

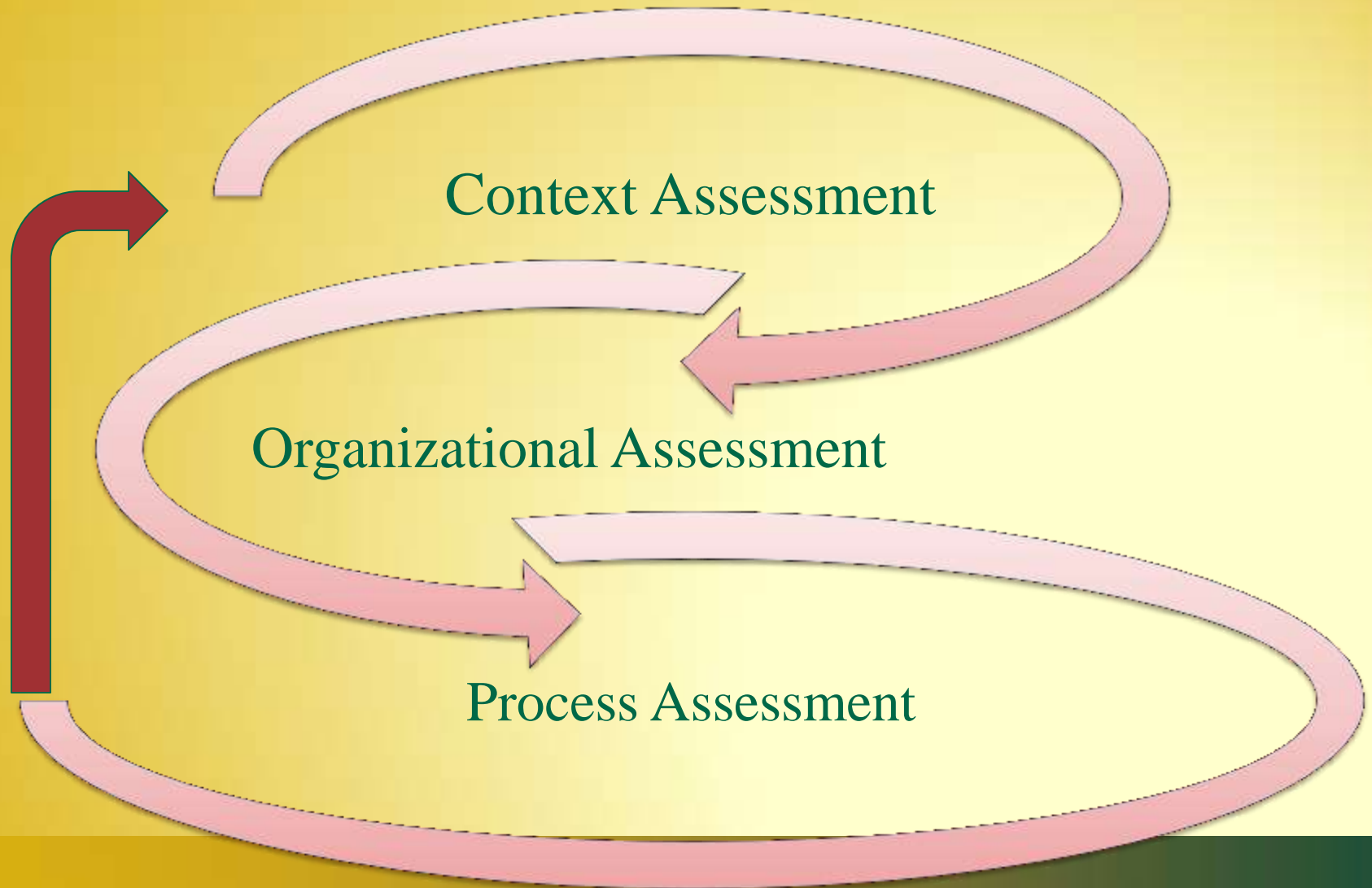


Building Demand-Driven and Financially Sustainable Extension Solutions

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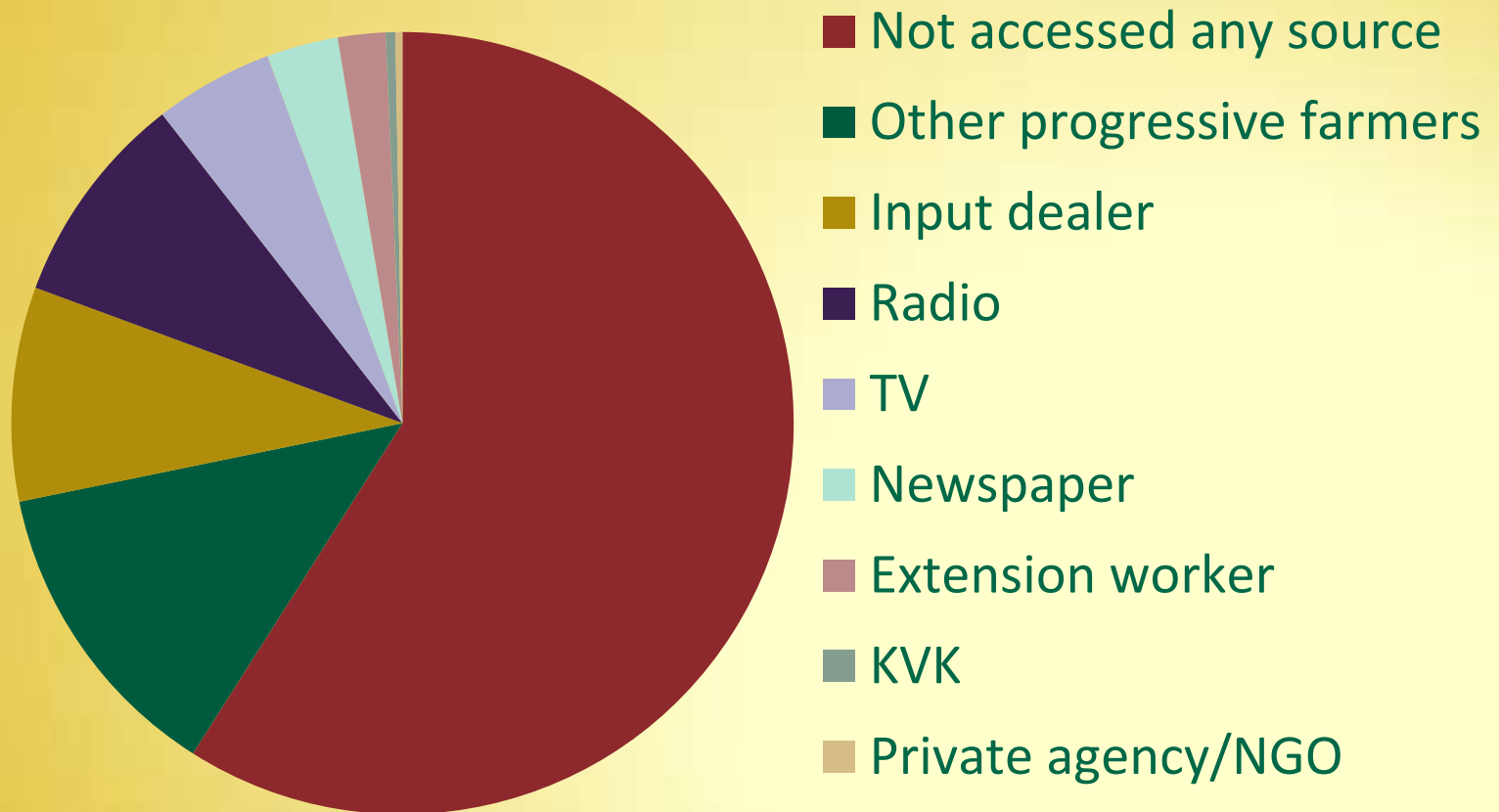
**CAAS-Syngenta Foundation Roundtable, Beijing, China
March 16, 2012**

Evaluating Extension Reforms



Where do farmers get their info?

% farmers for each info source (NSSO, 2005)



Information sources

- Main sources:
 - 68.6% input dealer
 - 51.2% state dept of agriculture
 - 43.6% TV
 - 39.9% family members and relatives
 - 36.2% progressive farmers
 - 35.7% PACs
- Differ by search group

