

Global Forum on Biological Control and Training Workshop on Biological Control

Nairobi, Kenya 26-30 June 2023

Scaling Out FAW biocontrol via the PlantVillage platform of youth & tech

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Co-organized by



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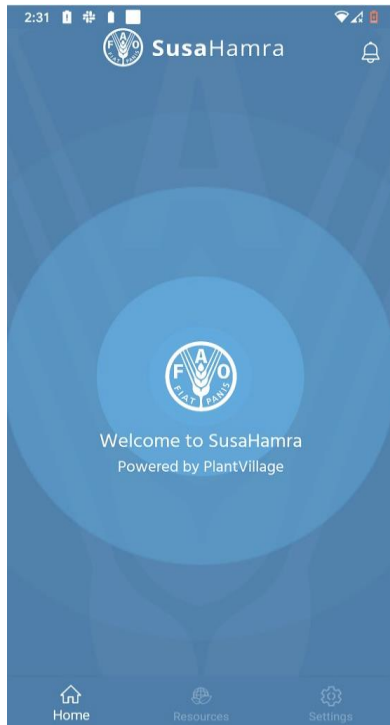
8 apps (6 Android and 2 iOS) in over 60 countries and 30 languages

FAMEWS



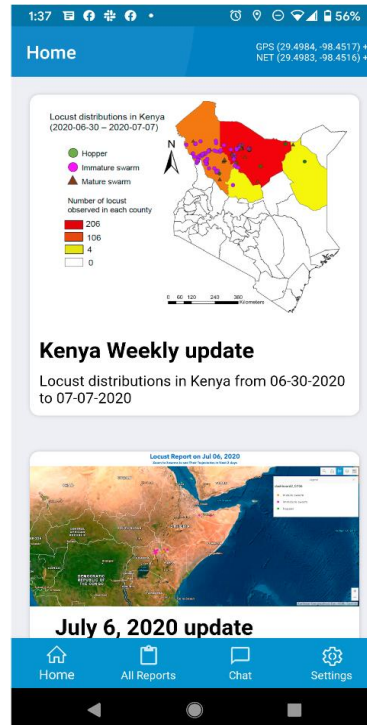
Fall Armyworm

SusaHamra



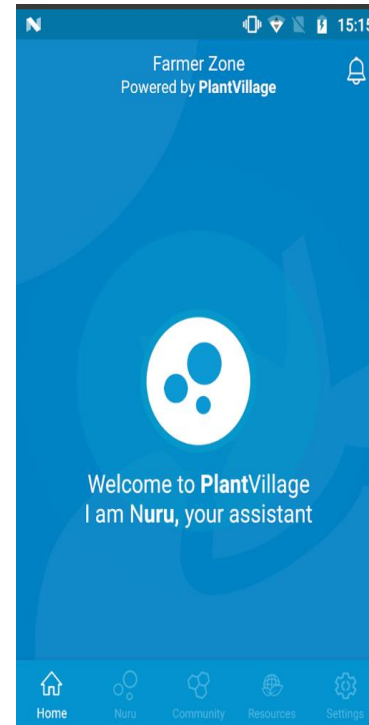
Red Palm Weevil

eLocust3m



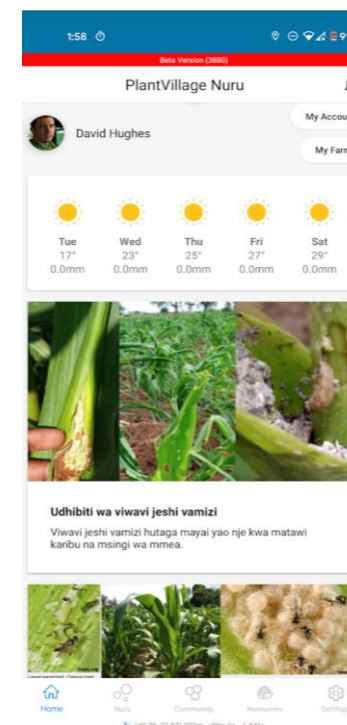
Locusts

FarmerZone (India)



