READING MANUAL

B. Sc. (Ag) 1st Year

Semester- II

FUNDAMENTALS OF EXTENSION EDUCATION AND RURAL DEVELOPMENT
(2+1=3)

Course Teacher
Aswani Kumar
Assistant Professor
Chandan Kumar Rai
Assistant Professor

Compiled and Edited By
Mr. Chandan Kumar Rai
Assistant Professor
(Agriculture Extension)
CSSS PG College, Machhara
CCS University, Meerut (UP)
Syllabus

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(a) Meaning, definition, objectives, Principles, Scope, Philosophy and its distinguishing features.
(b) Extension Teaching and Learning: Teaching, Teaching Elements, steps in Teaching, Learning, Learning Situation, Basic Principles of Teaching and Learning.
(c) Early Extension Efforts in India.
(d) Comparative study of Extension Service in India and USA.

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(a) Meaning, Principles and Procedure of Programme Planning.
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UNIT 1: Extension Education

The word ‘Extension’ is derived from Latin roots ‘ex’ meaning out and ‘tensio’ Meaning stretching.

Extension means the stretching out the ideas of research findings in the villages and the fields beyond the limits of the schools and colleges to which formal types of education is normally confined.

Extension – Meaning

The word ‘extension’ is derived from the Latin roots, ‘ex’ – meaning ‘out’ and ‘tensio’ meaning ‘stretching’. Stretching out is the meaning of extension. The word ‘extension’ came to be used originally in USA during 1914 which means “a branch of a university for students who cannot attend the university proper. In other words, the word “extension” signifies an out-of-school system of education.

Education is an integral part of extension. The basic concept of extension is that it is education. Extension means that type of education, which is stretched out, to the people in rural areas, beyond the limits of the educational institutions to which the formal type of education is normally confined.

- The term ‘extension ‘ originated in England in 1866 (Cambridge and Oxford Universities)
- In 1873 the Cambridge University first used the term “Extension Education” followed by London (1876) and the Oxford University in (1878).
• The word ‘Extension’ was allied to the ‘cooperative Extension Services’ in USA.
• Father of university extension James Stuart
• K.N. Singh is the father of Indian Extension
• Father of extension education J.P. Leagans

**Education**

*Education: It is the production of desirable changes in knowledge (things known), attitude (things felt) and skills (things done), either in all (or) one or more of human behaviour.*

• Education is an integral part of extension
• Education can be defined as the process of bringing desirable changes in human behavior such as knowledge (things known), attitude (things felt) and skills (things done) etc.
• Education does not mean teaching people to know what they do not know; it means teaching them to behave as they do not behave.
• The world education is derived from Latin word “educare” which means to bring-up.
• Education is also derived from another Latin word “educere “which means to lead out.

**Types of Education**

1. **Informal Education:** Is the life long process by which every person acquires knowledge, skills, attitudes and insights from daily experiences and exposure to the environment at home, at work, at play etc.
2. **Non-formal Education:** Is an organised, systematic educational activity carried on outside the frame work of the formal system to provide selected
types of learning to particular sub-groups in the population, including adults and children. E.g.: adult education, vocational education, functional literacy, continuing education, extension education etc.

3. **Formal Education**: Is highly institutionalized, chronologically graded and hierarchically structured, education starting from primary school and reaching up to university education.

**Extension Education**
- According to Webster’s dictionary, extension education is a branch of university for students who cannot attend the university properly.
- Douglas Ensminger defined extension as education and its purpose is to change the attitude and behaviour of people to whom the work is done.
- Extension education is an applied behavioural science.

**Basic definitions related to extension**

Extension education is an applied social science consisting of relevant content derived from physical, biological and social sciences and in its own process synthesised into a body of knowledge, concepts, principles and procedures oriented to provide non-credit out of school education largely for adults. (J. Paul Leagans, 1961).

**Extension service** refers to a program for agricultural development and rural welfare which (usually) employees the extension process as a means of program implementation.

