# farm tofeed

The ODD-looking solution to food loss

Africa's first online platform reducing food loss to tackle climate change and feed the future

**June 2023** 





Globally, almost one third of all food produced is lost or wasted



In sub-Saharan Africa, nearly half of fruit and vegetables never make it to market for consumption

# The challenge

In sub-Saharan Africa, 50% of fruits and vegetables never reaches the consumer



### This has a devastating impact on 3 different levels



#### **ECONOMY**

In Sub Saharan Africa, **1% reduction in post harvest loss could save US\$40 million** each year. Kenya alone loses
more than US\$1.5 billion annually due to
post-harvest losses.



#### **CLIMATE**

Food loss and waste account for 10% of global GHG emissions. With food loss, huge amounts of natural resources are wasted (land, water, energy etc)



#### **FOOD SECURITY**

**32% of Kenyans face food insecurity** or poor nutrition. Low-income household can spend up to 75% of income on food.

Sources: FAO, UNEP farm to feed

What is imperfect and surplus produce and why does it occur?



- ✓ Considered different due to onsumer preferences
- ✓ Aesthetic and qualitative demands
- ✓ Climate impact like rains or droughts
- ✓ Quality and quantity of inputs
- ✓ Lack of skills, resources or capacity
- ✓ Lack of market access or infrastructure
- ✓ Inability to plan according to demand (lack of data)
- ✓ Seasonalities

Etc



# The digitally-enabled replicable solution to food loss

## farm to feed

Africa's B2B platform for imperfect and surplus produce, in a nutshell:

1.
By buying the full harvest, we aggregate imperfect and surplus produce

Reducing pressure on the environment and increase farmer incomes



We create a market for the full harvest (one which includes imperfect and surplus produce)

Improving affordability and availability of nutritious food

# Making a problem...



## ... the solution

### √ Tackling climate change

reducing carbon emissions & environmental footprint, making this tangible using the ACE calculator

## √ Improving affordability

odd produce is sold at lower cost to our customers whilst giving value to the farmer

#### √ Boosting farmer incomes

giving value to something that did not have value before, thus boosting farmer incomes

# Our digital platform enables us to aggregate, optimize, streamline and lower ops costs

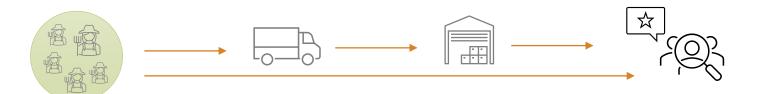
# **Operational** flow

Aggregate full harvest through smallholder supply hub system, commercial farms & partners

Lease-based first mile and outsourced last mile as/when needed

Sort, grade, dispatch: Quality control Customers order, FtF tracks impact for customers

FTF pays farmers within 72 hours





End to end tech enabled solution V1.0 1

Sourcing: farmer database, data, farmer mapping, produce aggregating 2

Logistics: route optimization, mileage, and tracking of drivers

3

Warehouse: Real time inventory (based on incoming and outgoing) 4

Seamless customer ordering flow: catalogue and impact dashboards

5

Finance: payments to farmers, customer invoicing and reporting



Collecting granular data on the real driver of food loss per location and demographics of farmers

# Pioneer in the food loss certification

Quantifying the environmental impact of our intervention

Keeping food within the human food chain 1st priority when rescuing food losses



1

Less food will have to be produced and with this less emissions that are related



2

Emissions related to the food loss destination (e.g. a landfill) are avoided

FTF calculates <u>avoided</u> CO2-e emissions using the ACE calculator









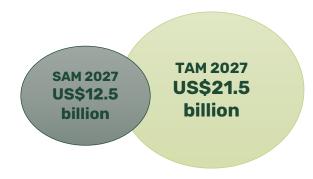
# Market opportunity

## Food market value and carbon offset market value



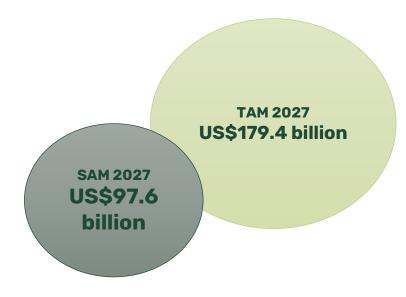
#### **KENYA FOOD MARKET VALUE**

Vegetables, convenience foods, fruits & nuts, sauces & spices



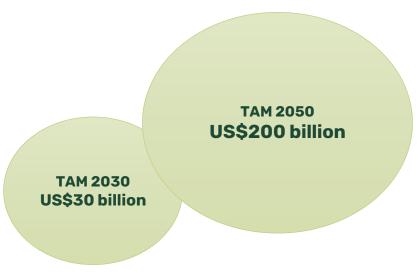
#### **AFRICA FOOD MARKET VALUE**

Vegetables, convenience foods, fruits & nuts, sauces & spices



#### **GLOBAL CARBON OFFSET MARKET VALUE**

The market for carbon offsets (US\$2 billion in 2021) projected to increase x15 by 2030 and x100 by 2050



# Growing to scale, how our platform will evolve

#### 1. End to end solution for farmers:

Focus on the full harvest - G1, 2 and rescue - expanding into semi-processing for "rescue grades":

#### Focusing on B2B, customer segments:

- Hotels, restaurants, caterers
- Food processors
- Schools/ feeding programs
- Consumer platforms (B2B2C)
- Vendor platforms
- Export

#### **Key milestones**

- Revenue US\$40 million by 2027
- Scale farmer network to 300,000 farmers (ie via partners e.g. iShamba/Digifarm)

## 2. Tech platform to automate operations, processes and build up farmer database:

Collection of farmer data and granular localized data on the drivers of food loss. This will inform future interventions and partners.

