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<td>Extension programme planning- meaning of planning, programme, importance.</td>
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<td>14</td>
<td>Women development programmes- DWCRA, IKP, ICDS, MSY, ANTWA</td>
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<td>15</td>
<td>New approaches in extension- PRA, NATP, ATMA, SREP, ATIC</td>
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</table>
CHAPTER 1 EDUCATION

“The difference between school and life? In school, you're taught a lesson and then given a test. In life, you're given a test that teaches you a lesson.” Tom Bodett

MEANING OF EDUCATION:
Education is the process of giving training and instruction to people to develop their knowledge, abilities, skills, character and mental powers.

The modern definition of education is the production of desirable changes in human behavior- in knowledge (things known), attitudes (things felt) and skills (things done), in all of them or in one or more of them.

Knowledge: It includes facts, concepts, principles and relationship
Attitude: An attitude can be loosely defined as a feeling towards some object, person, and situation or idea.
Skills: Ability to do things.

- Knowledge or cognitive Eg: Extension worker educates a farmer on cultivation practices in sweet corn (change in knowledge).
- Attitude or affective Eg: Extension worker changes the negative attitude of a women farmer and makes them adopt Mushroom cultivation (things felt)
- Skills or psychomotor Eg: Extension worker improves skills of a cotton farmer on stem application of pesticide (things done)

MEANING OF FORMAL, INFORMAL AND NON FORMAL EDUCATION

Methods of education: education must be conceived as a lifelong learning process. Human beings learn mainly by three methods through:

1. Informal education: It is a lifelong educational process by which every individual acquires and accumulates knowledge, skills, attitudes, and insights, from daily experiences and exposure to environment at home, at play etc
   Eg: Little baby, as she grows up, learns how to recognize her parents and how to eat

2. Formal education: It is highly institutionalized, uniform, full time, chronologically graded, hierarchically structured education system which starts from primary school to university education
   Eg: Education in schools & colleges

3. Non formal education: It is also organized and systematic educational activity outside the framework of formal education system to provide selected types of learning to particular sub groups of population, adults, as well as children according to their need.
   Eg: Extension Education. Extension worker improves the skills in cotton farmers on stem application of pesticides

DIFFERENCES BETWEEN FORMAL, NONFORMAL AND INFORMAL EDUCATION

<table>
<thead>
<tr>
<th>S. No</th>
<th>Criteria</th>
<th>Formal education</th>
<th>Non formal education</th>
<th>Informal education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Concerned with</td>
<td>Educational growth of children and youth preparing them for future</td>
<td>Adults and youth actual life situations</td>
<td>Incidental learning</td>
</tr>
<tr>
<td>2</td>
<td>Attendance</td>
<td>Is compulsory</td>
<td>Participation is voluntary</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Learners</td>
<td>Are relatively more homogenous in terms of their age, educational qualification, experience, knowledge, interests and needs</td>
<td>Are relatively more heterogeneous in terms of their age, educational qualification, experience, knowledge, interests, and needs also vary with value systems, cultural background etc</td>
<td>Individual learning process</td>
</tr>
<tr>
<td></td>
<td>Preconceived ideas</td>
<td>Learners do not generally have any preconceived ideas</td>
<td>Learners generally have preconceived ideas and notions because of their past experiences</td>
<td>May or may not have preconceived ideas</td>
</tr>
<tr>
<td>---</td>
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<td>---------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>5</td>
<td>Curriculum</td>
<td>Fixed and has pre decided subjects. Students should adopt themselves to the curriculum offered</td>
<td>No fixed curriculum and it is flexible to meet the diverse needs and demands of farmers</td>
<td>On the spot learning</td>
</tr>
<tr>
<td>6</td>
<td>Teaching</td>
<td>Is more formal with class rooms, prescribed text books, and examinations</td>
<td>Is more informal without any fixed venue and text books, timings and examinations, it is specific and problem oriented</td>
<td>No teacher (self learning)</td>
</tr>
<tr>
<td>7</td>
<td>Mode of instruction</td>
<td>Vertical- from teacher to student. More instructive in nature</td>
<td>Horizontal. Shared learning between teacher and learner</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Method of learning</td>
<td>Starts with theory followed by practical</td>
<td>Starts with practical and goes on to theory</td>
<td>Self learning</td>
</tr>
<tr>
<td>9</td>
<td>Teacher</td>
<td>Is older and experienced than the learners</td>
<td>May be younger and inexperienced than the learners</td>
<td>No teacher</td>
</tr>
<tr>
<td>10</td>
<td>Knowledge flow</td>
<td>Vertical in nature</td>
<td>Horizontal in nature</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>Evaluation</td>
<td>More formal in the form of marks, grades etc</td>
<td>More informal evaluation</td>
<td>-</td>
</tr>
<tr>
<td>12</td>
<td>Approach</td>
<td>Deductive</td>
<td>Inductive</td>
<td>-</td>
</tr>
<tr>
<td>13</td>
<td>Degrees and diplomas</td>
<td>will be awarded</td>
<td>No degrees and diplomas are awarded but as this non formal education develops certificates may be given as recognition of acquired skill</td>
<td>No degrees and diplomas will be awarded</td>
</tr>
<tr>
<td>14</td>
<td>Orientation</td>
<td>Board based and general in nature</td>
<td>Specific to situation</td>
<td>-</td>
</tr>
<tr>
<td>15</td>
<td>Nature of Education</td>
<td>• It aims at developing learners physical and mental faculties • In the institutional education, the knowledge and to some extent skills of the students are increased</td>
<td>• This aims at developing knowledge, attitudes, and skill in the learners pertaining to specific subject. • By extension education the human behavior is changed.</td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>Duration</td>
<td>It is time bound programme</td>
<td>Free from regimentation, participatory in nature</td>
<td>-</td>
</tr>
<tr>
<td>17</td>
<td>Place of teaching</td>
<td>Learning takes place within the four walls of the institution</td>
<td>Learning in real life situation-in villages and fields</td>
<td>-</td>
</tr>
<tr>
<td>18</td>
<td>Need orientation</td>
<td>It has definite programme and do not run according to the needs of the student</td>
<td>It is according to the needs of the people and availability of resources</td>
<td>-</td>
</tr>
<tr>
<td>19</td>
<td>Problem solving</td>
<td>Problems of the student are solved by the teacher</td>
<td>Problems of the people are solved by the people</td>
<td>-</td>
</tr>
</tbody>
</table>
Chapter 2 EXTENSION EDUCATION AND AGRICULTURAL EXTENSION

Meaning and Definitions

Extension is a programme and a process of helping village people to help themselves, increase their production and to raise their general standard of living. - D. Ensminger 1967

Extension is a two way channel; it brings scientific information to the village people, and also takes the problems of the village people to the scientific institution for solution. It is a continuous educational process, in which both learner and teacher contribute and receive. - B. Rambhai

Extension Education is a science which deals with the creation, transmission and application of knowledge designed to bring about planned changes in the behaviour-complex of people, with a view to help them live better by learning the ways of improving their vocations, enterprises and institutions. - Reddy A Adivi 1993

Extension Education is an applied science consisting of content derived from research, accumulated field experiences and relevant principles drawn from the behavioural sciences synthesized with useful technology into a body of philosophy, principles, content and methods focused on the problems of out-of-school education for adults and youth. - Leagans (1961)

From the above definitions, it is concluded that:

“Extension education is a professional method of non formal education to bring desirable changes in knowledge, skills, attitudes and understanding of the rural people to improve their social, economic and psychological status.”

Having defined Extension as above, we have to recognize the fact that the word has different meanings for different individuals and groups depending mainly on their personal interest, background and technical training etc.

For instance, in U.S.A. where Extension work is purely educational in nature, the scope of the word ‘Extension’ may be summed up in one sentence-Extension is an educational organization, an educational process and an educational job. Similarly, in our country the word ‘Extension’ is used to connote mainly three different aspects of extension work-the job, the agency (or organization) and the means (or process).

Many workers and lay people feel that agricultural extension is merely the process of providing the farmers with the supplies and services required by them for increasing production. Some administrators think that agricultural extension means planning and organizing a good programme of agricultural production at the national, state, district and or block level and ensuring its proper execution.

On the other hand, many of the agriculturally trained workers and teachers of Extension consider agricultural extension as an educational process, a system of teaching or extending useful information, based on research and/or practical experience, which if accepted and adopted by the farmers, will serve to increase production and net income.

AGRICULTURAL EXTENSION
• It is a professional method of non-formal education aimed at inducing behavioural changes in the farmers for increasing their income through increased production and productivity by establishing firm linkages with research for solving farmer’s problems ensuring adequate and timely supply of inputs and using proven methods of communication for speeding of the process of diffusion and adoption of innovations. - Y.C. Sanoria
• It may be defined as a special branch of Extension Education which deals with the economic and social aspects of people engaged in or associated with agriculture. - National Commission on Agriculture, 1976

Some Important Concepts of Extension Education:
“A concept is an abstraction from observed events or a short hand representation of a variety of fact.” The purpose of concept is to simplify thinking by summing up of a number of events under one heading. “Concept is an idea, general notion or way in which one can see a thing in his mind. In more general, concept means assigning meaning to the words.”

CERTAIN CONCEPTS OF EXTENSION
There are three main concepts in Extension. They are
1. Education
2. Extension Education Process
3. Salesmanship

1. THE BASIC CONCEPT OF EDUCATION: The basic concept of Extension is that it is Education.

What is Education? Education is the production of desirable changes in human behaviour. Extension is providing education. The three kinds of behavioural changes produced through Extension Education are illustrated below:

1. Change in knowledge
   Eg: Extension worker can improve knowledge of paddy farmers on WTO through trainings.  
   Eg: Knowledge of rural women on pesticide hazards can be improved by giving trainings

2. Change in skills (Mental and physical).
   a) Mental skills: Application of knowledge in solving the problems of life i.e ability of the person to work out solutions and ways to meet new problems.  
      Eg: Calculation of seed rates, fertilizer dosages, pesticide dosages etc.

   b) Physical skills: Ability of a person to do any work physically
      Eg: Skills of women farmers on mushroom cultivation can be improved by demonstrations.
      Eg: Skills of farmers on poison bait preparation for Spodoptera management can be improved by demonstrations.

3. Change in attitude: Eg: Attitude of farmers can be changed from paddy cultivation to flower cultivation through exposure visits
   Eg: Negative attitude of women farmers towards mushroom consumption can be changed by explaining nutritional importance to them.

   Change in attitude is most important one usually neglected. Extension worker may improve knowledge and skills of farmers in SRI method of paddy cultivation but unless the attitude of farmers is made positive towards SRI, implementation does not happen.

Example for KAS change in a single programme.
Rodent Management:
Change in Knowledge: Farmers are trained to make them aware of rodent management techniques viz., modern rat traps, use of celphos tablets, bromodiolone, fumigation techniques and ITK’s and dosages, time, method and place of application of chemicals etc.

Change in skills: Farmers are demonstrated on how to locate live burrows, baiting procedure etc

Change in attitude: Farmers attitude is killing rat is a sin because it is the asana of lord Ganesh, this attitude has to be changed by explaining them the extent of losses caused by rodents to them and to their neighbours, if left uncontrolled.

How attitudes change?

(A) Naturally:

1. As a natural result of changes in age levels Eg: A farmer when he is young he may be fascinated by city jobs but after he gets old he realizes the importance of his own Agriculture.
2. As a result of assuming new responsibilities Eg: A farmer may have self centered interests when he is a member of RMG but when he becomes president of RMG he thinks of group development.
3. As a sequel to mark changes in status Eg: When a farmer becomes rich in real estate boom his attitude towards Agriculture may change, he may prefer commercial business to Agriculture.
4. Abrupt changes in attitude may occur as a result of some personal or national crisis Eg: If a farmer loses his entire belongings in floods he may lose interest in Agriculture and migrate to city for better livelihood.
5. Attitudes are also changed through rationalization in order to accept a personal situation or to modify or ignore it.

(B) Changes in attitudes due to planned sharing of:

(i) Common knowledge (ii) Planning (iii) Decision making

2. THE CONCEPT OF THE EXTENSION EDUCATIONAL PROCESS

The earlier concept of Education aiming at improvement in Knowledge, Attitude, Skills happens step wise in a cyclic manner which is termed as Extension Education Process

The concept of Extension Education Process was developed by Dr. J. Paul Leagans. According to him, Extension Education takes place as a process, The Education starts with study of present situation and identification of problems. Based on the problems identified, solutions are found out and objectives are formulated. In the third phase, plan of work is taught on how to attain the objectives, then the entire process is evaluated and tested whether formulated objectives are attained or not and in the final stage reconsideration about the unattained objectives and unaddressed problems is done. Any Extension work undertaken in villages follows the same path.

Fig: Extension Education Process
I. The first phase is analysis of the situation. This requires a large amount of facts about all aspects of the situation. Facts are needed about the people, their interests (Agriculture, or Poultry or Ag + Horti) education (Eg: literate: 21%, illiterate: 76%, semiliterate: 3%), what they think they need, their social customs, habits and folkways. Facts are needed about the physical situation such as soils Eg: Red soils (29%), black soils (50%), type of farming(Agriculture, or Poultry or Ag + Horti), markets (Mandi or regulated market), size of farms (small, medium, marginal or big), cropping systems (Paddy fallow pulses or Maize, Maize- Groundnut), housing condition (kuccha or pucca houses), community services and communications.

II. The second phase is deciding upon objectives. It is necessary to distinguish between levels of objectives by separating the general objectives from the specific or working objectives. The planning process must enable the people to select a limited number of problems and to state their objectives clearly. The solutions to be offered must give satisfaction. Objectives should express the behavioural changes in people as well as the economic or social outcomes which are desired.

III. The third phase is teaching. This involves choosing (1) the content or what is to be taught (Pest Management or fertilizer management or organic farming etc) and (2) methods and techniques of communication (Lecture or Method demonstration or Exposure visit). We must use from six to nine different methods of communication to stimulate learning.

IV. The fourth phase in evaluation of the teaching. This should determine to what extent objectives have been reached. This will also be a test of how accurately and clearly the objectives have been stated. The process of evaluation may be simple and informal or it may be formal and very complex.

V. The fifth phase is a reconsideration after evaluation has taken place. This step consists of a review of previous efforts and results which reveal a new situation. If this new situation shows the need for further work, then the whole process may begin again, with new or modified objectives. Hence this process is continuous.

AN EXAMPLE OF EXTENSION EDUCATION PROCESS

I. ANALYSIS OF SITUATION

- VILLAGE INFORMATION: Type of soils, type of crops, nature of irrigation, soil problems, pest problems, markets, godowns, illiteracy, farm holdings, extension services, live stock, farmers organizations, Agricultural inputs, etc

- PROBLEMS IDENTIFIED
  1. Wild boars
  2. Heliothes in cotton
  3. Electricity problem
  4. Lack of good market price for produce
  5. Low yields in paddy due to water shortage

Out of the five problems, fifth one is the major problem in the village

II. DECIDING UPON THE OBJECTIVES: Keeping in view of the above indentified problem, the following objectives were chalked out.

General Objective: To improve paddy yields by adoption of SRI in Pargi village.
Specific objectives:
1. To improve farmers knowledge on SRI by organizing training programmes.
2. To develop skills among farmers in SRI by conducting demonstrations.
3. To improve yields in SRI paddy by 40%

III. TEACHING PLAN OF WORK: To carry out the above objectives successfully, the following teaching plan of work is prepared.

<table>
<thead>
<tr>
<th>S no</th>
<th>Content</th>
<th>Teaching methods</th>
<th>Teaching Aids</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Seed rate, soaking and incubation</td>
<td>Lecture + Demonstration</td>
<td>Powerpoint presentations, video cassettes, posters, flip charts, live samples and SRI implements</td>
</tr>
<tr>
<td>2</td>
<td>Raised nursery bed and sowing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Main field preparation and transplanting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Running of marker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Fertilizer management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Weeding and conoweeder operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Irrigation management</td>
<td></td>
<td></td>
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<tr>
<td>8</td>
<td>Pest and disease management</td>
<td></td>
<td></td>
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<tr>
<td>9</td>
<td>Harvesting</td>
<td></td>
<td></td>
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<tr>
<td>10</td>
<td>Post harvesting</td>
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</table>

IV. EVALUATION OF TEACHING: As scheduled in the beginning of the programme, whether five training programmes and five demonstrations were organized or not? If not organized, what are the reasons?

The change in the knowledge is measured with the help of an interview schedule and it was found that, only 60% of the trainees gained the knowledge on SRI method.

The farmers are asked to raise nursery bed, mainfield, run a marker and conoweeder practically in the field and observed that, only 40% of the farmers have gained the skills.

After harvesting the crop, it as found that, the yield increase was only 20%, instead of targeted 40%.

V. RECONSIDERATION: Reasons for differences in the knowledge and skills gained by the farmers

Reasons for attaining low yields than the targeted 40% improvement in the yields were reviewed

3. THE CONCEPT OF SALESMANSHIP

Extension teaching is sometimes compared to commercial Salesmanship. It is pointed out that the extension worker is primarily engaged in the “selling” of ideas. If we compare Extension Personnel with salesperson, we come across many similarities between them.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Extension worker</th>
<th>Commercial sales man</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sells new ideas</td>
<td>Sells articles of a shop</td>
</tr>
<tr>
<td>2</td>
<td>Personnel’s aim is welfare of the society without any self-interest</td>
<td>Aim of salesperson is limited to him or is to earn money</td>
</tr>
<tr>
<td>3</td>
<td>Salesperson sells materialistic articles by which only status of the family can be raised</td>
<td>Extension Personnel provide educational knowledge by which desired change can be brought about in the awareness, capacity of work and their views, so that all-round development of that person could be achieved.</td>
</tr>
</tbody>
</table>

Some important terminology used in Extension:
Extension Work – It includes the process of teaching and learning. Besides this process, extension work includes organization, administration, supervision & financial as well as the program management for the overall development.

Extension Service: An organization and or a programme for agricultural development and rural welfare, which employs the extension process as a means for programme implementation. It is thus same as that of extension work except that in extension service there has been greater emphasis on service. Eg: DWCRA, a Rural Development Programme, helps women farmers group of ‘X’ village in preparation and marketing of Vermicompost.

Extension Process: The extension process is that of working with rural people through out-of-school education, along those lines of their current interests and needs which are closely related to gaining a livelihood, improving the physical level of living of rural families, and fostering rural community welfare. Eg: Extension worker motivating the farmers to take up small scale biopesticide production unit.

Extension Job: The job of extension in agriculture and home economics is to assist people engaged in farming and home-making to utilize more fully their own resources and those available to them, in solving current problems and in meeting changing economic and social conditions. Eg: Extension worker demonstrates Neem Seed Kernel Extract (NSKE) preparation from neem seeds for management of sucking pests in cotton.

CHAPTER 3-EXTENSION EDUCATION – OBJECTIVES,PRINCIPLES,SCOPE AND IMPORTANCE

OBJECTIVES OF EXTENSION

Objectives are expressions of the ends towards which our efforts are directed. In other words, an objective is a statement of change in knowledge, feeling or action we want to bring about in people. An objective is that which a person, group or agency sets before itself as an object or condition to be attained.

Some extension workers like to make a distinction between the meaning of “objectives” and “goals”. Objectives are defined as “directions of movement”, while a Goal is defined as the distance in any given direction one expects to go during a given period of time.

The fundamental objective of extension is the development of the people or “the Destination Man” mentioned in the context of Community Development in India.

More specifically stated, the following are general objectives or functions of Extension.

1. To assist people to discover and analyse their problems their felt and unfelt needs.

Need is a difference between what is and what ought to be. It is the lack of something. Need is what one desires

- **Felt needs/recognized needs** are those existence the people are aware and feel necessity of fulfilling them.
- **Unfelt needs/Unrecognized needs** are those whose necessity the people don’t realize at present, but these none the less are important.

