grades the paddy bought from farmers and premium prices are paid for high quality paddy. This incentivizes farmers to produce high quality paddy that will fetch higher prices.
- ❖ Each PBCs can serve farmers within a radius of 50km to 80km and the Company approximates that over 200,000 farmers enjoy the ready market provided by the PBCs. The PBCs are strategically located within paddy farming villages, saving farmers costs related to storage and transport of paddy. Farmers save about TZS 5,000 per bag, increasing additional income to paddy farming households.
- ❖ Furthermore, MW Rice Millers Limited is the only company in East Africa that buys wet paddy directly from farmers which enables them to save on post harvesting costs by approximately 30%.

Farmers earn 10-15% additional income by selling their paddy to MW PBCs.



Paddy buying center located in Iringa Region

MW STRATEGIC INVESTOR STATUS SUBMISSION

THE UNITED REPUBLIC OF TANZANIA

**PRESIDENT OFFICE
REGIONAL ADMINISTRATION AND LOCAL AUTHORITY
MBARALI DISTRICT COUNCIL**



REF. NO. MDC/D/30 VOL. II/S/10

Date: 18/12/2020

To
MW RICE MILLERS LIMITED
Millers, Packagers Of Rice, Bulk And Consumer Pack
Plot 66-75 Block F, P O Box 1206 Industrial Complex, Kinonda, Morogoro Tanzania. Email -
Rice@murzahwilmur.com Tz. Phone +255767919161

**RE: APPRECIATION FOR YOUR REMARKABLE CONTRIBUTION TO RELIABLE PADDY
MARKET SOLUTION**


Dear MW Rice Millers Limited

I would like to thank you for your outstanding contribution in the supporting small hold farmers including large scale farmers for providing reliable paddy market. It has been noted that big volume of paddy are off taken in Mbarali which is an amazing output to be recognized in the community. Our farmers have been praising you for all purchasing process including using of standard measurement like weigh scale, grading of paddy as well as payment system.

Your dedication to this project has contributed to local government revenues through all crop cess collected from number of tons purchased in our District. We expect to grow in the future if you deliver the same quality of work.

We are quite aware of the fact that next season you will deliver the same quality of work or even more. We are grateful to well come you back again and again for any opportunity which is useful in our community.

Thanking you


DANIEL S. KAMWELA
Ag. DISTRICT EXECUTIVE DIRECTOR
MBARALI DISTRICT COUNCIL

Appreciation for creation of a reliable paddy market solution

Commercialization of Rice Farming Among Small Scale Farmers

- ❖ The Company has actively engaged with farmers through various initiatives and programs aimed at commercializing of paddy farming among small-scale farmers. The Company runs various programs that assist farmers to realize value from paddy farming. The Company runs the following programs with farmers:
 - **Good Agricultural Practices:** The good agricultural practices program relates to the practical aspect of paddy farming. Farmers are taught on scientific methods of paddy farming, harvesting, and drying, with the objective of increasing yield per acre and quality of paddy produced.
 - **Farming is Business:** Under this program, farmers are taught on the financial management and business literacy education towards the entrepreneurship aspect of the paddy farming.

MW plays a significant role in the attainment of NRDS II, which outlines the country's commitment towards commercialization and modernization of rice farming.

Redefining Rice Trading Through Modern Packaging

- ❖ Rice produced by the Company is packaged in eco-friendly modern packages. The rice is packaged in sizes ranging from 250 GM to 50 KG.
- ❖ By packaging the rice grain, MW Rice Millers Limited ensure that product deterioration is minimal, and the rice grain retain the beneficial effects to maintain or increase the quality and safety of food. Food hygiene is maintained as the rice grain cannot be contaminated by external factors such as flies and dust.
- ❖ Local rice trade is done via unpackaged methods where the rice grain is exposed and hence can easily be contaminated. This method of trading reduces food safety and can harm the health of consumers. The Company aims to redefine the rice trade business and envisions a future whereby rice grain shall be traded in modern packages.



Unpackaged rice sold in markets



MW Rice Millers Limited packaged rice as sold in markets

Promotion of Innovative Solutions

- ❖ The Company partners with different stakeholders in the rice value chain aiming at improving and growing the rice sub-sector via various innovative solutions.
- ❖ MW Rice Millers Limited is part of the AfricaConnect Initiative that targets rice farmers country wide. The initiative which brings together Equity Bank, Corterva Agriscience, Agricultural Seed Agency (ASA) and Yara Tanzania Limited aims at ensuring that farmers access financing, quality inputs and market for their products.
- ❖ The Company is a significant partner in the "AfricaConnect Initiative" as it the only partner that provides market for the paddy produced by the farmers, highlighting the significance of the Company in the rice sub-sector and in the overall agricultural sector.
- ❖ MW Rice Millers Limited also collaborates with other partners including Syngenta with the aim of improving food security by enabling millions of farmers to make better use of available resources.

Conversion of Rice Husks Waste to Biofuel

- ❖ The paddy milling process produces risk husk as waste. The rice husk obtained as a byproduct is considered as a waste and usually huge quantities of the rice husk are dumped as waste causing waste disposal problems.
- ❖ The Company has created a sustainable solution to convert the risk husk biomass fuel that can be used as an alternative to coal and other fossil fuels. Coal, Heavy Fuels, and electricity constitute the major energy sources for the plants. Such sources of fuel are not environmentally friendly and non-renewable. Gas emissions from the use of such fuels have adverse impacts to the environment.
- ❖ Studies indicate that rice husks costs are 36% cheaper than coal and energy produced by rice husk is carbon neutral making it a valuable source of renewable energy.
- ❖ The Company has invested in equipment and machinery that converts the rice husk waste into briquettes that are used as energy in boiler industry and companies. The Company supplies these briquettes to various companies including Tanzania Portland Cement (Twiga Cement), Sayona Fruits Limited, Mohammed Enterprises Tanzania Limited and many others.



Briquettes made from rice husks. These are used as alternative fuel source in boiler industries

CHAPTER 4 : SOCIO-ECONOMIC BENEFITS

CHAPTER 4: SOCIAL ECONOMIC BENEFITS OF THE PROJECT

The Company supports and contributes to the growth of the Tanzanian economy, contributing to both the national and local district economies in terms of taxes, direct and indirect employment, support in food safety standards, just to mention a few. The company also has a firm commitment in complying with all applicable laws, regulations, and other requirements, and conducts its business with consistent development principles.

A cumulative investment of USD 51.35 million by way of Foreign Direct Investment (FDI) will create significant social and economic benefits crucial for economic growth and development of Tanzania, as indicated further below:

❖ INCREASE IN GOVERNMENT REVENUE AND TAXES

The Company contributes to government revenue in terms of corporate taxes, city service levy, withholding tax and other taxes and levies. By embarking on the new project, The Company projects the total government revenue and taxes to steadily increase from the current TZS 3.8 billion to TZS 18 billion annually by 2028. Cumulative government revenue and taxes is likely to reach TZS 90 billion in the next seven (7) years.

The Company also contributes revenue for services offered by governmental institutions including TANESCO and Morogoro Municipality. The Company pays approximately TZS 1.2 billion annually for electricity, an amount that is expected to increase with completion of the new project. Furthermore, The Company contributes approximately TZS 109 million to Morogoro Municipality as City Service Levy.

❖ JOB CREATION

The project will create vital employment opportunities and other income generating opportunities to the Tanzanian workforce. The total number of direct jobs are expected to reach **360** (Permanent). Indirect jobs created at paddy buying stations, transporters as well as contractual jobs are expected to reach over 1,000 jobs. The number is expected to increase annually by 15%. Moreover, the number of jobs created in the whole rice value chain is expected to significantly increase.

The Company expects to incur a total of TZS 53 billion as labour costs in the next seven years. The jobs to be created will help to address the unemployment issues affecting the Country. The Company's workforce is primarily comprised of youth, hence playing a role in addressing youth unemployment, Women empowerment, reduction of poverty in rural/urban areas and fostering economic growth.

❖ PADDY PURCHASE

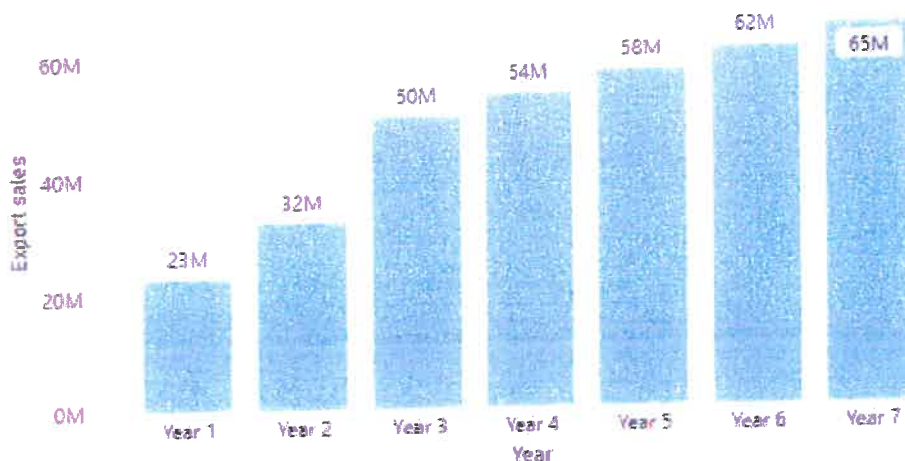
The Company expects to purchase over 1.5 million tons of paddy from farmers in the next seven years. The Company projects a total payment of approximately TZS 1 trillion for paddy purchase. This shall increase farmer's incomes and ultimately the standard of living of the paddy farming community.

