This presentation is part of the

Agriculture and Nutrition Global Learning and Evidence Exchange

(AgN-GLEE)

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For additional presentations and related event materials, visit: http://spring-nutrition.org/agnglee-asia
Digital Green uses social organization and technology to improve the efficiency of extension systems globally.
2006: Project at Microsoft Research

2008: Implementation in 4 Indian states

2009: Non-profit in USA and India

2012: Scaled to 7 Indian states

2015: 11,000 villages 1 million farmers

HOW WE EVOLVED
WHERE WE WORK
Agricultural Context

Green Revolution (1960s) had mixed results..
• In India, increased yields, but rising input costs, declining soil fertility
• Early adopter of technology: focus was on large-farms, not smaller plots
  Indiscriminate use of technology partially responsible for current agrarian crisis

Majority farmers now cultivate on less than 2 hectares of land...
• In India, farmers cultivate on less than 2% of global landmass
• And feed 16% of total world population
• 75% of world’s poor live in rural areas

A farmer from Yellachavadi village, outside of Bangalore
Agricultural Extension

Dissemination of expert agricultural information to farmers

Training & Visit: Face-to-face interactions of extension officers and farmers

500,000 extension officers trained in developing countries

Extension agent-to-farmer ratio:
1:2,600 in South Asia
1:1,800 in Sub-Saharan Africa

High recurring costs, weak accountability, under-resourced, limited training
Information Sources for Farmers in India

Main source of information about new technology and farm practices over the past 365 days (India: NSSO 2005)
Digital Video for Extension

Video provides...

- Resource-savings: human, cost, time
- Accessibility for non-literate farmers
Digital Green Approach – Hub and Spoke model

- Initiation
  - Mobilization
  - Situational Awareness
  - Training

- Production
  - Topic Identification
  - Storyboarding
  - Shooting
  - Editing

- Diffusion
  - Dissemination
  - Adoption
  - Reporting

DigitalGREEN
Digital Green: Early Results

7 times more adoptions than Training & Visit model

Mediation

Repetition (and novelty)

Integration into existing extension operations

Social homophily between mediator, actor, and farmer

Desire to be “on TV”

Trust built from identities of farmers and villages in videos
Cost-Benefit of Digital Green approach

<table>
<thead>
<tr>
<th>System</th>
<th>Training &amp; Visit</th>
<th>Digital Green</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost (USD)</td>
<td>$840</td>
<td>$630</td>
</tr>
<tr>
<td>Adoption (%)</td>
<td>11%</td>
<td>85%</td>
</tr>
<tr>
<td>Cost/Adoption</td>
<td>$38.18</td>
<td>$3.70</td>
</tr>
</tbody>
</table>

Note: Decreasing amortized cost of hardware with time and scale

digitalGREEN is **at least 10 times** more effective **per dollar** spent than a Training & Visiting system.
Nutrition Context

Two immediate causes of malnutrition globally:
Insufficient intake of nutritious foods
Increased incidence of infections

Basic causes at societal level → quantity, quality, control of resources

Basic causes at household level:
Lack of ability to control resources
Inadequate access to foods, maternal/childcare services, health services
Lack of knowledge or awareness of resources and information available
Collaboration with SPRING

- To adapt the Digital Green model currently being used for the promotion of agricultural best practices for the promotion of nutrition and hygiene-focused messages
- To test the feasibility of disseminating these messages through the use of the Digital Green approach
- Pilot project in Keonjhar district, Odisha; 30 villages
Project Accomplishments to date

• **Established partnerships**  
  (May – Oct 2012)

• **Formative research & analysis conducted**  
  (Nov 2012)
  – Societal food taboos/constraints
  – Pregnant women work load
  – Key influencers in community: mothers in laws, husbands

• **Nutrition training held**  
  (Feb 2013)
  – Local community video producers and facilitators
  – ASHAs, Anganwadi workers

• **First video produced**  (Mar 2013)  
  – Hand-washing featuring two community members
  – Test video included ASHA
Thank you!
Questions?