



# Extension from an innovation systems perspective

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- 1. Extension is at cross roads.
  - While its support (political as well as financial)
    has been declining, it is being asked to broaden
    its agenda
    - Reduce vulnerability and enhance voice of the poor,
    - environmental conservation,
    - organisational development,
    - enterprise promotion,
    - linking farmer to markets,
    - building links with other actors

#### 2. Beyond technology dissemination

- Farmers require wide range of knowledge from different sources and also need support to integrate these different bits of knowledge.
- However, most of the public sector extension deal mainly with disseminating new technology, though recent years have witnessed provision of price information and organising farmer groups.
- Emergence of new actors in extension-NGOs, private sector (input suppliers, agro-processing firms), Media, producer organisations etc

- 3. Extension reforms have generally failed to bring about institutional changes in extension
  - improving research-extension linkages,
  - decentralisation,
  - District level co-ordination agencies
  - cost recovery, privatisation,
  - farmer participation, group approaches
  - use of ICT's, gender in agriculture,
  - linking farmer to markets etc
  - It continues to be funded, operated and evaluated as an agency for technology dissemination based on the R-E-F paradigm

- 4. Extension needs new perspectives/ new frameworks to reinvent its role
  - "Innovation Systems" offers new perspectives for reinventing extension.

# Existing conceptual framework

- Diffusion of innovations (Rogers, 1962)
- Innovation- a new technology developed by research
- Role of extension- Dissemination of new technology developed at the research stations
- The linear framework (Research -Extension-Farmer)
- Though the scope of innovation was enlarged in subsequent decades, it hasn't really affected the dominance of the linear paradigm
- Research-Extension-farmer links only got attention, whereas extension's relationships with other actors (in the AIS) was ignored

**Agricultural Innovation System-actors Demand Domain** Consumers, Processing companies, Commodity markets, policy bodies Intermediary Research **Enterprise Domain Domain** Domain Producers, R&D Commission agents, Input agencies, NGOs. Transporters, **Extension** Services **Processors** (Min/Dept of Ag) **NARS** Producer associations Research Council & Trader associations Agrl. Uty's Consultants Donors Entreprenurs Other public sector R&D **Support Structures** Financial institutions, Transport and marketing Infrastructure, Professional networks, **Education System** 

## Implications of the linear approach

- Reforms often only target extension and its internal management mechanisms, whereas reforms were also due in other organisations
- Extension models were centrally introduced, stifling evolution of locally relevant extension arrangements- lack of adequate capacity to design new and relevant programmes.
- Extension continues to be evaluated in terms of technology adoption and so the focus is on improving technology transfer
- Tradition of working independently and also mistrust of other agencies such as NGOs and private sector

#### Extension needs a new framework

- better relate it to the increasing range of actors and understand interactions among them
- address the institutions (habits, practices, and ways of working) that shape these interactions and also
- facilitate designing new arrangements relevant to local contexts
  - .....and "Innovation systems" provides a framework to fill this need
  - It is increasingly being applied in agriculture in recent years

## Innovation Systems framework

#### Main attractions

- It recognises innovation as a process of generating, accessing and putting knowledge into use-(it is no longer a research-driven process that simply relies on technology transfer)
- Interaction and knowledge flows among different actors
- Institutions matter-shape the nature of these interactions
- Learning- as a means of evolving new arrangements specific to local contexts

## IS perspectives and Extension?

- It provides a framework to identify a more relevant role for extension.
  - Extension as a "Bridging organisation"
    - Setting the innovation agenda, organising producers and the rural poor, linking the groups to different bits of knowledge, promoting platforms for knowledge sharing, building coalitions of different actors to deal with new challenges, experiment with and learning from new approaches
    - Need to <u>partner</u> with a wide range of organisations and also need a <u>broader range of expertise</u>
    - Reforms need to address some of these institutional issues that prevent it from embracing this new role

## IS perspectives and Extension

- It offers insights on how to improve its capacity to design new locally relevant arrangements
  - Learning based strategies to design and improve programmes
  - Enhance the capacity of the staff at the middle and lower levels to design, experiment, learn and improve locally relevant approaches (need to shift from training to a learning by doing approach)
  - Considering the wide variation in local situations, organisational mix and capacity, implementing a single model across a region or a country is not the way to reform extension

## Extension from an IS perspective-Potential ways forward

- Innovation system diagnosis actors, interaction, institutions and enabling environment [World Bank (2006) Enhancing Agricultural Innovation]
- Learning from positive deviants
- Learning platforms to share experiences, approaches
- No blue-prints or models (perhaps models as starting points/experiments to bring about reforms)- promote locally evolved mechanisms
- Decentralised approach to building capacity —hand holding
- Partnerships- development of linkages and networks
- Broader range of expertise-rules on recruitment, qualifications, performance assessment
- Different M&E- from input and output targets to learning, drawing principles

#### Implications for Donors

- Start with an innovation system diagnosis, (beyond assessment of research and extension)
- Long term support for extension to build its capacity (10-15 years commitment)
- Support not linked to promotion of one model or approach- promote diversity and partnerships
- Donor harmonisation-need to learn what each donor is doing and explore ways of better filling the gaps



#### Thanks

#### www.innovationstudies.org

www.crispindia.org

