

# Mtibwa Sugar Estates

## Special Strategic Investor Status

03<sup>rd</sup> August 2023



### **Important Notice**

This special strategic investor status report (“report”) presents a qualitative and quantitative analysis of Mtibwa Sugar Estates Limited (“MSE” or “the Company”) and is prepared as part of MSE’s application TIC certificate of incentives (“the Application”). MSE’s application will be presented to Tanzania Investment Centre (“TIC”). The information contained in this report has been obtained from the shareholders and management of MSE and other independent sources. MSE cannot be held responsible for its unauthorized copying and distribution. Recipients are respectfully reminded that this report contains potentially sensitive information and should be kept secure.

The conclusions, findings, and opinions expressed in this report are those of the shareholders and management of MSE unless identified as those of other parties. This report has been produced for the purpose outlined above and its interpretation, use or application for other purposes imposes no obligations on the shareholders and management of MSE. MSE confirms that this report is neither a Memorandum of Information, nor a Prospectus nor any other kind of (private or public) Offering Document.

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# Glossary

<b>AYT</b>	Advanced Yield Trial	<b>NOPAT</b>	Net Operating Profit After Tax
<b>CAGR</b>	Compound Annual Growth Rate	<b>p.a.</b>	Per annum
<b>Capex</b>	Capital Expenditure	<b>PC</b>	Plant Cane
<b>EBIT</b>	Earnings Before Interest and Tax	<b>PYT</b>	Preliminary Yield Trial
<b>EBITDA</b>	Earnings Before Interest Tax Depreciation and Amortization	<b>RI</b>	Ratoon One
<b>FY</b>	Financial Year	<b>SRI</b>	Sugarcane Research Institute
<b>FYDP</b>	Five Year Development Plan	<b>TBS</b>	Tanzania Bureau of Standards
<b>GDP</b>	Gross Domestic Product	<b>TDV</b>	Tanzania Development Vision 2025
<b>Government</b>	Government of Tanzania	<b>TCH</b>	Tonnes Crushed per Hour
<b>Ha</b>	Hectare	<b>TFDA</b>	Tanzania Food and Drugs Authority
<b>Kg</b>	Kilogram	<b>TIC</b>	Tanzania Investment centre
<b>Management</b>	MSE's Management	<b>TOSCI</b>	Tanzania Official Seed Certification Institute
<b>MSE</b>	Mtibwa Sugar Estates Limited	<b>Tzs</b>	Tanzania Shillings
<b>MT</b>	Metric Tons	<b>USD</b>	United States Dollars
<b>NPT</b>	National Performance Trial		
<b>NBS</b>	National Bureau of Statistics		
<b>NIP</b>	National Irrigation Policy (2009)		
<b>NIMP</b>	National Irrigation Master Plan (2002)		
<b>NISC</b>	National Investment Steering Committee		

# Executive Summary

# Executive Summary (1/2)

**Mtibwa Sugar Estates, privatized in 1999, is among a few success stories resulting from Tanzania privatization policy.**

**Subsequent to the privatization and following an investment in excess of USD 125 million, the company increased its sugar production from pre privatization levels of 19,200 tonnes per year to levels of as high as 50,000 tonnes per year.**

**In the period prior to 2017, a series of events led to the price of sugar declining below MSE's cost of production. In an effort to minimize losses, MSE was forced to reduce sugar production at their estate.**

**MSE's leadership team has developed a turnaround strategy that focuses on; -**

- **Effective water resource management**
- **More efficient utilization of inputs to improve yields.**
- **And implementing best practices throughout the organization**

## Overview

- Mtibwa Sugar Estates Limited ("MSE") is one of the top four (4) sugar producers in Tanzania. MSE, privatized back in 1999, is one of the few successful stories emanating from the Tanzania privatization policy. Subsequent to the privatization and following an investment in excess of USD 125 million, the company managed to increase its sugar production substantially, peaking at 50,000 tonnes in 2006. In addition, during the same period; MSE managed to cultivate the entire 5,000 Ha estate, supported out growers' cane production to levels of over 200,000 tonnes per annum, rehabilitated and modernized the factory; and acquired additional land in Dakawa to increase the company's potential sugar cane cultivation to 20,000 Ha (hereafter referred to as "the Dakawa expansion project").
- However, in the period between 2013 and 2017, MSE faced multiple challenges triggering a series of events that eventually led to MSE's sugar production dropping to levels of 15,400 tonnes in 2016:
  - a) In the period prior to 2017, Tanzania's local sugar market was exposed to unlicensed, subsidized and thus cheap sugar imports. This resulted in an extremely challenging environment for local sugar producers as the price of sugar was driven below the cost of production for local producers. MSE's proximity to the port in Dar Es Salaam, made the company especially vulnerable to the imported sugar. Consequently, MSE experienced consecutive losses and deteriorating cash flows during the period between 2013 to 2017. This resulted in the Dakawa expansion project being halted and sugar production reduced to minimize the impact of falling prices.
  - b) The decline in sugar production was exacerbated by an increasing number of out growers who lost confidence in the company and opted to cultivate more profitable crops in place of sugar.
  - c) The difficulties were compounded by a natural ecological feature of Mtibwa, which is the skewed rainfall distribution. Mtibwa receives little or no rain for seven to eight months of the year while it experiences heavy rains between March to June. The lack of enough water dams meant that MSE could not store excess water during rainy seasons and thus experienced water shortages during dry seasons; further impacting sugar production.
  - d) Finally, as a result of the above challenges, financial institutions lost confidence in the sugar sector in general and the company in particular; and as a consequence of this, withdrew financial support to the company.
- To combat the situation, MSE's leadership team has developed a turnaround strategy that is centered around more efficient water resource management. The strategy includes constructing the largest dam in East Africa, bringing in a new management team, incorporating best practices throughout the organization, building strong values for the organization, placing more investment towards developing and upskilling its workforce; and kick-starting the Dakawa expansion project. Implementation of the turnaround strategy will require a total funding of approximately USD100 million over the next ten years.

# Executive Summary (2/2)

Support from the Government will assist MSE achieve its growth targets and increase overall sugar production for the country.

## Overview (Continued)

- It is worth pointing out and acknowledging that the primary driver of MSE's turnaround strategy is the resolve and bold actions of the sixth-phased government of the United Republic of Tanzania, under the leadership of her excellency President Samia Suluhu Hassan to transform the Tanzania economy through supporting local industries development. It is the unwavering support that MSE and similar industries are receiving from the sixth-phased government that has reinstated confidence of all stakeholders in the sugar sector. The Government, whose vision is to see Tanzania become a net sugar exporter, is actively supporting sugar producers by creating a conducive environment to allow more investments in the sugar sector. In view of this, MSE has responded with an aggressive but attainable turnaround strategy. Early results indicate the strategy is paying off as we are also slowly beginning to observe more out growers returning to the sugar sector and more financial institutions willing to engage with the sugar producers.

## Purpose of the report

- The purpose of this report is to request the Government to grant a special strategic investor status to MSE. The award of the status will immensely support the company in the execution of its turnaround strategy.
- MSE has prepared this comprehensive report that details the company's prior successes, elaborates on the challenges faced and lays the blueprint for its turnaround strategy for the purpose of supporting the National Investment Steering Committee ("NISC") in its evaluation process of this application.

# Company Overview

# Company Overview

Prior to privatization in 1999, MSE's operations were unprofitable due to numerous inefficiencies and overall organizational slack.

In 1999, the new owners and management team of MSE embarked on a USD 65 Million major rehabilitation program. The program, which was immensely successful, resulted to production levels increasing by two-fold.

In the period between 2013 and 2017, MSE was faced with various challenges that led to a reduction of production level. Main challenge being the illegal sugar imports.

On the back of a strong support from the fifth-phased Government, MSE's leadership has begun implementing a turnaround strategy that has already shown good signs of success.

## Overview

Mtibwa Sugar Estates Limited ("MSE") is a sugar producing company founded in 1962. The company was privatized in 1999 with the objective of eliminating organizational slack, improving productivity and efficiency as well as boosting employment in the region.

### Pre privatization

- Prior to privatization, MSE was performing at 60% below its operating capacity level of 32,000 tonnes. As a result, the company incurred consecutive losses year on year with limited upside potential.
- Deteriorating cash flows led to the company struggling to keep up with maintenance expenses and key equipment replacements. Consequently, the factory became worn out and machines were often out of order. Additionally, out growers began experiencing regular delays in their payments.
- MSE's operating environment is naturally dry and the lack of cashflows meant that modern irrigation equipment was generally scarce. Yield levels were also on the lower side of 40 tonnes per hectare and the factory was crushing c. 105 tonnes per hour. These factors culminated in production of approximately 19,200 tonnes of sugar per season against a capacity of 32,000 tonnes.

### Post Privatization

- In 1999, the new owners and management team of MSE embarked in a major rehabilitation program. Substantial investment was placed in factory machinery, cane fields and transportation equipment. Approximately USD 65 million was invested between 1999 and 2009; and this

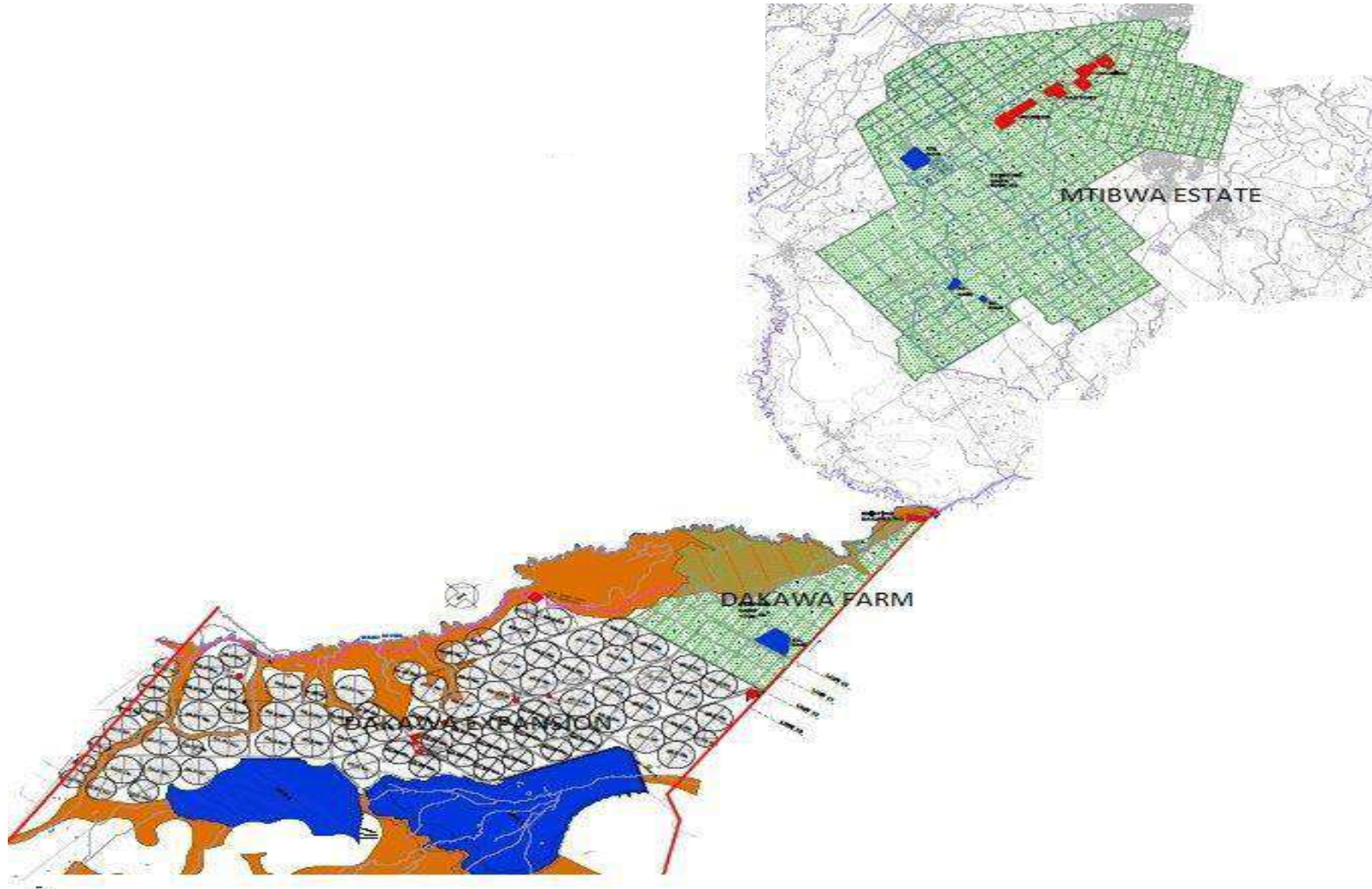
resulted in production increasing two fold.

