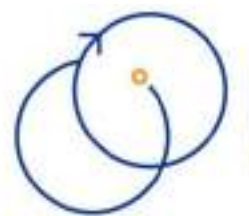




**AFRICA 20  
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Innovation for Resilient Growth



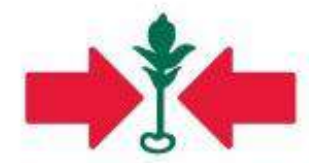
# A PRACTICAL GUIDE TO EXCEL IN NIGERIA'S AGRICULTURAL SECTOR



**MATCH**  
HIRING AFRICAN TALENTS



This project is funded by the  
European Union's Asylum,  
Migration and Integration Fund



EAST-WEST SEED

**MS Schippers**  
Passion for Farming



**NGN** impact  
with  
insects

**TNO** innovation  
for life

**NL.IN.  
BUSINESS**

**NABC**  
Confidence in African Business



Government of the Netherlands

# Introduction



**Myrthe van der Gaast**

Project Coordinator

**Netherlands-African**

**Business Council**

**Moderator**





# A Brief overview of Nigeria's Agricultural Sector



**Kabir Ademoh**

Local Coordinator for Seeds  
for Change (S4C)

Netherlands-African  
Business Council



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# Short quiz (true / false)

**Q1: Nigeria is an import dependent nation**  
**= FALSE**

# Q1: Explanation

## Imports of goods and services (% of GDP)



**Nigeria: 16.6%**

**World: 25.7%**

**NL: 67.4%**

**Total export: \$53.6 B**

**Total import: \$47.4 B**

**But!**

**Agri import: \$4.8 B**

**Agri export: \$1.2 B**

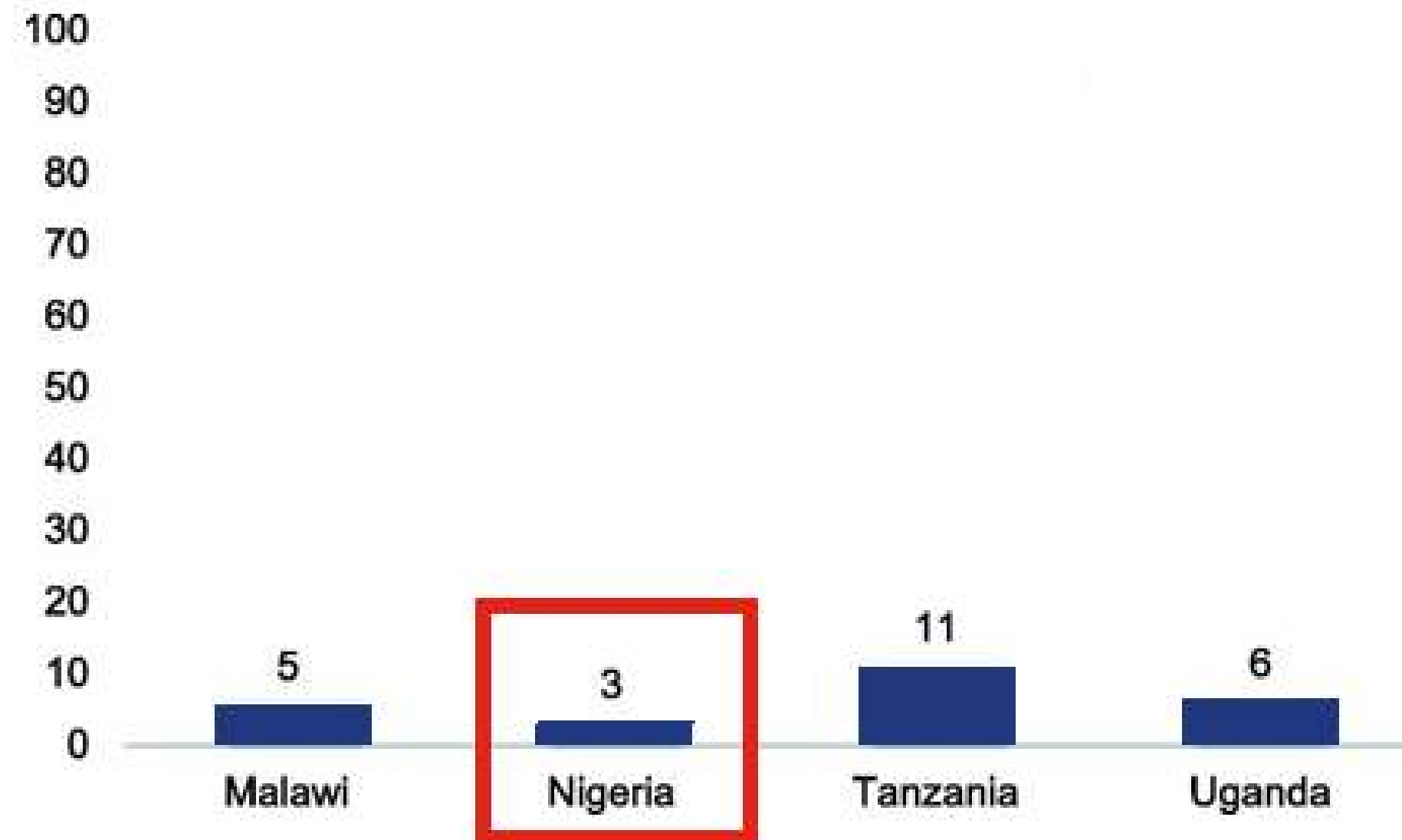
# Short quiz (true / false)

**Q2: Modern inputs are not financed through formal credit**

**= TRUE**

# Q2: Explanation

Of those who bought external inputs, share of farmers buying on credit (%)



Source: Liverpool-Tasie et al. (2017)