**Extension process** is that of working with rural people through out of school education along those lines of their current interest and need which are closely related to gaining a livelihood improving the physical level of living of rural families and fostering rural community welfare.
### Differences between Formal Education and Extension Education

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Formal Education</th>
<th>Extension Education</th>
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<tbody>
<tr>
<td>1.</td>
<td>Teaching is largely confined to the premises of the institution</td>
<td>It is largely outside the four walls of the institution.</td>
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<tr>
<td>2.</td>
<td>Learners are homogeneous with common goals</td>
<td>Learners are heterogeneous and have diverse goals.</td>
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<td>3.</td>
<td>There is a fixed curriculum, students are examined and degrees are awarded.</td>
<td>No fixed curriculum, it is flexible depending on the needs of the learners. No examinations are conducted and no degrees are awarded.</td>
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<td>4.</td>
<td>Knowledge flows from teacher to the learners (Vertical)</td>
<td>The extension worker also learns from those who he teaches (Horizontal). He teaches through local leaders.</td>
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<td>5.</td>
<td>Approach is from principles to problems</td>
<td>Approach is from problem to principles.</td>
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### Characteristics feature of extension education

- Two way communication and dynamic process
- Continuous process
- Co-coordinating process
- Integrating process
- Social intervention process
- It is an applied behavioural science (J.P. Leagans)
- Extension education is a science (Adivi Reddy)
- Process of ‘learning by doing and seeing is believing’
- Process of teaching rural people (Ibid)
- It is an out of school system of education (Kelsey and Hearne)
- Extension education as a profession
Disciplines of extension education

1. Agricultural Extension
2. Dairy Extension
3. Fishery Extension
4. Agricultural Engineering Extension
5. Home Science Extension
6. Fruit & Vegetable Extension
7. Forestry Extension
8. Sericulture Extension
9. Veterinary Extension
10. Medical Extension

Philosophy of Extension Education

The word philosophy is derived from two Greek words ‘Philos’ and ‘Sophia’. ‘Philos’ means knowledge and ‘Sophia’ means manner. Philosophy is the pursuit of wisdom, a body of general principles or laws of a field of knowledge. Philosophy of a particular discipline would furnish the principles or guidelines with which to shape or mould the programmes or activities relating to that discipline.

The philosophy of extension work is based on the importance of an individual in the promotion of progress for rural people and for the nation. Extension Educators should work with people to help them, develop themselves and achieve superior well-being.

Therefore the primary aim is to transform the people by bringing about desired changes in their knowledge, attitude and skills.

According to Kelsey and Hearne (1967) the basic philosophy of extension education is to teach people how to think, not what to think. Suppose the
community has irrigation problem, then people need to think in various angle and find out with practical solution.

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.

**Objectives of Extension Education**

Objectives are expression of the ends towards which our efforts are directed. There are three types of objectives as given below-

**Fundamental objective:** The fundamental objective of extension is the development of the people or the "Destination man". In other words, it is to develop the rural people economically, socially and culturally by means of education.

E.g.: To increase socio-economic status and standard of living of Indian farming Community.

**General objectives (Function):** The general objectives of the extension are-
1. To assist people to discover and analyses their problems, their felt and unfelt needs.
2. To develop leadership among people and help them in organizing groups to solve their problems.
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.
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.
5. To assist people in mobilizing and utilizing the resources which they have and which they need from outside.

E.g. To increase the production and productivity of Paddy in India.

**Working objectives:** Is one which focuses on specific activity of a specific group in a selected geographic area.

E.g.: To increase the yield of PKM-1 of the tomato among the tomato growers of Madhukkarai block in Coimbatore District.

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.

**Functions of Extension Education**

1. **Change in knowledge of the people**– It implies bringing change in what people know by providing information about latest developmental works, providing knowledge about new varieties of crops.

2. **Change in attitude of the people**– The positive change in attitude of people feeling or reaction towards certain things, information etc. e.g. Village people don’t like value addition products of potato.

3. **Change in skills of the people**– change in the technique of doing things. E.g. Preparation of paddy field by desi plough to using tractors.

4. **Change in understanding of the people**– It is necessary to bring change in comprehension of the people. He should believe that new/latest techniques, which are told to him, would be beneficial for him.

