From Digital Models to Sector Capabilities

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bigdata.cgiar.org
digital agriculture models
Avaaj Otalo (India)

- Interactive voice response-based advisory services.
- 5% more likely to use recommended inputs than comparison group
- Average 28% higher yields over comparison group
- Average $10 return for each $1 invested in subscription
MyAgro (Mali)

- Mobile scratch-card based layaway for inputs
- Delivery of genuine inputs and bundled advisory services
- Average yield gains 50%-100%
- Average income increased $150-$300
CIAT ‘Site-Specific Agriculture’ (Colombia)

- Analyzed over 4,000 crop events to understand declining rice yields
- Recommended shift in planting time or new variety
- 1-3 tons/hectare yield difference between intervention and comparison fields
Some digital interventions for agriculture development

- Analytics-driven
- Value chain coordination-driven
- Digital channel-driven

Mobiles    sensors    geospatial data    analytics capacity    data assets
From digital models to sector capabilities
CGIAR Data discovery++ Findable; Accessible; Interoperable; Reusable
Interoperability – Linked Open Data

Legend
- Cross Domain
- Geography
- Government
- Life Sciences
- Linguistics
- Media
- Publications
- Social Networking
- User Generated

Towards reference architectures
“SMS-based Smarter Agriculture decision support system for yellow corn farmers in Isabela” https://www.researchgate.net/publication/308819637_SMS-based_Smarter_Agriculture_decision_support_system_for_yellow_corn_farmers_in_Isabela