



# Development Communication & Digital Development

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# Introduction

- CABI works in key areas of **technical competence** including: plant health, management of invasive species, SPS and trade, production of commodity crops to deliver positive social outcomes
- **Development communication** and **digital development** are used to support the application of technical competences to address challenges such as:
  - Crop pests and diseases
  - Invasive species that threaten crops and the environment
  - Lack of food and nutritional security
  - Low incomes for smallholder farmers
  - Livelihoods that are vulnerable to shocks





# Development Communication

CABI envisions a world in which positive research results are adapted at scale through the use of development communication approaches.

Systematic use of participatory communication methods and tools facilitate information and knowledge sharing among stakeholders, in order to achieve positive social and behavioural change.

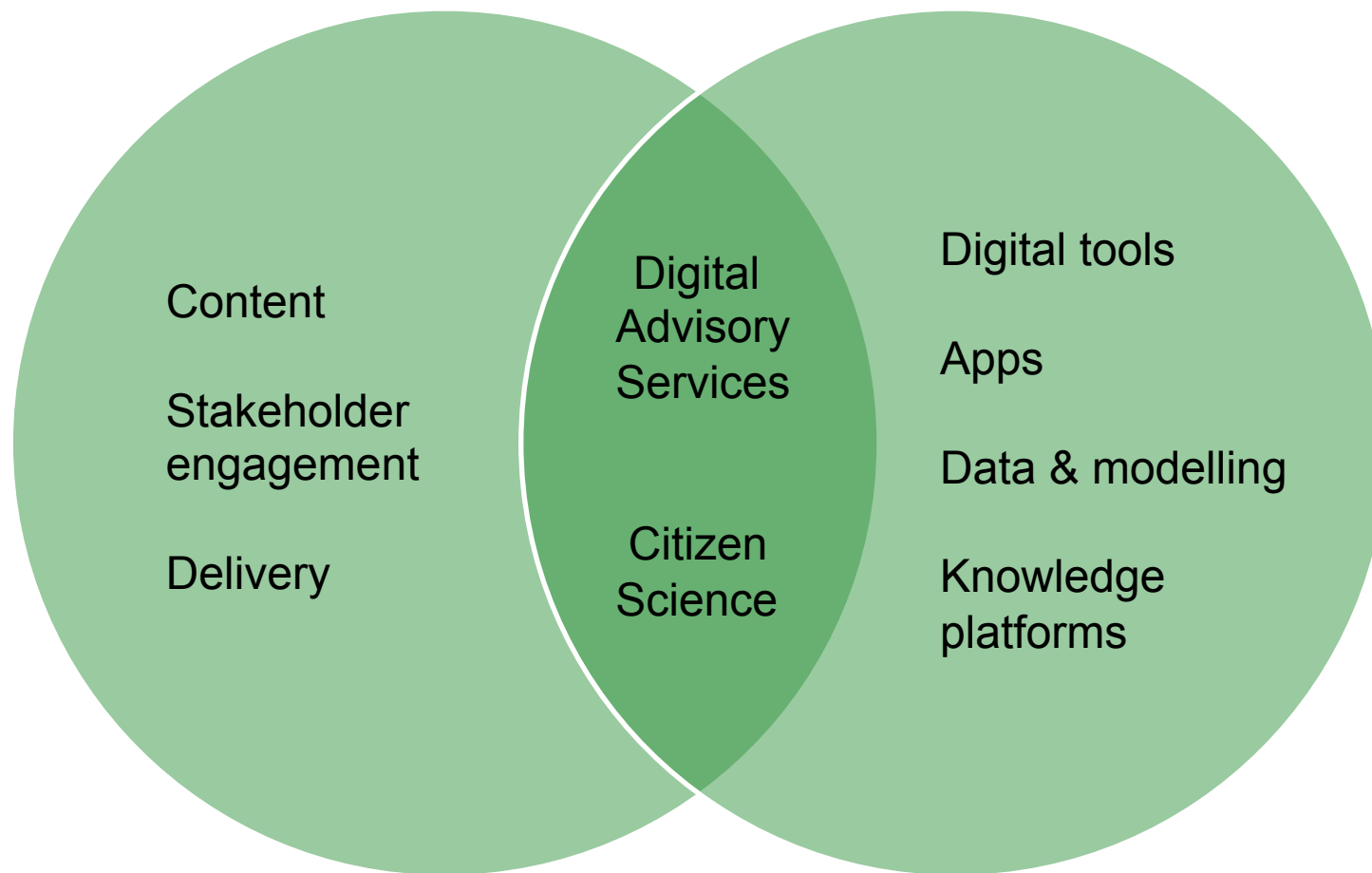


# Digital Development

CABI envisions a world in which our development impact is magnified through digital innovation in agriculture and the environment.

