MERU AGRO-TOURS & CONSULTANTS CO. LTD

Deals in: Agro Seeds, Agrochemicals, Fertilizers and Agricultural Equipments.
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BUSINESS PLAN

2024-2029

EXPANSION AND MODERNIZATION OF SEED BUSINESS

I. COVER SHEET

1. Company Details		
1.1	**Company Registered Name**	**Meru Agro-Tours & Consultants Co. Ltd**
1.2	**P.O Box No.**	13867
1.3	**Physical Address**	Postal code 23119, Street Maharage, Road Tanga General Road, Plot number 795, Block number A, House number 4 District Arusha CBD, Ward Olasiti.
1.4	**City / Town / Area Country**	**Arusha, Tanzania**
1.5	**Company Telephone No.**	**+255272547433**
1.6	**Email Address**	**meruagro@yahoo.com/w.chacha@meruagro.com**
1.7	**Company Website**	**www.meruagro.com**
1.8	**Contact Person**	Mr. Watanga Chacha Goryo
1.8.1	**Job Title of Contact Person**	**Managing Director**
1.8.2	**Phone No. of Contact Person**	**+255754688642/784688642**
1.8.3	**Email of Contact Person**	**meruagro@yahoo.com/w.chacha@meruagro.com**
1.9	**Company Registration**	**Meru Agro – Tours & Consultants Co. Ltd**
1.9.1	**Type of the firm**	**Private company**
1.9.2	**Year of Establishment**	**2005**
1.9.3	**Registration Number**	**53067**
1.9.4	**Country of Registration**	**Tanzania.**

II. EXECUTIVE SUMMARY

M/S Meru Agro-Tours & Consultants Co. Ltd (MATCC) is a local private company based in Arusha that specializes in Agricultural inputs business. Currently the main business activities and services are multiplication, distribution and retailing of agro seeds; importation, distribution and retailing of agrochemicals, distribution and retailing of fertilizers, agricultural equipment such as sprayers and provision of technical advisory services on farm input use and management. In addition, the company conducts agricultural research in collaboration with national, regional and international research institutes with the goals of addressing some of the critical issues facing farmers in the country.

In collaboration with International Maize and Wheat Improvement Centre (CIMMYT) through various project, Meru has released twelve maize varieties namely Meru HB 405, Meru HB 513, Meru HB 515, Meru SB 507, Meru HB 505, Meru lishe 503, Meru lishe 511, Meru HB 509, Meru HB 623, Meru IR 621, Meru VAH 517 and Meru VAH 519.

The varieties are drought resistant, high yielding under low Nitrogen marginal areas and optimum conditions; also, these varieties have different maturing period giving the farmers a competitive advantage over the currently climatic change with unreliable and erratic rainfalls accompanied with soil nutrient depletions.

Although these varieties may now be availed to the farmers, the company is challenged by the production of these varieties as currently it does not have enough production Land. Either there are insufficient commercial farmers/contract growers who have limited technical capacity, financial capacity and they do not have irrigation system to compliment the crop whenever there are erratic drought years. Together with the above challenges some of the growers do not have isolation distances required for seed production.

The company is currently using leased farm and contract growers who have limited technical capacity in hybrid seed production, limited financial capacity and they do not have irrigation system to compliment the crop whenever there is an erratic drought. Hence Meru is planning to expand it production and seed storage capacity by acquisition and establishment of additional seed farms and construction of warehouses.

Seed is the indispensable input for all agricultural production. Through its varied response to complimentary inputs such as fertilizer, improved seed has the potential to double or triple farmer's income.

The potential market size for improved seeds in Tanzania is about 120,000 MT (source: MAFSC 2012), while effective supply currently stands at 40,000-60,000 MT. Either since 2012 the demand has grown up and its now estimated to be more than 200,000 MT. Over 70% of improved hybrid maize seeds sold in Tanzania is being imported, the increasing costs of imported seeds segment (costs for production inputs, transportation, clearance, inflations) provide room and potential market for increasing local seed production for seed companies like Meru. Either local production ensures sustainable seed availability in the country particulary in the years when the exporting countries to Tanzania faces drought and other natural calameters like floods.

In the initial stages of seed production back in 2008, Meru seed production was only done in the Northern regions (Arusha, Manyara, Kilimanjaro and Tanga). The major challenges that faced the company at that time was few contract farmers that meet isolation distances required for seed production, low productivity of the growers and climatic changes as most of growers do not have access to irrigation water and others have not installed irrigation systems to compliment during drought years. Either the outbreak of Maize Lethal Necrosis disease also affected seed production in the Northern Zone.

To overcome the above challenges, Meru diversified seed production locations, leased seed production farm and invested in seed production equipments, hence currently seed production is done in Northern and Southern Highlands. The diversification of seed production location and leasing of part of Mbozi seed farm have reduced seed production risks and enable the company to customize its seed varieties as per specific market needs.

However, after a long period of investing in seed business particularly in seed promotions through demonstration and farmers trainings, seed processing and packaging (now four processing facilities); Seed production equipment and machineries; new variety development and release, the demand for Meru seed has gone up. The increase in seed demands challenged with few availabilities of Contract Grower necessitates the company need for new seed production farms in order to increase its seed production targets.

In the view of the above Meru has developed the new plan titled; **Expansion and modernization of Seed business.** In the new plan Meru plans to increase seed production and distribution by **acquisition and operationalization** of two new farms; increase seed storage and processing facilities; increase seed processing capacity, Improve and enhance seed distribution capacity and finally Improving Employee Welfare including renumerations, working environment and working infrastructure.

In the next six years Meru plans to increase seed production from the current 5,000 tons in 2024/2025 season to 17,000 tons. Meru has been allocated two farms at Ikungi District Singida Regions in total three thousand acre and Tanganyika district Katavi regions Five Thousands acres. Either Meru has requested additional land 5,000 acres in Tanganyika district, Katavi region and 10,000 acres at Ikungi district Singida region in order to support the increased production plan.

Currently seed production is done in two leased farms, one from Agricultural Seed Agency (ASA) in total 3500 acres located at Mbozi district Songwe regions and the second farm leased from Suba Agro-Trading & Engineering Co. Ltd at Nkasi district Rukwa region and few Contract Farmers. The two new acquired farms will enable the company to achieve the following: -

i. Increase the production of government strategic crops such as Sunflower, Sorghum and wheat crops to support and participate in the government initiative to increase production of oil crops and eventually reduce importation of cooking oils.

ii. Increase the production of quality maize hybrid and open pollinated certified seeds in order to ensure sustainable seed availability in the country from local production.

iii. Enable the company increase the number of varieties and technologies produced each year. As mentioned early, Meru has released varieties with different technologies such as Quality Protein Maize (QPM), Pro-vitamin A Maize, varieties suited for Striga prone areas, Stem Borer Resistance Varieties, Drought tolerance and Low Nitrogen use efficient varieties. To be able to produce these varieties Meru need big farms to accommodate the isolations distances required for seed production and also be able to maintain and produce Early Generation seeds (Breeder, Pre-Basic, Basic and Foundation Seeds) for Meru and others.

iv. Enable the company to conduct research and development of new varieties that addresses the current and future emerging farming challenges.

Hence in the next six years will invest in total more than USD 20,000,000.00. (Twenty Million dollars) The project will have huge impact in the increased accessibility of certified seeds in the country and It is in this view, Meru deemed it important to register this project with Tanzania Investment Centre (TIC)

1.0 COMPANY AND BUSINESS PROFILE

1.1 Background Information.

Meru Agro –Tours & Consultants Co Ltd was establishment July 2005. The company started its operation in October 2006 as one of the agro dealers, buying seeds, fertilizers, and pesticide stocking them and selling to individual farmers. Seed production started in 2008/2009 season, while agrochemical importation and distribution started in 2009

The company is headquartered in Arusha and has Zonal offices in Mbeya, Kahama, Morogoro and Arusha. Currently the company is employing more than 200 employees and is working in partnership with CIMMYT, AGRA and Local National Research Institutes.

Currently the company deals with agricultural input business focusing on the following areas.

a. Multiplication and distribution of seeds
    i. Main crops are Maize, Sunflower, Paddy, beans and Sorghum.
    ii. Through Collaboration with CIMMYT MATCCL has released twelve new maize varieties.

b. Importation and distribution of pesticides
    i. MATCCL has registered its own brands with Tropical Pesticides Institute (TPRI) currently 104.
    ii. Training of traceability, standards, safe use and handling of pesticides

c. Importation and distribution of agricultural equipment's
    i. Mainly agricultural sprayers

d. Provision of technical agricultural advisory services
    i. Training on farmers groups on Good Agricultural Practices.
    ii. Establishment and management of demonstration farms

e. Conducts adaptive agricultural research –to address issue facing farmers
    i. Drought, soil fertility, diseases, insect pests (stem borers and storage pests), striga and nutritional enhanced varieties such as QPM and Pro-vitamin A.

f. Farming
    i. Leased farm at Mbozi 1,200Ha
    ii. New acquired farm in Singida and Katavi – 6,600Ha
    iii. Own Basic Seed Production and research at Moshi –Kilimanjaro 24Ha.
    iv. Contract farming ranging from 200Ha to 500 Ha yearly.

1.2 Company Ownership.

MATCC Ltd is owned by two shareholders, who are all professional/experts in agriculture and agro-input business. The two owners are: Mr. Watanga Chacha Goryo ((90%) and Mrs. Sesilia Alphonce Magessa (10%).

1.3 Company Vision

MATC strives to become a model local Tanzanian company into a global stage dedicated to increase farmers productivity and consultancy services in a manner that create a distinctive value to our stakeholders

1.4 Company Mission

Our mission is to provide comprehensive agricultural input package for farmers through intensive supply of improved seeds, agrochemicals, fertilizers and oversee application of recommended agronomic practices

1.5 Core Values

Meru core values are the following

- **Customer Focused – Customer is the king and customer is always right.**
  During providing our services the first thing to be considered is our customer (Farmers, Agro-dealers and others). Ensuring good services are provided in order to keep close relationship to them.

- **Passion to deliver.**
  MATCC ensures the products and services are delivered to the customers through improving distribution network in order to reach all the farmers.

- **Strong moral values and social responsibility**
  The company insists on maintaining moral values of MATCC workers and social responsibility.

- **Learning and improving all the time – Encouraging Creativity and Innovation.**
  We strive hard in learning new things especially from our customers and hence improve all the time through innovation of new products based on customers' requirements.

- **Quality Focused and Value driven**
  In producing our products (Agro seeds and agrochemicals), quality is our priority in order to ensure the customers get the products and services according to their demands and hence have the value of money for the products.

- **Embracing technology**
  Through research and development of new products in order to ensure the farmers get the products according to the changes of their environment.

- **Teamwork and partnership.**

  Working together as a team is one of our core values and hence helping achieve our targets easier.

1.6 Company Location and Facilities.

MATCC Ltd headquarter offices are located in Arusha. The company operates through four zonal offices in the Northern zone (Arusha), Lake zone (Kahama), Southern highlands zone (Mbeya) and Central-coast zone (Morogoro). In all 4 zones, there are 15 sales points allocated strategically to serve the target markets country wide. Either the company has the following facilities as summarized below.

i. Production facilities

Table 1: MATCC Production facilities

S/No.	Equipment	Quantity	Usage
1	Tractor (50-200 HP)	27	Used for ploughing, harrowing, planting, herbicides application and farm logistics
2	Combine harvesters	3	Used for harvesting of seeds
3	Plough	14	Used for ploughing
4	Planters	7	Used during planting
5	Boom sprayers	8	Used for pesticides application
6	Water tanks	4	Used for water transportation
7	Seed driers	3	Used for drying seeds
8	Trailers	5	Used for farm logistics
9	Maize shellers	3	Used during maize shelling
10	Fertilizer spreaders	2	Used for application of lime
11	Grader	1	Used for road maintenance
12	Farm cars	3	Used for farm operations
13	Knapsack sprayers	130	Used for pesticides application
14	Soil analysis Kit	1	Used for soil nutrient analysis
15	Fuel tanker	2	Used for fuel transportation and distribution during operations

ii. Seed processing and storage

Table 2: MATCC Seed Processing and Storage facilities

S/No.	Equipment/Facility	Quantity	Usage
1	1,000 M^2 warehouse- leased	1	Used for seed storage
2	1,500M^2 warehouse - leased	1	Used for seed storage
3	2,000M^2 warehouse - own	1	Used for seed storage
4	2,400M^2 warehouse -own	1	Used for seed storage
5	25M^2 Cold room	1	Used for storage of inbred lines for research purposes
6	Complete Seed processing and dressing line	4	Used for seed processing, dressing and packing

iii. Seed marketing and distribution

Table 3: MATCC Seed marketing and distribution facilities

S/No.	Description	Available Infrastructure	
		Items Description	Quantity
1	Seed Storage	Warehouses (rented) across the country in all marketing and sales points mentioned in above,	25
2	Distribution trucks	❖ 30 tones trucks ❖ 5 tones Mitsubishi Canter	6 17
3	Seed Marketing	1.Vehicles 4x4 – Single and Double Cabin 2. Motorcycles	21 36

1.7 Company Objectives

In the next six years, the company intends to achieve the following objectives

1. Avail quality seeds at affordable cost and package to smallholder farmers

   Meru plans to increase availability, access and affordability by production, promotion and distribution of agro seeds as follows;

   ❖ Open Pollinated Varieties production and distribution (OPVs) for maize, sunflower, wheat, and sorghum from the current 2,000MT 2024/2025 to 6,000 MT by 2028/2029.

   ❖ Hybrid Maize Seeds production and distribution from 3,000 MT in 2024/2025 to 11,000 MT by 2028/2029.

2. To create awareness among farmers about the importance of improved varieties and allied production technologies
3. To establish improved seeds' retail outlets and teams of agro-dealers in rural areas
4. Increase sales revenues of agrochemicals and other associated technologies supplied by the company as summarized below;

   ❖ Increase agrochemicals sales by 35% up to 2028/2029 season from $ 4,275,520 to $5,764,337.
   ❖ Increase importation and distribution of agricultural equipment's such as motorized sprayers and knapsack sprayers.