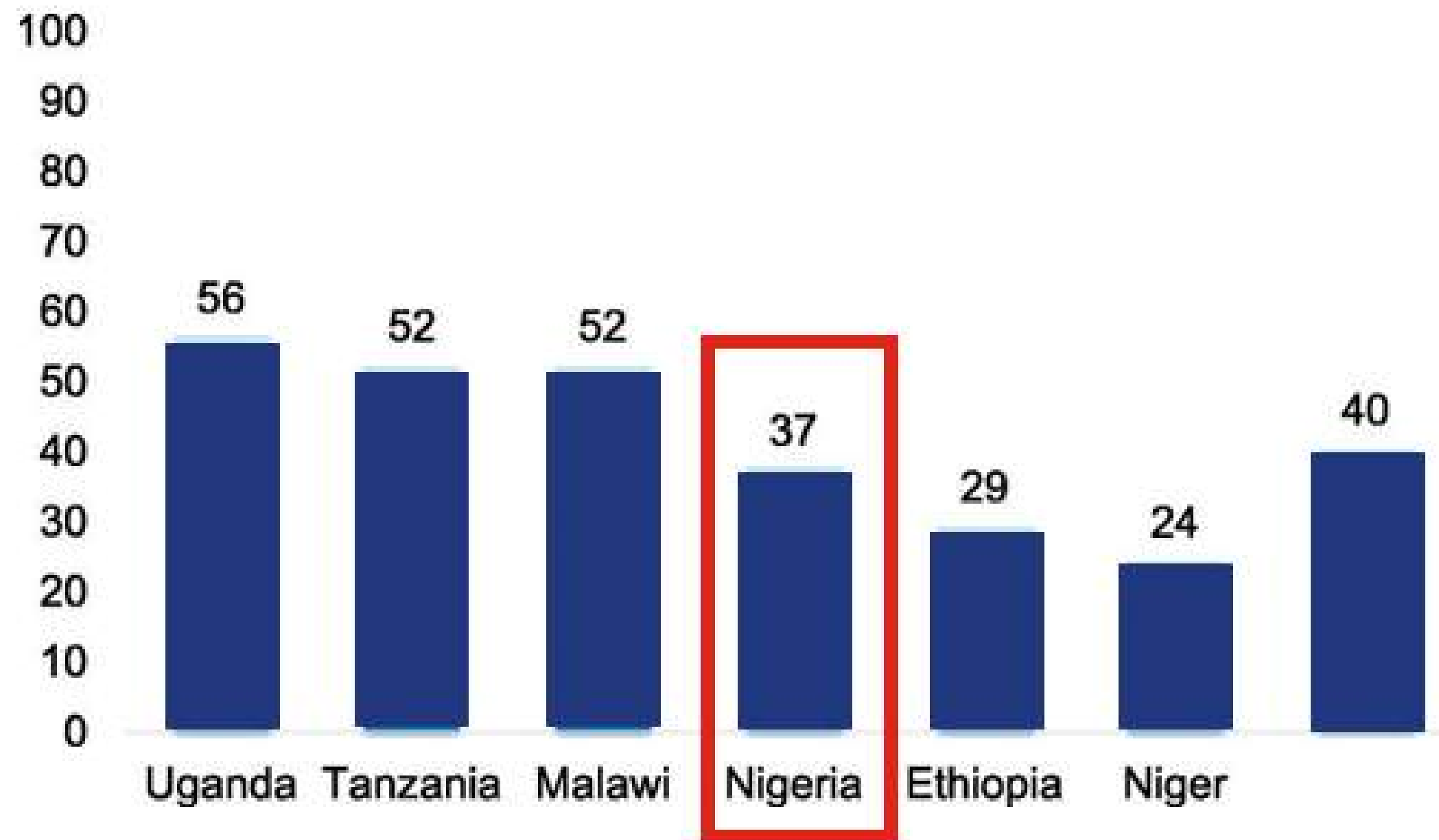
# Short quiz (true / false)

**Q3: Women provide the bulk of labour in  
Nigeria's agricultural  
= MOSTLY NOT TRUE**



# Q3: Explanation

## Female share of agricultural labour (%)



**Nigeria: 37%**

**Northern regions: 32%**

**Southern regions: 51%**

# Nigeria at a glance

**Giant of Africa:** 206.1 inhabitants, Lagos= 15.4-23 M

**Largest economy of Africa:** \$432,3B, but GDP still half of the NL

NL ranks 3<sup>rd</sup> as largest **importing (\$4.9B)**, and 4<sup>th</sup> as largest **exporting (\$4.7B)** country to Nigeria

**Agriculture:** 24% of GDP, 36% labour force, >80% smallholder farmers

**4 main sectors:** crop production (87,6%), fishing, livestock and forestry













**Main export products:** **sesame seeds, cashew nuts, cocoa beans,**

ginger, frozen shrimp & cotton

**Main import products:** wheat, sugar, fish & milk

# Policy & legislation

Focused on increasing **domestic production & self-sufficiency**, often via **trade regulation for import / limiting access to foreign currency**

Banned Imports	Restricted Dollar Access	Key Trade Rules
 Poultry, Pork, Beef, Eggs	 Poultry and eggs	 Rules of Origin
 Refined vegetable oil and fat	 Palm kernel/palm oil products/vegetable oils	 NAFDAC or SON product registration
 Spaghetti, sugar and fruit juice	 Meat and processed meat	 Registration with MAN and NACCIMA
 Sugar Cane	 Rice, Tomatoes	 NEPC Registration

Source: PWC (2020)

# Government incentives

- 1. 5-year tax holiday** for organizations involved in processing
- 2. Tax relief** for agricultural research & development
- 3. Credit risk guarantee** to aid access to credit facilities from Central Bank of Nigeria, Bank of Industry
- 4. 0% import duties** for agricultural & agro-allied machinery & equipment
- 5. Trade liberalization scheme** (TLS) of the ECOWAS = access to all ECOWAS countries without paying for import duties



# Main challenges



**1. Resource shortage:** shortage of seedlings & fertilizers



**2. Outdated system of agriculture**



**3. Absence of value addition and supply chain linkages**



**4. Insufficient supply** to meet population growth and consumer demand



**5. Lack of finance & infrastructure**



**6. Violent conflict**



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# Some major opportunities

Production & sales of farm inputs

Food processing & preservation

Mechanization & tech development

Commodity trading

Logistics

Irrigation development

Training & certification

# In practice: S4C Impact Cluster Nigeria

## SEEDS FOR CHANGE: INVESTING IN FOOD SECURITY

1. Tomato
2. Onion
3. Cabbage
4. Watermelon
5. Pepper (sweet/hot)
6. Koppert biological crop
7. protection: micro-organisms improving soil quality (bio-fertilizers, bio-stimulants and other micro-organism)



### Participating companies

syngenta



bakker<sup>®</sup>  
brothers



KOPPERT  
BIOLOGICAL SYSTEMS



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# Programme objective

**A thriving vegetables sector in Nigeria that is driven by use of Improved inputs (hybrid seeds and biological crop protection).**

## Target Group

**Small, medium and large scale vegetable farmers in Kano region of Nigeria. Specifically tomato, onion, cabbage, watermelon and pepper farmers.**

## Approach

### **Trials and testing**

- 5 ROUNDS OF TRIALS FOR TOMATO, CABBAGE, PEPPERS, WATERMELON & ONIONS
- TRIALS OF 55 NEW VARIETIES WITH 25 VARIETIES IDENTIFIED FOR COMMERCIAL DEMONSTRATIONS

### **Demonstration project**

- 60 DEMONSTRATION PLOTS PER CYCLE IN 3 YEARS
- 20% INCREASE IN WET SEASON VEGETABLE CULTIVATION
- 150% INCREASE IN PRODUCTIVITY OF TOMATO FARMERS ADOPTING HYBRID