Digital tools allow us to work with communities while our user-centred approach helps us ensure that no one is left out of the opportunities provided by digital for economic development.

# Development Communication



## Digital Development





# Development Communication

## **Goal 1:** Link learning & Planning

Establish evidence base of what works and what doesn't

### **Activities:**

- Integrate Action Research into programmes
- Implement After Action Reviews of key milestones
- Generate supporting resources for governments, civil society and the CABI partnership

### **Goal 1:** Link learning & Planning

Establish evidence base of what works and what doesn't

### **Goal 2:** Develop innovative hybrid models

Multiple channels / formats based on context and audience

### **Activities**

- Appraise environments including audience segmentation
- Address objectives with different timeframes: early warning; emergency; new technology
- Blend emerging digital technologies with more traditional extension services – mobilising local resources for sustainability and mixing approaches to achieve scale)



### **Goal 1:** Link learning & Planning

Establish evidence base of what works and what doesn't

### **Goal 2:** Develop innovative hybrid models

Multiple channels / formats based on context and audience

### **Goal 3:** Support entrepreneurship

Support value chains, input availability, market access

## **Activities**

- Enterprise development addressed as a key part of agricultural transformation
- Raise awareness among policy makers of problems and solutions for transformation
- Develop guidelines for investors in new technology

### **Goal 1:** Link learning & Planning

Establish evidence base of what works and what doesn't

### **Goal 2:** Develop innovative hybrid models

Multiple channels / formats based on context and audience

### **Goal 3:** Support entrepreneurship

Support value chains, input availability, market access

### **Goal 4:** Partnership building

Bridge local agendas and international expertise

## **Activities**

- Map the institutional landscape around farmers and key partners:
  - Knowledge partners – proven technologies or practices;
  - Input partners – support input supply chains
  - Delivery partners – use proven methods
  - Research partners – support learning

## **Goal 1: Link learning & Planning**

Establish evidence base of what works and what doesn't

### **Goal 3: Support entrepreneurship**

Support value chains, input availability, market access

### **Goal 4: Partnership building**

Bridge local agendas and international expertise

### **Goal 2: Develop innovative hybrid models**

Multiple channels / formats based on context and audience



# Case study: the power of mixed media campaigns

Total Number  
of Responses

1,118

Radio  
Stations

Radio Simba

Poll  
Duration

Dec 6th to  
16th Dec 2017



- Farmers provide feedback on Fall Armyworm in radio managed polls in Uganda
- Campaign on soybean production in Ghana used: film screenings to set up a Q&A with farming families; print and radio to reinforce messages and a partnership with supplier to deliver
- Farmers in Tanzania avoid losses by taking advice on response to threats and sales of drought tolerant maize seed increase following an SMS campaign with 40,000 maize farmers



*“Coupling inputs with extension information through mobile phones is critical to supporting smallholder farmers ... no single agency will reach everyone physically”* **Meru Agrotours**