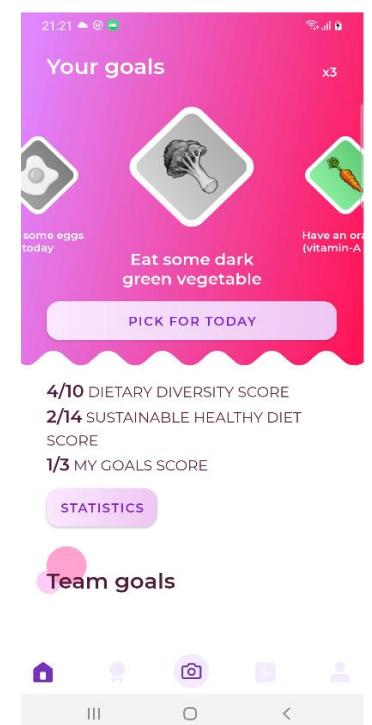
Potato

PlantVillage Nuru



Crops/Climate
change

PlantVillage Nutrition



Healthy eating for
adolescent girls

PlantVillage Platform

Feed The Future

Current and Emerging Threats to Crops Innovation Lab



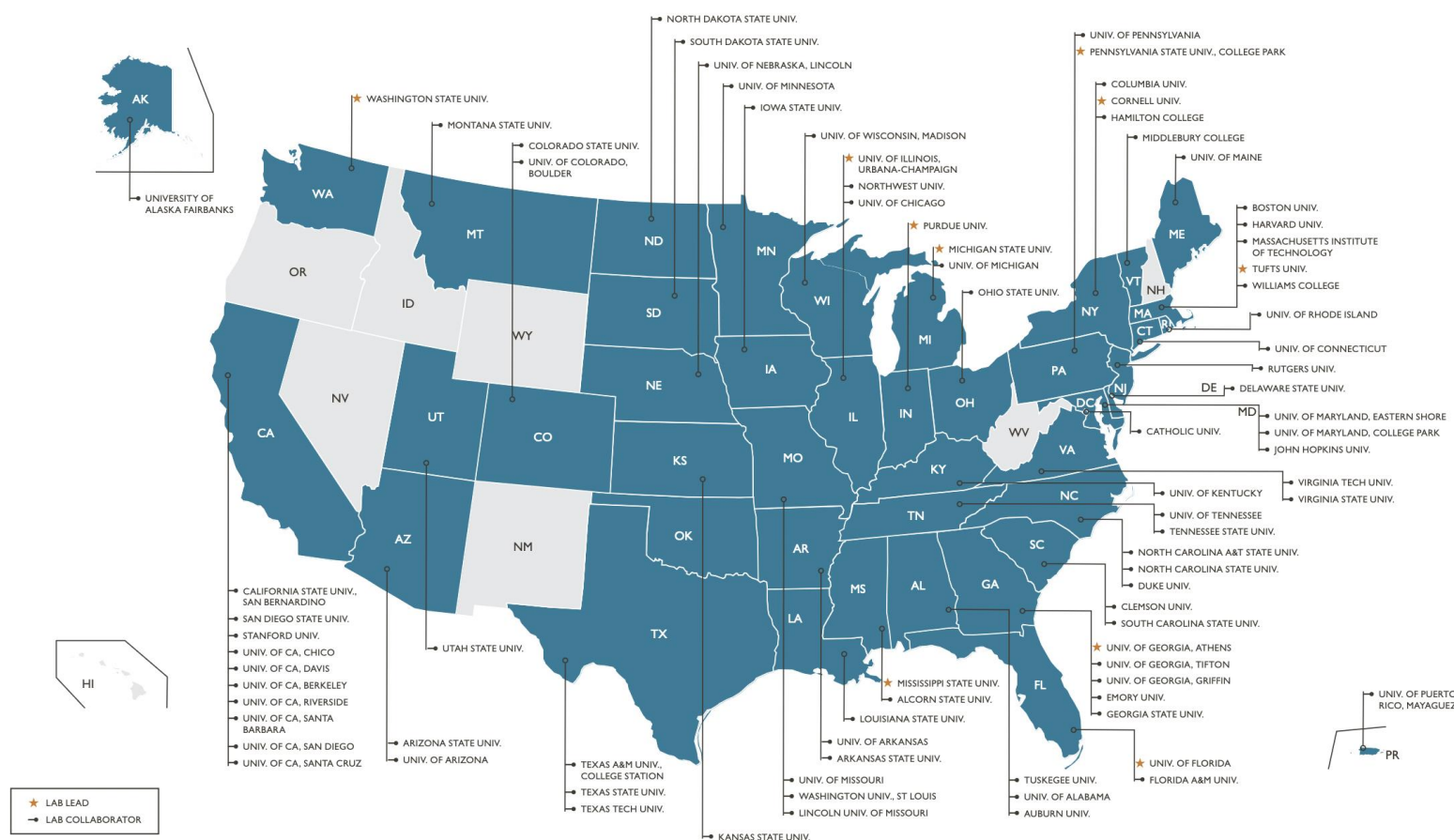
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The U.S. Government's Global Hunger & Food Security Initiative



FEED THE FUTURE INNOVATION LABS HELP FIGHT GLOBAL HUNGER

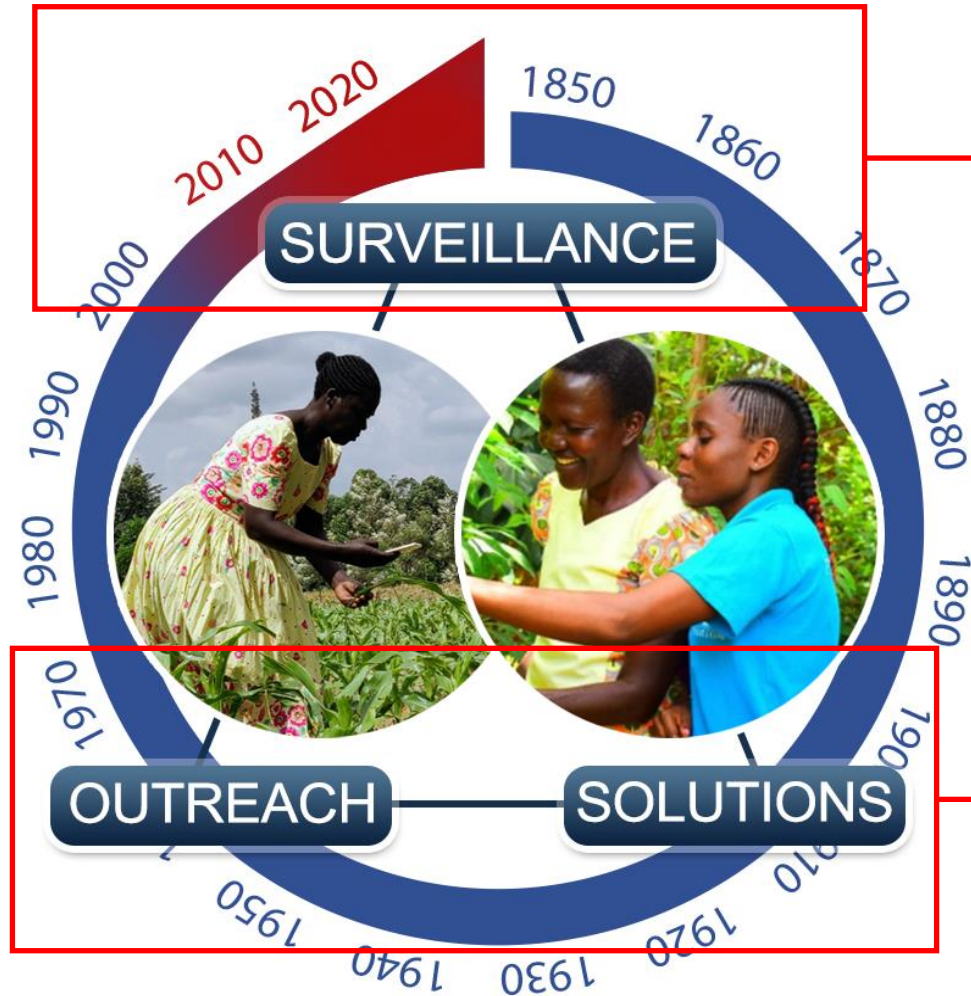


“four interconnected and gargantuan challenges confronting the world at this moment”

Ambassador Samantha Power,
Senate Hearing, March 23, 2021



S.O.S.



