

## **Innovation- decision process (Technology transfer process)**

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### **Innovation**

Any idea or thing or matter or concept or technology perceived as new by an individual.

### **Major innovation characteristics**

1. Relative advantage (economic benefit; social status; physical facilities- grant, input assistance; mental satisfaction etc.)
2. Complexity (technique easy/complex to understand/follow)
3. Compatibility (with 1. social value- birth control; 2. tradition/experience-fertilization; 3. to meet the felt need )
4. Trialability (scope of small scale trial; less trial results more time for tech dissemination)
5. Observability (techniques with physical observation results good adoption)

### **Adoption**

Full scale use of innovation.

### **Diffusion**

Spreading of technical information in a social system

### **Diffusion process**

- It is a social process
- Communication of innovation in a social system over time
- Social diffusion: technology dissemination from source to peoples /members of a society; irrespective of distance, potential adopter finds and adopts new technology earlier than others
- Geographical diffusion :technology dissemination from one area to another one; peoples under area closure to the source adopts technology earlier than that of other areas

### **Innovation-decision process (Technology transfer process)**

- This is completely a mental process.
- This is a mental process through which an individual passes from first hearing of an innovation up to final adoption.
- Five steps (1. Awareness, 2. Interest, 3. Evaluation, 4. Trial and 5. Adoption) were proposed for adoption process in 1955 which were explained well by the researchers afterwards.

- Considering the limitation (rejection of innovation in different steps), four steps were recommended by Roger and Shoemaker (1971) as 1. Knowledge, 2. Persuasion, 3. Decision and 4. Confirmation.
- Considering the necessity of small scale trial (after decision and before confirmation), Rogers (1983) described five steps as 1. Knowledge, 2. Persuasion, 3. Decision, 4. Implementation and 5. Confirmation.

### **1. Knowledge on innovation/technology**

- i) Awareness knowledge: what, existence, important characters
- ii) How to knowledge: use and application of innovation
- iii) Principle knowledge: theory and practical aspects of the innovation

Required communication channels: radio, television, magazine, poster, fair, friends, neighbours, hatchery/farm operator, fertilizer dealer

### **2. Persuasion**

- Needs further information for mental satisfaction
- Innovation characteristics are considered important
- Required communication channels: group discussion, farm and home visit, neighbours and relatives, radio and television, hatchery/farm operator, fair

### **3. Decision**

- Adoption or rejection of an innovation; adoption period is the total time required from knowledge to adoption
  1. Adoption
    - 1.1 Continued adoption- continue until the better comes, continued adoption (continue against specialist's opinion) and over adoption are not same
    - 1.2 Discontinuance- stop the use of innovation (rejection) after continue for some days; replacement discontinuance- rejection of previous and adoption of new one; disenchantment discontinuance- rejection due to dissatisfaction (causes of dissatisfaction: commitment failure by the extension worker, misuse of innovation by the users, situation change, social pressure)
  2. Rejection
    - 2.1 Active rejection- involved in trial and then rejection
    - 2.2 Passive rejection- rejection without consideration
    - 2.3 Continued rejection- rejection one after another
    - 2.4 Later adoption- finally rejection and then adoption

Required communication channels: farm and home visit, circular letter, result demonstration, tour/visit, television, leaflet etc.

### **3. Implementation**

- Action (use of innovation starts)
  - a. Covert behaviour: mental (will be done)
  - b. Over behaviour: action- change in attitude
  - c. Reinvention- partial change in innovation by the users at adoption and implementation level

Required communication channels: farm and home visit, demonstration visit, tour/visit, television, leaflet, circular letter, R & D meeting etc.

#### 5. Confirmation

- Dissonance
- Collecting support

Required communication channels: neighbours, other adopters, reliable friends.