5. **Change in goals of the people**– It is the distance in any given direction one is expected to go during a given period of time. E.g. A farmer wants to increase his production from 40 to 60 tonnes of rice in kharif season.
6. **Change in action of the people**– change in performance or doing things. E.g. Spraying insecticide from slower to faster moving.

7. **Change in confidence of the people**– change in self-reliance of the people that by adopting new techniques there will be definite increase in their net income.

### Principles of Extension Education

The extension work is based upon some working principles and the knowledge of these principles is necessary for an extension worker. Some of these principles, as related to agricultural extension, are mentioned below.

1. **Principle of interest and need.** Extension work must be based on the needs and interests of the people. These needs and interests differ from individual to individual, from village to village, from block to block, and from state to state therefore, there cannot be one programme for all people. E.g. Farmers are facing acute problem on water conservation in Maharastra.

2. **Principle of cultural difference.** Extension work is based on the cultural background. E.g. technology related to pig farming should not imposed on Muslim community

3. **Principle of participation.** Voluntary participation is highly recommended. Actual participation and experience of people in these programmes creates self-confidence in them and also they learn more by doing.

4. **Principle of adaptability.** It the adjustment stage with the end-users. People differ from each other, one group differs from another group and conditions also differ from place to place, so an extension programme should be flexible, based on locally available resources.

5. **The grass roots principle of organisation.** This principle involved the local people, resources, situations etc. The programme should fit in with the local conditions.
6. **The leadership principle.** Extension work is based on the full utilisation of local leadership, as they have more faith in local leaders.

7. **Principle of indigenous knowledge.** People everywhere have indigenous knowledge systems encompass all aspect of life and people consider it essential for their survival.

8. **The whole-family principle.** Family is the basic unit of any extension work.

9. **Principle of co-operation.** Extension is a co-operative venture. It is a joint democratic enterprise in which rural people co-operate with their village, block and state officials to pursue a common cause.

10. **Principle of satisfaction.** The end-product of the effort of extension teaching, Satisfaction is the key to success in extension work. "A satisfied customer is the best advertisement."

11. **The evaluation principle.** Evaluation prevents stagnation. The effectiveness of the work is measured in terms of the changes brought about in the knowledge, skill, attitude, and adoption behaviour of the people. It should indicate the gaps for further improvement.

**Scope of Extension Education**

Extension appears to have unlimited scope in situations where there is need for creating awareness amongst the people and changing their behaviour by informing and educating them. Kelsey and Hearne (1967) identified nine areas of programme emphasis, which indicate the scope of agricultural extension.

1. Efficiency in agricultural production.
2. Efficiency in marketing, distribution and utilisation.
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 and rural area development.
9. Public affairs

Extension is an integral part of agricultural and rural development programmes in India. The progress in production which has been achieved in agriculture, horticulture, animal husbandry, veterinary, fishery, social forestry, sericulture etc., may be thought of as proportional to the strength of extension service of the relevant government departments. The following statements will further amplify the scope of extension:

1. Extension is fundamentally a system of out-of-school education for adults and youths alike. It is a system where people are motivated through a proper approach to help themselves by applying science in their daily lives, in farming, home making and community living.

2. Extension is education for all village people.

3. Extension is bringing about desirable changes in the knowledge, attitudes and skills of people.

4. Extension is helping people to help themselves.

5. Extension is working with men and women, boys and girls, to answer their felt needs and wants.

6. Extension is teaching through ‘learning by doing and seeing is believing’.

7. Extension is working in harmony with the culture of the people.

8. Extension is a two-way channel; it brings scientific information to village people and it also takes the problems of the village people to the scientific institutes for solution.

9. Extension is working together (in groups) to expand the welfare and happiness of the people with their own families, their own villages, their own country and the world.
10. Extension is development of individuals in their day-to-day living, development of their leaders, their society and their world as a whole.

**Extension Education Process (Leagans, 1961)**

An effective extension educational programme involves five essential and interrelated steps. This concept of the extension educational process is intended only to clarify the steps necessary in carrying out a planned educational effort. It does not imply that these steps are definitely separate from each other. Experience shows that planning, teaching and evaluation take place continuously, in varying degrees, throughout all phases of extension activities.

