CABI Quarterly Update

Member Country Briefing

January 23 2025

KNOWLEDGE FOR LIFE

CABI

Today’s agenda

Introduction & 2024 Achievements – Daniel Elger

CABI in the News 2024 – Carol McNamara

Landscapes Initiative – Phyllis Engefu Ombonyo

Global Burden of Crop Loss – Cambria Finegold

PRISE – Charlotte Day

Finance Update, Pension Scheme update – Leonard Kimutai

The Year Ahead – Daniel Elger

Reviewing our 2024 priorities

- Deliver on second-year Medium-Term Strategy targets
- Engage Member Countries to deliver MTS and Action Plans
- Deliver an expanded International Development portfolio
  - PlantwisePlus scale-up phase
  - Landscape Initiative
- Build on opportunities from CABI Digital Library
- Meet Pension Scheme recovery plan obligations

Other key developments

Extensive Member Country engagement

Central African Republic approved to become a member

Record funding wins totalling >£70m for future work

Continuing investment to expand CABI's team, reach and capabilities

Significant expansion in work on evidence for policy

Conclusion of plans for UK Centre move to Imperial site

Increased engagement in climate and biodiversity ‘COPs’

→ Impact supported by growth in CABI team and funding

CABI in the news

Carol McNamara

2024 saw further progress in developing communications systems that reach and engage with our stakeholders

Great performance across CABI channels and platforms

49m

CABI sites page views (31m)

376

Blogs & news posts written (233)

620

CABI campaign emails sent (440) – click through rate grown from 2% to 4% average

42

Conferences organised (34)

21

Webinars produced (CABI only)

158 average attendance, 99% of attendees found webinars useful

6

Webinars produced (SciDev.Net/Script series)

725 attendees across series from 79 countries, additional video views 1,300

Event highlights in 2024		
ICT for Development	Ghana	March
Africa Fertilizer and Soil Health Summit	Kenya	May
Innovation in Agriculture	Swiss Embassy UK	May
Meetings of Agricultural Chief Scientists of G20	Brazil	May
3rd International Congress of Biological Control	Costa Rica	June
Crawford Fund Conference 2024	Australia	Aug
Africa Food Systems Forum	Rwanda	Sept
8th World One Health Congress	South Africa	Oct
COP-16 (Biodiversity)	Colombia	Oct-Nov
COP-29 (Climate)	Azerbaijan	Nov
4 Webinars on biopesticides Caribbean Member Countries		2024

CABI Media Coverage 2024

1,306 pieces of global online and broadcast coverage with an estimated reach of over 142 million

CNBC AFRICA

REUTERS

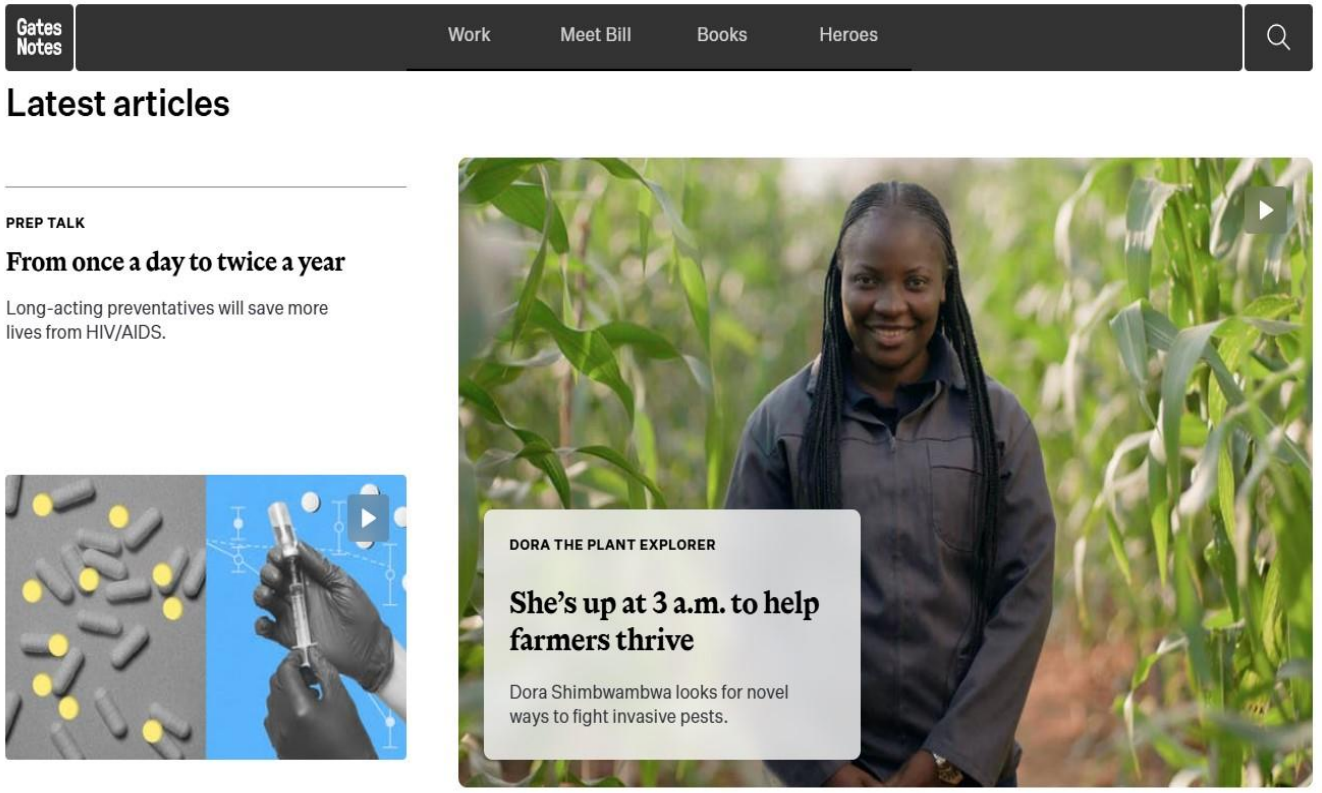
The Guardian

NATIONAL GEOGRAPHIC

The Standard

NEWS GHANA
NEWSGHANA.COM.GH

CABI Media Coverage 2024



Dora Shimbwambwa featured as Bill Gates's 'Heroes in the Field' video on YouTube with 880K views

CABI Media Coverage 2024

Pakistan OBSERVER

Tuesday, January 14, 2025 English

Top News Pakistan Business Sports World Lifestyle Technology CPEC Article Kashmir Daily Cartoon Forex Rate E-Paper

Home › Business › Aflatoxin control is key to boosting Pakistan's agricultural exports: Kauser

Aflatoxin control is key to boosting Pakistan's agricultural exports: Kauser

by News desk January 25, 2024 in Business

USAID USDA CABI

Dialogue on Regulatory Harmonization in Pakistan for MRLs and Biopesticides

Share Tweet WhatsApp Share on Linkedin WeChat Follow us

A significant dialogue on regulatory harmonization in Pakistan for Maximum Residue Levels (MRLs) and Bio-pesticides was held, aiming to improve food safety standards in the country. The event brought together four major partners, United States Department of Agriculture (USDA), Centre for Agriculture and Bioscience International (CABI), Pakistan Agricultural Research Council (PARC), and representatives from the private sector specially Rafhan Maize Product Co. Ltd. The primary focus of the dialogue was to facilitate the availability and regulation for Aflatoxin biological control technology for maize, which had demonstrated promising results in field trials.