### Post Privatization (Continued)

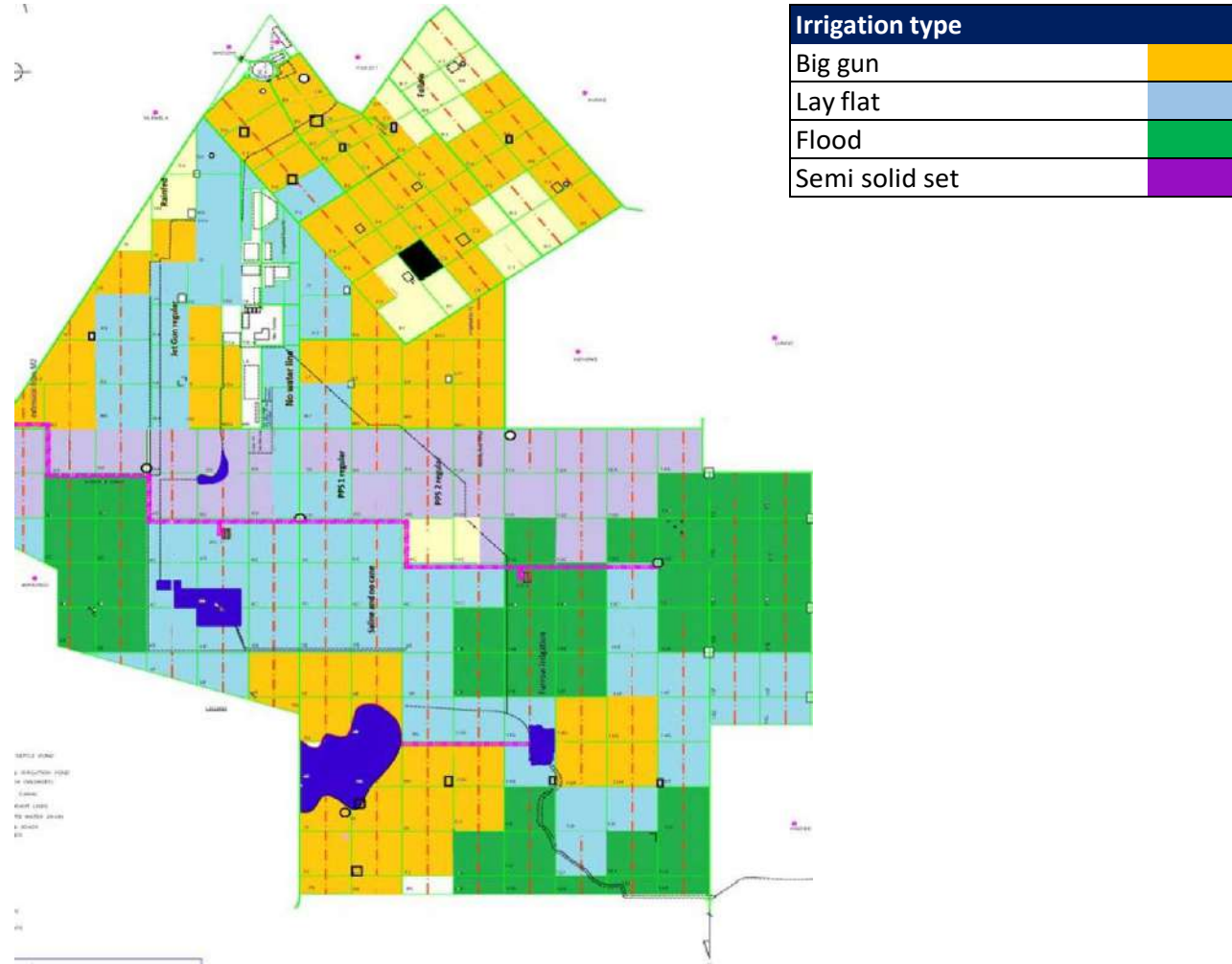
- During the 10 year period to 2009, modern agricultural practices were introduced and the company's irrigation infrastructure was upgraded. Land under cane production was increased to 5,000 Ha from a position of 2,400 Ha. The investment program was extended post 2009 and this resulted to sugar production peaking at levels as high as 50,000 tonnes.
- Various challenges started to emerge in the period between 2013 and 2017, mainly;
  1. Illegal imports of sugar led to MSE's sugar being sold at prices below production costs;
  2. Out growers opted to cultivate profitable crops instead of cane;
  3. Lack of sizeable water dams to store excess water during rainy seasons meant the company was left with inadequate water supply during dry seasons.
- Consequently, MSE experienced consecutive losses and deteriorating cash flows during the period between 2013 to 2017.
- In late 2016, management introduced a turnaround strategy to improve performance of MSE. The latest financial reports capture improvements in company's financial operations and performance.
- Further; MSE and other sugar producers have received significant support from the 5<sup>th</sup> Phase Government that has reinstated confidence back in the sugar sector. The Government, whose vision is to see Tanzania become a net sugar exporter, supporting sugar producers by creating a conducive environment to allow more investments in the

sector.

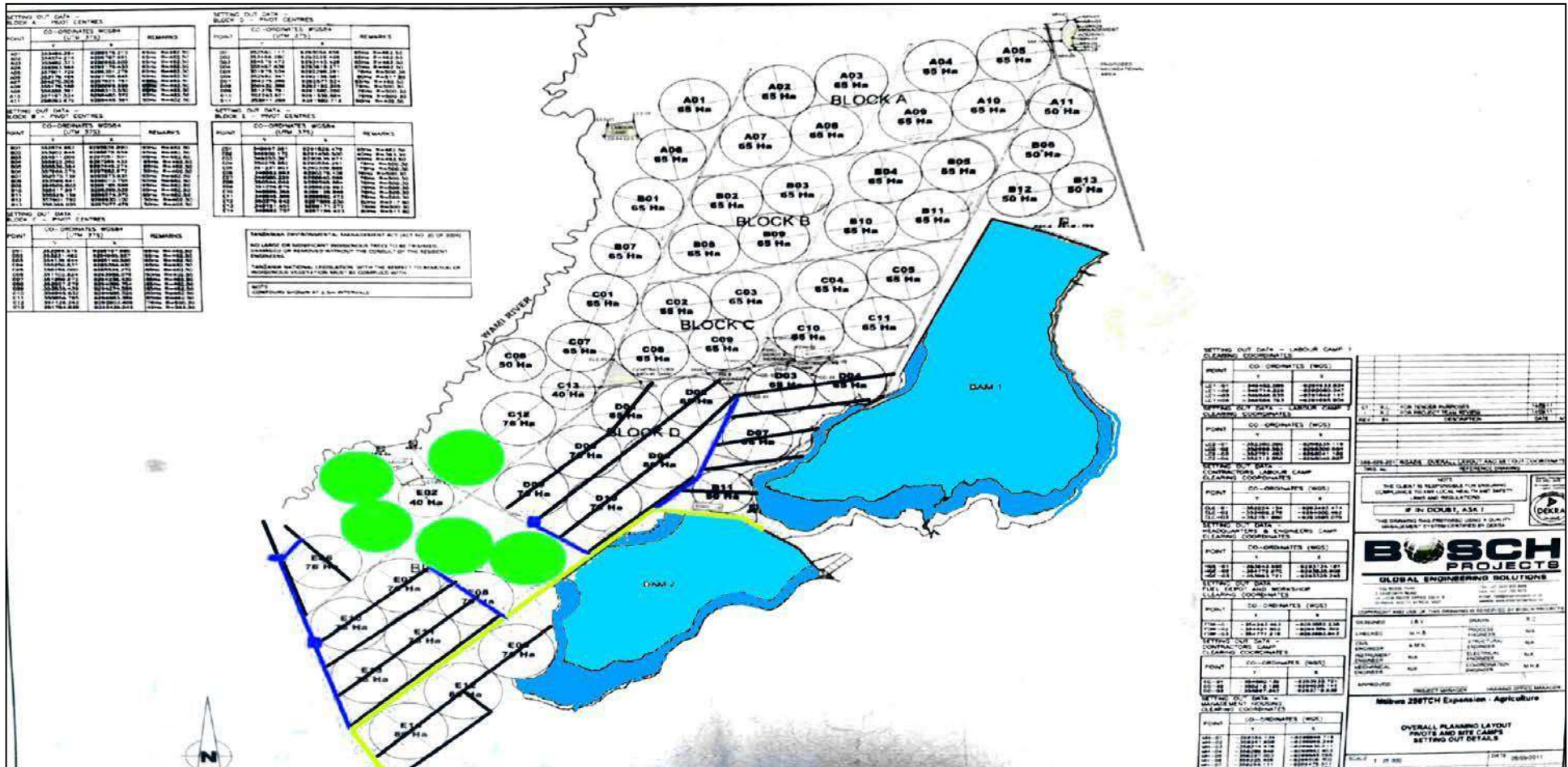
# Company overview - Map of MSE's estates



# Company overview - Map of Mtibwa estate



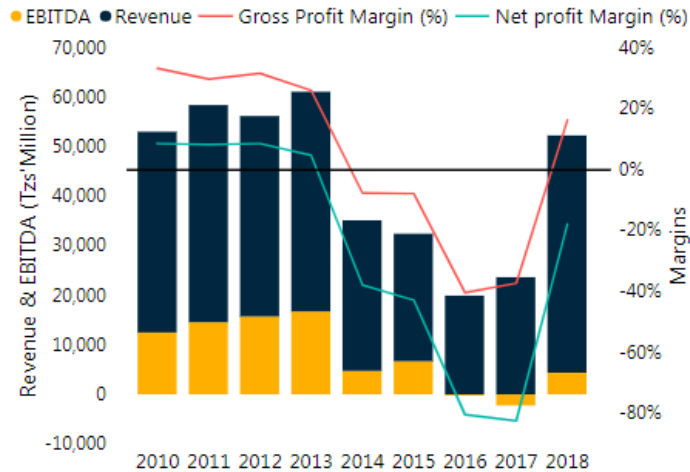
# Company overview - Map of Dakawa estate



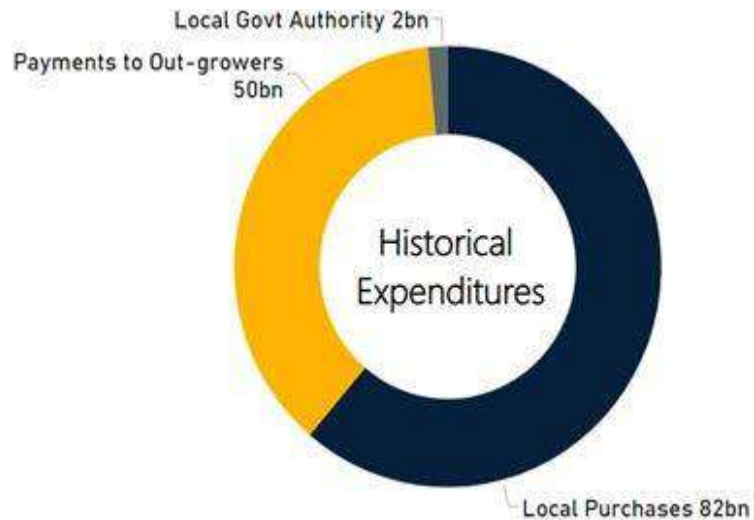
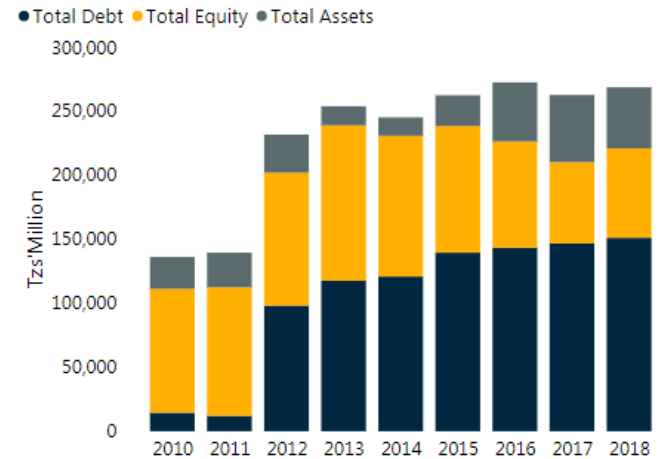
# Historical Achievements

# Summary Performance

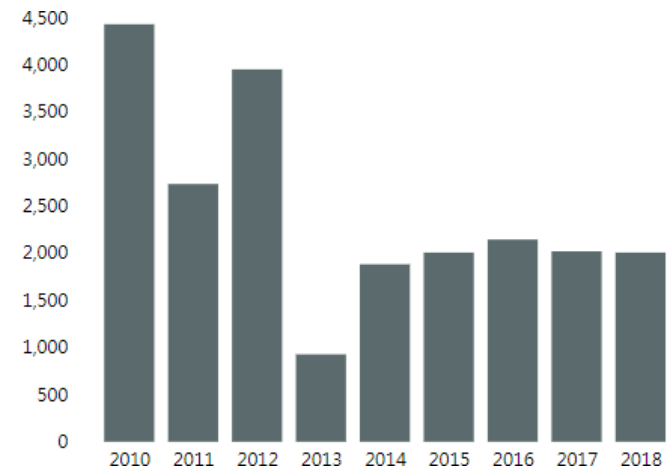
Summary Financial Performance



Summary Financial Position



Employees per annum



# Summary Achievements (1/3)

MSE has spent over USD 125 million over the past decade towards revamping their factory, upgrading their machinery and; installing irrigation and road infrastructure.