**Concept of Extension Educational process**

![Diagram of the Extension Educational Process]

**First step:** The first step consists of collection of facts and analysis of the situation. Facts about the people and their enterprises; the economic, social, cultural, physical and technological environment in which they live and work. These may be obtained by appropriate survey and establishing rapport with the people.

**Second step:** The next step is deciding on realistic objectives which may be accomplished by the community. A limited number of objectives should be selected by involving the local people. The objectives should be specific and
clearly stated, and on completion should bring satisfaction to the community. Objectives should state the behavioural changes in people as well as economic and social outcomes desired.

**Third step:** The third step is teaching, which involves choosing what should be taught (the content) and how the people should be taught the methods and aids to be used. Example, technologies like use of HYV seeds, application of fertilizer and plant protection chemicals were selected as teaching content. Result demonstration, method demonstration, farmers' training and farm publications were chosen as teaching methods, and tape recorder and slides were selected as teaching aids.

**Fourth step:** To find out the consequences of educational process, it may come desirable and undesirable.

**Fifth step:** The problems identified in the process of evaluation may become the starting point for the next phase of the extension educational programme, unless new problems have developed or new situations have arisen.

Thus, the continuous process of extension education shall go on, resulting in progress of the people from a less desirable to a more desirable situation

**Extension Teaching: Meaning and Steps**

- Extension teaching is a process of creating situations that facilitate the learning process.
- Creating situation includes providing activities, materials, and guidance needed by the learner.
- In other words, arranging situation in which the things to be learnt are brought to the attention of the learners, their interest is developed, desire aroused, conviction created, action promoted and satisfaction ensured.
- The ultimate purpose of teaching is not merely to inform people but to transform them to bring about the desired change in their behaviour.
Steps in extension

- Extension teaching is a planned and deliberate act on the part of the extension agent.
- Move step by step in a scientific way to impart training
- The role of the extension agent is that of a facilitator and motivator.
- There are some steps which are basic to extension teaching. These are presented below as suggested by Wilson and Gallup (1955).

Step 1: Getting the ATTENTION

- The first step in extension teaching is to make the people aware of the new ideas and practices.
- The people must first know that a new idea, practice, or object exists.

Steps in Extension Teaching

- This is the starting point for change.
- Teaching methods may be used at this stage are mass methods like radio, TV, exhibition etc. and personal contact by the extension agent, contact through local leaders.

Step 2: Stimulating INTEREST

- Once the people have come to know of the new idea, the next step is to stimulate their interest. This may be done by furnishing them more information about the topic in a way they will be able to understand and use.
• It is necessary to present one idea at a time, relevant to their needs.
• The important teaching methods at this stage are personal contact by extension agent, contact through local leaders, farm publications, radio, TV, etc.

Step 3: Learner’s DESIRE for information
• It means unfreezing the existing behaviour and motivating the people for change. At this stage it is necessary to emphasize on the advantage of the new idea or practice.
• Visit to demonstrations, farm publications, personal contact by the extension agent, group discussion etc. are important at this stage.

Step 4: CONVINCING for action
• It is the stage of strong persuasion so as to convince the people about the applicability of the new idea or practice in their own situation and that it would be beneficial for them.
• The people are furnished with adequate information about the idea and how it works. Field day or farmer’s day, slide show, personal contact by the extension agent and training are important at this stage.

Step 5: Getting ACTION
• This is the stage of putting the idea or practice into operation. This provides the opportunity of direct experience on the part of the learners.
• At this stage it is necessary to collect evidence of change such as change in yield, income, employment etc. Demonstration, personal contact by the extension agent, supply of critical inputs and ensuring essential services are important at this stage.

Step 6: Obtains SATISFACTION from his action
• To produce lasting change, the extension efforts should produce satisfying results.
• A satisfaction reinforces learning and develops confidence, which generates motivation for further change.

• Use of mass media, local leaders, and personal contact by the extension agent are important at this stage.

Steps of teaching can be analysed in sequence into three steps.