RECOMENDED

Pakistan Strike Force camp kicks off in Lahore ahead of Champions Trophy 2025

Ihsanullah Khan announces retirement as protest after being overlooked in PSL 10

CM Murad writes letter to PM, expresses concerns for neglecting Sindh Motorways projects

Differences should be resolved soon as negotiations are underway: Barrister Gohar

Saw judges falling ill, trembling during trials: Bushra Bibi

Regulatory harmonization in Pakistan of Maximum Residue Levels and biopesticides covered by media including Pakistan Observer, Nation and Daily Independent

CABI Media Coverage 2024

Strong year for social media promotion of CABI's work across X (formerly Twitter), Facebook and LinkedIn

117,332 post impressions
591 new followers

580,079 reach
590,345 post impressions

972,397 post impressions
21,641 engagements

SciDev.Net story on contaminated breast milk in Ghana

Shared with Pure Earth Ghana and researchers at the Ghana Atomic Energy Commission – leading to plans for interventions and a push for funding.

SciDev.Net story on irresponsible practices of e-waste companies in Latin America

The article changed the perception of lawmakers, politicians, journalists and the public, particularly in Brazil, Chile and Peru about these dangers.

SciDev.Net story on India road safety model which ‘can save lives worldwide’

The opinion piece tackled the initiatives led by SaveLife Foundation to reduce the number of road accidents happening along Mumbai-Pune Expressway. It was picked up by Innovation Advisor at the Prime Minister’s Office at the UAE.

Across CABI platforms

More engaging websites – UX improvements and new content

Improved email campaign processes, monitoring and data cleansing

Websites becoming more discoverable through SEO techniques

More focussed use of Pay per Click to drive traffic to key content

More and better performing news and blogs

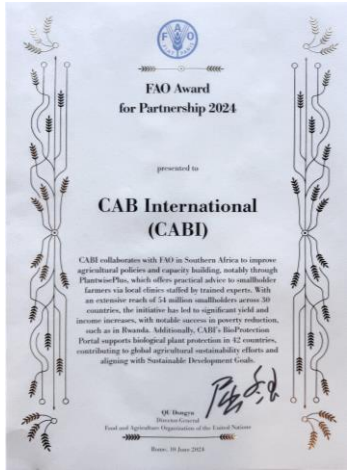
More techniques to capture user data – despite data privacy laws – through better web sign-up forms

Awards 2024

Winner

Partnership Award 2024

Used examples from PlantwisePlus work to meet the criteria



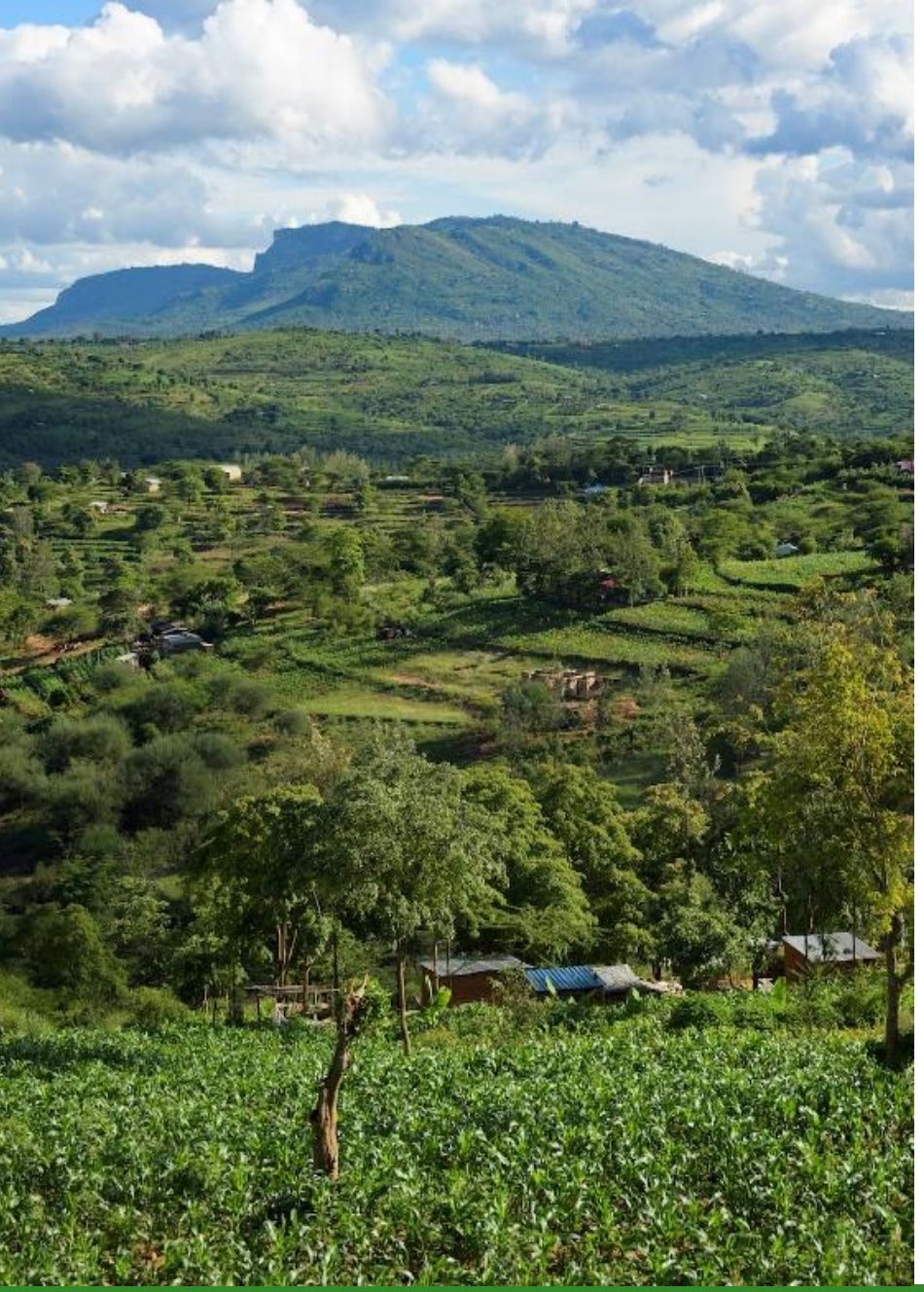
Silver Winner

Sustainability Award 2024

For Ukulima True campaign

Landscape Initiative

Phyllis Engefu Ombonyo



CABI Landscapes Initiative

Addressing Member Country concerns about impact of climate change, land degradation, and invasive species