<table>
<thead>
<tr>
<th>Example of felt needs</th>
<th>Examples of unfelt needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low yields in paddy- due low yielding varieties, wildboars and rodents</td>
<td>Soil salinity problem, water shortage at maximum tillering stage</td>
</tr>
<tr>
<td>low yields in maize- due to water shortage, pest problems</td>
<td>Poor varieties</td>
</tr>
</tbody>
</table>

2. To develop leadership among people and help them in organizing groups to solve their
problems. **Ex** formation of DWACRA groups, or RMG or SHG or FIG or CIG

3. To disseminate information based on research and / or practical experience, in such a manner that the people would accept it and put it into actual practice. **Ex**: Transfer of *IPM* in *cotton* through training programmes and demonstrations

4. To keep the research workers informed of the peoples problems from time to time, so that they may offer solutions based on necessary research. **Ex**: Botrytis in castor, Heliothis in *cotton*, Fusarium wilt in *redgram*, Non performance of *conoweeder* in heavy black soils etc.

The major objectives of Extension may also be categorized as follows.

(i) Material – increase production, income

(ii) Educational – change the outlook of people or develop the individuals.

(iii) Social and cultural – development of the community.

**LEVELS OF OBJECTIVES:**

1. **Fundamental objectives**: These are all-inclusive objectives in extension, e.g., the fundamental objective of extension work is development of man or the full development of individuals. Such objectives are generally found in legislation and charters of organization e.g. Good life, better citizenship, democracy etc.

2. **General Objectives**: These are more definite (specific) than fundamental objectives, and are directly associated with Extension Service and are generally found in statements of policies and purposes. **E.g.** helping rural people to have better home living.

3. **Working Objectives**: In these specific subject-matter approach is focused at individual or group.

   **Ex**: To improve farmers knowledge on cut flower cultivation

   Working objectives have three parts-

   1. **Audience**- Who are to be changed
   2. **Type of change**- Knowledge, attitude or skill
   3. **Content or message**- What are you trying to teach (What you want them to know, feel or do)

**FOUR GREAT PRINCIPLES OF EXTENSION**

A principle is a statement of policy to guide decision and action in a consistent manner. Thus a principle is a universal truth or a fundamental truth and a settled rule of action.

According to Mildred Horton, 1952 the four great principles underlying extension services are:

1. The individual is supreme in democracy.
2. The home is a fundamental unit in a civilization.
3. The family is the first training group of the human race.
4. The foundation of any permanent civilization must rest on the partnership of man and the land.

If we accept these principles as those underlying our extension activities, we must plan our work in accordance with them. Our objective in extension work is to help people reach higher levels of living – physically, mentally and spiritually. To reach these higher levels of living, people must be educated and trained to meet their responsibilities in relation to God, to their neighbours and to themselves. They must also know how to meet the responsibilities imposed by their environment. So we work with them as individuals, as families in the home, and with their environment.
PRINCIPLES OF EXTENSION EDUCATION

1) Principle of interests and needs: To be effective, extension work must begin with the interest and needs of the people. Many times the interests of the rural people are not the interests of the extension worker. Even though he sees the needs of the people better than they do themselves, he must begin with the interests and needs as they (the people) see them. In this way only can the extension agency mould the needs and interests of the people into realistic needs. Needs that can satisfy the individuals, groups, community and national interests, needs that can be fulfilled with the available resources should be fulfilled first.

Eg: Extension work is successful if it is according to peoples needs- Demonstration on paddy cultivation in low lying areas

Eg Extension work fails if it is not according to peoples needs- Demonstration on castor cultivation in low lying areas

2) Grass-roots principle: For extension work to be effective and real, it has to be synthesis of democracy obtained at the level of the family and more particularly at the village level. Things must spring from below and spread like grass. At the same time, modern science calls for an advanced stage of organization of wiser coordination of thinking and action than is feasible in a single family or a single village. Aim of extension should be on local or existing situation. Programmes should start from grass root level. Eg: Extension worker should train illiterate farmers initially on marketing aspects rather than training on complicated topic like WTO or GATT.

3) Principle of cultural differences: Cultural differences exist between Extension worker and farmer. In order to make extension programmes effective, the approach and procedure must be suited to the culture of the people who are taught. Different cultures require different approaches. A blueprint of work designed for on part of the globe cannot be applied effectively to another part, mainly because of the cultural differences. These differences can be perceived in the way of life of the people, their attitudes, values, loyalties, habits and customs. Eg: A demonstration on Mushroom recipes should not be conducted in a village where Mushrooms are not eaten.

4) Principle of cooperation and participation: The participation of the people is of fundamental importance for the success of any educational Endeavor. People must share in the development of a programme and must feel that it is their own programme. Eg: Success of Annahazare water shed in Ralaegoan sidhi is due to peoples participation

5) Principle of learning by doing: Learning by doing involves use of maximum number of senses, hence it is very effective in changing behavior. Eg : Demonstration on working of Conoweeder in SRI cultivation is very effective than lecture method. In extension work, farmers should be encouraged to learn new things by doing and by direct participation.

6) Adaptability principle in the use of extension teaching methods: No single extension teaching method is effective under all situations. The use of teaching methods must have flexibility to be adopted to the members of a community who differ in age, education, economic status, sex and proneness to change etc. Extension agents have found that they need a large number of teaching methods out of which they can select and revise the one effective for the purpose and best suited to the culture of the people. Eg: LCD power point presentations are not to be used in a interior village where electricity is uncertain, instead posters, charts, live samples can be used.
7) **Principle of leadership:** A good rule in extension work is never do anything yourself that you can get someone to do for you. The involvement of leaders in extension programmes is the one single factor that determines the success or failure of those programmes. Local leaders are the guardians of local thought and action and can be trained and developed to best serve as interpreters of new ideas to the villagers.

*Eg: Farmers gets easily convinced about latest technology if it is adopted by a local leader than taught by a extension worker.*

8) **Whole family principle:** The family is the unit of any society. All the members of the family have to be developed equally by involving all of them. This is because of the following reasons:

The extension programme effects all members of the family, the family members have great influence in decision-making, it creates mutual understanding, it aids in money management, it balances farm and family needs, it educates the younger members, it provides an activity outlet for all, it unifies related aspects, such as the social, economic and cultural issues of the family, it assures family service to the community and society.

9) **Principle of satisfaction:** Satisfaction of the people is very essential in extension work. Unless the people are satisfied with the end product of any programme, it is not going to be able to run. They must continue to act out of their own conviction and that is possible only when they derive full satisfaction through adoption of innovations well suited to their needs and resources.

*Eg: If an farmer is satisfied by seeing baby corn cultivation in a exposure visit he tries to adopt it.*

**IMPORTANCE OF EXTENSION**

Extension lays emphasis on “How to teach” instead of on “What to teach” so that the people can be encouraged to adopt new research techniques easily. In other words, if a person is very knowledgeable of various methods and techniques but does not know how to explain them or express them, then his knowledge has no meaning. Therefore, the power to express knowledge and viewpoint also plays a crucial role.

Now, Extension Education is included in the syllabus of Graduate and Post-Graduate classes. Therefore, it is necessary to understand basic concept of Extension Education for those who are associated with it in some way or the other.

The discipline of extension education is to generate knowledge relating to methods, tools and techniques for the lakhs of field extension functionaries who in turn could utilize it for accelerating the change process in the society. It also has to take into account the various problems emerging at the social level due to implementation of developmental programmes. The flow of such information is maintained by the Extension Service through its feedback mechanism.

Extension Education is primarily for the rural development. Its main objective is to bring necessary change in the beliefs or views of people. Extension education is an educational process by which capabilities among people are developed to understand their problems and resources. It is utilized to make scientific methods available to the rural people, so that they can raise their agricultural production and their standard of living. In India, the aim of extension education is community development, which is possible only by bringing change in the behaviour of rural people. Extension education plays major role in bringing desirable change in rural people.
You cannot apply yesterday’s methods today and be in business to-morrow” is a maxim which applies as much to the economy of a nation as to the business conduct of any group or individual. The need is obvious especially for the rural economy, with its major component of agriculture, to keep pace with the brisk changes characteristic of modern times. In other words, the rural people should know and adopt useful research findings from time to time and also transmit their problems to the research workers for solution. This task is done by Extension worker.

The research workers cannot disseminate or transfer the latest technology to the farmers directly because of these reasons: Lack of time for the research workers to go to the farmers fields, they are not equipped or trained in the job to persuade the farmers to adapt the latest technology, lack of transport facilities Language problem to speak and convince the farmers, on the other hand, farmers cannot adopt the latest technology because of the following reasons, the farmers do not know the location of various research stations, majority of the farmers are illiterates to go through the publications and research journals, farmers are economically handicapped to come and consult the research workers, problem of language to speak with the research workers.

Hence, an agency is required to minimize the gap or bridge the gulf between research workers and the farmers. This agency is termed as Extension and the people manning (working in) this agency are called Extension workers.

**Scope of Agricultural Extension :** The following nine areas of programme emphasis indicate the scope of Agricultural Extension work:

1. Efficiency in agricultural production.
2. Efficiency in marketing, distribution and utilization.
3. Conservation, development and use of natural resources.
4. Management on the farm and in the home.
5. Family living.
6. Youth development.
7. Leadership development.
8. Community development.
CHAPTER 4  RURAL DEVELOPMENT

"India lives in its villages" - Mahatma Gandhi.

MEANING AND DEFINITIONS

Rural: According to International Encyclopedia of Social Sciences, there is a broad general consensus that the term rural refers emphatically to population living in the area of low density and to small settlements.

Development: "The term development, according to Lale (1975) – is a process of improving standards of the masses of the low income population residing in rural areas making the process of rural development self-sustaining".

Rural Development is a strategy to improve the economic and social life of a specific group of people- the rural poor, including small and marginal farmers, tenants and landless

Rural Development is an improvement in the living standards of the masses of low income population residing in rural areas and making the process self sustaining

The term rural development combines two words Rural and Development.

The term Rural and Development- is used in different ways:
- As a Concept – Development of Rural areas
- As a phenomenon- Interaction between institutional factors
- As a Strategy- Approach to bring positive change in rural life

Ultimate Objective of rural development is : Improving the quality of life of rural poor and the rural weak.

CONCEPTS OF RURAL DEVELOPMENT: According to World Bank (1975) – the rural development in general terms, is a strategy designed to improve economic and social life of people in a rural settlement and in particular, it focuses attention on the rural poor comprising the small and marginal farmers, tenants, and landless labourers.

Rural development is the dynamic process of development of the rural people through various programmes and projects so that they can become self-reliant citizens of the country. The work is done by involving various agencies and organizations, and above all, the local people themselves.

It involves extending the benefits of development to the poorest among those who seek a livelihood in the rural areas. The group includes small scale farmers, tenants and the landless.

As a phenomenon, rural development is the end result of interaction between various physical, technological, economic, socio-cultural and institutional factors. motivate the people for adoption.

As a strategy, it is designed to improve the economic and social wellbeing of a specific group of people – the rural poor.

As a discipline, it is multidisciplinary in nature, representing an interaction of agricultural, social, behavioral, engineering and management sciences.

In the words of Robert Chambers (1983), Rural development is a strategy to enable a specific group of people, poor rural women and men, to gain for themselves and their children more of what they want and need. It involves helping the poorest among those who seek a livelihood in the rural areas to demand and control more of the benefits of rural development. The group includes small-scale farmers, tenants and landless.

Rural Development is a process of developing and utilizing natural and human resources, technologies, infrastructural facilities, institutions and organizations, and government policies and programmes to encourage and speed up economic growth in rural areas, to create jobs and to improve the quality of rural life towards self-sustenance.

OBJECTIVES OF RURAL DEVELOPMENT

1. Providing goods and services in terms of social and economic infrastructure
2. Increasing the income of every rural family on a self sustaining basis
3. Creation of additional employment opportunities in rural areas.
4. It implies a broad based reorganization and mobilization of the rural masses so as to enhance their capacity to cope effectively with the daily tasks of their lives and with changes consequent upon this.
5. Improvement of services or rural masses in the process.
6. Improvement of know-how, which is to be implemented to the rural people.

According to Singh (1999), the main objectives of rural development in all societies, irrespective of their economic, political and socio-cultural systems are:

- To make available and improve the distribution of life-sustaining goods, such as food, clothes, shelter, health and security;
- To raise per capita purchasing power and improve its distribution by providing better education, productive and remunerative jobs and cultural amenities; and
- To expand the range of economic and social choices to individuals by freeing them from servitude and dependence.

IMPORTANCE OF RURAL DEVELOPMENT

Social significance
- Innumerable rural problems
- Social change
- Best utilization of resources
- Infrastructural facilities

Economic significance
- National Income
- Employment and Source of livelihood
- Fuel and fodder
- Industrial Development
- Internal Trade and Transport
- International trade
- International ranking
- Capital formation and Investment

Political Significance: Political stability

PROBLEMS IN RURAL DEVELOPMENT
1. Most people are illiterate- for such people extension teaching methods like Demonstrations, individual and group approaches, Training classes require large number of extension workers.
2. Inadequate communication channels especially Mass Media in rural areas
3. Limitation of Funds and staff for training the farmers
4. As a traditional society with old ways and practices does not want to take risk unless they see the results.
5. In an illiterate traditional society real leadership could not come forward.
6. Preaching to rural people and educating them in new techniques require specialized skilled workers. It is very expensive to produce such workers
7. Communities and individuals differ in their needs as their circumstances change.
8. Organizational constraints
CHAPTER 5 EXTENSION PROGRAMME PLANNING

For any Extension programme to be effectively undertaken by an extension worker in a village (Eg: Project on village development or demonstrations or trainings etc) planning is essential. In this chapter an attempt is made to clarify about extension programme and planning. For the sake of easy understanding Extension Programme planning can be broken down into various words, which are clearly explained as:

**Extension programme:** According to Kelsey and Hearne (1967) "an Extension programme is a statement of situation, objectives, problems, and solutions. It is relatively permanent but requires constant revision”. It forms the basis for extension plans. Eg: Mandal plans prepared by DAATTC's of ANGRAU.

Leagans (1961) says ‘An extension programme is a set of clearly defined, consciously conceived educational objectives derived from an adequate analysis of the situation, which are to be achieved through extension teaching.

We can define Extension Programme as “extension programme is a written statement of situations, objectives, and a problem which is prepared by adequate regulated planning”.

**The function of extension programme** is to provide a clear guide, a blueprint, or a plan useful to extension worker in conducting ongoing extension programmes.

**Extension programme projection** can be defined as an administratively realistic form of long-range development involving the scientific approach in assembling facts as the basis for intelligent decision making by a broadly representative group of local people - National Task Force, USA

**Meaning of Planning and programme planning:**

1. The meaning of planning is to solve the problems by using the available resources, and for it, to make necessary policy and to work for achieving the goal.
2. Planning is a process which involves studying the past and present in order to forecast the future and in the light of that forecast determining the goals to be achieved and what must be done to reach them.
3. Planning is to make efforts to solve the problems permanently, which can be achieved through co-operative efforts, means and aims. The effective planning is that in which the maximum number of objectives are fulfilled.
4. **Planning** is designing a course of action to achieve ends
5. **Programme Planning:** It is a process of working with people in an effort to recognize the unsatisfactory situation and determine possible solutions or objectives or goals

**Meaning of Programme Planning:** It is a decision making process involving critical analysis of the existing situation and the problems, evaluation of various alternatives to solve these problems and the selection of the relevant ones, giving necessary priorities based upon local needs and resources by the cooperative efforts of the people both official and non official with a view to facilitate the individual and community growth and development.

It is obvious from all the definitions that programme planning is the knowledge of present situations, its analysis to identify the problems, to put in the sequence according to needs, to determine the objectives, to find out the scientific solution, and to determine the activities for the selected work and where, when and by whom it should be done.

**EXAMPLE**

<table>
<thead>
<tr>
<th>Village agriculture problems</th>
<th>Alternative solutions</th>
<th>Prioritization of problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil salinity</td>
<td>Adding gypsum</td>
<td>Soil salinity</td>
</tr>
</tbody>
</table>
Growing Green manure crops

<table>
<thead>
<tr>
<th>Non availability of seeds in time</th>
<th>Cultivation of tolerant crops</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placing indents well in advance</td>
<td>Production of own seed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lack of irrigation water</th>
<th>Cultivation of Irrigated Dry crops</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of micro irrigation</td>
<td>Discontinuation of Paddy cultivation</td>
</tr>
</tbody>
</table>

| Pest problems | Adoption of IPM practices. |

Local resources:
1. Seeds of Groundnut crops and gypsum are available with the department
2. Subsidies are given for ID crops and micro irrigation

**Extension Programme Planning**

Programme planning is the process of bringing about planned change. It is a deliberate and collaborative process involving change agent and client-systems, which are brought together to solve a problem, or more generally, to plan and attain an improved state of functioning in the client-system by utilizing and applying valid knowledge.

It is the process of analyzing existing situation, problems critically finding out solutions to these problems, prioritizing and selecting the relevant solutions based on local needs and resources and finally preparing a written statement indicating the situation, objectives, problems and solutions with cooperation from all the stakeholders.

The programme development process has been defined as a continuous and cooperative activity involving lay people and the Extension staff, in which problems are identified, objectives are set forth and action is taken to reach the objectives.”

The function of extension programme planning is to provide a clear guide – a blue print or a plan useful to extension workers in conducting an ongoing educational programme. A well-developed programme is to the extension worker what a compass is to the seaman.

**Other important related terminology:**

**Situation** is a brief statement of the more general factual information together with the needs and desires of the people.

**Plan of work** is an outline of activities so arranged as to enable efficient execution of the entire programme. It answers the questions how, when, where and by whom the work is to be done.

**Project** is an outline of procedure and pertains only to some phase of extension work.

**Calendar of work** is a plan of work arranged chronologically.

**Aims** are generalized and broad statements of directions with respect to given activities.

- **Eg:** Extension Worker's aim is to improve farmers' economic condition.

**Objectives** are expressions of ends towards which our efforts are directed

- **Eg:** To increase paddy yield by 40%

**Goal** is the distance in any given direction one expects to go during a given period of time.

- **Eg:** To increase Paddy yield by 20 Q/ha. in the current year.

**Plan** is a predetermined course of action.

**Problem**- It is a condition that the people after study, with or without help have decided needs changing

**Solution**- It is a course of proposed action to change an unsatisfactory condition to one that is more satisfying

Programme development process is defined as a continuous and cooperative activity involving lay people and the extension staff in which problems are identified, objective are set forth and action is taken to reach the objectives - Sanders

Entire programmes should be based upon needs of people,
IMPORTANCE OF PROGRAMME:
1. Helps in careful consideration of what is to be done and why.
2. Helps to furnish a guide or straight edge against which to judge all new proposals can be
   compared. A good programme guide tends to keep everyone concerned. It keeps them to avoid
   less important issues.
3. Programme helps to establish objectives towards which progress can be measured
   and evaluated.
4. Formulation of a programme gives continuity particularly during changes in
   personnel.
5. Programme helps to aid in the development of leadership.
6. It also serves as a means of choosing : a) the important from the incidental
   Problems b) the permanent from the temporary changes.
7. It helps to prevent mistaking the means for the end, and to develop both felt and
   unfelt needs.
8. Programme avoids wastage of time and money and promote general efficiency.
9. Programme helps to co-ordinate the efforts of the different people working for rural development.
10. Programme gives the extension workers more support by local people, thus
    ensuring cooperation and financial support.
11. Finally it helps to produce a written form of statement for general public use.
Chapter 6-Principles and steps in programme development process

PRINCIPLES OF PROGRAMME PLANNING:
According to Kelsey and Hearne, sound extension programme building is based

1. Sound programme building is based on the analysis of the facts in the situation
2. Sound programme planning selects problems based on needs
3. Good programme building determines objectives and solutions, which offer satisfaction
4. A good programme has permanence with flexibility
5. A sound programme has balance with emphasis
6. A good programme has a definite plan of work
7. Programme building is a continuous process
8. Programme building is a teaching process
9. Programme is a coordinating process
10. Programme planning provides opportunity for evaluation of results

1 Sound programme building is based on the analysis of the facts in the situation:
   to be effective every programme must start with the people and situation as they are and
   then build towards the ultimate goal of better living. It is important to take in to account all
   the facts concerning the people, the land, the community, the institutions, the organizations
   and the agencies operating in the area. Factual material is obtained through block staff,
   district staff available through local institutions like Panchayat, school, cooperative
   societies, youth club etc.

