



**USAID**  
FROM THE AMERICAN PEOPLE

*Transferring technology  
through ICT-enabled  
extension services*

**The India GMED Program**

**ACDI/VOCA**

**ITC Limited**

# *Profile*

## Growth Oriented Micro-Enterprise Development Program (GMED)

- Project Period: October 2004 – September 2007 (with possible extension thru 2008)
- Objective: to develop sustainable and scalable models for increasing employment through MSE growth

# *Components*

## Urban Services:

- Solid waste management

## Agribusiness

- Fruits and vegetables
- Organically certified food products
- Broilers (discontinued)
- Special Activities

# *Methodology*

- Value chain approach
- Technical assistance
- Corporate/NGO partners as service providers
- Embedded services as delivery vehicle
- No direct intervention with MSEs except for process validation

# *Fresh vegetables*

- Opportunity: Rapid growth of organized retail sector
- Principle partner: ITC Limited
- Three pilot production sites with 300 smallholder farmers (2 to 5 acres)
- Target: 20,000 to 30,000 ITC farmers in five years
- Future goal: replication by other industry players

# *Partner profile--ITC*

- 7th largest Indian corporation
- \$13 billion market cap
- \$3.5 billion annual turnover
- Tobacco/cigarettes, commodity trading, hospitality, IT, food processing, etc.
- Noted worldwide for pioneering smallholder commercialization through IT—the e-choupal platform
- Initial foray into fresh produce production, wholesaling, retailing--assisted by GMED

# *The challenge*

- Integrate smallholder vegetable farmers into commercial supply chain
- Enhance productivity and product quality through introducing package of improved production and postharvest practices
- Automate record keeping for traceability and crop planning/scheduling
- Build farmer loyalty to ITC

# *First Steps*

- ❑ Establish three model farmer clusters
- ❑ Select lead farmers/outgrowers
- ❑ Transfer package of practices
- ❑ Build farmer loyalty through technical services, appropriate pricing
- ❑ Results (first crop): productivity and income increases ranging from 30% to 100%; significant quality improvements

## *Second Phase*

Increase functional efficiency and cost effectiveness of private extension services

- ❑ Expand farmer base
- Utilize electronic connectivity to provide information flow between farmers, extension system and buyers
- Adopt “village extension” model
- Extend lead farmers’ role as mentors for outgrowers

# **Electronic Connectivity**

## **Starting Point**

### ITC e-choupal platform

- Computers installed at sanchalaks' homes
- Each e-choupal serves five to six villages
- Provides market prices, weather forecasts, technical production information
- Conduit for ordering production inputs and consumer goods for villages
- More than 5,000 e-choupals installed, coverage area includes 3.5 million farmers

# *E-choupal as Marketing Tool*

- ITC offers farmers a more efficient, transparent and rewarding marketing system as compared to local mandis (government-mandated auction markets)
- E-choupal primarily a marketing tool, transfer of technology secondary
- Dissemination of market information most widely used feature

# *Comparisons*

- E-choupal aimed at producers of grains, oilseeds, pulses, other field crops
- *GMED program deals with horticulture crops*
- E-choupal technical information transferred through single computer installation serving five to six villages
- *Horticulture farmers need continual one-on-one extension interface*

## *Comparisons (Cont.)*

- E-choupal primary purpose to attract farmers to ITC procurement hubs; no formal ongoing links between ITC and farmers
- *ITC fresh produce procurement program based on developing and retaining reliable, loyal production base through forging true partnership with farmers*

# *The GMED ICT initiative*

- Support—\$750,000 grant from USAID
- Goal—Develop an ICT-enabled private extension model
- Partners—I TC and Intel
- Immediate target—Indian smallholder horticulture farmers
- USAID objective—a viable model that can be replicated in other developing countries as well as India

# *The horticulture e-choupal*

## Objective

- A more functionally efficient and cost effective private extension model

## Means

- Adapt enhanced ICT connectivity capabilities to extension needs

# *The approach*

- Extension agents equipped with hand-held device—PDA or small computer—in continual contact with farmers
- Device connected to electronic data and information hub at collection centers
- Local hubs connected to corporate data/information center supported by on-call panel of experts
- Village extension system to supplement professional agents and reduce cost

# *Initial Application Modules*

- Technical production/postharvest crop and area specific information with provisions for farmer inquiries
- Market prices (ITC and local markets)
- Weather forecasts
- Farmer record keeping capability for traceability and crop planning and scheduling

# *Village Extension Model*

- Goal: to develop more functionally efficient and cost effective private extension service models
- Approach: train unemployed village youth in the rudiments of crop, soil, disease and pest management and employ them as sub-professional extension agents within their own village area
- Problems they can't handle to be referred to professional extension staff

# *Village Extension Model*

## *Advantages*

- Benefits to company: reduce manpower costs
- Benefits to farmers: 24/7 extension help available, local person known to farmer, speaks local dialect
- Social benefits: unemployed youth acquire marketable job skills

# *Summary*

- Effective application of technology by smallholder producers of horticultural and other high value crops requires intensive extension inter-action
- Private extension services are often the only solution
- These services must be both cost effective and functionally efficient to be sustainable

***For more information***

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Thank You!