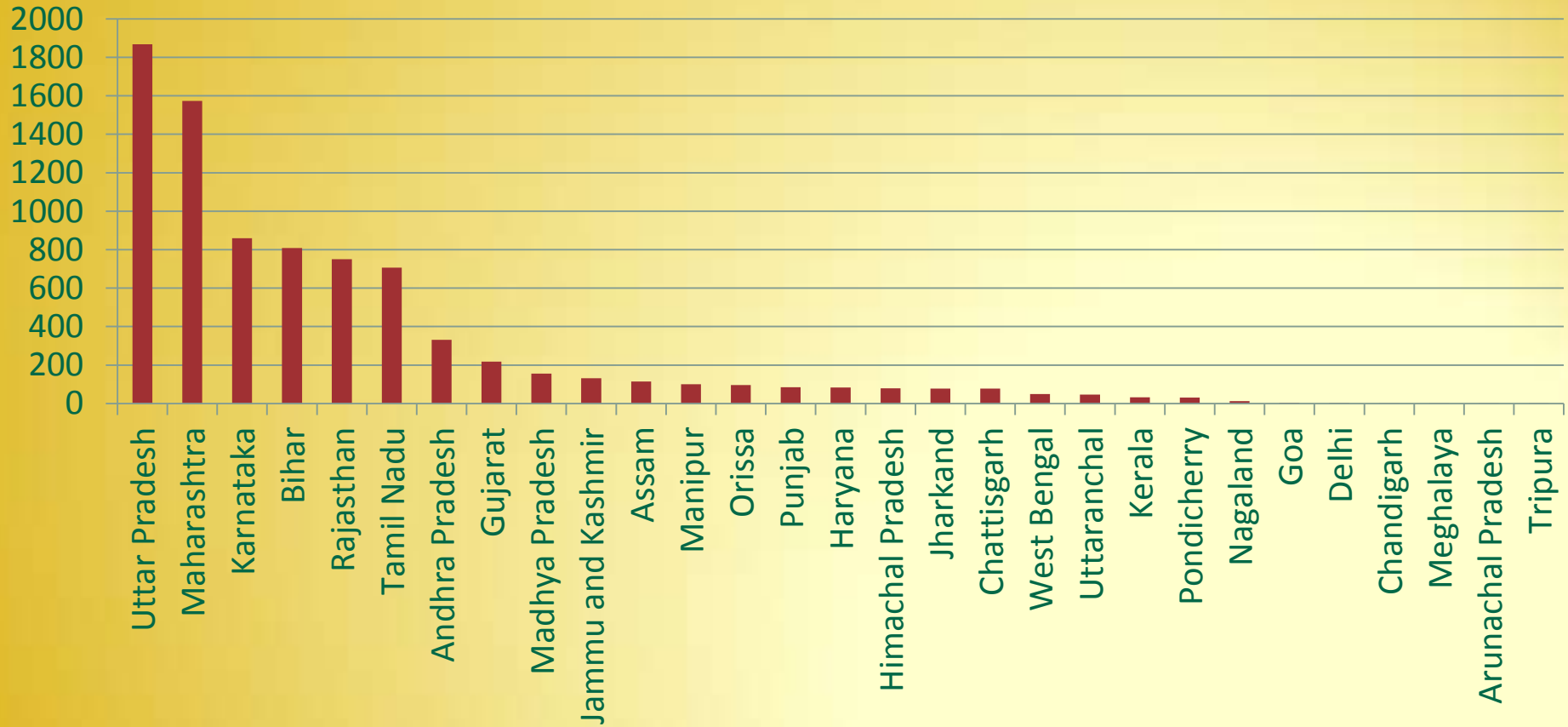
3 sets of results

- Agriclinics
- Mobile Phones
- Focused Group Discussions

Agriclinic and Agribusiness Scheme

- 2002 national scheme from MoA
- 25% subsidy, 2 month training, 1 yr support
- Agriclinic = provide expert services and advice to farmers
- Agribusiness centres = provide input supply and farm equipments on hire and other services.
- Agripreneurs are responsible for identifying a demand and establishing a business.

Agriclinics and Agribusiness by State



Tamil Nadu 'Agriclinic cum Mini Soil Testing Laboratories' program

- Funds from RKVY in 2007-08 for 224 blocks, 2008 – extended to all blocks
- State Dept of Ag + TNAU implementing agency
- Improve organic matter, balance soil nutrients = soil/water testing for Rs 50 per sample
- Other services: advisory, inputs, best practices, marketing, crop insurance, credit access, custom hiring
- Eligible: unemployed graduates, retired technical officers, diploma holders and Primary Agricultural Cooperative Banks (PACB)

Questions

- Who uses and is likely to use an Agrclinic?
- Are farmers willing to pay for soil testing?
- What are the challenges and strengths of the program?