❖ **EXPORT REVENUE**

The Company prides itself in being the leading official exporter of Tanzanian rice. The Company exports rice to neighboring countries including Kenya, Uganda, and Rwanda. The Company envisions exporting rice to the Middle East, Europe, and United States of America.

The project shall result to increase in export earnings flowing into the country as foreign exchange earnings. Export earnings are expected to reach a total of USD 344.3 million approximately for the next 7 years. The foreign exchange earnings are expected to positively influence the Country's economy in terms of GDP and stabilizing of the exchange rates. Furthermore, the Country will be better positioned to maintain its balance of payments.

Export sales by Year - USD



❖ **RICE SELF SUFFICIENCY**

More paddy is expected to be purchased from farmers with the expansion of the mill. As a result, farmers can farm and produce more paddy due to the reliable ready market for their paddy. These will significantly contribute to the country's political ambition to sustain rice self-sufficiency.

❖ **SKILLS TRANSFER**

Skills Transfer will occur. Tanzanian employees will receive both on job coaching from expatriate staff as well as formal training to be arranged by the company. The skills transfer has positive spill over effects to the economy.

❖ **MULTIPLIER EFFECT**

Other multiplier effects by way of purchase of goods and services such as spare parts and packaging materials from Tanzanian suppliers, as well as through availing rice mill by-products (bran and chip) for animal feed industry. The above therefore support the growth of local businesses which is crucial to the economy.

CHAPTER 5 : THE PROJECT

CHAPTER 5 : THE PROJECT

SUMMARY OF THE PROJECT

MW Rice Millers Limited has embarked on a new project aimed at increasing efficiency, productivity as well as storage capacity. The Company has made significant achievements and intends to capitalize on the opportunities present in the Country's rice sub-sector. The project shall see additional investment of **USD 30.21 million** into the paddy milling plant, making the cumulative investment by MW Rice Millers Limited to reach **USD 51.35 million**.

The new project focuses on:

- ❖ Increasing daily factory production by 862 MT. With the new project, daily production capacity is expected to increase from the current level of 288 MT to 1,150 MT.
- ❖ Increasing the factory area by purchase of additional 20 acres.
- ❖ Increasing paddy storage facilities by 27,100 MT.
- ❖ Increasing husk storage capacity by 800 MT.

CUMULATIVE INVESTMENT BY MW RICE MILLERS LIMITED AFTER THE UPCOMING PROJECT

Previously MW Rice Millers Limited incurred an initial investment of **USD 21.14 million** in setting up an integrated paddy milling factory, construction of buildings and other infrastructure necessary to ensure that plant is fully operational.

The cumulative capital investment incurred by the Company Rice Millers Ltd will be **USD 51.35 million** after completion of the upcoming project. The table below indicates the investment made by the Company:

Phase	Investment Project	Investment Amount (USD)
Phase 1	Construction and Plant Set Up	21.14 million
Phase 2	Upcoming Project	30.21 million
	Cumulative Investment	51.35 million

The USD 30.21 million that is expected to be incurred by the Company shall be invested in the following:

Upcoming Project (Phase 2)	Investment Amount (USD)
Rice Mill Line	13.90 million
Storage Silos	6.33 million
Finished Goods Warehouse	5.39 million
Food Testing Laboratory	0.12 million
Maintenance and Fire Pump House	0.11 million
General and Non-Technical Items	4.36 million
Total Investment	30.21 million

PROJECT DETAILS

Rice Mill Expansion

- ❖ The Company plans to incur a total of USD 13.90 million capital expenditure to add a second rice milling line and expanding the capacity of the current rice milling line.
- ❖ Both lines shall be fully automated, operated by "click of the mouse".
- ❖ The new machinery to be procured are ultra-modern state of the art Satake rice milling machines which are renowned for their efficiency.
- ❖ This is important as the Company is focused on improving operational efficiencies while driving costs and expense reductions. Once the desired operational efficiencies have been achieved the average cost per unit of production shall be low, resulting to competitive pricing of the Company's products.
- ❖ Furthermore, to compete in international export market, it is paramount that the Company produces high quality rice grain meeting international requirements. To do that, it needs a rice milling facility with the latest technology to produce high quality rice.

The annual production capacity after expansion is expected to reach 420,000 MT, an additional increase of 322,080 from the current capacity of 97,920.

To feed the expanded rice mill capacity, more paddy will be procured from farmers

- ❖ The expansion will assure farmers a ready market for their paddy while ensuring that the market is supplied with high quality rice grain for consumption.
- ❖ On the other hand, the company shall contribute significantly on the government's agenda on food security and rice self-sufficiency.

Storage Silos

- ❖ MW Rice Millers Limited's rice milling plant is ideally located in Morogoro which is among the major paddy producing regions in Tanzania.
- ❖ To take advantage of what its geography has offered, and in line with the expansion of the rice milling facilities, the Company plans to incur a total of **USD 6.33 million** to construct additional seven (7) new paddy storage silos and eight (8) new rice husk silos for storage of paddy and rice husks respectively.

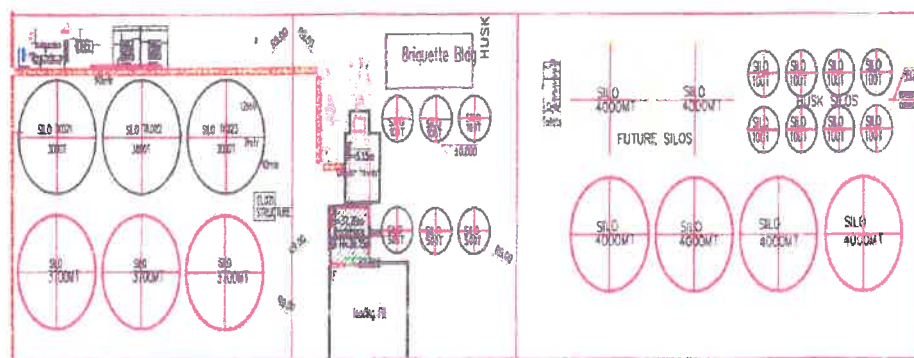
Paddy Storage Silos

- In Tanzania paddy is mostly harvested for 60 days in the months from July, August, and September.
- The short paddy harvesting period requires the Company to have adequate paddy storage facilities. This is important to ensure that the factory operates all year without shortage of raw materials hence increasing factory efficiency and ensuring food security.
- Paddy needs to be stored in a manner that preserves its quality. The method of storage must ensure control of moisture and air movement, preventing attack of microorganisms, insects, and rodents as well as minimization of losses during handling.
- Paddy is thus stored in silos for preservation of its quality. Silos enable grain to be stored efficiently and for longer durations and allows one to control temperature, aeration, insects, and pest infestation. Silos also ensure that grain stored is safe for human consumption.
- The Company plans to construct seven new silos in addition to the existing three silos that are already in place. The seven new silos will have a storage capacity of 27,100 MTs, increasing the total storage capacity to 36,100 MT.
- The silos shall be fitted with heat insulation, **temperature monitoring** control system and mechanized grain handling system to ensure easy loading and offloading.

Rice Husk Silos

- In addition to the paddy storage silos, the Company plans to construct additional eight rice husk silos (800 MTs) for storage of the rice husk.
- Currently the Company has only three husk silos and with the construction of the additional eight silos, the total storage capacity of rice husk will increase from 300 MT to 1100 MT.

Storage Silos



Layout plan on the new silos to be constructed.



Expected look of the paddy storage silos once construction is complete



Expected look of the rice husk silos once construction is complete

Finished Goods Warehouse

- ❖ The Company plans to incur a total of USD 6.39 million to purchase additional land, warehouse, and buildings. The additional purchase of land totaling 20 acres will make the total factory area to increase from the current seven (7) acres to 27 acres.
- ❖ With the increased rice grain production capacity, additional storage area for finished goods is required. The warehouse shall store the finished goods prior to shipment to customers and will have a capacity of 6,000 MT.

POTENTIAL FUTURE INVESTMENT

Power Plant

- ❖ In the future, the Company expects to incur potential investment of around USD 25-30 million to construct a power plant.
- ❖ Reliable and uninterrupted power supply is paramount for the efficiency of factory operations. Power outages, sags and surges present a big threat to the Company as factory operations are disrupted resulting to inefficiencies and high costs.
- ❖ The Company produces rice husk from the paddy milling process, and the Company plans to use the rice husk to generate power. Power generation using rice husk is very environmentally friendly and is the most efficient and useful way to dispose rice husk. Feasibility studies are ongoing on the viability of the power plant project.