Using an Integrated Landscape Management (ILM) approach, which refers to long-term collaboration among diverse stakeholders to foster natural resource resilience at the landscape level with the aim to provide sustainable livelihoods and improve ecosystem goods and services

One key element is the development of a Pooled Fund

Member Country Engagement in 2024

Kenya 18-20 Jun

Kenya 18-20 June

24 participants from 18 entities

8 landscapes identified, 4 prioritized

Workshop report shared

Engaging with existing National ILM Platform (KenLab)

Malawi 28-30 Aug

Malawi 28-30 August

21 participants from 20 entities

8 landscapes identified, 2 prioritized

Workshop report shared

Engage with existing National Platform (FLR)

Tanzania 8-10 Oct

Tanzania 8-10 October

28 participants from 15 entities

6 landscapes identified, 3 prioritized

Workshop report about to be shared

Advisory Group established by participants

Ethiopia 11-12 Nov

Ethiopia 11-12 November

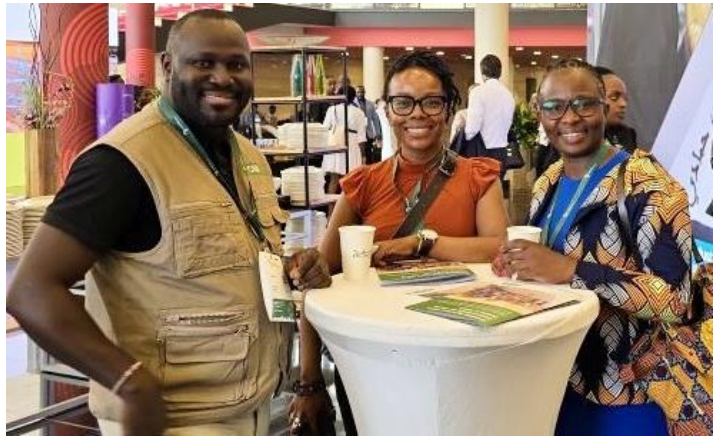
20 participants from 11 entities

7 landscapes identified

Workshop report in preparation

Connected with entities active in ILM space

Donor Engagement in 2024



Confirmed donors:

biovision

The Nature Conservancy

Concept Development Taskforce (virtual) **Jan-March**

Leaders Roundtable (virtual) **11 July**

Africa Food Systems Forum, Kigali, Rwanda **2-6 Sept**

New York Climate Week **22-29 Sept**

Partner Engagement

Global ILM Networks

LANDSCAPES FOR 1 BILLION PEOPLE

Regen10

Global Landscapes Forum

National ILM Networks

KENYA LANDSCAPE ACTORS PLATFORM

Malawi, National Cross-Sectoral Forest Landscape Restoration Platform

Other International and National Partners

The Nature Conservancy

KENYA WILDLIFE SERVICE

IUCN

WILDLIFE RESEARCH & TRAINING INSTITUTE
Discover Beyond

TAFORI

CGIAR

KEFRI

Plans for 2025

Finalize Programme Implementation Plan and use as basis for Pooled Fund proposals

Obtain first funding or at least funding commitment for the Pooled Fund

Conduct in-country workshops at sub-national/community level to co-develop concrete projects in areas identified in 2024

Establish internal governance structures; including the pooled fund governance.

Branding agreed upon and developed

Global Burden of Crop Loss:

Data and evidence for global food security

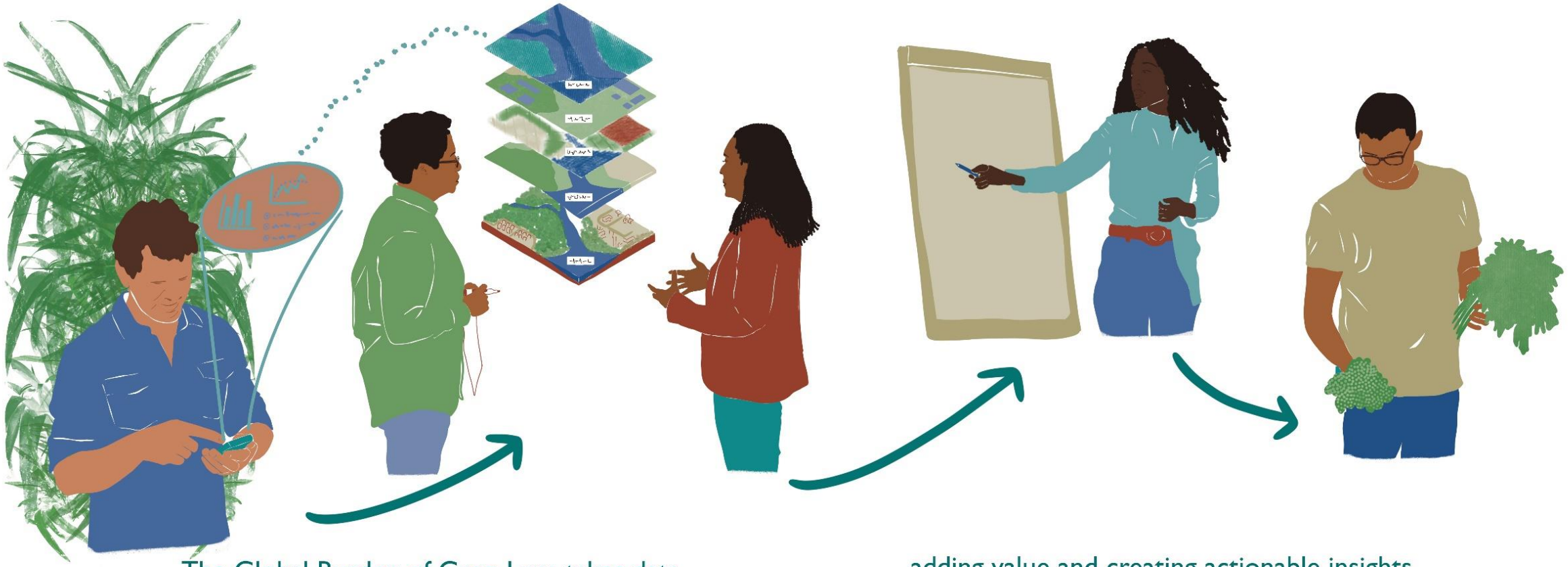
Cambria Finegold

Keeping pace with the growing demand for food, under increasing impacts from climate change, is one of the defining challenges of our time.

