



# The Global Action for FAW control

## Fall Armyworm Monitoring and Early Warning System (FAMEWS)

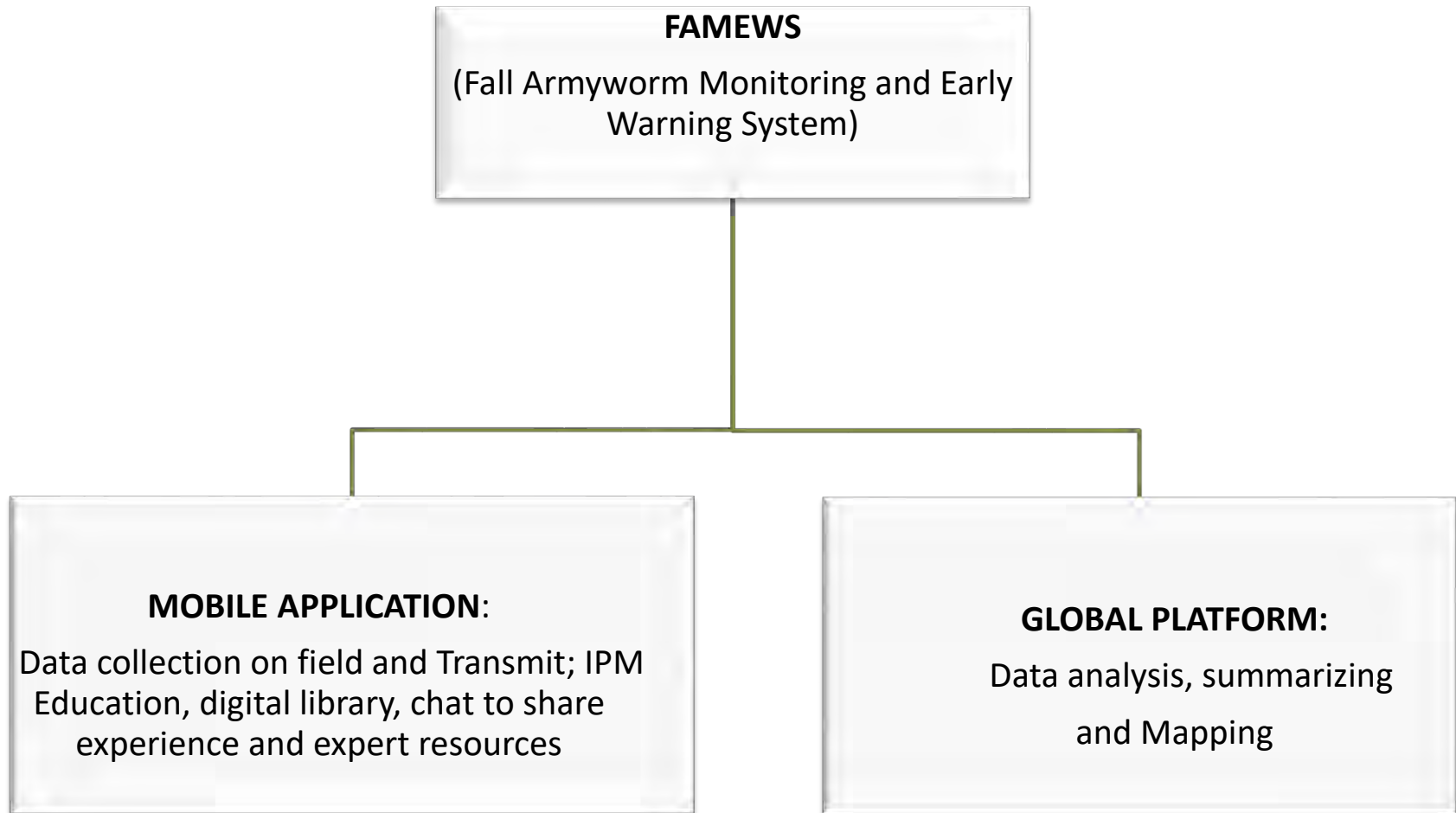
October 2020, FAO headquarters

**Jean Claude Rwaburindi**  
Plant Production and Protection Division (NSP)  
FAO



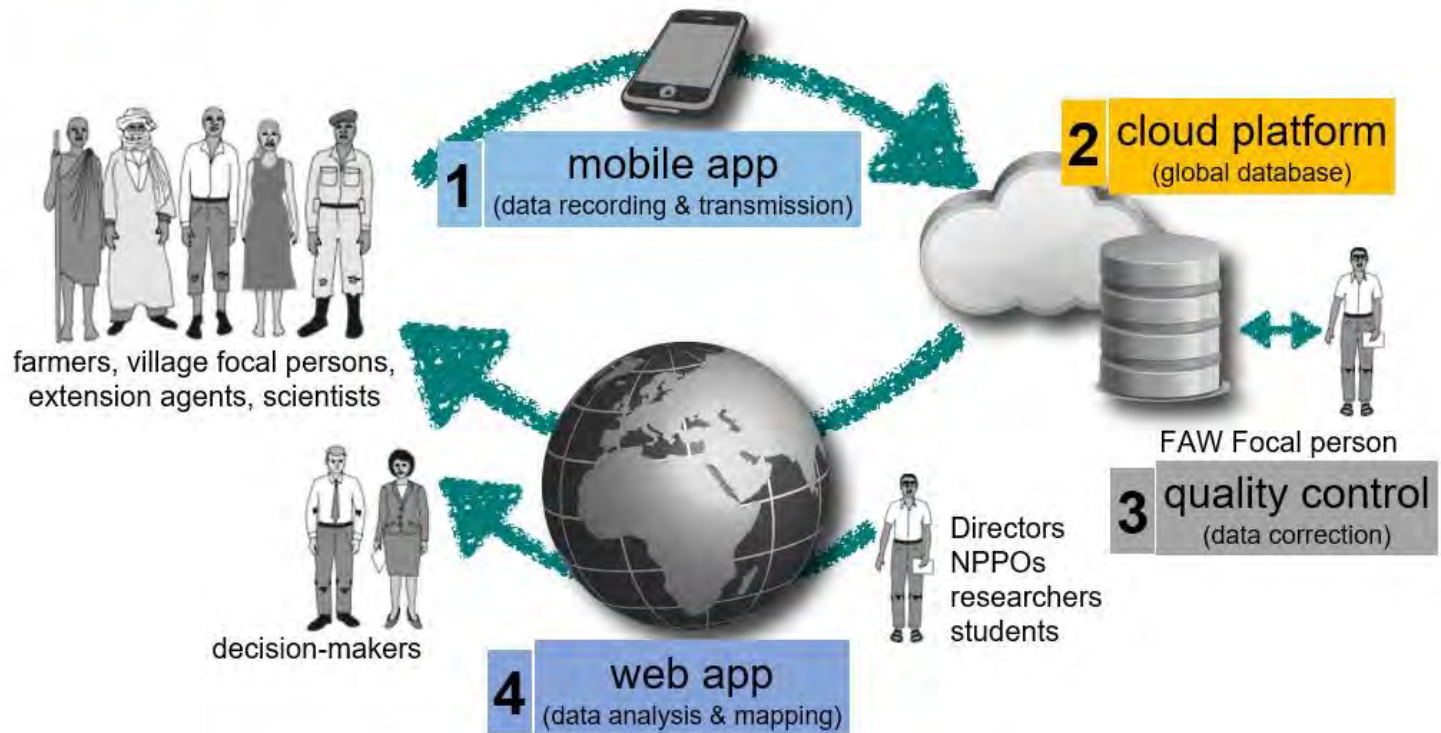
## Why famews

- ✓ To monitor Fall Armyworm Regularly
- ✓ To prevent from crop damage
- ✓ To understand Pest Behaviour, Ecology, Pest movement, etc
- ✓ To support Decision making based on evidence data
- ✓ To support sustainable management of the pest and early actions
- ✓ To provide information to all levels, including Government, International organizations, NGOs, Researchers and farmers