Surveillance needed in a climate changed world

Research needed for solutions and reaching hundreds of millions of farmers



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“the key issue regarding IPM technology transfer is how to cost-effectively spread IPM to a global audience of millions of farmers in enough depth so that they will adopt IPM in an appropriate manner”. Dr. Muni Rangaswamy, 2016 paper

Feed The Future

Current and Emerging Threats to Crops Innovation Lab

October 1st 2021



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PennState



Quick win projects on FAW IPM at scale



Scaling out FAW egg parasitoids: A verified and sustainable control strategy



Training of the PlantVillage Dream Team by *icipe* experts (October 2021).



35 million parasitoids produced and released to 750 maize fields across 10 counties in Kenya by **July 2022**.

QJ77F727M9 Confirmed. have received Ksh4,000. from [redacted] on 7/10/22 at [redacted] PM New M-PESA balance

Creating a market by **January 2023** for parasitoids as input: 600 farmers who were trained during field days have expressed interest and have registered to receive parasitoids.



Setting up a parasitoid rearing facility that is 100% managed by the PlantVillage Dream Team.



Educating farmers on FAW biological management through PlanVillage Nuru, Shamba Shape Up TV and SMS.

Contact Us at <https://plantvillage.psu.edu/cetcil>



Brenda Cheptoo



Frankline Areba

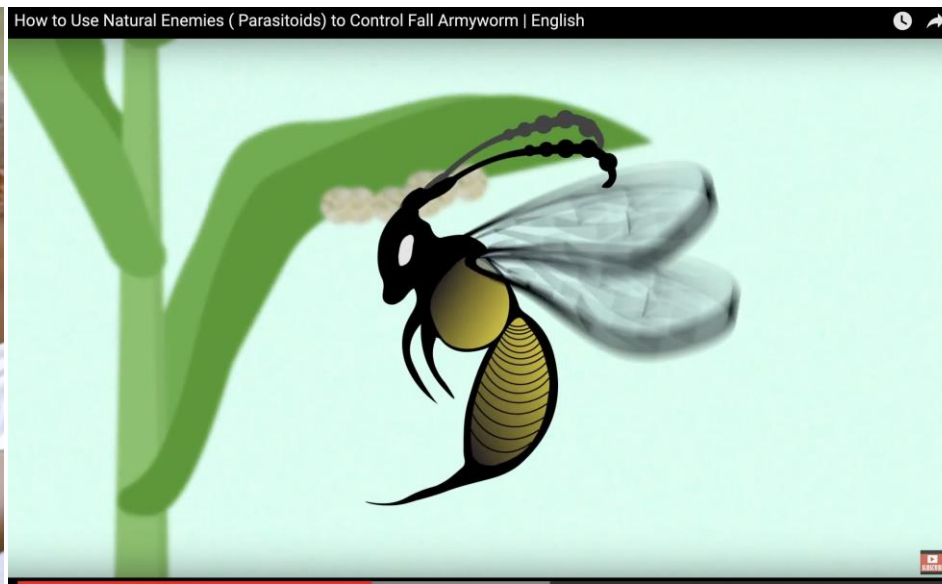




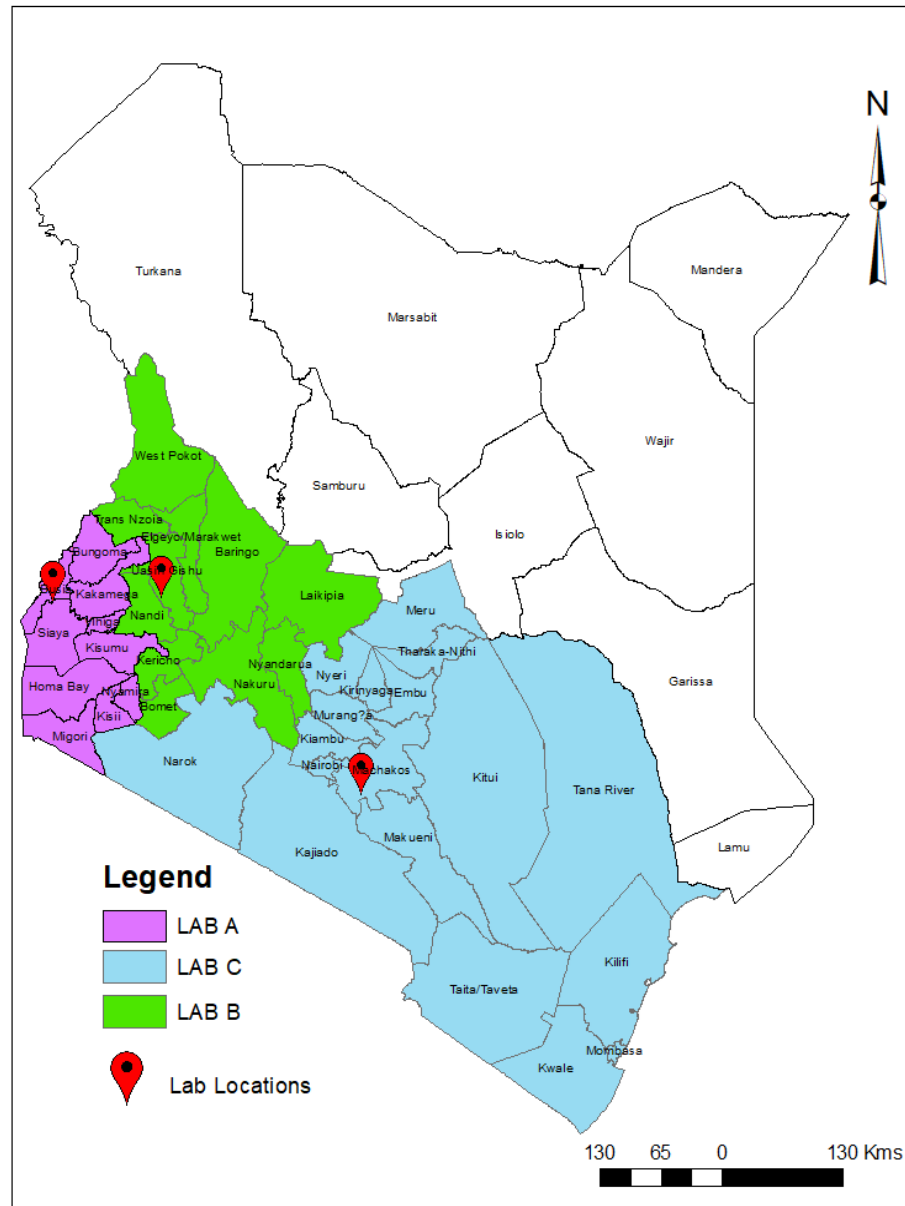
Welcome to Shamba Shape Up

Get practical advice on improving your farm and increasing your yields from East Africa's favourite farming show!

6-8 million viewers
Plus SMS to 500,000 farmers



Three Parasitoid Labs Provide Service to Maize Growing Farmers in Kenya



Number of trained people in parasitoid labs = 24

Parasitoid Lab at Alupe University, Busia = 7

Parasitoid lab at Moi University, Eldoret, Uasin Gishu = 9

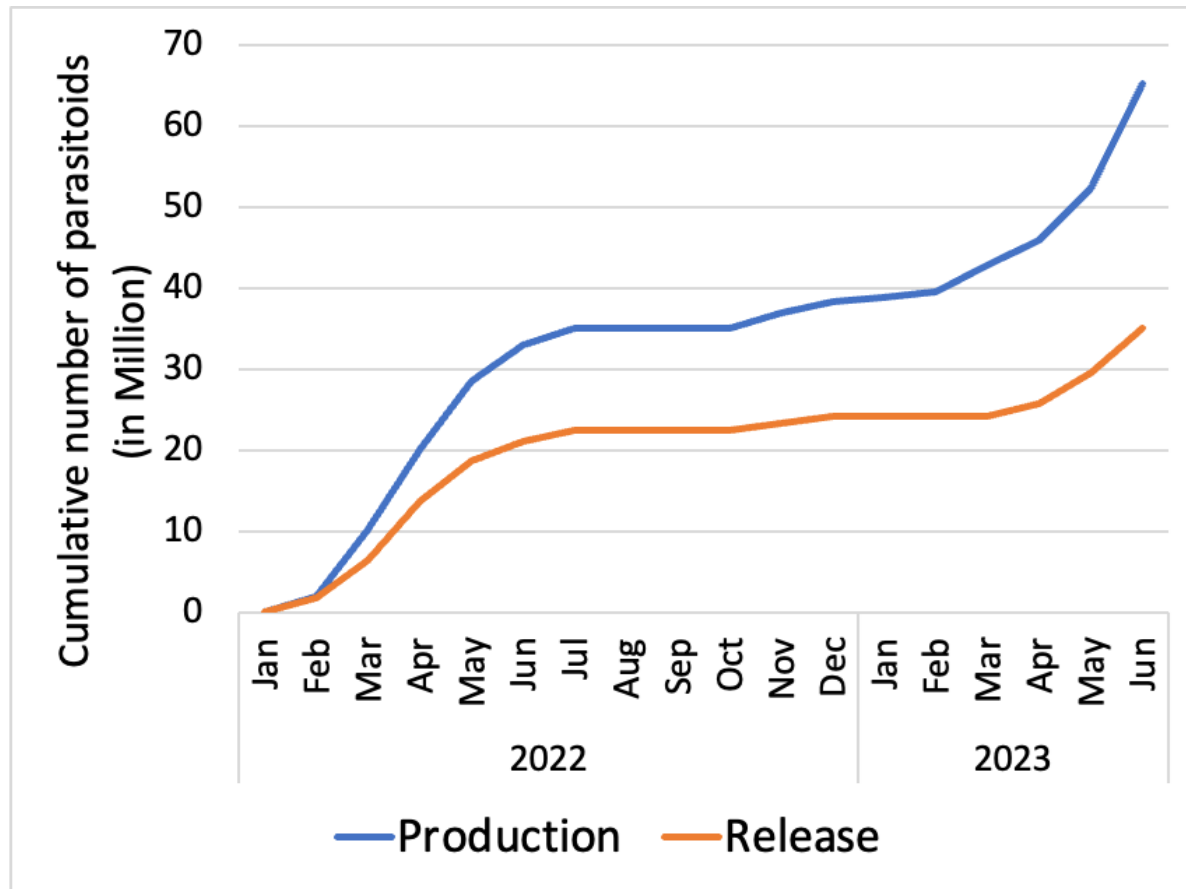
Parasitoid Lab at Machakos = 8

Number of parasitoid agents = 32 (22 Female, 10 Male)