### **Capacity building and Training**

- 50,000 FARMERS ON FIELD TRAININGS (OFTS)
- 1750 MODEL FARMERS TRAINED ON GAP
- SEED LAW COMPLIANCE WORKSHOPS WITH NASC
- HOSTED 6 SEED PLATFORM MEETINGS TO REUNITE KANO HORTI SECTOR

### **Knowledge transfer**

- 4 LEARNING PLOTS ESTABLISHED AT KNOWLEDGE INSTITUTES
- 60 INTERNS TRAINED ON HORTICULTURAL ENTREPRENEURSHIP WITH MASTERCARD-IITA
- OVER 1 MILLION LISTENERS TUNED IN TO RADIO SERIES ON DALA FM
- 30 SUPERTRAINERS IN PARTNERSHIP WITH WUR

## Foundation

**Access to markets & finance: linking farmers to off-takers and innovative financiers**

**Partnership with local stakeholders such as Bayero University & Afri Agri (S4C trial sites) and 2SCALE for financial & market linkages**



# Unlocking Nigeria's Agricultural Potential

## How to Successfully turn Insects into Business



**Marian Peters**

CEO & Founder

New Nutrition Generation



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Insect production:  
- Small, simple & significant –

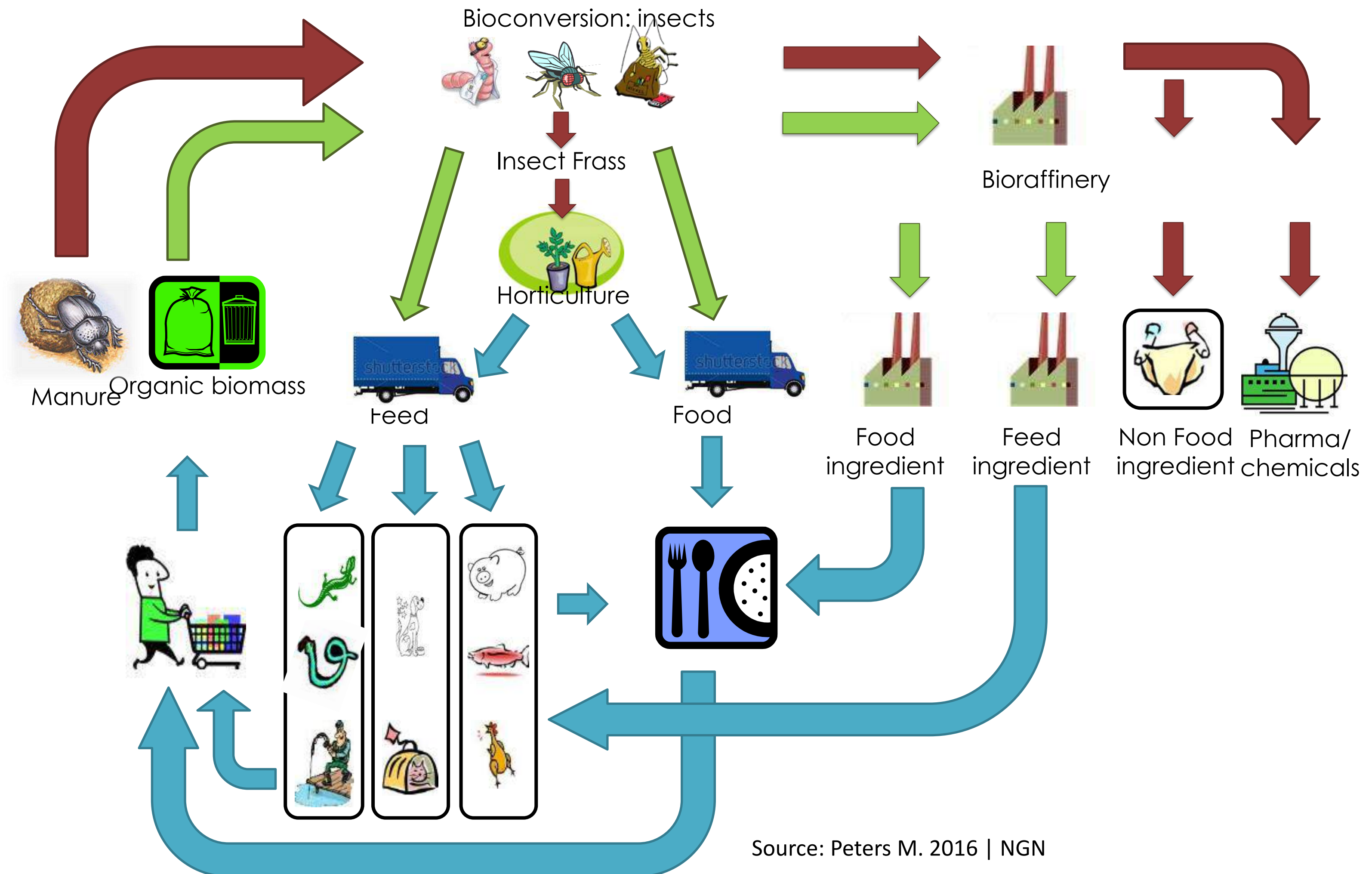
Marian Peters | NGN

Partnerships to create local ecosystems



**NGN** impact  
with  
insects





Source: Peters M. 2016 | NGN



# (Agricultural) waste as substrate for insects or worms





# Maggots & worms for feed: using (agricultural/slaughter house) waste and sludge





# Crickets for food: using agricultural waste



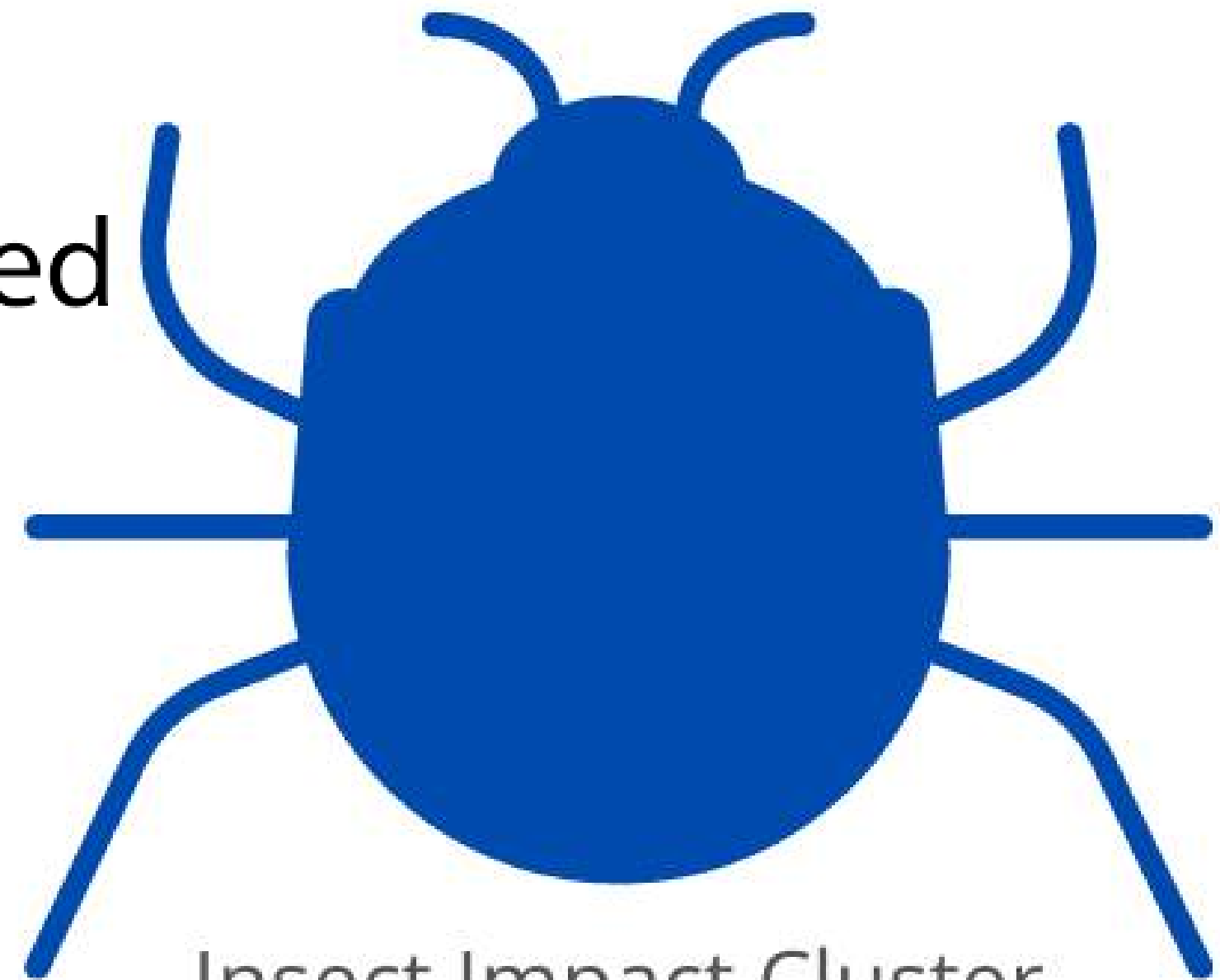