High levels of crop loss makes this even harder. Around **40%** of the world's crops are lost to pests alone.

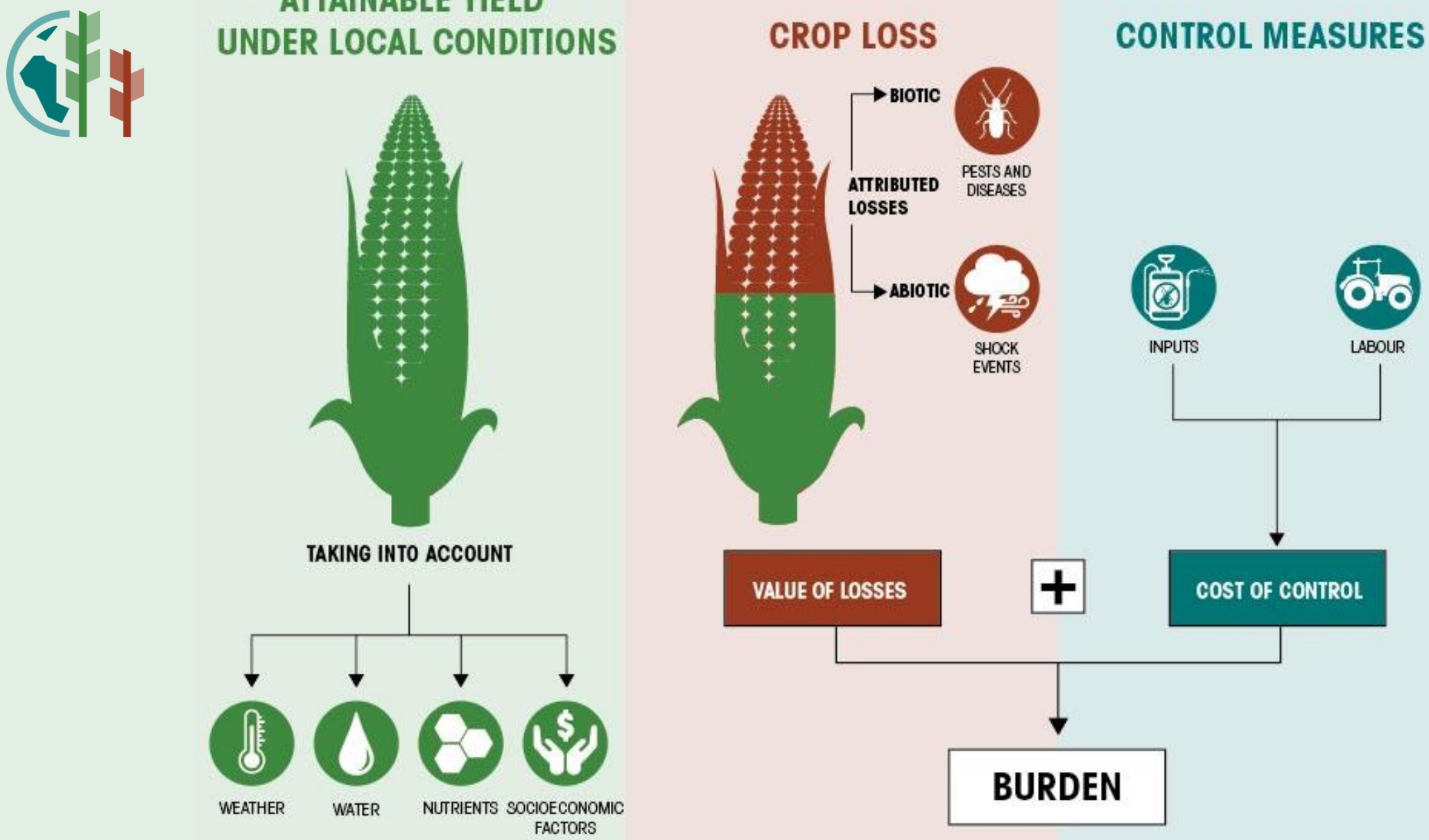
But decision-makers lack the evidence they need to tackle the problem.

How it works...



The Global Burden of Crop Loss takes data from around the worlds and transforms it…

adding value and creating actionable insights for governments, funders and researchers.

