L.E.A.F AFRICA

Linking Environment Agribusiness & Forestry

IAMF

INTEGRATED AFRICAN MODEL FARM

OCTOBER 2023

CAMPO

BGC

BRAZAFRIC GROUP OF COMPANIES

ForestFoods

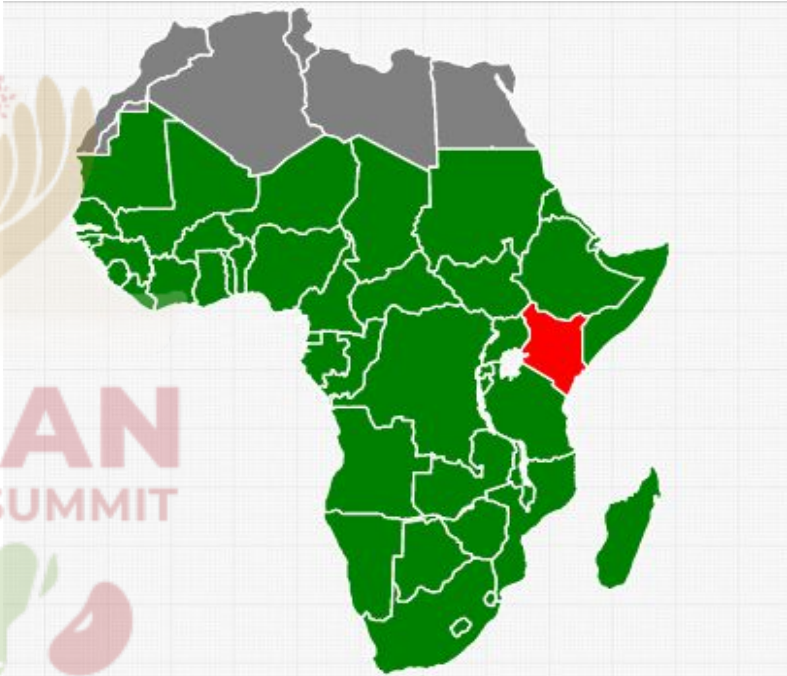
1. The Problem

1.1. A pending worldwide food crisis due to increased prices and stockpiling.

- The world is experiencing challenging times due to several aspects, but especially those triggered by the Covid pandemic and the conflict in Europe.
- Prices of most commodities, as well as, national and international freight charges, insurances and several other aspects are skyrocketing.
- It is known that countries with large populations such as: “China, India and other major economies are taking precautionary measures to ensure that they have enough food to feed their populations. That is triggering a run for food in countries with excess production for export.

1.2. A big threat to Africa's food security.

- While Africa has adequate land available to produce enough food to feed its population and export the excess, it is currently a major importer of grains, which poses a great threat as well as an opportunity to Africa.



Cereal Import Dependency Ratio, 2016 - 2018 (%) according to UN Data (Reference Link)

44% Kenya 31% Africa 21% Sub-Saharan Africa

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2. The Opportunity

The market conditions offer an opportunity for Africa to finally enter the market of commercial production on a medium and large scale.

Smallholders farmers (SHF)produce the bulk of food that is consumed in Africa. Kenyan small farmers produce around 63% of the food in the country. *(Ref. FAO 2015 Link)*

We propose full mechanization and use of modern technologies and innovations to all sizes of farmers; from small, medium to large scale.

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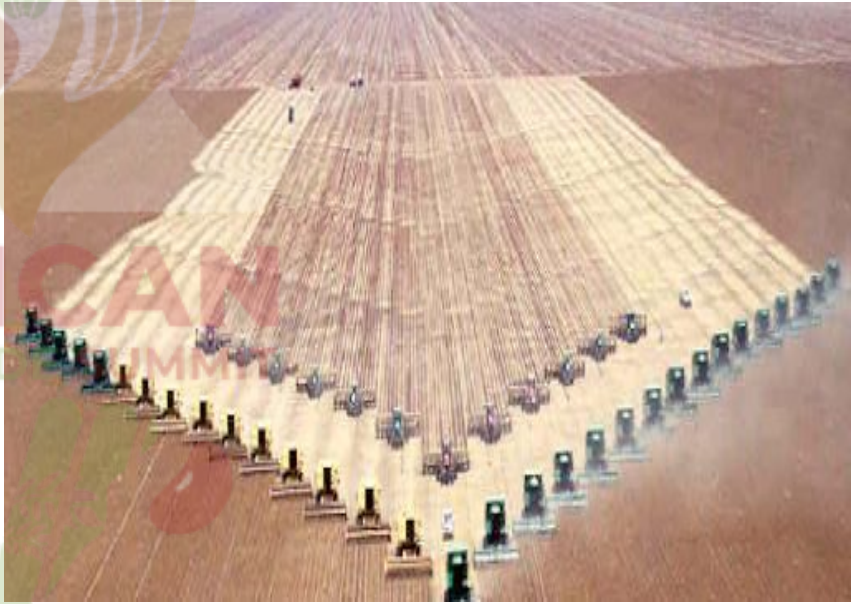
3. The Solution