First Step: Pre-active steps of teaching—In this step, teaching plan is prepared. In the pre-active steps of teaching the following activities are included:

1. Formulation of objectives of teaching—These objectives are of two types: (i) Entering behaviour (ii) Terminal behaviour.

2. Selection of subject matter—Teacher takes the decision regarding the subject-matter to be taught to the student.

3. Sequences of elements of the content—Subject matter of teaching is analysed and its elements are arranged in logical and systematic way in order to impart effective teaching and knowledge.

4. Decision regarding strategy for teaching—follows 5Ws and H

Second Step: Interactive Steps of Teaching—

1. Sizing up the class—Diagnosis of the learners

   During diagnosis, a teacher follows the following sequence: Perception—Diagnosis—Response.

2. Initiation and response—Activity in teaching process can be divided into two parts: (a) Initiation, and (b) Response.

Third Step: Post-active steps of teaching—

1. Change in behaviour through teaching

2. Selection of appropriate evaluative techniques

3. Evaluation—Decision making

Learning and Learning Experience

• All complex behaviours are learned
• Learning is a theoretical concept and it is not directly observable.
• Learning has no universally agreed definition

- **Cognitive theories of learning**, it as the mind’s ability to acquire, process, and retain new knowledge and information. Thus cognitive psychologists studying learning are interested in unobservable mental activities such as thinking, remembering, creating, and solving problems.

- **Behavioural** psychologists view that the outcome of learning is change in behaviour and emphasizes the effects of external events on the individual.

- **Experiential theories**, which emphasize the role of action and experience in learning, conceptualize it in terms of competencies generated among learners.

**Features of Learning**

• Learning involves change: change may be good or bad, desirable or undesirable.

• The change must be relatively permanent: temporary changes may be only reflexive and fail to represent any learning.

• The change must be brought up by experience: The change may be deliberate or unintentional, for better or for worse. To qualify as learning, this change must be brought up by experience, by the interaction of a person with his or her environment.

**Definitions of Learning**

- Learning is a process of progressive behaviour adaptation (Skinner, 1960).
- Learning is a process by which a person becomes changed in his behaviour through self-activity (Leagans, 1961).
- Learning is the process whereby knowledge is created through the transformation of experience (Kolb, 1984).
Van den Ban and Hawkins (1988) defined learning as the acquiring or improving the ability to perform a behavioural pattern through experience and practice.

Learning is any relatively permanent change in behaviour that occurs as a result of experience or practice (Weiss, 1990).

**Laws of Learning (Thorndike)**

1. **Law of effect**: Learning is strength when accompanied by a pleasant feeling. It has direct relationship to motivation. It is based on emotional reaction.
2. **Law of exercise (Practice)**: Things most often repeated are best remembered.
3. **Law of readiness**: It is the degree of concentration or eagerness towards something.
4. **Law of primacy**: Things learned first create a strong impression.
5. **Law of recency**: Things are most recently learned are most remembered.
6. **Law of intensity**: It is the more intense material taught, more it is likely to be learned.
7. **Law of freedom**: Things freely learned are best learned.
8. **Law of requirement**: We must have something to obtained

**Learning Situation**

Extension teaching requires learning situations that includes five major elements. The five elements necessary to constitute an effective learning situation and important characteristics about each are presented below.

1. **Learner**: Person who wants to learn. Person may be anyone like women, farmers, businessman, child, youth etc. Learner occupies the central position and all efforts are directed towards him/her. Learners should:
i be capable of learning
ii have interest in the subject
iii have need for the information offered, and
iv Be able to use the information once it is gained.

In the extension education, the farmer, farmwoman, and rural youth comprise the learner. To explain the learning situation, we take an example in which dairy farmers who need to increase milk production are learners.

**Cone of experience: Eagar Dale and modified by Sheal (1989)**

2. Teacher

Teachers are the facilitator or motivator for learner. She/he not only know what to teach, but also knows how to teach. The teacher should:

- have a clear cut and purposeful teaching objectives,
- know the subject-matter and have it well organised,
- be enthusiastic and interested about the learners and the subject-matter,
- be able to communicate and skilful in using teaching aids, and
- Be able to encourage participation of the people.