## Why Nigeria?

- Perfect climate (day/night)
- Insects are part of the diet for many Nigerians
- Need local production of alternative proteins
- Import prices - currency fluctuation
- High feed prices
- Import ban artificial fertilizers
- Entrepreneurial attitude



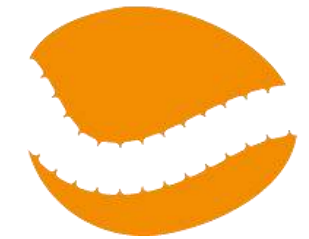




Insect Impact Cluster

**Kick-starting insect entrepreneurship for sustainable agri-food chains**

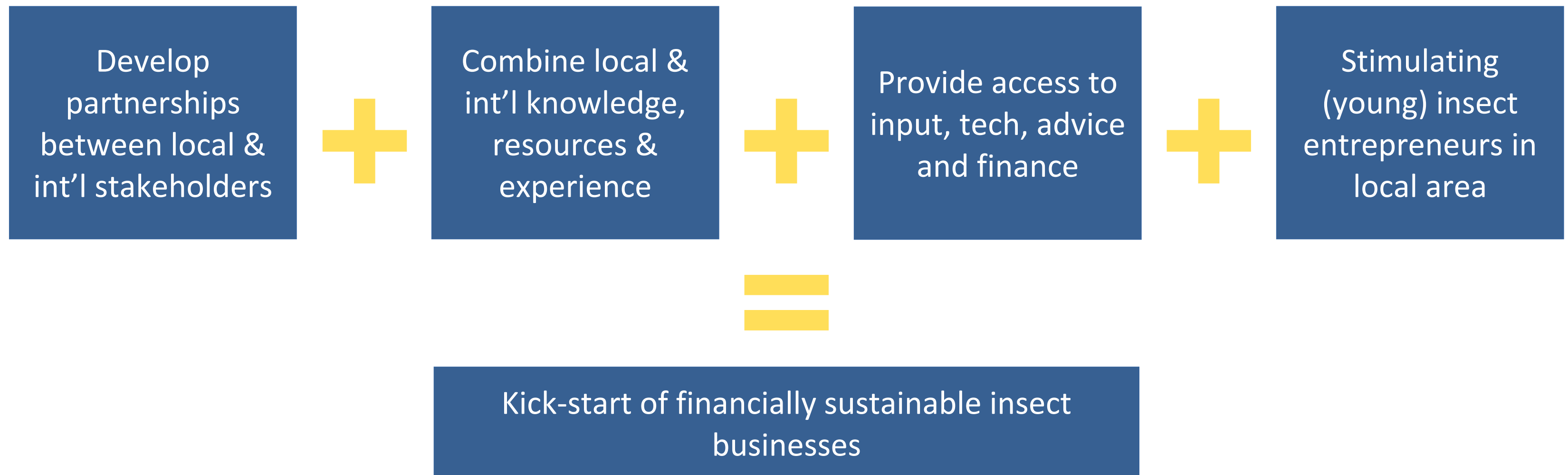
<https://insects4feed.org>





# Insect Impact Clusters as a Sustainable Solution

The Impact Cluster mechanism is used as a basis to stimulate partnerships between local and international stakeholders over a 3 year period. This results in the planning and implementation of a fully financially-sustainable insect value chain in the target region.



# The Impact Cluster Approach

To implement the cluster, activities are divided into 5 'horizons' the each cover a specific subject. Together, these horizons build the necessary knowledge, infrastructure and business mechanisms needed for a sustainable insect sector. The horizons feed into each other to create a financially sustainable flow of knowledge, support and turnover.