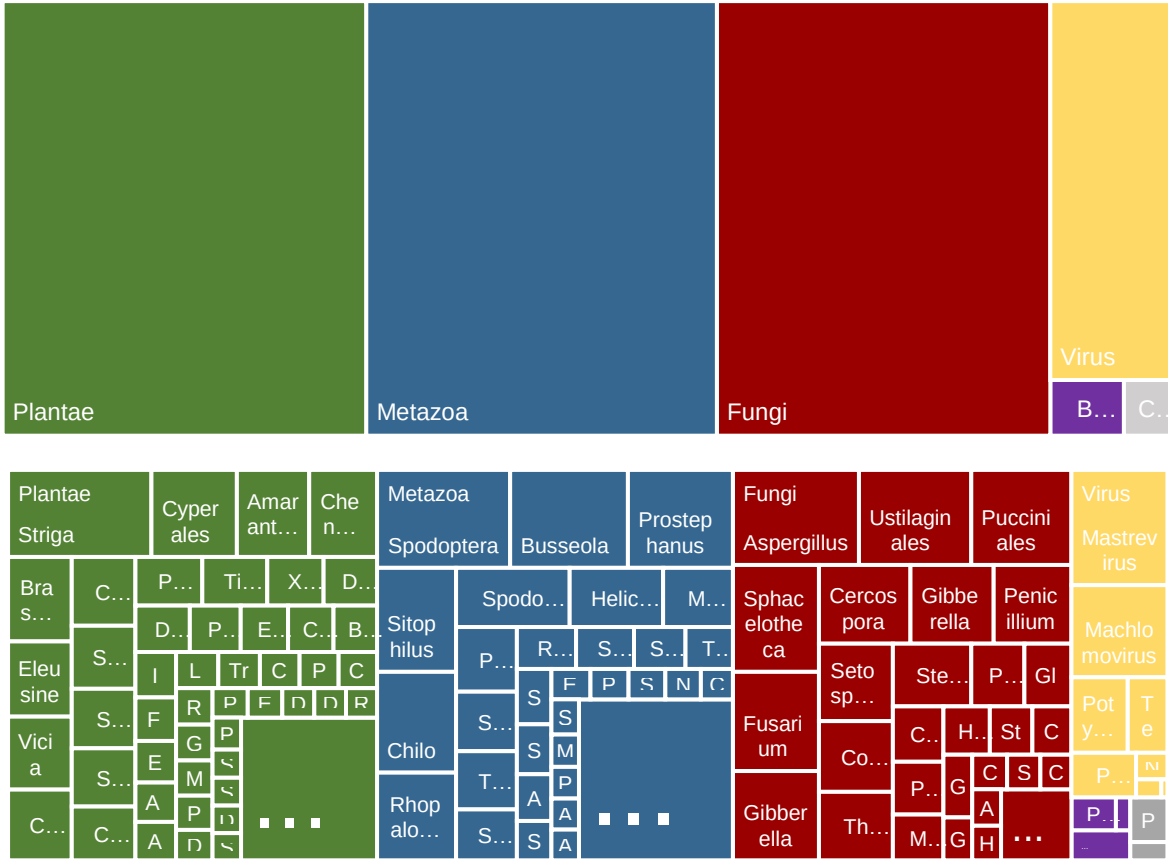

ATTAINABLE YIELD
UNDER LOCAL CONDITIONS
TAKING INTO ACCOUNT
WEATHER
WATER
NUTRIENTS
SOCIOECONOMIC FACTORS
CROP LOSS
BIOTIC
PESTS AND DISEASES
ATTRIBUTED LOSSES
ABIOTIC
SHOCK EVENTS
CONTROL MEASURES
INPUTS
LABOUR
VALUE OF LOSSES
+
COST OF CONTROL
BURDEN

Estimates of maize yield losses in Kenya and key biotic constraints

Attainable yield and loss estimates

Attainable production 2010	4,230,077 t
Attainable production 2015	4,419,416 t
Actual production FAO 2010	3,464,598 t
Actual production FAO 2015	3,825,092 t
Total loss envelope 2010	765,479 t
Total loss envelope 2015	594,324 t

Key biotic factors – by group and genus



CABI

GBCL Plans 2025-2027

Global – country-level

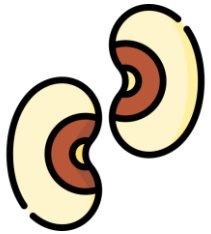
Wheat

Maize

Rice

Regional – tropical crops

Cassava


Cowpea

Banana

Case study countries

Kenya
Ghana

Ethiopia

India

Deliverables

- Attainable yield estimates (suite of statistical and mechanistic approaches)
- Crop loss envelope estimates
- High level attribution of crop loss to abiotic/biotic factors
- Economic burden estimates

Pest Risk Information SErvice (PRISE)

Charlotte Day

PRISE 101: What it does

The Pest Risk Information Service (PRISE) is an **early-warning information system** that forecasts the **risk of crop pest outbreaks**, and provides farmers with alerts on the **best time to intervene**.

Developed in Kenya, Ghana, Zambia and Malawi, models are transferable to additional countries* and offer alerts on the maize-bean-tomato cropping system commonly found across Sub-Saharan Africa.

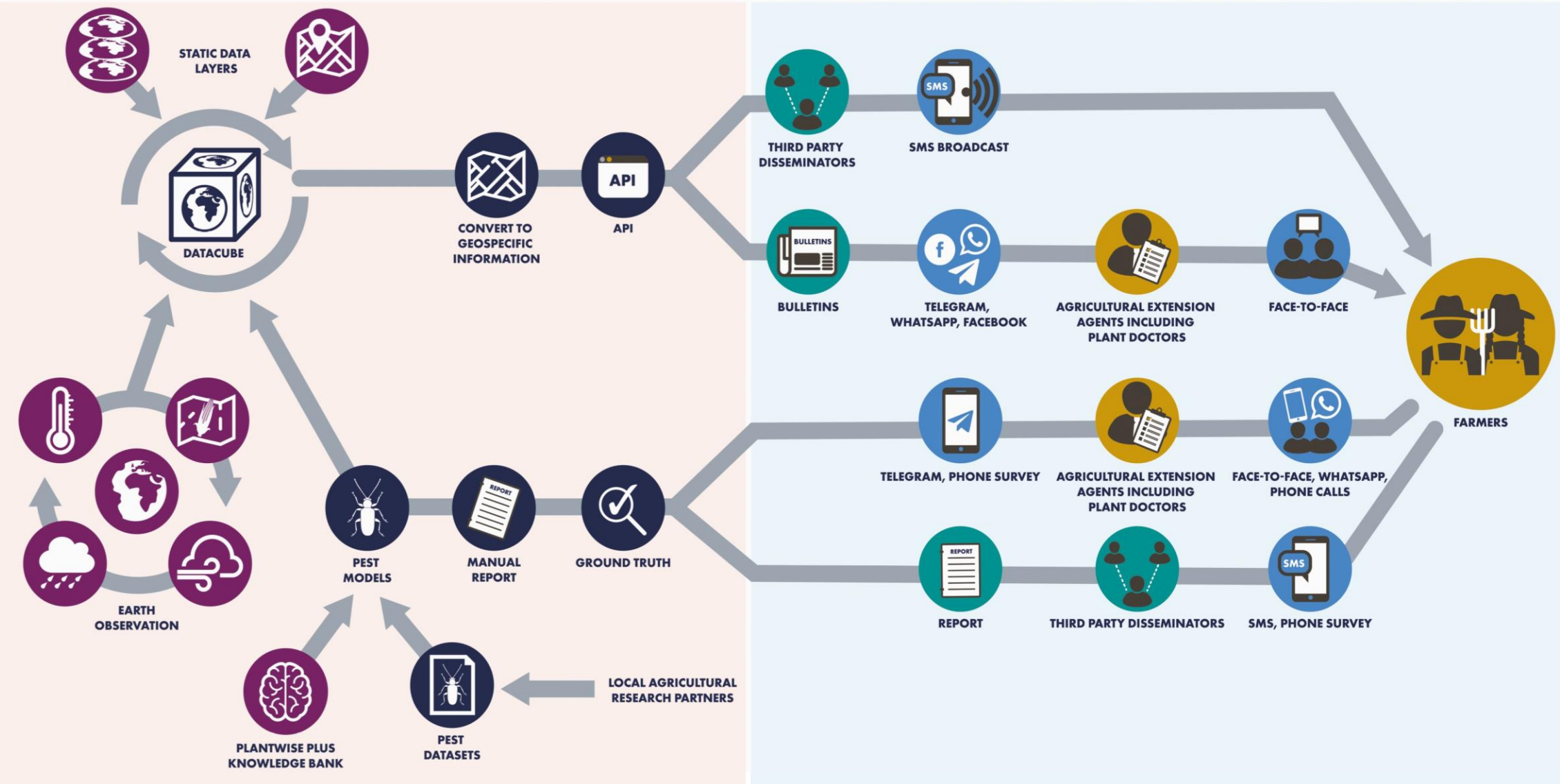
Combines earth observation derived weather data with pest models to **give optimum time to act (TTA)** alerts; providing decision support on ‘when’ taking action is most effective and efficient to the existing wealth of ‘what’ IPM interventions to take.

