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# Background

- Invasive Pest and Disease widen yield gap in cassava production in Southeast Asia
  - Cassava mealybug
  - Cassava witches broom

- Emerging Pest and Disease Project (EPDP)
  - Region-wide pest surveillance
  - Applied research
  - Capacity building
  - Farmer extension activities









# Why the project applied ICTs

- Why we used ICTs extension approach?
  - Inform farmers about active prevention and control of pest invaders
  - Conventional extension approaches are costly and limited-coverage
  - FtF video extension: wide-coverage in remote area





# How the project applied ICTs

- Cassava pest/disease prevention campaign
- Audience
  - Extension workers, farmers
- Preventative tactics
  - Farmer-to-farmer educational video
    - Healthy planting material
    - Field sanitation & stake treatments
    - 7 different languages
  - To be distributed through 'agricultural cinema'
- Elaborated through Agro-Insight, widely distributed through NARS
- Partnerships: PPD (Vietnam), PPC (Laos), GDA (Cambodia), DoAE(Thailand)





# **Obstacles**

- Infrastructure and technological constraints
  - Limited number of DVDs
  - Lack of DVD players
  - Access to electricity
  - Distributional constraints
    - Difficulty in ensuring that Public sector distributed the DVDs to local farmers
    - Private sector engagement differed between the countries/regions



## Results

- FtF videos on mealybug Integrated Pest
  Management (IPM) Thousands of farmers
  reached
  - Videos continues to be shared
  - Active participation with Private Sector
    - 500 DVDs were distributed amongst the 96 biggest Cassava
       Factories in Vietnam
    - Activate participation with the Womens Union in Vietnam

#### However

 Difficulty in Myanmar/ Indonesia with limited video distribution



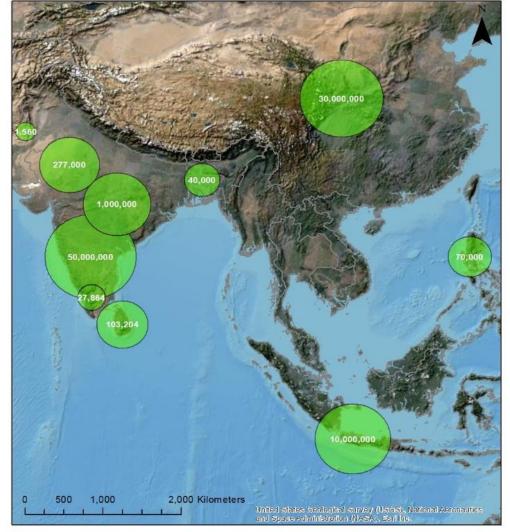
## **Lessons Learnt**

- Need to mobilise a large number of stakeholders to ensure broad video coverage
- Technological constraints can inhibit the distribution of Videos
- Monitoring and Evaluation
  - Limited capacity for farmers to get further tailored advice on IPM



# Questions for Further Research/ Use of ICT

- Project Specific Research Needs:
  - Pilot provision of tailored IPM advice via cell phone or fixed line
  - Gauge impact of video showings on farmers behavior
  - 3. Assess potential of streaming FtF video through cellphone apps
- General ICT Research Needs:
  - ICT in the CSV's as a test bed for weather advisory services – Partner with AWHERE/AgriBuddy
  - Pests and disease monitoring and early warning systems in the GMS



#### Leaend

Number of farmers reached

Figure 1: Source of data (Parker et al (2015)





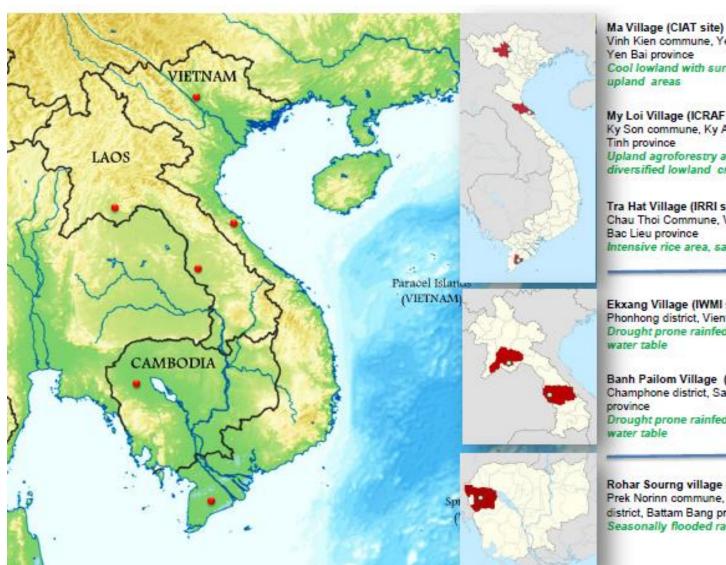
# Climate-Smart Villages in SE Asia

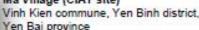












Cool lowland with surrounding

#### My Loi Village (ICRAF site)

Ky Son commune, Ky Anh district, Ha Upland agroforestry area with

diversified lowland crops

#### Tra Hat Village (IRRI site)

Chau Thoi Commune, Vinh Loi district,

Intensive rice area, saline affected

#### Ekxang Village (IWMI sites)

Phonhong district, Vientiane province Drought prone rainfed with shallow

#### Banh Pailom Village (IRRI site)

Champhone district, Savannakhet

Drought prone rainfed area with deep

Rohar Sourng village (WorldFish site) Prek Norinn commune, Ek Phnum district, Battam Bang province Seasonally flooded rainfed area









# Ma CSV, North Vietnam



### 1. Scenario and mapping analysis

- Participatory mappings (land-use, soils)
- Soil and land health (LDSF, SoLIM)
- Socio-economic surveying

## 2. Priority Setting

- Participatory prioritization of CSA T&Ps
- Cost-benefit analysis for final CSA T&Ps

## 3. Participatory Action Research

- Action learning agenda for CSVs
- Building ownership for stakeholders (local gov., farmers, local research units, NGOs, etc.)

#### 4. Climate Services

- Phone app.-based weather forecast
- Agricultural insurance

## 5. Knowledge Sharing

- Compendium
- Source book of CSA T&Ps

## **6. Action Plan and Strategy Development**

- Adaptation
- Scaling up/out
- National policy making