2. Sound programme planning selects "Problems based on needs:
   All the problems
   cannot be attacked once. It is necessary to select that most urgent concern. Choice of the
   problems must be among those brought out by the analysis of facts regarding what are felt
   and unfelt needs. To be effective extension work must begin with the interests of the
   people. Problems should be related to family, community and block situations. The
   problem should be arrived at democratically through participation of people, extension staff
   and others who can contribute to programme

3. Good programme building determines objectives and solutions, which offer satisfaction.
   In order to hold interest the workers, must set specific objectives for whom
   they are intended should understand solutions, which are within reach and will give the
   satisfaction of achievement of objectives. They should be agreed upon by the people and
   be attainable and they should be stated in terms that can be measured. Objectives which
   are determined by extension worker should be made clear to the people

4. A good programme has permanence with flexibility:
   A good programme should be permanent. Without flexibility, the programme cannot meet the needs of the people. It has
   been found that particular items need to be changed to meet important emergencies. A
   programme should be prepared well in advance of its execution but not too far ahead of
   time. Ordinary events may be subjected to change in part though not in total. Programmes
   should meet long term and short term changes to meet special emergencies

5. A sound programme has balance with emphasis:
   A good programme should cover
   the majority of their important interests. It must be comprehensive enough to embrace all
   the groups and all problems of family, village, block and district. It is futile to deal with one
phase of life in a community as an end itself. At the sanction a few of the most important or timely problems should be chosen for emphasis.

6. **A good programme has a definite plan of work:** No matter how well the programme is sorted out it is of no use unless carried out. This implies good organization and careful planning of action. A plan of work is answer to what, where, when and how the job will be done. It also includes part to be played by extension worker, part played by agencies and plans for measuring results.

7. **Programme building is a continuous process:** It is never finished. The situation changes through economic and social trends through actions of people, problems change, emphasis change and phases may be completed and new problems may arise and needs new solutions and new programmes.

8. **Programme building is a teaching process:** The process of programme building itself an excellent teaching device. It teaches people to think, to reason, make decisions, and act through participation. It is time consuming but good investment.

9. **Programme is a coordinating process** Programme planning process find out the most important problems and seeks agreement on definite objectives. It obtains cooperation of many people and coordinates the efforts of leaders, groups, agencies and promotes the best use of all resources.

10. **Programme planning provides opportunity for evaluation of results**- All attempts at evaluating extension work are dependent on clear objectives and records of results in terms of which changes in the action of the people are shown.

**STEPS FOR MAKING A PROGRAMME OR PROGRAMME DEVELOPMENT PROCESS**

The five phases of the Paul Leagans concept of extension educational process can be broken up into the following 9 specific steps in programme planning process.
The first 4 steps constitute the **Extension Programme** and the next 5 steps, the **Annual plan of work**

1. **Collection and analysis of data:** Good planning depends on the collection of adequate, reliable data about the situation. The facts must be carefully analyzed and interpreted through the joined efforts of technically trained staff and progressive village leaders. All extension workers must possess the basic farm and family information for preparing sound family, village and block plans which should include:
   a. Basic information about the village includes the data pertaining to population, total number of families, main occupations of the village, communication facilities, schooling facilities, medical facilities, drinking water facilities etc.
   b. Information about farm management and production programmes includes total cultivated area of the village, size of agricultural holdings, types of crops, soil types, disease and pest control, agricultural machinery etc. It is necessary for increasing agricultural production in the village.

2. **Determination of objectives:** Effective rural development programmes must have clear and significant objectives before deciding the project to be undertaken. The basic objectives of the programme are to be determined by the villagers in consultation with extension personnel. The villagers should have the clear concept of the project by deciding on objectives. The involvement of various institutions and voluntary organizations should be secured. The objectives of the programme for family plans could be decided upon by the head or active members of the participating family and by Panchayats in case of objective to be undertaken on community or village basis. The objectives should specify behavioral changes of the people.

3. **Definition of problems:** The village activities should be classified properly before planning. This helps in execution of the programme. Problems can be classified into 3 categories as follows:
   a. Problems solved by the villagers with their own resources like improving the yields by adopting improved practices, digging compost pits, organizing rural youth clubs etc.
   b. Problems that need community cooperation without involving much outside assistance like construction of village approach road or deepening of tank etc. by volunteering efforts.
   c. Problems that require outside assistance on account of high cost involved and the technical knowledge needed like purchase of plant protection equipment, construction of school building etc.

In this way the internal and external resources can be utilized economically and quicker results obtained. It is also desirable to break up complex problems step by step in to simple problems.

4. **Finding solutions to problems:** The extension workers should advise the villagers and guide them in finding the solutions to the problems. The solutions offered should be practicable, economical and should result in satisfaction and learning. District and state
specialists should help the extension functionaries at the village and block level in doing this work

5. Selecting problems and determining priorities: All the problems cannot be tackled simultaneously even though solutions are known for them. At this stage it is essential to set up programme committees at village and block levels to review the situation periodically for determining how much progress has been made on projects under way, which projects are completed and which new projects need to be started. Extension workers have to play a great role in this respect.

6. Preparing a plan of action or Annual plan of work: A plan of work is listing of activities by which objectives already decided upon are to be achieved. It includes the methods of executing a programme, timing and persons responsible for carrying out programme along with evaluating the progress. It is an important step to solve selected problems. It is essential to involve villagers in planning the programmes

7. Carrying out the plan: The success of the programme depends on the method by which it is carried out. For successful implementation of any programme, it is desirable that advance planning is made at the first step towards its implementation. The activities to be carried out each month should be taken out. Proper arrangement for the supply of materials and training of workers should be made. All steps in carrying out the programme should be discussed with the villagers and local leaders and the consent should be obtained to see full cooperation, steps for assistances and direction should be clearly stated to avoid confusion in launching the programme

8. Continuous checking and evaluation of results: Adequate records of each activity should be kept for future evaluation by extension staff, development committees and village institutions. Each future programme should be based on results of the previous one. Successful evaluation gives a correct direction to the programme. The evaluation of programme has to be done with the reference to the original objectives set. Systematic evaluation provide information about the effectiveness of various methods used and various steps taken for executing the programme

10. Review of progress and projection of plans: At the end of each cycle of programme planning process as a periodical review of situation and reconsideration of plan for setting up revised objectives should be done in view of the changes in social and economic levels of people. Acceptable programmes may be expanded to the neighboring areas. Research should be conducted to find out the reasons of failure of the programmes. All developmental programmes are tools for doing more work that is effective
CHAPTER 7 MONITORING AND EVALUATION OF EXTENSION PROGRAMMES

MONITORING

Process of assessing / analyzing progress on going of a project based on predetermined indicators and objectives of programme.
Monitoring simply means to keep a watch on what is happening. Monitoring is generally done at the operational level and involves collection and analysis of information. To be effective, monitoring should be a continuous process.

The monitoring of extension activities consists of timely gathering and analysis of data on the organization of the extension service and its performance, as well as on farmers’ acceptance of extension advice.

Monitoring reveals whether the components of the extension service are operating as intended. It is done through survey, baseline, meetings, discussions, reporting, structured interviews, questionnaire surveys etc.

For monitoring indicators are of 2 types – (1) Process indicators, (2) Impact indicators

There are qualitative / quantitative indicators. Qualitative indicators use proxy indicators e.g. for measuring leadership ask 2-3 questions indirectly to assess it like how many women can take decision, how many can lead a group on her own, how many women can handle crisis situation.

Quantitative indicators deal with numerical values. They are easy to measure. Qualitative indicators assess changes in knowledge, attitude, behaviour and practices at individual, family, community levels.

EVALUATION IN EXTENSION

Evaluation is a very necessary step for extension activities. About those extension programmes which have been drawn up and introduced, it is necessary to know how much effective they have been or how many new things of agriculture the farmers have learnt from them. If they did not get any advantage, then, what were the causes? What are the reasons for farmers not taking interest? The study of these points is the evaluation in extension.

Definitions of evaluation:

1. Programme evaluation is the determination of extent to which the desired objectives have been attained or the amount of movement that has been made in the desired direction (Boyle and Johns, 1970)
2. Evaluation is the comparison of the situation before and after a development programme has operated with an area for a predetermined period (Metthew, 1956)
3. The process of assessing impact of project / programme vis-à-vis set goals / objectives
4. Evaluation in its broadest sense means judging the value of something.
5. Evaluation may be defined as a process of systematic appraisal by which we determine the worth, value or meaning of something. This something in extension may be a programme or part of a programme, a method used in carrying extension work, or a situation such as a community a block or even a larger area.
6. Extension evaluation is the process of determining how well the desired behavioral changes have taken place or taking place because of extension education effort.
On the basis of the above definitions, we can say that the study of causes of success or failure of the programme is called evaluation.

**Objectives of Evaluation:**

1. To know the causes for success or failure of the programme, along with identifying the obstacles for success in the programme
2. To inspire the workers for the evaluation of their objectives
3. To know the merits and demerits of the programme
4. To increase the self-confidence in both the rural people and extension worker
5. To unearth the expenses and achievements of a programme
6. To find out the usefulness of new experimental teaching methods

**Types of evaluation:**

I. According to purpose for which we conduct evaluation- it is of two types

- **Formative evaluation:** gathers data for development of an effective extension programme.
- **Summative evaluation:** tries to measure end results of a programme in order to decide whether or not it should be continued or discontinued.

II. According to the stage of the programme- when the evaluation is conducted. It is of two types

- **Ongoing or process evaluation:** Ongoing or process evaluation means evaluation when the work is in progress, it enables the evaluator and the stakeholders to develop a better understanding of the functioning of the programmes.
- **Outcome evaluation:** Outcome evaluation is done after completion of the work. It enables the participants to assess which of their goals are being achieved and how well this is being done.

III. According to the nature of evaluation- it is divided into 5 degrees as suggested by Frutchey (1967)

<table>
<thead>
<tr>
<th>Casual every day evaluations</th>
<th>Self-checking evaluations</th>
<th>Do-it-yourself evaluations</th>
<th>Extension studies</th>
<th>Scientific research</th>
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<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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</table>

The first three degrees of evaluation are informal in nature and the next two degrees of evaluation are formal in nature.

1. **Causal every-day evaluation:** This is the initial part of evaluation we do every day. Eg- Good dress, best actor, worst speech etc. These simple observations are important but have their own limitations. We must be careful in analyzing what is the truth and what is seen. It is most crude and subjective method of evaluation.

   The following are some of the limitations of this type of evaluations:
   - Personal ideas used instead of standard measurements.
   - Intuition (guess) and personal bias cannot be eliminated
   - No systematic plan for arriving at conclusion
   - May have only part of the information.

2. **Self-checking evaluation:** This is the next higher degree of evaluation. It makes conscious attempt to apply principles of evaluation. Eg- checking on ordinary observations, talking with
others, getting other people’s judgments etc. Ex: if person X comes to an extension order and says that in Ramapur village, farmer Venkataiah got 100 bags/acre of yield with Tellahamsa variety. Extension worker instead of directly accepting this information, (s)he personally visits the field of the farmer Venkataiah and talks to the villagers and self checks whether the information received was correct or not.

3. **Do-it-yourself evaluation:** This is still higher degree of evaluation. This involves more careful planning and applies principles of evaluation and are more systematically done. They usually require surveys or score cards. Eg: If A.O. gets an information that in an X village hail storm has damaged 100% of crops, he will not totally depend on this information alone but he visits the village and with the help of surveys or score cards, he will evaluate by himself the extent of damage to crops.

4. **Extension studies:** This is the fourth level of evaluation continuum, complicated than the above three methods. Uses higher tools, techniques, and methods for evaluation purpose. Uses more scientific approach. Eg: theses of M Sc and Ph D in extension studies come under this category.

5. **Scientific research:** last on evaluation continuum and most complex. Experimental studies scientifically carried out to determine cause and affect relationships. The scientific research must be
   a. **Factual (or Valid):** Measure what you think you are measuring
   b. **Analytical:** Analyze the relationships of various factors
   c. **Reliable:** Sample representative of population consistency of results.
   d. **Objective:** Free of bias- others get similar results.
   e. **Impartial:** Approach with a open mind and spirit of enquiry

IV. According to the sources, evaluation is divided into 2 types

1. **Internal evaluation:** Internal evaluation can be done in different forms. Eg: performance appraisals, review committees in an organization etc.

2. **External evaluation:** When an external person, institution or development agency has done an evaluation work, it is called external evaluation. Eg: Evaluation of ATMA project by EEI.

**Evaluation of human behavior:** Human behaviour can be evaluated with the help of following tests, scales, schedules or questionnaires

- **Knowledge tests** measures extent of information a person has gained because of the programme
  Eg: Test to find out the knowledge gained by the farmers on the SRI method of rice cultivation

- **Understanding tests:** these are also designed to measure the to what extent a person has understood the information

- **Skill or performance tests or schedules** are those which measure the amount of skills acquired by a person. Eg: Running a conoweeder or marker in SRI rice cultivation

- **Attitude scale:** These are developed to know how people feel or think about certain programmes. For this purpose the person has to mark one of the choices on the scale in terms of degrees of the attitude such as agree, undecided, do not agree etc.
  Eg: Scale developed to measure the attitude of the farmers on SRI rice cultivation

**Importance of evaluation in Agricultural Extension:**

1. Extension evaluation helps to determine the degree to which the important purposes and specific objectives are attained Eg: after conducting a training programme on SRI, extension worker
can evaluate farmers and can understand whether they gained any knowledge on all principles and practices of SRI cultivation.

2. It also helps to provide periodic tests which gives direction for continuous improvement of work
   
   Eg: If extension worker has delivered lecture on new concept cluster bean cultivation for gum extraction, which is followed by evaluation of training. If majority of the farmers have not understood the concept or technology, lecture training method has to be changed to exposure visit / lecture should be followed by a method demonstration / result demonstration / exposure visit.

3. It helps to serve as a check on extension teaching methods
4. It helps to furnish data regarding the rural situation to extension programme planning
5. To provide evidence of the value of the programme and a basis for adjusting a programme
   
   Eg: If a particular training programme is felt to be of good value by the participants, the same thing can be documented and kept as evidence.

6. To give satisfaction to leaders and cooperators through an understanding of what is accomplished
   
   Eg: Following a method demonstration, if majority of trainee farmers were able to run conoweeder for weeding in SRI paddy, this gives leaders / cooperatives a satisfaction. Good oral or written performance of farmers for a lecture on marigold cultivation practices, gives a satisfaction not only to extension worker but also for leaders and cooperatives

7. To help in locating strong or weak points in any programme or plan
   
   Eg: Method demonstration on vermicompost preparation in village could have the following strong and weak points

     | Strong points | Weak points |
     |----------------|-------------|
     | • Collection of good quality of semi rotten material | • Poor gathering |
     | • Demonstration done under shade | • No wide publicity |
     | • Good interaction between farmers and extension worker | • Literature not distributed |

8. To ascertain the result of organization and administrative procedures of the programme
9. It also helps to establish a bench mark

10. It provides the information with whom we work i.e. people

   Eg: Evaluation helps to assess certain information about the villagers like their cooperativeness, sincerity, hospitality, hardworking nature, litigant nature, women participation, enthusiasm, risk proneness, impact of various political groups etc.

CHAPTER 8- DEVELOPMENTAL PROGRAMMES-PRE-INDEPENDENCE ERA
In 1947 before achieving freedom in India, many programmes have started which are mainly as follows. Looking at a vast country like India, during British rule, some selected social workers had started some programmes of rural development. For the clarity in study, we can divide these Development Programmes in two parts.

**First - Pre-Independence Programmes (1866 - 1947)** and  
**Second - Post-Independence Programmes (1947 - 1952)**

### PRE-INDEPENDENCE PROGRAMMES

**SHRI NIKETAN PROJECT (1914)**

It was founded by Ravindra Nath Tagore. Sri Niketan was one mile away from Shanti Niketan, in West Bengal state. This area was backward socially, economically and politically backward. The main aim of this project was all-round development of rural people. Shree Tagore thought that if some villages were developed, the other villages will get inspiration and the programme of village development will spread all over the country and thus the whole country will be developed.

**Activities:**

1. Survey of selected Villages.
2. Demonstration of improved practices.
3. Arranging campaigns for the eradication of Malaria, T.B., and other infectious diseases.
5. Weaver’s cooperatives were organized.
7. Establishment of social welfare centre in each village.
8. Establishment of cooperative societies.
10. Mobile library for rural people.
11. Scout organization.
12. Management of pure drinking water.
13. Village sanitation works.

### 2. GURGAON EXPERIMENT (1927)

In 1927, F.L. Brayne had been appointed on the post of Deputy Commissioner in Gurgaon district and he began this project of rural upliftment in his district, which became famous as “Gurgaon Project”. According to him the main principle of this experiment was rural development on practical basis. This was the 1st programme started on a mass scale for rural upliftment by state in Gurgaon district.

**Objectives:**

1. To bring villagers out of old grooves by convincing them that improvement is possible.
2. To kill their fatalism demonstrating disease and insect control through scientific means.
3. To deal with whole life of the villagers.
4. The work should be started in whole district at a time.
5. Development work should be taken at campaign level.

**Areas of work:**

1. Agricultural development & increasing

**Method of work:**

1. Propaganda was done by drama and music.
2. Guides were appointed to organise the programme at village level.
3. The teacher of village schools used to teach
1. Food production.
2. Health improvement.
3. Village sanitation.
4. Social improvement (Reforms).
5. Reforms in rural institutions
7. Organization of cooperative societies.
8. Coordination and publicity.
9. Home development works.
10. Controlling extra expenditure.

Although this project got some success, yet this scheme could not survive for a long time because this project was also based upon the sentiments of F.L. Brayne and when he was transferred, gradually this programme also stopped.

3. SEVA GRAM (1921)

Mr. M.K. Gandhi (Mahatma Gandhi) started this programme in 1921 at Sewagram. Later it was extended to Wardha in 1938 after 2nd non-cooperation movement. This programme was totally based on the concept of “Helping the people to help themselves”.

Mahatma Gandhi is a great social worker. He knew very well that as long as people are suppressed, their society and their nation cannot progress. For ending this suppression, he began this welfare project “SEVA GRAM” by establishing his Ashram in Wardha. The programme mainly focuses on prevention of the economic and social suppression of the people and creating feeling of patriotism among them. M. Gandhi also insisted that all extension workers should have 3 principles in practice viz., self purification, self reliance and self exemplary conduct.

For fulfilling this objective, Gandhi made this programme which became famous as “Gandhian Constructive Programme”. The main objectives of this project were as follows:

1. To use khadi clothes
2. To initiate programmes on sanitation, women welfare, health, economic help and social harmony in the village.
3. To uplift the backward classes.
4. Primary and adult educational programmes
5. The programme of economic help.
6. To improve the conditions of poor people
7. To popularize the mother tongue and other national dialects.
8. To serve the under privileged villagers.
9. To make the villagers self sufficient and self reliant.
10. To develop the power and courage in rural people.