3. Subject Matter

It is the content or topic of teaching that is useful to the learner. The subject matter should be:

- pertinent to the learners needs,
o applicable to their real life situations,
o well organised and presented logically and clearly,
consistent with the overall objectives, and
Challenging, satisfying and significant to the learner. Here, the subject matter is increasing milk production.

Reading strategy
- Survey
- Question
- Read
- Recite
- Review

4. Teaching Materials
These are appropriate instructional material, equipment and aids. The teaching material should be:
- suitable to the subject matter and physical situation,
- adequate in quantity and available in time,

In the present example, teaching materials may be improved breeds of bull or semen and fodder seeds suitable for the area, appropriate medicines, audio-visual aids relevant to the topic etc.

5. Physical Facilities
It means appropriate physical environment in which teaching learning can take place. The physical facilities should be:
- Compatible with objective,
- Representative of the area and situation, and
- Adequate and easily accessible.
  Example, digital classroom

Principles of Learning
The principles are generalized guidelines which form the basis for taking action. Following are some of the principles of learning along with their implications in teaching.

1. **Principle of association:** New learning must be associated with previous one for satisfying responses. For example, Farmers should apply balanced fertilizer rather than application of urea only.

2. **Principle of clarity of objectives:** Objectives must be clear and meaningful to the learners. It should clearly tell the learner’s what he/she going to achieve after this. Progress must be constantly appraised and redirected. Example if I work hard then I will get ICAR-JRF Fellowship.

3. **Principle of self-activity:** Learning is an active process on the part of the learners. The door to learning is “locked on the inside and unless the learner opens the door herself/himself, learning cannot take place”. It follows if there is a will, there is a way.

4. **Principle of motivation:** To learn, people need to feel the need for learning. When this desire exists, the learner will exert a high level of effort. The learning experience, therefore, should be designed so learners can see how it will help them achieve those goals they have set for themselves.

   - Implications for teaching
   - Teacher motivation of the student is essential in making learning more challenging.
   - Standards demanded of the learner should be suitable to their ability or capacity.
   - Appropriate and timely recognition should be given to student achievement.

5. **Principle of practice:** It follows “learning by doing principle”

   - Implications for teaching
   - Course content should be organised into meaningful units.
   - Theory should be related to practice.
✓ Provide activities that stimulate actual use situation.

![Learning Curve](image)

**Learning Curve**

6. **Principle of disassociation:** Eliminating or not adopting the technology which gives negative consequences. Example for commercial purpose of crop production, farmers should not use local varieties which gives fewer yields.

7. **Principle of readiness:** Learning takes place more effectively when one is ready to learn. Example voluntary participation of farmers in training programmes.

8. **Principle of set or attitude:** An unfavourable attitude or set retards learning and a favourable attitude accelerates it. Example Laggards are not ready to adoption new technology until it is a matter of survival.

9. **Principle of reinforcement:** Behaviours that are positively reinforced (rewarded) are encouraged and sustained. When the behaviour is punished, it is temporarily suppressed but is unlikely to be extinguished.

10. **Principle of transfer of learning:** Learning should be designed to foster transferability.

11. **Principle of feedback:** Learning is facilitated when the learners are provided with knowledge of progress of learning.

12. **Principle of abilities:** The level of communication and the level of understand ability of the subject matter taught must be in line with the learner’s
ability. If farmers understand only Hindi language then, he/she should be taught in Hindi only.

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### Early Extension Efforts in India

#### Pre-Independence Development Programmes

**Objectives and Importance:** Over a period of about seventy years number of rural development experiments and programmes were conducted in India. Long before the introduction of the Government managed extension system at the national level in 1952, there had been sporadic attempts in developing the rural life. Knowledge of the early extension efforts shall serve as a useful background in understanding the development of systems of extension in India.

The early extension efforts had two distinct patterns. First, there were attempts by some benevolent persons and private agencies to improve rural life. Second, attempts were made at government level to initiate some projects to solve the pressing problems in agriculture.