Pest models help to pinpoint ahead of time when pest presence is likely at the most appropriate lifestage and population density for taking intervention that achieves maximum control.

*with varying degrees of calibration required

THE PRISE SYSTEM

(LINE DIRECTION INDICATES FINAL MODEL FLOW)



Dissemination

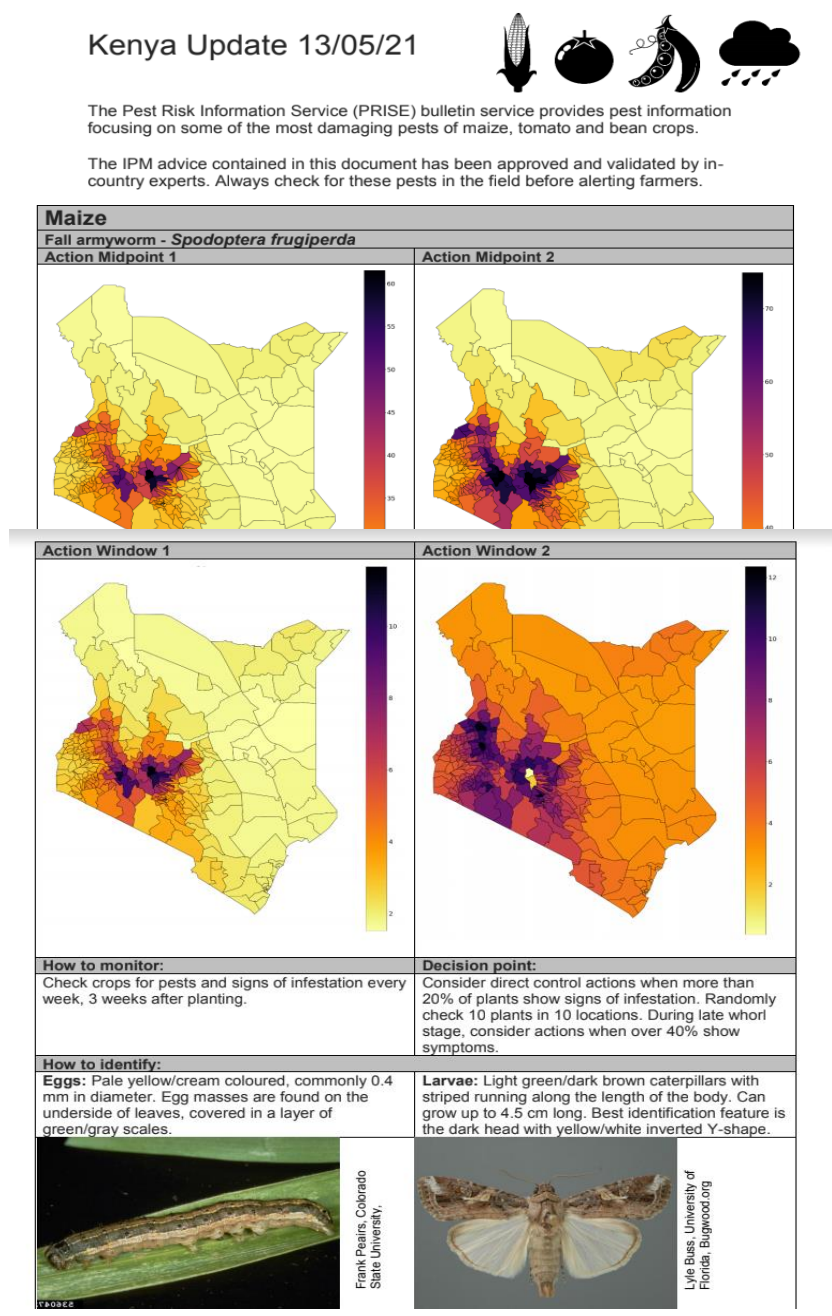
PRISE TTA alerts are incorporated into national agricultural extension services and third-party disseminators including SMS services and radio broadcasts

- KALRO in Kenya currently reaching ~1m farmers/month with PRISE TTA alerts via SMS

PRISE Bulletins are produced twice a month throughout a given cropping season in each country

- Bulletins are shared with Plant Doctors and other extension advisors as complementary advice

Bulletins contain PRISE TTA forecast in map format, Plantwise Pest Management Decision Guide (PMDG) recommendations and Met department rainfall forecast.



Kenya Update 13/05/21

The Pest Risk Information Service (PRISE) bulletin service provides pest information focusing on some of the most damaging pests of maize, tomato and bean crops.

The IPM advice contained in this document has been approved and validated by in-country experts. Always check for these pests in the field before alerting farmers.

Maize

Fall armyworm - *Spodoptera frugiperda*

Action Midpoint 1 | **Action Midpoint 2**

Action Window 1 | **Action Window 2**

How to monitor:
Check crops for pests and signs of infestation every week, 3 weeks after planting.

Decision point:
Consider direct control actions when more than 20% of plants show signs of infestation. Randomly check 10 plants in 10 locations. During late whorl stage, consider actions when over 40% show symptoms.

How to identify:

Eggs: Pale yellow/cream coloured, commonly 0.4 mm in diameter. Egg masses are found on the underside of leaves, covered in a layer of green/gray scales.

Larvae: Light green/dark brown caterpillars with striped running along the length of the body. Can grow up to 4.5 cm long. Best identification feature is the dark head with yellow/white inverted Y-shape.

Frank Peairs, Colorado State University.

Lyle Buss, University of Florida, Bugwood.org

Impact to Date

Over **2 million smallholder farmers** reached in Sub-Sahara Africa since 2017

TTA alerts increasingly embedded in government agricultural advisory services

Pilot phase endlines in 2022 show an average of **13% increase in yields** compared to control group farmers

One study on fall armyworm TTAs found that **59% of farmers** who received the service changed their practices

A 2024 study in Kenya on tomato production found that farmers experienced **an increase in tomato yields and farm income by 46% and 62% respectively compared to control farmers (16% and 11% compared to GAP only recipients)** after receiving tomato leafminer time to act alerts

Studies show the benefit of receiving information e.g. **increased Integrated Pest Management uptake, including reduced application of pesticides**

Scan for a published PRISE paper

Benefits of PRISE

First of its kind – a digital service aimed at controlling plant pests and diseases. This unique offering complements existing advisory services and adds value to any portfolio of products.

Proven to enhance the bottom line – farmers are equipped to improve decision making, make efficient use of available control methods and boost incomes.

Enables a sustainable farming system – earlier and better interventions save farmers money as well as reduce reliance on harmful pest control methods.

Cost effective – PRISE is highly scalable, able to deliver data and advice from field-level to the national scale.