For Gandhi, independence of country would be meaningless without eco development. For making his programme successful and effective, he established All India Village Industry Association, All India Spinners Association, Hindustani Education Association and Kasturba Gandhi Association etc. Other activities are:

1. Economic equality:
   (a) Equal distribution of wealth.
   (b) Eliminate middle men and exploiters.

<table>
<thead>
<tr>
<th>Principles</th>
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<tbody>
<tr>
<td>1. Self help</td>
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<td>2. Dignity of labour e.g.</td>
<td>Sharamdan, etc.</td>
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<tr>
<td>3. Self respect</td>
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<td>4. Truth and non-violence</td>
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</table>
(c) Use of khadi clothes

2. Education: Basic education through “learning by doing and earning while learning”

3. Social equality
   (a) Removal of untouchability
   (b) Equal opportunity for women
   (c) Community unity.
   (d) Hindu-Muslim equality

Gandhiji’s constructive programme was not fully successful because hand made products were dominated by machine made products which attracted common man more. The single cause of failure of Gandhiji’s programme was Industrialization in the country.

4. MARTHANDAM PROJECT (1921)

This programme was started in 1921 by Dr. Spencer Hatch, an American Agricultural expert. In Trivendrum at some places, people used to cultivate only paddy and coconut. To overcome this weakness, it was thought that some developmental work should be done, so that the Christian faith could spread. Consequently Dr. Hatch made agreement with Y.M.C.A. and Christian Church Association for his work and initiated this project in neighbouring village Marthandum. From the demo centre at Marthandam, about 100 villages were covered through YMCA centres.

It was having a 3 field programme - development of spirit, mind and body. But later it evolved a fivefold programme - development of the physic, spirit, mind, economic and social aspects of life.

Objectives:
1. Self help and cooperation.
2. Helping people to help in their own work.
3. Opening the demonstration centers.

Method of work
- Before launching the programme, surveys are made to know the needs of that area and on the basis of their needs the programmes were introduced.
- The rural dramas, rural exhibition, inter-rural competition, demonstration were also organized to attract the people
- Religious programmes were also organized for developing the religious feelings.
- All-round development of rural life and individual’s progress were the subjects of importance in the programme i.e., Farming, rural industry, cooperation and development of Panchayat were initiated.
- For bringing economic development among the rural people, many programmes as soap making and the educational programmes etc. were organized.
- 6 weeks Short training courses to villagers and school teachers.

FIRKA VIKAS YOJANA OR FIRKA DEVELOPMENT PROGRAMME (1946)

It is a Government sponsored programme and aimed at attainment of Gandhian ideal of “Gram Swaraj”. It was launched in the last quarter of 1946 in 34 Firkas throughout Madras state. It was extended to another 50 additional Firkas at the rate of two Firkas per district on April 1950.

Among Pre-Independence projects, this was the biggest project.

Objectives:
1. Preparation of short term plans for the development of rural communication, water supply.
2. Long term plan to make the area self sufficient through agricultural, irrigational and livestock improvements.
3. Formation of panchayats and organization of cooperatives.
4. Introduction and development of Khadi and Cottage Industries.
5. All-round development of rural people

**POST-INDEPENDENCE ERA PROGRAMMES**

1. **ETAWAH PILOT PROJECT: 1948**
   
   Etawah project has shown its way for Community Development in India hence it is called as Etawah pilot project. This is such an effective project that after witnessing its results, the way was cleared for initiating the Community Development Project. Therefore this was called the Pilot Projector it can be treated as a forerunner for Community Development Programme.

   **Objectives:**
   
   1. To develop the mental power of people.
   2. Arousing their interest and initiative.
   3. To awaken the desires of rural people and to make them laborious.
   4. The develop agriculture and animal husbandry.
   5. Development of Panchayat
   6. To development the feeling of self-confidence, co-operation and mass participation.
   7. To seek the possibility of transferring this project elsewhere in the country.
   8. To make villagers sanitation minded.
   9. To measure the extent of agriculture development in terms of social improvement, initiative and self confidence.
   10. To buildup the sense of community living.
   11. To buildup a spirit of self help in villagers.

2. **NILOKHERI PROJECT:**
   
   In 1948, Shree S.K. Dey prepared this project for the purpose of providing shelter for 7000 immigrants from Pakistan. The name of this project was “Majdoor Manzil”. Later, S K Dey became the Union Minister of Community Development in 1965. It was built around the vocational training centre that was transferred from Kurukshetra in July 1948.

   **Objectives:**
   
   1. Self sufficiency for rural cum urban township in all essential requirements of life.
   2. Making provision of work and professional training for the people according to their experience.
   3. To eliminate middle men.
   4. To make 700 acres of Swampy land cultivable.

   **Activities:**
   
   Polytechnic training for B.D.O. and S.E.O. and V.L.W, Housing and marketing facilities.
   Management of schools, hospitals and recreation centre, Cooperative credit facility.
   Small scale industries were run on cooperative basis.
Chapter 9 COMMUNITY DEVELOPMENT PROGRAMME (CDP):

- **Community:** A community consists of persons in social interaction within a geographical area and having common centers of interest & activities and functioning together in the chief concern of life.

- **Development:** Orderly movement of individual from lower level of functioning to the higher level of functioning.

- **Community Development** is a movement designed to promote better living for the whole community with the active participation and on the initiative of the community

- Community Development Is technically aided and locally organized Self-help

Community Development has been described as a (Mukherji)

- process of change from the traditional way of living of rural communities to progressive ways of living;
- method by which people can be assisted to develop themselves on their own capacity and resources,
- programme for accomplishing certain activities in fields concerning the welfare of the rural people and
- movement for progress with a certain emotional and ideological content

The two essential elements in community development are

1. Participation by the people themselves in efforts to improve their level of living with as much reliance as possible on their own initiative and
2. The provision of technical and other services in ways which encourage initiative, self-help and mutual help and make these more effective.

**Some Assumptions underlying the Philosophy of Community Development**

1. Communities of people can develop capacity to deal with their own problems
2. People want change and can change
3. People should participate in making, adjusting or controlling the major changes taking place in their communities
4. Changes in community living that are self imposed or self developed have a meaning and permanence that imposed changes do not have
5. A "wholistic approach" can deal successfully with problems, with which a "fragmented approach" cannot cope
6. Democracy requires the people's cooperative participation and action in the affairs of the community
7. Frequently communities of people need help in organizing to deal with their needs

**Basic Philosophy:**

Basic philosophy of community development programme was

1. Individual development
2. Development of family.
3. Awareness of the responsibilities and self motivation among the people
4. Community development
5. Development of Cooperativeness among the people
6. To create confidence towards science and technology
7. Development of rural leadership
8. Development of rural institutions
9. Development of other resources for community development

The social, cultural and economical development of rural society

CHAPTER 10
PRINCIPLES AND OBJECTIVES OF COMMUNITY DEVELOPMENT

Guiding Principles of Community Development

The United Nations Economic and Social Council has been trying to define such principles and concepts of Community Development as well acceptable to all its-member-States and which they should agree to implement as far as possible.

1. Activities undertaken must correspond to the basic needs of the community, projects should be initiated in response to the expressed needs of the people.
2. Local improvements may be achieved through unrelated efforts in each substantive field; however, full and balanced community development requires concerted action and the establishment of multipurpose programmes.
3. Changed attitudes in people are as important as the material achievements of community projects during the initial stages of development.
4. Community development aims at increased and better participation of the people in community affairs, revitalization of existing forms of local government and transition towards effective local administration where it is not yet functioning.
5. The identification, encouragement and training of local leadership should be a basic objective in any programme.
6. Greater reliance on the participation of women and youth in community projects.
7. To be fully effective, self-help projects for communities require both intensive and extensive assistance by the Government.
8. Implementation of community development programme on a national scale requires adoption of consistent policies, specific administrative arrangements, recruitment and training of personnel, mobilization of local and national resources and organization of research, experimentation and evaluation.
9. The resources of Non-Governmental Organizations should be fully utilized in Community Development Programmes at the local, national and international level.
10. Economic and social progress at the local level necessitates parallel development on a wider national scale.

Objectives of Community Development Programme

The fundamental or basic objective of Community Development in India was the development of people. It’s broad objectives were: (i) economic development (ii) social justice and (iii) democratic growth.

Basic objectives:

i. The all-round development of the rural community.
ii. To develop the feeling of communitarian life style among the rural people.
iii. To develop the feeling of responsibility, to create confidence, to create inspiration for working by self decision among the rural people and establishing local leadership and institutions this can tackle the problems of that area.

**Objectives:**

1. To increase the agricultural production
2. Community and integrated development
3. The extension of the new scientific knowledge
4. Development of small and medium irrigation projects
5. Development of co-operative organizations
7. To increase the adult education and primary education
8. Facility for entertainment.
10. To inspire the youth for the development programme.

The response of the villagers to Community Development Programme was tremendous, hence the Government of India decided to expand the coverage of the programme to other parts of the country. Limited resources, however, did not permit a rapid expansion of the Community Development Projects, with somewhat less intensive approach than CD project a programme named as **National Extension Services (NES) was started in October 2nd 1953.**

The Idea behind NES was to cover entire country by the year 1960. Operational unit in both C.D and NES was development block. Activities under NES programme were less intensive than those of C.D. Basic idea of both CD and NES is same. Both are complementary, interwoven and run concurrently. Each NES block covers 100 villages with 65,000 population. Each block is headed by Block Development Officer (BDO) who is in turn assisted by Extension Officer with 10 Multipurpose Village Level Workers (MPVLW).

NES was thought of as the agency and CD is the method to bring about socio-economic transformation of the rural people.

**SIMILARITIES BETWEEN EXTENSION EDUCATION AND CD**

1. Both the processes are essentially educative
2. For both central objective is the “Growth of people”
3. Both processes are inter disciplinary in chapter
4. Both aim at bringing about change
5. Both are involvement processes
6. Both are relatively slow processes
7. Both are government sponsored and supported organizations.
8. Both emphasize on cooperation
9. Both are concerned with social and economic development

**DIFFERENCES BETWEEN EXTENSION EDUCATION AND CD**

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<thead>
<tr>
<th>S.NO.</th>
<th>EXTENSION EDUCATION</th>
<th>COMMUNITY DEVELOPMENT</th>
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<tbody>
<tr>
<td>1.</td>
<td>Place emphasis on individual development</td>
<td>Emphasizes cooperative or group action for the benefit of communities</td>
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</table>
3. Aims to bring about changes by leaving decisions for change of individuals | Decision are taken by group or representatives

4. Extension education is highly specialized and concentrates on agricultural changes | Concerned with various elements of human concern including health, sanitation etc

5. Mono purpose approach | Multipurpose approach

6. Extension education is concerned with improving social organizations but not attack problems at this level | C.D. is directly concerned with developing social organizations

7. It is the Means | It is the End
CHAPTER 11 PANCHAYAT RAJ SYSTEMS

The realization that people’s participation is crucial for successful implementation of programmes like CD and NES, was brought to sharp focus through the Report of the Team for the study of Community Projects and National Extension Service by Balwant Rai G. Mehta (1957). The committee observed that one of the least successful aspects of CD and NES work is its attempt to evoke popular initiative. Hence it recommended for DEMOCRATIC DECENTRALIZATION.

What is “Democratic Decentralization”? The word “democracy” is derived from the Greek roots-’cracy’ meaning ‘rule of’ and ‘demos’ meaning ‘the people’. It is governance of the people, by the people, for the people. Rule by majority is, no doubt, an important feature of this system of governance; but the more important ingredient is rule by consultation – consultation between the people’s representatives on one hand and consultation with the officers on the other.

‘Decentralization’ means devolution of central authority among local units close to the areas served. Where authority devolves by this process on people’s institution, it is ‘democratic decentralization’.

Need for Democratic Decentralization:

India is a sovereign democratic republic. Till recently, our administration was described as ‘democracy at the top and dictatorship at the bottom’. It was ‘an inverted pyramid’. It was realized that, so long as the people who constitute the roots of the democratic system were kept apart from the administration at levels close to them, it would be impossible, to secure their support or enthusiasm for the Programme. The study team on C.D. Programmes headed by Balwantrai Mehta recommended “Democratic Decentralization”.

The state of Madras had started democratic decentralization as an experimental measure in her own way as early as 1957. When Andhra State started in July 1958, twenty pilot blocks adopted democratic decentralization @ one per district. Inspired by these experiences the State of Rajasthan adopted democratic decentralization on October 2. 1959, the birth anniversary of Gandhiji.

On November 1, 1959, Andhra Pradesh State introduced this scheme of democratic decentralization in the entire State by the enactment of the Andhra Pradesh Panchayat Samithis and Zilla Parishads Act, 1959.

“Panchayat Raj” – its meaning: There is something anomalous and contradictory in the term “Democratic Decentralization”. It was also not easily understood by our people in India. At the instance of the Prime Minister it was decided to give this process of the three-tier administration a strictly Indian name, “Panchayat Raj” which means a system of government.

THE THREE TIERS OF PANCHAYAT RAJ

1. The Gram Panchayat: The following is a brief account of the structure, powers & functions of the three tiers of Panchayat Raj, as per the Andhra Pradesh Panchayat Samithis and Zilla parishads Act, 1959 and the Andhra Pradesh Gram panchayats Act, 1964. The first formal democratic institution as enjoined on us under the directive principles in the Indian Constitution is the Gram Panchayat. It is the primary unit of local self-government. Gram Panchayat is a cabinet of the village elders, directly elected by the adult citizens of the Village.
The Gram Panchayats are constituted taking into consideration their income, population and area. There is provision for reservation of seats for women and for Scheduled Castes and Scheduled Tribes. The members of the Gram Panchayats have a tenure of five years and are directly elected from wards while the Sarpanch is elected by the members. There is a Gram Sabha for each Panchayat and the Sarpanch is required to convene Gram Sabha meetings at least once in six months. The Sarpanch is required to convene a meeting of the members of the Panchayat once in a month. Each Gram Panchayat is required to levy house tax and profession tax, while the imposition of some others like vehicles tax is optional. They also collect license fees for professionals and traders, run markets and other remunerative enterprises, raise fisheries, grow plantations, etc.

The Gram Sabha is an assembly which should consist of all the adult citizens of the village - men and women, young and old. In other words, it is the counterpart of the national Parliament.

**The powers and functions of the Gram Panchayat could be broadly classified into three categories.**

1. Representative functions: where the main role is to voice and represent the community’s opinion on matters affecting it.
2. Regulatory and administrative functions: consists of regulating the conduct of individuals and institutions and also collecting taxes; e.g., watching work done in the village school, registering births and deaths, enforcing measures of safety and sanitation etc.
3. Service or developmental functions: Promotion of education, health, agriculture, communication, irrigation etc.

2. **The Panchayat Samithi:** This is the next tier of administration at the Block level. It consists of:
   
i. Sarpanch’s of all Panchayats
   
ii. Local M.L.As and M.L.C.s with right to vote but not to hold office.
   
iii. One person nominated by District Collector for every Panchayat for which no Sarpanch has been elected.

**Reservation and Community-option**

iv. Two women

v. One from Scheduled Castes

vi. One from Schedule Tribes

vii. Two persons with experience in administration and public

The President and Vice-President of the Samithi are elected from among the Village Panchayat sarpanchs’. Block Development Officer appointed by the Government is the chief executive of the Samithi and functions as the leader of the team of block level officials.

Every Panchayat Samithi normally has seven Standing Committees. Each Standing Committee consists of 7 members.

**SUMMARY OF POWERS AND FUNCTIONS OF PANCHAYAT SAMITHIS**

1. They have to ensure the whole-hearted support of the people for the implementation of the Development Programmes.

2. They have to exercise all the powers conferred on and perform all the functions entrusted to the Panchayat Samithi by the government.
3. In particular, all the activities of Community Development Programme are taken over by Panchayat samithis. The activities concerning the rural welfare and development in the fields of Agriculture, Animal Husbandry, health and Sanitation, Elementary Education, Cottage Industries, Social Welfare etc., which were being carried on by the normal development departments are now entrusted to the Panchayat Samithis.

4. The powers and functions of the District Boards, with institutions, staff and assets and liabilities have been transferred to the Panchayat Samithis with effect from 1st December 1959. The Presidents and members will have to see to the proper implementation of all the programmes and working of the institutions entrusted to them.

5. The Panchayat Samithis can borrow funds subject to the conditions laid down in the Andhra Pradesh Panchayat Samithis and Zilla Parishads loans Rules 1959.

6. Government of Andhra Pradesh has provided funds for Panchayat Samithis. These funds will be recovered from the Panchayat Samithis in installments. The Panchayat Samithis will have to sanction and disburse loans to individuals and will have to recover them from the loanees.

7. The loan funds available with some of the normal development departments such as Agriculture, Animal Husbandry, Industries, etc., are also made over to Panchayat Samithis to be similarly spent and recovered.

8. The funds available under the Village Housing Project are also entrusted to Panchayat Samithis. All these loans will have to be recovered from the loanees by the Panchayat Samithis themselves.

3. The Zilla parishad: is the third tier of Panchayat Raj operating at the district level. It consists of:

1) All Presidents of Panchayat Samithis in the district.
2) The District Collector
3) M.L.As of the District
4) M.L.Cs.
5) M.Ps. of the District
6) Two women representatives.
7) One representative of Scheduled Castes.
8) One representative of Scheduled Tribes.
9) Two persons interested in rural development.

The members of the Parishad elect a Chairman and a Vice-Chairman.

Every Zilla parishad has normally seven Standing Committees.

Each Standing Committee of 9 members of whom the Chairman of Zilla Parishad and the District Collector are ex-officio members. The District Collector is the Chairman of all the Standing Committees.

SUMMARY OF POWERS AND FUNCTIONS OF THE ZILLA PARISHAD

1. Zilla Parishad should function as advisory body over the Panchayat Samithis with powers to: (a) approve their budgets, (b) community-ordinate their plans and (c) distribute funds given by the Government among the blocks.

2. It has to prepare plans for all items of developmental activities in the district including Municipal areas.
3. Secondary education is the responsibility of Zilla Parishad.
4. The Parishad should perform such of the powers and functions of the District Board as are transferred to it by the Government.
5. It should also perform the functions of Panchayat Samithis in respect of non-Samithi blocks.
6. It should discuss and review at its ordinary meetings the progress made or the results achieved under various items. Development Department furnishes to Parishad a brief note on the achievements in the schemes of its department.

**Activities of three tiers in Panchayat Raj**

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<th>Panchayat</th>
<th>Panchayat Samithi</th>
<th>Zilla Parishad</th>
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<tr>
<td>Sanitation and water supply</td>
<td>Administration of blocks.</td>
<td>Approval of Panchayat Samithis budgets</td>
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<tr>
<td>Construction and maintenance of roads</td>
<td>Execution of all programmes under C.D.</td>
<td>Distribution of funds among Panchayat Samithis.</td>
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<td>bridges, drains etc.</td>
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<td>Promotion of Ag, community cooperation</td>
<td>Approval of Panchayat Budget</td>
<td>Coordinating plans and supervising the activities of the Samithis</td>
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<td>&amp; cottage industries</td>
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<td>Management of elementary schools.</td>
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<td>Advising the Government on developmental activities of the district</td>
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<tr>
<td>Promotion of Agriculture and cottage</td>
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<td>Establishing and maintenance of secondary, vocational and industrial schools.</td>
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<td>industries</td>
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1. The President of Panchayat Samithi shall be elected by all the members of the Gram Panchayats in the Block from among the registered voters in the Block (i.e. by direct election) on the same day as the ordinary elections of the members of the Gram Panchayats.
2. There shall be a Vice-President for each Panchayat Samithi who shall be elected by the members of the Samithi from among themselves.
3. The Chairman of Zilla Parishad shall be elected by the Sarpanches of all the Gram panchayats in the district (i.e. by direct election) from among the registered voters in the district on the same day on which the elections of the Sarpanches in the district are held.
4. There shall be a Vice-Chairman for each Zilla Parishad who shall be elected by the members of the Zilla Parishad from among themselves.
5. The number of Standing Committees of the Panchayat Samithi or the Zilla Parishad shall be reduced from seven to five: Standing committee for development, Education, social welfare and women welfare, works and finance.