CHAPTER 6 : REQUEST TO THE GOVERNMENT

CHAPTER 6: REQUEST FOR STRATEGIC INVESTOR STATUS

With this submission, MW Rice Millers Limited hereby request the Government of Tanzania to grant Strategic Investor Status and to approve below fiscal and non-fiscal incentives in support of the new project:

FISCAL INCENTIVES REQUESTED

1. VAT Exemption for all Imported and locally procured goods and services . The list of capital and deemed capital goods is attached as **Annexure I** to this submission.
2. Import Duty and Excise Duty Exemptions on capital goods and deemed capital goods. The full list of these items is disclosed on **Annexure I** to this submission.
3. Corporate Tax Exemption (or Alternate Minimum Tax) for 10 years.
4. Service Levy exemption for 10 years,
5. Withholding Tax Exemption on all foreign remittances towards purchase of services and loans for 10 years.

NON-FISCAL INCENTIVES REQUESTED

1. Work and Residence Permits for additional 10 Expatriates.
2. Exemption from Customs Processing Fee for all imports.
3. Exemption from Payment of Railway Development Levy.

MOTIVATION FOR THE REQUEST

The request for seeking Government support is motivated by the following:

- ❖ Typically, large scale projects require substantial amount of investments whilst their potential return on investment is on a longer time horizon. Despite this, the project has been contributing to the social economic development of the country from the first day of operations as indicated in the previous sections of this submission.
- ❖ The rice grain sold by the Company is an exempt supply in terms of the VAT Act, 2014 and the input VAT incurred by the Company cannot be deducted or claimed for refund. The Company pays VAT (input VAT) of about USD 3.0 Million annually on its imports and purchase of local supplies. The only way to recover the cost of VAT is to pass that cost to the buyer of the rice. This has not been possible as competitors have not incurred significant cost of VAT due to low investment made by them. Furthermore, doing this shall result to

high prices, resulting to MW Rice Millers Limited's rice being uncompetitive in the market. MW Rice Millers Limited is therefore unable to pass the VAT cost to final buyer through price increase. Profit Margins are depleted by the VAT costs and on the other hand the Directors are forced to continuously inject additional capital to fund the VAT cost.

- ❖ FDI is received by way of foreign loans and shareholder contributions. Withholding taxes charged on foreign loans discourages foreign lenders who in turn raises the cost of financing.
- ❖ The long period of time it will take to recover returns from the project as it's compounded by complexity of the projects and other fiscal and non-fiscal challenges facing it, are the reasons for the project promoters such as MW Rice Millers Ltd to seek special support from the Government.

**CHAPTER 7 : ALIGNMENT WITH
NATIONAL DEVELOPMENT
VISION AND PLANS**

CHAPTER 7: ALIGNMENT WITH NATIONAL VISION AND PLANS

As indicated in previous sections, the expansion project for MW Rice Millers Ltd is aimed at development of a modern Industrial Facility in Morogoro Tanzania. The Rice Mill Plant will use state of art technology and it will become the Largest Rice Mill in East and Central Africa. Through this establishment the company will be able to contribute to the achievements of a number of key National targets as set by Tanzania Development Vision 2021 and the 3rd Five Year Development Plan.

TANZANIA DEVELOPMENT VISION (2025)

The project will contribute to the attainment of the following Targets within the Tanzania Development Vision 2025:

- ❖ Food self-sufficiency and food security
- ❖ Gender equality and the empowerment of women in all socio-economic and political relations and cultures. Women are key participants in paddy production.
- ❖ Absence of abject poverty.
- ❖ Diversified and semi-industrialized economy.
- ❖ An economy with a substantial industrial sector comparable to typical middle-income countries.
- ❖ Macroeconomic stability manifested by a low inflation economy and basic macroeconomic balances.
- ❖ A growth rate of 8% per annum or more
- ❖ An active and competitive player in regional and world markets, with the capacity to articulate and promote national interests and to adjust quickly to regional and global market shifts.

NATIONAL FIVE-YEAR DEVELOPMENT PLAN III (2021/22 – 2021/262025)

- ❖ Agricultural sector transformed and commercialized consistent with considerations of climate smart agriculture (CSA).
- ❖ Enabling farmers to invest beyond food security needs, Sustainability helping to produce surplus export quality food grains.
- ❖ That economic growth (GDP) steadily grows at not less than 8 percent per annum, aiming specifically at consolidating the country's status as a middle-income country; both in terms of income and indicators of social development; and that the country does not slip back into low-income country bracket.

CHAPTER 8 : CONCLUDING REMARKS

CHAPTER 8: CONCLUDING REMARKS

The Sixth Phase Government, Led by H.E Samia Suluhu Hassan has renewed investor's confidence in Tanzania. The government is prioritizing efforts to improve the business environment and attract foreign direct investment (FDI).

The Government's theme of "Realizing Competitiveness and Industrialization for Human Development" in the National Five-Year Development Plan 2021/2022 – 2025/2026 has set a tone of commitment by the Government to support industrialization and investment within Tanzania.

The Company is witness to the favourable policies and initiatives implemented by the Government, including hinger import duty on imported rice, completion of the construction of pre-basic rice/paddy seeds laboratory in Morogoro, and the Expanded Rice Production Project (ERPP).

The Company also recognizes and aims to take maximum advantage of the opportunities that exists in the rice export market. The Company has ensured that it maintains high food safety standards which is a critical element in international rice market.

Projections done by the company so far have shown positive results and viability of the upcoming project. MW Rice Millers Limited would like to build on this and reach the company's rice production target level of 191,000 MT by 2028.

The Management and Directors of MW Rice Millers Limited believe that this submission has presented case for request of Strategic Investor Status from Tanzania Investment Centre (TIC).

The Company is committed to ensuring that the fiscal and non-fiscal incentives that will be awarded alongside the Strategic Investor Status will be diligently used in the implementation of the project as well as in the delivery of the declared benefits to the economy.

ANNEXURE 1

**RICE MILL MACHINERY AND EQUIPMENT
ANNEXURE 1 - CAPITAL GOODS**

ITEM	DESCRIPTION	ORIGIN COUNTRY	UoM	QTY
Milling Separator/Aspirator - Paddy	SFI1500A-T+TLA-1500A	Japan	Nr	4
Destoner	SGA15B(2)-T	Japan	Nr	4
Paddy Husker	HR10DDF-T	Japan	Nr	10
Paddy Separator	PS500D(2)-T	Japan	Nr	4
Thickness Grader	WS600AK	Japan	Nr	6
Rice White Machine	VTA20SR-T	Japan	Nr	6
Rotary Sifter	ST1037RSD(2)-T1	Japan	Nr	8
Polishing Machine	KB100PI-T	Japan	Nr	6
Cascade Aspirator for VTA and KB	-	Japan	Nr	12
Color Sorter	NRM7DMS-T	Japan	Nr	4
Flow Meter	IFW80	Japan	Nr	1
Flow Meter	IFW30A-T	Japan	Nr	1
Flow Meter	SLS20/40CC-T	Japan	Nr	4
Flow Meter	FS100CWA(1)-T	Japan	Nr	2
Slippy Sieve	TM05C(2)-T	Japan	Nr	1
Testing Mill	THU35B(3)-T	Japan	Nr	1
Testing Husker	RSQI10B	Japan	Nr	1
Grain Scanner	LRG306FA-T	Japan	Nr	10
Length Grader	HDCS-L65	Japan	Nr	1
Scale Shutter / Packer for Fractions	MM1E	Japan	Nr	1
Milling Meter	SS8	Japan	Nr	2
Handy Type Moisture Meter	-	Japan	Nr	1
Engineering Fee	SCA1500	Japan	Nr	1
Aspirator after Slippy Sieve	RDBS200P-T	Japan	Nr	2
HUSK WEIGHER	IFW30A-T	Japan	Nr	5
Weigher for Rice Fractions	TO BE QUOTED	Japan	Nr	2
Packing Scale for Bran	N/A as no root blower	Japan	Nr	
Airlock		Japan	Nr	11
Divider		Japan	Nr	1
Bucket Elevator	BE250 SIE	India	Nr	1
2 Way change valve / Pneumatic Tee	PD250	India	Nr	1
Control Tank	1.728x1.728x0.9+1.2 m3	India	Nr	1
Conveyor	CC250 SIE	India	Nr	1
Conveyor	CC250 SIE	India	Nr	1
Bucket Elevator	BE250 SIE	India	Nr	1
Control Tank/Two way Distributor	0.9*0.6*0.45+0.5 m3	India	Nr	1
Control Tank/Two way Distributor	0.9*0.6*0.45+0.5 m3	India	Nr	1
Control Tank/Two way Distributor	0.9*0.6*0.45+0.5 m3	India	Nr	1
Control Tank/Two way Distributor	0.9*0.6*0.45+0.5 m3	India	Nr	1
2 Way change valve / Pneumatic Tee	PD250	India	Nr	1
2 Way change valve / Pneumatic Tee	PD250	India	Nr	1
2 Way change valve / Pneumatic Tee	PD250	India	Nr	1
2 Way change valve / Pneumatic Tee	PD250	India	Nr	1
Conveyor	CC250 SIE	India	Nr	1
Conveyor	CC150 SIE	India	Nr	1
Bucket Elevator	BE250 SIE	India	Nr	1
Control Tank	1.728x1.728x0.9+1.2 m3	India	Nr	1
Control Tank	1.728x1.728x0.9+1.2 m3	India	Nr	1
Bucket Elevator	BE300 SIE	India	Nr	1
2 Way change valve / Pneumatic Tee	PD250	India	Nr	1
Control Tank	2 way Distributor	India	Nr	1
Magnet	4000-6000G	India	Nr	1
Magnet	4000-6000G	India	Nr	1
Conveyor	CC250 SIE	India	Nr	1
Conveyor	CC250 SIE	India	Nr	1