Horizon 1:  
Research



Horizon 2:  
Business  
Development



Horizon 3:  
Input  
Industry

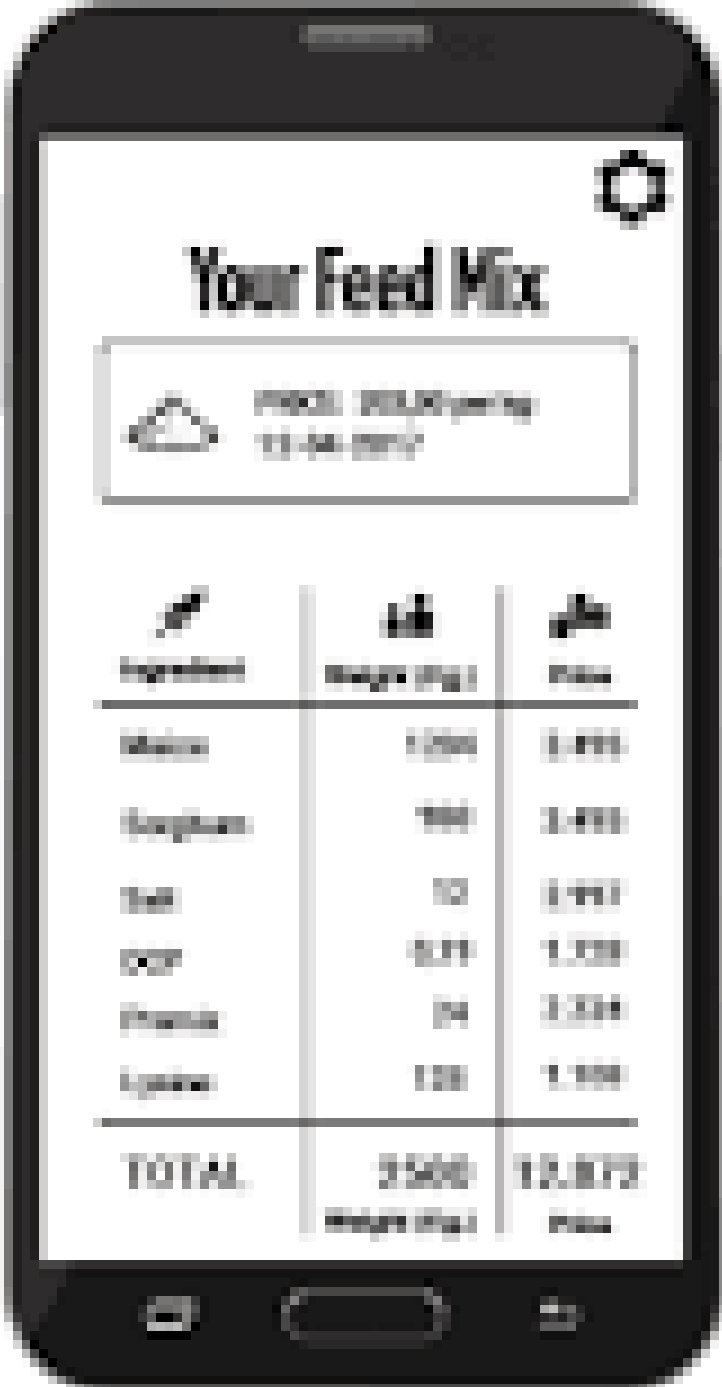
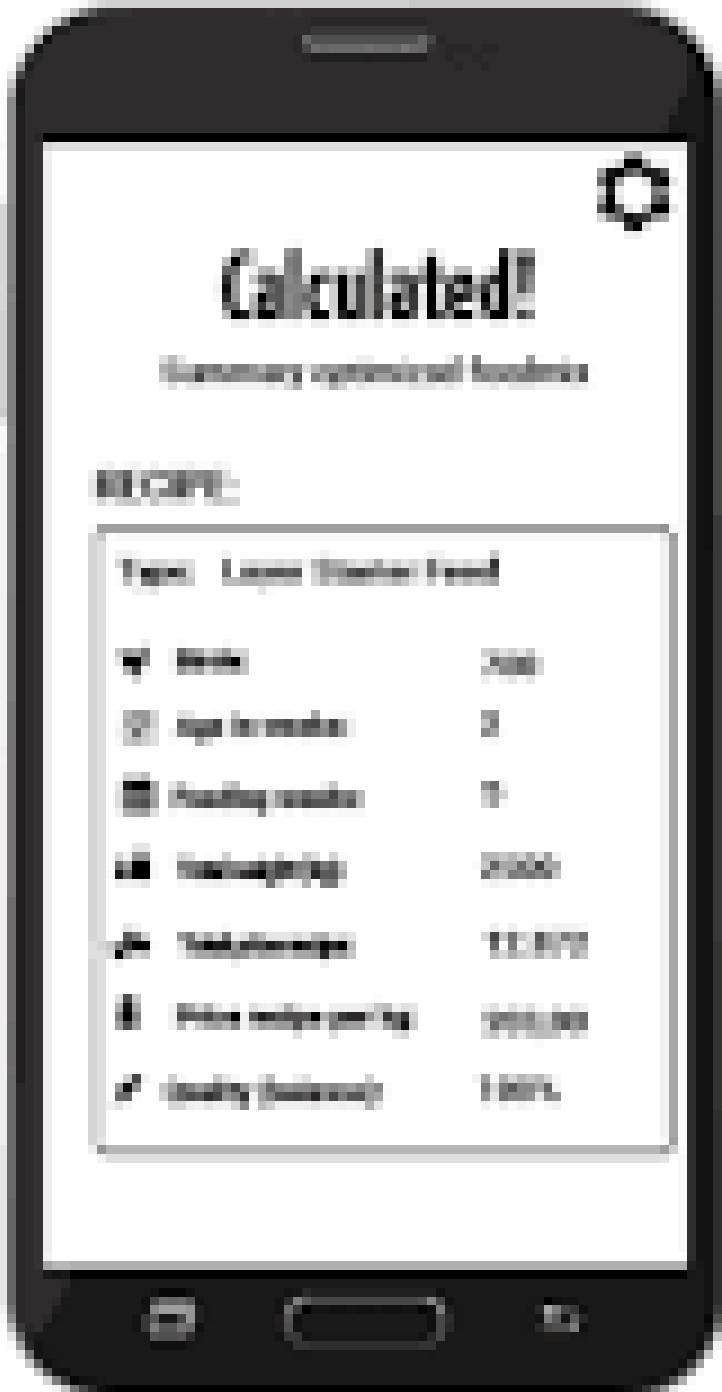