Presented by LEAF Africa and its Consortium

IAMF unique approach is mainly aiming at:

- **Production at lower costs**, resulting in a price below the price of imports - modern agriculture with emphasis on environmental conservation and regenerative agriculture.
- **Production of a high quality food,** ensuring high nutritional value of end-product and lower food loss – post harvest crop protection.
- **Production in large quantities**, directly available for processing in-country - commercial farming and value addition.
- **Linking our Commercial nucleus farms to a network of Smallholder Farmers**, resulting in economic benefits for the broader farming population in Africa through fair prices, lower costs and repositioning the middleman role – positive effect on the whole production chain.
- **Progressively replacing chemicals on all the production phases.**
- **Maximizing renewable energy in each production unit.**



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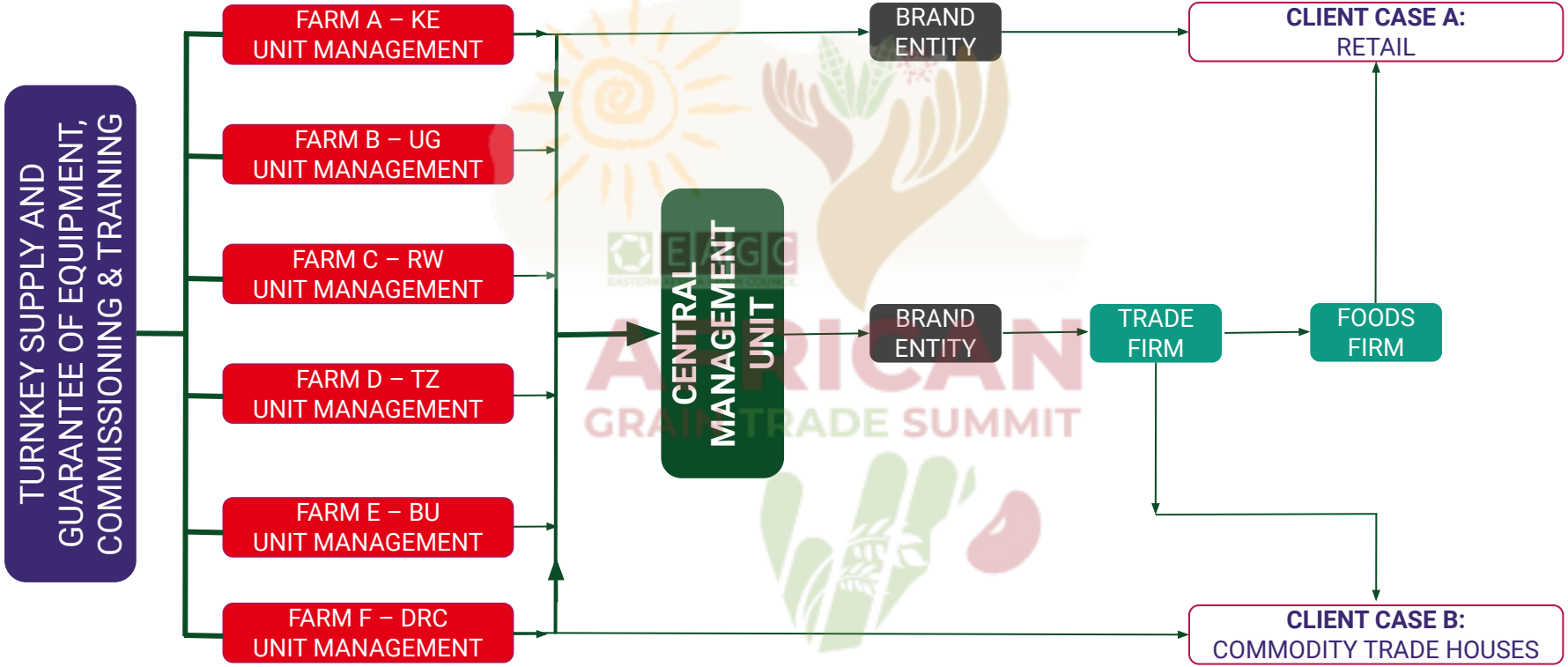
3.1 Offering a Whole Solution



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4. Who are we?