## Summary of key achievements:

- Area under cane stands at 5,428 Ha from 1999 position of 2,400 Ha.
- MSE has modernized its factory, machinery and sugar cane irrigation scheme.
- The company has spent significant amounts to modernise and improve the irrigation infrastructure.
- Average yields have improved from an average of 40 tonnes of cane per Ha to as high as 76.6 tonnes per Ha.

## Overview

- MSE has spent over USD 125 million over the past two decade towards revamping their factory, upgrading their machinery and; installing irrigation and road infrastructure.
- Set out below is a summary of MSE's key historical achievements:

## Sugarcane estates and irrigation scheme

- In the period between 1999 and 2019, MSE has made significant investments to increase the area under cane production in the estates and in out-grower areas as well as modernizing the sugar cane irrigation scheme.
- Area under cane production has expanded each year, from 2,400 Ha to about 5,428 Ha at Mtibwa and Dakawa.
- Total cane harvested from out-grower farmers has also increased significantly, peaking at 200,000 tonnes of cane. A total of TZS 49.9 billion was paid to out-grower farmers in the period between 2009 to 2018.
- During the period, MSE has invested significantly in irrigation infrastructure and technologies at the estate. The company introduced flood irrigation system using Siphon and lay flat technologies. The company has also invested in Big Gun@ Sprinklers and semi solid set irrigation systems. Currently, MSE has a total of 5 centre pivots at Dakawa land the plans is to add an additional 20 in the same area.
- By investing in irrigation, MSE has increased yields to as high as 76.6 tonnes of cane per hectare from a pre privatisation average of 40 tonnes of cane per hectare.



*Field of twin row planted cane*



*A centre pivot on one of the farms in Dakawa I estate.*

# Summary Achievements (2/3)

## Summary of key achievements (Continued):

- In 2017, MSE constructed a 2 Million cubic water dam, the 7H Dam. In the dry months, the dam extends supply of water from the canal to the central and south farms.
- In March 2019, MSE completed the construction of a 5.0 Million cubic meter water dam, the B4 Dam. The dam will supply water to all the cane fields on the Dakawa 1 farm.
- Recently, MSE has completed construction of a 0.5 Million cubic meter water dam, the J4 Dam. The dam will provide additional water to the drier North farm of MSE's Mtibwa estate.

## Overview

- Mtibwa estate receives seasonal rainfall predominantly in the months of March to June. Outside of this period, there is very little or no rainfall at all. If left to natural rain, the sugarcane crop cannot survive. It is therefore critical, at both Mtibwa and Dakawa, that off-peak water storage capacity is constructed to allow sugarcane to receive sufficient water throughout the year. The following initiatives have been implemented to achieve these goals:

### The 7H Dam

- The 7H Dam, with capacity to store 2.0 Million cubic meters, was constructed at the estate in 2017. In the dry months, the dam extends the supply of water from the canal to the central and south farms (refer to the MSE estate farm on page 10). Water from this dam feeds the cane fields by gravity thereby saving considerable pumping costs.

### The B4 Dam on Dakawa 1 farm

- The construction of a 5.0 Million cubic meter capacity dam, known as the B4 Dam was completed in March 2019. The B4 dam is set next to the Wami River on Dakawa 1 farm. Construction of a 2.5km wall and a 5.0 km flood protection dyke was successfully completed using in-house equipment. This dam will ensure that all the cane lands on the Dakawa 1 farm receive their full water requirements.

### The J4 dam on Mtibwa

- In October 2019, a third water dam (J4 Dam) was completed. The dam will be receiving water from the Diwale River. The Dam has capacity to store 0.5 Million cubic water. This dam will allow additional water to be pumped to the drier North farm of MSE's estate.



*The 7 H storage dam at MSE.*



*The B4 dam on Dakawa 1 farm at MSE.*

# Summary Achievements (3/3)

## Summary of key achievements (Continued):

- The factory's milling capacity, measured by Tonnes of Cane crushed per Hour ("TCH"), increased from pre-privatisation levels of 105 TCH to the current capacity of 128 TCH.
- MSE's sugar production has increased from pre-privatisation levels of 19,200 tonnes per annum of sugar to levels of as high as 50,000 tonnes of sugar.

In the past decade, MSE has paid over;

- TZS 2.0 billion to local government authorities
- TZS 81.8 billion in local purchases
- TZS 49.9 billion to out growers
- and TZS 560 million towards staff welfare.

Furthermore, MSE has contributed towards road infrastructure and provided healthcare to staff members as well as the local community.

improving, indicated by growth in gross profit margins.

## Increasing sugar production and efficiency

- In the period between 1999 and 2019, MSE made significant investments to increase the capacity and efficiency of its sugar production factory.
- MSE managed to increase its factory's milling capacity, measured by Tonnes of Cane crushed per Hour ("TCH"), from pre-privatisation levels of 105 TCH to current capacity of 128 TCH.
- Actual sugar production increased from pre-privatisation levels of 19,200 tonnes of sugar to levels of as high as 50,000 tonnes of sugar.

## The Dakawa expansion project

- MSE acquired additional land in Dakawa region, increasing the company's potential sugar cane cultivation to 20,000 Ha from 5,000Ha.

## Other achievements

- MSE has to date invested a total of USD 5 million on road infrastructure at the estate that currently stands at 1,000 Kilometres. This investment is ongoing as MSE has to maintain these roads.
- MSE has also shown commitment to its community and staff members welfare by spending over TZS 4.0 billion over the last decade. Specifically, during the same period, the company has settled a total of TZS 583 million relating to hospital expenditures.
- In addition, approximately TZS 2 billion has been paid to Local Government Authorities during the period between 2010 to 2018.



# Cane Plantation (1/2)

Agriculture is a very long term investment by its nature and requires very heavy investment at the beginning.

Key operational steps undertaken by MSE to fully develop one hectare of cane plantation.

1. Bush clearing
2. Rough Levelling
3. Ripping
4. First plough, second plough and third plough
5. Scraping and Levelling
6. Ripping



*Step 1: Initial clearing of shrubs and trees on an undeveloped land*



*Step 2/3: A second clearing process to knock down the anthills, Ripping and initial levelling of the land*



*Step 4: Ploughing (3 operations) to loosen up top layer of soil*



*Step 5/6: GPS controlled machine tractors and scrapers levelling the land, followed by ripping operation*

# Cane Plantation (2/2)

Key operational steps undertaken by MSE to fully develop one hectare of cane plantation.

- 7. Excavation of drains
- 8. Harrowing
- 9. Ridging
- 10. Planting



Step 7: Installation of main water pipelines.



Step 8: MSE's tractors carrying out harrowing operations.



Step 9: Cane fields are ridged with ridging tractors to prepare for Cane planting process.



Step 10: Planting of cane.

# Cane Varieties Development (1/2)

Development of new sugarcane varieties is a key and long-term undertaking for the sustainability of the sugar industry.

Variety evaluations takes up to 12 years from commencement to commercialization.

MSE is committed to research and development of new sugarcane varieties.

MSE has spent over TZS 2 billion in conducting trials / evaluations of new sugar cane varieties.

Over the next 12 years, MSE expects to spend TZS 10 billion in research and development of new sugar cane varieties

## Overview

- MSE recognizes that development of sugarcane varieties plays a vital role in the economic viability and sustainability of the sugar industry. MSE has invested heavily in research, development and evaluation of new sugar cane varieties for commercialization.
- MSE has invested about TZS 2.04 billion since 2012/13 on the evaluation and selection of new sugar cane varieties for commercialization.
- Conducting sugarcane variety evaluation is a highly scientific process that is regulated by the Ministry of Agriculture through the Sugarcane Research Institute (“SRI”).
- The objective of trials is to obtain varieties with high cane and sugar yields, good ratooning ability and resistance to smut and other diseases. Sugar cane varieties evaluations takes up to twelve (12) years before a variety is ready for commercialization.

## Summary procedures

### *Preliminary Yield Trial – I (PYT I)*

- A trial with two replications in high/medium potential fields under irrigation. This is done in Kilombero under the supervision of SRI. Assessments made on plant cane (“PC”) and the first ratoon (RI) will determine whether to move varieties to the next stage.

### *Smut Screening Nursery*

- This is carried out along with PYT I. Varieties are planted in the smut screening nursery (three replicants). Assessments are done on PC up to RII. Depending on data and results, varieties will either be dropped or proceed for further tests and selection.

## Summary procedures (continued)

### *Preliminary Yield Trial – II (PYT II)*

- Varieties selected from PYT I and the smut nursery are advanced to PYT II. Replicated experiments planted in two sites with high and medium/low potential are carried out. Assessments are done on PC, RI and RII. Data is obtained and promising varieties are moved to the next stage.

### *Advanced Yield Trial – I (AYT I)*

- Varieties selected from PYT II are planted in replicated trials over four sites representing the soil types at the estates. Assessments are done on PC and RI and later ratoons. Data is obtained and promising varieties are selected for the final stage of evaluation.

### *Advanced Yield Trial – II (AYT II)*

- This stage is to expose varieties from AYT II to more diverse conditions in the estates to further assess adaptability and resilience under various soil conditions.

### *National Performance Trial (NPT)*

- This stage is carried out to meet the requirements of the Seed Regulations (2007). An independent trial is carried out by the Tanzania Official Seed Certification Institute (TOSCI). A Distinctiveness, Uniformity and Stability test of the variety is also carried out by TOSCI.
- The cost of the trials is borne by the company (i.e. MSE). Additionally, estate agronomists employed by MSE are required to, on a day-to-day basis, supervise trials, collect data and assist in laboratory analysis.

# Cane Varieties Development (2/2)

Development of new sugarcane varieties is a key and long-term undertaking for the sustainability of the sugar industry.



*Different Cane varieties on display.*



*One of the most promising varieties R579*

# Irrigation Infrastructure (1/3)

MSE has spent significant part of its investment towards installing underground irrigation infrastructure and state of the art irrigation technologies.



*Installation of water pipes as part of the irrigation infrastructure.*



*Water pipes as part of the irrigation infrastructure*



*Installation of water pipes as part of the irrigation infrastructure.*



*Water pipes as part of the irrigation infrastructure*

# Irrigation Infrastructure (2/3)

MSE has spent significant part of its investment towards installing irrigation infrastructure and installing state of the art irrigation technologies.



*Installation of centre pivot irrigation structure.*



*One of MSE's centre pivot irrigation structure at work.*



*New lay flat irrigation system at work.*



*Some of the Big Gun® Sprinklers at MSE.*

# Irrigation Infrastructure (3/3)

One of many pump stations installed as part of the irrigation infrastructure at MSE estate.



# MSE's Cane Fields

MSE has some of the most productive cane fields in Tanzania. Together with the excellent sunshine days and abundant water, this estate is one of the most suitable for the production of sugarcane in East Africa



*Twin row plant cane*



*Twin row plant cane*



*MSE's healthy cane fields*



*MSE's healthy cane fields.*

# Heavy duty vehicles & Equipment (1/3)

MSE has incurred substantial capital expenditure procuring modern heavy duty equipment such as bulldozers, excavators, tractors, tippers, cranes etc.



# Heavy duty vehicles & Equipment (2/3)

MSE has incurred substantial capital expenditure procuring modern heavy duty equipment such as bulldozers, excavators, tractors, tippers, cranes etc.



# Heavy duty vehicles & Equipment (3/3)

MSE has incurred substantial capital expenditure procuring modern heavy duty equipment such as bulldozers, excavators, tractors, tippers, cranes etc.



# Power Infrastructure

Significant investments has also been spent on developing a reliable power infrastructure.

It was necessary to construct power reticulation grid from the Morogoro main power station to the mill. In this regard, MSE incurred a significant capital expenditure on 33kVA power lines covering a total distance of 82KM.

Acquisition and construction of reticulation grid (poles, transformers, isolators and fuses) was done by MSE.



*MSE has installed power infrastructure at the estate.*



*Part of the power infrastructure installed by MSE.*



*Power equipment at MSE*



*New 15 MW TA generating set at MSE.*

# Bridge over River Wami (1/2)

One of the main challenges MSE faced for many years is the lack of a bridge over the River Wami. River Wami separates the two main areas within the MSE's estates i.e. Mtibwa and Dakawa.

On average, Mtibwa area receives rainfall for four months in a year. With the lack of bridge and the frequent occurrence of flood, it was challenging for MSE to conduct business activities across the River Wami.

Due to the above, MSE decided to first build a temporary bridge over the River Wami.

Subsequently, with support from the Government, the company completed a permanent bridge over the River Wami.