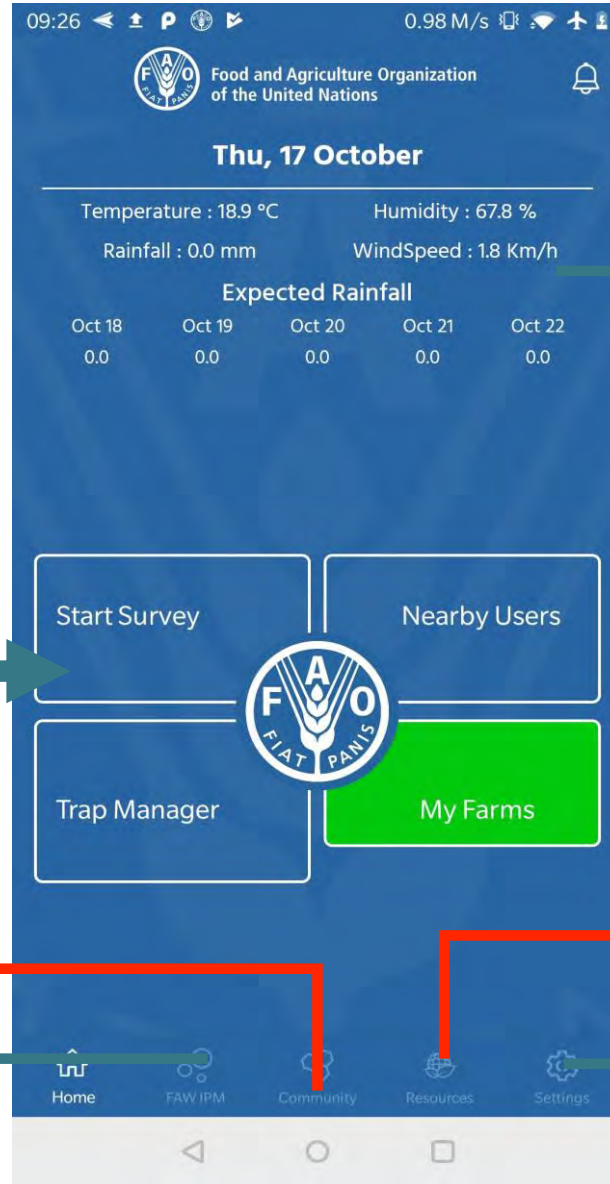


## INFORMATION SHARING STRUCTURE





# FAMEWS MOBILE APPLICATION



- Current weather
- 5-day forecast

- My surveys
- Crops
- Supported Diseases
- Topics
- Video Library \*
- About us
- Partners
- Terms and Conditions

Click to start



- Chat with other FAMEWS users \*
- Chats \*
- Ask PlantVillage Network \*
- Ask a Question \*
- Send Feedback \*

- FAW natural enemies
- FAW general advice
- Expert images
- FAW Guidance Notes

- Change Language \*
- My Account
- Notification settings
- Messages \*
- How FAO-FAMEWS Works
- Share App
- Logout

\* requires connection



back to Home

Food and Agriculture Organization of the United Nations

Thu, 17 October

Temperature : 18.9 °C Humidity : 67.8 %  
Rainfall : 0.0 mm WindSpeed : 1.8 Km/h

Expected Rainfall

Oct 18	Oct 19	Oct 20	Oct 21	Oct 22
0.0	0.0	0.0	0.0	0.0

Start Survey (highlighted with a red box)

Nearby Users

Trap Manager

My Farms

Home FAW IPM Community Resources Settings

Select Farm

Choose a previous farm to link this survey to or add a new farm

Add Farm (circled in red)

Sudan farm Ad Damer,Sudan Oct 16, 2019	Kenya west farm Kakamega,Kenya Oct 17, 2019
Kenya farm Makueni,Kenya Oct 17, 2019	CV12 Praia,Cape Verde Oct 16, 2019
Juba Juba,South Sudan Oct 15, 2019	CV1 Cape Verde Oct 17, 2019
Marib Mar'ib Governorate Oct 16, 2019	Lahij Abyan Governorate Oct 16, 2019