When these experiments were conducted there existed certain conditions like, agriculture was the primary occupation to a large percentage of population, extremely low purchasing power, lack of application of science and technologies, lack of understanding about the natural resources especially the flora and fauna of the region and their commercial usage, lack of socio-economic organisations, etc. These realities are to be remembered before understanding the past rural development works. When these experiments were conducted, colonial rule was existing.

**Merits and Demerits:** These programmes and experiments were conducted at different points of time, in different regions, and under different politico-socio-economic conditions. They varied in area, population coverage, financial and other resources. They were designed according to the policy maker’s perception of problems and needs of people. Therefore common evaluation is not possible...
and each experiment for programme is to be studied independently for its approach, performance, effectiveness against the stated objectives, etc.

The projects had one or the other shortcomings which may be summed up as follows:

1. Most of the efforts were based on individual initiative.
2. Government backing and financing were not forthcoming.
3. All attempts were isolated, uneven and discontinuous.
4. Staff was mostly inexperienced and untrained.
5. Plans and programmes were ill-defined and unbalanced.
6. Need for proper methods and skills for approach was not realised.
7. No evaluation was carried out; hence the results were not known.
8. Association and coordination other development departments were very limited.
9. Involvement of the people in planning and execution i.e. finding out the problems and their solutions was very limited.

**Sriniketan Project (1914)**

Shri Rabindra Nath Tagore wanted to develop a centre to extend his ideas on education in a rural setting. During 1914 he established a rural reconstruction institute at Sriniketan involving youth from a group of 8 villages. It maintained a demonstration farm, a dairy and poultry unit, an outdoor clinic, a department of cottage industries and a village school. These agencies were to treat the villages as their laboratory to identify problems and test their ideas. The villages were expected to approach these agencies through the village workers to obtain solution of their more pressing problems. These social workers lived in the villages and worked with the people.
At Sriniketan centre, agriculture, dairy and poultry were the foremost activities. Scheme of land development and tree plantation were given due importance. Experiment on paddy, sugarcane and cotton were undertaken. Improved seeds, vegetable seedlings, fruit grafts and saplings were distributed. New breeds of cattle were introduced. Local artisans were trained in cottage industries. Other activities were village scout movement, village developmental council, health, cooperatives, and circulating library and village fairs.

**Drawbacks**

1. This institute could not get Government help and support.
2. It could not do research work and hence the programmes remained limited to those 8 villages only.

**Marthandam Project (1921)**

During 1921 under the auspices of YMCA, Marthandam project was started at Travancore in Kerala by Dr. Spencer Hatch, an American agricultural expert specialized in sociology. Fundamental aim of this programme was fivefold development of physical, spiritual, mental, economic and social; Dr. Hatch implemented an all-round development in agriculture, public health and education.

In this centre prize bulls and goats, model bee-hives, demonstration plots for improving grain and vegetable seeds, poultry with prize laying hens, a weaving shed, etc. were maintained.

It also worked for improving literacy. On weekly market day it set up a portable tent with teaching equipment, and exhibits with better poultry and livestock. The centre also promoted the cooperative. The society developed the improved breeds of egg layers and good bees. It assisted the people for marketing their products through cooperative organisations. In 1939, the egg selling cooperative society
becomes a self-governing body. Another society 'honey club' was also formed. This society cured the honey brought by villagers and marketed cooperatively. There were bull clubs, weavers' clubs, etc. These cooperative organisations are still continued by YMCA and the rural development is taken up intensively.

**Sarvodaya Movement**

It was a Gandhian concept and evoked great enthusiasm in Bombay since 1948-49. The main features were simplicity, non-violence, sanctity of labour and reconstruction of human values. It aimed in raising the standard of living, scientific development of agriculture, promotion of cottage industries, spread of literacy, medical and health facilities and the development of village panchayats.

**Gurgaon Project (1920)**

Towards the end of 1920 F.L. Brayne, an Englishman was posted as Deputy Commissioner of Gurgaon district. After his assumption of the charge he studied the area by touring and observed that the people were extremely poor, dirty and unhealthy, with no conscious desire for any better because they had no idea that anything better was possible. After seven years of study he developed a scheme called "The Gurgaon scheme" with the following objectives:

- to jerk the villagers out of their old groove and convince them that improvement is possible;
- he must be laughed out of his economic and unhealthy customs and taught better ways of living and farming.

