

# Pest Risk Information Service (PRISE)



PRISE is an early-warning information system that provides farmers with alerts on **the best time to intervene** in a crop for pest management. PRISE **increases productivity** and **builds resilience to climate shocks** through supporting preventative action.

## Achievements and Impact

### Over 1.8 million farmers

across Kenya, Ghana, Zambia, and Malawi have benefited from PRISE pest alerts since 2017

### A return on investment of 1:182

means that those 1.8 million farmers earned **an extra £1.5 billion** in produce value<sup>1</sup>

### 13% increase in yields

compared to control group farmers

### 59% of farmers

who received the service changed their practices based on PRISE recommendations for fall armyworm

<sup>1</sup>Based on difference in yield value from implementing PRISE, drawn from endline surveys in all four countries and using average crop values per country per year.

PRISE collects data on pest presence through a crowd-sourced feedback loop, and combines it with Earth Observation (EO) technology, data, and pest modeling to assess risk and generate alerts.

PRISE generates alerts on the optimum '**time to action window**', allowing farmers and other agricultural stakeholders to prepare in advance, thereby **increasing the efficiency and efficacy of intervention**. PRISE does not define which interventions should be made, but the system could be expanded to incorporate CABI's world-class pest management advice. The alerts can be integrated into existing advisory services, complementing the advice already serviced to farmers.

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## PRISE Benefits



**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.

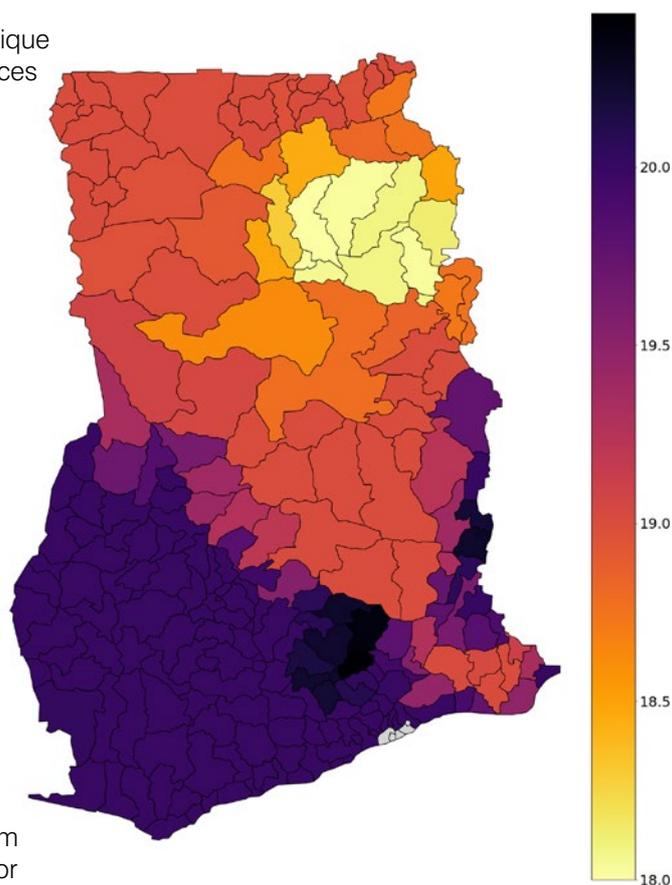


Figure 1: A map of Ghana demonstrating the time to action window (from the planting date) for Fall armyworm

## Partner with us

**Partnerships are key to PRISE.** We are looking for implementing partners who want to integrate PRISE models into their agricultural advisory services.

The **models we have already created can be run anywhere** and we are particularly interested in **calibrating these models in new countries.**

We can work in partnership to **develop additional pest models** that are important challenges to your farming community. This includes agricultural, horticultural and perennial crops, and covers both insects and pathogens.

We are interested to work with you on **the development of innovative models that go beyond pest alerts.** Using historic climatology data, we can support decision making throughout the production process and beyond the farmgate, such as appropriate site selection, yield modelling, drought and flooding risk, as well as input distribution, financial inclusion services and more.

## Find out more

To discuss CABI's work in digital development, please contact:

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# [www.prise.org](http://www.prise.org)