Horizon 4:  
Markets &  
Scaling



Horizon 5:  
Industry  
Development

# Market entrance while scaling





# The ecosystem: Where are we now?



UI:  
Insect Input  
Screening  
Center



UI:  
Agricultural  
Incubation  
Center



IITA:  
Demo Farm



# Flying Food



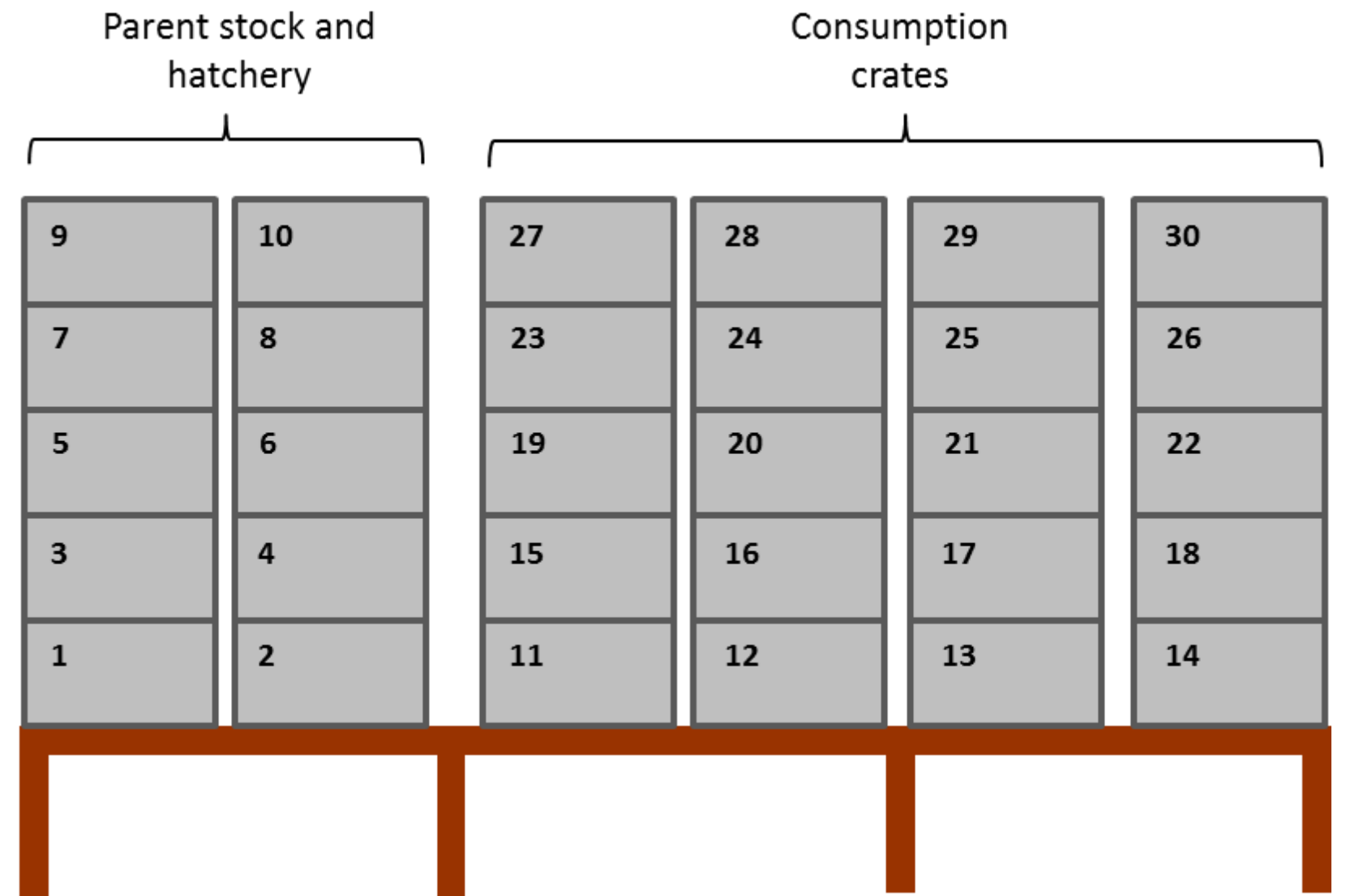
Netherlands Enterprise Agency





# Rearing

- *Systematic, standardised production system* (NL origin, adapted)
- 30 crates (smallest economically viable scale)
- 3-day procedure
- Small farmer can be self sustainable (parent stock and sales)

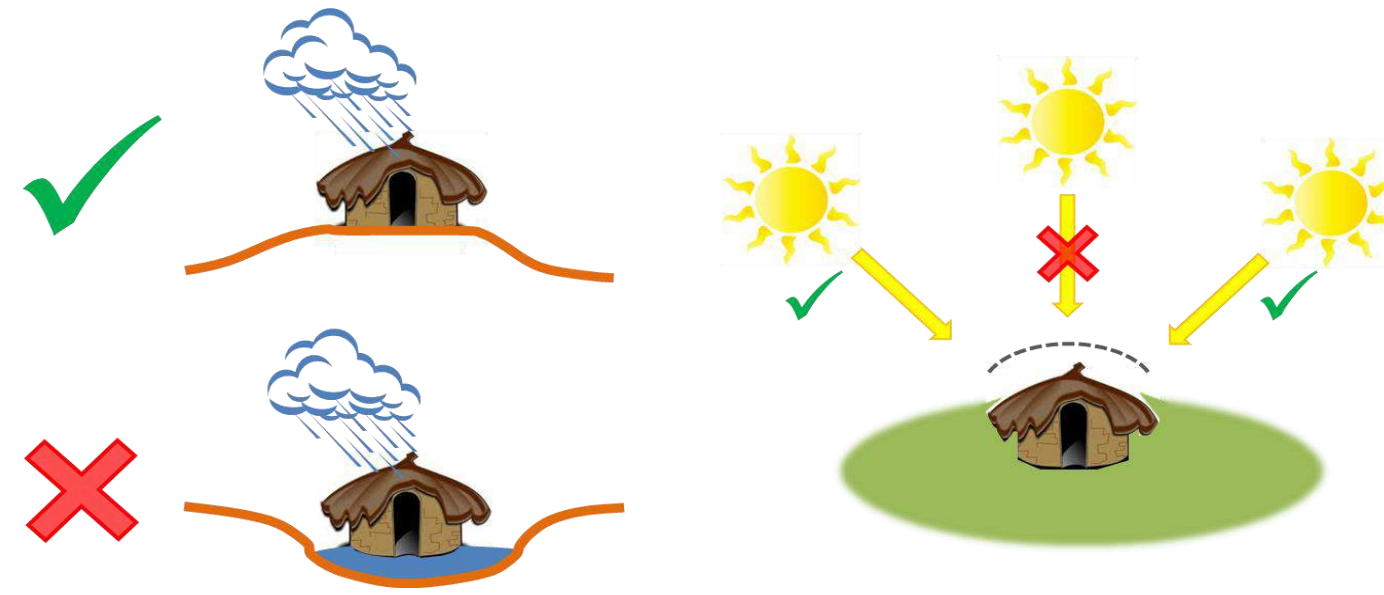








# Rearing facilities (small holder farmers)





# March 2022: Akure Nigeria













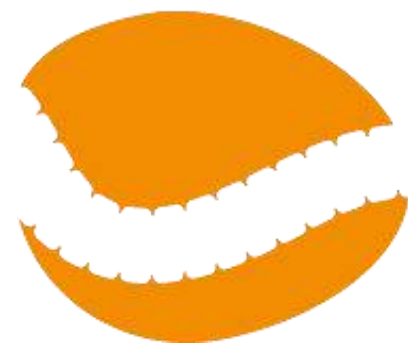
# NAFDAC and the bakery



Thank you

**CONCLUSION:**

**- SMALL, SIMPLE & SIGNIFICANT –**



**NGN** impact  
with  
insects



# Panel



**Marian Peters**

CEO & Founder  
**New Generation  
Nutrition**



**Rutger Groot**

Chairman EWS Knowledge  
Transfer Foundation &  
Member Supervisory Board  
EWS  
**East-West Seed**



**Kabir Ademoh**

Local Coordinator S4C  
**NABC**

# How to increase your local foothold in Nigeria

## Lessons from EWS-KT



### **Rutger Groot**

Chairman EWS Knowledge  
Transfer Foundation &  
Member Supervisory Board  
EWS

**East-West Seed**



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A smiling man in a red shirt with a logo is holding several large, mature cabbages in a field. The background shows rows of plants supported by stakes and a trellis system. The image is overlaid with a green semi-transparent box containing text.