*Crossing River Wami prior to construction of a bridge.*



*Crossing the River Wami prior to construction of a bridge was a major challenge.*



*At times it was necessary to cross by locally build bark boats.*



*Temporary bridge installed over the River Wami*

# Bridge over River Wami (2/2)

MSE incurred significant amounts of capital and time to construct temporary and permanent bridges.



*New bridge under construction.*



*New bridge under construction.*



*New bridge under construction.*



*New bridge over the River Wami*

# Road Infrastructure (1/2)

MSE inherited a sugar estate with minimal road infrastructure developed on it.

Harvested cane is required to reach the mill within twenty four (24) hours. Management had to invest on a road infrastructure that has now reached approximately 1,000 Kilometres.

MSE has invested heavily in developing road infrastructure at the estates. It was a necessary investment to ensure ease of access to different parts of the estates throughout the different seasons during the year.

This investment is ongoing as MSE has to maintain these roads.



*State of the roads after heavy rains.*



*MSE faced challenges using the existing road network especially during rainy seasons.*



*One of the roads constructed by MSE.*



*One of the roads constructed by MSE.*

# Road Infrastructure (2/2)

MSE has incurred significant capital expenditure in developing a reliable road network at the estates.

Some of the roads constructed by MSE



# Administration Buildings

MSE is committed to developing a competent workforce at all levels of the company.

In response to this commitment, substantial investment has been spent to refurbish the training centre at MSE estate.



*MSE's old training centre.*



*The new training centre at MSE.*



*The old look of some of houses at the MSE estate.*



*One of the refurbished houses at the MSE estate.*

# Community Welfare

MSE invests in policies that ensure a healthy and mutually prosperous relationship between the company and its community.

A few of these policies include the provision of free education and healthcare, prioritizing local purchases, investment in infrastructure as well as working closely with local government authorities, boosting local employment and preserving the environment.



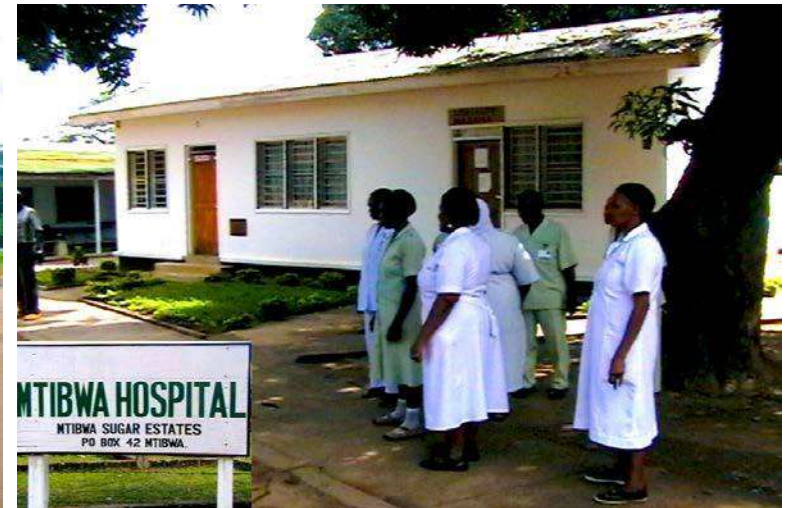
*MSE fully funds Mtibwa Sugar Sports Club*



*Local maize grinding facility for the local community.*



*One of the schools funded by MSE.*



*Mtibwa Hospital is fully funded by MSE.*

# Challenges

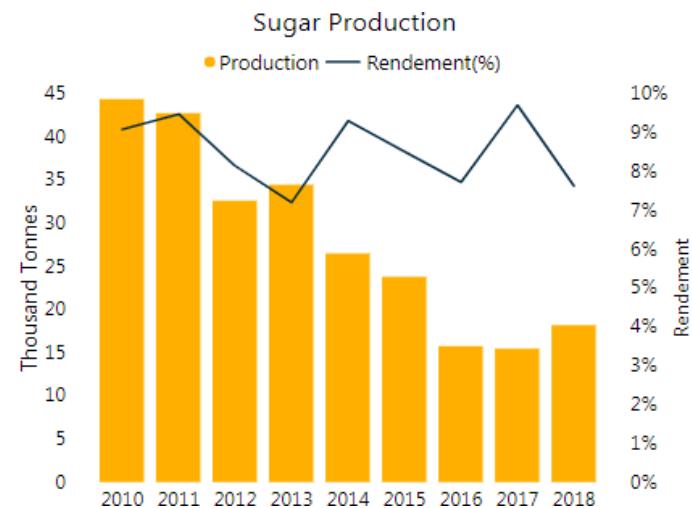
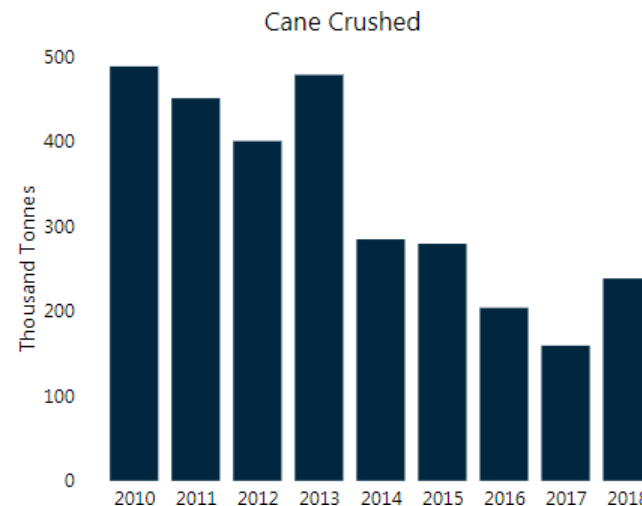
# Challenges (1/2)

Due to MSE's proximity to the port in Dar Es Salaam, the company was forced to bear the brunt of the market conditions caused by the cheap imported sugar. This created uneven playing field resulting to MSE selling its sugar below its cost of production in the period between during 2013 and 2017.

The problem of illegal sugar imports and flooding of poor quality sugar in the market has largely been brought under the control by the current 5th phase Government.

## Challenges faced by MSE in the period between 2013-2017

- Over the period between 2013 and 2017, MSE has experienced a number of challenges that have prevented the company from implementing successfully the Dakawa expansion project. An unbalanced competitive landscape, loss of confidence by key stakeholders including financial institutions, suppliers and out growers on the company; and inadequate water management infrastructure have all had a detrimental effect on MSE's growth prospects.
- Summary of key challenges faced by the company:
  - a) *Illegal and cheap sugar imports*
    - Tanzania's sugar market experienced an influx of imported sugar in the five year period prior to 2017. A large amount of the imported sugar was unlicensed and subsidized; making it difficult for local producers to compete on an even playing field.
    - Due to MSE's proximity to the port in Dar Es Salaam, the company was forced to bear the brunt of the market conditions caused by the cheap imported sugar. For a long period during 2013 and 2017, the company had to sell its sugar below its cost of production.
    - As a result, MSE sustained consecutive losses and deteriorating operating cash flows. Consequently, expansion projects were halted and sugar production was dialled down to minimise the impact of unprofitably low sugar prices.
    - The problem of illegal sugar imports and flooding of poor quality sugar in the market has largely been brought under the control by the current 5th phase Government.



# Challenges (2/2)

The local sugar market and MSE turbulent performances led to financial institutions, major suppliers and out growers losing confidence in the sector and the company.

- Financial institutions halted the funding and pulled out support on the ongoing projects.
- Out growers shifted away from sugar production and towards more profitable crops.

MSE's woes were compounded by lack of water dams which meant that MSE could not store excess water during rainy seasons and thus experienced water shortages during dry seasons

## b) *Loss of confidence*

### *Financial institutions*

- A combination of these challenges, which resulted in deterioration of MSE's operational and financial position, led to a loss of confidence on the company by the financial institutions. These institutions halted the funding and pulled out support on the ongoing projects.

### *Major suppliers*

- Predominantly the following suppliers are crucial to sustain the business without which the business will be stressed: suppliers of fertilizers for farming operations, supplier of fuel for cane haulage and field operations, supplier of electricity (TANESCO) and spare parts' supplier to keep equipment and vehicles operational. These major suppliers also lost confidence on the company.

### *Out growers*

- The above market challenges had a direct negative impact on not only on MSE but also to the sugar cane out growers. Out growers began losing confidence on MSE due to the deterioration of the company's performance. Consequently, most of the out growers shifted away from sugar production and towards more profitable crops; resulting in MSE's production levels dropping even further.

## c) *Water challenges at MSE's estates*

- The difficulties on MSE were compounded by a natural ecological feature of Mtibwa, which is the skewed rainfall distribution. Mtibwa receives little or no rain for seven to eight months of the year while it experiences heavy rains between March to June. The lack of enough water dams meant that MSE could not store excess water during rainy seasons and thus experienced water shortages during dry seasons; further impacting sugar production.

## d) *Other challenges*

### *Agricultural risks*

- Sugar production business is a long term investment. Investors are expected to initially invest heavily in the infrastructure in and around the sugar estate to create a conducive sugar cane production ecosystem. Over the same time horizon, investors face uncertainties inherent in the form of weather, yields, prices and seasonality which can cause significant uncertainties on investment returns.

### f) *Investment in infrastructure*

- MSE inherited a sugar estate with minimal infrastructure developed on it. Harvested cane is required to reach the mill within twenty four (24) hours. Management had to invest on a road infrastructure that has now reached approximately 1,000 Kilometres. This investment is ongoing as MSE has to maintain these roads.
- Similar to most agriculture activities, sugarcane farming business requires a sophisticated irrigation system which has to be supported with reliable power supply. MSE invested in installation of power distribution infrastructure around the estate.
- It was necessary to construct major electrification infrastructure to support the supply of power from Morogoro main power station to the estate. This included the supply of poles, overhead 33kVA power lines covering a distance of 82KM and isolated transformers. This was a significant investment made by MSE and there is still a substantial amount that is being spent towards this area to ensure a reliable power supply to the estates.

# Turnaround Strategy

# Turnaround Strategy (1/5)

MSE will invest USD 100 million over the next ten years as part of its turnaround strategy to achieve production levels of 100,000 tons of sugar by 2030.

The strategy focuses on;

- Expanding the company's area under cane production
- Increasing production capacity to 230 TCH
- Revamping the management team
- And incorporation of best practises in agriculture and factory production
- Investing in extensive training (skill development and leadership) at all levels of the company

## Overview

- The Fifth Phase Government, led by H.E. President Dr. John Magufuli, has renewed confidence to investors (MSE being one of the major investors) in the country and other key stakeholders in the sugar sector such as financial institutions and out-growers.
- Actions taken by the government to enforce regulations in the sugar sector, control sugar imports and support local production have prompted MSE's leadership to develop and implement a major turnaround strategy that will increase MSE's sugar production to 100,000 tonnes pa.
- MSE's planned capital expenditure program for the next ten years is USD 100 million.

## Dakawa expansion

- Subsequent to a study, in collaboration with the International Development Corporation ("IDC") and CRDB Bank, MSE initiated an expansion of the area under cane in the Dakawa region.
- The project is expected to increase MSE's sugar production to 100,000 tonnes pa by the year 2030.

## New management team

- To improve oversight over MSE's resources, a new management team has been appointed. The overhaul includes replacements in all key management positions, from the agricultural and factory heads to the finance and risk manager roles.
- Mr. Rana has been appointed as CEO of the Sugar Division and tasked with spearheading the turnaround strategy. The management team will be led by Mr. Seif (Group Chairman) and Mr. Rau (General Manager).

## New management team (continued)

- Both Mr. Seif and Mr. Rana have had success in turning around a subsidiary company; Kagera Sugar Limited ("KSL"). Using their combined experience; the two senior officials expect to replicate the success experienced by KSL to MSE.
- A key strategy has been to develop a skills base of employees at MSE. To this end, a total of 100 graduates in both agriculture and factory disciplines, have been recruited. Extensive development of these graduates and other employees, in respect of technical and leadership skills has been a key focus at MSE.
- The new senior management team has placed emphasis on best practises throughout the organisation, better harnessing of inputs to maximise yields and the development of skills for a competent workforce.

## Independent assessment

- MSE commissioned an independent expert (Agricane Consulting, based in South Africa) to provide technical advice for the turnaround strategy. After conducting an agriculture and financial review, the consultant confirmed that MSE's agricultural and financial projections are realistic and achievable.