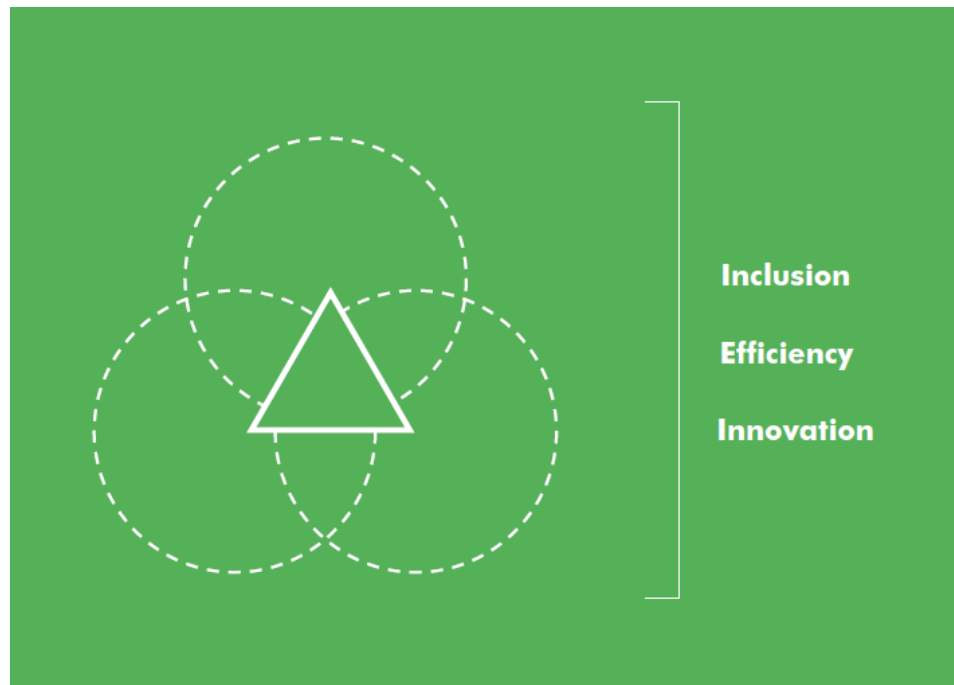


# Digital Development



# Digital Development – Background

- Digital tools help farmers, extension workers, and landscape managers access **information** quickly and easily, make **data-driven** decisions about their activities, and **communicate** with each other
- Major **opportunities** – improved **scale/efficiency**, enabling new **innovations**, involving **youth** in digitally enabled agribusiness and extension



World Bank. 2016. *World Development Report 2016: Digital Dividends*.





# PRINCIPLES *for* Digital Development

## The Principles

1. Design with the User
2. Understand the Existing Ecosystem
3. Design for Scale
4. Build for Sustainability
5. Be Data Driven
6. Use Open Standards, Open Data, Open Source, and Open Innovation
7. Reuse and Improve
8. Address Privacy & Security
9. Be Collaborative

<https://digitalprinciples.org/>



# Digital Development – CABI contribution

- **Digital approaches to knowledge** creation, management, and dissemination, and **user centred design** deliver high quality, science-driven, digital information **resources and tools**
- Skills, infrastructure, and information resources needed in our **publishing business** and our **digital development work** are **complementary**





# Digital Development – CABI contribution

- **Mandate from member countries** – keen interest in last round of regional consultation, featured in 2017-2019 Medium Term Strategy
- Well positioned to work with a wide range of **partners** to strengthen **local capabilities** for digital development





# Digital Development: CABI Goals and Activities

- **Goal 1:** Two-way **communication channels** based on digital tools empower stakeholders, leading to better decisions, increased engagement and improved livelihoods

- **Goal 2:** Harness the power of **data to deliver solutions at scale**, taking advantage of opportunities created by earth observation, sensors and modelling to automate analyses and generate targeted advice across huge areas

- **Cross-cutting:** Principles for Digital Development, gender, sustainability, user-centred design and co-creation



# Digital Development – Goal 1

## (Two-way communication channels)

- Engage **youth in agriculture and agribusiness** through the development of digital tools supporting self-employment and other livelihood opportunities
- Combine CABI's ICT and development communication expertise in developing approaches to **digital and digitally supported agricultural extension**
- Continue to develop and support **information resources and platforms**, transforming scientific information into practical, actionable knowledge
- Develop systems for **two-way communication and crowdsourcing**, enabling end users such as extension workers to contribute citizen science data and drive the direction of the information services they use



## Digital Development – Goal 2 (Data-driven solutions at scale)

- Use **geospatial tools and spatial and predictive modelling** to provide tailored agricultural advice and alerts; support landscape-level ecosystem management; help developing country farmers access markets; underpin climate change adaptation and strengthen programme design and monitoring and evaluation
- Taking a data-driven approach, we will be able to do all of this **at scale** by automating the generation of tailored insights
- Promote and **build capacity for data use** by partners, including data literacy, analytics tools, open data, data policy and responsible data approaches. We will undertake capacity building, consultancy and data policy work to support good data practice across the sector



# Case study: the power of geospatial work



- Mapping and monitoring the invasive weed *Parthenium* using state-of-the-art satellite imaging (Pakistan)
- Generating actionable pest alerts from a novel combination of citizen science, earth observation data, and phenological modelling (PRISE project – Kenya, Ghana, Zambia)
- Using satellites, UAVs, and modelling to maximise efficacy of biopesticide application and control locusts and wheat rust (China)



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