**RICE MILL MACHINERY AND EQUIPMENT
ANNEXURE 1 - CAPITAL GOODS**

ITEM	DESCRIPTION	ORIGIN COUNTRY	UoM	QTY
TANK	0.6*0.6*0.9+0.3 m3	India	Nr	10
Control Tank	1.728*1.728*0.5+1.2 m3	India	Nr	1
Control Tank	1.728*1.728*0.5+1.2 m3	India	Nr	1
Conveyor	CC250 SIE	India	Nr	1
Conveyor	CC250 SIE	India	Nr	1
Conveyor	CC250 SIE	India	Nr	1
Conveyor	CC400 SIE	India	Nr	1
Conveyor	CC150 SIE	India	Nr	1
Bucket Elevator	BE250 SIE	India	Nr	1
Bucket Elevator	BE250 SIE	India	Nr	1
Control Tank	1.728*1.728*0.9+1.0 m3	India	Nr	1
Control Tank	1.728*1.728*0.9+1.0 m3	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
2 Way change valve / Pneumatic Tee	PD250	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Conveyor	CC150 SIE	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Bucket Elevator	SEC5 SIE	India	Nr	1
Thickness grader rejection Tank	3*3*4+1.7 m3	India	Nr	1
Brown Rice Tank	3*3*4+1.7 m3	India	Nr	1
Brown Rice Tank	3*3*4+1.7 m3	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Control Tank	1.728*1.728*0.9+1.2 m3	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Magnet	4000-6000G	India	Nr	1
Control Tank	1.728*1.728*1.5+1.0 m3	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Magnet	4000-6000G	India	Nr	1
Control Tank	1.728*1.728*1.5+1.0 m3	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Magnet	4000-6000G	India	Nr	1
Control Tank	1.728*1.728*1.5+1.0 m3	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Conveyor	CC150 SIE	India	Nr	1
Conveyor	CC150 SIE	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
2 Way change valve / Pneumatic Tee	PD250	India	Nr	1
Tank	3*3*4.6+1.7m3	India	Nr	1
Tank	3*3*4.6+1.7m3	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Magnet	4000-6000G	India	Nr	1
Control Tank- Triple Outlet	1.728*1.728*0.9+1.0 m3	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Magnet	4000-6000G	India	Nr	1
Control Tank- Triple Outlet	1.728*1.728*0.9+1.0 m3	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Control Tank	1.728*1.728*0.9+1.2 m3	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1

RICE MILL MACHINERY AND EQUIPMENT
ANNEXURE 1 - CAPITAL GOODS

ITEM	DESCRIPTION	ORIGIN COUNTRY	UoM	QTY
Bucket Elevator	SEC7 SIE	India	Nr	1
Bucket Elevator	SEC7 SIE	India	Nr	1
Magnet	4000-6000G	India	Nr	1
Magnet	4000-6000G	India	Nr	1
Control Tank	2.6*1.4*0.8+1.0 m3	India	Nr	1
Control Tank	2.6*1.4*0.8+1.0 m3	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Conveyor	CC150 SIE	India	Nr	1
Conveyor	CC150 SIE	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Bucket Elevator	SEC7 SIE	India	Nr	1
Bucket Elevator	SEC7 SIE	India	Nr	1
Magnet	4000-6000G	India	Nr	1
Magnet	4000-6000G	India	Nr	1
Control Tank	2.6*1.4*0.8+1.0 m3	India	Nr	1
Control Tank	2.6*1.4*0.8+1.0 m3	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Conveyor	CC150 SIE	India	Nr	1
Conveyor	CC150 SIE	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Conveyor	CC150 SIE	India	Nr	1
Conveyor	CC150 SIE	India	Nr	1
Conveyor	CC150 SIE	India	Nr	1
Conveyor	CC400 SIE	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Bucket Elevator	SEC7 SIE	India	Nr	1
Conveyor	CC150 SIE	India	Nr	1
Conveyor	CC150 SIE	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Control Tank	1.728*1.728*0.9+1.2 m3	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Bucket Elevator	SEC5 SIE	India	Nr	1
Bucket Elevator	SEC5 SIE	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
H/R Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
H/R 2 Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
Large Broken tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
Medium broken tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
Head Rice Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
2 Way change valve / Pneumatic Tee	PD250	India	Nr	5
Conveyor	CC200 SIE	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
2 Way change valve / Pneumatic Tee	PD250	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
2 Way change valve / Pneumatic Tee	PD250	India	Nr	2
Conveyor	CC200 SIE	India	Nr	1

**RICE MILL MACHINERY AND EQUIPMENT
ANNEXURE 1 - CAPITAL GOODS**

ITEM	DESCRIPTION	ORIGIN COUNTRY	UoM	QTY
Conveyor	CC200 SIE	India	Nr	1
Packing Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
Packing Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
Packing Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
Packing Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
Packing Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
Packing Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
Packing Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
Packing Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
Packing Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
Packing Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
Packing Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Control Tank	2.5*2.5*2.0+1.6 m3	India	Nr	1
Bucket Elevator	SEC8 SIE	India	Nr	1
Control Tank	2.5*2.5*2.0+1.6 m3	India	Nr	1
Bucket Elevator	SEC7 SIE	India	Nr	1
Bucket Elevator	SEC7 SIE	India	Nr	1
Bucket Elevator	SEC7 SIE	India	Nr	1
Bucket Elevator	SEC7 SIE	India	Nr	1
Control Tank	1.2*1.2*1.0+0.6 m3	India	Nr	1
Control Tank	1.2*1.2*1.0+0.6 m3	India	Nr	1
Control Tank	1.2*1.2*1.0+0.6 m3	India	Nr	1
Control Tank	1.2*1.2*1.0+0.6 m3	India	Nr	1
By-Product Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
By-Product Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
By-Product Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
By-Product Tank	2.5*2.5*3.4+1.6 m3	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Bucket Elevator	SEC7 SIE	India	Nr	1
Control Tank	1.5*1.5*1.0+1.0 m3	India	Nr	1
Cyclone	Dia 2000mm	India	Nr	1
Rotary Valve	RAL 35/30	India	Nr	1
Bag Filter with Rotary Valve	PJPR- 5265	India	Nr	1
Suction Fan with Silencer	450m ³ /min,5.0kPa	India	Nr	1
Cyclone	Dia 1800mm	India	Nr	1
Rotary Valve	RAL 28/22	India	Nr	1
Bag Filter with Rotary Valve	PJPR-3664	India	Nr	1
Suction Fan with Silencer	300m ³ /min,5.0kPa	India	Nr	1
Cyclone	Dia1500 mm	India	Nr	1
Rotary Valve	RAL 28/22	India	Nr	1
Bag Filter with Rotary Valve	PJPR - 2444	India	Nr	1
Suction Fan with Silencer	210m ³ /min,5.0kPa	India	Nr	1
Cyclone	Dia 1500mm	India	Nr	1
Rotary Valve	RAL 28/22	India	Nr	1
Bag Filter with Rotary Valve	PJPR-2444	India	Nr	1
Suction Fan with Silencer	210m ³ /min,5.0kPa	India	Nr	1
Cyclone	Dia 1500mm	India	Nr	1
Rotary Valve	RAL 28/22	India	Nr	1
Bag Filter with Rotary Valve	PJPR-2444	India	Nr	1
Suction Fan with Silencer	210m ³ /min,5.0kPa	India	Nr	1
Cyclone	Dia 1500mm	India	Nr	1
Rotary Valve	RAL 28/22	India	Nr	1

