# INNOVATING YOUR COMMERCIAL MODEL FOR SUSTAINABILITY











'LEVERAGING TECHNOLOGY, in ACHIEVING A SUSTAINABLE FOOD SYSTEM IN AFRICA"

Adebowale Onafowora



Empowering Africa to feed herself and the entire world





Scaling up the deployment of modern agritech in Africa

#### **KEY STRATEGIES**

- Training and skill empowerment
- Green skill transfer/acquisition.
- Soilless Farm hubs.
- Development of agribusiness Value chain
- Farm set-up, establishment and management
- Field trips & Excursions
- Consultancy

### **PARTNERS, PROJECTS & AWARDS**



ASHOKA Europe: 2021 Systems Change Acceleration Program.



2021 Ashoka-HSBC Green Skill Innovation Challenge winner

ASHOKA Africa: Lead facilitator,
Train the trainer for the BUNGOMA
county government of Kenya
agricultural development project.





Milken Innovation Centre (MIC),
Jerusalem Institute for Research and
Policy, Israel (Blum Global fellowship
internship placement): Deployment of
Greenhouse digital technologies



Awardee 2021 MB100- Meaningful Business award.

#### **\* UNIVERSITIES & RESEARCH INSTITUTIONS**

- ☐ TECHNICAL, LEAD TRAINER & EXPERT CONSULTANT WITH **LANDMARK UNIVERISTY**:
  - Hydroponics and Greenhouse technology centre establishment
  - Train the trainer
  - o Technical partnership.
- ESTABLISHMENT AND MANAGEMENT CONSULTANCY WITH **AFE BABALOLA UNIVERSITY**:
  - Establishment and management of the largest Moringa Factory and plantation
  - Product development and registration with NAFDAC certifications of over 10 products
- ☐ TECHNICAL PARTNER, TECHNOLOGY INCUBATION CENTRE, ABEOKUTA
- ESTABLISHMENT & SET-UP OF HYDROPNICS FARMS AT FUNAAB







#### **CORE ACTIVITIES REACH SINCE 2012**



500+

[TRAINING & SKILL AQUISITION PROGRAMS]

200+

[HYDROPONICS FARM & GARDEN SET-UP)

200+

[Hectares of land under controlled environment technologies]

1

**Soilless farm hub:** [Southwest Nigeria]



Improved living conditions for all premised on increased productivity and earned incomed

#### **DIRECT IMPACT**

Over 20,000 trainees across Africa

45%

female inclusion

**75%** 

positive outcomes

1,000+

New jobs/decent employment opportunities

#### **INDIRECT IMPACT**



Adoption and traditional innovation of sustainable green technologies by & for youths, smallholder farmers and

women.



Enhanced climate change adaptation skills and strategies



Development of local industry
(Materials & Equipment supplies
to facilitate adoption of
introduced technologies)

# **Our Team**





**Exe Director/IT Lead** 

Adebowale Onafowora
CEO/ MD

Job Grace
Operations Manager



Tolulope Aremu R&D/ M & E Diretor



Kayode Ogundele Project Engineer



Olabamiji Adewale
Senior Accountant



Femi Olayanju Agronomist



Ife-oluwa Caleb
Programs & Training Director

# WORLD FOOD SYSTEM

The world's food production depends on availability of

- Arable land
- Water and
- Stable climatic conditions.

# THE TECHNOLOGY (HYDROPONICS/SOILLESS FARMING)









# WHAT IS HYDROPONICS TECHNOLOGY?

- Hydroponics Technology is a Farming System used in growing Crops and Vegetables without the use of Soil.
- It is otherwise known as SOILLESS FARMING or VERTICAL FARMING.
- Hydroponics Technology as an Agricultural Tool
  - Can be employed and explored to feed the Cities of today and the Future
  - Satisfy Customer demands
  - Ensure the Health of Ecological Systems that sustains a livable world and
  - create a whole lot of business Value Chains.
- With this technology, vegetables like tomatoes, cucumber, iceberg lettuce, red/Chinese cabbage, spinach, broccoli, celery, herbs, chives, some root crops and livestock fodders can be produced within a short period of time, while mitigating hunger without destroying the forest or cause adverse climate change



- In line with the Bic Farms Concepts Mandate, hydroponics technology, has a huge potential to deliver timely results (*Better food System*) to Africans in the following socio-economic areas;
  - Employment generation for millions of unemployed urban youths within this decade
  - Achieve food security and zero hunger in many countries like Nigeria, Sudan, etc.
  - Social insecurity as a result of the farmers /herdsmen confrontations.
  - Responsible consumption and production of food
  - ➤ Reduce carbon foot print and deforestation in Africa

### ■ LOWER LABOR-INTENSIVE TECHNOLOGY

The younger generation finds agriculture not too edifying and so tends to stay away from active participation which gives our nation the average farmer's age to be around 60 years in a country that has about 60% of her population in the age range of 20's-40's. With hydroponics technology, these age range tends to jump and embrace the system, which now makes agriculture interesting.

### ☐ CONTRIBUTION TO SOCIAL SECURITY

- with this type of farming, the Trans-human and Pastoralist challenge, otherwise known as herdsmen / farmers problem can be solved once and for all. This is because, hydroponics technology makes zero grazing farming a doable venture in Nigeria via the setting up of fodder centers.
- In recognition of these Concerns amongst other things, we have moved ahead to find modern means of meeting Consumers and Retailers demands for Safer, and High-quality Food production





### ☐ HIGH YIELD RATE

- This technology works in an enclosed set-up structure, known as the GREENHOUSE. A greenhouse is a house built to provide protection for crops from weather, it thus provides the optimum environmental conditions that are conducive for crop growth.
- Production of Crops with this technology is faster and yields about 50 times more than it would do on the regular soil.
   E.g., one hectare of hydroponics green house, will produce an equivalent of 50 hectare of open field cultivation
- The environmental challenges arising from global warming and other vegetable diseases which has led to the reduction in food production can be averted and greatly mitigated through this technology.





# Soilless Farm Hub, Key to Sustainability, Youth Employment and Decent Job Creation



# What The Hydroponiocs Farm Hub Offers?



### **\$Land**

- ➤ Accessible land for agricultural productivity in a periurban area( TIC compound)
- ➤ Close proximity to the market
- ➤ Safe and secured farming environment

## Shared Facility

➤ Investing in a resource efficient business, thus contributing to carbon emission reduction

# Off-taking services

- ➤ Market guarantee for produce
- ➤ Reduction in post-harvest losses

### Management

Effective management of your productive capital (greenhouse facilities)

# WHAT \$50,000 WILL DO?



### Greenhouses

- ➤ 5 Units of 8m x 30m Complete hydroponics greenhouse kit to be co-owned by 3 youths to 1 unit.
- ➤ 15 Young beneficiaries/ business owners
- ➤ Centre/hub will train 60 people annually

# **❖Zero Hunger**

- ➤ The units will produce 15,000kg 25,000kg of tomatoes and bell peppers yearly
- > Healthy and more nutritious food production

# **❖Job creation & Empowerment**

- ≥20 full time jobs
- ≥30 in-direct jobs
- ➤ 600 trained in 5 years

# Environmental Impact

- ➤ Save 20 hectares of forest land
- Conserve 2.5 million liters of water

# **❖** Much more, you get to contribute to Impact **Investment**

- > Training and development of youths
- > Green skill acquisition, which is relevant for the future of the global economy
- > Job creation for young graduates e.g agronomists, greenhouse experts etc
- > Contribute significantly to the achievement of the Sustainable Development Goals (SDGs)









































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