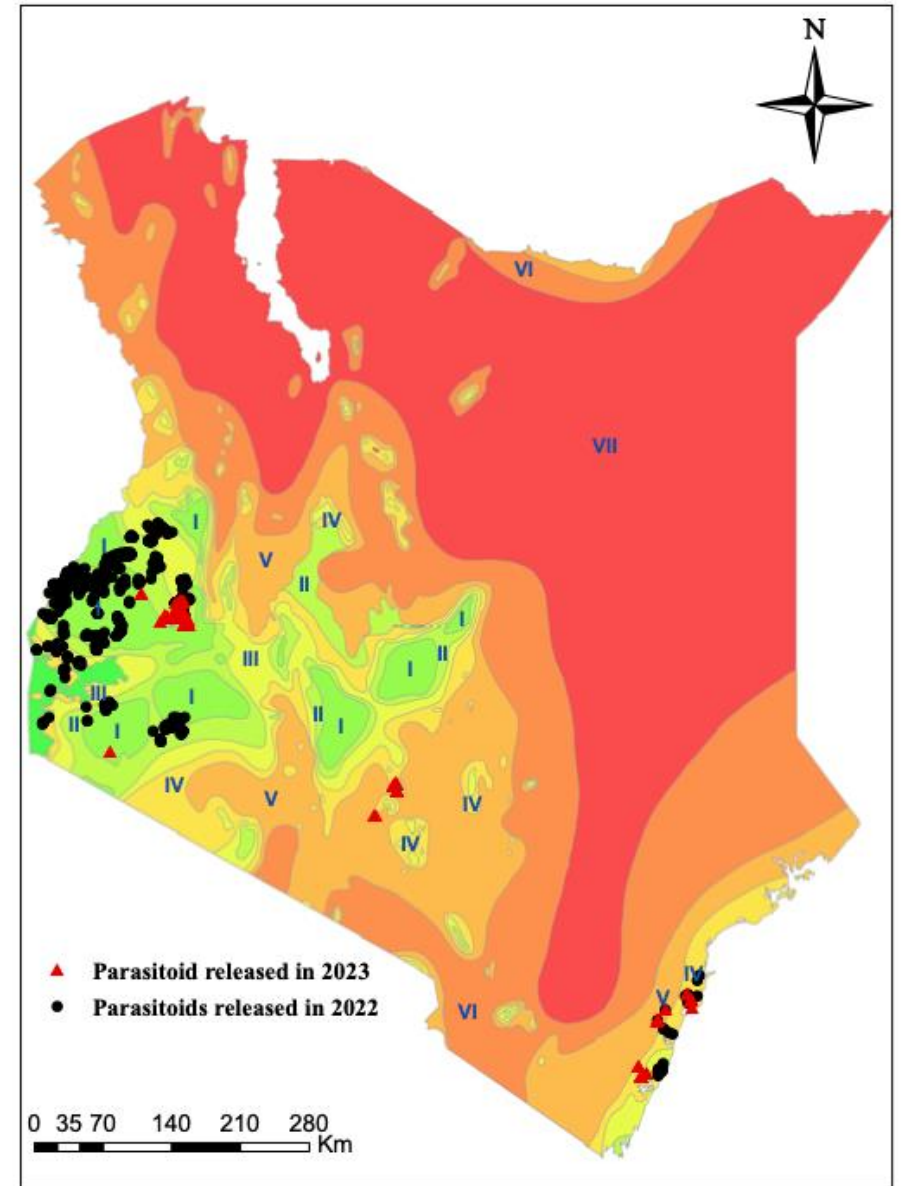
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Parasitoid Labs Released Over 65 Million Parasitoids in Thirteen Counties



In 2022, parasitoids were released in 750 farm

In 2023, parasitoids were released in 180 farms. This year farmers are paying for the parasitoid release service.



**IF YOU HAVE EARLY STAGE
MAIZE USE PARASITOID
WASPS FROM
PLANTVILLAGE TO
CONTROL FALL
ARMYWORM. AT ONLY
KSH.500/QUARTER AN
ACRE. TEXT OR CALL US
ON 0715034782**