**RICE MILL MACHINERY AND EQUIPMENT
ANNEXURE 1 - CAPITAL GOODS**

ITEM	DESCRIPTION	ORIGIN COUNTRY	UoM	QTY
Bag Filter with Rotary Valve	PJPR-2444	India	Nr	1
Suction Fan with Silencer	210m ³ /min,5.0kPa	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Conveyor	CC200 SIE	India	Nr	1
Conveyor	CC400 SIE	India	Nr	1
Bucket Elevator	BE600 SIE	India	Nr	1
Conveyor	CC400 SIE	India	Nr	1
Conveyor	CC400 SIE	India	Nr	1
Cyclone	Dia 2000mm	India	Nr	1
Rotary Valve	RAL 28/22	India	Nr	1
Bag Filter with Rotary Valve	PJPR-4465	India	Nr	1
Suction Fan with Silencer	360m ³ /min,5.0kPa	India	Nr	1
Cyclone	Dia 1700mm	India	Nr	1
Cyclone	Dia 1700 mm	India	Nr	1
Rotary Valve	RAL 28/22	India	Nr	1
Rotary Valve	RAL 28/22	India	Nr	1
Bag Filter with Rotary Valve	PJPR-6484	India	Nr	1
Suction Fan with Silencer	550m ³ /min,5.0kPa	India	Nr	1
Cyclone	Dia 1700 mm	India	Nr	1
Rotary Valve	RAL 35/30	India	Nr	1
Bag Filter with Rotary Valve	PJPR-7685	India	Nr	1
Suction Fan with Silencer	280m ³ /min,6.5kPa	India	Nr	1
Cyclone	Dia 1700 mm	India	Nr	1
Rotary Valve	RAL 35/30	India	Nr	1
Bag Filter with Rotary Valve	PJPR-7685	India	Nr	1
Suction Fan with Silencer	280m ³ /min,6.5kPa	India	Nr	1
Cyclone	Dia 1700 mm	India	Nr	1
Rotary Valve	RAL 35/30	India	Nr	1
Bag Filter with Rotary Valve	PJPR-7685	India	Nr	1
Suction Fan with Silencer	280m ³ /min,6.5kPa	India	Nr	1
Cyclone	Dia 1700 mm	India	Nr	1
Rotary Valve	RAL 35/30	India	Nr	1
Bag Filter with Rotary Valve	PJPR-4105	India	Nr	1
Suction Fan with Silencer	300m ³ /min,7.0kPa	India	Nr	1
Cyclone	Dia 1700 mm	India	Nr	1
Rotary Valve	RAL 35/30	India	Nr	1
Bag Filter with Rotary Valve	PJPR-4105	India	Nr	1
Suction Fan with Silencer	300m ³ /min,7.0kPa	India	Nr	1
Conveyor	SC250 SIE	India	Nr	1
Conveyor	SC250 SIE	India	Nr	1
Conveyor	SC250 SIE	India	Nr	1
Bucket Elevator	BE200 SIE	India	Nr	1
Cyclone	Dia 1500mm	India	Nr	1
Rotary Valve	RAL 28/22	India	Nr	1
Bag Filter with Rotary Valve	PJPR-2444	India	Nr	1
Suction Fan with Silencer	200m ³ /min,5.0kPa	India	Nr	1
Conveyor	SC250 SIE	India	Nr	1
Bucket Elevator	BE200 SIE	India	Nr	1
Control Tank- Bran	1.2*1.2*2.0+1.2 m3	India	Nr	1
Electrical Control Panels	MCC + PLC + VFD + Scada /Mill Software	India	Nr	1
Instruments and Sensors		India	set	1

**RICE MILL MACHINERY AND EQUIPMENT
ANNEXURE 1 - CAPITAL GOODS**

ITEM	DESCRIPTION	ORIGIN COUNTRY	UoM	QTY
Supervision of Installation and Commissioning	120days @USD 350	India	Set	
Set Of Spare Parts for Bought Outs		India	set	1

**NICHROME PACKING MACHINE 25G TO 5KG
ANNEXURE 1 - CAPITAL GOODS**

ITEM	DESCRIPTION	UNIT	QTY
VFFS MACHINE MODEL EXCEL 400	EQUIPPED WITH 3H MOTORIZED GATE WEIGH FILLER WITH BUILT IN SET OF FORMING SIZE PART FOR 5 KG	Nr	2
EXTRA SET OF FORMING SIZE PART FOR 1 KG		Nr	2
EXTRA SET OF FORMING SIZE PART FOR 2 KG		Nr	2
SIDE GUSSETING SYSTEM		Nr	2
POUCH TAKE UP CONVEYOR FOR FILLED PACKS	APPROX. 1.5 MTRS	Nr	2
COMBO CHECK WEIGHER & METAL DETECTION UNIT	ON LINE COMBO CHECKER FOR VFFS MACHINE	Nr	2
INDEPENDENT PORTABLE DUST COLLECTOR	FOR VFFS MACHINE	Nr	2
KIT OF CONSUMABLES & SPARES		Set	2
BROAD SEAL JAWS	FOR 5 KG WITH 3 FINGER HOLE AS PER KLD	Nr	2
THREE PHASE SERVO VOLTAGE STABILIZER	SUITABLE FOR VFFS PACKING MACHINE	Nr	2
DATE BATCH CODING DEVICE	FOR VFFS MACHINE	Nr	2
HORIZONTAL BELT CONVEYOR 3 MTR LENGTH	(FOR POUCHES OF VFFS MACHINE UP TO 5 KG)	Nr	2
VERTICAL ELEVATOR (APPROX 14 MTRS HT)	IN MS CONSTRUCTION & SS BUCKETS.(APPROX. 6 TO 7 TPH) 2 No - 1 NO FOR EACH MACHINE	Nr	2
INTERMEDIATE STORAGE HOPPER	(APPROX. 5000 KG RICE) (WITHOUT SUPPORT STRUCTURE) VOLUMETRIC CAPACITY: APPROX. 7000-8000 LTR	Nr	2
ADDITIONAL EXTRA HORIZONTAL BELT CONVEYOR 3 MTR LENGTH	(FOR POUCHES OF VFFS MACHINE UP TO 5 KG)	Nr	2
EXTRA SET OF FORMING SIZE PART FOR 250 GM	2 NO - 1 NO FOR EACH MACHINE	Nr	2
EXTRA SET OF FORMING SIZE PART FOR 500 GM	2 NO - 1 NO FOR EACH MACHINE	Nr	2

**STEEL SILOS AND EQUIPMENT
ANNEXURE 1 - CAPITAL GOODS**

ITEM	DESCRIPTION	UNIT	QTY
Silos	3700 MT X 3 nos.	Nr	3
Silos	4000 MT x 4 Nos.		4
Heat Insulation	To be provided along with all necessary accessories. Fumigation enable. (SHOULD BE FIRE PROOF ONLY)	Lot	7
Roof Handrail	To be Provided	Lot	1
Discharge Gate	1 manual and 1 electronic gate for the central outlet. 1 manual gate for each intermediate silo outlet.	Nr	35
Level Sensor for High and Low Level	Vibratory fork Type - 2 nos. at upper part and 2 nos. at lower part of each silo. Provision for monitoring through PLC. Details specification to be provided by supplier.	Nr	28
Level Transmitter	Radar Type (LR560) (2 nos. for each silo) (Client Scope). Supplier to provide necessary arrangements for LT installation at Silo Roof.	Nr	14
Temperature detecting, Control & Monitoring system	Temperature control system with Temperature Sensors as per ATEX Zone 20, with Common COMPUTER, Software etc.	set	7
Aeration system with Compatibility to Closed loop Fumigation system	Complete with Ducting, Ventilating Board, and ventilating cage plate etc. Supplier to furnish all details.	Set	7
Aeration fans with suitable motor	Centrifugal Fan complete with Motor, Coupling guards, Baseplate, Pressure Gauges etc.	Nr	7
Roof Ventilation Fans	To be Provided. With Explosion Vent.	Nr	28
Sweep Auger with suitable motor and gearbox	To be provided. supplier to specify Capacity, MOC, Dia. of Sweep, Area covered, and detailed list of accessories provided in the system.	Nr	7
Ladder and staircase (As per EN ISO 14122)	Safety Caged Ladder with self-closing safety gate at the top of the ladder for each silo to access the shell manhole and level switch. Rest platform to be provided to shell manhole for access to manhole and maintenance of level sensors. Supplier can check possibility of a single common platform for two silos each. Orientation of manhole shall be workout accordingly.	Lot	1
Structure for conveying equipment	Stair tower for feed elevator with necessary Conveyor Gantry, Catwalks with Handrails and Supporting structure.	Lot	1
Spiral staircase	1 nos. of spiral staircase at the very last silo of each row of capacity 4000 MT and 3700 MT.	Nr	2
Catwalk Platform	Flushed type Grating as per Wilmar Standard	Lot	1
Handrailing	As per WILMAR standard	Lot	1
Chain Conveyors	Chain Conveyor , TCA 150, 120 & others models, with drive Motor, and accessories	Nr	17
Bucket Elevators	Bucket Elevator ELA 500 , LA 500 and others models , with buckets , belts and accessories	Nr	2
Air ducting and product spouts	AR steel slide lining , Duct work tpe 250, GI piping for air ducts	Lot	1
MCC Panels	MCC Panel, IO panels, VFDs , PCC, GIS panels, ,DB s, JB s, scada, CPU panels, Radar system s, Temp computers etc.	Nr	1
Power cables (XLPE), and control cables (FRLS)	Internal cabling Motor to MCC panel and IO panel etc.	Lot	1
Above ground earthing for equipment	Cu. strips, GI strips, Earth rods, clams , Lightning arrester items	Lot	1
Separate Copper earthing for PLC Panel and control stations.	Cu. Earth strips etc	Lot	1
Wire Mesh Type Cable trays with accessories	Mortor, sintruments to MCC , VFD cales trays , GI pipings etc	Lot	1
All Electrical Hardware, Local Push buttons, Glands, Sleeves, Conduit pipes etc.	Emergency stop, local push buttons, connectors , Glands , sleeves , ferruls, GI and	Lot	1
Husk Silo & Allied Equipment	1000MT X 8	Nr	5