Please include the diagram of organizational set up of panchayat raj
MANDAL SYSTEM

The central government under the chairmanship of Ashok Mehta in 1978 has appointed a committee to review and rectify the weakness of the Panchayat Raj system. The committee presented a report and recommended to implement the Mandal System and suggested to make small administrative unit instead of larger unit at Taluka (consists of about 100 villages level. Karnataka was the first state to adopt mandal system. The government of Andhra Pradesh on 25th May 1985 dismissed the old revenue limits of Taluka and Firka. The Mandal Adhikari will work with same power as Tahasildar and Taluka Magistrate and the Mandal Development Officer was placed in-charge of all the developmental functions and all the regulatory function are handed over to the Mandal Adhikari.

There are 1104 mandals in Andhra Pradesh. Every mandal consists of 12-14 villages with a population of 35,000-50,000. The Taluka or Samithi head quarter of Municipalities is the headquarters of Revenue Mandals. Villages within a limit of 10-12 Kms from the headquarter of the Mandal are provided with the facilities of bank, bus stand, railway station, Primary Health Centre, Veterinary dispensary, police station, post office, telephone exchange, high school, marketing facilities and agricultural go down facilities. Revenue record of all the Tahsil Offices are now shifted to the concerned mandal headquarters. Andhra Pradesh has passed the act with slight modifications and implemented in three stages this system viz; Gram Panchayat, Mandal Praja Parishad and Zilla Praja Parishad and in this act every mandal Praja Parishad is having a Revenue Mandal.

Previously the Sarpanches of the Gram Panchayat were elected directly and these Sarpanches used to elect the Panchayat Samithi Chairman and Panchayat Samithi Chairmen, MLA’s and MP’s used to elect the Chairman of Zilla Parishad. It was almost always possible to pass a vote on non confidence against the Zilla Parishad Chairman. But due to the direct election of mandal and Zilla Praja Parishad Chairmen it is now not possible to remove these people till the end of voters of mandals.

Mandal Praja Parishad consists of votes of Sarpanches, MLA’s, MP’s and one member from the Linguistic Minorities. Reservation members for Chairman, Mandal Praja Parishads are 15% from the SCs, 6% from the STs, 20% from the BCs, 9% from the women members. Zilla Praja Parishad is constituted at district level consists of Mandal Praja Parishad Chairmen, MLA’s, MP’s and members of Rajya Sabha and a member from the linguistic or religious minorities. The Zilla Praja Parishad members are empowered to elect this member. Due to the mandal system many mistakes of Panchayat Raj system are supposed to be rectified and revolutionary actions are being taken to bring the public nearer to developmental administration. A meaningful attempt is made to give shape to mandal system but the time will show whether this new experiment will again be proved as an experience of mistakes or it will really be proved to be Gram Swaraj for the country.
INTENSIVE AGRICULTURAL DISTRICT PROGRAMME (IADP)

In 1959, a team of Ford Foundation agricultural experts, after visiting various states in India, recommended intensified development efforts in selected areas with assured irrigation so that rapid increase in production could be made.

The government accepted the idea and started IADP in July 1960 in seven selected districts of various states (including West Godavari of Andhra Pradesh) during 1st phase and twenty one districts during second phase.

Criteria for selection of districts:
1. Districts with high potential for increasing the yield in short time i.e. with assured irrigation facilities and minimum natural hazards
2. Districts with well developed Panchayats and Cooperatives

IADP is popularly known as PACKAGE PROGRAMME because of the collective and simultaneous application of all improved package of practices namely improved seed, irrigation, fertilizers, plant protection, implements, storage facilities, marketing facilities, credit etc.

The distinctive features of IADP were as follows:
1. To provide factors of production simultaneously, timely and adequately,
2. Essential inputs like fertilizer, etc. to be made available 100 percent of the requirement,
3. Credit to be provided to any farmer who joins the programme and has the potential to get increased yield.
4. More agricultural and cooperative staff to be posted.
5. Provision of composite demonstrations instead of single factor demonstrations.
6. Periodical training of staff.
7. Analysis and evaluation.

Weaknesses
1. Educational approach to reach the cultivators was lacking,
2. Poor trainings to staff.
3. Staff were not clear about the methods to reach the cultivators,
4. Posting of staff was not adequate and timely,
5. Workshop, seed testing and soil testing laboratories were not functioning to the required level and
6. Transport and land development programmes were not progressing satisfactorily.

Achievements
In spite of these limitations IADP created a new dynamism in the farming community, greatly enhanced the use of technical inputs and also contributed to the growth of marketing and storage facilities as well as supporting services. Other achievements are:
1. Technical assistance was given to farmers in preparing production plans.
2. The cultivators were provided simultaneously with all supplies and services at right time and in adequate quantities through cooperatives
3. Credit was given to all who had their production plans and participated in the programme
4. Marketing and storage facilities were developed within bullock cart distance
5. Covered all the important cash crops grown in the districts although emphasis was laid on the increase of food grain crops

WATER SHED DEVELOPMENT PROJECT (WSDP)

Watershed:
- It can be defined as the drainage basin or catchment area of a particular stream or river.
A watershed is a geohydrological unit which drains into a common point by a system of streams. The watershed approach is a project based Ridge to valley approach for in-situ soil and water conservation.

**Watershed Area:** It refers to the area from where water to a particular drainage system, like river or stream comes from. The area may range from few hectares to several thousands of hectares.

It is a land area that captures rainfall and conveys the overland flow and runoff to an outlet in the main flow channel. The size of the watershed may vary from a few square meters to thousands of square kilometers. The size becomes important, depending upon the objective of working with the watershed. For example, for large irrigation projects, watersheds of thousands of square kilometers size may be considered. On the other hand, for a small storage structure in farm (farm pond), only a few hectares of land is considered. Watershed is also affected by afforestation, grassland development, cultivation etc.

The board objectives were the promotion of the overall economic development and improvement of the socio-economic conditions of the resource poor sections of people inhabiting the programme areas. The Drought Prone Area Programme (DPAP) and the Desert Development Programme (DDP) were brought into the Watershed mode in 1987. The Integrated Wasteland Development Programme (IWDP) launched in 1989 under the National Wasteland on watershed basis.

All these programmes were brought under the Guidelines for Watershed Development with effect from 1 April, 1995. Other major programmes now being implemented through this approach are the National Watershed Development Project in Rainfed Areas (NWDPRA) and the Watershed Development in Shifting Cultivation Areas (WDSCA) of the Ministry of Agriculture.

**What are the components of watershed Development:**
1. Human resource Development
2. Soil and Land Management
3. Water management
4. Afforestation
5. Pasture Development
6. Agricultural development
7. Livestock Management
8. Rural energy Management

**Objectives**
1. Developing wastelands/degraded lands, drought-prone and desert areas on watershed basis, keeping in view the land capability, site-conditions and local needs.
2. Promoting the overall economic development and improving the socio-economic conditions of the resource poor and disadvantaged sections inhabiting the programme areas.
3. Mitigating the adverse effects of extreme climatic conditions such as drought and desertification on crops, human and livestock population for their overall improvement.
4. Restoring ecological balance by harnessing, conserving and developing natural resources i.e. land, water and vegetative cover.
5. Encouraging village community for:
   a) Sustained community action for the operation and maintenance of assets created.
   b) Simple, easy and affordable technological solutions.
   c) Employment and development of human and other economic resources of the villages.

**Finances**- The sphere of one “Water Shed Development Project” is considered to be 500 hectare land and per project Rs. 20 lakh have been allotted for the expenses.

**Criteria for selection of watershed**
1. Each small contiguous watershed with an approximate total area of 500 ha may be taken up for development.
2. In case an watershed falls in two villages, it should be divided into two sub-watershed areas confined to the designated villages. Care should be taken to treat both the sub-watershed areas simultaneously.
3. Watershed which has acute shortage of drinking water should be selected.
4. Watershed having large population of Scheduled Castes/Scheduled Tribes dependent on it is to be considered.
5. Watershed that has a preponderance of non-forest wasteland/degraded land should be considered for sanction.
6. Watershed where actual wages are significantly lower than the minimum wages.
7. Watershed which is contiguous to another watershed that has already been developed/treated.
8. Watershed where people’s participation is assured through raw materials, cash, contributions on labour etc. for its development as well as for the operation and maintenance of the assets created.

TRAINING AND VISIT SYSTEM
(NEW AGRICULTURAL EXTENSION METHODOLOGY)

Danial Benore and James Q. Harrison, has released his article “Agriculture Extension Training and Visit System”. The Training & Visit System of Agriculture Extension has been adopted directly by about 40 countries of Asia, Africa, Europe and Central, South America, Pakistan, Srilanka, Bangladesh, Nepal and Indonesia etc.

A centrally sponsored scheme “strengthening and reorganization of Agricultural administration in the states” has been approved by Government of India for implementation in 6th plan period. This scheme is based on new Agricultural extension methodology called as Training andVisit System. It is also known as Benor system, as Mr. Benor was instrumental in introducing this innovation in agricultural extension.

In 8 countries and 13 big states in India, this system has been adopted by all the farmer-families everywhere. In other countries, aided by World Bank or helped by other resources it has been adopted in the limited fields along with the agriculture and rural development projects.

This new method of agricultural extension was evolved on the basis of experiences gained in the pilot project set up with World Bank assistance in canal areas & Chambal Command areas in Rajasthan and Madhya Pradesh and Command areas in Andhra Pradesh, in kharif 1974. Since this methodology yielded encouraging results, a reorganized agricultural extension system based on this approach was introduced in other States by 1985 with the World Bank assistance.

The purpose of T and V system of agricultural extension was to build a professional extension service that will be capable of assisting farmers to raise production and increase their income. The main objective of this system was to remove short comings in the existing agricultural extension system. This system has given the country a new vision bringing farm scientists and field extension functionaries closer with sole intension of improving production and income of farmers.

The basic spirit behind T & V system is that any land, even though it may not have produced a satisfactory crop in the past, can be made to yield an optimum crop according to its capacity within the crop season of 4-5 months only, provided the farmer is advised what to do on his farm step by step, as per the stage of crop growth, every week or fortnight.

SAILENT FEATURES OF T & V SYSTEM
The key features of the T & V system according to Benor and Baxter (1984) are as follows:

1. **Professionalism:** The extension staff must keep in close touch with relevant scientific developments and research in order to formulate specific recommendations that will be useful to farmers in all kinds of resource situations. This can be achieved only if each extension worker is fully and continuously trained to handle his particular responsibilities in a professional manner

2. **Single line of command:** The extension service must be under a single line of technical and administrative command within the Department of Agriculture. Support is required from teaching and research institutions, input supply and other agricultural support organizations and local government bodies but all extension workers should be responsible administratively and technically to a unit within only one department.

3. **Staff is not responsible for the supply of inputs, data collection, distribution of subsidies, processing of loans, or any other activity not directly related to extension. It is assumed that the**
effective span of control for supervision or guidance is about eight. Hence, no extension officer should have more than eight staff or offices, which he must personally supervise and for whose performance he is specifically accountable.

4. **Time bound work:** Messages and skills are taught to farmers in a regular timely fashion, so that they will make best use of the resources at their command. The VEW (Village Extension Worker) must visit his farmers regularly on a fixed day, usually once each fortnight. Recommendations for a specific area and for particular farming conditions for every two fortnight periods (1 month) are discussed by Subject matter Specialists (SMSs) at regular monthly workshops. The recommendations are then presented to VEWs and AEOs (Agricultural Extension Officers) at the next two fortnightly training sessions. Any break in this time bound system makes extension in effective.

5. **Field and Farmer orientation:** The contact of extension staff must be on a regular basis, on a schedule known to farmers and with a large number of farmers representing all major farming and socio economic types.

6. **Regular and continuous training:** Regular and continuous training of extension staff is required, both to teach and discuss about the specific production recommendations required by farmers for the coming fortnight and to upgrade their professional skills.

7. **Linkages with research:** Effective extension depends on close linkages with research. Linkages are two way. Problems faced by farmers that cannot be resolved by extension workers are passed on to researchers for either an immediate solution or investigation. During seasonal and monthly workshops and joint field trips, extension and research staff formulates production recommendations that will be adopted by extension workers as necessary, to make best use of the specific local environmental and actual farmers resources.

**Objectives**

i) Coordinate research, training and extension activities effectively.

ii) To make research more effective by catering to the local needs and situation.

iii) To evolve an intensive training programme on a systematic basis for extension workers and farmers and to ensure effective supervision and technical support to VEWs/AEOs.

Transfer of know-how from Subject Matter Specialist (SMS) to the farmer was ensured in two stages through-

a. Training: For transfer of know-how from subject matter specialists to extension worker and

b. Visits: For transfer of know-how obtained at the training from extension worker to the farmer.

**Organization structure of the T & V system**

An agriculture extension officer (AEO) guides, trains and supervises about six to eight village extension workers. Six to eight AEOS in turn were guided and supervised by Sub Divisional Extension Officer (SDEO). The SDEOs were supported by a team of SMSs. Four to eight SDEOs were supervised by a District Extension Officer (DEO) who was also supported by SMSs.

<table>
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<tr>
<th>Level</th>
<th>Extension Personnel</th>
<th>Coverage</th>
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<tbody>
<tr>
<td>Field level</td>
<td>Village extension worker (VLW)</td>
<td>800-1200 farm families</td>
</tr>
<tr>
<td>Block level</td>
<td>Agriculture extension officer (AEO)</td>
<td>8 VLWs</td>
</tr>
<tr>
<td>Sub-divisional level</td>
<td>SDEO</td>
<td>6-8 AEOS</td>
</tr>
<tr>
<td>District level</td>
<td>DEO</td>
<td>4-8 SDEOs in districts</td>
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Coverage of various extension personnel:

All the families under a VLWs jurisdiction were divided into eight groups of equal size. From the each group, the VLW in consultation with village leader selecteds about 10% of the contact farmers on whom he concentrates his efforts. The VLW visits each of the eight groups for a full day each fortnight. An alternative was to visit two groups on a day. In such case he visits each group for one half day only but once every week.

Each week the VLW devotes four days to visit so that he covers his entire circle of eight groups in a week, of a fortnight. One of the two remaining working days in each week was devoted to in service training which was crucial to this programme and the other day for unscheduled visit.
One of the training sessions each fortnight was conducted by the team of SMSs responsible for the area. The session was scheduled so that the VLWs were trained for full day in a group of 30-40. The other weekly training session during the fortnight was conducted by the AEO who was the immediate supervisor of the VLW for the group of VLW under his charge.

The AEO spends two days in training session for VLW and eight days in field supervision and assisting them. The SDEOs supervises VLWs under his jurisdiction and was in over all charge of the extension programme. The SMS devotes one-third of their time to VLW training session, one third to field visits and one third of their time in visiting research stations and conducting some research. In a fortnight, a team of SMS spends four days in VLW and AEO training session.

Achievements

The T & V system resulted in:
1. Increase in cultivated area under high yielding varieties.
2. Increase in the cropping intensity.
3. Increase in employment of family labour.
4. Raise in marginal value of productivity of all inputs and
5. Acceleration in the adoption of recommended practices.

Weaknesses

1. Limited use of mass media hindering effectiveness, especially in reaching women and other small scale farmers.
2. Limited or no clientele involvement in programme development.
3. Recurrent cost problems that became serious when donor funding terminates; and
4. Weak links with research, plus lack of adequate SMS capacity, frequently resulting in lack of appropriate technology.

CHAPTER 13-SOCIAL JUSTICE & POVERTY ALLEVIATION PROGRAMMES

INTEGRATED TRIBAL DEVELOPMENT AGENCY (ITDA)

Tribals are considered as children of nature as their lifestyle is conditioned by their surrounding ecosystem. Andhra Pradesh occupies 8th position among the states having tribal population and has largest tribal population in the south Indian peninsula.

Currently there are 35 scheduled tribes with a population of 6 million. Since independence e have actively thought of and planned for upliftment of our tribal people. The late Prime Minister Jawaharlal Nehru gave serious thought to the problems of tribal welfare and suggested his own enlightened approach “to develop the tribals along the lines of their own genius” and expressed his disapproval of the “false idea to call some people primitive and to think of ourselves as highly civilized”.

There are certain inadequacies in the tribal areas in administration missionary, lack of sensitive and trained management, lack of general preparedness for large investments, procedural delays and lack of proper monitoring and evaluation system.

There are still a number of tribal groups faced with the threat of extinction. In order to address the above issues in addition to other problems of indebtedness, land alienation, poverty, shifting cultivation, unemployment, migration, housing, education etc, Government of India has initiated Integrated Tribal development Agency (ITDA) during 1971-72 with 6 pilot development projects.

The Government of Andhra Pradesh has sought to establish a Single Line Administration in the Tribal Sub Plan Areas by empowering ITDA.

The ITDA has the overall responsibility of bringing about the development of the tribals of the area by utilizing its own funds, funds from the external agencies, funds available with various other departments of the Government working in the Sub Plan Area.
The Project Officer, ITDA is designated as Joint Collector, Addl.District Magistrate and Additional Agent to Government and has been given powers to plan, implement, review and co-ordinate the activities of all Departments working in the area.

**Developmental activities under ITDA**

The agriculture wing of the ITDA plans, implements, and monitors the development of agriculture in the land owned by the tribals.

The Horticulture Wing looks after the development of Horticulture and encourages the Tribals to bring their wasteland, degraded land etc. under horticulture crops like Cashew, Mango, etc.

The Minor Irrigation Wing of the ITDA is responsible for taking up construction of minor irrigation tanks, check dams, community irrigation wells.

The Tribal Welfare Engineering Department is responsible for the construction of the buildings - for Schools, Hostels, Offices, etc., construction of Roads, Bridges for connecting interior villages.

The Animal husbandry section of the ITDA ensures the supply of strong Plough Bullocks for ploughing the lands, Milch Animals etc.

The Sericulture wing helps tribals to take up raising of mulberry crops and rearing of cocoons. Since lot of forest land with T.Arjuna trees is available, this wing encourages Tasar cultivation in a big way.

The industry sector of the ITDA encourages tribal entrepreneurs to take up small industries that use the raw materials available in the area.

The Girijan Co-operative Corporation, for which the Project Officer is one of the Executive Directors, is responsible for the supply of daily requirements to the tribals in the interior areas at nominal rates.

The TRICOR wing of the ITDA gives margin money to the tribals at very low rate of the interest and help the beneficiaries to purchase modern agriculture implements, tractors, electric motors and auto-rickshaws etc. and for starting small scale industries.

**OBJECTIVES OF ITDA:**

1. To sensitize (motivate) administration to the basic problems and needs of the tribes
2. To enforce the existing laws concerning to debt relief, poverty relief alleviation (lessening) of tribal lands

**SPECIAL FEATURES OF ITDA:**

1. Enforcement of Excise and forest policies to stop exploitation of tribes.
2. Organization of Training programmes in agro and forest based industries for self employment
3. Setting up of Tribal development Corporation.
4. Organization of special programmes for most back ward groups among tribes
5. Subsidy to the extent of 50 to 70% is allowed and the remaining amount as loan
6. To narrow down the gap between the levels of development of tribal areas and other areas
7. Administrative structure in tribal areas should be restructured for effective service

**INTEGRATED RURAL DEVELOPMENT PROGRAMME (IRDP)**

In 1959-60 Ford Foundation’s Agriculture Food Production Committee had presented some firm suggestions to the government pointing out the laxity of agriculture production programmes in the report ‘India’s Food Crisis and Steps to Meet It’. In this report arguing on the topic of food production there was the main suggestion of community efforts by the intensive programme on food grain crops in selected areas.