1

Start Survey

Please complete mandatory fields (\*)

Date of survey \*  
18/10/2019, 08:26 AM

Location

Latitude \*  
1.563261

Longitude \*  
35.383925

Country \*  
Kenya

Region / district \*  
West Pokot

Village Name \*  
Village Name

2

Start Survey

Training

Training or assistance received \*  
0 selected

Crop Information

Main crop \*  
Select (Tap here (not arrow))

Main crop variety \*

Planting date \*  
Select

Irrigation \*  
Select

Fertilizer used \*  
Select

3

Start Survey

Crop stage \*  
Select

General health of crop \*  
Select

Farming system \*  
Select

Field size \*  
Field size

Field size unit \*  
Select

Rain

Date of last rain \*

Next (4)

Start Survey

Scouting

Scout with PlantVillage

Or

Add data manually

Check at least 10 plants in a row at 5 different places in your field. Count the number of plants that you see FAW, AW and borer or damage:

Plants	FAW	AW	Borer
Infested	0%	0%	0%

Damage

Crop damage \*  
Select

5



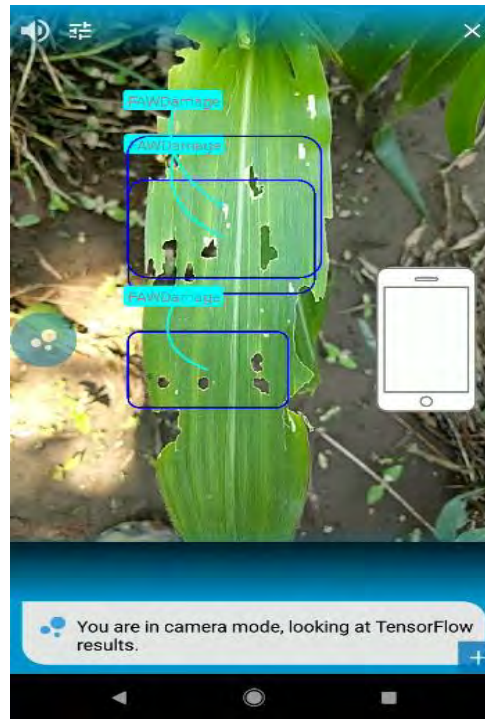
Add data manually

Check at least 10 plants in a row at 5 different places in your field. Count the number of plants that you see FAW, AW and borer or damage:

Plants	FAW	AW	Borer
10	<input type="text"/>	<input type="text"/>	<input type="text"/>
10	<input type="text"/>	<input type="text"/>	<input type="text"/>
10	<input type="text"/>	<input type="text"/>	<input type="text"/>
10	<input type="text"/>	<input type="text"/>	<input type="text"/>
10	<input type="text"/>	<input type="text"/>	<input type="text"/>
Infested	0%	0%	0%
Stage	<input type="text"/>	<input type="text"/>	<input type="text"/>

\* requires connection to send data

## Field Scouting with IA



**Add data manually**

Check at least 10 plants in a row at 5 different places in your field. Count the number of plants that you see FAW, AW and borer or damage:

Plants	FAW	AW	Borer
10	<input type="text"/>	<input type="text"/>	<input type="text"/>
10	<input type="text"/>	<input type="text"/>	<input type="text"/>
10	<input type="text"/>	<input type="text"/>	<input type="text"/>
10	<input type="text"/>	<input type="text"/>	<input type="text"/>
10	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Infested</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>stage</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Home

©Team of Pennsylvania state university



08:28 0.08 K/s

INFO SCOUTING

Current damage in whorl and leaves? \* ?

Select

Previous damage on older leaves? \* ?

Select

Click to see examples of natural enemies

Natural enemies present? \* ?

0 selected

Dead larvae present? \* ?