Flexible and adaptable – the PRISE platform and datasets can be repurposed and used for other applications such as climate risk analysis, crop mapping and modelling, early warning and other risk alerts such as flood and drought.

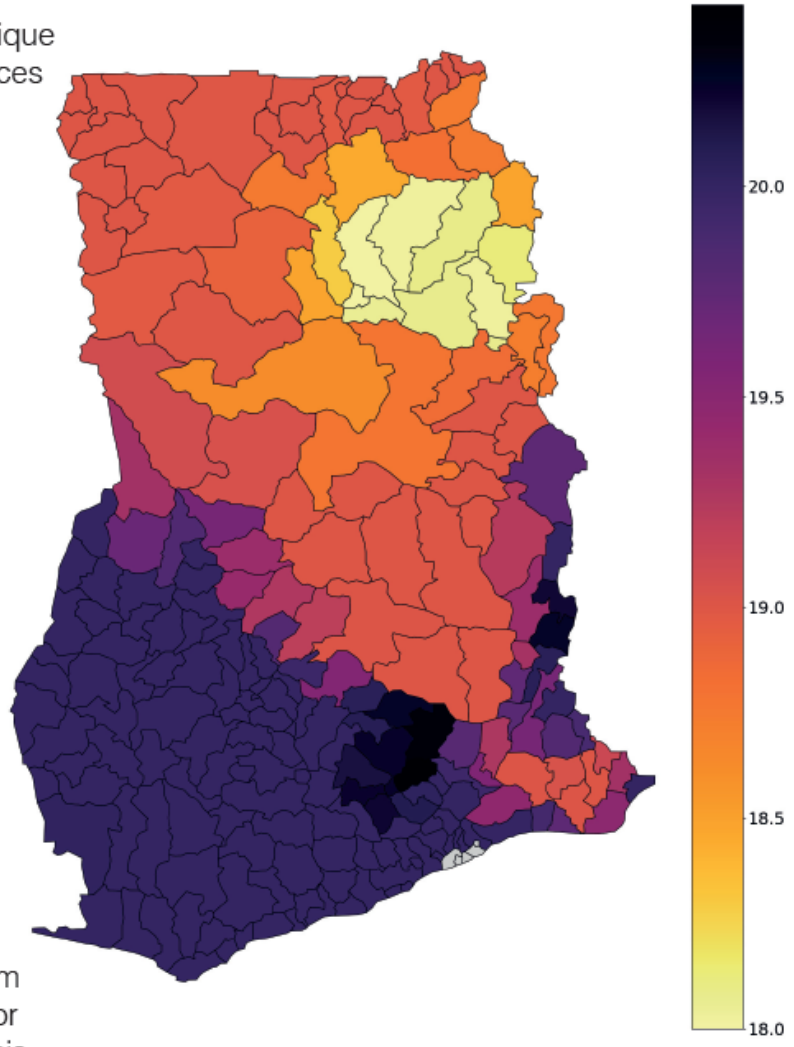


Figure 1: A map of Ghana demonstrating the time to action window (from the planting date) for Fall armyworm

PRISE 2025+

Kick off new project with USAID in Zambia:

- Embed PRISE TTA with Zambia digital advisory service (ZIAMIS)
- Create PRISE learning material for model creation
- Conduct randomized controlled trial (RCT) on maize/Fall Armyworm to understand PRISE impact at scale
- **Define a scaling approach to take PRISE to new countries within and outside of Africa**

Continue work on coffee berry borer models in Kenya and Colombia, including connecting TTA with timing of biopesticide application model

Develop a forecast-data driven pathology service to complete pest TTAs with pathogen ‘high risk’ alerts

Define a sustainable delivery model, including the development of commercial services for financial sustainability.

Finance update

Leonard Kimutai

Net Revenue 2024 – YTD Nov and Forecast

£'000	YTD			Forecast		BUD	
	Actual	Budget Var %	Growth vs 2023 %	Full Year	Growth vs 2023 %	Full Year	Forecast vs Budget
Knowledge Business	10,962	(7)%	6%	12,950	7%	13,234	(2)%
International Development	21,999	(10)%	(2)%	25,756	2%	28,478	(10)%
Corporate/Central costs	4,137	16%	11%	4,686	10%	4,188	12%
Total	**37,098**	**(7)%**	**1%**	**43,392**	**4.5%**	**45,900**	**(5)%**

- We forecast a 4-5% revenue growth over prior year. Below budget due to shortfalls and delays in some project revenues.

Operating Surplus – YTD Nov and Forecast

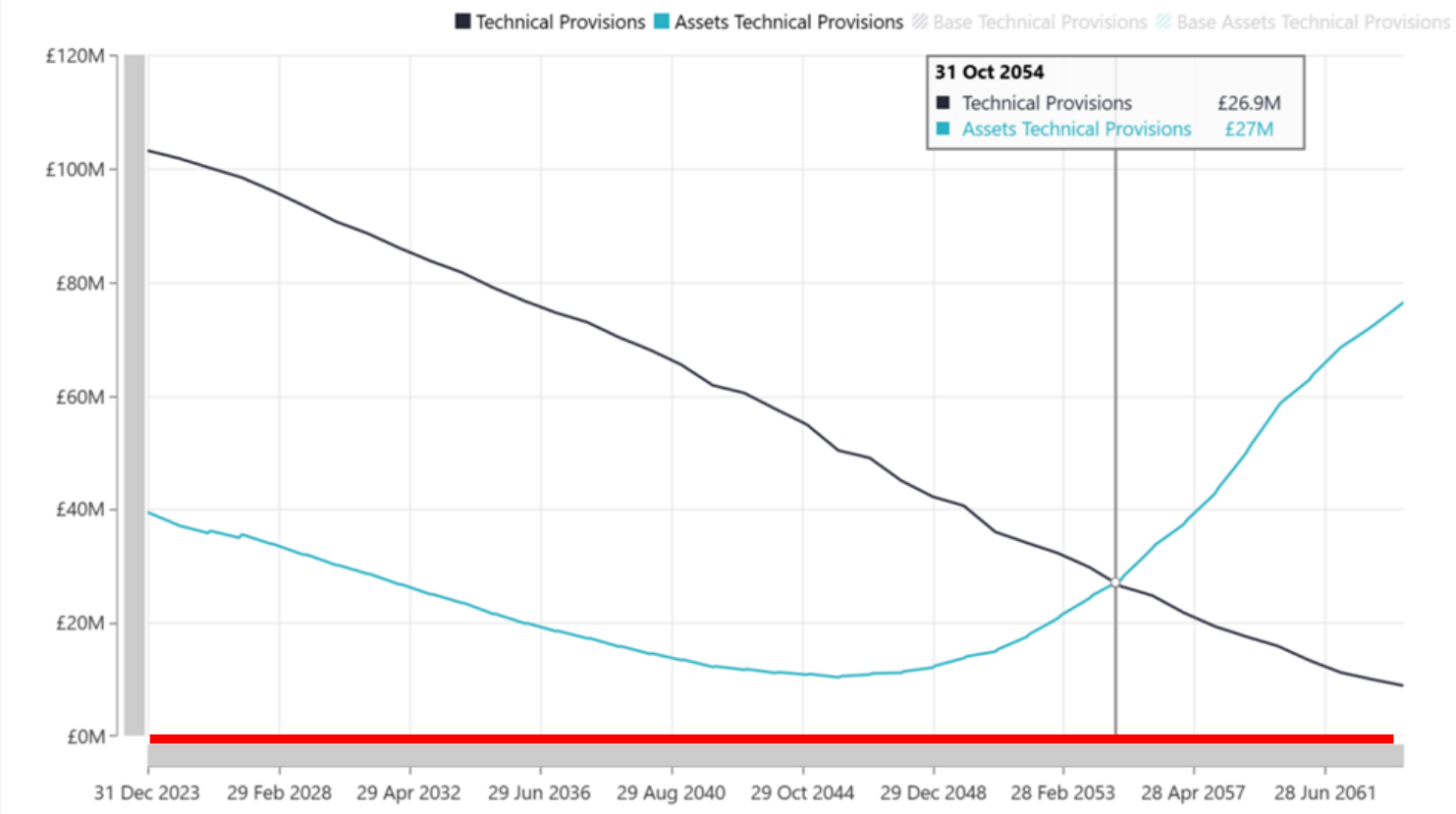
£'000	YTD			Full Year	
	Actual	Budget	2023	Forecast	Budget
Knowledge Business	3,606	3,955	3,777	4,482	4,612
International Development	(476)	37	695	50	520
Corporate	(4,429)	5,218	(4,315)	(4,510)	(5,068)
Total	**(1,299)**	**(1,226)**	**157**	**21**	**64**