Evaluation of Agriclinic - Survey

- 5 blocks x Kancheepuram district
(PACB Agriclinics)
- 6 blocks x Tiruvallur district
(3 x PACB, 3 x Independent)
- Each agriclinic 20 x soil testers,
20 x non-soil testers = 440 surveys
but final count $N=393$

Descriptive data of respondents

- 95% male
- Education: 49% yr 6-12, 24% yr1-5, 17% no education
- Primary income/vocation: agriculture
- Member of FBOs – 88%
- Average age 52 (std dev 9.8)

Descriptive data of respondents

- Average land cultivated 6.8 acres (std dev 5.2)
- Kancheepuram – 5.4 acres, Tiruvallur – 7.0 acres
- Irrigation water source
 - Tubewells/dugwells (77%)
 - Ponds/tanks (16%)
 - Rainfed (1%)
- Crop for Samba 2009 = PADDY

Input Purchase for Samba 2009

- Are Agriclincs used as input dealers?
- 55% purchased fertilizer at agriclincs
- Reasons: close by, timely, quality
- 9% other chemicals purchased at agriclincs
- 6% seeds purchased at agriclincs

Extension Access and Use

- Are agriclinics used for advisory services?
- Major extension sources:
 - 30% progressive farmers
 - 25% input dealer
 - 18% agriclinics
- Info: pest management, new seed varieties, fertilizer use, disease problems