Many special programmes were introduced for benefit of rural people before and after independence viz., IADP, IAAP, HYVP, SFDA, MFAL, CADP etc but these programmes suffered from many lacunae like: restriction to small and same areas, same target groups, no single programme for their entire country, unsatisfactory administration, population explosion etc besides these problems, it was felt that in order to deal with dimensions of rural poverty in India, a far more ambitious programme was required. Consequently, a programme known as IRDP was introduced in 2,300 blocks of the country in 1978-79 and after some time, on 2nd October, 1980, it was introduced in all the blocks of the country.

Each block will get 5 lakh rupees or 3000 families in every block will get direct help within five years. In every block 600 families are selected. Among the total selected families, there are
selected 50 percent families of S.C. and S.T. castes, 40 percent women and 3 percent disabled and remaining 7% other general poor families.

Objectives:
1. To provide necessary help to the poor families in the villages to raise them from the poverty line.
2. To create substantial additional opportunities of employment in the rural sector.

Working System:
The management of I.R.D.P. is guided by the District Rural Development Agencies. Members in the guidance council of this Agency are Local M.P., M.L.A., Chairman of Zilla Panchayat, the persons of District Rural Development Department and representatives of women and S.C.’s/S.T.’s. The responsibility of managing the programme is upon the authorities of community development block. At the state level, there is an integrated committee which supervises the management of this programme in the state. The central state governments supply the necessary funds in the ratio of 50:50 percent for I.R.D.P.

Pattern of assistance:
In this programme, the needy families are selected very carefully. The IRDP beneficiaries were assisted though viable projects which were financed partly by subsidy and partly by Bank loans. The capital loss of the assets was subsidized to the extent of 25% for small farmers, 33.33% for marginal farmers, agricultural and non-agricultural labourers, and rural artisans and 50% for the SC, ST and tribals.
In this way, for fulfilling the economic need of every family, efforts are made for raising their income.

Financing
The programme aims at providing income generating assets and employment opportunities to the rural poor to enable them to raise them above the poverty line once and for ever. The IRDP was centrally sponsored scheme funded by the centre and state on 50% basis.

Who were beneficiaries?
1. Small and marginal farmers.
2. Agricultural labourers.
3. Rural artisans and mechanics.
5. All those families who were below the poverty line or their yearly income were below Rs. 11,000 Annually.

Weaknesses
i) Mis-identification of beneficiaries and mis-utilisation of fund.
ii) Lack of infrastructural support,
iii) Lack of proper co-ordination among different departments,
iv) Irregular monitoring and evaluation of the programme,
v) Lack of better quality assets,
vi) Absence of full-time staff at the block level for IRD work,
vii) Preference was given to those who were better-off within the poverty group,
viii) Non-involvement of the village community as a whole in the identification of the beneficiaries,
ix) Lack of participation of members of the target group in the selection of schemes and allied aspects of receiving assistance, and
x) Inadequate flow of credit. This has arisen from non-availability of adequate bank infrastructure in certain areas.

SWARNA JAYANTI GRAM SWAROJGAR YOJANA (SGSY):
In India, many programmes were introduced for elimination of poverty. All of them functioned as separate programmes so there was lack of desired communication and proper coordination and in their implementation there were emphasis on achieving the goals but not on
centralizing their attention on the important matter of continuously increasing the income by permanent resources which resulted in failure of these programmes.

In 1997, Prof. S.R. Hashim Committee reviewed the rural development and poverty alleviation programmes. This committee, among others, suggested for making efforts towards from individual beneficiaries approach to group approach in implementation of self-generation programme and preference was given to group activities and cluster approach as a result, Swarnajayanti Gram Swarozgar Yojana (SGSY) was launched in India on 1st April 1999 through incorporating the erstwhile Integrated Rural Development Programme (IRDP), Training of Rural Youth for Self employment (TRYSEM), Development of Women and Children in Rural Areas (DWCRA), Supply of Improved Toolkits to Rural Artisans (SITRA), Ganga Kalyan Yojana (GKY) and Million Well Scheme (MWS). The beneficiaries of this programme are known as Swarojgaris.

For improving this condition, the government has organized these self-employment programmes and introduced a new programme on 1st April, 1999 SGSY. This is extensive programme which included all the aspects of self employment i.e., the organization of Self-Help Group, training, loan, technical structure, and marketing for the poor people. This project will be financially aided in ratio of 75:25 by the central and the state governments. It is a credit and group oriented holistic anti poverty programme.

This holistic SGSY programme encompassing all aspects of self-employment such as organization of the poor into self-help groups, training, credit, infrastructure and marketing was evolved as a means of poverty alleviation in rural areas.

The main objective of SGSY is to raise poor people from below the poverty line within three years by providing income generating property with cooperation of government aid and bank loan. Its main purpose is to ensure that the net and monthly income of the family should be minimum Rs. 2000. It will be tried that in the next five years, in every block minimum 30% of poor families may come in contact with this project. Quality is the certificate of this programme and the assumption of this programme is to raise people from poverty line.

Objectives:-
1. To assist rural people especially women & youth in self employment by organizing them into SHG’s
2. To establish large number of micro enterprises like vermicompost, poultry, mushroom etc.
3. Identification of 4-5 such micro enterprises/block depending upon skills, resources and marketing facilities in that area.
4. Capacity building, training & planning of activities.
5. To provide technical support, market support, credit support for the newly formed SHG’s

Criteria for the selection of beneficiaries
- Swarojgari may be the members from SHG’s or others
- From BPL with approval of the Gram sabha

Executing agency
At the district level, the implementation of the scheme has been entrusted to the District Rural Development Cell of the Zilla Parishad. All the three tiers of the panchayats have their specified roles in execution of the scheme. The Sabhadhipati of the Zilla Parishad is the Chairman and the District Magistrate is the Convener of the district level SGSY committee. Similarly for the SGSY committee at Block level, the Sabhapati of Panchayat Samiti is the Chairman and BDO, the Convener.

Identification of the Micro – Enterprises:-Based on available local resources, marketing facilities and skills many enterprises were identified like: Non farm- Food preservation, tailoring, poultry, goatry, restaurants, bottle manufacture, etc
Farm activities- Preparation of bio pesticides, vermicompost, seed production, horticulture, poultry, pond desilting

Financial Assistance
Subsidy is only minor element major amount is in the form of loan, interest rate and subsidy components is according to NABARD terms. After taking money, the within 30days. The Swarojgaris should purchase the assets. The subsidy is uniform at 30% of the project cost but it could give up to the maximum limit of Rs.7500. For the disabled persons and ST/SCs subsidy is 50% but up to maximum of Rs. 10,000 of the project cost can be given. For SHGs this subsidy is also fixed at 50% of project cost up to a maximum of Rs. 1.25 lakh. Subsidy is back ended.
The Bank will give the medium term loan with a minimum repayment period of 5 years. In order to get subsidy, loan should be paid back before a certain fixed period known as lock in period, otherwise no subsidy will be provided. The lock in period corresponding to 5, 7, 9 years (repayment periods) are 3, 4 and 5 years respectively.

**Constraints in implementation of SGSY:**

1. Banks are not enthusiastically participating in the programme due to mounting NPA
3. Non participation of primary stakeholders wholeheartedly in the programme
4. Integration of Government subsidy programme with bank credit had detrimental effect on regular banking

**MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE SCHEME (MGNREGP)**

The MGNREG Act 2005 provides enhancement of livelihood security, giving atleast 100 days of guaranteed wage employment in every financial year to every household, whose adult members volunteer to do unskilled manual work. Panchayats at districts, intermediate and village levels will be the principal authorities for planning and implementation of the scheme.

**Objectives**
The Andhra Pradesh Rural Employment Guarantee Scheme shall have the following objectives:

1. The primary objective of the Scheme is to provide livelihood security to the households in rural areas of the aforesaid 13 (thirteen) notified districts by providing not less than 100 (one hundred) days of guaranteed wage employment in every financial year to every household, whose adult members volunteer to do unskilled and manual work.
2. Creation of durable assets and strengthening the livelihood resource base of rural poor.

**Type of Works**

(i) The focus of the Scheme shall be on the following works in the order of priority:

1. Water conservation and water harvesting.
2. Drought proofing (including afforestation and tree plantation).
3. Irrigation canals, including micro and minor irrigation works;
4. Provision of irrigation facility to land owned by households belonging to the Scheduled Castes and Scheduled Tribes or to land of beneficiaries of land reforms or that of the beneficiaries of Indira Awas Yojana program.
5. Renovation of traditional water bodies including desilting of tanks.
7. Flood control and protection works, including drainage in water-logged areas.
8. Rural connectivity to provide all-weather access.

Any other work, which may be notified by the Central Government in consultation with the State Government.

(ii) Investing on Scheduled Caste / Scheduled Tribe lands for irrigation and land development duly fulfilling Special Component Plan / Tribal Sub-Plan norms in each Mandal.

In order to ensure that the adequate investments under Employment Guarantee Scheme are channelised for plantation programme, it is proposed that 20% of the value of works taken up in Village shall be on plantation programme.

(iv) Roads can be taken up as last priority not exceeding 10% of the value of all types of works taken up.

**Social Audit and Right to Information**
Social audit shall be taken up to make the planning, implementation and evaluation of Employment Guarantee Scheme more participatory, transparent and accountable. Social audit shall not be retrospective but an ongoing process of participation to ensure that legal guarantees and entitlements flow to the workers in a legitimate way. Social audit shall be done in three stages - pre, during and post implementation. Social audit shall be integrated into the critical activities of Employment Guarantee Scheme.

An information Wall shall be built by the Gram Panchayat at Gram Panchayat headquarters. One side of the Wall shall be painted with long-term information like task-wise wage rates to be adopted for the year, non-negotiables, important guidelines, shelf of works identified etc. The other side of the wall shall be updated with weekly information like work-wise number of labour working; materials procured and consumed expenditure etc.

The Programme Officer shall be the Public Information Officer for the Scheme, under the Right to Information Act, 2005 at the Mandal level and the Panchayat Secretary shall be the Public Information Officer at the Gram Panchayat level. The District Programme Coordinator shall be the appellate authority under the Scheme. The Public Information Officer shall make available the copies of the documents/registers for verification and sale on cost as per the provisions of the Right to Information Act, 2005. The Programme Officer shall make available to the Gram Panchayats and the Village Organizations, the estimates of the works commenced, copies of Muster Rolls, pay orders for facilitating public scrutiny. The Village Organizations and the Mandal Mahila Samakhya shall maintain registers containing information on Employment Guarantee Scheme and discuss in their monthly meetings to ensure transparency, accountability and facilitate social auditing.

Chapter 14 - WOMEN DEVELOPMENT PROGRAMMES
DEVELOPMENT OF WOMEN AND CHILDREN IN RURAL AREAS (DWACRA)

A midterm review of the implementation of IRDP revealed that flow of assistance to women members of target group households had been very marginal. To serve the overall objective of improving life of rural families living below poverty line, sharper focus on providing assistance to women as part of IRDP strategy was considered essential.

Hence a programme of DWACRA was launched as a sub-scheme of IRDP by Government of India during 1982-83 on pilot basis in 50 districts. This group approach for women was extended to cover all the districts with effect from 1st January 1990.

Rationale behind the programme is that women’s income is known to have positive correlation with development of positive attitude, nutritional and educational status of the family.

Apart from raising the income of rural women of poor households, DWACRA also aimed at enabling organized participation of groups of women in the programmes of credit, skill, training and infrastructure support for self employment. TRYSEM is expected to fulfill skill requirements for beneficiaries of DWACRA.

DWACRA was providing all necessary inputs like working capital, credit, training, employment, management skills, marketing facilities etc.

Approach
10-15 poor women form a group. One member of the group was organizer, who assisted in the choice of activity, procurement of raw material, marketing of products.

Objectives
- To provide crèche services for children of working DWACRA women.
- Setting up literacy centers of DWACRA women with specific emphasis on girl child dropouts and illiterate members.
- Filling up critical gaps in the areas of immunization, nutrition etc. for the children of DWCRA members.
- To provide some relief to the physically handicapped children of DWACRA members.
The main activities of DWCRA are: Dairy Activity, Gem Cutting, Silk Weaving, Candles/Agarbathi making, Readymade garments, Canteen, Beedi making, Multipurpose activities like preparation of Masala powders, Pickles etc.

Who are eligible: Rural women coming under below Poverty Line have to form self help groups. 50% of the women must belong to SC/ST. Priority was given to physically handicapped persons and girls or women.

Time Frame: After identification of the beneficiary self-help groups will be formed immediately. As stated above revolving funds will be released after six months.

Pattern of assistance: Group of women in each DWACRA group gets Rs. 25,000 as Revolving Fund. Central Govt. and UNICEF were sharing the expenditure on revolving fund equally. Later on UNICEF withheld its assistance from 1st January 1996 and both Central and State govt. share on 50:50 basis.

Implementation
At the district level, District Rural Development Agencies were responsible for execution of the programme. The Assistant Project Officer (APO), the additional Gram Sevika along with two Gram Sevikas and Mukhya Sevika constituted a team to assist in the implementation of DWACRA.

Strategy adopted in DWACRA of Andhra Pradesh
- Formation of Thrift and Credit groups to develop group dynamics, cohesion and homogeneity among the members.
- Sustainable income generating activities with access to credit under the Integrated Rural Development Programme (IRDP) and to training facilities.
- Total Literacy Campaign (TLC), Kalajatha, and multimedia publicity campaign through All India Radio (AIR), Doordarshan and print media, involvement of youth leaders, mahila mandals, voluntary organizations and Government functionaries created awareness and contributed to the process of social mobilization.

In the implementation of DWCRA, some States like Andhra Pradesh, Kerala, Tripura and Gujarat have performed very well while in other States, the performance and impact of DWCRA has been relatively poor.

In Andhra Pradesh, in particular, several successful DWCRA groups have been formed and this has led to the empowerment of women in decision-making on various social aspects that impinge on their daily life.

Shortcomings of DWCRA
- On the whole, though the programme is successful, at some places the several shortcomings have also surfaced in implementation of DWCRA which has stymied its successful and effective execution in some States.
- Several groups have become defunct over time. The reasons for these include, among others
  (a) Improper selection of groups;
  (b) Lack of homogeneity among the group members;
  (c) Selection of non-viable economic activities that are mostly traditional and yield low income
  (d) The linkages for supply of raw material and marketing of production are either deficient or not properly planned
  (e) Lack of institutional financial support, inadequate training
  (f) Inadequacy of staff and their insufficient training and motivation has also affected the overall implementation of the programme.
INDIRA KRANTHI PATHAM (IKP)

The activities of DWCRA and Velugu were integrated under a programme called Indira Kranti Patham. The basic objective of this integration is to implement various programmes for strengthening of self-help Groups with similar implementation strategy. The new scheme Indira Kranti Patham had been designed by clubbing Women Empowerment with Poverty Alleviation

Indira Kranti Patham (IKP) is a statewide poverty reduction project to enable the rural poor to improve their livelihoods and quality of life through their own organizations. It aims to cover all the rural poor households in the state with a special focus on the 30 lakh poorest of the poor households. It is implemented by Society for Elimination of Rural Poverty (SERP), Dept of Rural Development, Govt of AP. SERP is an autonomous society registered under the Societies Act, and implements the project through District Rural Development Agencies (DRDAs) at the District level. The Chief Minister of Andhra Pradesh is the Chairperson of the Society. IKP builds on more than a decade long, statewide rural women’s self-help movement. The focus is on deepening the process, providing an institutional structure and developing a framework for sustaining it for comprehensive poverty eradication. It is the single largest poverty reduction project in South Asia.

It works with 4,76,930 Self Help Groups federated into 28,080 Village Organizations (VO) and 700 Mandal Samakhyas (MS). The project mandate is to build strong institutions of the poor and enhance their livelihood opportunities so that the vulnerabilities of the poor are reduced. Community Investment Fund (CIF) is the major component of the project, which is provided to the SHGs/ VOs/ MSs to support wide range of activities for socioeconomic empowerment of the Poor.

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Chapter 15 NEW APPROACHES IN EXTENSION-PRA,NATP,ATMA,SREP.ATIC

PARTICIPATORY RURAL APPRAISAL (PRA)

The rich experience of the farmers generally do not get priority in planning, as the action plans for development of their areas are mostly prepared elsewhere. What is generally done is technologies which are developed and tested at one location are implemented elsewhere. Sometimes irrelevant technologies are implemented leading to poor adoption rates, all this is happening because farmers participation is lacking. Farmers innovation and experience in handling their own technology to be used in future is lacking.

PRA is an approach, which comprises of a number of technologies or aids employed for analyzing information with the participation of village people.

PRA is one of the tools of surveying that helps outsiders to understand about a village in depth by using various techniques which often produce interesting and authentic information about the village. The process of understanding the agro-eco system and the social organizations can only be successful with the total involvement of the village people and the officials concerned.

PRA is considered as intensive and systematic learning experience carried out in a community by a multidisciplinary team which includes community members.

Meaning: It is semi-structured way of gathering information relatively at a quicker time by a multi-disciplinary or intra-disciplinary team from the local people about the key problems and opportunities of an area and deciding on an agreed set of possibilities for alleviating the problems and or making good use of the opportunities of an area and deciding on an agreed set of possibilities for alleviating the problems and or making good use of the opportunities. This method is useful for collection of information of the entire village for effective planning and implementation of various programmes.
PRA consists of three words or terms, namely

- Participatory
- Rural
- Appraisal

People of the rural area participate and appraise about the village pertaining to demography, institutions, agro-climatic and agro-ecological conditions, habitats, habits, occupations and livelihoods, adoption of technologies, the past and present village conditions, working patterns and also the needs to improve the present conditions and future aspirations to the members of the team.

The need for PRA at a glance:
1. Sustained change and the need for accurate and timely information.
2. It advocates that the people themselves are ‘solution agents’ for their problem.
3. It cuts down the normal professional bias towards people.
4. Reduces down the normal time consuming long methods of survey which consumes the much needed resources and that time. The method is cost effective, accurate and timely. To get authentic, accurate and timely information from target group.
5. To avoid masking of field information by intermediaries.
6. To teach the farmers in understanding their village resources and problems and solutions in a holistic manner.
7. Reduces down the normal time consuming long methods of survey which consumes the effective, accurate and timely
8. To obtain solutions for certain problems from the villagers themselves.
9. To use farmers criteria and understand the local environment with clear local priorities.
10. To learn farmers indigenous technologies.
11. To achieve for triangulation, using different methods and involving various people to check and recheck the findings.
12. To develop self-critical analysis and direct contact with local needs and communities.

Characteristics of PRA:
1. Carried out in the field and has an informal character.
3. Continuous interaction of research team with villagers to develop methods and procedures together.
4. Short, intensive periods of field work alternated with analytical workshops/discussions by the team.
5. Carefully selected methods/techniques used by the team.
6. Flexible use of the methods.
7. Learning from & listening to people is utmost important.
8. PRA can usefully supplement the long survey methods.
9. PRA has purpose and is a means to an end.
10. Optical ignorance and diversity of analysis.