**PACKAGING, HANDLING AND AUTOMATION EQUIPMENT
ANNEXURE 1 - CAPITAL GOODS**

ITEM	DESCRIPTION	Uom	QTY
Bran Separator Equipment	Bran Separator with accessories	Set	1
Bulk Packaging Machines	Double slide gate feeder-MWSV	Set	2
Bulk Packaging Machines	Single spout bagging machine -MWPf-W PL	Set	3
Bulk Packaging Machines	Bag closing conveyor-MWTD	Set	4
Bulk Packaging Machines	Packing controller unit-MEAG-P	Set	5
Bulk Packaging Machines	Operating Cabinet	Set	6
Bulk Packaging Machines	Bag closing machine	Set	7
CCTV and Security Equipment	CCTV Cameras	Nr	100
CCTV and Security Equipment	Warehouse Security Items	Nr	50
Electrical and Automation Equipment	33 & 11 KV Incoming HT Cable	Lot	1
Electrical and Automation Equipment	33 & 11 KV Switchyard (AIS/GIS as applicable)	Lot	1
Electrical and Automation Equipment	Switch Yard Monitoring System	Lot	1
Electrical and Automation Equipment	33 & 11 KV to MVD Main Transformers (Step down & Step up)	Nr	2
Electrical and Automation Equipment	33 & 11 kV HT Main Distribution Panel	Nr	1
Electrical and Automation Equipment	MVD Main Distribution Panel	Nr	1
Electrical and Automation Equipment	LVD Main Distribution Panel	Nr	1
Electrical and Automation Equipment	MVD HT Cable	Lot	1
Electrical and Automation Equipment	LVD HT Cable	Lot	1
Electrical and Automation Equipment	Instrument Cable	Lot	1
Electrical and Automation Equipment	MVD to LVD Transformer (Rice Mill Line-2 & Boiler project)	Nr	2
Electrical and Automation Equipment	Busduct	Lot	1
Electrical and Automation Equipment	PCC Panel as per transformer load distribution	Nr	1
Electrical and Automation Equipment	APFC Panel as per PCC load distribution	Nr	1
Electrical and Automation Equipment	MCC Panel-Rice Mill Line-2	Nr	2
Electrical and Automation Equipment	MCC Panel-Rice Mill Line-1 additional load.	Nr	1
Electrical and Automation Equipment	MCC Panel-Boiler	Nr	8
Electrical and Automation Equipment	PLC Panel for Rice Mill Line 2	Nr	1
Electrical and Automation Equipment	DCS system for boiler package	Lot	1
Electrical and Automation Equipment	MPDB/MLDB/Emergency MLDB Panels	Nr	3
Electrical and Automation Equipment	DG Set with Synchronizing Panel	Nr	1
Electrical and Automation Equipment	UPS/Stabilizers	Nr	1
Electrical and Automation Equipment	Plant Internal Lighting (All Plant & Non-Plant Buildings)	Lot	1
Electrical and Automation Equipment	Street Lighting	Lot	1
Electrical and Automation Equipment	Lightning Arrestors	Lot	1
Electrical and Automation Equipment	High Mast	Lot	1
Electrical and Automation Equipment	LV Power Cables	Lot	1
Electrical and Automation Equipment	Cable trays, Conduits, Glands, JB's and Other Electrical Hardware	Lot	1
Electrical and Automation Equipment	Load Cells	Nr	1,000
Electrical and Automation Equipment	Other Miscellaneous Electrical items	Lot	1
FRP Gratings Equipment	Panel Size 600mm x 1000mm, 30mm depth with mesh size of 30mmx30mm bar thickness of 10mm, load bearing capacity of 7.0 tonnes USD per sqm, in Isophthalic resin system, Open, Grey Colour	Nr	1,100
Material Handling Equipment	Forklift	Nr	10
Material Handling Equipment	Reach Truck	Nr	2
Material Handling Equipment	Trucks (30Mts carrying capacity)	Nr	30
Material Handling Equipment	Tractors with trolleys	Nr	10
Material Handling Equipment	Plastic Pallet	Nr	5,500
Material Handling Equipment	Shettle Racking	Lot	1
Material Handling Equipment	Truck with Trailers	Nr	15
Material Handling Equipment	Road Cleaning Truck	Nr	2
Material Handling Equipment	Sky Jack	Nr	2
Personal Protective Equipment Items	Plastic PPE/sefuline/Fumigation Tarpaulin		500
Personal Protective Equipment Items	PPE protective gears & other Rice Mill equipment		1,000

**PACKAGING, HANDLING AND AUTOMATION EQUIPMENT
ANNEXURE 1 - CAPITAL GOODS**

ITEM	DESCRIPTION	Uom	QTY
Solar Street Lights Equipment	Solar Panel	Nr	70
Solar Street Lights Equipment	Solar Battery	Nr	71
Solar Street Lights Equipment	LED Lapms	Nr	72
Solar Street Lights Equipment	Pole for Lights	Nr	73
Solar Street Lights Equipment	Controller	Nr	74
Weigh Bridge Equipment and Machines	MS fabricated structure of 80T capacity duly Shot blasted and Anti Corrosive painted	Lot	1
Weigh Bridge Equipment and Machines	Compression Loadcell Model RL5426 40T Capacity each	No	8
Weigh Bridge Equipment and Machines	Loadcell mounting assembly and related fastener	No	8
Weigh Bridge Equipment and Machines	Loadcell connecting table	Meters	30
Weigh Bridge Equipment and Machines	Junction box	Set	1
Weigh Bridge Equipment and Machines	920i Weight Indicator	No	1
Weigh Bridge Equipment and Machines	Weighing Panel with Relays	No	1
Weigh Bridge Equipment and Machines	RFID Card reader Near Weighbridge	No	1
Weigh Bridge Equipment and Machines	RFID Card	No	50
Weigh Bridge Equipment and Machines	Photo Sensor with Pole	Set	2
Weigh Bridge Equipment and Machines	Signal Lamp with Pole (Red & Green) - Single Direction	Set	1
Weigh Bridge Equipment and Machines	Remote Display	No	1
Weigh Bridge Equipment and Machines	Vehicle Entry and Exit Sensors	No	2
Weigh Bridge Equipment and Machines	Boom Barrier	No	2
Weigh Bridge Equipment and Machines	Ethernet Switch	No	1
Weigh Bridge Equipment and Machines	Cameras with Onvif Support	No	2
Weigh Bridge Equipment and Machines	Printer	No	1
Weigh Bridge Equipment and Machines	Computer with Operating System	No	1
Weigh Bridge Equipment and Machines	Weighing Software	No	1
Weigh Bridge Equipment and Machines	UPS	No	1
Weigh Bridge Equipment and Machines	Lighting Protection	Set	1
Weigh Bridge Equipment and Machines	Weigh Bridge	Nr	2
Weigh Bridge Equipment and Machines	Laser Sensor track position kit	Set	1
Air Compressor	CIPPMM ELGI air compressor EG 75 - 10 DV Inbuilt	UN	1
Air Compressor	CIPPMM Vertical Air Receiver 5m3 with accessories	UN	1
Air Compressor	CIPPMM Vertical Air Receiver 10m3 with accessories	UN	1
Air Compressor	CIPPMM orifice and check valve	UN	2
Air Compressor	CIPPMM line filters	UN	1
Air Compressor	CIPPMM Auto Drain Valve	UN	2
Radar System	Radar Transmitters-LR560	Items	10
Radar System	Accessories for Radar system	Items	10
Solar System Equipments	35 Kwp Mono-Crystalline PERC Photovoltaic Modules	Lot	1
Solar System Equipments	9 Hybris inverters	Lot	1
Solar System Equipments	36kw STRING INVERTER	Lot	1
Solar System Equipments	Integration Panels	Lot	1
Solar System Equipments	Aluminum Mounting System	Lot	1
Solar System Equipments	AC and DC Cables	Lot	1
Solar System Equipments	Totalizing Panel	Lot	1
Solar System Equipments	PV Cables and MC4 Connectors	Lot	1
Solar System Equipments	240kwh Lead- Acid Batteries	Lot	1
Solar System Equipments	ISO20 Container with battery racks and connections	Lot	1

