Modern Agriculture Hub (MAH) Project

PSA – Dansarari Farm

MEMACO Alliance Nigeria

Engineering . Procurement . Construction

Dansarari Group

MAH/DFTS – Project Details

Organic Fertilizer-BioDeposit – Phase 1

The first phase of the project consist of setting up an adequate production lines for Bio Deposit organic fertilizer with a capacity of 10,000 ton/year, upgradable as per project development and a mechanical assembly line for tractors where the fertilizer and the modern tractors will be used to enhance the food production in the provided land areas, irrigation will be provided using water canals. The utilization of organic fertilizer will enhance the soil fertility and increase the crops yield, leading to reduction in food inflation.

MAH/DFTS – Project Details

Organic Fertilizer-BioDeposit – Phase 1

- The process consists of removing the raw material from the river's banks and/or from the swampy areas, transporting it by a pipe to a nearby storage tanks; then the product is fermented and dried to remove the humidity and packaged making it ready to use by farmers.
- The final product is an alternative to the chemical fertilizers and organic manure.
- Any waterways such as rivers and swamps can be beneficial to produce organic fertilizers.
- **The project will have a production capacity of 10,000 tons/year upgradable as per project development.**

The factory will be able to produce the following products:

- Solid organic BioDeposit fertilizers
- Liquid organic BioDeposit fertilizers
- Animal feedstock additives
- Raw materials for medical products
- ECODOX disinfectant to be used in farming

NB: Preferable options (Natural lake within the project perimeter)will be explored in due time.

MAH/DFTS – Project Details

Organic Fertilizer - BioDeposit – Phase 1

ECODOX® DEZENFEKTAN

Ecodox® çevre teknolojileri

ECODOX CLO2 is an antimicrobial agent that has a lethal effect on bacteria, mold, yeast and viruses.

- Used to reduce the microbial population
- Destroys 99.9%bacteria
- It prevents organic contamination
- It does not have a negative effect on animals and animal foods
- It provides disinfection of drinking water
- Kills most bacteria, virus spores, fungi and cryptosporidium

MAH/DFTS – Project Details

Modern Agricultural Equipment Assembly Lines – Phase 1

One of the main agricultural challenges that farmers are facing in Nigeria is the lack of modern mechanization in the farming sector. The MAH/DFTS project will establish SKD and CKD assembly lines for modern agricultural equipment. Where in the SKD the tractors chassis and engine will come preassembled and the line will continue assembling the remaining parts, however in the CKD the tractor will have to be fully assembled. The benefits of using assembly lines for tractor production include increased efficiency and output, reduced manufacturing costs, and standardized processes that ensure consistent and reliable product quality.

MAH/DFTS – Project Details

Farm Machinery – Phase 1

Mechanization and modernization of agricultural practices enhances productivity by automating tasks like planting, harvesting, and irrigation. These advanced tools boost efficiency and reduce labor, transforming traditional farming into a high-tech industry.

MAH/DFTS – Project Details

Three And Four-wheeler Cargo Vehicles Assembly – Phase 1

MAH/DFTS will provide Three and four-Wheeler cargo vehicles for urban transportations and agricultural products handling.

Heavy-load transportations

Refrigerated cargo for meat transportation

Open cabin cargo three- wheeler

Closed cabin cargo three-wheeler

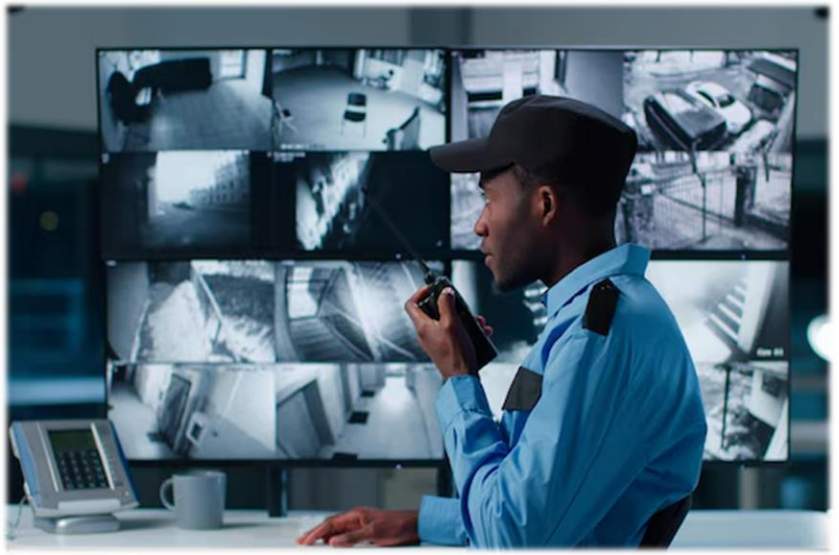
APV Van

Heavy-load APV cargo Four-wheeler

MAH/DFTS – Project Details

Security and Safety – Phase 1

The security and safety of the project's lands and equipment will be provided. Fencing will be made in the surrounding borders, equipped with cameras and sensors to detect any probable approach as to avoid animals to ruin the planted areas, monitored by guardians and a control room to have the maximum of safety.