5. Improve and enhance company capacity in the following areas.

    - ❖ Improve seed processing and packaging capacity in the next six years
        - ❖ Construct four new seed processing and storage facilities (in Arusha, Mbeya Ikungi singida and Katavi).
        - ❖ Enhance storage and distribution at Kahama and Morogoro Zonal offices
    - ❖ Acquire quality control, maintenance and testing equipment for seeds and agrochemicals (Di haploid – DH facility Lab)
    - ❖ Acquire and mechanize new R & D farms and R& D activities in plant breeding, on farm trials, adaptive research, end- user activities and other variety developments, in bred lines maintenance and germplasm collection and storage

In order to achieve these goals Meru Agro-Tours and Consultants Co. Ltd needs to focus on HOLISTIC APPROACH by combining input and output market development process, specifically dealing with the following key areas:

- Market driven product development in release and registration for seeds and agrochemicals with the relevant regulatory authorities in Tanzania.

  This approach involves effective and efficient products selection (marketable and affordable financially, socially and technically) and segmentation, targeting farmers from high potential to marginal potential areas. The focus being on people's livelihoods at district and specific agro-ecological areas in the district with the aim of covering the whole country. Either the combination of common names in one product to carter for wider spectrum of diseases and pests will be considered for agrochemicals.

- ❖ To improve linkage and cooperation/collaboration with public extension services (Public-Private partnership).

- ❖ To streamline input supply system in respond to land use, output market and farmer's needs.

- ❖ Pursue aggressive marketing campaign including: demo plots and field days all over the country, aimed to show the benefits of improved seeds in combination with herbicides, fertilizers and storage techniques. Training farmers, agro dealers and extensionists; participating in farmers day shows; local radio and TV spots; open market advertisements, personal selling, forging strategic alliance/partnership/collaboration with NGOs and District agriculture dev. Projects and extension services.

- ❖ Communicate the differentiation and quality of our offering through personal interaction, media and regional marketing.

- ❖ Develop a repeat-business base by making close follow up and adoptive research and correction of technical and operational field mistakes/problems.

- ❖ Aim and maintain high quality of our products as well as carry out intensive training of the sellers and users.
- ❖ Effective staff recruitment and training (Especially for new farms in Singida and Katavi regions).
- ❖ Opening distribution depot in all potential regions as well as forging and participating in private-public partnerships in District agricultural developments projects.

- ❖ Strive for management efficiency hence affordable pricing of our products.

- ❖ Client/market-oriented approach in pack sizes, crop variety, product development and pricing.

1.8 Company Organization and Management Structures.

Meru company organization and management structures is composed by the following levels:-

1.8.1. The Board of Directors

This is the top management team of Meru which is the ultimate source of company authority. The Board of Directors manages goals and policies of the Company. It devotes more time on review and approval company plans and coordinating key functions of the company. It is composed of 5 independent Board Members and Meru executive Director as member of the Board. The Boarder of Director of Meru meets twice a year. This team is responsible for the following roles:-

i) It provides guidance and direction of the company in general.
ii) To determine company's vision, mission, objectives and broad policies of the company.
iii) To develop and review long-range plans and strategies of the company.
iv) To oversee the implementation of all necessary operation systems and procedures.
v) To evaluate overall performance of the company at make appropriate decisions.
vi) To appoint senior management team i.e. Departmental Heads and Zonal Managers.
vii) To determine company values to be promoted

viii) To issue necessary instructions for preparation of the entire company and departmental budgets, procedures, schedules etc.

1.8.2. Executive Management Team (EMT)

This team is composed of Meru executive Directors, Departmental Heads and Company Secretary. They are responsible for review and pre-approvals of the company plans and budgets. Meru has five departments namely Research & Product Development, Accounts and Finance, Human Resources and Administration, Marketing and Sales and Legal Department. Departmental Heads are directly reporting to Company Managing Director who is also direct responsible to the Board of Directors. This team meets twice every year. Executive Management Team is responsible to perform the following duties: -

i) Responsible for review and pre-approval of company plans and budgets
   - ❖ Zonal plans and budgets.
   - ❖ Departmental plans and budgets.

ii) Responsible for the company strategic planning and management.

iii) Responsible for development, review, interpretation and pre-approval of company policies

iv) Review of departmental progress reports; budget expenditure and advice accordingly.

v) Responsible for receiving, analyzing, planning coordination and execution of BOD instructions.

vi) Responsible for analyzing company risks and designing mitigation measures accordingly,

1.8.3. Senior Management Team (SMT).

This team is composed of Meru executive Directors, Departmental Heads and Zonal Managers. They participate in planning and setting objectives, activity targets and operational budgets for their departments and zones before sharing to Executive Management Team for approval. Meru has four Zones with their zonal offices located at Arusha, Mbeya, Kahama and Morogoro. In each zone there is a Zonal Manager who is the in-charge of all activities within the respective Zone. Also, Meru has four farms located in Mbozi-Mbeya, Moshi-Kilimanjaro, Ikungi – Singida and Tanganyika- Katavi. Senior Management Team meet quarterly in a year to plan and evaluate the progress of the activities. The primary duties and responsibilities of Senior Management Team are as follows: -

i) To coordinate daily activities to be performed within the departments, zones and farms as per approved plans and budgets.

ii) They are also responsible for planning and implementation of plans developed by higher company authorities.

iii) They are also responsible for monitoring and evalutions of the planned and implementation activities.

1.8.4 Meru Management team.

The team is composed of departmental heads, Zonal Managers and Sales Point in charges. The team is responsible for daily implementation of the company plans. The team meets twice per month to discuss the implementation of the plans, challenges and the suggested way forward.

1.8.5. Departmental Management Teams

Departmental Management Teams are composed of Departmental Head, Heads of Sections and Heads of Units. All the departments are led by Departmental Manager who is a Head of Department. Within the departments there are sections and units which are led by section leaders or supervisors. Departmental Management Teams are responsible for planning and implementation of the plans. In additional to that they are also responsible for implementation the plans developed by the higher company authorities that falls in their department. They are also responsible to assign jobs and tasks to various workers to guide and instruct workers for day to day activities to ensure the department attain its set objectives. The meetings shall be held as the need arises.

1.8.6. Zonal Management Teams

Zonal Management Teams are composed of Zonal Manager, Sales Point in charge and Zonal Accounts Clerks. These teams are led by Zonal Managers who are the in charge of their respective Zones. Zonal Management Teams are responsible to plan and implement zonal plans. They are also responsible to assign jobs and tasks to various workers to guide and instruct workers for day to day activities to ensure the Zones attain their set objectives. The team shall meet quarterly to discuss the progress of plans implementation and solve the challenges encountered in the implementation

process. The zonal management teams' meetings shall be either online or face to face. The zonal manager shall prepare the meeting agenda and the meeting minutes shall be shared with the Managing Director.

1.8.7. Seed Processing Management Teams

Seed Processing Management Teams is composed of Seed Processing Officer, Warehouse Manager and Zonal Manager. The primary responsibility of this team is to process the seeds from the farms until the final stages to be ready for selling to customers. Also, the team is responsible to meet the demands of all Zones by supplying the seeds as per requests and plans submitted to them earlier.

1.8.8. Farm Management Teams

Farm Management Teams are composed of Farm Managers, Farm Administrator, Chief Technician, Chief Driver, Chief Security Offciers and Farm Accounts/Store Keeper. These teams are led by Farm Managers who are the in charge of their respective Farm. Farm Management Teams are responsible to plan and implement the seed production plans developed during the planning meeting. They are also responsible to assign jobs and tasks to various workers to guide and instruct workers for day to day activities to ensure the farms attain its objectives set.

1.8.9. Middle Management Team

This team is composed of some officers, administrators and managers who are not departmental heads but they are reporting authority of some lower management teams of section, and units which are working directly under supervisors, foremen or section leaders. This team is responsible for the following duties

iv) They participate in planning and setting objectives and operation budgets for their units before sharing to senior management team.
v) To coordinate daily activities to be performed within the departments or zones.
vi) Acting as a bridge between senior management teams and the lower management teams.
vii) They are direct responsible to senior management team. The middle management team is coordination activities between the senior management team and the lower management team.

viii) They are responsible to work as reporting authority of lower management team where the senior manager is not directly involved e.g. Farm Manager and sales point in charges.

1.8.10. Lower Management Team

The Lower Management team is also known as supervisory / operative level of management. It consists of supervisors, foreman, section leaders, etc. Supervisory management refers to those executives whose work has to be largely with personal oversight and direction of operative employees. In other words, they are concerned with direction and controlling function of management. Their activities include -

i) Assigning of jobs and tasks to various workers in daily activities.
ii) They guide and instruct workers for day to day activities.
iii) They are responsible for the quality as well as quantity of production.
iv) They are also entrusted with the responsibility of maintaining good relation in the organization.
v) They communicate workers problems, suggestions, and recommendatory appeals etc to the higher level and higher-level goals and objectives to the workers.
vi) They help to solve the grievances of the workers.
vii) They supervise & guide the employees who works under them.
viii) They are responsible for providing training to the workers.
ix) They arrange necessary materials, machines, tools etc for getting the things done.
x) They prepare periodical reports about the performance of the workers.
xi) They ensure discipline in their working place.
xii) They motivate workers.
xiii) They are the image builders of the company because they are in direct contact with the workers.
xiv) Also, they act as a bridge between workers and middle or senior management team.

Meru Agro Tours & Consultants Co. Ltd management structure is composed of Board of Directors, Executive Management Team, Senior Management Team, Departmental Management Team, Zonal Management Team, Seed Processing Management Team, Farm Management Team, middle management team and lower management team as per organogram below.

Singida Farm

Table 4: Singida farm operationalization plan 2024/2025-2028/2029

S/NO	Activity	Activity Target by Year (Ha)				
		2024/2025	2025/2026	2026/2027	2027/2028	20
1	Bush Clearing	-	400	300	300	350
2	Ploughing	-	400	550	850	1,200
3	Harrowing	-	400	550	850	1,200
4	Planting	-	400	550	850	1,200
5	Drilling Boreholes	-	1	-	-	-
6	Water reservoir	-	1	-	-	-

(i) Katavi Farm

Table 5: Katavi farm operationalization plan 2024/2025-2028/2029

S/NO	Activity	Activity Target by Year (Ha)				
		2024/2025	2025/2026	2026/2027	2027/2028	
1	Bush Clearing	-	500	600	750	75
2	Ploughing	-	500	1,100	1,850	2,
3	Harrowing	-	500	1,100	1,850	2,
4	Planting	-	500	1,100	1,850	2,
5	Drilling Boreholes	1	-	-	-	-
6	Water reservoir	-	1	-	-	-

2.1.3 Machines and equipment requirement plan

Below is the table of machines and equipment required in each season from 2024 to 2029 production season.

Table 6:Machines and equipment requirement plan 2024/2025-2028/2029

S/NO.	MACHINES	Quantity by Year										TOTAL
		2024/2025		2025/2026		2026/2027		2027/2028		2028/2029		
		Singida	Katavi	Singida	Katavi	Singida	Katavi	Singida	Katavi	Singida	Katavi	
1	Tractor 180-200 HP	1	2	-	1	1	1	1	-	-	1	8
2	Tractor 150-180 HP	1	1	-	-	1	1	-	-	-	1	5
3	Tractor 95 HP	2	2	-	1	-	1	1	2	-	-	9
4	Tractor 75 HP	2	2	-	1	1	2	1	-	1	2	12

5	Bulldozer (D6)	2			2	-	-	-	-	-	-	4
6	Excavator	2	-		1	-	-	-	-	-	-	2
7	Combine Harvester	-	-	-	-	1	1	-	-	-	-	2
8	Water Bowser	1	1	-	-	-	-	1	1	-	-	4
9	Fuel tanker	1	1	-	-	-	-	-	-	-	-	2
10	Plough GTCR	2	2	-	1	1	1	1	-	-	1	9
11	Harrow GTCR	1	1	-	-	1	1	-	-	-	1	5
12	Planter	2	2	-	1	-	1	1	2	-	-	9
13	Boom sprayer	2	2	-	1	1	2	1	-	1	2	12
14	Chainsaws	5	15	-	-	-	-	-	-	-	-	20
15	Workshop tool kit	1	1	-	-	-	-	-	-	-	-	2
16	Farm Car – Land Cruiser Single/Double cab	1	1	1	1	-	-	-	-	-	-	4
17	Motorbikes	-	-	1	1	1	2	-	1	2	2	10
18	Labor collection truck- Canter	-	-	1	1	-	-	-	-	-	-	2
19	Trailer	2	2	-	-	1	2	-	-	1	1	8
20	Bicycles	-	-	2	2	2	4	-	2	4	4	20
21	Lowbed	-	1	-	-	-	-	-	-	-	-	1
22	Tip truck	1		-	-	-	-	-	-	--	-	1
23	50Ha Complete Center Pivot system	4		4		8	2	12				30
24	800KVA Transformer with Auto re-closure	2		2		4	1	6				15
25	200Ha Center Pivot Piping system	1		1		2	0.5	3				7.5
26	Electric wires for center pivots system	10km		10Km		20Km	10Km	30Km				80km
27	500KVA Standby Generator	1		2		4	1	4				12

2.1.4 Farm infrastructure development plan

In each farm, infrastructures are going to be developed periodically depending on the need of a respective infrastructure and staffing plan.

The tables below summarize on farm infrastructures development for Central Zone and Western Zone Farms.