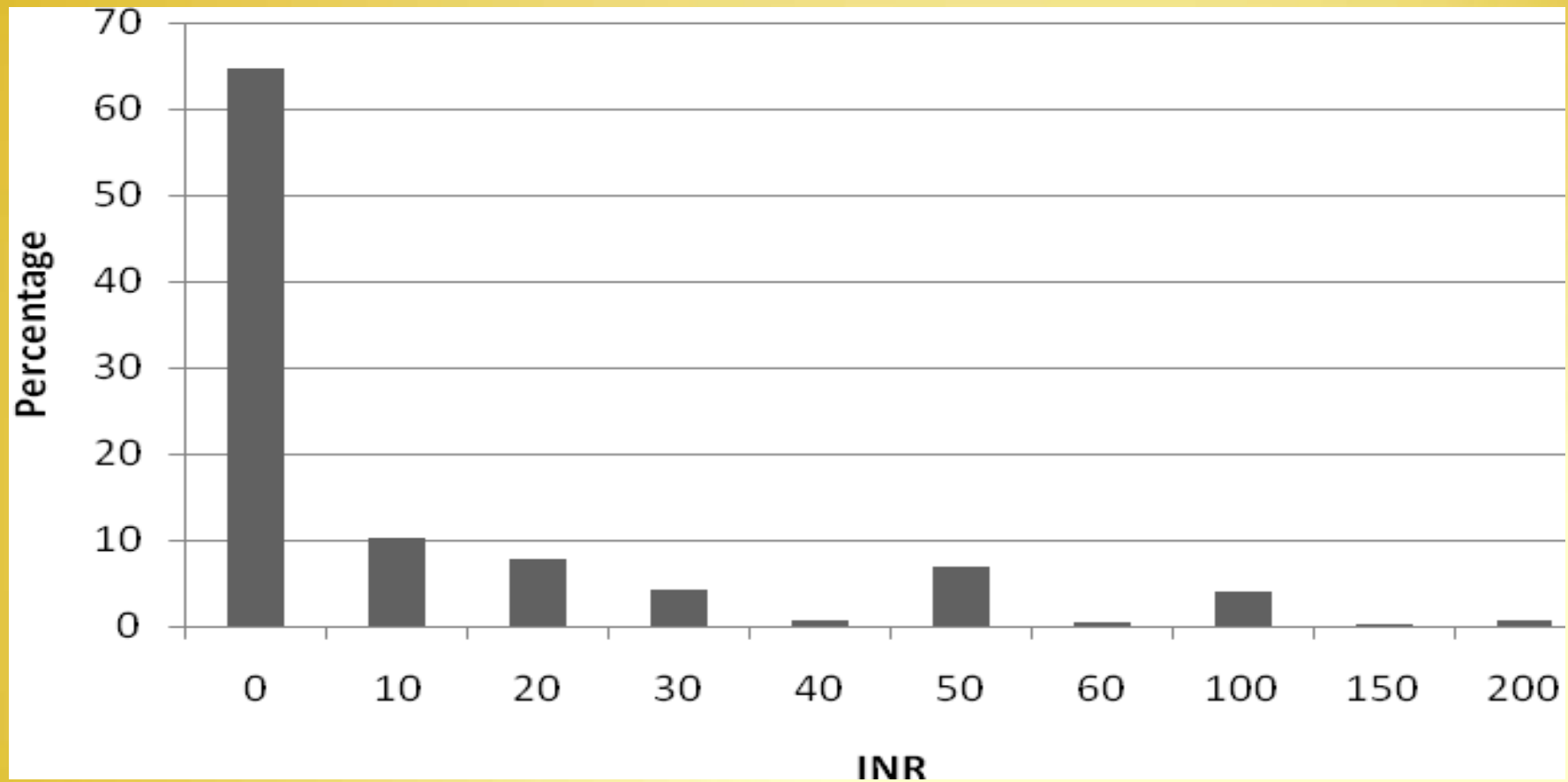
Agriclinic use and perceptions

- 58% used advice
- 57% improved production knowledge
- 42% use of inputs improved
- 21% improved production
- 25% satisfied

Contingent Valuation

- Willing to pay more for soil testing if:
 - less education
 - not a member of a farmer assoc/org
 - larger total land area
 - further distance from agriclinic

Willingness to pay for mobile voice messages



Focused Group Discussion



- 27 Focused group Discussions to find out what they want and what are they willing to pay for?

Key problems for farmers are:

- 1) Limited contacts at the village level
(Extension offices only at the block level)**
- 2) Lack of reliable information**
- 3) Input availability when needed**
- 4) Cost of inputs – limited choices**
- 5) Good price for the outputs / Markets**

Innovative models for Knowledge Management System In Indian Agriculture

<p>Strengthening public extension system: Agricultural officer (AO) or Assistant Agricultural Officer (AAO) will be empowered with ICAAP Knowledge Management Portal through internet. It will enable him to access the advanced agricultural practices for various crops so that AO or AAO could able to answer farmer's queries and he will be provide helpline number and same will be communicated to farmers.</p>	Model - 1
<p>Introducing private extension system: Unemployed educated youth would be identified in the village or near villages. He will be trained through ICAAP and certified as "Agricultural Knowledge Professional" or "Certified Extension Professional". Trained person will act as a resource person to 2 to 3 village farmers. Farmers will be benefitted through his consultation and farmer will raise the fund and pay as a monthly salary.</p>	Model - 2
<p>Introducing Social entrepreneurship (Youth empowerment): Unemployed educated youth would be identified in the village or near villages. He will be trained through ICAAP and certified as "Agricultural Knowledge Professional" or "Certified Extension Professional". Trained person will act as a resource person to 2 to 3 village farmers and he will have connection with extension officer to subsidy information, banks for agri-credits and KVKs and Research institutes for new technologies.</p>	Model - 3
<p>Empowering farmers through mobile: The voice message and SMS will be disseminated to farmers and knowledge will be drawn through ICAAP Knowledge Management Portal. The information will be sent to farmers based on their needs on subsidy information, crop best practices, market information.</p>	Model - 4
<p>Creation of Agri info shop near PUDHUAARU: The Agri Info Shop next to the PUDHUAARU centers which will advise farmers and provide quality certified seeds, chemicals and other agricultural inputs to the farmers. The idea is to make quality inputs available to the farmers at the right time with right information that is context specific for their villages which could come from the ICAAP Knowledge Management Portal.</p>	Model - 5

Three Models of paid extension services

- **Village level contact:** – ICT trained youth connected to Extension workers (5 more years) – **Most preferred but training is needed – reliability?**
- **Collective action by 2-3 villages:** Join hands with 2 other villages and have a consultant to visit the village on a regular basis (**possible but takes collective action and local leadership**).
- **Panchayat (local administration)** pay for the extension worker to visit the Panchayat (group of villages) – cover the cost and bit more form user fee (**least preferred**)

Challenges for Demand Driven

- Lack of awareness and what to demand
- Most of the demand relate to information on inputs
- Large / progressive farmers have better networks
- Poor follow up results in reduced demand for services

Conclusions



- **Concept of paying for information is recent initiative BUT used by farmers (if information is beneficial)**
- **Organized groups are more willing to pay – accountability is better**
- **Needs greater awareness about services: and possible benefits**
- **Need more experimentation and assessment**