# Turnaround Strategy (2/5)

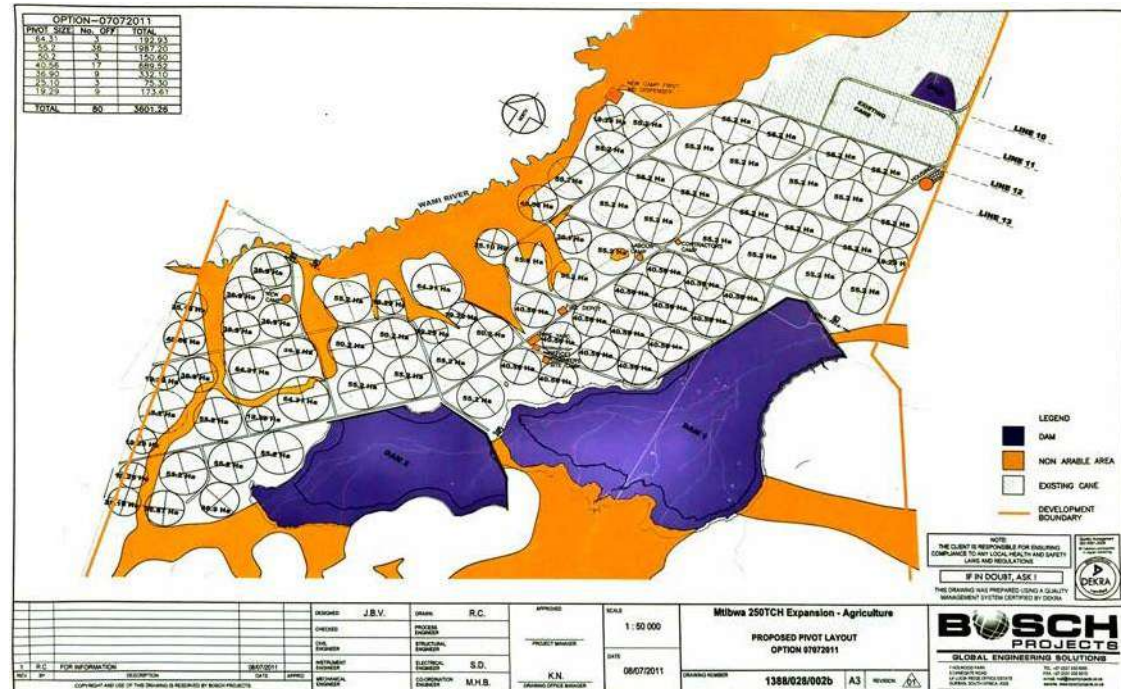
Central to any turnaround strategy is the alignment of all employees to the vision and mission of the company.

## Overview

- Central to any turnaround strategy is the alignment of all employees to the vision and mission of the company. To this end, the mission, vision and core values have been developed and every employee, regardless of his position in the company, has been aligned to these. The core values are the basis and manner in which all business is conducted at MSE.
- Best practice manuals have been developed which support the company's mission.



# Turnaround Strategy (3/5)



## Dakawa Dam 2

completion.

- At the heart of MSE turnaround strategy is the construction and commissioning of the Dakawa Dam 2.
- This dam will store 25,000,000 m<sup>3</sup> and supply it to MSE's cane fields at Dakawa. This in turn will allow development of a centre pivot irrigation system covering 4,000 ha.
- This secured bulk supply of water to the estates will improve water availability from below 40% of crop requirement in 2016/17 to 100% after successful

## Dakawa Dam 2 (Continued)

- This will resolve the great water supply challenge caused by the skewed rainfall distribution i.e. seven to eight months of the year there is little or no rain with very heavy rainfall in the long

rains period from March to June.

# Turnaround Strategy (4/5)

Mtibwa estate receives seasonal rainfall predominantly in the months of March to June. Outside of this period, there is very little or no rainfall at all. If left to natural rain, the sugarcane crop cannot survive. It is therefore critical, at both Mtibwa and Dakawa, that off-peak water storage capacity is constructed to allow sugarcane to receive sufficient water throughout the year.

At the heart of MSE turnaround strategy is the construction and commissioning of the Dakawa Dam 2. Upon completion, the Dakawa Dam 2 will be one of the largest storage dams in Eastern and Central Africa.

This dam will store 25,000,000 m<sup>3</sup> and supply it to MSE's cane fields at Dakawa. This in turn will allow development of a centre pivot irrigation system covering 4,000 ha.



# Turnaround Strategy (5/5)

Construction of Dakawa Dam 2



*Construction of a dam wall*



*Ongoing work at the dam*



*Construction of Dakawa dam 2*

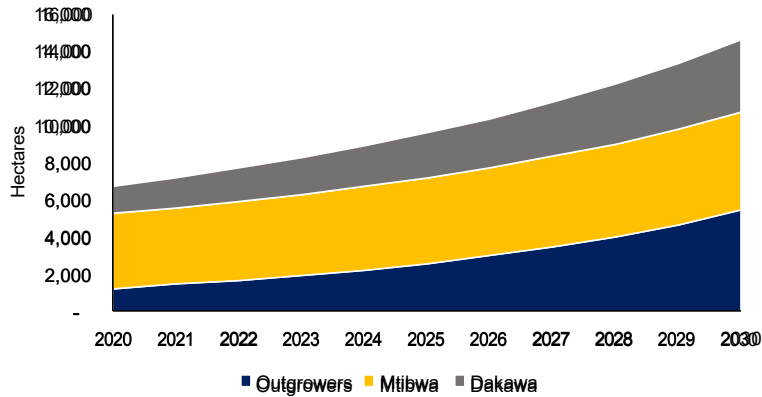


*Building of a pump station at Dakawa*

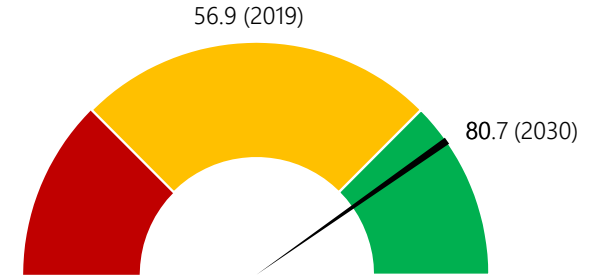
# Future Plans

# The next ten years

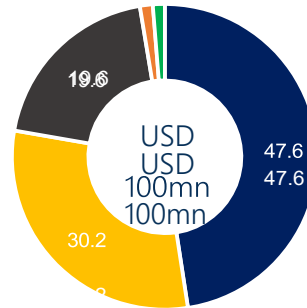
Area under cane production



Estate Yields (tonnes per hectare)



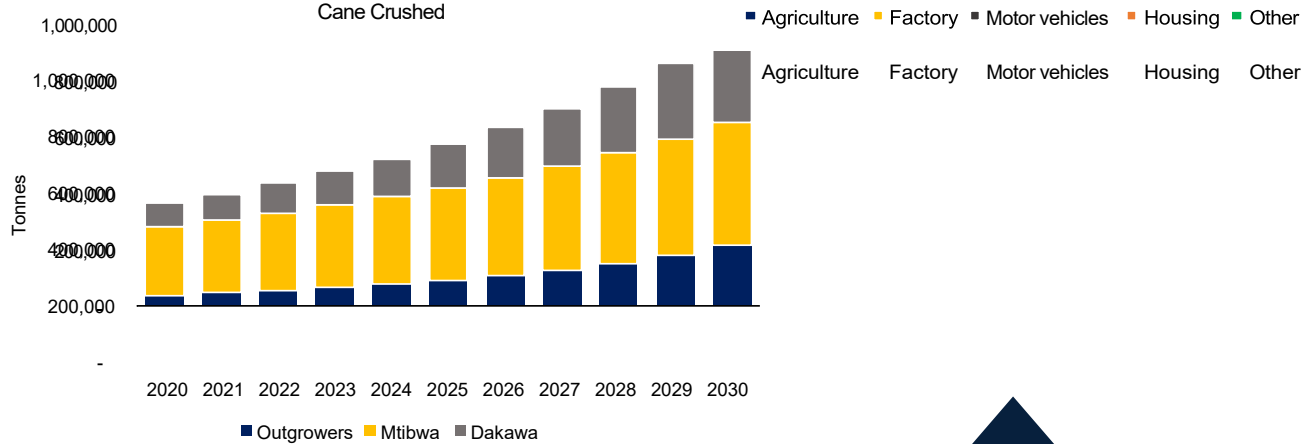
Capital Investment Program (2020-2030)



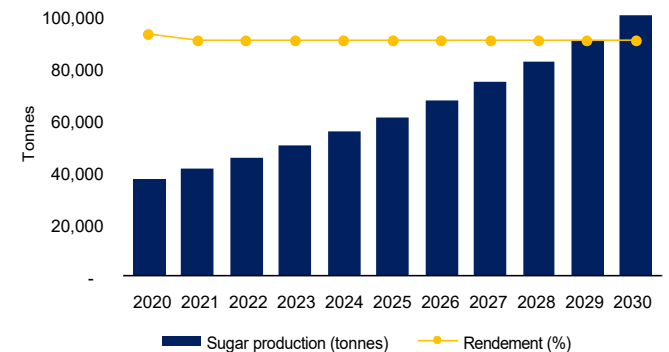
**42%** increase in yields

Cane Crushed

Cane Crushed



Sugar Production



12.0%  
10.0%  
8.0%  
6.0%  
4.0%  
2.0%  
0.0%

# Agricultural Development (1/4)

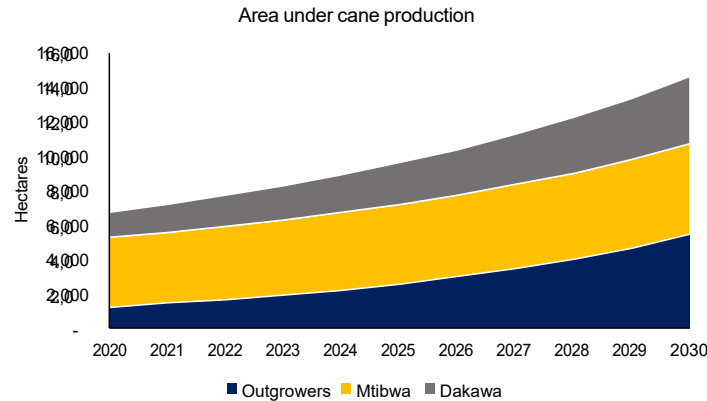
MSE's capital expenditure program for the next ten years is USD 100 million.

The agriculture component of MSE's long-term capital investment is estimated at USD 47.6 million over ten years.

Investments in agriculture are long-term in nature and require stability in policy and a conducive business environment.

To capitalise on Dakawa's substantial area of undeveloped cane potential, MSE will develop an additional 2,500 hectares of land in the Dakawa estate.

Growth in MSE's area under cane production as well as increased yield performance through improved irrigation, will allow MSE to reach sugar production levels of 100,000 tonnes by 2030.



## Estate development

- The positive actions taken by the Fifth Phase Government, under H.E. Dr. John Magufuli have renewed confidence and appetite for long-term capital investment in MSE by its stakeholders.
- MSE has a planned capital expenditure of USD 100 million over the next ten years. Of this, approximately USD 47.6 million will be invested in agriculture, water supply and irrigation.
- By the end of FY19, MSE had planted a total of 5,428 hectares of land; of which 4,505 hectares were from their own estates and 923 hectares from out-growers.
- To capitalise on the region's favourable climate conditions and Dakawa's substantial area of undeveloped cane potential, MSE plans on developing an additional 2,500 hectares of land in the Dakawa estate.

## Estate development (continued)

- By 2030, MSE expects to harvest cane from a combined 14,600 hectares in its own estates and out-grower farmers.

## Irrigation and water supply

- A key factor in the development of sugar cane is the irrigation system. MSE has managed to increase the area developed to flood irrigation from 806 to 2,150 hectares. The flood irrigation has been supplemented by the use of a 7H dam to store water. This measure has substantially improved the availability of water at Mtibwa South.
- To enable continued growth in MSE's area under cane development and sustain efforts to improve yield performance through better irrigation techniques, MSE plans on investing in the construction of a second dam ("Dakawa Dam 2") in the Dakawa region.
- The new dam will support additional investment in 31 centre pivot systems capable of irrigating around 2,200 hectares of cane.

## World-class farming best practice.

- In addition, MSE has began employing more effective agricultural techniques. One of which is utilising the twin rows planting approach. This method increases the rows per hectare by and allows more sunlight into the crop; thus, improving overall yields by 15-20%.
- The aforementioned measures are expected to culminate into an increased area under cane production; reaching 14,600 hectares by 2030. This in effect, will bring up the tonnes of cane crushed from 300,225 in 2019 to over 1,000,000 by 2030.

# Agricultural Development (2/4)

Through the application of best practise, MSE's will generate more cane per hectare.

Benefits of twin rows include:

- Increase in number of rows per ha.
- More sun light into the crop
- Higher yield achieved (15-20%).



*Single row system*



*World class twin rows system*



*Photo: Unhealthy cane farm*



*Photo: Healthy cane farm irrigated by existing centre pivots*

# Agricultural Development (3/4)

MSE will employ a variety of irrigation methods over the next ten years. However, a significant portion of the farm land at Dakawa will be irrigated by overhead centre pivot systems.