Table 7: Farm infrastructure development plan 2024/2025-2028/2029 for Singida and Katavi farm

S/No.	INFRASTRUCTURE	Infrastructure Development Plan by year								
		2024/2025		2025/2026		2026/2027		2027/2028		20
		Singida	Katavi	Singida	Katavi	Singida	Katavi	Singida	Katavi	Singid
1	House – 3 bedrooms	1	1	-	-	-	-	-	-	-
2	House – 2 bedrooms	2	2	-	-	-	-	-	-	-
3	3 Apartment house	2	3	5	6	4	7	3	4	3
4	Office	-	-	-	1	1	-	-	-	-
5	Warehouse -Seed storage and agrochemicals	-	-	1	1	-	-	-	-	-
6	Workshop	1	1	-	-	-	-	-	-	-
7	Water source (Boreholes)	1	1	-	-	-	-	-	-	-
8	Water reservoir (Dam)	-	-	1	1	-	-	-	-	-
9	Electricity-Generator	1	1	-	-	-		-		-
10	Kitchen	1	1	-	-	-	-	-	-	-
11	Social club	-	-	-	-	-	-	-	1	-
12	Dispensary	1	1	-	-	-	-	-	-	-
13	Primary school	-	-	-	-	-	-	-	-	-
14	Farm shop	-	-	1	1	-	-	-	-	-

2.1.5 Staffing plan

In all the farms new staffs are going to be employed according to the demand (depending on the total area under production).

Below are yearly staffing plan tables in Central Zone Farm and Western Zone Farm.

Table 8: Singida and Katavi farm Staffing plan 2024/2025-2028/2029

S/No.	Position	Staffing plan by year								
		2024/2025		2025/2026		2026/2027		2027/2028		
		Singida	Katavi	Singida	Katavi	Singida	Katavi	Singida	Katavi	Sin
1	Farm Manager	1	1	-	-	-	-	-	-	-
2	Chief Agronomist	-	-	1	1	-	-	-	-	-
3	Chief technician	1	1	-	-	-	-	-	-	-

4	Accounts clerk	1	1	-	-	-	-	-	-	-
5	Security supervisor	1	1	-	-	-	-	-	-	-
6	Field Officer	-	-	1	1	1	2	-	1	2
7	Assistant Field Officer	-	-	2	2	2	4	-	2	4
8	Technicians	1	1	-	-	1	1	1	1	-
9	Assistant technicians	1	1	-	-	1	1	1	1	-
10	Machine Operator	1	2	6	10	4	6	3	2	1
11	Assistant machine operators	1	2	6	10	4	6	3	2	1
12	Chainsaws Operators	5	15	-	-	-	-	-	-	-
13	Security guards	1	1	3	5	3	6	3	8	3
14	Store keeper	1	1	-	-	-	-	-	-	-
15	Cleaners and cook	1	1	-	-	1	1	-	-	-
16	Office attendant (Secretary)	-	-	-	1	-	-	-	-	-

S/No.	Attribute	Farmer Benefits	Variety										
			Meru HB 405	Meru SB 507	Meru HB 509	Meru HB 513	Meru HB 515	Meru IR 621	Meru HB 623	Meru Lishe 503	Meru Lishe 511	Meru VAH 517	Meru VAH 519
1	High yielding under Low Nitrogen doses (Low -N)	❖ High yielding under low top-dressing fertilizers ❖ High yielding under marginal lands	×	×	√	√	×	×	×	×	×	×	×
2	Resistance to most common maize leaf disease (Grain leaf disease, Maize strike virus disease)	❖ Gives assurance of harvest in areas affected by leaf disease.	√	√	√	√	√	√	√	√	√	√	√
3.	Moderate tolerant against Maize Lethal Necrosis Disease (MLN)	❖ Gives assurance of good harvest against MLN infested areas in Tanzania	×	×	√	×	×	×	×	×	×	×	×
4	IR variety	❖ Well adapted to striga prone areas	×	×	×	×	×	√	×	×	×	×	×
5	Stem Borer resistance	❖ Give assurance in stem borer prone areas ❖ Reduces insecticide cost in production	×	√	×	×	×	×	×	×	×	×	×
6	Drought tolerant	❖ Gives assurance of harvest in low rainfall areas. ❖ Gives assurance of harvest in short rainfall years	√	√	√	√	√	√	√	√	√	√	√
7	Good tip cover	❖ Prevents maize from cob rot disease.	√	√	√	√	√	√	√	√	√	√	√
8	White hard kernel/Grain	❖ Has good pound ability and gives more flour. ❖ Sweet corn hence suitable for roasted	√	√	√	√	√	√	√	√	√	√	√
9	High grain yield potential per acre	Assurance of benefit/gain from agriculture, with small farm area but high harvest.	25-30	30-40	30-40	30-40	30-40	40-50	40-50	30-40	30-40	30-40	30-40
10	Variety Maturity	❖ Most suited for the current climatic changes.	75-100 days	100-110 days	100-120 days	100-110 days	100-110 days	110-120 days	120-140 days	100-120 days	100-120 days	100-120 days	100-120 days
11	High level of Protein (Lysine and Tryptophan)	❖ Compliment daily protein intake ❖ providing structure and strength to cells and tissues ❖ controlling biochemical reactions and aiding the immune system ❖ Replenish worn out cells		×	×	×	×	×	×	√	√	×	×
12	High level of Pro-vitamin A	❖ Promotes good vision, especially in low light ❖ Form and maintain healthy skin, teeth, skeletal, soft tissue, mucus membranes white blood cells and the immune system	×	×	×	×	×	×	×	×	×	√	√

a. Common bean seeds

Meru has been producing common bean seed for several seasons now. The varieties produced include Lyamungo 90, Lyamungo 85, Uyole Njano, Uyole 03, Selian 13 and Uyole 96.

- **Lyamungo 85** is a determinate type suitable for an altitude between 900-1800 m.a.s.l. It has a large seed size, good cooking ability, palatable and yields about 1.2-1.5 tons per ha.

- **Lyamungo 90** has low tannin content as well as resistant to leaf rust and anthracnose.

- **Uyole Njano** is suitable in 1000 – 2000 metre above sea level and is one of the high yielding bean varieties registered in Tanzania producing up to 3 tons per ha. Uyole is tolerant to Leaf rust, Anthracnose, Mosaic Virus and Halo blight.

- **Uyole 03** is high yielding bean variety with shortened cooking time and tolerant to various leaf diseases.

- **Uyole 96** is tolerant to rust, Ascochyta and Bean Common Mosaic Virus therefore well adapted even to disease-prone areas.

- **Selian 13** is a yellow bean variety which reaches maturity within 60-75 days and has an average yield of 1.5-2.0 Mt/Ha. Selian 13 is a variety very tolerant to rust, blight virus disease and bacterial diseases.

b. Sunflower

- **Record:** Optimal production altitude ranging from 0 to 2000 m.a.s.l. Record can yield up to 2 tons per hector. Its oil content is 50%.

c. Wheat

- **Sifa** is one of varieties very resistant to leaf rust and smut disease. Sifa has an average yield of 1-1.2 Mt/Ha.

d. Sorghum

- **Macia** is a high-yielding, early maturing, white-grained variety with large heads. Macia has an average yield of 1.2 Mt/Ha.

3.2 Agrochemicals

Meru has registered one hundred and four (104) agrochemicals with Tanzania Plant Health and Pesticides Authority (TPHPA). Meru's pesticide portfolio includes seed dressers, insecticides, herbicides, fungicides, acaricides, grain storage and desuckerides. The company distributes agrochemicals into various pack sizes from 50 ml to 20 liters and 50 gm to 25 kg as farmer needs from small scale farmers to large scale farmers.

a) Insecticides

Table 9: List of MATCC registered insecticides

S/No.	Product Name	Active Ingredients and Concentrations	Uses/ Controlled Pests
1	Agromethrin 10 EC	Alpha-cypermethrin 100g/L	Contact & stomach poison, broad spectrum insecticide for control of lepidoptera, leaf eating caterpillars, bollworms, beetles & their larvae, sucking insects, such as aphids, whiteflies, thrips, leaf hoppers, & other virus vectors.
2	Protrin 60 EC	Chloropyrifos 500g/L + Cypermethrin 100g/L	Broad spectrum insecticide, it controls Bollworms, Aphids, jassids, leafworms, stainers, army worms, thrips, whiteflies, Bettles, Carterpillars, Fruits bores and leaf eating
3	Agromectin 1.8 EC	Abamectin 18g/L	Is a broad spectrum miticide/insecticide for control of red and spotted spider mites at all motile stage, leaf miners.
4	Agrofecron 720 EC	Profenofos 720g/L	It controls Vector complex i.e Chewing, sucking and biting pests such as scales, Leucoptera, Lepidoptera, antestia bugs, leaf miner, mealybugs, (leaf skeletonizer in coffee), Coffee berry bores
5	Metakan super 350 SE	Imidacloprid 200g/L + Cypermethrin 150g/L	Broad spectrum insecticide, it controls Bollworms, Aphids, jassids, leafworms, stainers, army worms, thrips, whiteflies, leaf miners, Bettles, Leaf eating, Fruits bores and sucking pests.
6	Agrothrin 5 EC	Lambda-cyhalothrin 50g/L	Is characterized by repellent properties and a very broad spectrum of activity for controlling chewing & sucking insects such as aphids, whiteflies, thrips, leaf hoppers & other virus and bacteria vectors
7	Dino 200 SG	Dinotefuran 200g/Kg	Is a systemic insecticide. It controls wide range of insect pests such as ants, thrips leaf miners, whiteflies, aphids, leafhoppers and mealybugs in mango, potato, cucurbits, ornamental plants. rice, fruiting vegetable and leafy vegetable
8	Midox 700 WG	Imidacloprid 700g/Kg	Is a broad-spectrum foliar insecticide with contact, and stomach action. it has a high knock-down effect and excellent residual activity.
9	Methox 250 WG	Thiamethoxam 250g/Kg	Is a new broad-spectrum insecticide for foliar and soil use to control sucking and some chewing insects in tomatoes, lettuce, salads, brassicas (cabbage, kales, etc), cucurbits, green beans, peas, okra, pepper, ornamentals, flowers and tobacco.
10	Atomic 230 SC	Emmamectin benzoate 50g/L + Methoxyfenozide 180g/L	Control Fall Army Worms in Maize and other crops.
11	Takai 150 SC	Chlorantraniliprole 100g/L + Lambda-cyhalothrin 50g/L	Control insect pests in horticultural crops.

12	Finisha 200 SC	Emmamectin benzoate 40g/L + Indoxcarb 160g/L	Control Fall Army Worms in Maize and other crops
13	Topstar 200 SL	Methomyl 200g/L	Control lepidoptera in horticultural crops.
14	Bodigadi 500 WDG	Lufenuron 400g/Kg + Emmamectin benzoate 100g/Kg	Control tuta absoluta and other insect pest in vegetables.
15	Midox 350 SC	Imidacloprid 350g/L	Control termites in horticultural crops.
16	Betamu 175 EC	Emmamectin benzoate 25g/l + Acetamiprid 100g/l + Alphacypermethrin 50g/l	Control of Sucking insects and Lepidoptera in vegetables
17	Fecron Super 330 EC	Profenofos 300g/l + Lambdacyhalothrin 30g/L	Control of Sucking insects and Lepidoptera in vegetables
18	Mefeni 350 SC	Thiamethoxam 20.5% + Bifenthrin 14.5%	Control of Sucking insects and Lepidoptera in vegetables
19	Feron 240 SC	Chlorfenapyr 19% + Lufenuron 5%	Control of Sucking insects and Lepidoptera in vegetables
20	Ridimu 80 EC	Abamectin 2% + Acetamiprid 6%	Control of Sucking insects and Lepidoptera in vegetables
21	Damethrin 2.5 EC	Deltamethrin 25g/Lt	Control of Sucking insects and Lepidoptera in vegetables
22	Methox Plus 250 ZC	Thiamethoxam 150g/Lt + Lambacyhalothrin 100g/Lt	Control of Sucking insects and Lepidoptera in vegetables
23	Daziron 250 SC	Diflubenzron 200g/Lt + Imidachloprid 50g/Lt	Ground application of red and desert locust
24	Daziron 50 ULV	Diflubenzron 40g/Lt + Imidachloprid 10g/Lt	Ground and Aerial application of red and desert locust.
25	Damethrin 1 ULV	Deltamethrin 10g/Lt	Ground and Aerial application of red and desert locust.
26	Locutox 125 ULV	Fipronil 125g/Lt	Ground and Aerial application of red and desert locust.
27	Methion 60 ULV	Fenthion 600g/Ly	Control of Quelea Quelea
28	Damethrin Super 9 ULV	Dimethoate 85g/Lt + Alphacypermethrin 5g/Lt	Control of Quelea Quelea
29	Davo 500 EC	Dichlovos 500g/Lt	Control of Larger grain Borer, maize weevils and household insects on Disinfestation of Storage Structures for Maize, Public health

b) Fungicides

Table 10: List of MATCC registered fungicides

S/No.	Product Name	Active Ingredients and Concentrations	Uses/ Controlled Pests
1	Agromenol 250 EC	Triadimenol 250g/L	Is systemic with protective, curative & eradicative action for the control of powdery mildew (sphaerothica pannosa), rust (uromyces dianthi), black spots and botrytis
2	Agromenol super 300 EC	Triadimenol 150g/l+Tebuconazole 150g/l	is a systemic fungicide with protective, curative and eradicative action against brown rust, yellow rust, leaf blotch, net blotch, spot blotch, stem rust, speckled leaf blotch and powdery mildew in wheat and barley.
3	Meronil 720 EC	Chrolothalonil 720g/L	Preventive action against early and late blight, leaf rust, down mildew, purple blotch and Coffee Belly Diseases (CBD)
4	Sipron Star 330 EC	Propiconazole 250g/L + Cyproconazole 80g/L	it control all wheat and Barley diseases such as Rust diseases, net blotch& Rhynchosporium, scald, powedery mildew, Septoria tritici blotch, and yellow spot in wheat and barley
5	Agrozeb Gold 700 WP	Mancozeb 600g/Kg + Dimetomorph 100g/Kg	Provide preventive and curative action against early blight (caused by **alternaria solan)** and late blight (caused by **phytophthora infestans**) in potatoes and tomatoes as well as downy mildew in roses.
6	Agrozeb Gold 80 WP	Mancozeb 800g/Kg	Provide preventive action Early & Rate blight and Downey mildew in vegetables and roses
7	Metax 450 WP	Triadimefon 250g/kg+Metalaxyl 200g/kg	Is a systemic, broad-spectrum fungicide for control of many fungal diseases which affect coffee, vegetables, tree fruits, ornamentals and cashew
8	Hezron 50 EC	Hexaconazole 50g/L	Is a systemic, broad-spectrum fungicide for control of many fungal diseases which affect coffee, vegetables, tree fruits, ornamentals and cashew
9	Bellet 400 WP	Thiram 300g/Kg + Thiophanate-methyl 10g/Kg	Control wide range of fungal diseases in vegetables
10	Okapi 300 SC	Picoxystrobin 220g/L + Cyproconazole 80g/L	A systemic, broad-spectrum, fungicide for control of rust, grey leaf spot and blight in maize, beans, barley, wheat and other crops
11	Pacha 500 SC	Triadimenol 250g/L + Carbendazim 250g/L	Control fungal diseases in horticultural crops and cashew.
12	Nemox 780 WP	Propineb 700g/kg + Cymoxanil 80g/Kg	Control fungal diseases in horticultural crops.
13	Sulfo 990 DP	Sulphur 99%	Control fungal diseases in horticultural crops and cashew.
14	Sulfo 80 WP	Sulphur 800g/Kg	Control fungal diseases in horticultural crops and cashew.
15	Stone 480 SC	Pyraclostrobin 160g/L + Tebuconazole 320g/L	Control fungal diseases in horticultural crops.
16	Apozim 250 SC	Epoxiconazole 125g/L + Carbendazim 125g/L	Control fungal diseases in Wheat and Barley.
17	Heko 300 SL	Hymexazol 300g/L	control soil borne diseases caused by Fusarium, Aphanomyces, Pythium, Corticium and Typhula sp.,
18	Fagio 78O WP	Mancozeb 60% + cymoxanil 8% + Dimethomorph 10%	Control fungal diseases in horticultural crops.
19	Sulfo Super 800 WP	Mancozeb 500g/Kg + Sulphur 300g/Kg	Control fungal diseases in horticultural crops.