Select

Control

Successful control undertaken ?

0 selected

6 Submit

Home FAW IPM Community Resources Settings

2.65K/s 91% 09:24

← Advice

- Collect, grind and apply filtrate diluted in water to infected plants (because dead larvae probably contain fungal spores or viroid particles)
- Do not spray chemical insecticides (because most of these will kill the natural enemies). Look for ants (because these are very important natural enemies).
- Scout your field again in 3 days, talk to your neighbours about FAW and ask them to check their fields (because FAW moths move from neighboring farms, fly long distances at night and lay eggs on new plants causing rapid spread; they do not come from seeds or fertilizer)

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Home FAW IPM Community Resources Settings

## FARMER EDUCATION

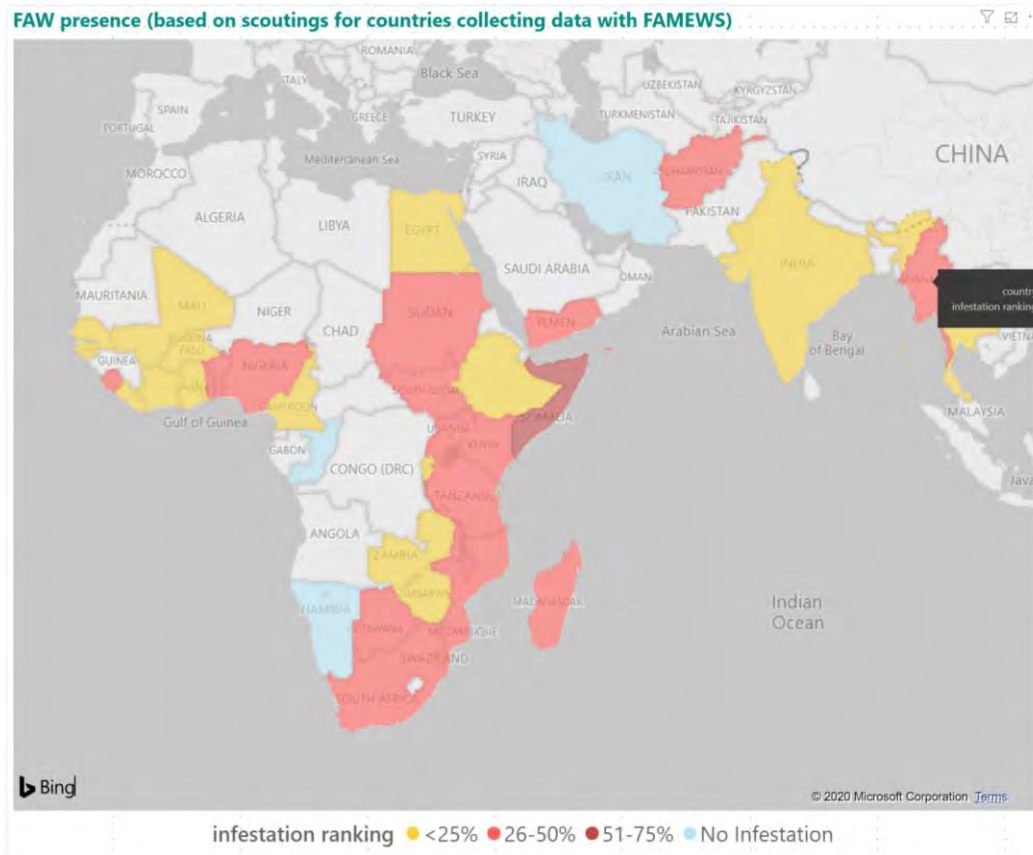
## COMMUNICATION

## EXPERT RESOURCES



# GLOBAL PLATFORM

Please visit: [www.fao.org/fall-armyworm](http://www.fao.org/fall-armyworm)