*Overhead centre pivot system*



*Overhead centre pivot system*



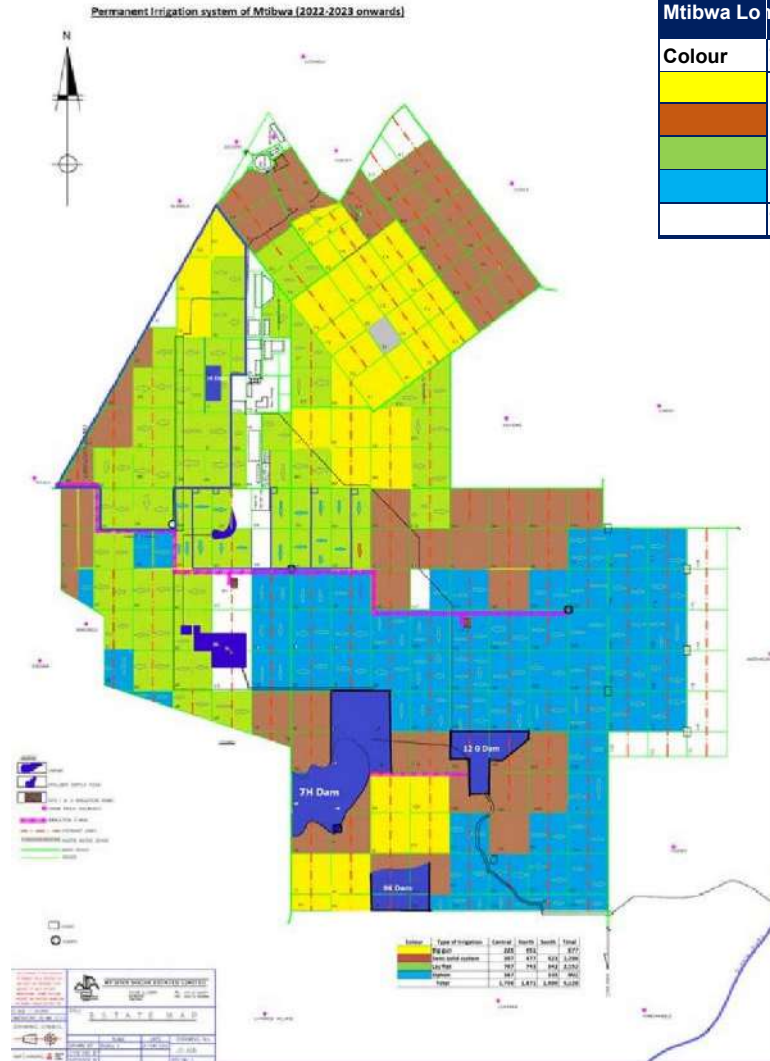
*Flood irrigation*



*Lay-flat irrigation*

# Agricultural Development (4/4)

The map presents the permanent irrigation systems at Mtibwa Estate.



Mtibwa Long Term Irrigation Plan (Hectares)					
Colour	Type	Central	North	South	Total
Yellow	Big gun	226	651	-	877
Brown	Semi solid system	397	477	423	1,297
Green	Lay flat	767	743	642	2,152
Blue	Siphon	367	-	535	902
<b>Total</b>		<b>1,757</b>	<b>1,871</b>	<b>1,600</b>	<b>5,228</b>

# Out-grower Program (1/3)

MSE is committed to revive and support the out-grower program using its own resources and in partnership with local financial institutions.

The injection of capital from financial institutions will allow the area harvested by out growers to increase to 5,400 hectares by 2030.

By 2030, out grower farmers will supply 216,000 tonnes of cane to MSE.

## Out-grower program

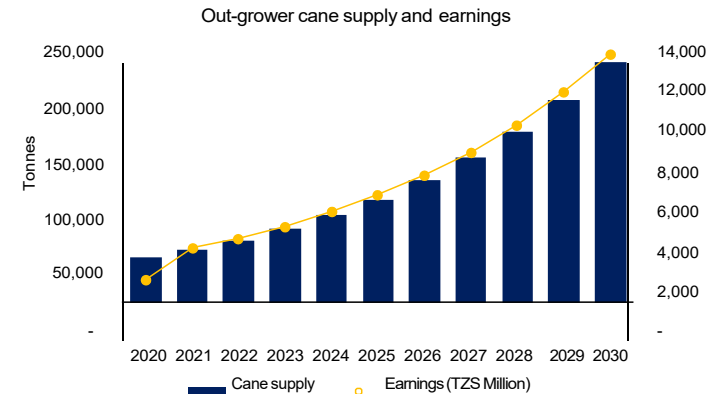
- Due to the operational and financial challenges faced by MSE, following the excessive dumping of cheap imported sugar in the local market, the network of out-grower farmers lost confidence in the sugar sector, opting to switch to other cash crops. This reduced the cane supply from out-growers significantly.
- A steady supply of out-grower cane is critical to MSE as around 35% of total cane crush over the last ten years was secured from out-grower farmers.
- MSE is on track to revive the out-grower program. With financial support from Tanzania Agricultural Development Bank (“TADB”) provided to out growers through MSE, the area harvested by out growers is estimated to reach 5,400 hectares by 2030.

## Technical support to out-growers

- MSE has established a dedicated out-grower extension department, with qualified agricultural staff to provide extension services to out-grower farmers.
- In addition, MSE will supply appropriate farming equipment such as tractors to out-growers, as well as post harvest operations (PHO) activities.
- This is expected to increased the yield from the current 37 tons / ha to around 50 tons per ha by 2030.
- Providing quality seed cane.
- Ongoing technical support.

## Financial support to out-growers

- MSE will partner with a financial institution to ensure out-grower farmers have the financial support required to deliver quality cane.
- A legally binding agreement will be signed between MSE, the financial institution and the out-grower farmers. Loans will be granted directly to out-grower farmers by the bank.
- MSE will facilitate purchase of all the cane from out-growers and the loans provided by the bank. MSE has now appointed staff to take care of contracting and bank loan repayment.
- Loan repayments will be by way of cession against cane proceeds. These deductions will be done over four crop cycles (i.e PI, R1, R2 and R3).



# Out-grower Program (2/3)

Out-growers will supply over 216,000 tonnes of cane to MSE by 2030. This will earn them over TZS 14.0 billion annually in income.



*Photo: Out-grower farmers attending a session at MSE offices.*

## MSE's out grower program's primary goals

- Build out growers' confidence on MSE and the sugar sector.
- Establish common purpose with out growers.
- Continuous engagement with out growers and transferring knowledge on agricultural best practices.

## Benefits to farmers and local community

- Significant revenue generation potential for farmers.
- Opportunity to develop new businesses around the out-grower scheme.
- High multiplier effect of up to 8:1.
- Good road infrastructure.
- Sugar cane has low maintenance requirements.

# Out-grower Program (3/3)

MSE interacts actively with out-growers.



*MSE engagement/interaction with out-growers.*



*MSE engagement/interaction with out-growers.*



*MSE engagement/interaction with out-growers.*



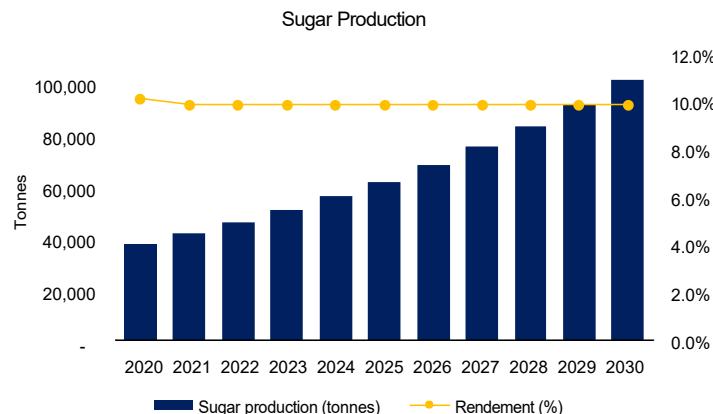
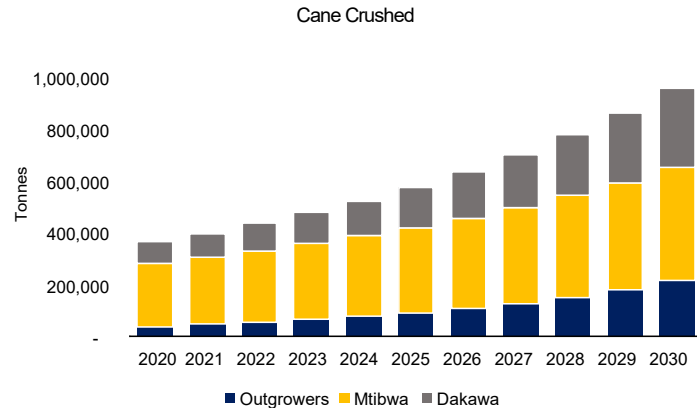
*MSE engagement/interaction with out-growers.*

# Factory and Production Capacity (1/2)

Investments in industry are long-term in nature and require stability in policy and a conducive business environment.

MSE plans on spending USD 30.2 million to improve and upgrade its current cane processing factory.

By augmenting the factory's hardware upgrades with technical modifications and procedural enhancements, MSE expects to increase sugar to 100,000 tonnes by 2030.



## Factory and Capacity Improvements

- MSE intends to embark on a USD 100 million capital expenditure program for the next ten years. Approximately 30% (USD 30.2 million) of the capital expenditure will go towards factory upgrades and maintenance. Moreover, MSE aims to boost the factory's capacity by 64%, increasing from the current installed capacity of 140 TCH to 230 TCH by 2030.
- Part of this investment will be in a new industrial boiler to be commissioned in 2021. The capacity of the new boiler is rated at 125 tons of steam / hour 45 bars of pressure will supply heat and power to the factory and the estates.
- In addition to hardware improvements, MSE will begin implementing a number of technical enhancements to improve factory performance. This will include improving the extraction process by focusing on appropriate mill settings and critically managing imbibition.
- To supplement hardware and technical modifications, MSE will carry out a number of procedural improvements to minimise operational inefficiencies. This will involve monitoring and reporting on daily, weekly and monthly basis to enable swift corrective action in lagging areas.

## Efficiency Gains

- MSE's factory upgrades are expected to bring up the cane rendement ratio to 10% and maintain this level throughout the next decade.
- The level of cane crushed is estimated to reach 1,000,000 tonnes by 2030; translating to a 3.3x increase in sugar production from 30,200 tonnes in 2019 to more than 100,000 tonnes by 2030.

# Factory and Production Capacity (2/2)

MSE plans on spending USD 30.2 million to improve and upgrade its current cane processing factory.



*Ongoing factory expansion*



*New 15 MW TA generating set at MSE.*

# Staff Housing

MSE has begun implementing a number of new welfare and development initiatives to improve both the well being and competence of staff members.

Staff estate houses are set to undergo substantial upgrades that will see an estimated USD 1.4 million injected into the renovations.



*Photo: Old housing at MSE's estate*



*Photo: Renovated house at MSE's estate*

## Estate Housing

- The housing on MSE's estate has not had maintenance work done for over a decade. As such, the state of the housing has substantially deteriorated.
- To improve the living conditions of its employees, MSE has put into motion plans to develop a detailed disposition of all company houses. Using this disposition, MSE will develop a comprehensive maintenance plan to guide the renovations.
- Skilled and competent artisans will be employed to execute the maintenance plan and ensure the selected houses undergo the required upgrades.
- This work is ongoing and already houses around MSE's estate are being renovated.



*Photo: Renovated house at MSE's estate*

# Staff Training (1/3)

MSE has a dedicated training manager and state-of-art facilities for training.

MSE's budget for training is TZS 400 million per year and this will increase with the number of staff.

## Graduate Programme

- MSE is committed to developing a competent workforce at all levels of the company. MSE has recruited 114 graduates from local universities – 54 in agriculture, 35 in factory operations and 25 in other departments across the company.
- MSE has partnered with Sokoine University of Agriculture (“SUA”), University of Dar es Salaam (“UDSM”) and the Dar es Salaam Institute of Technology (“DIT”) for talent acquisition in agriculture and engineering fields.
- Graduates go through intensive local training programs, followed by external trainings delivered by the Sugar Milling Research Institute (“SMRI”), South African Sugarcane Research Institute (“SASRI”) in South Africa.
- SASRI offers a fully comprehensive inhouse training program for senior management in all aspects of sugar cane agriculture. The SASRI is recognised worldwide as the leading authority in terms of research, training and development and scientific excellence in sugarcane agriculture.
- SMRI offers a similar portfolio to SASRI in respect of sugar milling, training and research. These institutions are in unparallel in Africa and extensive use is made of these institutions by MSE.
- The appointed graduates are expected to add to the competence of MSE's workforce and encouraged to initiate innovative agricultural and operational practises across the organisation.

## Training Schemes

Some of MSE's trainings include:

### *Overseas Training*

- Cane Growing Course at SASRI, South Africa.
- Cane Milling Course at SMRI, South Africa.

### *Local Training*

- Leadership Training (65 attendees).
- Key Performance Indicators (“KPI”) Training.
- Planning, Organizing, Leading and Control (“POLC”) Training.
- Security Training.
- Machinery Maintenance Training.
- Agricultural Best Practices Training.

# Staff Training (2/3)

Training will continue to be a major pillar of MSE's turnaround strategy.