c) Herbicides

Table 11: List of MATCC registered herbicides

S/No.	Product Name	Active Ingredients and Concentrations	Uses/ Controlled Pests
1	Agrosate 480 SL	Glyphosate 480g/L	Non selective herbicide used to control Couch grass, Star grass and perennial glass
2	Agromine 720 SL	2,4 D- Amine	Post emergency herbicide highly effective again Broad leaves in Broad leaves- wheat, Barley, paddy, maize, finger millet, sorghum
3	Lamex 79 WG	Atrazine 75% + Nicosulfuron 4%	Post-emergency Maize herbicide highly effective against broadleaves, and grasses
4	Kiboko Gold	Mesotrione 5 % + Atrazine 50%	Post-emergency Maize herbicide highly effective against broadleaves, and grasses
5	Safuroni 715 WP	Quinclorac 48 %+ Pyrazosulfuron-ethyl 1.5 % + Cyhalofop-butyl 22%	Post-emergency Rice herbicide highly effective against broadleaves, aquatics and grasses including known resistant types
6	Meraxone 200 SL	Paraquat 200g/L	Non selective herbicide used to control Couch grass, Star grass and perennial glass
7	Bakapu 600 EC	Propanil 200g/L + Thiobencarb 400g/L	Post-emergency Rice herbicide highly effective against broadleaves, aquatics and grasses.
8	RiceBac 400 SC	(Bispyribac-sodiumSodium 400gm/L	Post-emergency Rice herbicide highly effective against broadleaves, aquatics and grasses including resistant biotypes.
9	Bromox 450 EC	(Bromoxynil 225g/L +MCPA 225g/L)	Post emergency herbicide highly effective again Broad leaves in wheat, Barley, paddy, maize, finger millet
10	Amigo 650 WG	(Ametryn 400g/Kg + Terbutryn 250g/Kg)	Is the post-emergent herbicide which provides knockdown and residual control of annual grass and broadleaf weeds in sugarcane.
11	Duron Super 650 WG	(Diuron 500g/Kg +Hexazinone 150g/Kg)	is a soil residual, broad spectrum post-emergence herbicide for control of a wide range of annual and perennial grasses, broadleaf weeds and vines in established sugarcane.
12	Melan Super EW 90	(Fenoxaprop-P-ethyl 69g/l + Mefenpyr-diethyl 21g/l)	Is a post emergence herbicide highly effective against grass weeds and some broad leaf weeds in wheat, barley and rye
13	Ndamo 55 WP	(MCPA 100g/Kg + Ametry 300g/Kg +Diuron 150g/Kg	Is an early post emergence herbicide for control of annual grass and broadleaf weeds in sugarcane best results will be achieved when weed seedlings are small and actively growing. spray when soil moisture conditions are good at the early post-emergent stage of the sugar cane.
14	Todim 12.5 EC	(Sethoxydim 125g/L	is a selective broad-spectrum post-emergence herbicide for control of annual and perennial grass weeds in citrus, cotton soybean, ornamental, peanut. Essentially all grass crops such as maize, sorghum, rice as well as ornamental grass are susceptible to this product.
15	Stoper Gold 450 CS	(Pendimethalin 450g/Lt	Selective pre-emergence herbicide for control of annual grasses and broadleaf weeds in rice
16	Penox 110 OD	Penoxsulam 10g/L + Cyhalofop-butyl 100g/L	Control grasses, broadleaves and sedges in rice.
17	Bentam 460 SL	Bentazone 400g/L +MCPA 60g/L	Control broad leaved weeds in maize and rice
18	Selekta 150 ME	Clomazone 90g/L + Quizalofop-P-ethyl 15g/L +Fomesafen 45g/L	Control weeds in beans
19	Cottogad 560 SC	Glyphosate 60g/l + Fluometuron 250g/l + Prometrine 250g/l	Control weeds in vegetables and other crops.
20	Galaxy 16 GG	Pretilachlor 145g/Kg + Pyrazosulfuron ethly 15g/Kg	Control weeds in transplanted rice

21	Bentazon 380 EC	Clomazone 240g/l + Pretilachlor 40g/l + Bensulfuronmethyl 100g/L	Control weeds in rice
22	Meraxone Plus 380 SL	Paraquat 280g/L + Diuron 100g/L	Control weeds in sugarcane.
23	Neron 500 WP	Linuron 500g/Kg	Control weeds in carrot and onions
24	Metrazin 500SC	Attrazine 250g/L + Ametryn 250g/L	Control weeds in sugarcane
25	Bafron WDG	Metsulfron 200g/L	Control broad leaf weeds in wheat and barley
26	Trairam 300 SL	Triclopyr 200g/L + Picloram 100g/Lt	Control shrubs and weeds in Plantations
27	Pomex 500 EC	Oxyfluorfen 5% + Metolachlor 30%+ Pendimethalin 15%	Control of weeds in onion.
28	Rilofu 110 OD	Rimsulfuron 2.5% + Quizalofop-P-ethyl 8.5%	Used for control of weeds in Irish potatoes
29	Baneti 400 OD	2,4-D butylate 10.5% + Nicosulfuron 4.5 % +Atrazine 25%	Used as post emergence herbicide for the control of narrow and broad-leaved weeds in maize.
30	Lamex Super 26 0D	Mesotrione4% + Nicosulfuron 2% + Atrazine 20 %	Used as post emergence herbicide for the control of narrow and broad-leaved weeds in maize.
31	Bentam Gold 240 EC	Bentazone 15% + Quizalofop-Pethyl 2% + Fomesafen 7 %	Used as post emergence herbicide for the control of weeds in beans.
32	Todim Super 208 ME	Fomesafen 12.5% + Sethoxydim 8.3%	is a selective broad-spectrum post-emergence herbicide for control of annual and perennial grass weeds in citrus, cotton soybean, ornamental, peanut. Essentially all grass crops such as maize, sorghum, rice as well as ornamental grass are susceptible to this product.
33	Beansweed 460 SL	Bentazone 36% +fomesafen 10%	Used as post emergence herbicide for the control of weeds in beans.
34	Ribon 330 WP	Fluroxypyr-methyl 300g/kg + Tribenuron-methyl 30g/kg	Control of broad-leaved weeds in wheat and barley
35	Bafron super 500 WP	Carfentrazone-ethyl 400g/kg + Metsulfuron methyl 100g/kg	Control of broad-leaved weeds and sedges in wheat and barley
36	Kabamax 750 WDG	Flucarbazone-sodium 500g/kg + Tribenuron-methyl 250g/kg	Control of broad-leaved weeds and some grasses in wheat and barley
37	RiceBack 450 WP	BispyribacSodium 300gm/L + Quinclorac 150g/L	Control of grasses and some broad leaves in paddy.

d) Suckericides

Table 12: List of MATCC registered suckericides

S/No.	Product Name	Active Ingredients and Concentrations	Uses/ Controlled Pests
1	Mkombozi 30.2 SL	Maleic Hydrazide 30.2 %	The only available systemic product to control suckers in tobacco
2	Bamex 305 EC	Flumetralin 12.5% + Butralin 18%	Control suckers in tobacco
3	Stoper 330 EC	Flumetralin 12.5% + Butralin 18%	Control Suckers in tobacco

e) Acaricides

Table 13:List of MATCC registered Acaricides

S/No.	Product Name	Active Ingredients and Concentrations	Uses/ Controlled Pests
1	Merutix 10 EC	Alphacypermethrin 100 g/L	Control of cattle ticks and ectoparasites
2	Merutix super 400 EC	Cypemethrin 150g/L + Chlorpyrifos 250g/L + piperonyl Butoxide 150g/L + Citronelle 10g/L	Control of cattle ticks and ectoparasites

f) Grain storage

Table 14:List of MATCC registered grain storage

S/No.	Product Name	Active Ingredients and Concentrations	Uses/ Controlled Pests
1	Kiboko Grain dust	Fenitrothion 12g/kg + Deltamethrin 13g/kg	Contains a combination of organophosphate (fenitrothion) and a synthetic pyrethroid (deltamethrin)
2	Alupho Tabs	Aluminum Phosphide 56%	Control of larger grain borer (Prostephanus trancatus) and weevils (Sitophilus zeamais) on maize storage

g) Seed Dressers

Table 15: List of MATCC registered Seed dressers

S/No.	Product Name	Active Ingredients and Concentrations	Uses/ Controlled Pests
1	Seed Care 30 WS	Imidachloprid 10% + Metalaxyl 10 % + Carbendazim 10 %	Control of Helminthosporium, maydis, Sphacelotheca reiliana, Pythium spp, Rhizoctonia spp, Fusarium spp, Pythium spp, Rhizoctonia Alternaria spp, Diaporthe (Phomopsis) spp , aphids, white flies, leafhoppers, wireworm
2	Seed Care Gold 350 WS	Imidacloprid250g/Kg + Thiram 100g/Kg	Control of Helminthosporium, maydis, Sphacelotheca reiliana, Pythium spp, Rhizoctonia spp, Fusarium spp, Pythium spp, Rhizoctonia Alternaria spp, Diaporthe (Phomopsis) spp , aphids, white flies, leafhoppers, wireworm
3	Seed Guard 250 FS	Thiamethoxam 22.2% + Metalaxyl-M 1.7% + Fludioxinil 1.1%	Control of Sucking insects, Fusarium wilt, Bacterial blight,Damping off and Verticulum wilt in Maize as seed treater
4	Seed Guard Gold 415 FS	Thiamethoxam 250g/L + Carbendazim 150g/L + Fludioxinil 15g/L	Control of Sucking insects, Fusarium wilt, Bacterial blight, Damping off and Verticulum wilt in Maize as seed treater

h) Foliar Fertilizers

Table 16: List of MATCC registered foliar fertilizers

S/No.	Product Name	Active Ingredients and Concentrations	Uses
1	Foliar Booster High N	N:P:K 31:11: 11+TE	Contain high amount of Nitrogen to be used in different crops at vegetative stage.
2	Foliar Booster High P	N:P:K 12:52:5+TE	Contain high amount of Phosphorus and is used at the initial stage of growth of the crop
3	Foliar Booster High K	N:P:K 15:12:31+TE	Contain high amount of Potassium and is used during maturity stage of the crop
4	Foliar Booster General	N:P:K 20:20:20 +TE	Contain same amount of N, P and K and is used at different stages of growth.
5	Foliar Booster Potato	N:P:K 14:25:13 +TE	Contain essential nutrients N, P and K and Trace elements used for potatoes.
6	Crop Master	N:P:K 24:18:18 +TE	Is used at different stages of growth and applied in different crops
7	Pawa Booster	Trace elements (Cu:Fe:Ma:Zn:Bo:Mo:Mg – 1.6:6.5:1.6:0.9:1.6:0.3:1.0)	Is used to help during growth of vegetable crops as it contain high amount of trace elements.
8	Seed Booster	N:P:K 24:18:18 +TE	Is used as seed enhancer
9	Yield Booster	N:Ca:Mg: Bo:Zn 13.2:11.2:3.4:0.32:0.1	Contains Calcium and trace elements and is used for tomatoes and helps to prevent blossom end rot

3.3 Sprayers and its accessories

In the Tanzanian context, field management cannot be achieved without pest control and fertilizer application. Pesticide and fertilizer application becomes effective when proper tools and equipment are used. In addition, to protect applicator's health suitable equipment is crucial. Meru understands that farmers field management tactics, field size, economic status, location, labor availability and field terrain varies most.

Meru distributes various sprayers to accommodate different farmer programs. The sprayers' volume ranges from 1 litre for hand sprayers to 600 litres for boom sprayers and their spare parts as listed in the table that follows.