PlantVillage

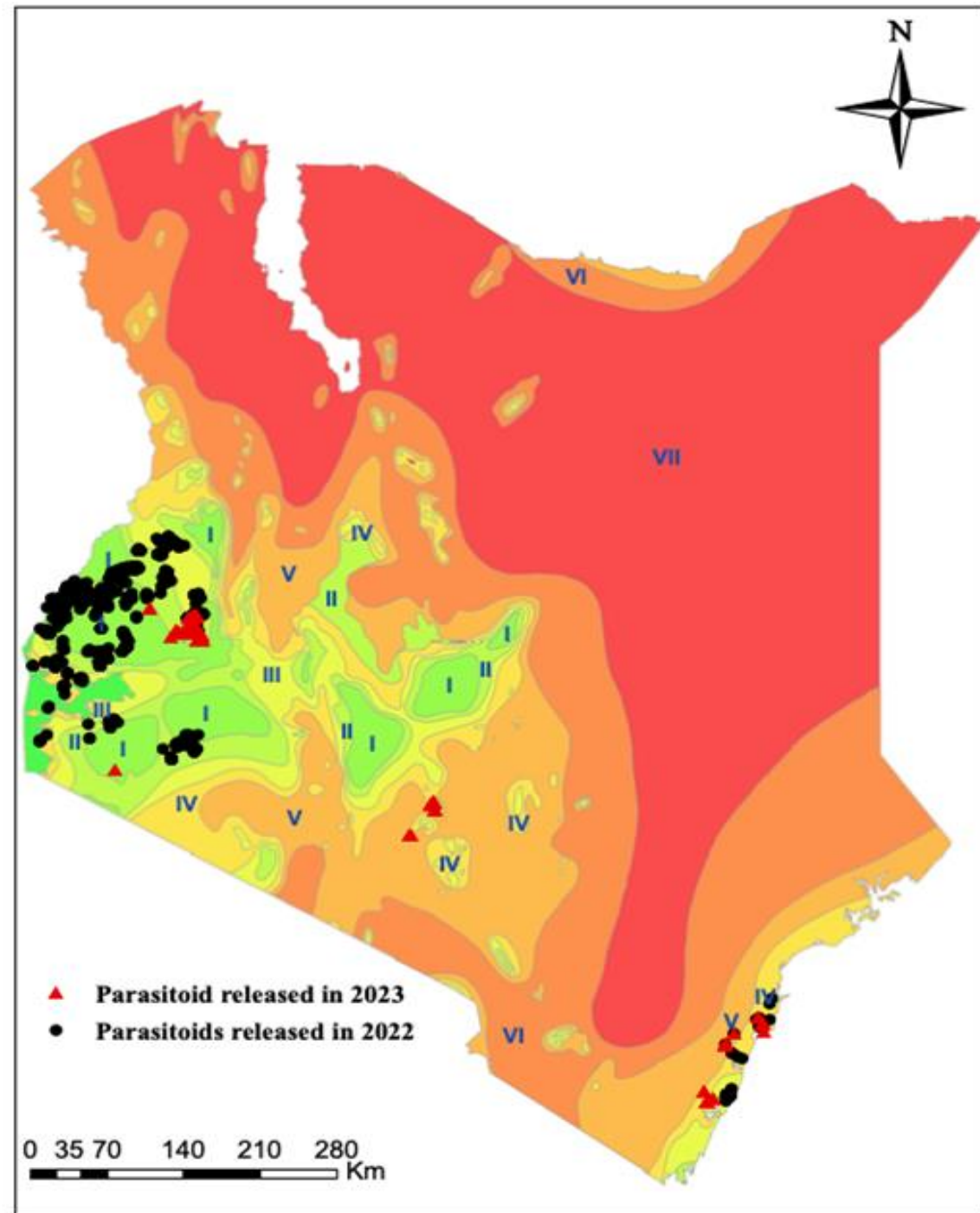


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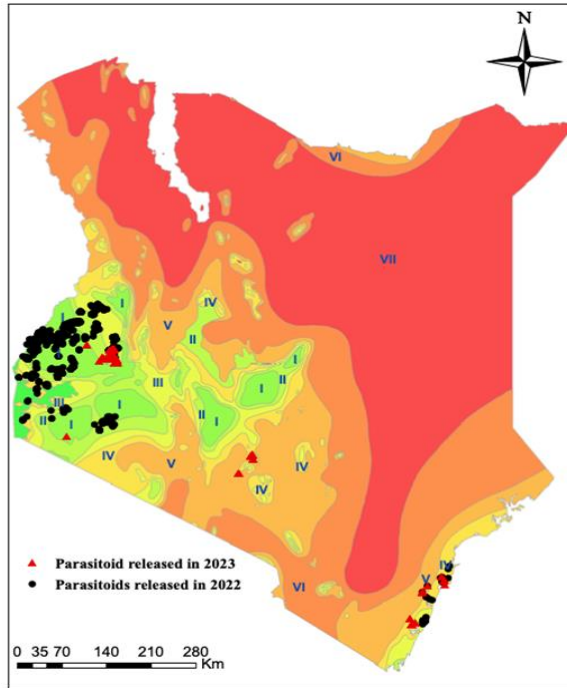