## Participation

- Training is carried out extensively throughout the year. The table below summarizes attendees for selected trainings in 2019.

Training	Attendees
Cane Growing	8
Cane Milling	3
Agricultural Best Practice	600
Disciplinary and Grievance	340
Machinery Maintenance Training	200
Garden and Forestry	160
Hazard Analysis Training	150
Leadership Training	65
Security Training	120

## Going forward

- MSE will carry out regular reviews of training requirements to provide training that is relevant as and when required by its employees.
- Training will continue to be a major pillar of MSE's turnaround strategy.



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Website: www.sasri.org.za

16 April 2019

## SENIOR CERTIFICATE COURSE IN SUGARCANE AGRICULTURE

04 February – 08 March 2019

Student Name: Nelson Godson Motemba

Student Number: 143

SUBJECT	MARK (%)
Botany & Varieties	85
Environmental Management	87
Harvesting	84
Husbandry	86
Irrigation	86
Land Use Planning	75
Management	86
Mechanisation	86
Pests & Diseases	86
Soils	92
Weed Control	71
STUDENT'S AVERAGE	84

RESULT: PASSED WITH HONOURS

South African Sugarcane Research Institute is a division of the South African Sugar Association



A copy of training certificate from South African Sugarcane Research Institute (SASRI)

# Staff Training (3/3)



Ongoing training session at MSE



MSE leadership training set up



Local training in full swing.



One of many leadership training courses at MSE.

# Investing for Development

# Investing for Development

By 2025, Tanzania will graduate from a least developed country to a middle income country with a high level of human development characterized in improvements in the quality of livelihood of the people.

MSE's capital investment program is uniquely placed to boost both the agriculture and industry sectors over the next ten years.

Further, MSE's support and initiatives in the community, employee welfare, schools and hospital will greatly contribute to poverty reduction and improving quality of life in the often neglected rural areas.

## Contributing to the Tanzania Development Vision (2025)

- The overarching vision of the Government of Tanzania, enshrined in the Tanzania Development Vision (2025) is to transform Tanzania's economy from "a low productivity agricultural economy" to "a semi-industrialized one led by modernized and highly productive agricultural activities which are effectively integrated and buttressed by supportive industrial and service activities in the rural and urban areas."
- One challenge outlined in the National Five-Year Development Plan I and II (2016/17 – 2020/21) is the low level of irrigation and the lack of investment in irrigation infrastructure. Additionally, FYDP II identifies specific challenges for the sugar sector as low cane yields and over-reliance on rainfall.
- Tanzania's National Irrigation Master Plan (NIMP) (2002) identifies a total irrigation development potential of 29.4 million hectares. According to the National Bureau of Statistics (NBS), about 468,000 ha are currently under irrigation, leaving more than 98% of fertile land dependent on increasingly uncertain weather and climate change.
- To enhance agricultural transformation, the FYDP II has set a goal of expansion and improvement of irrigation systems. The target set in FYDP II is to have 700,000 hectares under irrigation by 2020 and 1,000,000 hectares by 2025.
- One of the main policy objectives in the National Irrigation Policy (NIP) (2009) is to ensure "expansion of area under irrigated agriculture for commercial irrigation farming by the private sector".
- By investing in the expansion of the irrigation scheme, MSE is strategically placed to contribute towards achievement of the targets set in the FYDP II, NIP and TDV.
- The National Plan for Growth Reduction and Poverty I and II and the FYDP II have recognised the inclusion of smallholder farmers in the agenda for reduction of poverty and improvement of quality of life. Some measures include reducing dependence on rain-fed agriculture, linking farmers to industry and securing markets for their produce, promoting skills and awareness as well as improving the quality of extension services.
- MSE's commitment to continue supporting small holder sugar cane farmers around the estate will contribute to inclusive agricultural-led growth and transformation envisioned in TDV 2025.
- The Fifth Phase Government's top priority for 2025 is the "promotion of growth and industrialization for economic transformation".
- In the FYDP II, the broader industry sector targets are set at 25% share of GDP, 10.5% real growth and 20.0% share of employment by 2025. The manufacturing sub-sector targets are set at 18% share of GDP, 12.2% real growth and 12.8% share of employment by 2025.
- The FYDP II specifically identifies the sugar industry as one with the potential to double total production in the medium and long term, contribute to national self-sufficiency with local production and eliminate imports of sugar which drain foreign currency.
- By investing in the expansion of the factory, MSE will add value to agricultural produce, significantly increase sugar production in the country, generate manufacturing sector growth and create sustainable employment for thousands of people in rural areas.

# Request to the Government

# Request to the Government

Fiscal and non fiscal incentives that will facilitate effective implementation of planned expansion plans.

## Overview

- Typically large scale agricultural projects demand immediate substantial amounts of investments, significant amount of efforts and on the contrary, the potential pay off is on a longer time horizon. This timing mismatch compounded by complexity of such projects, are the reasons for project promoters such as MSE seek special support from the Government.
- MSE is requesting the Government to grant the company a special strategic investor status in support of its planned expansion project.
- Specifically, the company is requesting for the following fiscal and non fiscal incentives within the project implementation period i.e. 2019 to 2030.

## Fiscal incentives

- Diesel and lubricants are critical key inputs in MSE' project establishment phase. The project will consume approximately 650,000 litres of diesel per month, amounting to 7,800,000 litres per year.
- The company is therefore requesting full tax exemption (Excise duty and Fuel Levy) on fuel and lubricants to be used by MSE in the project period at the consumption levels outlined on the table below:

Tax exemptions on fuel and lubricants			
SN	Description	Qty (lt rs)/ Month	Qtr (Ltrs)/ Year
1	Diesel	650,000	7,800,000
2	Engine Oil	17,000	204,000
3	Transmission Oil	5,000	60,000

## Fiscal incentives (Continued)

- VAT, import duty and excise duty exemptions on all vehicles that will be procured and used in the implementation of expansion plan. The full list of these items is disclosed on Annexure I, page 67 to 71 of the report.
- VAT and import duty exemption on all project capital goods i.e. agricultural equipment, factory equipment, building materials, replacement components and spare parts. The full list of these items is disclosed on Annexure I, page 67 to 71 of the report.
- Withholding tax exemption on interest on foreign financing.
- Withholding tax and VAT exemption on engineering and technical services.
- Full exemption on all tariffs for water used for irrigation purposes and full exemption from discharge fees for factory/irrigation water reused for irrigation purposes.

## Non fiscal incentives

- Recruitment of reasonable number of expatriates for the development of the planned expansion project.
- Land rent on underdeveloped land.
- Funding for material used to build roads within the estate.

# Closure

# Closure

**With the Government's support, MSE's management is confident the company can achieve the sugar production target of 100,000 tonnes by 2030.**

- Following the privatization initiative in 1999, MSE was granted special strategic investor status. This allowed MSE to revamp and upgrade the estate's infrastructure and transform the company into a profitable sugar producing entity. MSE continued to grow and expand, reaching production levels of 55,000 tonnes of sugar in 2010.
- During the period 2014 to 2017, Tanzania's local sugar industry experienced an inflow of imported sugar. A large portion of the imported sugar was unlicensed and subsidized, making it substantially cheaper than locally produced sugar. As a result, the price of sugar in the local market declined below MSE's cost of production; initiating a domino effect that eventually led to MSE having to reduce production levels to avoid exacerbating losses. Additionally, the lack of enough water dams to store excess water during wet seasons meant that MSE's production levels were constrained during the dry season.
- The Sixth Phase Government, led by H.E. Dr. Samia Suluhu Hassan has renewed confidence to investors to turnaround MSE. By controlling sugar imports and setting a favorable business environment, the Government has shown its commitment to supporting local sugar production.
- The management team at MSE has designed a turnaround strategy that aims to address the problems faced by the company in the period from 2014 to 2017. Best practices will be implemented across the organization in an effort to eliminate inefficiencies and improve yields. MSE has also begun the construction of a dam in the Dakawa region to improve water management and ensure sugar production remains optimal during dry seasons.
- Early results indicate the turnaround strategy has been effective thus far. With the government's support, MSE would like to build on this and reach the company's target sugar production levels of 100,000 tonnes by 2030; and in turn, reduce the country's reliance on sugar imports.

# Annexure

# Annexure I: Items to be procured in the expansion project (1/5)

Factory Equipment (1/6)			Factory Equipment (2/6)			Factory Equipment (3/6)		
SN	Items	No of units	SN	Items	No of units	SN	Items	No of units
1	Evaporator vessel and equipment	4	36	Breathing aparatus	10	71	Electromagnet	4
2	Air Receiver	2	37	Cane Slat Carrier	4	72	Sugar packing machine(250g to 5kg)	6
3	Ash Beach Plant and equipment	4	38	Cane Control Tower Diffuser Line	4	73	TA Cooling tower	
4	Bearings	5,000	39	Cane Feeder Table	4	74	Molasses Bladder	
5	Belt Magnet	4	40	Cane Knife assembly	4	75	Fire Protection System	
6	Bending Machines	2	41	Cane Knife Discharge Conveyor	4	76	Dirty Sluice Water Pump	4
7	Boiler Chequered Plates	1000t	42	Cane Knife Feeder Drum	4	77	Imbibition Pump	
8	Boiler Refractory materials	1000t	43	Cane Prep MCC	4	78	ICW Pump	10
9	Boiler economiser and ancilliaries	2	44	Centrifugal, batch and continuous	6	79	Dry Sugar Elevator Belt	200m
10	Boiler Feed Water Pump	4	45	Overhead Crane(5 to 50 ton)	8	80	Effluent Treatment plant tanks	10
11	Boiler Feed Water Treatment Plant	4	46	Centrifugal Screens	500	81	Electric Transformers	500
12	Boiler Fire Bricks	5,000	47	Compressor(50 to 750 CFM)	6	82	Electrical data logger	2
13	Boiler Fondu Cement	1000t	48	Compressor Drier	6	83	Electrical overhead power line equipment	
14	Boiler Galvanized Srews	1,000	49	Cesspool truck	4	84	Electrodes	1000t
15	Cane Control Tower	2	50	Civil Structure Equipments	100	85	Electronical Control Panel	100
16	Cane Feeder Table and ancilliary equipment	10	51	Clarifier flash tank	2	86	Entrainment Separators	50
17	Hilo Cane Spiller	10	52	Clean Water Pump	4	87	Ethanol Plant Complete	2
18	Boiler HP valves	100	53	Clear Juice heater	4	88	Evaporator Condenser	4
19	Boiler ID Fan	4	54	Mixed Juice Tank	2	89	Factory Electrical Cables	100000m
20	Diffuser	2	55	Process Pumps	100	90	Factory electrification equipments	1,000
21	Rotary juice screens	4	56	Cooling tower	8	91	Factory Personal Protective Equipments	10,000
22	Boiler MS Plate	1000t	57	Cooling Tower Fans	8	92	Factory tools	10,000
23	Boiler PA Fan	4	58	Cranes (10-200 tons)	6	93	Final Mixed Juice heater	4
24	Boiler Recycle Water Pump	4	59	Crystalliser Liquidation Pump	10	94	Fire Extinguishers (Fire Fighting Equipments)	1,000
25	Boiler Rock Wool Branket	5000m	60	CVP	4	95	Fire fighting equipment	1,000
26	Boiler SA Fan	4	61	Vacuum pan	20	96	Fire Fighting truck	4
27	Maceration Tanks	10	62	Vacuum pan condenser	20	97	Fire Fighting Vehicle	2
28	Maceration Pumps	10	63	Cyclodrive gearboxes	20	98	Fire siren(electric)	10
29	Press water tank	6	64	Vacuum Seed Reciever	10	99	Fire siren(hand)	10
30	Press water pump	6	65	Strike receiver	20	100	Fireman PPE	30
31	Bagasse slat carrier	16	66	Vertical Crystaliser	10	101	First Aid Boxes	200
32	Belt conveyor	10	67	Dearator	4	102	First Mill	4
33	Boiler spares	3,000	68	Massecuite reheater	2	103	Generators (20 kva-1000 kva)	6
34	Boiler Tubes	1000m	69	Dearator Spray Pumps	4	104	Heavy duty chains	5000m
35	Boiler(150 tph and 250 tph)	4	70	Sugar line magnet	4	105	Heavy duty welding machines	30