Table 17: List of sprayers and accessories supplied by MATCC

Name	Volume	Package Inclusive
Pulmic-Tractor Boom Sprayer	600Lt	Three Nozzles per Hole.
Pulmic Motorized Air Sprayer	12Lt	
Pulmic Motorized knapsack sprayer	25Lt	
Pulmic Raptor 16 –Hand Knapsack Sprayer	16 Lt	Shield, Jacket, Additional Nozzles, and pump rubber.
Pulmic Hand Sprayer	1Lt	
Various Nozzles -flat, Eco-fan	Pcs	

3.4 Outreach services

The following are some outreach services that MATCC participates:

Table 18: Summary on outreach services conducted by Meru

S/No.	Outreach service	Description
1.	Demonstration plots	Every season total of 1,000 – 1,200 demonstration fields are established in different areas. Normally demos are located in strategic areas where they can be easily seen and accessed by passers-by. The demonstration plot is the learning place where farmers working in small groups collect data, analyze and make decisions based on their analyses then present the decisions to other farmers for refinement.
2.	Field days	Field Days (FDs) consist of groups of farmers who get together to study a particular topic. FDs provide opportunities for learning by doing. It teaches basic agricultural and management skills that make farmers experts in their own farms. The aims of field days are; ▪ To empower farmers with knowledge and skills ▪ To make farmers experts in their own fields. ▪ To sharpen the farmers' ability to make critical and informed decisions. ▪ To sensitize farmers in new ways of thinking and problem solving ▪ To help farmers learn how to organize themselves and their communities.
3.	Agro-dealer seminars	This involves a group of 20 -30 agro-dealers (business owners and shopkeepers). The aim is to equip the participants with knowledge on seed storage, good agronomic practices (GAP), customer care, communication skills, business management and financial management.
4.	Agricultural shows	Meru participates in agricultural exhibitions every season. The

	participation	largest exhibitions being Nane Nane shows in every August. In exhibitions, visitors have a chance to see the performance of agro seeds therefore they learn good agronomic practices to maximize productivity in their fields. It is also an opportunity for visitors mainly farmers to discuss face to face with the company agronomists on the best farming practices.

4.0 MARKET ANALYSIS AND SECTOR PERFORMANCE.

4.1 Company Product and Services Markets/Consumers.

In general, the market for MATCC Ltd products can be divided into three major categories according to mode of buying and size of orders:

a) **Tenders:**
These include: Local government Authorities, Ministry of Agriculture, Government institutes, Crop boards, Farmers Cooperative unions mainly for seeds and agrochemicals.

b) **Plantations and specialized markets.**
Mainly large-scale farms, such as Tobacco companies, Coffee estates, Seed growers, flower farms, sugar plantations, Contract growing schemes (Malting Plant and Serengeti Brewery), Tea estates, Local NGOs and Agricultural. Development projects.

c) **Cash and short-term credits:**
These include: Agro Dealers, Distributors, Agents, farmers groups and large-scale farmers. These are mostly individuals or traders buying in small orders.

Meru Agro Ltd plans to focus its effort at district to village level, especially small-scale farmers in the marginalized area with the aim of enabling them to have access to and use of quality affordable appropriate improved seeds and other agro-Inputs, thus improving their livelihood.

4.2 Market Segmentations.

The market segmentations bases on the customer needs and land use at district to village levels and on agro ecological areas. At district level, it will be divided into agro-seed needs, agro-chemical needs, fertilizer needs, agro- equipments needs, agro- produce market needs and agro-technology needs.

In potential areas such as Southern highlands and Northern regions the emphasis will be on the hybrid seeds and high level of productivity technologies.

In marginal areas the emphasis will be to design appropriate land use/drought resistant crops, conservation tillage/rain water harvest, high value low yield crops, food security OPV seeds and etc. MERU AGRO Ltd intends to integrate the socio-economic and environmental conservation with market and profitability on selecting appropriate and optimal land use for these areas. We believe that if we can promote appropriate and profitable land use (crop selection) for these areas- with less risk on moisture limitations, farmers will be able to adopt the use of improved inputs and agro-technology sustainably, hence increasing volume, market and use of agro-inputs

4.3 Target Market and Sector Performance Growth Potential.

The government statistics for different inputs shown that the input consumption has registered positive growth. For the next five years the inputs consumption will continue to increase due to strengthened remarkable development in:

- Government will, efforts, strategies and development plans in solving existing constraints affecting utilization of agro-inputs and agriculture development.
- Current improvements in government policies, access to the National, Regional and International market; hence increase in demand, price and reduction in trade barriers for agro produce
- Inter-industry relationships: new investments in agriculture- there is an increase in investors investing in agricultural production, agro export and processing
- Financial support in agriculture: There are more agro-financing efforts going on than before hence empowerment of stakeholders to increase productivity and distribution of agro-input.

- ❖ Agricultural developments projects: There are more agricultural projects going on than before hence empowerment of stakeholders to increase productivity and distribution of agro-input.

The above trends in agriculture developments show that the consumption of agro inputs increases. With proper planning and investment Meru Agro-Tours & Consultants Ltd, stands a better chance of being very successful. Either positive population growth will increase demand for food leading to increased production and input consumption.

4.4 Target Market Segment Strategy

4.4.1 Small scale farmers

Our target is to cover and focus intensively and extensively at small scale farmers at district level for all districts in Tanzania. Each district will be treated as an individual customer/ a specific market segment. After conducting market research/ survey involving district agricultural authorities, NGOs, stockiest and farmers, we will develop a marketing strategy and specific market offering packages for that particular district.

4.4.2 Large scale and bulk buyers

For this market segment the strategy is to identify, select customers from international to district levels- to know what they do, what they want and need, how, when, and develop their profiles for the same. And determine how and what to produce according to their specifications and needs - individual marketing. Our model is customer customization on not only what the customer wants but also what on the problems she/he is facing. It is looking for the solution rather that selling of the products.

5.0 MARKETING AND DISTRIBUTION PLAN

Marketing plan is usually done in zone yearly; hence we do establish four marketing plans for the four zones of Meru namely Northern Zone marketing plan, Southern Highland Marketing plan, Central and Coast Marketing plan and Lake zone Marketing plan. The combined plans for the four zones make the company Marketing plan.

The zonal marketing plans are usually established at the zonal level where the sales points for the zone plans are combined to make the zone marketing plan. Once the plans have been developed, the zonal manager presents it to the Senior Management team during the planning meeting usually held in Arusha in May each year.

Meru uses the SOSTAC Model for marketing planning. SOSTAC is an acronym for the 6 basic elements of market plan. The elements are described below

- Situation - where are we now?
- Objectives - where do we want to get to?
- Strategy - How are we going to get there? (Big picture)
- Tactics - How are we going to get there? - (detail)
- Actions -Who is going to do what & when?
- Control - How can we control, measure & develop process

In situation analysis the main focus is the analysis of the customers, analysis of markets/opportunities available in each sales point, analysis of competitors, potential partners available, wider macro environment, company capabilities and issues form SWOT analysis.

In setting objectives usually, the plans align the marketing objectives with the business objectives and business missions. The objectives are usually defined based on sales turnover for the period of the plan by product and market segment; market share for the period of the plan by product and market segment; customer satisfaction, brand awareness and even new product development.

Strategy usually involves the Segmentation of the available opportunities, selection of the opportunities to be captured in the period and decision on how the company will position itself in capturing the targeted opportunities.

The tactics involves detailed description and plan of eight P's namely product, price, place, promotions, services, people/team, processes and physical presentation. The plan also includes communication mix, content plan and contact plan.

Actions plans involves Governance - who is going to do what? When are they going to do it? What is the resource allocation? What are the key performance measurements? How is the performance going to be recorded?

Control involves setting goals on what are we trying to achieve, Measuring Performance by checking what is actually happening; diagnosing performance by asking critical questions as Why is it happening and taking corrective action by deciding on what can be done about it.

5.1 Available Opportunities.

Agro seeds

Currently the company has huge potential lies in the agro seeds business due to the fact that there is huge potential market that is untapped.

Table 19: Summary of identified opportunities

Opportunities	Projected Opportunities					Total
	2024/25	2025/26	2026/27	2027/28	2028/2029	
Irrigation schemes	40	56	60	115	55	324
Prisons	13	11	6	8	10	58
AMCOS	720	685	520	469	451	2,845
Agro-dealers	859	526	502	298	66	2,251
Plantations	42	35	27	24	13	141
Government Institutions	9	6	5	4	4	28
NGO's	6	3	2	2	1	14

5.2 Marketing plan objectives

The company marketing plan objectives are:

- To generate net annual profit that represent the return average of 15% on the resources employed for the next five years.
- Increase sales revenue by an average of at least 20% for the next five years.

5.3 Marketing Strategies

The company will employ value creation and delivery sequence which involves first target market identification, product selection, price, distribution and promotions mix.

For each of the established/identified market segment, a different marketing mix has to be designed in order to ensure capturing of enough marketing shares.

The following marketing mix strategy will be employed in designing the marketing mix for each of the identified market segment s the strategies that will be used in the next five years.

Table 20: Summary on marketing strategies to be used in different sales point

S/No.	MARKETING STRATEGIES	MBEYA				KAHAMA			ARUSHA		MOROGORO			TOTAL
		Mbeya	Iringa	Ruvuma	S/wanga	Kahama	Bariadi	Tabora	Babati	Arusha	Morogoro	Ifakara	Masasi	
1	Establishment of demonstration plots	160	130	140	140	125	320	190	130	140	120	30	50	**1,675**
2	Conduction of field days	12	8	10	9	29	65	16	10	10	12	5	5	**247**
3	Distribution of small packs	6000	6000	6000	6000	2720	3500	2580	3000	3000	3000	3000	3000	**58,600**
4	Distribution of leaflets	2000	2000	1500	2300	2000	2000	2000	1500	2000	2000	1500	1500	**29,800**
5	Posters	200	200	1000	720	500	150	150	200	200	200	200	200	**4,570**
6	Irrigation scheme training	19	11	13	8	10	3	7	15	10	10	5	8	**147**
7	Farmer groups training	120	32	45	60	106	254	105	32	60	105	80	130	**1400**
8	Agro-dealer recruitment	59	3	39	15	154	310	143	39	20	32	45	60	**1274**
9	Plantation training	10	9	1	6	2		5	10	6	4	4	3	**72**

5.4 Distribution Strategies.

Meru is headquartered in Arusha and has well established four branches at Arusha, Morogoro, Mbeya and Kahama. The company is already doing inputs supply business with farmers across all the country. It has a well-established network that is used to distribute its products. This same network is expected to be used in the distribution process of the tendered products and after sales services. This network is aligned in such a way that it facilitates the product to reach to the farmers timely and in less expensive way. Currently Meru has more than seventeen sales and marketing points in the country and is distributing its products through a network of more than 1200 agro dealers all over the country.

This arrangement, has eradicated the challenges with long travelling distances to cover the target markets, time limitation taking into account that the country is very big and the season window is short. The plan has also improved effective and efficient of the marketing activities carried out and making follow up on the activities, improved accountability and increased sales.

The twelve Marketing and sales points are located at regions namely Rukwa (Sumbawanga), Ruvuma (Songea), Iringa (Iringa), Manyara (Babati), Kahama (Shinyanga), Tabora (Tabora), Simiyu (Bariadi) Mbeya (Mbeya), Morogoro (Morogoro), Morogoro (Ifakara) Mtwara (Masasi) and Arusha (Arusha).

This plan has helped the company to increase the sales and also distribution network and now covering most parts of the country. Meru only sales its products on retail at Arusha and Mbeya where the company has shops and in all other points sales are done through the distribution network developed.

Figure 1:Meru agro sales and marketing distribution network

5.5 Marketing and Sales team alignment and enrichment

The current operational structure has divided the country into zones and sales Points. The current team has to be aligned and enriched to implement the new proposed plan in the business plan. Table 29 below summarizes the current team.

Table 21 The status of marketing and Sales teams.

S/No.	Zone/Sale Point	Southern Highlands				Lake Zone			Northern Zone		Central and Coast			Sub Total by Position
	Position	**Mbeya**	**Iringa**	**songea**	**S/wanga**	**Kahama**	**Bariadi**	**Tabora**	**Arusha**	**Babati**	**Morogoro**	**Ifakara**	**Masasi**	
1	Zonal Managers	1	0	0	0	1	0	0	1	0	1	0	0	4
2	Sales Point In charge		1	1	1		1	1		1		1	1	8
3	Marketing Officers	2	1	0	1	2	1	1	3	1	2	0	0	14
4	Sales Officers	1	1	1	2	1	2	2	2	2	2	1	1	18
Sub-Total team by Sales Point		**4**	**3**	**2**	**4**	**4**	**4**	**4**	**6**	**4**	**5**	**2**	**2**	**44**
Sub-Total by Zone		**13**				**12**			**10**		**9**			

The new team alignment and enrichment plan will include the introduction of new positions at zonal and sales point level and also aligning the current team accordingly. The new positions to be introduced include zonal agronomists, Zonal Agrochemical marketing officers, Sales Point agrochemical and seeds marketing officer and also the assistance marketing officer to be located and allocated specific districts territory for their operations. Table 30 below summarizes the alignment and enrichment plan for 2025/2026 production season.