MATERIAL AND EQUIPMENT SCHEDULE FOR FIRE FIGHTING INSTALLATIONS
ANNEXURE 1 - CAPITAL GOODS

ITEM	DESCRIPTION	UNIT	QTY
1	AUTOMATIC SPRINKLER SYSTEM INSTALLATIONS		
	<i>(RICE MILL BUILDING & ADMINISTRATION BUILDING)</i>		
1.1	PIPES, FITTINGS AND VALVES:		
	Medium grade, galvanized steel pipework (Schedule 40), for sprinkler main, distribution, range and drainage pipes. Including fittings, brackets and supports. Pipes and fittings to be painted with standard colour coatings and coding before installation. Connection for water supply from presssurized fire ring main.		
	Pipes in running lengths:		
a	25mm diameter		
b	32mm diameter	Lm	1,836
c	40mm diameter	Lm	544
d	50mm diameter	Lm	161
e	65mm diameter	Lm	85
f	80mm diameter	Lm	105
g	100mm diameter	Lm	138
		Lm	97
	Fittings in threaded end joint adoptors		
	<u>90deg. Elbow:</u>		
h	25mm diameter		
j	32mm diameter	Nr	1,257
k	40mm diameter	Nr	21
l	50mm diameter	Nr	10
m	80mm diameter	Nr	20
n	100mm diameter	Nr	15
o	25mm diameter	Nr	4
p	32mm diameter	Nr	160
q	40mm diameter	Nr	179
r	50mm diameter	Nr	46
s	65mm diameter	Nr	16
t	80mm diameter	Nr	12
u	100mm diameter	Nr	11
v	32mm diameter	Nr	15
w	40mm diameter	Nr	4
x	50mm diameter	Nr	7
y	65mm diameter	Nr	8
z	80mm diameter	Nr	22
aa	100mm diameter	Nr	17
	<u>Reducing bush:</u>	Nr	4
ab	25/15mm diameter		
ac	32/15mm diameter	Nr	353
ad	32/25mm diameter	Nr	160
ae	40/15mm diameter	Nr	132
af	40/25mm diameter	Nr	39
ag	40/32mm diameter	Nr	11
ah	50/40mm diameter	Nr	29
aj	50/32mm diameter	Nr	15
ak	50/25mm diameter	Nr	11
al	50/15mm diameter	Nr	22
am	65/50mm diameter	Nr	5
an	65/40mm diameter	Nr	12
ao	65/32mm diameter	Nr	14
ap	65/25mm diameter	Nr	23
aq	80/65mm diameter	Nr	8
ar	80/50mm diameter	Nr	27
		Nr	11

**MATERIAL AND EQUIPMENT SCHEDULE FOR FIRE FIGHTING INSTALLATIONS
ANNEXURE 1 - CAPITAL GOODS**

ITEM	DESCRIPTION	UNIT	QTY
as	80/40mm diameter	Nr	14
at	80/32mm diameter	Nr	35
au	80/25mm diameter	Nr	18
av	100/80mm diameter	Nr	5
aw	100/65mm diameter	Nr	3
ax	100/50mm diameter	Nr	1
ay	100/25mm diameter	Nr	1
	Equal socket:		
az	25mm diameter	Nr	22
ba	32mm diameter	Nr	8
bb	40mm diameter	Nr	5
bc	50mm diameter	Nr	5
bd	65mm diameter	Nr	4
be	80mm diameter	Nr	2
bf	100mm diameter	Nr	3
	Valves and flange adoptors:		
	Listed gate valves		
bg	25mm diameter	Nr	6
bh	80mm diameter	Nr	6
bj	100mm diameter	Nr	2
	Drainpipe		
	Sprinkler drain rising main and branch pipe connected to floor supply line, complete with drain valve.		
bk	50mm diameter	Lm	62
bl	25mm diameter	Lm	6
bm	25mm drain valve	Nr	6
	Flange adaptor as 'Viking Jonhson' between HDPE and GI pipes		
bn	100mm diameter	Nr	2
1.2	SPRINKLER HEADS		
	Fire sprinkler head, standard response type, 68°C heat sensitive element rating, including connection to sprinkler drop/upright pipes:		
a	Ditto ceiling mounted (pendant) type	Nr	61
b	Ditto exposed (upright) type	Nr	480
2	INTERNAL FIRE HYDRANT, HOSE REEL & PORTABLE EXTINGUISHER		
	(ADMINISTRATION BUILDING, ANCILLARY BUILDING, RISE MILLING BUILDING AND MACHINERY TOWER)		
2.1	PIPES, FITTINGS & VALVES:		
	Medium grade, galvanized steel pipework (Schedule 40), for hydrant and hose reel rising mains and branch pipes. Including fittings, brackets and supports. Pipes and fittings to be painted with standard colour coatings and coding before installation. Connection for water supply is from fire ring main.		
	Pipes in running lengths		
a	25mm diameter	Lm	131
b	50mm diameter	Lm	404
c	100mm diameter	Lm	25

**MATERIAL AND EQUIPMENT SCHEDULE FOR FIRE FIGHTING INSTALLATIONS
ANNEXURE 1 - CAPITAL GOODS**

ITEM	DESCRIPTION	UNIT	QTY
	Fittings in threaded end joint adaptors		
	90deg. Elbow:		
d	25mm diameter	Nr	85
e	50mm diameter	Nr	21
	Equal Tee:		
f	50mm diameter	Nr	26
g	100mm diameter	Nr	3
	Reducing bush:		
h	50/25mm diameter	Nr	26
j	100/65mm diameter	Nr	3
	Equal socket:		
k	25mm diameter	Nr	20
l	50mm diameter	Nr	68
m	100mm diameter	Nr	5
	Valves and flange adaptors:		
	Listed gate valves		
n	25mm diameter	Nr	23
o	50mm diameter	Nr	6
p	100mm diameter	Nr	1
	Listed pressure reducing valves:		
q	25mm diameter	Nr	23
	Flange adaptor as 'Viking Jonhson' between HDPE and Gi Pipes		
r	50mm diameter	Nr	3
s	100mm diameter	Nr	1
2.2	LANDING VALVES, HOSE REEL & PORTABLE EXTINGUISHERS		
	Floor landing valves:		
a	Landing valves with 65mm diameter hose connector and pressure regulating valve for outlet pressure up to 8bar	Nr	3
	Hose reels and hose rack:		
b	Swing type fire hose reel, without hose reel cabinet for internal installation. Hose diameter 25mm, hose length 30m.	Nr	21
c	Ditto with hose reel cabinet for external installation. Hose diameter 25mm, hose length 30m.	Nr	2
d	Hose rack assembly comprising of 30m long layflat fire hose with connections suitable for 65mm landing valve. Complete with adaptor connectors, jet (spray) nozzle and all necessary accessories.	Nr	3
	Portable extinguisher		
e	Dry powder type, 6.0kg extinguishing capacity bottle, complete with mounting brackets supplied by the same manufacturer	Nr	45
f	CO2 type, 2.0kg extinguishing capacity bottle, complete with mounting brackets supplied by the same manufacturer	Nr	10

**MATERIAL AND EQUIPMENT SCHEDULE FOR FIRE FIGHTING INSTALLATIONS
ANNEXURE 1 - CAPITAL GOODS**

ITEM	DESCRIPTION	UNIT	QTY
3	CLEAN AGENT (TOTAL FLOOD) EXTINGUISHERS <i>(ELECTRICAL POWER ROOM)</i>		
	Condensed Aerosol fire extinguishing system for total flood application, supplied and installed as per standards and manufacturer's recommended instructions.		
	Fire extinguishing generators (aerosol generators) with the following extinguishing capacity/mass:		
a	3000g	Nr	21
b	5700g	Nr	17
c	Extinguishant control panel complete with backup batteries, gas release signs and all necessary accessories.	Nr	6
d	Sequential activators	Nr	23
e	Isolation switch (abort button)	Nr	6
f	Fire alarm bell (1st stage alarm)	Nr	6
g	Sirene (2nd stage alarm)	Nr	6
h	Optical smoke detector, complete with mounting base	Nr	13
j	Optical heat detector, complete with mounting base	Nr	13
k	Fire resistance cable: 2Cx1sq.mm	Lm	350
l	Fire resistance cable: 4Cx1sq.mm	Lm	305
4	EXTERNAL FIRE HYDRANT, FIRE MONITOR AND STAND PIPE <i>(EXTERNAL FIRE FIGHTING, SILOS AND CAR PARKING)</i>		
4.1	FIRE RING MAIN, BRANCH PIPING & FITTINGS		
	HDPE PN16 pipe work for underground installations. Including trench excavation, bedding and backfilling with approved soil materials. Connection for water supply from fire pumping station.		
	Ring main and branch pipes in running lengths		
a	150mm diameter	Lm	1,259
b	100mm diameter	Lm	122
c	65mm diameter	Lm	266
	Fittings in fussion butt-weld and socket joints		
	90deg. Elbow:		
d	150mm diameter	Nr	13
e	100mm diameter	Nr	4
f	65mm diameter	Nr	22
	Equal Tee:		
g	150mm diameter	Nr	14
h	100mm diameter	Nr	2
j	65mm diameter	Nr	2
	Reducing Tee:		
k	150/100mm diameter	Nr	2
l	150/65mm diameter	Nr	12
m	100/65mm diameter	Nr	2
	Equal socket:		
n	150mm diameter	Nr	84
o	100mm diameter	Nr	9
p	65mm diameter	Nr	18