A genuine African Agribusiness solution provider based in Nairobi, Kenya, offering innovative agricultural solutions from Brazil and other successful agriculture countries.

Syntropic Agroforestry
Timau, Central Kenya

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5. Our Experience with farming

LEAF's backbone in tropical farming is based on a partnership with CAMPO-Brazil as well as LEAF and its partner's agricultural experience in Africa.

CAMPO Prodecer

Initiated in Brazil in the late 70s

LEAF PARTNERS

Over 30 active Partners

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6. Our Approach

Our primary goal is to produce high-quality food in Africa by utilizing modern technologies and techniques, largely based on tropical agriculture practices that helped Brazil to become a powerhouse in the production of a wide range of crops and animal value chains.

Our approach employs:

Conservation Agriculture
Zero Tillage

Mixed Farming
Livestock, cereals, pastures etc…

Other Possibilities
Agroforestry and Pastures

Irrigation Options
Central Pivots

Post-Harvest Solutions
Grains, dryers, silos and value addition.

Renewable Energy
Solar, Biofuels, etc…

All our projects envision: SHF integration, training, and mechanization.

"Corporate, social, and environmental responsibility."

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6.1. Main Components

1. Sustainable Agriculture

- **Conservation Agriculture** (zero tillage)
- **Multi-cropping** (traditional existing crops & addition of new high value crops)
- **Intercropping** (crops and pastures)
- Proven **modern and fully mechanized** farming
- **Irrigation** through water reservoirs, drip, ...
- **Grain** handling, drying and storage.

2. Environmental Conservation

- **Soil conservation** and recovery
- **Agro forestry,** reforestation & pastures
- **Sustainable use of water**: water harvesting, water recycling …
- **Renewable energies**: solar, biomass, wind …
- Full utilization of **bio waste**

3. Technology Transfer

- **Hybrid crops and animal breeds** adaptable to the tropics
- Partnership with reputable international & **local schools, research institutes:** student exchange programs, …
- **Training students** from local communities on equipment operation, maintenance, farming methods
- **Agroshop** – one-stop shop for the farmer

4. Agro- Industry

- **Modern post-harvesting processing** techniques
- **Value addition** to crops & animal products
- **Brand creation**

6.2. Project Goals

1. Economic

- **Optimize resource use** for sustainable wealth creation to project investors and small holder farmers
- Bring **agro-industries to rural areas**, ensuring **full purchase of out-growers produce** and **eliminating middlemen**
- Avail **ready market** for the project's outputs (local, regional & international)
- **Diversify income & increase profitability** via multi cropping and value addition)

2. Technological

- **Transfer appropriate technology**, knowledge & technical back up assurance at competitive price (BrazAfric)
- **Train farmers** on mechanization, improved farming practices & techniques
- **Supply farmers** with improved seeds, farm inputs & equipment
- **Advance farmers** with appropriate animals, embryos & semen suitable for tropical conditions

3. Social

- **Discourage rural urban migration -** rural area development
- **Alleviate poverty** by improving farmers' earnings & generating value employment
- **Facilitate potential finance** to smallholder farmers - enhance their productivity
- **Improve food security and nutrition** in rural areas

4. Environmental

- Promote **renewable energy** use in the project and by out-growers.
- Encourage tree planting **(reforestation & afforestation)** and discourage deforestation
- Support **soil conservation** and recovery through conservation agriculture
- Support **water conservation** through water reservoirs

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6.3. Main Benefits of IAMF

1. **Development** to underdeveloped rural areas.
2. **Positive socio-economic impact** (organized out grower schemes & extension services).
3. **Food security & nutrition** (quality & increased productivity).
4. Sustainable **environmental conservation**
5. **Wealth creation** to investors and communities of farmers.
6. **Creation of quality jobs** (value employment) and opportunities to communities.