Country

All

Most Recent Survey

Jan 02 2020

Field Scoutings

Pheromone Traps

36,480

Number of scoutings

638,445

Hectares Checked

1,840,413

Plants Checked

361,201

Plants with FAW

18,144

Traps Checked

9,157

Traps with moths

142,369

FAW Confirmed

90,648

FAW Suspected



# Interaction with the Dashboard



**subregion**  **country**

**Date selector**

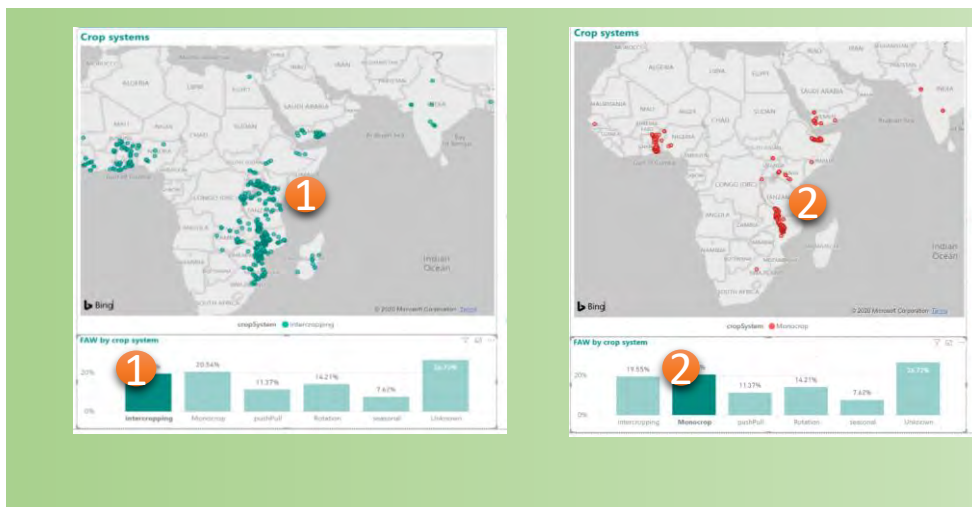
## Select by geographical areas

Data can be aggregated at regional and country level. Selecting a single area will recalculate any statistic for the geographical area selected.