- We forecast to deliver a modest surplus for the FY 2024 on the back of headwinds from inflation, revenue shortfalls.

Update on the UK Defined Benefit Pension Scheme

Leonard Kimutai

Results of the New Recovery plan



Essence of the New Recovery Plan

- CABI will inject **a lumpsum of £1.205m (**£500k in 2025 and a further £705k in 2026). Supported by the Egham asset sale.
- Apply an increase of **5.2% annually** on (slightly enhanced) CABI monthly contributions from 2025 till 2028. Thereafter grow by Inflation.
- Manageable from CABI's resources

- The Scheme's projected minimum asset value improves to **~£10m** in 2045
- The contributions expected t**o remove the deficit by 31 October 2054** (similar to the 2020 valuation)
- The plan was well received by the UK Pension Regulator
- The plan was discussed at the Exco Sub-committee on Finance & Risk held 29th November 2024 and approved at the CABI Board last Dec 2024

UK Pension Scheme update 2024

£m	31 Dec 2024
Assets	30.7
Liabilities	96.1
Deficit	(65.4)
Funding ratio	32%

The Year Ahead

Daniel Elger

Member Governance and Engagement 2025-26

Executive Council Meeting 2025

‘Action-focused’ regional meetings and review conference

- Regional meetings in 2025
- Review conference in early 2026

Executive Council meeting

20 March (10.00-12.00 GMT)

Virtual via Zoom (Meeting ID: 927 5341 0121; Passcode: 407609)

Executive Council members and Liaison Officers are invited

Agenda will include:

- Progress reports from the Board and CEO
- Updated impact metrics – year 2 of Medium-Term Strategy
- Approval of Budget 2025 and financial plan 2026-2027
- Election of Executive Council Chair and two Board Observers

2.5 days each

Regional Consultation Meetings

Asia-Pacific
Tuesday-Thursday, 18-20 February 2025
Kuala Lumpur, Malaysia

Africa
Wednesday-Friday, 11-13 June 2025
Nairobi, Kenya

Americas
Tuesday-Thursday, 16-18 September 2025
Port of Spain, Trinidad & Tobago

Regional Consultation Meetings

Action focus – pesticide risk reduction

- Participation supported by expert input
- How to advance at policy, regulatory and farm levels
- Country priorities for action
- Routes to mobilise resources for action

Work before, through and after meeting

Also:

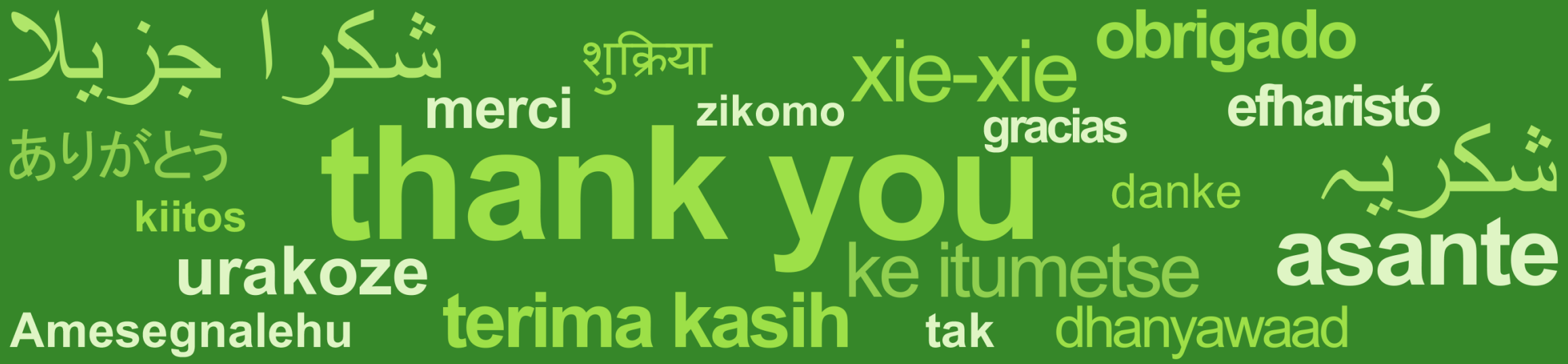
- Working together
- Medium-Term Strategy (MTS) ‘refresh’
- Regional progress on MTS ‘23-25
- Major programme initiatives
- View from host country

2025 priorities

- Deliver on third year Medium-Term Strategy targets
- Agree Strategy refresh and new plans with Members
- Deliver an expanded programme and project portfolio
- Grow reach and sales of publishing products
- Continue investment & reforms for Member-responsive growth
- Meet Pension Scheme recovery plan obligations

Closing Comments & Discussion

Daniel Elger



CABI as an international intergovernmental not-for-profit organization, gratefully acknowledges the generous support received from our many donors, sponsors and partners. In particular we thank our Member Countries for their vital financial and strategic contributions.