#### **Customer segments**

- Input & finance service providers (cross selling of credit, seeds, fertilizers, storage, irrigation, transport, insurance, agrovets)
- Ag-tech companies
- Funds / donors / investors
- Farmers

#### **Key milestones**

- Scale farmer network (through partners e.g. iShamba / Digifarm/ mshamba)
- Open to new customer segment to allow cross selling and charge commission fee

## 3. Tracking, verifying and selling carbon avoidance credits

Additional revenue stream will ensure earlier financial sustainability or allow lowering cost of rescue produce.

#### **Customer segments**

Buyers on the voluntary market, looking to offset their emissions:

- Private investors, businesses
- Governments Non-governmental organizations
- Individuals
- Brokers

#### **Key milestones**

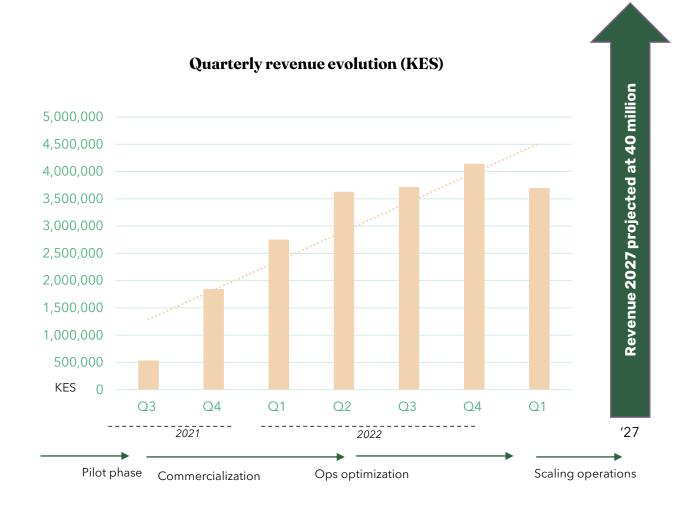
• Reach scale to 100,000 kgs per week

# Food loss and waste presents an unique commercial opportunity



### **Key commercial achievements**

- 1. Annual revenue 2022: **US\$125,000 (KES 14 Million)**
- 2. Hitting ~US\$17,000 monthly revenue October 2022 with a gross margin of 22%.
- 3. Currently delivering 30,000 45,000 KGs per month,
- **4. Saving** customers between **20 50%** on their produce, increasing their margins
- **5.** Customer portfolio includes influential food businesses in diverse segments: food processors, ho-re-ca, schools and feeding programs (ie Kapu, Tushop, Nature Lock, Browns, Art Caffe, Tamarind Group, Pankaj Feeding program



# **Key customers**

## Our customer portfolio includes most influential food businesses in Kenya

1. Food processors







2. Hotels, restaurants, caterers







3. Schools / feeding programs









4. B2B2C platforms





5. Export & semi processing (R&D phase)

# Our impact results and the SDGs

Food loss is one of the major drivers of climate change, food insecurity and loss of farmer incomes











PRODUCE RESCUED FROM FARMS CLIMATE IMPACT, EMISSIONS AVOIDED FOOD AFFORDABILITY

**INCOME FOR FARMERS** 

IMPACT TO DATE 780,000 kgs total of which 650,000 kgs rescued of vegetables

861 tons CO2-e & reduced wastage resources

10.7 million affordable veg portions delivered

US\$200,000 to farms

IMPACT BY 2027 34 million kgs total of which
23 million kgs
rescued of vegetables



30,300 tons CO2-e & reduced wastage resources

450 million
affordable veg portions delivered



## A women-led team

## Local, regional & international experience: agriculture, logistics and business expansion



**Claire van Enk** Managing Director

- Raised in Kenya, Dutch heritage
- Previous experience strategy & operations for different stage companies across East Africa for PriceWaterhouseCoopers.
- Holds masters in engineering & management



Christine Kiraithe Pentinga Operations

- Kenyan nationality, masters in Logistics, Procurement and Supply Chain Management.
- Supply chain experience across Africa (i.e. DRC and CAR) logistics, procurement, inventory, transport for Médecins Sans Frontières.



Anouk Boertien
Product ® Sustainability

- Holds masters in business economics
- Qualified GHG Measurement, Reporting & Verification
- Managed multi-million US\$ redevelopment projects at Schiphol Airport including operations on site as well as stakeholder management.



**Zara Benosa**Business Development

- 14 years in Kenya, experience managing large scale development programs with deep understanding of increasing resilience and productivity of smallholder farmers.
- More than 17 years experience in business development, partnership and fundraising



**Stella Mbungu**Sales, Customer Care



Peter Matheka
Sourcing



**Lucy Wainaina**Finance ® reporting



**David Chege** Supply Hub Lead



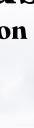
**Gregoire Dusausoy** Advisor



20+ years
experience in
investment and
building ventures /
coaching founders
across the continent

# Our key needs

We are raising US\$1million











TEAM, WORKING CAPITAL, LOGISTICS

**50%** 



DIGITAL PLATFORM 20

20%



COLD STORAGE AND WAREHOUSE 24%



R&D FOR VALUE ADDED PRODUCTS

**6**%

US\$200,000 pre-seed invested on a SAFE note by



\$27,000 prize money (Women Empowerment Award 2022)







### **Our partners**















## Worldwide 1.2 billion tons of food is wasted on farms each year...

Significantly more than is wasted from retail, food service, and households combined

... enough to feed the world's 870 million undernourished four times over

\_\_\_

It's time to transform the food system