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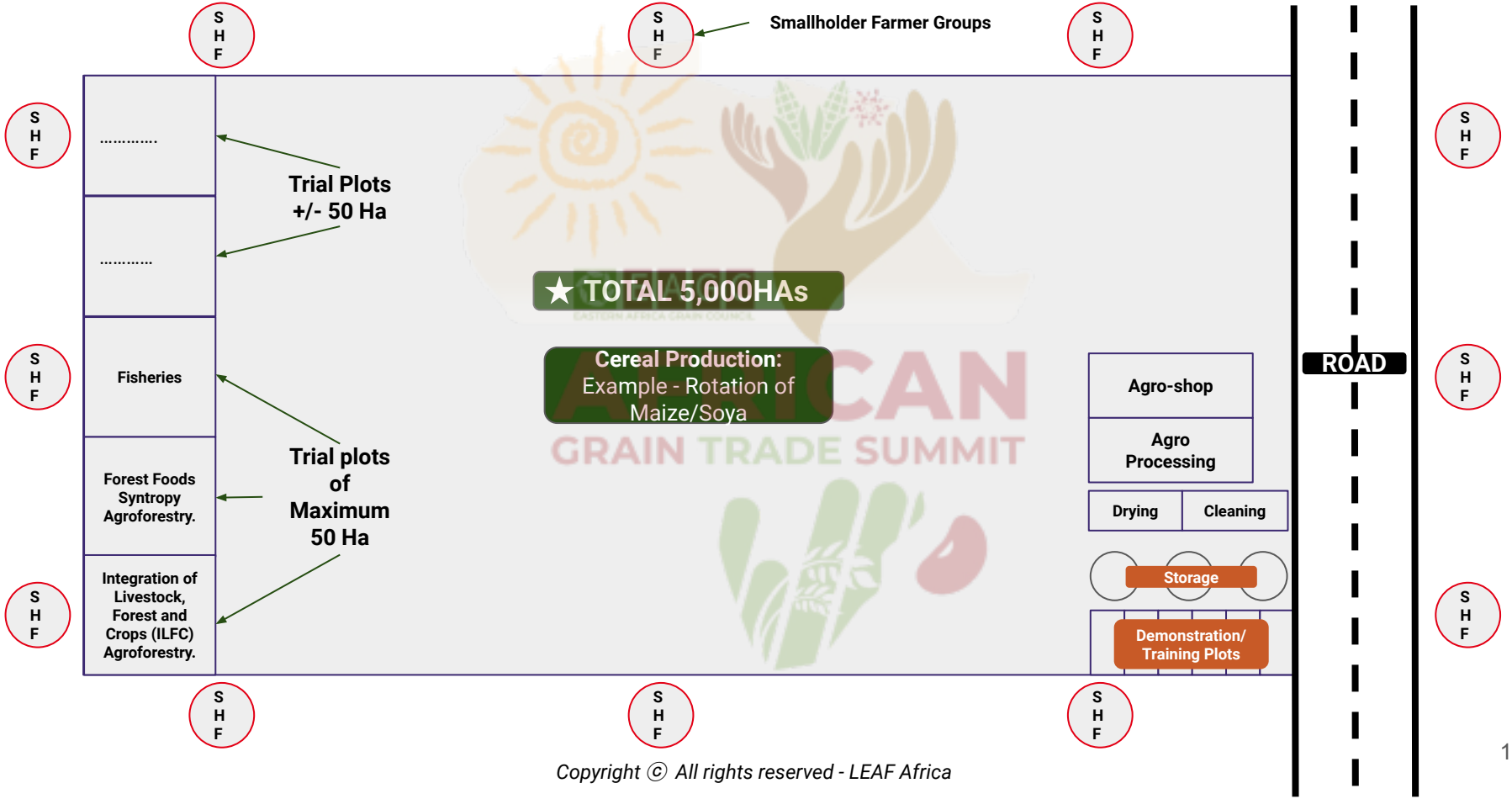
7. IAMF Potential Design



7.1. Project Requirements

1. Land

- **Adequate land** (good soils, enough water sources, favorable weather conditions)
- **Good accessibility** (Availability of utilities - electricity and water).
- **Free of conflicts**
- **Minimum of 50 years lease** or contract

2. Environmental

- **Supply of environmentally friendly machinery & equipment**: Full assurance of quality, competitive prices and back up services
- **Conservation agriculture and other regenerative agriculture practices.**

3. Finance

- Appropriate **long term finance** at international interest rates
- Accessibility to **grants** for the project
- **Appropriate repayment periods** through crop cycle
- **Grace period on repayments**
- **Affordable financing options to small holder** farmers