Source: MSE's Management

Source: MSE's Management

Source: MSE's Management

# Annexure I: Items to be procured in the expansion project (2/5)

Factory Equipment (4/6)		
SN	Items	No of units
106	High Pressure Cleaner	6
107	Hilo Cane Spiller(20 ton and 30 ton)	4
108	HP steam traps	100
109	Instrument workshop test equipment	20
110	Intercarrier	4
111	Kestner Evaporator	4
112	Lamella Clarifier	2
113	Lazer alignmnt set	2
114	Lathe machines	6
115	Machinery for pipes	10
116	Machinery for sugar bagging	2
117	Machinery for wood cutting	2
118	Massecuite crystallizer	10
119	Mill bearings	50
120	Mill Discharge Conveyor	4
121	Mill Juice heater	4
122	Mill rope couplings	6
123	MS Pipe Schedule 40 high pressure for turbine	5000m
124	MS U Channel for overhead cane carrier	1000t
125	Overhead Line Conductor	500000m
126	Photo luminiscent safety signs	1,000
127	Portable gas detector	6
128	Portable Grinding Machine	200
129	Power cutting machines	2
130	Power Saw Machines	2
131	Pre-fabricated house complete sets	300
132	Pre-fabricated house furniture	300
133	Pre-Fabricated steel material and structure for	10000t
134	Pressing Machines	2
135	Pressure Cleaning/Washing(treatment) Pumps	6
136	Process and Lab Chemicals	3,000
137	Radio Base Station (including GPS Connection)	6
138	Radio Hand Sets	6
139	Raw Sugar Dryer	2
140	Road signs	2,000

Source: MSE's Management

Factory Equipment (5/6)		
SN	Items	No of units
141	Rolling Machines	2
142	Rotary juice screen	4
143	Saccharomant Equipments	4
144	Sanitary Equipments	10,000
145	SCADA Engineering server	6
146	SCADA Engineering station	6
147	SCADA Operator station	6
148	Scaffolding Accessories	20set
149	Scalding Juice Heater	4
150	Scalding Juice Heater Condensate Tank	4
151	Scalding Juice Heaters Condensate Pump	4
152	Scraper Spares	300
153	Secondary Mixed Juice heater	4
154	Sewing Machines	20
155	Shear machines	2
156	Shredder	4
157	Sluice Water Pump	4
158	Solar street lights	1,000
159	Steam Turbine Concentric Reducers	100
160	Steam Turbine MS Pipe schedule 40	1000n
161	Steam Turbine Bends,schedule 40	1,000
162	Steam Turbine Complete	6
163	Steel Construction Structure	10000t
164	Sugar Evaporator Contactors	300
165	Sugar Impellers	100
166	Sugar Laboratory Equipments	500
167	Sugar Laboratory Tools and Apparatus	1,000
168	Sugar Mill key locked emergency push botton	300
169	Sugar Mill Thermal O/L Relay	300
170	Sugar Mill Trash Plates	100
171	Sugar Mill Brass Bar	300t
172	Sugar Mill Fenaflex Coupling	400
173	Sugar Mill Motors	1,000
174	Sugar Mill Pinions	300
175	Sugar Mill Rollers	50

Source: MSE's Management

Factory Equipment 6/6		
SN	Items	No of Units
176	Sugar Mill Valves	1000
177	Sugar Processing tools and instruments	1000
178	Tan dem Mill Complete	2
179	Turbaine spares	4000
180	Uninterruptable Power Supplies(UPS)	50
181	Variable Speed AC drives	100
182	Variable Speed AC drives	50
183	Vibration analyser and balancing machine	2
184	Water softener (Treatment)	2
185	Weigh Bridge	4
186	Wheel Alignment Machine	2
187	Input/output modules(I/O)	1000
188	Electric hand dryers	500
189	Culvert making machine	4

Source: MSE Management

Agricultural Equipment		
SN	Items	No of Units
1	Block making machine	4
2	Cane haulage Tractors	16
3	Slew loading cane loaders	5
4	Cane haulage rigs	4
5	In field tractors	12
6	Heavy Rome ploughs	4
7	Light harrows	4
8	Middle busting shaper	4
9	Fertilizer applicators	6
10	Herbicide applicators	6
11	GP Trailers	8
12	Labour trucks	4
13	Centre Pivot irrigation units	20
14	Solid set irrigation systems	15
15	Lay-flat irrigation systems	2500m
16	Agric Houses	6 units

Source: MSE Management

# Annexure I: Items to be procured in the expansion project (3/5)

Land Development and Cane Field Operations (1/2)		
SN	Items	No of units
1	Bulldozer	15
2	Tractor 0- 100 HP	100
3	Tractor 101 - 200 HP	200
4	Tractor Greater than 300 HP	120
5	Plough Chisel	20
6	Plough Square	20
7	Plough 36"	30
8	Plough 32"	30
9	Plough Disc	30
10	Harrow 28"	30
11	Ripper	10
12	Ridger	30
13	Grove / Bed former	10
14	Boom Sprayer	40
15	Herbicide Applicator	2,000
16	Fertiliser Applicator	2,500
17	Fertiliser Incorporator and Spreader	100
18	Grabloader Seedcane	15
19	Trailer Seedcane	20
20	Trailer Tip	50
21	Trailer Flat	50
22	Water Tankers	50
23	HWT Plant	10
24	Slashers	20
25	Hay Making Equipment	50
26	Spray Race	5
27	Weighing Equipment	20
28	Scraper Leveller	30
29	Land Plane	10
30	Manure / Filtercake Spreader	40

Source: MSE's Management

Land Development and Cane Field Operations (2/2)		
SN	Items	No of units
31	Manure / Filtercake Loaders	20
32	Molasses Bowsers and Pumps	30
33	Survey and GPS Equipment	200
34	Radio Units	600
35	Radio Base Stations	50
36	Security CCTV System	1,000
37	Sanitary Equipment	1,000
38	Fertigation Equipment	400
39	Chemigation Equipment	400
40	Tractor Guidance Equipment	250
41	Computers	150
42	Agronomy Laboratory and Equipment Sets	3
43	Meteorological Equipment	100
44	Agronomy Cane Testing Equipment	100
45	Agronomy Trials Equipment	500
46	Soil Nutrition Laboratory and Equipment Sets	3

Source: MSE's Management

Cane Harvesting and Transport		
SN	Items	No of units
1	Cane Grab Loader	30
2	Haulage Tractor	150
3	Cane Trailers	200
4	Fuel Bowser	10
5	Cane Knives	50,000
6	Weigh Station	5
7	Mobile Weigh Station	20
8	Cane Harvester	10
9	Mobile Workshop	10

Source: MSE's Management

Drainage, Roads and Const ruction		
SN	Items	No of units
1	Excavator	20
2	Excavator Long Reach	10
3	Grader	15
4	Wheel Loader	15
5	Compactor	10
6	Tankers	40
7	Fuel Bowsers	10
8	Bulldozer	15
9	Lowbed Loader	10
10	Survey and GPS Equipment	100
11	Tipper / Dump Trucks	80
12	Trucks	50
13	Horse Trucks	20
14	Semi Trailers	45
15	Trailers	100
16	Tow Grader	30
17	TLB	10
18	Mobile Crane Truck	20
19	Crane	20
20	Mobile Workshop	20
21	Front End Loader / Wheel Loader	25
22	Backhoe	25
23	Welding equipment	100
24	Plate rollers	10
25	Culvert Making Machine and Moulds	100
26	Plate compactors	50
27	Rollers	40
28	Cement Mixer	20

Source: MSE's Management

# Annexure I: Items to be procured in the expansion project (4/5)

Irrigation Equipment (1/2)		
SN	Items	No of units
1	Centre Pivot Irrigators	400
2	Centre Pivot Equipment, Gearboxes and Acces	1,000,000
3	Centre Pivot Tyres	20,000
4	Containers 40 ft	400
5	Containers 20 ft	100
6	Pivot Transformers	400
7	Pole Transformers	200
8	Mobile Pivot Irrigators	100
9	Reel Irrigators	500
10	Reel Irrigator Equipment and Accessories	10,000
11	Diesel Pressure Pumps	200
12	Irrigation pump spares	5,000
13	Centre Pivot Tyres	10,000
14	Drip Irrigation Equipment	2,000
15	Drip Irrigation Pipes	2,000 km
16	Drip Irrigation Dripper Pipes / Tape	55,000 km
17	Drip Line Installer	10
18	Filtration Units	1,000
19	Sprinkler Irrigation Risers, Hydromatics, Access	10,000,000
20	Sprinkler Irrigation Sprinklers	500,000
21	Sprinkler Irrigation Hoses	20,000km
22	Water Treatment Plant	50
23	Petrol and Diesel Motor and Pumps	300
24	Transfer Pumps	50
25	Electric Panels	150
26	Electric River Pumps	150
27	Electric Pump Transformers	30
28	Irrigation Pump Stations	30
29	Borehole Equipment	500
30	Switchgear	1,200

Source: MSE's Management

Irrigation Equipment (2/2)		
SN	Items	No of units
30	Auxillaries	1,200
31	Hydrants	20,000
32	Airvents	1,000
33	Valves	5,000
34	Pressure Regulating Valves	1,000
35	HT Electric Line	1,000 km
36	LV Electric Line	1000 km
37	Electric Insulators and Accessories	100,000
38	Fencing Wire, Poles and Accessories	1,000 km
39	Generators	50
40	Treated Wooden Poles	5,000
41	PVC Pressure Pipes	1,000 km
42	HDPE Pressure Pipes	1000 km
43	GRP Pressure Pipes	500 km
44	Irrigation Pipe Connectors, Joints and Bends	1,000,000
45	Soil Moisture Monitoring Equipment	2,000
46	Prefabricated Buildings, Offices and Structures	500
47	Irrigation Workshop and Equipment	5

Source: MSE's Management

Employee First Aid Clinics		
SN	Items	No of units
1	Hospital Beds	100
2	First Aid Centre Structure	50
3	First Aid Centre Equipment	50
4	First Aid Centre Benches and Beds	50
5	First Aid Centre Generators	50
6	Desks, Cabinents, Cupboards and Chairs	50

Source: MSE's Management

Workshop (1/2)		
SN	Items	No of units
1	Tractor Tyres	10,000
2	Truck Tyres	12,000
3	Motor Vehicle Tyres	12,000
4	Trailer Tyres	10,000
5	Motorcycle Tyres	10,000
6	Welding Machine	100
7	Tyre Repair Unit	20
8	Wheel Alignment Unit	20
9	Tyre Changing Machine	20
10	Forklift	20
11	Jacks	500
12	Tools and Spanners	10,000
13	Oil Dispenser	50
14	Fuel Dispenser	50
15	Mobile Workshop	20
16	Mobile Service Units	50
17	Generators	50
18	Grinders, Drills, Bench press, Pneumatic press	500
19	Power Tools	1,000
20	Press Machines	50
21	Overhead Crane	100
22	Mobile Crane	10
23	Vehicle Hoists	50
24	Heavy Duty Chains	5000 m
25	Bob Cat	10
26	Plough Discs	5,000
27	Hydraulic Cylinders	1,000
28	Lathe and Workshop Machinery	1,000
29	Paint Workshop Equipment	200
30	Workshop Spares and Equipment Storage Racks	200

Source: MSE's Management

# Annexure I: Items to be procured in the expansion project (5/5)

Workshop (2/2)			Field Maintenance			Employee Transport		
SN	Items	No of units	SN	Items	No of units	SN	Items	No of units
31	Workshop Structures	20	1	Fire Tenders	10	1	Personnel carrier	100
32	Hydraulic Pipe Workshop and Equipment	100	2	Hospital XRay machine	2	2	Tractor 4WD 90 HP	50
33	Electrodes	100000 kgs	3	Hospital laboratory test equipment	100	3	Flatbed / Box body Truck	40
34	Grader Blades	5,000	4	Dental equipment	100	4	Pickup 2WD	70
35	Grader Tips	20,000	5	Mortuary equipment	10	5	Pickup 4WD	100
36	Grader Accessories and Spares	5,000	6	Hospital equipment general	500	6	Motor Vehicles 4WD (Land Cruiser)	50
37	Scraper Blades	3,000	7	Refuse Collection Trailers	30	7	Toyota Land Cruiser Exec management vehicles	10
38	Dozer Blades	1,000	8	Compost Makers	20	8	Motorcycles	500
39	Dozer Tips	3,000	9	Nursery equipment	100	9	Bicycles	20,000
40	Dozer Accessories and Spares	5,000	10	Manure / Compost spreaders	10	10	Mini Bus	15
41	Dozer Tracks	150	11	Grass mowers	200	11	Bus	10
42	Excavator Tracks	300	12	Chainsaws	200	12	Ambulance 2WD	5
43	Excavator Accessories and Spares	5,000	<i>Source: MSE's Management</i>			13	Ambulance 4WD	6
44	Fire Fighting Equipment	500	<b>Vehicles &amp; equipment</b>			14	Boat	5
45	GPS Tracking and Monitoring Equipment	200	<b>SN</b>	<b>Type of vehicle/ equipment</b>	<b>No of units</b>	15	Outboard boat engine	10
46	Fuel Storage Tanks	90	1	SUVs (Sport Utility Vehicles)	50	<i>Source: MSE's Management</i>		
47	Tyre changer machine	12	2	Hardtops	100			
48	Tyre press machine	12	3	Double cabin pick ups	150			
49	Tyre mobile service	3	4	Single cabin pick ups	150			
50	Barge Boat	3	5	Tippers	75			
			6	Sugar and cane haulage trucks	30			
			7	Rigids	40			
			8	Tankers	20			
			9	Tractors	150			
			10	Motorcycles	600			

*Source: MSE's Management*

*Source: MSE's Management*