**MATERIAL AND EQUIPMENT SCHEDULE FOR FIRE FIGHTING INSTALLATIONS
ANNEXURE 1 - CAPITAL GOODS**

ITEM	DESCRIPTION	UNIT	QTY
	Valves and flange adaptors:		
	Listed gate (service) valves		
q	150mm diameter	Nr	22
r	100mm diameter	Nr	2
s	65mm diameter	Nr	14
	Listed pressure reducing valves used with standpipes for outlet pressure not less than 8bar:		
t	65mm diameter	Nr	14
	Flange adaptor as 'Viking Jonhson' or similar, used between HDPE and GI Pipes and at valve connections		
u	150mm diameter	Nr	47
v	100mm diameter	Nr	2
w	65mm diameter	Nr	14
4.2	EXTERANL HYDRANT, FIRE MONITOR AND STANDPIPE		
	Hydrant assembly:		
a	150mm wet barrel, pillar type external fire hydrant for fire department connections. Comprising 1nr. 65mm hose connection, 1nr. 65mm Fire monitor connection and 1Nr. 100mm pumper connection. Connected from pressurized fire ring main for water supply	Nr	13
	Fire monitor:		
b	Water type fire monitor connected to external pillar hydrant as indicated on engineering drawings.	Nr	13
	Standpipe assembly including the following:		
c	65mm, medium grade pipe	Lm	20
d	65mm GI flange connector	Nr	13
e	65mm GI 90deg. Elbow	Nr	13
f	65/40mm GI reducing bush	Nr	13
g	Listed 40mm hose connection adaptor	Nr	13
h	Hose cabinet:		
j	Weatherproof type hose cabinet for external installation used with stand pipes and housing 40mm, 30m length lay-flat hose on rack, delivery hose coupling, delivery nozzles, 1Nr. Water type and 1Nr. CO2 portable fire extinguishers. Cabinet body provided with side-bottom punch for 65mm pipe inlet.	Nr	13
5	FIRE WATER PUMPING STATION & FIRE WATER STORAGE TANK		
5.1	FIRE PUMP ASSEMBLY		
	Listed fire pump set.		
	Listed fire pumps assembled on common base frame (skid) with control panels, control valves, check valves, gauges, test pipe connection and flow meter. Pumps shall be factory pre-wired and tested for performance and comprising the following:		
a	Duty electric driven fire pump with flow rate of 1900L/min. against 1500kPa pressure head.	Nr	1
b	Standby mechanically driven (diesel enginer) fire pump wit flow rate capacity of 1900L/min. against 1500kPa pressure head.	Nr	1
c	Electric driven jockey pump and pressure tank, both sized and installed, by manufacturer, to the same base frame with the fire pump set	Set	1

MATERIAL AND EQUIPMENT SCHEDULE FOR FIRE FIGHTING INSTALLATIONS
ANNEXURE 1 - CAPITAL GOODS

ITEM	DESCRIPTION	UNIT	QTY
	GI Piping in running lengths:		
d	150mm diameter	Lm	20
	GI fittings in threaded end joint adaptor:		
	90deg. Elbow:		
e	150mm diameter	Nr	4
	Equal Tee:		
f	150mm diameter	Nr	7
	Gate (service) valves in flanged joint adaptor:		
g	150mm diameter	Nr	5
h	50mm diameter	Nr	2
	Non-return (check) valves in flanged joint adaptor:		
j	150mm diameter	Nr	2
k	50mm diameter	Nr	1
	Flange adaptor as 'Viking Jonhson' or similar, used between HDPE and GI Pipes and at valve connections		
l	150mm diameter	Nr	2
5.2	FIRE WATER STORAGE TANK		
	Welded steel tanks in cylindrical shell plates		
	2Nr. Interconnected tanks fabricated with 6.4mm steel plate for tank shell, bottom, and roof. Tanks resting on concrete slab as designed and indicated on tank detail drawings. 150CBM volume capacity for each tank. Include internal and external ladders and all pipe connection provisions in flanged end adaptor.	Nr	2
	GI Piping in running lengths:		
a	150mm diameter	Lm	10
b	65mm diameter	Lm	10
	HDPE Piping in running lengths:		
c	65mm diameter HDPE for underground installation and connected from municipal main supply line.	Lm	480
	GI fittings in flanged end joint adaptor:		
	90deg. Elbows:		
d	150mm diameter	Nr	6
e	65mm diameter	Nr	3
	Gate (service) valves in flanged joint adaptor:		
f	150mm diameter	Nr	1
	Pistol type nozzel gun		
	Flash detector		
	Mislenous Fire equipment		
	Flange adaptor as 'Viking Jonhson' or similar, used between HDPE and GI Pipes and at valve connections		
g	65mm diameter	Nr	2

**WATER TREATMENT PLANT
ANNEXURE 1 - CAPITAL GOODS**

ITEM	DESCRIPTION	UNIT	QTY
Reverse Osmosis Unit	Model INDRO 803, capacity 3000 LPH with control panel, booster pump and necessary instrumentation	Nr	1
Multigrade Sand FILTER	Contains manual multiport valve and filter media-graded sand, 6 m3/hr	Nr	1
FRP Vessel	21-inch diameter and 62 inch height	Nr	1
Activated Carbon Filter	Contains manual multiport valve and filter media-activated carbon capacity 6 m3/HR	Nr	1
FRP Vessel	21-inch diameter and 62 inch height	Nr	1
Water softener,	Contains manual multiport valve, Regeneration system and filter media softening resin capacity 6 m3/hr	Nr	1
FRP Vessel	21 inch diameter and 62 inch height	Nr	1
Filter feed pump	Capacity 6 m3/hr	Nr	2
Chemical dosing system	Sodium hypo/SMBS/Antiscalant	Nr	3
UV system	Capacity 3 m3/hr	Nr	1
Inter connecting pipe and fittings	Plumbing Pipes for water	Nr	1
Installation charge	Supervision of Installation and Commissioning	Nr	1

OTHER EQUIPMENT AND MACHINERY
ANNEXURE 1 - CAPITAL GOODS

ITEM	DESCRIPTION	UoM	Qty
Bulk Packing Machine	10kg-50kg	Lot	1
Steel structure for Rice Mill floors	Rice mill machine and Buffer bin area	Lot	1
Rice Mill MCC Panel, PLC, Scada	2nd Line and 1st Line	Lot	1
Transformer- for 2nd line	Additional TF	Lot	1
Bus duct	For 2nd TF to PCC	Lot	1
Silos section MCC Panel	MCC for 7 Silos and accessories	Lot	1
PCC panels	PCC Panel For Add on lines	Lot	1
HT /LV Cables, Cable Tray , JB, DB s	For PCC , MCC supply	Lot	1
Mech Work shop machines	Radial Bech Drilling , Shapper , power hacksaw, Lathe etc	Lot	1
E&I Misc items - lights, earthing , DB s , Flood light Towers , UPS from KBK	Electrical goods for industrial uses	Lot	1
Vaccum cleaners	Cleaning by vacuume and piping	Lot	1
Sky Jet-15m	Lifting dock with hudrolic 15m	Lot	1
Platic Pallets	platic pallets 1.2mx1.5m	Lot	1
Fork lifts	Elect fork lift 4T, 5T with batteries	Lot	1
Telescopic loading Conveyors	Extendable conveyor for rice bag loading offloading	Lot	1
RHA- Rice Husk Ash Silo	MS Bin for ask storage	Lot	1
UF system for packing material treatment	UF station with indicators	Lot	1
Tarpoulins	Fumigation enables platic tarpaulin	Lot	1
Electrical tools	measuring instruments, working tools for E& I jobs	Lot	1
Mechanical Tools	Cutting tools, measuring tools, general mech tools	Lot	1
Bran Testing Lab equipments	Bran analysis lab machines	Lot	1
Storage Racks	Adjustable and pre feb storae racks	Lot	1
Ash removal trucks	Trucks for loading ash	Lot	1
PIMS itesm - extra metering , hardware,	Flow scales , instruments cables, power meter etc	Lot	1
Road sweeper	Outdoor Road sweeper	Lot	1
Heavy Duty vacume cleaner	Industrial vacuum cleaner	Lot	1
Shuttle Rackings	Industrial shuttel racking to store rice bags	Lot	1
Husk pallet machine	Husk compressed machine	Lot	1
Bran solvent plant machinary	Bran refinery machines and equipment	Lot	1
Husk Briquette machine	Husk compression and Briquettes machine	Lot	1