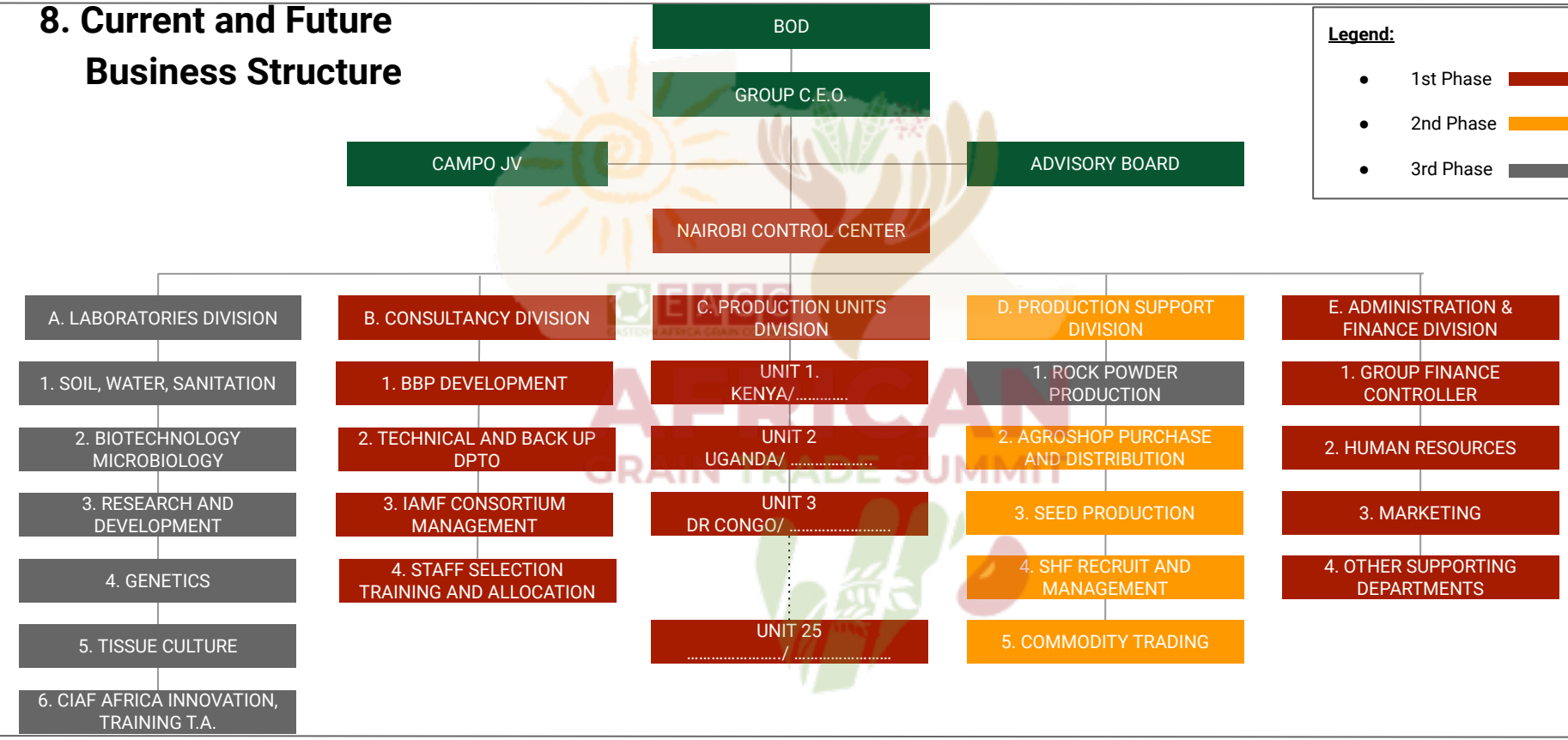
4. Government Policies

- **Tax exemptions**
- **Finance incentives**
- **Attractive policies** for investors
- **Seeds and genetic material imports facilitation**
- **Concession on importation** of project requirements

5. Technical Assistance

- **Feasibility studies**
- **Free/subsidized expertise** support
- Cooperation with **leading research institutions (ILRI, WALTON SCHOOL, EMBRAPA, KARI, NGOs …)**
- Other project partners

8. Current and Future Business Structure



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9. Partner Logos by Specialization

Key Consortium Partners

LEAF AFRICA · CAMPO · BIGC BRAZAFRIC GROUP OF COMPANIES

Pre-Harvest Equipment

VENCE TUDO · Incomagri · LAVRALE · Western

Post-Harvest Equipment

PINHALENSE · Toper · CSi · ERKAYA INSTRUMENTS · SUCRANA ENGINEERING SOLUTIONS · SURI ENGINEERS

Seed Experts

ALBANAGRO · PLANTECH KENYA LTD · Afritec Seeds Ltd · kaiima

Water Experts

watex · PASS AFRICA · arrakis waters

Energy Experts

OFGEN energy simplified

Infrastructure Developers

EAST AFRICA BRAZIL · SACECA ENGINEERING & CONSTRUCTION

Financiers

LONGEVITY DEVELOPMENT · RentCo · TERRA PRETA

Supporting Partners

Brazil Africa Institute · EAGC EASTERN AFRICA GRAIN COUNCIL · SADC · Soybean Innovation Lab · THE GRAIN COUNCIL OF UGANDA · BLACKFORESTUX · INOTEC INNOVATION TECHNOLOGY

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THANK YOU

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