Need surveillance on the success of large-scale releases

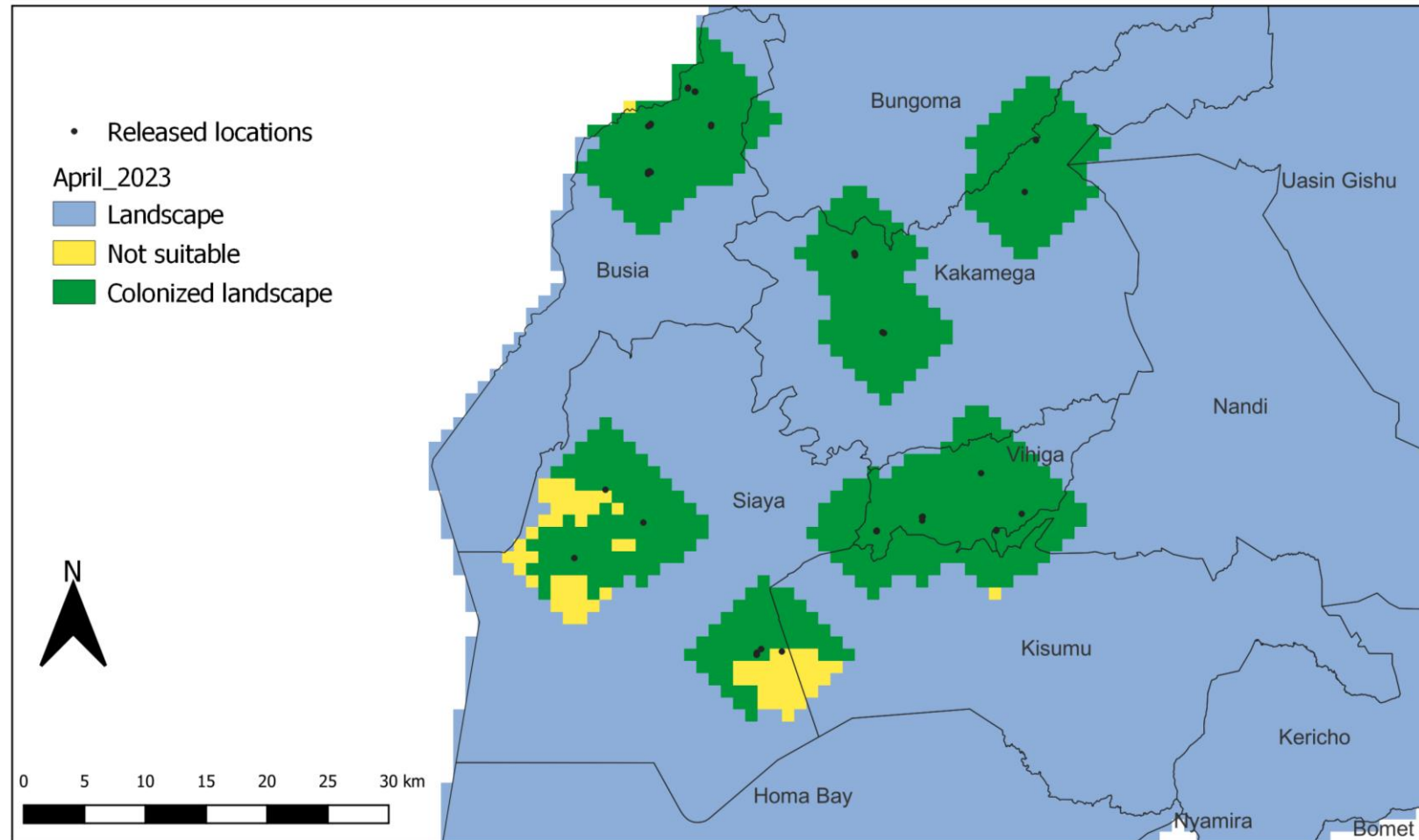
Agroecological zones



Phytothron research at icipe to simulate increased CO₂ and temperature rises

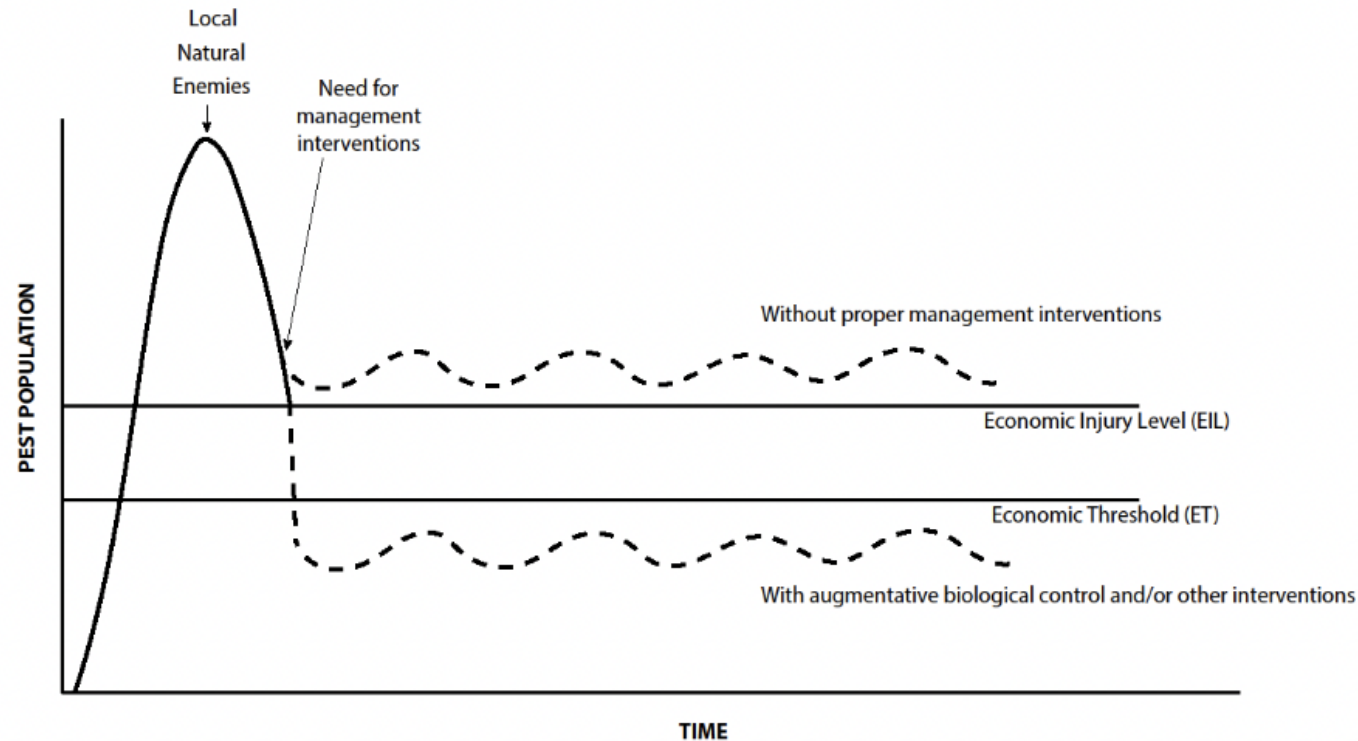


FAW parasitoid dispersion

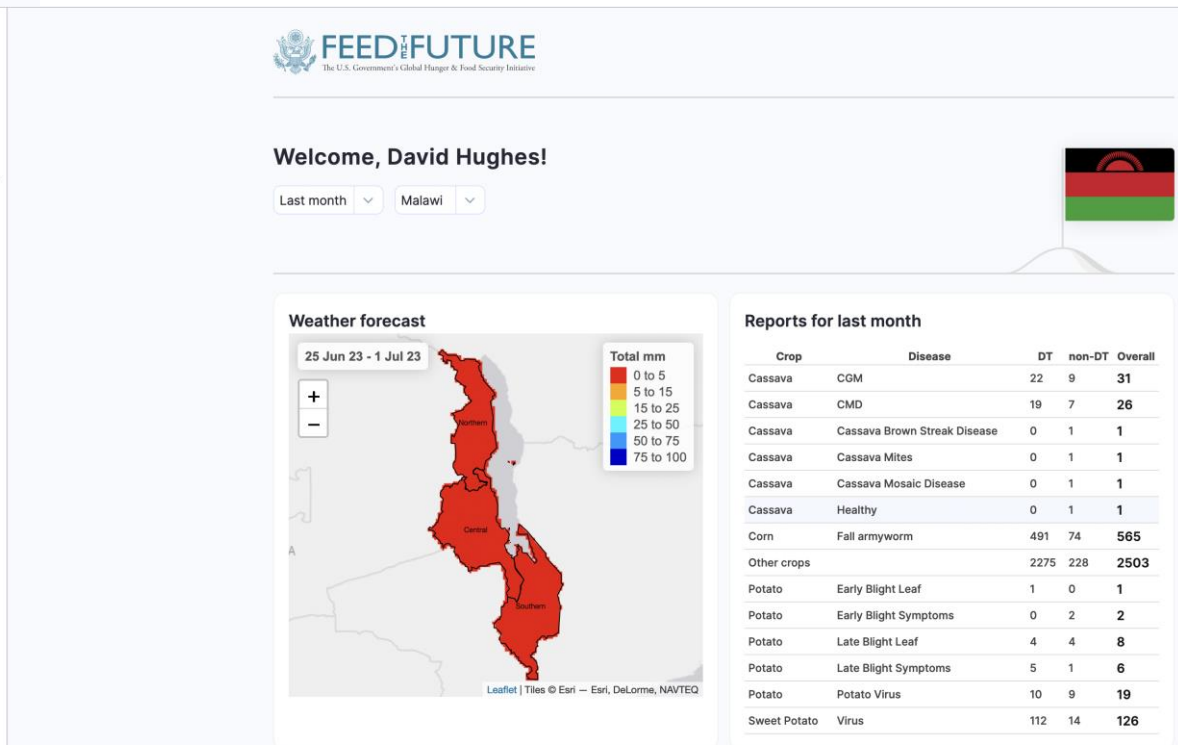
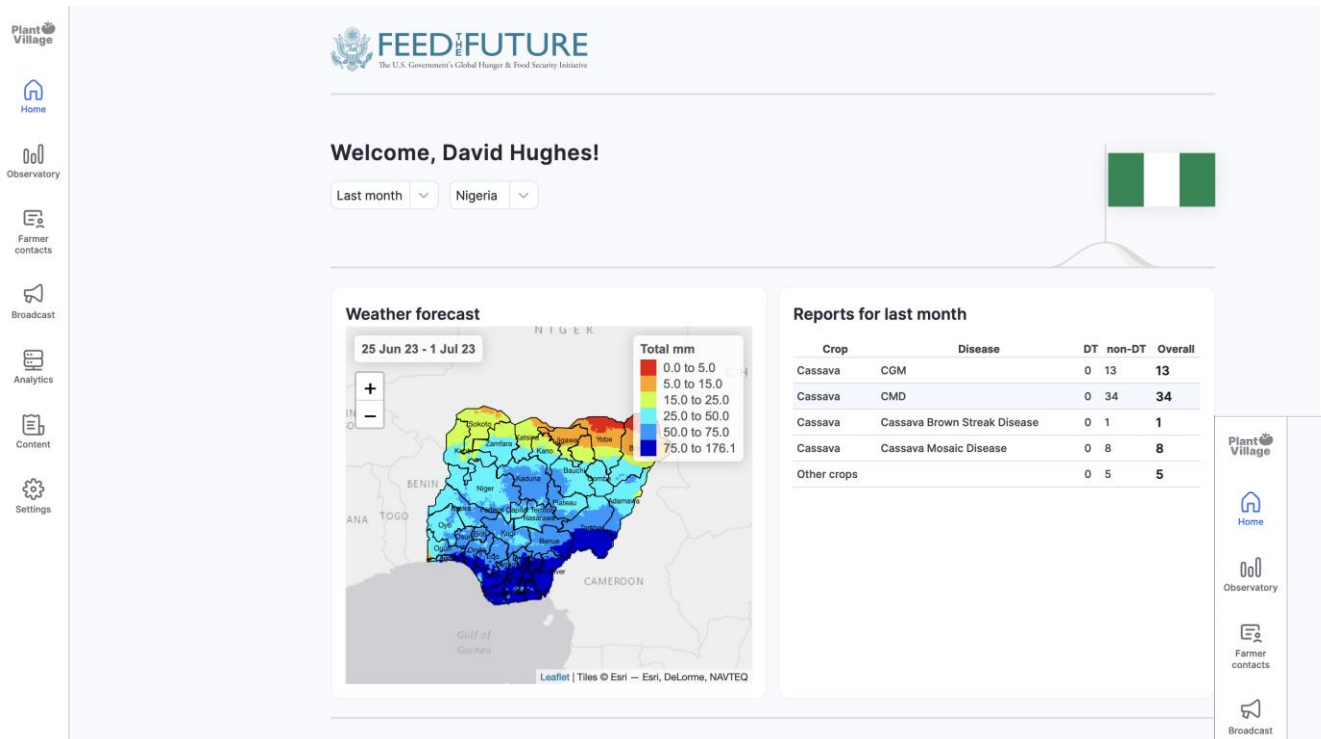


Economic outcome of scaled FAW biocontrol