**Date selector**

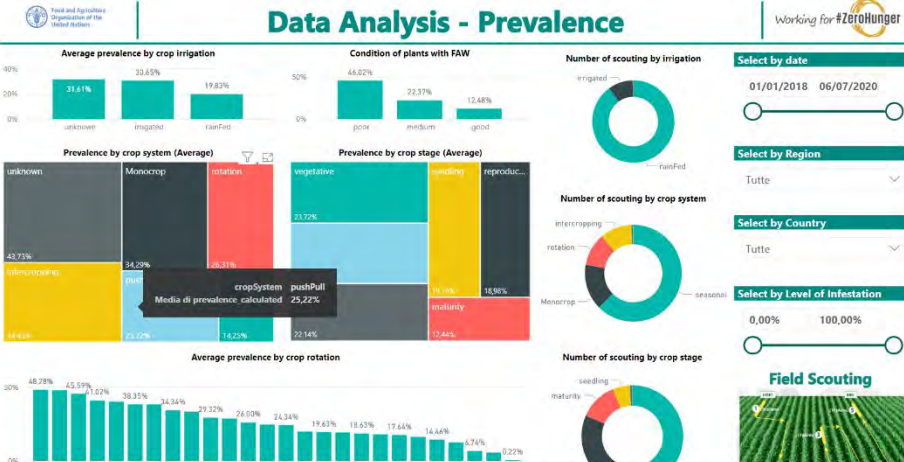
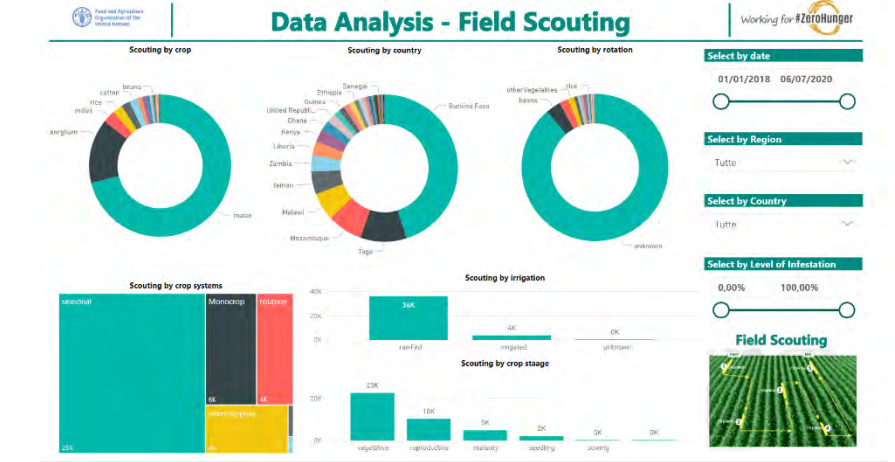
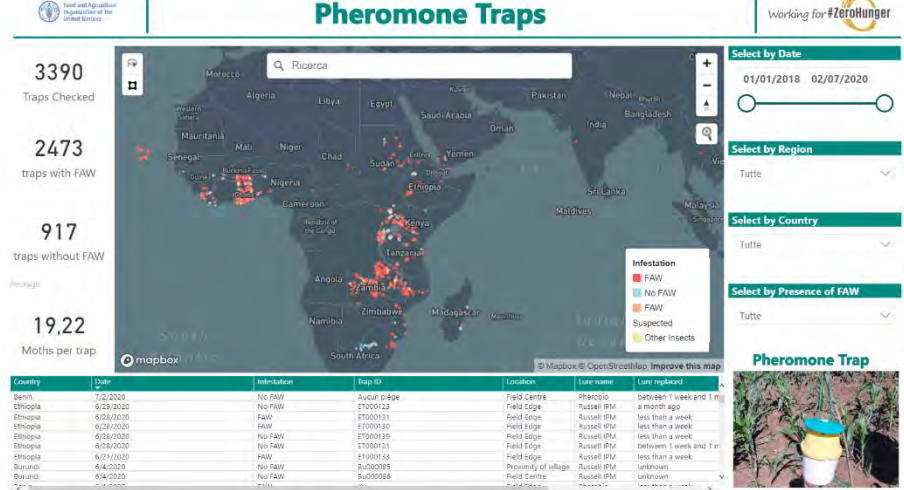
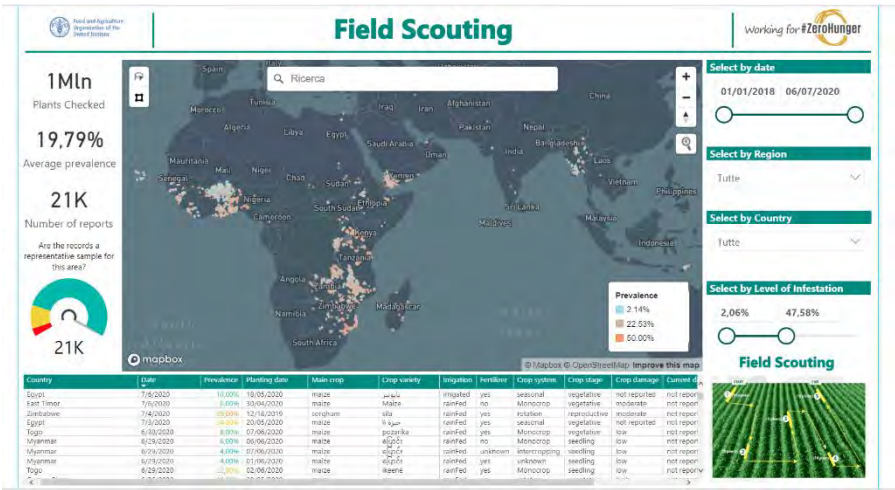
## Select by date

It is possible to slide the two buttons forward or backward to adjust your range. By clicking on a date, a calendar view will be shown. Statistics will be recalculated only with the data collected between the chosen dates.