Table 22: Marketing and Sales team Enrichment Plan

S/No.	Position	Southern Highlands				Lake Zone			Northern Zone		Central and Coast			Sub Total by Position	Reccomended Tool
		Mbeya	Iringa	songea	S/wanga	Kahama	Bariadi	Tabora	Arusha	Babati	Morogoro	Ifakara	Masasi		
1	Zonal Agronomist	1				1			1					3	Toyota Hilux Double Cabin
2	Zonal Agrochemical Marketing Officer					1					2			3	Toyota Hilux Double Cabin
3	Sales Point Agrochemical Marketing Officer	1		1	1				1	1				5	Toyota Hilux Double Cabin
4	Sales Point Seed Marketing Officer	2	1				1		1	1				6	Toyota Hilux Double Cabin
5	Assistance Marketing Officers	3	1	3	3	3	2	3	4	4	2	1	1	30	Motorcycle-Yamaha
6	Sales Officers	2				1			1	1				5	Toyota Landcruiser/Hilux Single Cabin
Sub-Total team by Sales Point		**9**	**2**	**4**	**4**	**6**	**3**	**3**	**8**	**7**	**4**	**1**	**1**		
Sub-Total by Zone		**19**				**12**			**15**		**6**				
Grand Total Team Enrichments														**52**	

6.0 PROJECT IMPACT

i. Food Security is National Security
Acquisition and operationalization of new farms at Katavi and Singida will improve the national food security through enhancement on accessibility, availability and affordability of improved seeds

ii. Acquisition and operationalization of Katavi and Singida farm will help to stabilize seed prices in our country. Increase in production of up to 17,000 Mt of seeds will help farmers to have enough options of better seeds and also increase in production will improve seed industry competitiveness in our country.

iii. It is expected that the increased sunflower seed production will mitigate the current challenge of shortage of sunflower seeds in the country and reduce the sunflower seed prices to a reasonable level. Hence increase the local production of cooking oil with the ultimate impact of reducing the importation of cooking oil in the country.

iv. Increase in production of seeds is going to contribute in Government revenue through direct taxes from seeds sales and indirect taxes like purchasing of resources like fuel, cars and other things which facilitate the advancement of the project.

v. The project will Improve community nutrition's, following the production of Meru VAH 519 and Meru VAH 517 pro vitamin A maize and Quality Protein Maize "Meru Lishe 503, Meru Lishe 511.

vi. Enhancement in seed distribution to the rural areas through working with farmers groups and cooperatives, VBAA and Agro dealers in distribution of agro inputs like seeds.

vii. The project will contribute in the provision of agricultural skills to the community near the farms and National Education Institutes. Meru has been working closely with government institutions like TARI, SUA, UDSM, Uyole and private Agricultural training institutes in imparting skills to the students through practical trainings.

viii. Provision of employment
Execution of expansion and modernization of seed business will ensure the provision of employment to the community along the value chain. Permanent and temporary employment will be provided during implementation of different plans.

The table below summarizes employments expected to be provided during project execution in different departments.

Table 23:Summary on project impact on employment between 2024/2025-2028/2029

S/No.	Operation	Type of employment	Position	No. of Workers	Justification
1	Research and Development	Permanent employment	Research and development officers	3	• Through establishment of 3 new research testing sites in different locations in the country including Southern zone, Eastern zone, Northen zone
2	Seed Production	Direct and permanent employment	Farm manager, Chief agronomist, Technicians and assistant technicians, account clerks, store keepers, field and assistant field officers, cook and cleaners, security officers, machine and assistant machine operators.	196	• Following the implementation of the project of new 6,600Ha for production, new staffs 196(Agricultural officers, operators and technicians) are going to be needed and employed on permanent basis
		Direct and temporary employment	Labors used during different production operations like herbicides application, detasseling and harvesting (Hybrids)	3,000	• During the course of seed production, there are several operations which involves the use of man power on temporary basis like fertilizer application, Herbicides application, detasselling and harvesting of Hybrid seeds. And the employments on temporary basis will be created during the specific operation at specific time of the season.
3	Transportation and logistics	Direct employment	Truck drivers/Driver assistances	6	• In order to enhance seed collection and distribution, new three trucks will be acquired.
		Direct and temporary employment	Seed Loaders and off loaders	500	• During loading and loading of seeds at least 1,500 direct temporary workers are going to be needed.
4	Seed processing and packaging	Direct employment	Seed processing officers (3), Seed processing workers (Factory)	273 workers	• Due to the currently locations of our seeds processing and packaging facilities at Mbeya, three new seed processing facilities will be established at Katavi, Arusha and Mbeya. • A single seed processing facility will accommodate 90 workers and hence for all the facilities we will need 270 workers for all three working shifts,
5	Marketing and Sales operations	Direct permanent employment	Zonal and Sales Point Sales and Marketing positions	52	• Marketing of company products • Sales of company products

Apart from the above-mentioned employments to be created, there are other indirect employment expected to be created like recruitment of new agro-dealers to improve distribution network and also it is expected the non-beneficiaries from the project to be higher due to the end users benefiting from the project products (Agro seeds).

7.0 IMPLEMENTATION SCHEDULE AND FINANCIAL PROJECTIONS.

7.1 Seed Production Projection.

During the next five years, Meru plans to produce seeds as summarized in the tables below. Seed production will be done by using company leased farm at Mbozi-Mbeya and the new acquired farms in Katavi and Singida.

Table 24: Seed production projection in Area (Ha)

S/No.	Crop	Type	Variety	Production projection (Ha)														
				2024/2025			2025/2026			2026/2027			2027/2028			2028/2029		
				Mbozi	S/Wanga	Singida	Mbozi	Katavi	Singida	Mbozi	Katavi	Singida	Mbozi	Katavi	Singida	Mbozi	Katavi	Singida
1	Maize	Hybrid	Meru HB 513	350	-	-	350	100	-	300	150	-	300	400	-	300	400	-
			Meru HB 515	-	-	-		-	-	100	100	-	100	200	-	100	300	-
			Meru HB 623	100	66 -	-	100	-	-	95	100	-	100	200	-	100	300	-
			Meru HB 405	105	-	-	90	-	-	-	-	100	-	-	150	-	-	200
			Meru HB 505	-	-	-	-	-	-	55	-	-	50	100	-	50	150	-
			Meru VAH 517	40	58	-	50	-	-	50	50	-	50	100	-	50	150	-
			Meru VAH 519	50	-	-	50	-	-	50	50	-	50	100	-	50	150	-
Sub-total Maize Hybrids				**645**	**-**	**-**	**640**	**100**	**-**	**650**	**450**	**100**	**650**	**1,100**	**150**	**650**	**1,450**	**200**
2	Maize	OPV	Situka M1	400	340	-	450	400	-	300	600	-	370	600	-	400	800	-
3	Beans	OPV	Selian 13, Lyamungo 90, Uyole 03	50	-	-	50	-	-	50	50	-	30	-	-		-	-
4	Sunflower	OPV	Record	-	-	-	-	-	250	-	-	450	-	-	700	-	-	1,000
5	Wheat	OPV	Sifa, Chiriku, Kware	50	-16	-	30	-	-	150	-	-	100	150	-	100	200	-
6	Sorghum	OPV	Macia	55	-	-	30	-	-	50	-	-	50	-	-	50	150	-

Sub-total OPV	**555**	**-**	**-**	**560**	**400**	**250**	**550**	**650**	**450**	**550**	**750**	**700**	**550**	**1,150**	**1,000**	
Total Seed Production by Farm (Ha)	**1,200**	**479**	**-**	**1,200**	**500**	**250**	**1,200**	**1,100**	**550**	**1,200**	**1,850**	**850**	**1,200**	**2,600**	**1,200**	
Grand Total Seed Production	**1680**			**1,950**			**2,850**			**3,900**			**5,000**			

Table 25:Seed production projection in Metric Tons (MT)

S/No.	Variety	Type	Productivity (Mt/Ha)	Production projection (Ha)														
				2024/2025			2025/2026			2026/2027			2027/2028			2028/2029		
				Mbozi	Katavi	Singida	Mbozi	Katavi	Singida	Mbozi	Katavi	Singida	Mbozi	Katavi	Singida	Mbozi	Katavi	Singida
1	Meru HB 513	Hybrid	5.0	1,750	-	-	1,750	500	-	1,500	750	-	1,500	2,000	-	1,500	2,000	-
2	Meru HB 515	Hybrid	5.5	-	-	-	-	-	-	550	550	-	550	1,100	-	550	1,650	-
3	Meru HB 623	Hybrid	6.0	600	264	-	600	-	-	570	600	-	600	1,200	-	600	1,800	-
4	Meru HB 405	Hybrid	4.5	473	-	-	405	-	-	-	-	450	-	-	675	-	-	900
5	Meru HB 505	Hybrid	5.0	-	-	-	-	-	-	275	-	-	250	500	-	250	750	-
6	Meru VAH 517	Hybrid	2.5	100	87	-	125	-	-	125	125	-	125	250	-	125	375	-
7	Meru VAH 519	Hybrid	3.0	150	-	-	150	-	-	150	150	-	150	300	-	150	450	-
8	Situka M1	OPV	3.5	1,400	1190	-	1,575	1,400	-	1,050	2,100	-	1,295	2,100	-	1,400	2,800	-
9	Selian 13, Lyamungo 90, Uyole 03	OPV	1.2	60	-	-	60	-	-	60	60	-	36.0	-	-	-	-	-
10	Record	OPV	1.0	-	-	-	-	-	250	-	-	450	-	-	700	-	-	1,000
11	Sifa, Chiriku, Kware	OPV	1.5	75	-	-	45	-	-	225	-	-	150	225	-	150	300	-
12	Macia		1.2	66	-	-	36	-	-	60	-	-	60	-	-	60	180	-
Sub Total by Farm				**4,674**	**1541**	**-**	**4,746**	**1,900**	-	**4,565**	**4,335**	**900**	**4,716**	**7,675**	**1,375**	**4,785**	**10,305**	**1,900**

Grand Total production Per season	**6,215**	**6,896**	**9,800**	**13,766**	**16,990**

7.3 Agrochemicals importation projection from 2024/2025 plans.

Table 26: Agrochemicals importation projection from 2024/2025-2028/2029

S/No.	Product Name	Pack Size	Unit	Product Price (USD)	Sales Year										Total Quantity	Total amount
					2024/2025		2025/2026		2026/2027		2027/2028		2028/2029			
					Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount		
1	Agrofecron 720 EC	1lt	LTS	8.61	4,000	48,000	4,400	52,800	4,840	58,080	5,082	60,984	5,336	64,033	23,658	283,897
2	Agrofecron 720 EC	500mls	LTS	8.76	2,000	12,400	2,200	13,640	2,420	15,004	2,541	15,754	2,668	16,542	11,829	73,340
3	Agrofecron 720 EC	250mls	LTS	8.96	1,000	3,200	1,100	3,520	1,210	3,872	1,271	4,066	1,334	4,269	5,915	18,926
4	Agrofecron 720 EC	100mls	LTS	9.39	1,000	1,600	1,100	1,760	1,210	1,936	1,271	2,033	1,334	2,134	5,915	9,463
5	Agrothrin 5 EC	1lt	LTS	2.8	3,000	19,200	3,300	21,120	3,630	23,232	3,812	24,394	4,002	25,613	17,744	113,559
6	Agrothrin 5 EC	500mls	LTS	2.93	3,000	10,200	3,300	11,220	3,630	12,342	3,812	12,959	4,002	13,607	17,744	60,328
7	Protrin 60EC	1lt	LTS	5.55	4,000	45,600	4,800	54,720	5,280	60,192	5,544	63,202	5,821	66,362	25,445	290,075
8	Protrin 60EC	500mls	LTS	5.7	2,000	12,000	2,400	14,400	2,640	15,840	2,772	16,632	2,911	17,464	12,723	76,336
9	Agromine 720 SL	1lt	LTS	1.95	25,200	131,040	27,720	144,144	30,492	158,558	32,017	166,486	33,617	174,811	149,046	775,039
10	Agrosate 480 SL	1lt	LTS	1.85	22,200	133,200	24,420	146,520	26,862	161,172	28,205	169,231	29,615	177,692	131,302	787,815
11	Agrosate 480 SL	500mls	LTS	2.25	3,000	9,600	3,300	10,560	3,630	11,616	3,812	12,197	4,002	12,807	17,744	56,779
12	Agrosate 480 SL	20lts	LTS	2.1	16,000	1,792,000	17,600	1,971,200	19,360	2,168,320	20,328	2,276,736	21,344	2,390,573	94,632	10,598,829
13	Agrozeb Gold 700 WG	1kg	KGS	7.12	5,000	60,000	5,500	66,000	6,050	72,600	6,353	76,230	6,670	80,042	29,573	354,872
14	Agrozeb Gold 700 WG	500g	KGS	7.21	2,000	12,400	2,200	13,640	2,420	15,004	2,541	15,754	2,668	16,542	11,829	73,340
15	Agrozeb Gold 700 WG	250g	KGS	7.8	1,000	3,200	1,100	3,520	1,210	3,872	1,271	4,066	1,334	4,269	5,915	18,926
16	Bafron 200 WDG	1kg	KGS	5.58	3,000	60,000	3,600	72,000	3,960	79,200	4,158	83,160	4,366	87,318	19,084	381,678
17	Kabamax 750 WDG	1kg	KGS	38.3	1,000	20,000	1,200	24,000	1,320	26,400	1,386	27,720	1,455	29,106	6,361	127,226
18	Bromox 450 EC	1lt	LTS	6.75	1,000	16,000	1,200	19,200	1,320	21,120	1,386	22,176	1,455	23,285	6,361	101,781
19	Melan Super EW 90	1lt	LTS	4.55	3,000	60,000	3,600	72,000	3,960	79,200	4,158	83,160	4,366	87,318	19,084	381,678