East-West Seed Knowledge Transfer

# Promoting vegetable production as a rewarding livelihood

Date: 28 June 2022



**KNOWLEDGE  
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# East-West Seed | Better Seeds for Better Yield



- One of the world's leading vegetable seed companies in Asia, rapidly expanding in Africa and Latin America
- Our mission is to provide innovative seeds and services that help improve the livelihoods of tropical vegetable farmers
- Develop and improve tropical vegetable varieties adapted to tropical markets, growing and weather conditions: 80 crops and 740 varieties



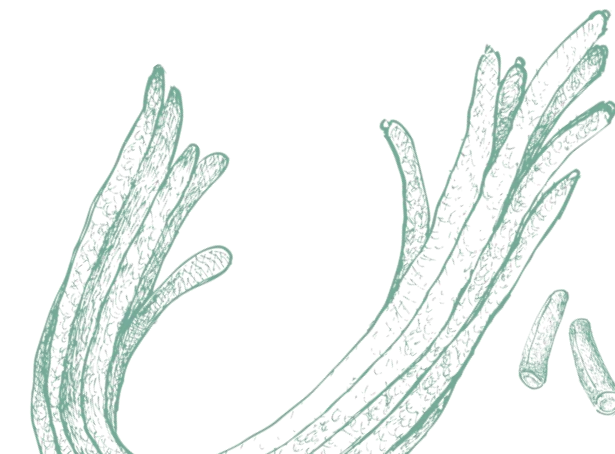
**21 million farmers served worldwide**



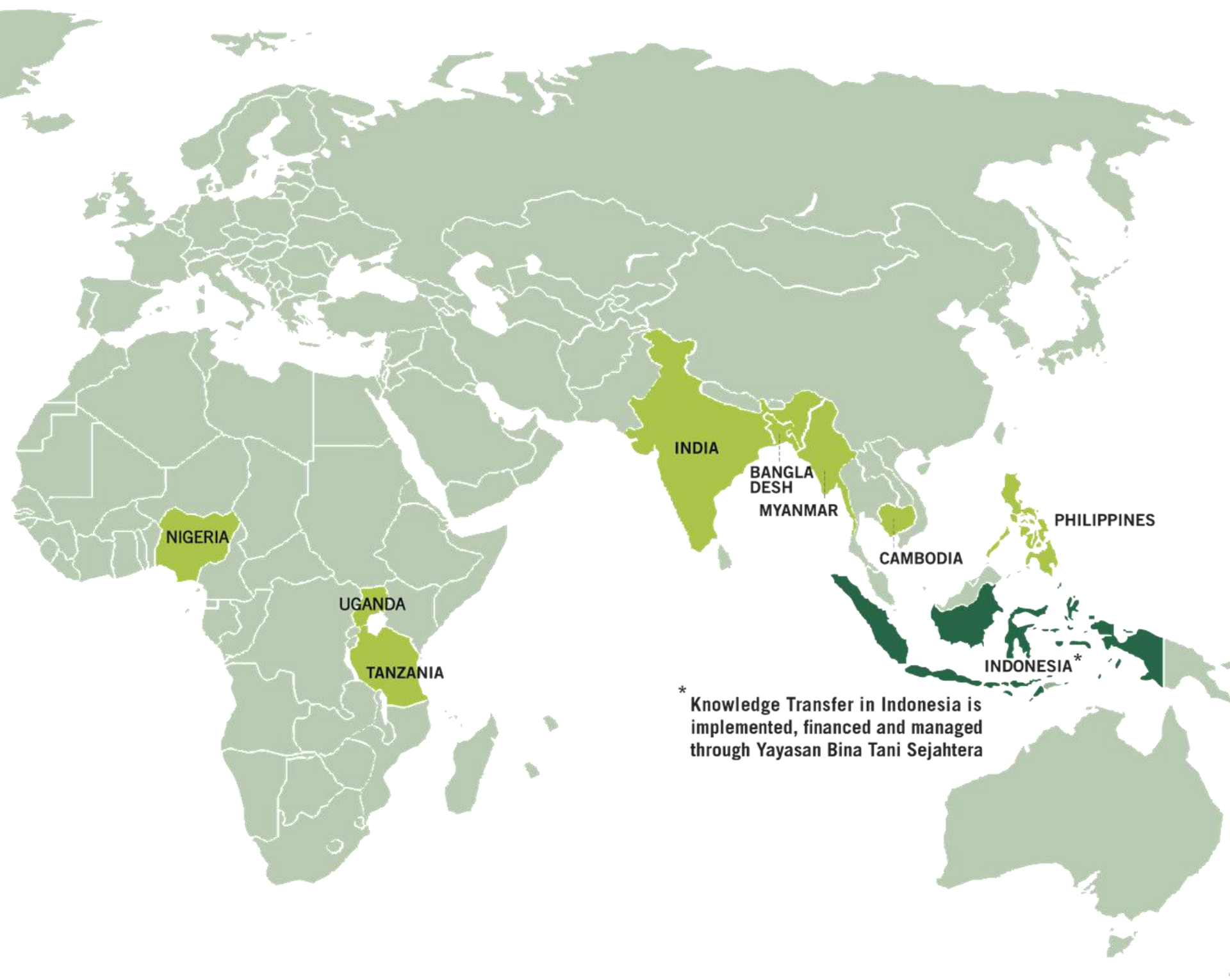


## What do high quality seed bring to farmers?

- High germination rate
- Resistance to disease (i.e bacterial wilt)
- Tolerance to abiotic stress in changing climates (i.e heat stress during flowering, drought stress)
- Increased vigour and uniformity
- Higher yields
- Marketable traits (increasing farmers competitive position)







# Better skills for Better Yields

- Non-profit foundation of East-West Seed
- Partly funded by East-West Seed
- We work in areas where farmers struggle with poor-quality yields, and where we see the potential for future agricultural-input markets to develop
- Mission: to improve the livelihoods of smallholder farmers by sharing knowledge on profitable and sustainable production practices
- Over the last 5 years we have trained 300,000 farmers
- Aim to train 1 Million farmers by 2025



