











# **ICT4D Technologies**

To address the Data Jam Challenge Statement, teams should select one or more of the below ICT4D Technologies on which they will innovate during the Data Jam. Teams must identify how their data resources can be used to augment or improve the existing Technology selected. As a starting point in your brainstorming, we recommend teams identify strengths and weaknesses of the Technology, propose products, services or improvements, and determine the feasibility of incorporating those improvements into the existing Technology.

Team members who have professional affiliations with any of the listed ICT4D Technologies should disclose this affiliation during their presentations. If you would like to innovate on an ICT4D technology not included on this list, please come discuss with event organizers.

## **PEAT's Plantix (Self-Service Farm Management Solutions)**

Plantix is a plant diagnostic app developed by PEAT. The App provides users worldwide with customized information concerning best practices, pest & disease incidences, information on preventive measures and independent options for action. Plantix offers the possibility to send pictures of affected plants directly via smartphone and guides through an identification process to determine the plant disease in a very simple manner. Pictures sent via the app are tagged with coordinates.

PEAT will be represented at the ICT4D Conference. Data Jam participants are encouraged to download the apps, explore the features, and innovate on new products and services that could be offered to help farmers deal with pest & disease outbreaks.

#### For more information:

- Website: http://plantix.net/
- Android app (India, Germany, & Scandinavia): https://play.google.com/store/apps/details?id=com.peat.GartenBank
- Beta app is for testing and development: https://play.google.com/store/apps/details?id=com.peat.GartenBank.preview

## Plantwise Knowledge Bank (Self Service Farm Management Solutions)

The Plantwise Knowledge Bank is a global resource to help combat plant health problems. The Knowledge Bank is an online platform which can retrieve maps of current pest and disease outbreaks, and help users diagnose and treat pest problems. The Knowledge Bank is filterable based on country or region. The Plantwise Knowledge Bank is maintained by CABI (<a href="http://www.cabi.org/">http://www.cabi.org/</a>) and will be represented at the ICT4D Conference.

• Website: http://www.plantwise.org/KnowledgeBank/CountryHome.aspx

## **WeFarm (Self-Service Farm Management Solutions)**

The WeFarm platform allows farmers to share information and best practices directly with each other, either through smart phones or basic mobile phones. Farmer users post questions to the WeFarm platform through SMS, and the WeFarm platform in turn sends those questions to a select group of other farmers using the platform who can return answers via SMS. Farmers can, therefore, use the platform to receive relevant, crowd-sourced answers from their peers, even if they do not have access to the internet.

- Website: https://wefarm.org/how-wefarm-works/
- Read case studies on WeFarm's services: <a href="https://wefarm.org/case-studies/">https://wefarm.org/case-studies/</a>

## **Digital Green (Rural Advisory Service)**

Digital Green is a not-for-profit, international development organization that uses an innovative digital platform for community engagement, to improve lives in rural communities across South Asia and Sub-Saharan Africa. They partner with local public, private and civil society organizations to share knowledge on improved agricultural practices, livelihoods, health, and nutrition, using locally produced videos and human mediated dissemination. Participants are encouraged to investigate what Digital Green does and does not offer, and think about where new data resources could augment their existing services.

Digital Green is represented at the ICT4D Conference. Relevant information includes:

- Analytics about the effectiveness of Digital Green's programs: https://www.digitalgreen.org/analytics/overview\_module
- Access to the Digital Green data management sandbox: <a href="https://www.digitalgreen.org/tools/">https://www.digitalgreen.org/tools/</a>

## **Dimagi's CommCare** (Rural Advisory Service)

CommCare is an open source, mobile data management and collection platform that enables development professionals to build mobile apps to collect data for their projects and organizations. Active in over 60 countries, CommCare describes itself as "the most widely adopted, technically advanced, and evidence-based mobile platform for low-resource settings."

Dimagi is representing at the ICT4D conference, and is looking to expand the reach of its CommCare product into agriculture. Some key links:

- See an overview of CommCare: https://www.dimagi.com/products/
- Source code for Android: https://github.com/dimagi/commcare-android
- Sign up for a free trial at: https://www.commcarehq.org/register/user
- Case studies of previous CommCare applications: <a href="https://www.dimagi.com/case-studies/">https://www.dimagi.com/case-studies/</a>

## FarmerLine (Rural Advisory Service, Market Linkages)

Farmerline's innovative mobile messaging web platform, Mergdata, allows users to send bulk voice messages & SMS messages in local languages to the mobile phones of thousands of people anywhere in the world. Mergdata also has mobile survey capabilities. FarmerLine advertises additional services to farmers and clients, such as weather forecast messaging.

FarmerLine is represented at the ICT4D Conference, and Data Jam participants are encouraged to review their product and service offerings, and brainstorm on how the services could be augmented, improved, or added to.

- Sign-up for access to the platform: <a href="https://core.mergdata.com/signup">https://core.mergdata.com/signup</a>
- Products: <a href="http://farmerline.co/mobile-messaging-2/">http://farmerline.co/mobile-survey2/</a>
- Services: http://farmerline.co/services/

# RML AgTech (Rural Advisory Service, Market Linkages)

RML is an India-based farmer service launched in 2007, providing SMS messages to registered farmers for the farmers' preferred crops. Messages cover crop prices in nearby markets, news on input prices, yield improvement tips, and district-level weather forecasts. RML receives its content information from private weather information providers, the Indian Meteorological Department (IMD), and experts from state agricultural universities and various ICAR institutions. Farmers can pay for the service on a monthly basis or can pre-pay at a discount for multiple months at a time.

#### Relevant information includes:

- RML AgTech's description of its farmer SMS product and a link to download its app is here: http://rmlagtech.com/web/rml-farmers/
- A Case Study describing the RML AgTech approach and features can be found here: <a href="http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/12/M4D-Impact-Case-Study-Reuters-Market-Light.pdf">http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/12/M4D-Impact-Case-Study-Reuters-Market-Light.pdf</a>

## iShamba (Rural Advisory Service, Market Linkages)

iShamba is a mobile-phone messaging service and call center available to subscribing farmers in Kenya. The service includes weather forecasts, agricultural tips, market prices, and event alerts. iShamba works on a "freemium" business model, providing some basic services for free while users must pay to have access to the full suite of services. Data Jam participants are encouraged to think of ways the Data resources could provide added value to iShamba.

#### For more information:

• Website: <a href="https://ishamba.com/">https://ishamba.com/</a>

#### **Social Media**

A great deal of work can be done to utilize popular social media platforms for farmer and agriculture services. If you would like to incorporate such a technology in your Data Jam project we encourage you to consult the publicly available resources offered by platforms like:

- WhatsApp: https://www.whatsapp.com/
- Facebook: https://www.facebook.com