20	Melan Super EW 90	5Lts	LTS	4.25	2,000	192,000	2,400	230,400	2,640	253,440	2,772	266,112	2,911	279,418	12,723	1,221,370
21	Stone 480SC	1lt	LTS	8.19	2,000	56,000	2,500	70,000	2,750	77,000	2,888	80,850	3,032	84,893	13,169	368,743
22	Bellet 400 WP	1kg	KGS	2.36	3,000	18,000	3,300	19,800	3,630	21,780	3,812	22,869	4,002	24,012	17,744	106,461
23	Bellet 400 WP	500gm	KGS	2.43	2,000	6,400	2,200	7,040	2,420	7,744	2,541	8,131	2,668	8,538	11,829	37,853
24	Bellet 400 WP	200gm	KGS	2.64	3,000	4,200	3,300	4,620	3,630	5,082	3,812	5,336	4,002	5,603	17,744	24,841
25	Bodigadi 500WDG	50gm	KGS	19.45	3,000	12,000	3,300	13,200	3,630	14,520	3,812	15,246	4,002	16,008	17,744	70,974
26	Feron 240 SC	1lt	LTS	6.93	2,000	22,800	2,200	25,080	2,420	27,588	2,541	28,967	2,668	30,416	11,829	134,851
27	Feron 240 SC	500mls	LTS	7.07	1,000	6,000	1,100	6,600	1,210	7,260	1,271	7,623	1,334	8,004	5,915	35,487
28	Feron 240 SC	250mls	LTS	7.27	1,000	3,200	1,100	3,520	1,210	3,872	1,271	4,066	1,334	4,269	5,915	18,926
29	Kiboko gold 55 SC	1lt	LTS	3.93	63,000	554,400	69,300	609,840	76,230	670,824	80,042	704,365	84,044	739,583	372,615	3,279,013
30	Rilofu 110 OD	1lt	LTS	7.61	3,000	21,600	3,450	24,840	3,795	27,324	3,985	28,690	4,184	30,125	18,414	132,579
31	Beansweed 460 SL	1lt	LTS	7.73	3,000	12,000	3,300	13,200	3,630	14,520	3,812	15,246	4,002	16,008	17,744	70,974
32	Lamex Super 26 OD	1lt	LTS	4.13	9,600	84,480	10,560	92,928	11,616	102,221	12,197	107,332	12,807	112,698	56,779	499,659
33	Trairam 300 SL	1Lt	LTS	7.85	4,000	48,000	4,400	52,800	4,840	58,080	5,082	60,984	5,336	64,033	23,658	283,897
34	Meraxone 200 SL	1lt	LTS	1.58	31,000	148,800	34,100	163,680	37,510	180,048	39,386	189,050	41,355	198,503	183,350	880,081
35	Meraxone 200 SL	500mls	LTS	1.73	2,800	7,280	3,080	8,008	3,388	8,809	3,557	9,249	3,735	9,712	16,561	43,058
36	Pomex 500 EC	1Lt	LTS	6.09	3,000	26,400	3,300	29,040	3,630	31,944	3,812	33,541	4,002	35,218	17,744	156,143
37	Meronil 720 SC	1lt	LTS	3.07	6,000	48,000	6,600	52,800	7,260	58,080	7,623	60,984	8,004	64,033	35,487	283,897
38	Meronil 720 SC	500mls	LTS	3.21	4,000	16,800	4,400	18,480	4,840	20,328	5,082	21,344	5,336	22,412	23,658	99,364
39	Meronil 720 SC	250mls	LTS	3.57	2,600	5,720	2,860	6,292	3,146	6,921	3,303	7,267	3,468	7,631	15,378	33,831
40	Merutix 10 EC	100mls	LTS	3.84	5,000	5,000	5,500	5,500	6,050	6,050	6,353	6,353	6,670	6,670	29,573	29,573
41	Merutix 10 EC	500 ml	LTS	3.99	2,000	8,800	2,200	9,680	2,420	10,648	2,541	11,180	2,668	11,739	11,829	52,048
42	Merutix 10 EC	1lt	LTS	4.61	2,000	16,800	2,200	18,480	2,420	20,328	2,541	21,344	2,668	22,412	11,829	99,364
43	Stoper Gold 450 CS	1Lt	LTS	7.21	2,000	24,000	2,200	26,400	2,420	29,040	2,541	30,492	2,668	32,017	11,829	141,949
44	Nemox 780WP	1kg	KGS	6.08	4,000	24,000	4,400	26,400	4,840	29,040	5,082	30,492	5,336	32,017	23,658	141,949

45	Nemox 780WP	500g	KGS	6.3	2,000	6,400	2,200	7,040	2,420	7,744	2,541	8,131	2,668	8,538	11,829	37,853
46	Nemox 780WP	250g	KGS	6.4	2,000	2,800	2,200	3,080	2,420	3,388	2,541	3,557	2,668	3,735	11,829	16,561
47	Metakansuper 350 SE	100mls	LTS	11.95	3,000	5,400	3,300	5,940	3,630	6,534	3,812	6,861	4,002	7,204	17,744	31,938
48	Ricebac 400 SC	50ml	LTS	20.1	3,000	19,200	3,300	21,120	3,630	23,232	3,812	24,394	4,002	25,613	17,744	113,559
49	Ricebac 400 SC	100mls	LTS	19.5	1,000	12,000	1,100	13,200	1,210	14,520	1,271	15,246	1,334	16,008	5,915	70,974
50	RiceBack Gold 450 WP	60gm	KGS	22	2,000	12,000	2,200	13,200	2,420	14,520	2,541	15,246	2,668	16,008	11,829	70,974
51	Ridimu 80EC	100mls	LTS	5.38	3,000	34,200	3,300	37,620	3,630	41,382	3,812	43,451	4,002	45,624	17,744	202,277
52	Ridimu 80 EC	500mls	LTS	5.92	1,000	6,000	1,100	6,600	1,210	7,260	1,271	7,623	1,334	8,004	5,915	35,487
53	Sulfo 80 WP	1kg	LTS	2.35	16,000	25,600	17,600	28,160	19,360	30,976	20,328	32,525	21,344	34,151	94,632	151,412
54	Sulfo Super 800 WP	1kg	KGS	3.18	4,000	20,000	4,400	22,000	4,840	24,200	5,082	25,410	5,336	26,681	23,658	118,291
55	Sulfo Super 800 WP	500g	KGS	3.41	2,000	5,200	2,200	5,720	2,420	6,292	2,541	6,607	2,668	6,937	11,829	30,756
56	Sulfo Super 800 WP	250g	KGS	3.56	2,000	2,800	2,200	3,080	2,420	3,388	2,541	3,557	2,668	3,735	11,829	16,561
57	Damethrin 2.5 EC	200mls	LTS	5.65	3,000	6,000	3,300	6,600	3,630	7,260	3,812	7,623	4,002	8,004	17,744	35,487
58	Pacha 500 SC	1 Lt	LTS	10.09	2,000	40,000	2,200	44,000	2,420	48,400	2,541	50,820	2,668	53,361	11,829	236,581
59	Foliar Booster Crop Master	1 Lt	KGS	3.45	8,000	48,000	8,800	52,800	9,680	58,080	10,164	60,984	10,672	64,033	47,316	283,897
60	Foliar Booster Crop Master	500 ml	KGS	3.75	4,600	27,600	5,060	30,360	5,566	33,396	5,844	35,066	6,137	36,819	27,207	163,241
61	Foliar Booster-High K	1kg	KGS	2.98	6,000	36,000	6,600	39,600	7,260	43,560	7,623	45,738	8,004	48,025	35,487	212,923
62	Foliar Booster-High K	500g	KGS	3.28	4,000	24,000	4,400	26,400	4,840	29,040	5,082	30,492	5,336	32,017	23,658	141,949
63	Foliar Booster General	Kg	KGS	2.97	6,000	36,000	6,600	39,600	7,260	43,560	7,623	45,738	8,004	48,025	35,487	212,923
64	Foliar Booster General	500gm	KGS	3.27	4,000	24,000	4,400	26,400	4,840	29,040	5,082	30,492	5,336	32,017	23,658	141,949
65	Foliar Booster Potatoes	Kg	KGS	2.95	6,000	36,000	6,600	39,600	7,260	43,560	7,623	45,738	8,004	48,025	35,487	212,923
66	Foliar Booster Potatoes	500gm	KGS	3.25	4,000	24,000	4,400	26,400	4,840	29,040	5,082	30,492	5,336	32,017	23,658	141,949
TOTAL					**4,275,520**		**4,753,112**		**5,228,423**		**5,489,844**		**5,764,337**			**25,511,236**

7.4 Tender business projection

Meru Agro has been working on research and development of products for tendered crops. In Tanzania, Cotton, Tobacco and Cashew are the major crops involved in tenders. In all the major crops MATCC has registered several products which will be used depending on the tender requirements.

7.4.1 Cotton

The main problems facing the farmers are the insect pests (Sucking insects and chewing insects). The company has already registered several products, Agromethrin 10 EC, Agrothrin 5 EC, Betamu 175 EC, Feron 240 SC, Mefeni 350 SC, Damethrin super 330 EC, Bodigadi 500 WDG and Takai 150 SC as insecticides. The farmers also face challenges on soil insects and seed borne diseases, where the company has four registered seed dressers namely Seed care 30 WS, seed care gold 350 WS, seed guard 250 FS and Seed guard gold 415 FS. Currently fungal diseases have also been a challenge in cotton production and the company has registered two fungicides Bellet 400 WP and stone 480 SC.

7.4.2 Tobacco

The main challenges facing farmers growing tobacco are insect pest (chewing and sucking insects). Through several researches, MATCC has registered several products for Tobacco insects like Damethrin 2.5 EC, Metakan super 350 SE, Methox 25 WG, Midox 700 WG. Apart from potential market of insecticides Tobacco has suckericides market, where a company has registered three products to be used namely Mkombozi 30.2 SL, Bamex 305 EC and stopper 330 EC.

7.4.3 Cashew

The cashew agrochemical business potentials fall under insecticides and fungicides. The company has registered several fungicides namely Agromenol 250 EC, Hezron 50 EC, Pacha 500 SC, Metax 450 WP, Stone 480 SC, Sulfo 99 DP and Sulfo 80 WP and insecticide for coconut bugs, cashew bugs and mealybugs are Agromethrin 10 EC, Agrothrin 5 EC, Protrin 60 EC and Agrofecron 720 EC. Therefore, the company has all the essential products which are currently needed in cashew crop.

7.4.4 Quelea and Locust Outbreak

The outbreak of quelea and locust in Tanzania has been monitored by TPHPA. And the government has been tendering the products for the mentioned challenges. MATCC has registered two products for Quelea namely Damethrin super 9 ULV and Methion 60 ULV, and the insecticides for red and desert locust are Daziron 250 SC, Daziron 50 ULV and Locutox 125 ULV.

Therefore, the company will be involving in tender business for the mentioned opportunities and further research and development are still on going in developing new molecules for different challenges.

7.5 Farm operationalization plan and Cost

From the expansion and modernization of seed business between 2024/2025 to 2028/2029 season, the following below are the farm operationalization costs based from the plans.

Table 27: Summary of Farm operationalization plan and costs between 2024/2025-2028/2029

S/NO	Operation	Operation Unit	Operation Unit Quantity	Operation Unit Cost (USD)	2024/2025		2025/2026		2026/2027		2027/2028		2028/2029		Total Amount (USD)
					Area	Cost (USD)	Area	Cost (USD)	Area	Cost (USD)	Area	Cost (USD)	Area	Cost (USD)	
1	Bush Clearing	Litre	80	1.1	-	-	750	66,696	900	80,035	1,050	93,374	1,100	97,821	337,926
2	Ploughing	Litre	20	1.1	1,680	37,350	1,950	43,352	2,850	63,361	3,900	86,705	5,000	111,160	341,928
3	Harrowing	Litre	12	1.1	1,680	22,410	1,950	26,011	2,850	38,017	3,900	52,023	5,000	66,696	205,157
4	Planting	Litre	8	1.1	1,680	14,940	1,950	17,341	2,850	25,344	3,900	34,682	5,000	44,464	136,771
5	Herbicide Spraying-1st Round Agrosate	Litre	5	1.1	1,680	9,337	1,950	10,838	2,850	15,840	3,900	21,676	5,000	27,790	85,482
6	Herbicide Spraying- 2nd Round (Lamex/Kiboko gold/Stopper gold/Bafron/Selekta)	Litre	5	1.1	1,680	9,337	1,950	10,838	2,850	15,840	3,900	21,676	5,000	27,790	85,482
7	Fertilizer- 1St Foliar	Litre	5	1.1	1,680	9,337	1,950	10,838	2,850	15,840	3,900	21,676	5,000	27,790	85,482
8	Fertilizer- 2nd Foliar	Litre	5	1.1	1,6	9,337	1,95	10,838	2,85	15,840	3,90	21,676	5,00	27,790	85,482

					80		0		0		0		0		
9	Fertilizer- 3rd Foliar	Litre	5	1.1	1,680	9,337	1,950	10,838	2,850	15,840	3,900	21,676	5,000	27,790	85,482
10	Harvesting - Combine	Litre	20	1.1	1,000	22,232	1,160	25,789	1,550	34,460	1,970	43,797	2,700	60,026	186,304
11	Harvesting -Labor	Bag	156	1	645	100,620	740	115,440	1,200	187,200	1,900	296,400	2,300	358,800	1,058,460
12	Yara Otesha	Bag	2.5	60	1,680	252,000	1,950	292,500	2,850	427,500	3,900	585,000	5,000	750,000	2,307,000
13	Amidas	Bag	2.5	60	1,680	252,000	1,870	280,500	2,750	412,500	3,770	565,500	4,700	705,000	2,215,500
14	Yara Cereal	Bag	2.5	60	1,680	252,000	1,870	280,500	2,750	412,500	3,770	565,500	4,700	705,000	2,215,500
15	Foliar Booster High P	Kg	2	8	1,680	26,880	1,950	31,200	2,850	45,600	3,900	62,400	5,000	80,000	246,080
16	Foliar Booster High N	Kg	2	8	1,680	26,880	1,950	31,200	2,850	45,600	3,900	62,400	5,000	80,000	246,080
17	Foliar Booster High K	Kg	3	8	1,680	40,320	1,950	46,800	2,850	68,400	3,900	93,600	5,000	120,000	369,120
18	Agrosate 480 SL	Litre	1	6	1,680	10,080	1,950	11,700	2,850	17,100	3,900	23,400	5,000	30,000	92,280
19	Stopper gold 450 CS	Litre	1.5	11	-	-	250	4,050	450	7,290	700	11,340	1,000	16,200	38,880
20	Bafron 200 WDG	Kg	0.25	20	50	250	30	150	150	750	250	1,250	300	1,500	3,900
21	Lamex 79 WG	Kg	1.25	8	1,680	16,800	1,590	15,900	2,100	21,000	2,870	28,700	3,500	35,000	117,400
22	Meraxone 200 SL	Litre	2	5	1,680	16,128	1,590	15,264	2,100	20,160	2,870	27,552	3,500	33,600	112,704
23	Atomic	Litre	0.2												