# Knowledge Transfer in Nigeria



KNOWLEDGE  
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- Active in Nigeria since 2018
  - Directly trained more than 95,000 farmers
  - Over 30,000 reached through digital media
  - Over 12 million reached through the radio weekly
- Working on two project in Kano and Kaduna:
  - SDGP (2019) together with Solidaridad, WUR, AB University and MoA facilitate the development of a sustainable and inclusive horticulture sector that contributes to food and nutrition security in Nigeria by increasing productivity, market access, and financial services to smallholder farmers (136,000 farmers)
  - HortiNigeria (2021) together with IFDC, WUR and KIT Increase the productivity of the domestic vegetable sector by bringing knowledge, new varieties, and adapted technologies from the private sector and evidence-based knowledge and skills from reputable universities (60,000 farmers)





# KT approach is field-based and practical in nature



Demonstration Field



Field Days



Training of Farmers



Extension Materials



Training Farmer Advisors



Partnership and Capacity Building of Agro Dealers



Market Assessments



Radio and other digital media platforms



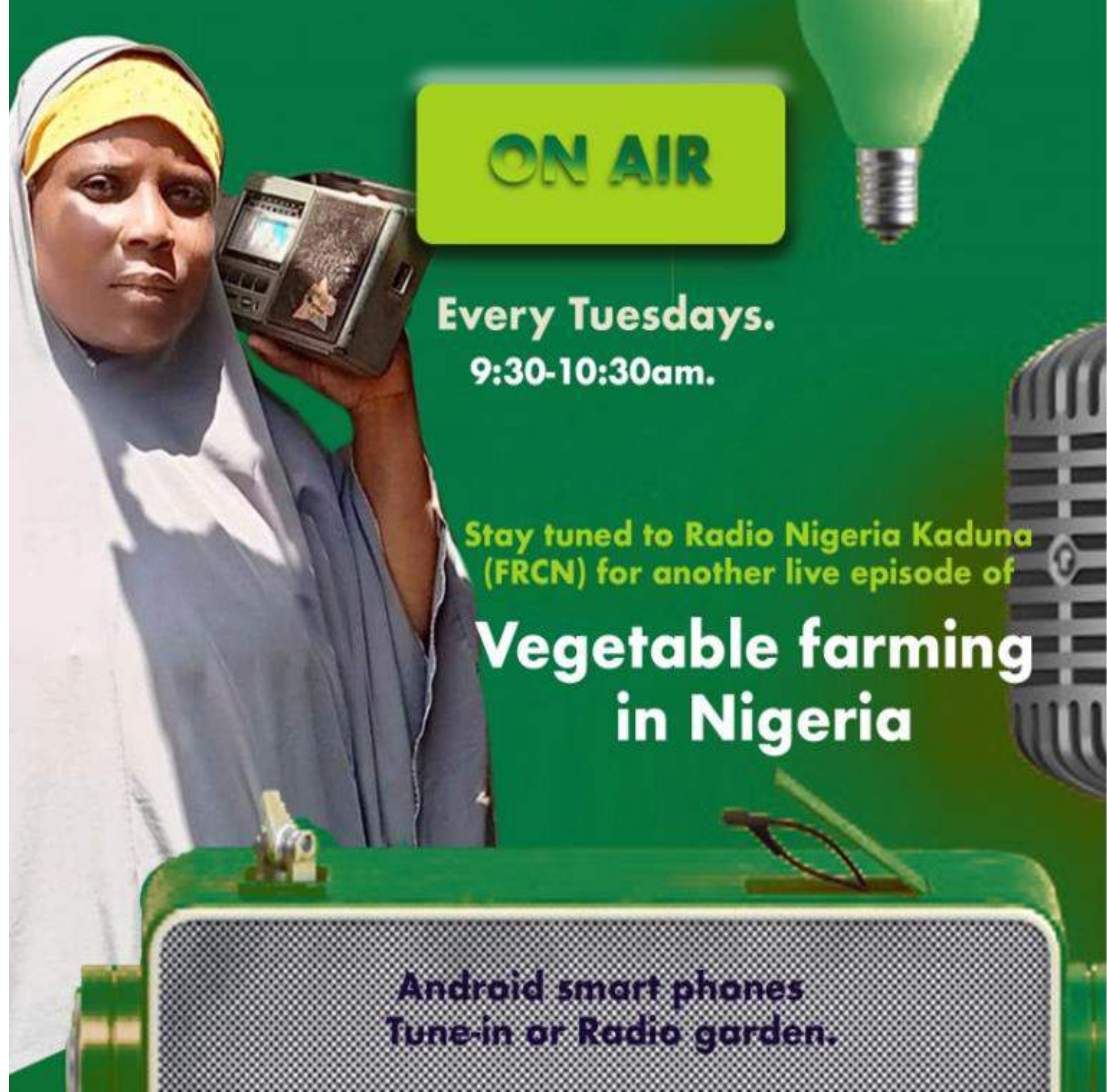


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# Digital

We utilise digital solutions both as a way to complement the knowledge that farmers gain from our field-based activities and as a means to spread this experience to a wider network of farmers

- **GrowHow** is our digital platform that provides full public access to a wide range of extension materials
- Social media platforms and groups - **Facebook, Youtube, Whatsapp**
- **Radio** program broadcasted in a renowned Hausa radio station which covers over 19 states
- **Mobile learning solutions and Apps**: Funzi & Kucheza







# Impact

<b>Nigeria</b>	<b>#Demo plot</b>	<b>Yield/ 500sqm (Kilo)</b>	<b>Cost/ 500sqm (USD)</b>	<b>Return/ 500sqm (USD)</b>	<b>Benefit/ 500sqm (USD)</b>	<b>Duration of production (Day)</b>	<b>Income/ day (USD)</b>	<b>Net income/ day (USD)</b>
Cabbage	51	1748	47.65	312.11	264.47	90	3.47	2.94
Cucumber	26	1772	51.95	341.27	289.32	75	4.55	3.86
Okra	76	488	30.92	145.35	114.43	70	2.08	1.63
Tomato	100	1794	52.91	584.80	531.89	120	4.87	4.43



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- [Farm records ROI](#) of demonstrations





## Unlock the opportunities in the agricultural sector

### *What has worked well for EWS-KT?*

- A long term approach; Knowledge transfer as a long term strategy for market development
- Collaboration with the government
- Forming strategic partnerships
- Using local teams that have experience in operating in their communities
- Integrating the high percentage of women and youth
- Increasing reach through the radio, digital and print media







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# Contact Us

For any questions or  
clarifications on our report.

## Website

<https://www.ews-kt.com/>

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# Panel



**Tunde Ayodeji  
Keshinro**

Sales Manager Nigeria  
MS Schippers



**Rutger Groot**

Chairman EWS Knowledge  
Transfer Foundation &  
Member Supervisory Board  
EWS  
East-West Seed



**Mia McKenzie**

MATCH Project Focal Point  
IOM the Netherlands







**THANK YOU FOR  
YOUR ATTENTION**

**FOR QUESTIONS ON THE MATCH  
PROJECT, PLEASE CONTACT**

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