FAW Management Using Biocontrol



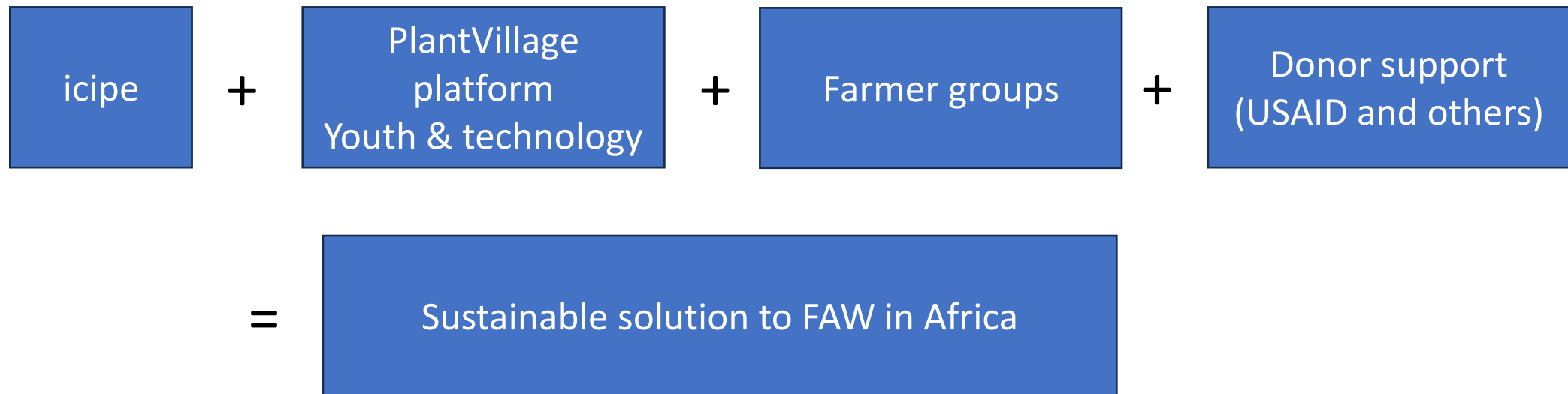
Expansion via USAID CETC IL



In conclusion



- We have an excellent model



Food and Agriculture
Organization of the
United Nations





Thank you



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 **PlantVillage**

 **dream team**
AGRO CONSULTANCY

 **icipe**



Thank you

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