				5	1,680	1,613	1,590	1,526	2,100	2,016	2,870	2,755	3,500	3,360	11,270
24	Protrin 60 EC	Litre	0.4	11	100	448	80	358	700	3,136	980	4,390	1,300	5,824	14,157
25	Stone 480 SC	Litre	0.4	28	50	560	80	896	700	7,840	980	10,976	1,300	14,560	34,832
26	Pacha 500 SC	Litre	2	20	50	2,000	30	1,200	150	6,000	250	10,000	300	12,000	31,200
27	Seed Covering	Mandays	2	3	1,680	10,752	1,590	10,176	2,100	13,440	2,870	18,368	3,500	22,400	75,136
28	Thinning	Mandays	3	3	1,680	16,128	1,590	15,264	2,100	20,160	2,870	27,552	3,500	33,600	112,704
29	Insecticide Spraying-3rd Round-Meraxone 200 SL	Mandays	3	4	1,680	20,160	1,590	19,080	2,100	25,200	2,870	34,440	3,500	42,000	140,880
30	Detasseling- Average 7 round	Mandays	27	3	1,000	86,400	740	63,936	1,200	103,680	1,900	164,160	3,500	302,400	720,576
TOTAL					**1,275,638**		**1,471,021**		**2,167,491**		**3,014,646**		**3,870,361**		**11,799,156**

7.6 Machines and Equipment acquisition plan and costs

Table 28: Machine and equipment to be acquired and costs between 2024/2025-2028/2029

S/No	Equipment/ Machine name	Unit Cost	Investment by year										Total per Item	Grand Total Amount per Item
			2024/2025		2025/2026		2026/2027		2027/2028		2028/2029			
		USD	Unit Qty	Amount (USD)	Unit Qty	Amount (USD)	Unit Qty	Amount (USD)	Unit Qty	Amount (USD)	Unit Qty	Amount (USD)		USD
1	Tractor 180-200 HP	112,780	5	563,900	1	112,780	2	225,560	1	112,780	1	112,780	9	1,127,800
2	Tractor 150-180 HP	88,000	-	-	-	-	2	176,000	-	-	1	88,000	2	264,000
3	Tractor 95 HP	35,000	4	140,000	1	35,000	2	70,000	3	105,000	-	-	10	350,000
4	Tractor 75 HP	21,000	4	84,000	1	21,000	3	63,000	1	21,000	3	63,000	9	252,000
5	Combine Harvester	150,000	-	-		-	2	300,000	-	-	-	-	2	300,000
6	Dozer (D6)	377,600	2	755,200	2	755,200	-	-	-	-	-	-	4	1,510,400
7	Excavator	135,000	1	135,000	-	-	-	-	-	-	-	-	1	135,000
8	Lowbed-Trailer	44,000	1	44,000	-	-	-	-	-	-	-	-	1	44,000
9	Water bowser	2,500	2	5,000	-	-	-	-	2.00	5,000	-	-	4	10,000
10	Fuel tanker	20,000	2	40,000	-	-	-	-	-	-	-	-	2	40,000
11	Plough GTCR	25,800	4	103,200	1	25,800	2	51,600	2	51,600	1	25,800	9	258,000
12	Harrow GTCR	19,775	2	39,550	1	19,775	2	39,550	-	-	1	19,775	5	118,650
13	Planter	15,765	4	63,060	-	-	2	31,530	3	47,295	-	-	9	141,885

14	Electricity-Generator	16,032	2	32,064	-	-	-	-	-	-	-	-	2	32,064
15	Boom Sprayer	10,000	4	40,000	1	10,000	3	30,000	1	10,000	3	30,000	9	120,000
16	Workshop tool kit	20,040	2	40,080	-	-	-	-	-	-	-	-	2	40,080
17	Land cruiser	72,000	2	144,000	2	144,000	-	-	-	-	-	-	4	288,000
18	Motorbike	2,500		-	2	5,000	3	7,500	1	2,500	4	10,000	6	25,000
19	Canter	18,000		-	2	36,000	-	-	-	-	-	-	2	36,000
20	Trailer	6,000	4	24,000	-	-	3	18,000	-	-	2	12,000	7	54,000
21	Bicycle	40		-	4	160	6	240	2	80	8	320	12	800
22	Tipper	89,700	1	89,700	-	-	-	-	-	-	-	-	1	89,700
23	Chainsaw	1,800	20	36,000	-	-	-	-	-	-	-	-	20	36,000
24	50Ha Complete Center Pivot	120,000	4	480,000	4	480,000	8	960,000	14	1,680,000		-	30	3,600,000
25	800KVA Transformer with Auto re-closure	40,000	2	80,000	2	80,000	4	160,000	7	280,000		-	15	600,000
26	200Ha Center Pivot Piping system	300,000	1	300,000	1	300,000	4	1,050,000		-		-	6	1,650,000
27	Electric Wire for Center Pivot (meter of 15mm wire)	15	10,000	150,000	10,000	150,000	20,000	300,000	10,000	150,000	20,000	300,000	50,000	1,050,000
28	500KVA Standby Generator	70,000	1	70,000	2	140,000	4	280,000	5	350,000		-	12	840,000
Sub Total Investment by			**3,458,754**		**2,314,715**		**3,762,980**		**2,815,255**		**661,675**			**13,0**

Year (TZS)															**13,379**

7.7 Farm Infrastructure Development plan and costs

Table 29: Farm infrastructure development plan and costs between 2024/2025-2028/2029

S/No	Item Name	Location	Item unit measurement (M^2/M^3)	Item unit cost /M^2 /M^3 (USD)	Infrastructure establishment by year										Total Items /Location	Total Amount (USD)
					2024/2025		2025/2026		2026/2027		2027/2028		2028/2029			
					Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount		
1	House – 3 bedrooms	Katavi	166	255	1	42,334	-	-	-	-	-	-	-	-	1	42,334
		Singida	166	255	1	42,334	-	-	-	-	-	-	-	-	1	42,334
2	House – 2 bedrooms	Katavi	103	272	2	56,042	-	-	-	-	-	-	-	-	2	56,042
		Singida	103	272	2	56,042	-	-	-	-	-	-	-	-	2	56,042
3	3 Apartment House	Katavi	26	587	3	45,068	6	90,136	7	105,158	4	60,090	5	75,113	25	375,565
		Singida	26	587	2	30,045	5	75,113	4	60,090	3	45,068	3	45,068	17	255,384
4	Toilet block	Katavi	17	367	1	6,371	2	12,742	2	12,742	1	6,371	2	12,742	8	50,970
		Singida	17	367	1	6,371	2	12,742	1	6,371	1	6,371	1	6,371	6	38,227
5	Office	Katavi	242	516	-	-	1	124,790	-	-	-	-	-	-	1	124,790
6	Warehouse -Seed storage and agrochemicals	Katavi	2,952	159	-	-	1	470,463	-	-	-	-	-	-	1	470,463
7	Store - Agrochemicals and other	Singida	200	159	-	-	1	31,874	-	-	-	-	-	-	1	31,874

	inputs															
8	Work shop	Katavi	252	236	1	59,472	-	-	-	-	-	-	-	-	1	59,472
		Singida	252	236	1	59,472	-	-	-	-	-	-	-	-	1	59,472
9	Water source (Boreholes)	Katavi	220	295	1	64,841	-	-	-	-	-	-	-	-	1	64,841
		Singida	220	295	1	64,841	-	-	-	-	-	-	-	-	1	64,841
10	Water reservoir (Dam)	Katavi	900	295	-	-	1	265,500	-	-	-	-	-	-	1	265,500
		Singida	900	295	-	-	1	265,500	-	-	-	-	-	-	1	265,500
11	Kitchen,changing room and Canteen	Katavi	103	372	1	38,265	-	-	-	-	-	-	-	-	1	38,265
		Singida	103	372	1	38,265	-	-	-	-	-	-	-	-	1	38,265
12	Social club	Katavi	822	261	-	-	-	-	-	-	1	214,209	-	-	1	214,209
13	Dispensary	Katavi	416	258	1	107,203	-	-	-	-	-	-	-	-	1	107,203
14	Administration block	Katavi	348	282	-	-	-	-	-	-	-	-	1	98,069	1	98,069
15	Classrooms	Katavi	1,413	270	-	-	-	-	-	-	-	-	1	382,204	1	382,204
16	School Toilet blocks	Katavi	102	221	-	-	-	-	-	-	-	-	1	22,566	1	22,566
17	Dinning hall	Katavi	1,165	281	-	-	-	-	-	-	-	-	1	327,275	1	327,275
18	Teacher's house	Katavi	204	255	-	-	-	-	-	-	-	-	1	52,024	1	52,024
19	Farm shop	Katavi	25	261	-	-	1	6,516	-	-	-	-	-	-	1	6,516
		Singida	25	261	-	-	1	6,516	-	-	-	-	-	-	1	6,516
2	Labor	Kat														

0	atory	avi	151	261	-	-	-	-	1	39,459	-	-	-	-	1	39,459
TOTAL					**716,967**		**1,361,891**		**223,821**		**332,110**		**1,021,433**		**3,656,222**				

8.4 Other Infrastructure development and Equipment acquisition plan and costs

7.4.1 Other Infrastructure development plan and costs

Table 30: Other infrastructure to be developed and cost between 2024/2025-2028/2029

S/No	Item Name	Location	Item unit measurement (M^2)	Item unit cost/ M^2 /M^3 (USD)	Infrastructure establishment by year										Total Items /Location	Total Amount (USD)
					2024/2025		2025/2026		2026/2027		2027/2028		2028/2029			
					Quantity	Amount	Quantity	Amount	Item Quantity	Amount	Item Quantity	Amount	Item Quantity	Amount		
1	Seed Storage warehouse	Morogoro	540	265	1	143,109	-	-	-	-	-	-	-	-	1	**143,109**
		Kahama	540	270	1	145,709	-	-	-	-	-	-	-	-	1	**145,709**
		Arusha	1,500	277	-	-	1	415,773	-	-	-	-	-	-	1	**415,773**
2	Office	Morogoro	374	334	1	124,947	-	-	-	-	-	-	-	-	1	**124,947**
		Kahama	374	334	1	124,947	-	-	-	-	-	-	-	-	1	**124,947**
3	Ikungi Seed Storage and Processing warehouse	Ikungi Singida	10,000	200	-	-	1	2,000,000	-	-	-	-	-	-	1	**2,000,000**
4	Laborat	Ikungi Singid	151	932	-	-	1	141	-	-	-	-	-	-	1	**141,0**

	ory	a						,032								**32**
5	Changing room, Canteen and Kitchen	Ikungi Singida	103	372	-	-	1	38,242	-	-	-	-	-	-	1	**38,242**
6	Office and Shops	Ikungi Singida	450	372		-	1	167,400		-		-		-	1	**167,400**
7	Fuel Pump stations	Ikungi Singida	1	200,000		-	1	200,000		-		-		-	1	**200,000**
8	Tanganyika-Katavi Seed Storage and Processing warehouse	Tanganyika-Katavi	10,000	200		-		-	1	2,000,000		-		-	1	**2,000,000**
9	Laboratory	Tanganyika-Katavi	151	932		-		-	1	141,032		-		-	1	**141,032**
10	Changing room, Canteen and Kitchen	Tanganyika-Katavi	103	372		-		-	1	38,242		-		-	1	**38,242**
11	Office and Shops	Tanganyika-Katavi	450	372		-		-	1	167,400		-		-	1	**167,400**
12	Fuel Pu	Tanganyika-	1	200,00		-		-	1	200,		-		-	1	**200,0**

	mp stations	Katavi		0						000						**00**
13	Iwambi-Mbeya Seed Storage and Processing warehouse	Iwambi-Mbeya	2600	200		-		-	1	520,000		-		-	1	**520,000**
14	Laboratory	Iwambi-Mbeya	151	932		-		-	1	141,105		-		-	1	**141,105**
15	Changing room, Canteen and Kitchen	Iwambi-Mbeya	103	372		-		-	1	38,242		-		-	1	**38,242**
16	Complete seed Processing, Dressing and Packaging line	Ikungi Singida, Mbeya and Katavi warehouses	1	482,600		-	1	482,600	2	965,200		-		-	3	**1,447,800**
17	New Farm acquisition	Ikungi Singida and Tanganyika-Katavi	1	425,000		-	2	850,000				-		-	2	**850,000**
TOTAL					**538,710**		**2,962,447**		**3,246,020**		**-**		**-**			**9,044,977**

7.4.2 Other Equipment acquisition plan and costs.

Table 31:Other equipments and assets to be acquired and costs between 2024/2025-2028/2029

S/No	Equipment/ Machine name	Location	Unit Cost	Investment by year										Grand Total Amount per Item
				2024/2025		2025/2026		2026/2027		2027/2028		2028/2029		
			USD	Unit Qty	Amount (USD)	Unit Qty	Amount (USD)	Unit Qty	Amount (USD)	Unit Qty	Amount (USD)	Unit Qty	Amount (USD)	USD
1	Toyota Hilux Double Cabin	Mbeya	64,000	-	-	7	448,000		-	-	-	-	-	448,000
		Kahama	64,000	-	-	3	192,000		-	-	-	-	-	192,000
		Morogoro	64,000	-	-	2	128,000		-	-	-	-	-	128,000
		Arusha	64,000	-	-	5	320,000	-	-	-	-	-	-	320,000
		HQ Research team	64,000		-		-	5	320,000		-		-	320,000
2	Toyota Hilux Single Cabin	Mbeya	54,000	-	-	2	108,000	-	-	1	54,000	-	-	162,000
		Kahama	54,000	-	-	1	54,000	-	-	1	54,000	-	-	108,000
3	30 tones truck	HQ	85,000	-	-	2	170,000	-	-	2	170,000	1	85,000	425,000
4	Toyota Land Cruisers Prado standard	HQ	90,000	-	-	-	-	1	90,000	-	-	-	-	90,000
	Toyota Landcruiser VXR	HQ	200,000		-		-		-	1	200,000		-	200,000
5	Motorbikes	Assist. Marketing Officer	3,000		-	30	90,000		-		-		-	90,000

		s												
6	Research Farms Irrigation system investment	Mbozi Farm	50,000	-	-	-	-	-	-	1	50,000	-	-	50,000
		Tanganyika Farm	50,000	-	-	-	-	-	-	-	-	1	50,000	50,000
		Singida Farm	50,000	1	50,000	-	-	-	-	-	-	-	-	50,000
TOTAL				**50,000**		**1,510,000**		**410,000**		**528,000**		**135,000**		**2,633,000**