MAH/DFTS – Project Details

Corporate Social Responsibility – Phase 1

The project will work to benefit not just the owners of the project but also all the surrounding communities through establishing different small projects such as:

1. Providing solar powered technique for the potable water wells in the villages nearby.
2. Establishing a laboratory for farmers in the region to test their crops and land fertility.
3. Introducing new technology for agriculture such as precision agriculture, introducing new crop varieties, regenerative agriculture, increasing crop yield.
4. Establishing a sport academy for young boys and girls with different types of sports.
5. Building small clinics that will benefit mid-aged people.
6. Social activities for older people such as libraries, fitness & wellness center.

MAH/DFTS – Project Details

Modern Irrigation – Phase 2

The other serious problem facing farmers in the farming sector is the irrigation facilities. MAH/DFTS project will provide the necessary equipment and solutions by setting up pumping, piping and storage tanks which will be distributed evenly depending on the demand of each area. Water will be provided from fresh water sources such as Taraba's or Benue's river and pumping system will be powered by solar energy. Other solution can be consisted of the making of water canal to supply the nearby agricultural fields. The best solution will be determined depending on technical studies that are based on locations and water sources capacity.

Solar Powered Water Pumping Station

Water Piping:
Supply From Station To Storage

Geomembrane Water Supply Canal

Water Storage Tanks

MAH/DFTS – Project Details

Feed Production, Processing and Animal Husbandry – Phase 2

The feed production process starts with the production of various types of animal feedstock (corn, soybean, oats, barley, Napier grass…), and by utilizing modern agricultural technologies beside the modern Turkish tractor. As for the storage of feed stock, silos will be used to stock the harvested and processed feed in a convenient way, insuring safe and efficient stockage.

MAH/DFTS – Project Details

Feed Production, Processing and Animal Husbandry – Phase 2

Concerning the animal husbandry, livestock type and breed selection is made depending on Taraba state actual market's demand, (Chicken, Cattle, Goat, Sheep) for processing milk and meat. The number of livestock of each type and breed is determined depending on project's budgetary cost and land availability.

MAH/DFTS – Project Details

Green House – Phase 3

MAH/DFTS will rehabilitate some abandoned land areas, by transforming them into a controlled green houses. This project will allow to grow various types of crops in a controlled environment while using the same organic fertilizers produced in the factory to achieve a higher yield and multiple harvests per year. These green houses will be used to grow and cultivate different types of greens, vegetables and fruit trees as well.

MAH/DFTS – Project Details

Food Processing – Phase 3

To complete the value chain, MAH/DFTS will establish food processing plants near the farms, where the cultivated crops will be processed into food such as ketchup and tomato paste for cultivated tomatoes. Moreover, the livestock will be slaughtered to produce meat and a milk processing plant will pasteurize and bottle fresh milk to increase its shelf life.

MAH/DFTS – Project Details

Food Packaging and Export – Phase 4

The establishment of a food packing and export facility in Nigeria marks a significant milestone.

As Phase 4 of MAH/DFTS, the food packing and export facility will enhance the value addition and international trade. This phase focuses on processing, packaging, and preparing locally grown products for both local markets and global export.

Equipped with advanced technology, AI integration in the agricultural practices and quality control systems, the facility will be ensuring that the products meet international standards. It also creates job opportunities and strengthens the agricultural value chain.

MAH/DFTS – Project Details

Water Dam – Phase 5

Water dam is to be established on phase 5 of the project.
This establishment is meant to provide:

- Hydro power
- Dam-based aquaculture
- Irrigation guarantee all over the year

This establishment will be conceived based on BOOT Basis for 25 years with an international partner.

As the integration of solar power technology within agricultural operations will be made which involve using solar energy for various farming needs like powering irrigation systems, providing electricity for farm buildings, or even creating "Agri solar" setups where solar panels are integrated with crop cultivation to maximize land use.
This approach offers a sustainable and often cost-effective alternative to traditional energy sources, particularly in areas with limited or unreliable grid access.