PRINCIPLES OF PRA
1. Active participation of rural people for self critical analysis.
2. Reversal of learning: learning from rural people directly on the site and face to face.
3. Broad, complete and accurate analysis of local situation and rural people.
4. Learning rapidly and progressively with conscious exploration.
5. Use of secondary data for comparison.
6. Catalyst role of PRA expert team.
7. Off setting biases by taking the concerns and priorities of women and poor people.
8. Optimizing trade offs: relating the costs of learning to the useful truth information.
9. Triangulation: using of a wide range of methods and information to cross check the collected data.

**PRA techniques, which are used in Agricultural developmental projects**

1. **Handing over the stick:** In order to seek good rapport with people start with what people know. Encourage local people to elicit and use their own criteria and categories of analysis and planning. Learn from errors. Have confidence that villagers can do it. Do not try to impose your interests, opinions, values or common sense during the process.

2. **Do-it-yourself:** Roles are reversed, in which the villagers are clearly the experts; outsiders soon learn how much skill is required, say, to plough a furrow. Do-it-yourself prompts changes in attitude. Other examples of activities include leveling a field, puddling, transplanting rice, weeding, building stone gully plugs, lopping tree fodder, cutting and carrying fodder grass, milking buffaloes, fetching water, fetching firewood, digging compost, sweeping and cleaning, washing clothes, drawing water from a well, thatching, plastering a house and many more.

3. **Secondary data review:** This include project documents, scientific documents, the results of earlier studies, annual reports, statistics, topographic and geomorphologic maps, satellite images and other official, unofficial documents, newspaper articles and others. The documents which are available at Government, Non Government Agencies, Universities, libraries, private sources, marketing societies etc should be reviewed and evaluated. Written summaries, copies of maps and photographs that are collected from above said sources can be used by the team to get its initial learning while beginning their work in the field. E.g: If PRA on Agriculture in 'X' village is to be done, secondary data about Agriculture of X village on number of farmers (Small, medium, Marginal and Agricultural labourers), crop acreage, cropping pattern, quantity of Agricultural inputs used (fertilizers, pesticides), average yields, market prices (month-wise), implements, schemes etc. can be obtained from NRSA which reveals cropped area, water resources, forest cover etc.

4. **Direct observation:** this involves the intensive and systematic capturing of observable phenomena and processes within their natural surroundings. As a rule, the results of direct observation should be cross checked with key informant’s interviews to verify their correctness. It is systematically observing objects, events, places, processes, relationships or people, and recording these observations promptly. E.g : PRA team can travel the entire village and can estimate various resources, problems, enterprises, soils etc by direct observation.

5. **Participatory Mapping / Modeling:** This is the construction of a map of village area by villagers themselves by interaction with one another using rangoli powders or chalk or various locally available materials like cotton bolls for cotton crop, small slabs for houses, grass for grazing lands etc on the ground or a cement floor for understanding the village layout, main features such as houses, temples and other infrastructure and other resources like forests, lands, rivers, pastures, watersheds etc. There are several types of maps:
   a. Resources maps of catchments, villages, forests, fields, farms, home gardens;
   b. Social maps of residential areas of village;
c. Wealth rankings and household assets surveys on social maps;

d. Health mapping.

6. **Transact walk:** A transact walk is a kind of exploratory walk which is undertaken by team along with the villagers to observe and record every send in minute detail of a particular area. The area under study is systematically traversed together with villagers e.g. from north to South or east to west, or from the highest to the lowest point, while walking everything noticed directly or mentioned by the villagers is discussed and recorded.

   Diagrams may be drawn by making the team walk through the village and surrounding areas, observing, asking, listening, and discussing problems and opportunities while walking. Such a transactional analysis is important for understanding the rural situation in its totality.

7. **Time line:** Time lines and historical profiles are one of the important PRA techniques which are used as a simple means of visualizing key historical events and major perceived changes e.g. soil erosion, crop shift, change in food habits, shift in livelihoods, population growth, climatic changes etc. Eg: Time line helps us to understand when minor millet cultivation was replaced by cash crop cultivation, what are the reasons and simultaneously it also gives insights on how to encourage millet cultivation etc.

   Timeline refers to a calendar of historical events from as far back as one can remember up to the present, in the life of a person, community, village, area or institution depending on what we wish to construct. The best informants are the old people of the village.

9. **Time trend:** If we depict the data obtained in time line by choosing a particular item and analyze its growth over a period of time and presented in the form of a graph or a line diagram it is called time trend. Ex: yields of groundnut for the past 10 years.

10. **Matrix Ranking:** In matrix ranking a class of objects is evaluated-by applying different criteria and assigning value to criteria. One can understand villagers’ preferences and attitudes towards a particular topic by this technique. It helps us to understand farmer’s priorities in crop varieties, vegetables, tree species, live stock, soil and water conservation techniques, irrigation methods etc. This technique helps to gain better understanding of farmer’s decision making processes and identifies criteria to prioritize and select certain items or activities over others.

11. **Seasonality/ Seasonal Analysis/ Seasonal calendars:** This is a calendar which indicates month wise (even day wise or season wise), the abnormalities, specialties, threats, problems, abundance, and shortage, with regard to agriculture in a diagrammatic way. It is an important and useful exercise to determine seasonal patterns in rural areas as related to rainfall, farming practices, employment etc. This helps us to understand pest, disease problems in a particular season, employment availability, labour migration, rainfall patterns, labour wages, labour availability, water availability, market prices, crops, food consumption, diseases to crops, livestock, human beings etc.

13. **Venn diagram:** The term “Venn diagram” refers to a diagram developed by a person called Venn to indicate the contribution of outside and inside agencies and individuals in the decision making process of the inhabitants of a village as perceived by the villages themselves. The Venn diagram shows the diagram of a village and its institutions. The institutions are depicted in different size circles, the bigger the size, the more is its importance to village, and the institutions are depicted at various distances. The key institutions and individuals in a community and their relationships are important in for decision making. The institutions were linked with the
community and represented in the form of circles of different sizes. The size of the circle represents
the relative importance of the institution for the community. It is also called Chapathi diagram.

14. **Wealth ranking:** It is a process by which members of a community jointly determine the
relative wealthiness of all its members by taking into account all assets sources of income and
liabilities of an individual family. In wealth ranking, the criterion for rich or poor is determined by
the villagers themselves which may vary from land holding to a number of other criteria’

15. **Semi-structured interviews:** It is a form of guided interviewing where only some questions
are predetermined. Many questions are formulated during the interview, as in a journalistic
interview. These may be of various types. This is one of the main tools used in PRA. It is a form of
guided interview where only some of the questions are predetermined. In PRA interview formal
questionnaire should not be used but at most a checklist of questions as a flexible guided and many
questions will be formulated during the interview. Types of semi structured interviews include. A.
Individual interview  B. Key informant’s interview. C. Group interview  D. Focused group
interview.

16. **RANKING:**

   a) **Preference Ranking:** It can be used to quickly identify problem areas and the preferences
of individuals and compare them with the assessments of others. Whether the aim is to rank
preferred crops or the principle problems affecting agricultural production. The preferences can be
identified by assigning scores (e.g. highest score for most preferred crop or most important problem,
least score for least preferred/ important crop or problem). A limited number of respondents may be
asked to give their opinion on a 5-point rating scale like most important, important, undecided, not
so important and least important with scores 5,4,3,2, and 1 respectively. After tabulation of the
responses, ranking of the items may be obtained.

   b) **PAIRWISE RANKING:** In this method, the relevant items relating to problems, preferences
etc. are separately presented to the respondents in pairs in all possible combinations. If there are 5
items the number of pairs would be 10. The respondents would select one item over the other from
each pair which they consider to be more important. A simple ranking of the items, on the basis of
number of choices received for an individual or a composite ranking for all the items for a group
may be obtained.

   c) **DIRECT MATRIX RANKING:** This method enables the participatory team to prioritize from
a list of criteria for a certain object. It allows the team to understand the reasons for local
preferences for such things as tree species, crops, vegetables, household animals etc. The criteria are
likely to change from group to group and between men and women.

   d) **WEALTH RANKING:** Wealth ranking is used to classify households according to relative
wealth or well-being. Cards with one household name on are sorted by informants into piles. The
wealthiest are put at one end, the poorest at the other, and as many piles or categories as desired in
between are made. The process is repeated with at least three informants.

**PRA makes use of other wide range of methods -**

1. Ranking by Voting
2. Analysis Group Discussion.
3. Innovation Assessment
4. Construction of Diagrams
5. Historical and Future Mapping

**Strengths of PRA:**
- Community forum
- Local solutions
- Adequate data
- Systematized participation
- Accelerated changes already in motion.
- Builds self-confidence.
6. Mobility mapping
7. Social Mapping
9. Systems Diagram
10. Pie and Histogram
11. Oral Histories
12. Case Studies and Portraits
13. Indigenous Categories and Terms
14. Proverbs
15. Taxonomies-Ethno-classification

Limitations:

- PRA did not provide final absolute answers.
- PRA had a relatively small sample size and it could not provide statistically accurate data.
- PRA should be seen as complementing these more conventional approaches.
- The best possibility for the people may not be necessarily the absolute best.
This project was introduced in the financial year 1995-96. Govt. of India approved this project in November 1998 for full-scale implementation. This aims at developing a transfer of technology (TOT) system that is demand driven, well integrated with research, and financially sustainable and accountable to stakeholders of agricultural development. Govt. of India initiated NATP with the financial assistance of World Bank HICH is expected to finance for initial five years. NATP would also shift the balance of technology generation assessment and dissemination programmes towards greater location specific need for the future. The purpose of this project was to consolidate earlier investments in agriculture and address specific system constraints, weaknesses and gaps that were not addressed earlier.

The basic premise of NATP is that research and extension programmes should be farmer centered and demand driven

**Objectives of NATP:**

1. The main objective of the project would be to address key constraints, which limit the efficient use of the public resources
2. To improve the relevance of technology through proper assessment, refinement and transfer according to the changing needs of farmers.
3. Conservation of natural resources through improved agricultural technology
4. To address key national objectives of food Security, economic growth, equity, alleviation of rural poverty.
5. Increase the quality and type of technologies disseminated through
   a) Location specific technology development
   b) Diversification and intensification of farming systems
   c) Use of sustainability enhancing technologies.
6. Enable research and extension systems to become demand driven and responsible for solving problems of farmers
7. Strengthen research-extension-farmers (R-E-F) linkages
8. Increase financial sustainability of the system
9. Shared ownership of Agricultural Technology Systems (ATS) by key stakeholders i.e. farmers especially poor, women and disadvantaged, public sector research and extension agencies like ICAR, SAUs, DOA etc.

**Strategy of NATP:**

1. Improving the capacities of the human force thereby increasing the efficiency of public research and technology assessment
2. Improvements in the incentives and accountability
3. Proper monitoring and impact evaluation.
4. Facilitating the entry of other private actors or producers in to research and extension activities wherever appropriate
5. Accumulating replicable experience to guide further change

**Components of NATP**

1. **Development of the ICAR organizations and Management System:** Under this component, following activities will be supported:
• Strengthening of the ICAR Head Quarters, including the National Agricultural Science Centre (NASC)
• Directorate of Information and Publications of Agriculture (DIPA) (d) institutionalization of priority-setting mechanism, monitoring and evaluation (PM & E)
• Information System Development (ISD), covering Agriculture Research Information Service (ARIS) and Library Information and Networking.

Funding would be provided to continue the present reforms in ICAR organizations and management processes including support for the review of selected institutions aimed to enhance their management capabilities, consultancies and workshops to plan further evaluation of ICAR itself.

2. **Support for Agro-ecosystems Research**: The Project Implementation Unit (PIU) has been set up at the Lal Bahadur Shastri Bhavan, ICAR, Pusa, New Delhi. Funding location specific interdisciplinary research programmes. It would promote entry of other institutions such as general universities, foundations, NGOs, farmers associations, the corporate sector into research. HRD support for agro ecosystems research, emphasizing enhanced linkages with national and international centers of research.

3. **Innovations in Technology Dissemination**: Technology Dissemination Unit (TDC) has been established in the Directorate of Extension, Department of Agriculture and Cooperation (DAC). The ITD proposals received from the DAC and the Division of Extension, ICAR are being processed by the TDC and put up for the approval by the Technology Dissemination and Management Committee (TDC). The DAC component involved mainly setting of the Agricultural Technology Management Agencies (ATMAs). Selected State Agriculture Management and Extension Training Institutes (SAMETIs) are strengthened to train farmers and extension workers.

The purpose of this component is to test new methodologies in technology transfer, new organizational arrangements and operational procedures.

- One goal is to decentralize decision making to the district level through the creation of Agricultural Technology Management Agency (ATMA), as a registered society.
- A second goal is to increase farmer input into programme planning and resource allocation especially at the block level and increase accountability to stakeholders.
- A third goal is to increase programme coordination and integration. Funds would be provided to 24 pilot districts in agro-ecological zones to create Agriculture Technology Management Agency which will bring together researchers, extensionists, farmers and other stakeholders (including NGOs and the Corporate sector)

To operationalize, it proposes following interventions:

1. Agricultural Technology Information Centre (ATIC)
2. Remandating selected Zonal Research Stations: The NATP envisages strengthening the regional research capabilities of SAUs for undertaking research to develop location specific technologies.
3. Strengthening Zonal Coordination Units (ZCUs) and Directorate of Extension (DoEs) of SAUs: The NATP calls for strengthening of ZCUs & DoEs to enhance their ability and effectiveness to monitor NATP supported programmes in the field.

4. **AGRICULTURAL TECHNOLOGY MANAGEMENT AGENCY (ATMA)**
A Centrally sponsored scheme ‘Support to State Extension Programmes for Extension Reforms’ was launched by the ICAR in 1999. This scheme is a major initiative towards revitalizing agricultural extension in the States to make the extension system decentralized and demand driven. The scheme is implemented through autonomous district level institutions established in the States in the form of Agricultural Technology Management Agency (ATMA). ATMA is managed by Project Director at district level.

Goals of ATMA

1. Decentralize decision-making to the district level.
2. Increase farmer input into programme planning and resource allocation, especially at the block level.
3. Increase programme coordination and integration, and to increase accountability to stakeholders.

As a society, it would be able to receive and expend project funds, entering into contracts and agreements and maintaining revolving accounts that can be used to collect fees and thereby recovering operating cost.

ATMA networking: It would have linkage with all the line departments, research organizations, NGOs, and agencies associated with agricultural development in the district. Research and Extension Units within the project districts such as ZRS or substations, KVKs and the key line departments of Agriculture, Animal Husbandry, Horticulture and Fisheries etc. would become constituent members of ATMA.

ATMA Governing Board: The ATMA Governing Board is a policy making body and provides guidance as well as review the progress and functioning of the ATMA. The composition of the ATMA Governing Board is as follows.

Chairman: District Magistrate/Collector
Vice-Chairman: Chief Executive Officer (CEO)/Chief Development Officer (CDO)
Members:
- Joint Director/Deputy Director (Agriculture)
- A representative from ZRS/KVK, One farmer representative, One livestock producer, One horticulture farmer, Representative of Women Farmers Interest Group, One SC/ST farmer representative, A representative of NGO, Lead Bank Officer of the district, A representative of District Industrial Centre,

Note
Sub-divisional Agricultural Officers are nominated as members.
On the basis of local requirement other members may be nominated.

Key functions of ATMA Governing Board

1. Review and approve Strategic Research and Extension Plan (SREP) and annual work plans that are prepared and submitted by the participating units.
2. Receive and review annual reports presented by the participating units, providing feedback and direction to them as needed, for various research and extension activities being carried out within the district.
3. Receive and allocate project funds to carry out priority research, extension and related activities within the district.

ATMA management Committee: The Management Committee would be responsible for planning and executing the day-to-day activities of ATMA. The ATMA management committee shall be constituted as follows.

Chairman: Project Director of ATMA
Members: District Heads of Departments of Agriculture, Horticulture, Animal Husbandry, Fisheries, Sericulture, other appropriate line departments important for a district. Heads KVK, ZRS, Sub divisional Agricultural Officers, One representative of NGO in-charge of farmers organization, Two representative of farmers organizations (one year rotation basis)

Key functions of Management Committee
1. Carryout Participatory Rural Appraisals (PRAs) to identify the problems and constraints faced by different socioeconomic groups and farmers within the district.
2. Prepare an integrated, Strategic Research and Extension Plan (SREP) from the district.
3. Prepare annual work plans that would be submitted to the ATMA Governing Board for review, possible modification and approval.

**Linkage mechanism:** ATMA has a sound Research-Extension-Farmer (REF) linkage mechanism. This approach of transfer of technology envisages both top-down and bottom-up linkage (Das and Saha, 2002). Cooperation and coordination among sister departments is the key for successful whole farm management.

At the block level, Farm Information and Advising Centre would be created. It would be the planning and operational arm of ATMA.

**Advantages**
1. ATMA is more effective in technology generation as it encourages location-specific solutions, keeping the resources of the farmers in mind.
2. As ATMA ensures a greater coordination among sister departments, it helps in better management of farms by the farm families.
3. Participation is the basic principle of ATMA. Involvement of women in both ATMA Governing Board and Management Committee would bring about women empowerment.
4. ATMA seeks a greater linkage with research and extension.
5. ATMA provides a single window extension system by creating FIAC at the block level. Farmer can get any advice and suggestions from there only.
6. ATMA has an effective feedback mechanism.

**STRATEGIC RESEARCH AND EXTENSION PLAN**

ATMA is mandated to develop a demand driven, situation specific, multi-actor oriented

**Strategic Research and Extension Plan (SREP)** to accelerate agriculture development in the project district.
The SREP is the basic document which not only decides the development activities that need to be carried out but also in which manner and by whom it has to be done.

**What is strategic planning?**

i. A process in which the stakeholders of an organization join in strategic thinking and acting to create the best fit between the organization and its environment.

ii. It is planning from outside in and from inside out.

iii. It aims to unearth strengths, weaknesses, opportunities and threats in terms of the organization its mission, its vision and its environment of an organization.

iv. In brief, strategic planning is:
   a. What is intended to be achieved in future?
   b. How to get there?

**The need for SREP: The present Agricultural Technology Service (Research & Extension) is:**

1. Centralized in nature.
2. Its approach is top down.
3. It focuses on individual commodities/enterprises rather than on holistic/integrated approach.
4. It is adhoc in nature and does not involve participation of all actors.
5. The farmers are considered as receivers of benefits rather than as responsible persons who can influence the production process.

To address the aforementioned issues, under ITD component of NATP, ATMA of each district is required to develop a SREP by involving all stakeholders.

Therefore, in formulating a SREP, the following guiding principles should be kept in view.

- Identify and spread important farming system innovations or success stories that may intensify or diversify existing systems and thereby, increase farm household income.
- On-farm collaborative technology development, testing and refinement to address serious technological gaps in the existing farming systems.
- Promote appropriate natural resource management (NRM) plan for building and maintaining the sustainable production systems within each AES.

**PROCEDURE FOR SREP PREPARATION:** In order to prepare SREP for a district, representative mandals and villages will be selected for data collection. Secondary data is collected from records and again at village level primary data is collected from farmers by Agro Ecological Situation Team (AES) by use of participatory methods.

**Contents of SREP**

The SREP will have two sections: and each section will have two subsections as under:

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<th>Strategy Section</th>
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<td>Activities</td>
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**Diagnostic section:** Information sub-section: (For the District and Village)

Secondary data on the following aspects is collected from the available records of Agricultural Officer, Revenue officials, Panchayat records etc.

General features: Agro-ecological situations, Agro-climatic information, Information on land based systems, Demographic data, Land and soil-land utilization statistics, Rainfed and irrigated area-
Area and percentage under each category, On-going development, extension and research, Information on markets, Agro-processing facilities, Storage facilities, Agricultural credit, Input and service facilities, Farmers’ group and organizations, Private sector organizations and non-governmental organizations, Information and communication, Primary data is to be collected from the selected villages on the above aspects and also on: Farm holdings, Farming systems, Farming situations in each crop (Ag+ Horti), Adoption gaps in crop cultivation, Existing INM, IPM practices, Seed Quantities used, Success stories, Innovative farming systems

Analysis sub-section: Analysis of existing farming systems and enterprises:
SWOT analysis is to be carried out in respect of different Farming Systems, as observed in each AES.