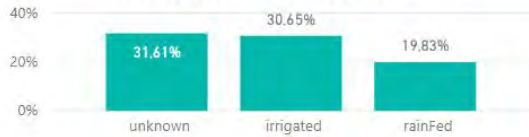
## Interaction among visuals

Any chart on a report page is connected with all the others and will cross-filter or cross-highlight the other visuals on the page. Some visual interactions are purposely turned on/off.

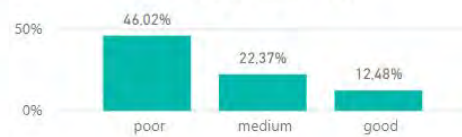


# Data Analysis - Prevalence

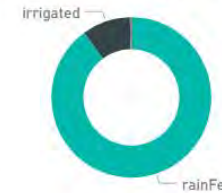
Average prevalence by crop irrigation



Condition of plants with FAW



Number of scouting by irrigation



Select by date

01/01/2018 06/07/2020



Select by Region

Tutte

Select by Country

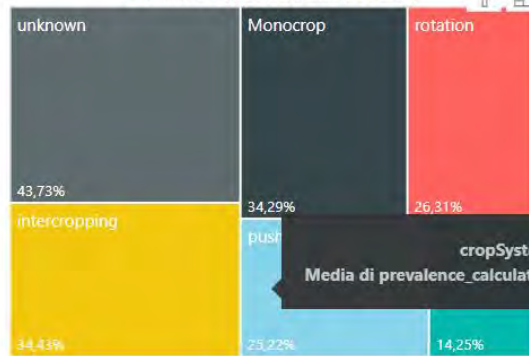
Tutte

Select by Level of Infestation

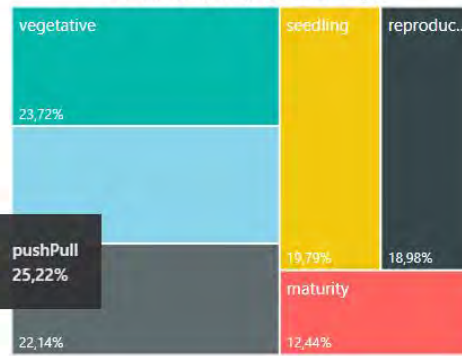
0,00% 100,00%



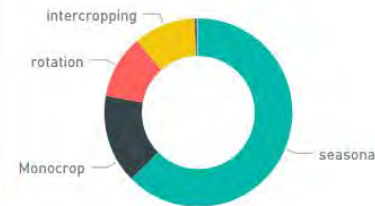
Prevalence by crop system (Average)



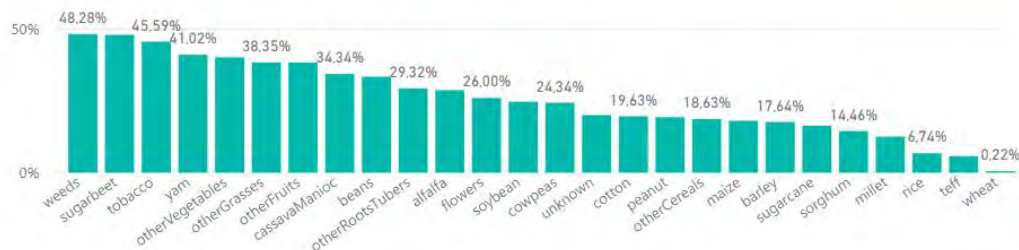
Prevalence by crop stage (Average)



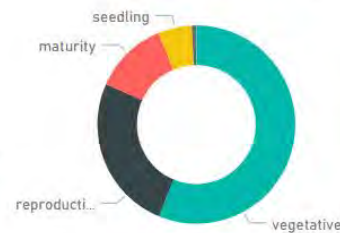
Number of scouting by crop system



Average prevalence by crop rotation



Number of scouting by crop stage



## Field Scouting





# THANK YOU

<http://www.fao.org/fall-armyworm/en/>

[Fall-Armyworm@fao.org](mailto:Fall-Armyworm@fao.org)