Strategy section: Strategy sub-section: This section spells out strategies for research and extension for each AES in respect of different program components. In this sub-section strategies would be developed, separately for extension and research, generally on the following categories.

How to Develop SREP
SREP is to be demand driven while it is in consonance with the prevailing Agro-ecological, socio-economic situations and also the development goals of various government departments. This is developed with a bottom – up approach. While it gives importance to the main clients i.e. the farming community, it does consider the views of the other stakeholders in the agricultural development scenario. Hence, the methodology for developing SREP for any NATP district is different from the method presently in vogue in different line departments of the government in formulating plans and strategies for their activities. The steps for developing SREP are outlined here under:

STEPS IN DEVELOPING SREP

STEP 1 Orientation of District Level Officers and Scientists on SREP.
STEP II Identification of Agro-eco-situations (AESs) within the district,
Constitution of AES teams and Logistic arrangements
STEP III Training of AES teams
STEP IV Participatory Field data collection
STEP V Rechecking and analysis of data and information
STEP VI Developing strategies for research and extension in the district
STEP VII Developing Activity Schedules
STEP VIII Approval of SREP

AGRICULTURAL TECHNOLOGY INFORMATION CENTRE (ATIC)
The Agricultural Technology Information Centres (ATICs) are established to provide greater coordination and intensive interaction between the researchers and technology users beyond individual units of research institutions in contributing towards the dissemination of information. Each ATIC will serve as a “Single Window System” with an objective to help Farmers and other stakeholders such as Farmer-Entrepreneurs, Extension workers, Development agencies, Non-Government Agencies (NGOs) and private sector organizations to provide solutions to their location-specific problems in agriculture and make available all the technological information along with technology inputs and products for testing and use by them. The ATICs need to be demand driven and well integrated with research and financially sustainable, lay greater emphasis on location-specific and system based sustainable technologies.

ATIC, ANGRAU started functioning from 1-1-1999 at Rajendranagar.
ATIC disseminates technologies through: Office calls, Telephone calls, Personal letters, Expert node, Diagnostic services, Supply and Sale of technological inputs

**Specifically, the ATICs provide**

- Diagnostic services for soil testing, plant and livestock health,
- Supply research products such as seeds, planting materials, livestock breeds, poultry strains, fish seed, processed products etc., emerging from an institution for testing and adaptation by various clientele.
- Disseminate information through published literature, audio-visual aids and electronic media, provide an opportunity to institutions for resource generation through sale of their technologies and support the district level Agricultural Technology Management Agencies (ATMAs) in technology dissemination wherever they are available.

ATIC’s are located in 21 states viz., Andhra Pradesh (1), Andaman & Nicobar (1), Assam (1), Bihar (1), Gujarat (1), Haryana (2), Himachal Pradesh (3), Jammu & Kashmir (1), Karnataka (3), Kerala (5), Madhya Pradesh (3), Maharashtra (5), Meghalaya (1), New Delhi (1), Orissa (1), Punjab (1), Rajasthan (2), Uttaranchal (1), Uttar Pradesh (3), West Bengal (1), Tamilnadu (2).

One of the key indicators of success of ATIC will be number of farmers and farmer groups visiting the centre, the sale of materials, the number of farmers trained per year and the kind of technological feedback received, documented and passed on to the research-extension systems.
The private extension service providers available in the country are the unemployed agricultural graduates, agricultural consultants, consultancy firms, progressive farmers, farmers organizations, cooperatives, non-governmental organizations, NGO run KVKs, agri-business companies, input dealers, newspapers, agricultural magazines, private television channels, private sector banks, internet and donor agencies.

The real boost to this concept came when the government of Madhya Pradesh decided to implement on innovative programme on “Private-Public Partnership in Agricultural Extension Management” with the active facilitation of MANAGE on November 5, 2001, private-public partnership with Dhanuka Group in Hoshangabad began a new chapter in history of agriculture system in India. Thus M.P. became the first State in the country to have a private extension policy. Many other companies’ viz, KRIBCHO, IPL, SOPA, Sriram fertilizers and NFL have come forward to work in other districts.

The definition of agricultural Extension varies from simple transfer of information to facilitating the process of total human development. The services are mainly funded and delivered by government in Indian context. But there are private players who also fund and/or deliver extension services. This process of funding ad delivering extension services by private individual or organization is called private extension.

These concepts about the privatization emphasizes three aspects, they are:

1. It involves extension personnel from private agency/organization
2. Clients are expected to pay the service fee (sometimes private extension may not expect fee from clients e.g. NGOs).
3. Act as supplementary or alternative to public extension service.

Marketing is crucial for ensuring balanced and continuing development of sustainable agriculture. Through the government and the private sector have made substantial investments in the development of infrastructure and facilities for marketing of agricultural produce, the development of the agricultural marketing system is far below the desired level. Therefore, the need of a private institution to take care of the specialized variety and needs of marketing was realized.

Factors for Privatization of Agricultural Extension Service in India:

The following factors have to be considered for privatization of agricultural extension service in India.

1. Types of crops cultivated throughout the country.
2. Socio-economic strata differences among the farming community viz. tenancy, ownership, leased, small, marginal, medium and large farmers categories.
3. Entirely drastic agro-climatic variation along across the length and breadth of the country.
4. Different approaches followed in various developing/developed countries and their utility possibilities in our country, environment etc.
5. Changes in rainfall pattern, vagaries of monsoon, floods, cyclone etc.

Privatization of Agricultural Extension:

Following Saravanan and Shivalinge Gowda (1999), Privatization of Agricultural Extension Service may be defined as the service rendered in the area of agriculture and allied sectors by
extension personnel working the private agencies or organizations for which farmers are expected to pay a fee (or fee), and it can be viewed as supplementary and complementary to public extension services. Privatization as a system of agricultural extension is gradually being adopted in Indian agriculture because of the following reasons:

1. Declining trend in government expenditure in public extension due to heavy financial burden;
2. Perception of public extension service as less effective in meeting the current needs of the farmers;
3. A shift in agriculture from subsistence level to commercialized agribusiness;
4. To meet the challenges of globalization and liberalization of the farm sector, and
5. Demand for specialized knowledge, information and assistance from farmers.

**Characteristics of private extension system:**

These are presented following Saravanan (2001):

**Objectives.** Private extension mainly concern with maximum possible profit to the clients through advisory services, so they try to become more efficient and effective in providing services. Their remuneration is obviously linked with increased income of the farmers.

**Target group.** Private extension mostly concentrates on big farmers, farmers producing commercially, and in favourable environments. They will not be interested in investing on small, marginal and resource poor farmers as they cannot pay for private extension’s high charges.

**Clients.** In Private extension system, clients are more committed and careful about extension services, because they are paying for the services. Clients make best use of the private extension worker’s time.

**Offerings.** Profit oriented services include not only technology transfer but also supply of critical inputs. Offerings are based on seasonal needs and convenience of the farmers.

**Technologies.** Private extension agency transfers the location specific and demand – driven technologies. Technologies are specialized and costly, but are profitable. Private extension ensures timely supply of inputs.

**Organizations.** Private extension personnel become more accountable to clients and highly motivated because they are getting remuneration from their clients. They become professionally sound and will put constant efforts to upgrade their knowledge and technical know-how.

**Funding.** Private extension service gets funds from farmers’ contribution and developmental agencies.

**Extension service.** Advisory nature of service. Extension becomes purchased input and it generates new income to farmers.

**Methods.** Private consultancy mostly adopts personal contact methods, as group approach will reduce their chances of getting consultancy fee.

**Strategies for privatizing extension:**

Following Saravanan and Shivalinge Gowda (2000), these are:

**Commercialization of extension services.** Complex, demand-driven technologies in the public extension system should be provided for particular cost.

**Introducing contract extension system.** Public extension system can make contract with registered private agricultural consultancy agencies to transfer the agricultural technology.
Introducing share cropping system. Private / public extension agents are provided with remuneration in the form of share crop. It will increase the extension personnel’s accountability and commitment to all service.

Giving partnership rights and more responsibility to private sector and NGO’s. Private sector and NGOs are entering in a big way in recent years to provide agricultural consultancy. They may be given more responsibility in agricultural technology transfer.

Gradual withdrawal of public extension system. Gradual withdrawal can be done in two ways: area-wise and/or commodity-wise. Extension service responsibility in areas having favourable environment like high soil fertility, high irrigation potential, satisfactory infrastructure facilities, commercial farming and commodities which provide high profit to farmers, can be given to the private sector.

Creating and strengthening farmers groups and cooperatives. Through farmers groups and cooperative, extension agents are appointed and the cost will be shared by the members. For this purpose, existing village cooperative, clubs, mahila mandals and water management committee are used. Private organizations such as, agricultural consultancy, commercial firms, agro-based industries, input agencies organizations etc, will enter the area of extension service.

Reasons behind the Privatization Issue.

i. Financial burden on Government:

ii. Disappointing Performance of Public Extension Service:

iii. Commercialization of agriculture:

   The privatization of extension service on the basis of payment is primarily based on two major considerations. Firstly, the guarantee to provide expected profits.

   The second question relates to marketing, private agencies can help by providing:


Problems of Privatization of Extension:

- The consequence of privatization in user’s fee, i.e. collection of cost from the beneficiaries. The feasibility of charging fee for extension service raises a question on the paying capacity of the farmer.
- In case the message does not yield the desired result, i.e. projected profit, the service will be rejected for future.
- Privatization does not care for sustainability; instead advocate exploitation of natural resources to the maximum extent.
- Private extension concentrates big and progressive farmers and areas having favorable environment.
- Private extension is less education oriented and more commercial in nature.
- The human resources development role of organizing, motivating and guiding farmers for empowerment will be sidelined by the private extension agencies.
- Private extension restricts flow of information among the fellow farmers.

Merits of Privatization:

1. Extension generates new income, extension become economic input.

2. Provides demand-driven service.
3. Increases the voice of farmers in the extension service.
4. Extension service becomes more cost effective with efficient and quality service.
5. Privatization complements or supplements the efforts of public extension.
6. Extension personnel become more clients accountable.
7. Private extension increases staff professionalism.
8. Clients (farmers) are more committed to service.
9. Private extension doesn’t concentrate only on food grain production but will promote crop diversification.

MARKET LED EXTENSION

Indian agriculture has made rapid progress in the last half century by augmenting the annual food grain production from 51 millions tones in the early fifties to 209 million tones in 1992-2000 and steered the country to a status of self sufficiency. It has been successful in keeping pace with the rising food demand of a growing population.

Food grain production quadrupled in the last 50yrs while population tripled from 350 million to billion during this period. Significantly the extension system had played its role untiringly in transfer of production technologies from lab to land besides the agricultural scientists, farmers and marketing network.

Though the production has increased dramatically, not so much bothered about remunerative prices, small and marginal farmers generally prone to sell produce on “as is where is basis” due to several constraints like repayment of personal hand loans and to meet domestic needs.

With globalization of market, farmers have to transform themselves form mere producers-seller in domestic market to producers cum sellers in wider market sense to best realize the returns for his investments, risks and efforts. This to be achieved, farmers need to know answers to questions like what to produce, when to produce, how much to produce, when and where to sell, at what price and whom to sell his produce. Farmers received most of the production technologies from extension system. Extension system now needs to be oriented with knowledge and skills elated to market.

An efficient marketing system is essential for the development of the agricultural sector. The marketing system contributes greatly to commercialization of subsistence farmers. Effective linkages of productions system with marketing. Agro-processing and other value added activities would play an increasingly important role in the diversification of agriculture (MOA, GOI 2001)

The government provides much of the infrastructure required for efficient marketing. One of the most important is the information and extension services to farmers besides transport & communication facilities, public utility supply, like water, electricity, fiscal and trade administration and public storage, market and abattoir facilities (FAO, 2000).

Throes and woes of Indian farmer:

- Small fragmented land holdings
- Inferior quality produce
- Multiple products in small quantities with heavy wastages
- Post harvest management is not up to the mark.
• Seasonal dependence
• Selling everything wholesale and buying everything in retail (No holding capacity/ storage facilities)
• Distress sale of produce
• Week market intelligence

Marketing: “Marketing involves finding out what customers want and supplying it to them at a profit.”

Why marketing is important: The importance of marketing can be viewed from four different perspectives of the national economy, the farmer, the product and consumer.

Enhanced roles of Agricultural Extension personnel in light of Market Led Extension:

• SWOT analysis of market. Strengths (Demand, high market ability, good rice etc), Weaknesses (inadequate staff, poor skills and information) Opportunities (Export, appropriate time of selling etc) and Threats (imports and perishability of the produce etc.) need to be analyzed about the markets. Accordingly, the farmers need to be made aware of this analysis for planning of their production and marketing.
• Organization of Farmer’s Interest Groups (FIGs) on commodity basis and building their capabilities with regard to management of their own farm enterprise.
• Enhancing interactive and communication skills of the farmers to exchange their views with customers and other market forces for getting feedback.
• Establishing marketing and agro-processing linkages between farmer’s groups, markets and private processors.
• Advice on product planning: Selection of crops to be grown and varieties suiting the land holding and marketability of produce will be stating point of agri-enterprise.
• Educating the farming community: To treat agriculture as an entrepreneurial activity and accordingly plan various phases of crop production and marketing.
• Direct marketing: farmers need to be informed about the benefits of direct marketing.
• Capacity building of FIGs in terms improved production, post harvest operations, storage and transport and marketing.
• Acquiring complete market intelligence regularly on various aspects of marketing.
• Regular usage of internet facility through computers to get updated on market besides internet.
• Organization of study tours of FIGs : To the successful farmers / FIG’s for various operations with similar socio-economic and farming systems as the farmers learn more from each other.
• Production of video films of success stories of community specific farmers.
• Creating of websites of successful FIGs in the field of agribusiness management with all the information to help other Figa achieve success.

Paradigm shifts from transfer of technology to market led extension

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<th>Market led extension</th>
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<td>Purpose/objective</td>
<td>Transfer of technologies</td>
<td>Enabling farmers to get optimum returns out of enterprise</td>
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</table>
Expected results | Delivery of messages. Adoption of package of practices by most of the farmer | High returns
---|---|---
Farmers seen as | Progressive farmers High producer | Farmers as an entrepreneur “Agripreneur”
Focus | Productivity / yields “Seed to seed” | Whole process as an enterprise. High returns “Money to Money”.
Technology | Fixed package recommended for an agro climatic zone covering very diverse baskets of practices suitable at local situations/ farming systems | Extensionist’s interactions | Messages, Training, Motivating Recommendations | Joint analysis of the issues, varied choices for adoption, consultation
Linkages/Laison | Research-Extension farmers | Research – Extension – farmers extended by market linkages
Extensionist’s role | Limited to delivery mode and feedback back to research system | Enriched with market intelligence besides the TOT function. Establishment of marketing and agro-processing linkages between farmers groups, market and processors
Contact with farmers | Individual | FIG’ s/Focused groups/ SHG’s
Maintenance of records | Not much importance as the focus was on production | Very important as agriculture viewed as enterprise to understand the cost benefit ratio and the profits generated.

In the changing scenario of Indian agriculture, with newly added face of marketing, the extension system is likely to undergo series of crises like Knowledge – skill crisis, Efficacy crisis, Credibility crisis, Reorganization crisis.

**Challenges to Market Led Extension**
- Gigantic size of Public Extension System of the public extension in the country.
- Generation of data on market intelligence would be a huge task by itself.
- The present extension system suffers from several limitations of stationery, mobility, allowances, personal development of cadres etc.
- Infrastructure challenges.
- Storage and preservation of produce
- Minimization post harvest losses.
- Capacity building of extension personnel and farmers.

**PROVIDING URBAN AMENITIES IN RURAL AREAS (PURA)**
The Government of India accorded the approval of PURA (Providing Urban Amenities in Rural Areas) in January 2004 within the existing gross budgetary support, for bridging the rural urban divide and achieving balanced socio-economic development. This scheme is proposed to be implemented in 4,130 rural clusters across the country in the next five years. The North-Eastern States, other special category States and backward areas, identified by the Planning Commission would get priority under the scheme.
**Economic connectivity:** PURA consists of four connectivity. Physical, electronic, knowledge and thereby leading to economic connectivity to enhance the prosperity of cluster of villages in the rural areas. The PURA entrepreneur has to have the skill of evolving a business plan with banks and also create infrastructural support such as educational institutions, health centers and small scale industries, transportation services, tele-education, tele-medicine, e-governance, water treatment plants, cold storage for agri-produce services in the region, integrating with the governmental rural developmental schemes such as road, communication and transport and also with national and global markets to sell the products and services.

**Criteria for PURA cluster:** PURA enterprises can undertake management of schools, healthcare units, vocational training centers, chilling plants, building of local industrial/ICT parks, tourism services, banking system and the regional business or industrial units.

**Implementation:** PURA implementation can be effectively done through establishment of an apex body chaired by top management of the nation. Five regional PURA Corporations may be formed which will execute the PURA in those regions such as North, East, West, South and Central regions with the empowered Chairpersons. Total number of PURAs in the country could be about seven thousand.

Adilabad and Mahaboobnagar districts of Andhra Pradesh have been selected under PURA

**RYTHU CHAITANYA YATRA (RCY)**

(FARMER EMPOWERMENT MARCH-FEM)

**Forces of change in agriculture**

- New technologies
- Biotechnology
- Competition from WTO regime
- Fragmentation of land holdings
- Changes in consumer demand
- Government policies and regulations
- Energy-Technology demand, use

**A New Vision for Agriculture for 21stCentury Rural Economy**

To improve income and quality of life of farming community, particularly small and marginal farmers by empowering them to improve agricultural productivity and their farm incomes

**Farmer Empowerment March**

- An innovative approach for services delivery
- Extension Service Delivery Initiatives
- Continues service improvement
- Farmer Views & Participation
- Accountability for results
- Extension staff participation

**Process of RCY (FEM)**

- Village action plans
- Agriculture Officers with other officers and vehicles at 7.30 am visit the villages
- Posters, CDs at centre of village
- Explain government programmes and services
- Best farming practices for that village

**Launching RCY (FEM)**

* 19 Day long 2006 Pre kharif campaign 2nd -1 9t’ April 2006
* Over 50,000 state govt. person nel/scientists
* 54,702 villages covered
2.21 million Farmers touched
1.79 million male and 0.419 million female
2,19,537 soil samples collected and 33,600 analyzed

Evaluation RCY (FEM)
- Farmer to farmer approach
- Innovative approach to extension
- Extension model
- Learning alliances
- A communication model
- Convergence of agriculture & allied departments
- Common vision
- Strengthen Research-Extension linkages

Issues raised during RCY (FEM)
- 21% in 5,233 villages - seed subsidy
- 19% in 4,677 villages - timely supply of inputs
- 15% 3,806 villages - crop loans to Rythu Mitra Groups

Comparison between Traditional Extension & RCY (FEM) Approach

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<th>RCY (FEM) approach</th>
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<td>Traditional one problem</td>
<td>Solves multiple problems</td>
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<td>Motherhood recommendations</td>
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<td>One way communication</td>
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<td>Research - extension - farmers</td>
<td>Research - extension - farmers</td>
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<tr>
<td>No benchmarks</td>
<td>Benchmarks to achieve specific goals</td>
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<td>Target setting</td>
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<td>Bottom-up approach</td>
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<tr>
<td>Covers mainly villages</td>
<td>Covers villages, hamlets &amp; habitations</td>
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