He took the whole district as the field of operation and approached the area with every form of propaganda and publicity. Under his programme village guides were posted in each village, who acted as the channel to pass on the information to villagers. The programme introduced improved seeds, implements, methods of cultivation, etc. The activities introduced by Brayne were:
1. A school of rural economy to train the village guides in 1925.
2. A domestic school of economy to train groups of women under women and children welfare work in 1926.
3. Health association, which ran five health centres in the district.
4. A women's Institute at Gurgaon to manage the ladies' garden in Gurgaon.

As the village guides were not technical men, only very little could be achieved.

**Indian Village Service (1945)**

Arther T. Mosher of New York and B.N. Gupta established it in 1945. The objectives were to assist village people to realise the best in their own village by developing individuals, volunteer leaders and local agencies, and establishing them to be effective in helping themselves and others. It was mainly to assist the government in villages. For the realisation of these objectives the organisation adopted the techniques of personal contact, informal group discussion, use of volunteers, demonstrations, use and production of visual aids, exhibitions, tours, dramas, books, periodicals etc. It was financially supported by the contribution and donations.

**Post-Independence Development Programmes**

**Etawah Pilot Project (1948)**

This project was started in 1948 by Mr. Albert Mayer of USA who came to India as a warrior at a village called Mahewa in UP. A pilot project for development of Etawah district in UP was formulated by him with the following objectives.

1. To know the degree of productive and social improvements, through self-confidence and cooperatives;
2. To find how quickly these results could be attained;
3. To know whether the results remain permanent even after the special pressure is withdrawn; and
4. To assess how far the results were reproductive in other places.
In the project, development officers at various levels were posted. At village level, there was a ‘multi-purpose’ village level worker (VLW) with four or five villages under him. The entire project was sponsored and funded by the Government of UP. This programme works were, by and large, similar to earlier projects; introduction of improved variety seeds, chemical fertilizers, improved implements, plant protection measures, horticultural development, soil conservation, improved cultural practices and the like. There were projects in animal husbandry, cooperation, credit provision, marketing and supply, improvements of roads, water supply, drainage etc. There were adult literacy programmes, tour for farmers, village leader training camps, mass contact programmes, etc.

The project total expenditure was 1.54 million rupees. Of this total expenditure only 1.3 per cent was on grants-in-aid and subsidy. This was very little share. It also did not distribute materials of any kind at free of cost to the people. The emphasis was self-help. Advice alone was free.

Initially the work was started in 64 villages. After one year the number of villages covered by the project went up to 97. In 1951, another 125 villages were included. Finally this project was merged with the National Extension Service (NES) block.

The most convincing achievement of this project was in agriculture, particularly in wheat production due to adoption of improved production technologies. This project solved the problem of unemployment and under-employments. There was 53.3 per cent expenditure on capital works, which resulted in making available of good roads, and other structures. Success gained in Etawah could not be maintained after Mayer's departure in 1957.

**Nilokheri Project (1948)**
It started during 1948 under the leadership of S.K. Dey. Its primary purpose was to develop a new township to rehabilitate displaced persons from West Pakistan. The project was built in a swampy barren land by refugees 'self-help and governments' assistance, located around the vocational training centre on the highway of Delhi and Ambala.

Dey launched the new scheme called 'Mazdoor Manzil' for construction of township at Nilokheri. This scheme gave the people (1) training on Agricultural implements preparation, (2) cottage industries (3) carpentry etc. It was based on self-sufficiency for rural cum urban in all essential requirements of life. Later this township was subsequently handed over to the Government of Punjab. After the bifurcation of Punjab, Nilokheri went to Haryana state.

**National Extension Services (NES-1953)**

NES was implemented from 2.10.1953. This was implemented in the areas which were not covered by CDP, so that entire country would get the benefit of development. When compared to CDP, the NES was less intensive in character.

Since CDP and NES had the same basic ideas, they were integrated both at the centre and state. With effect from April, 1958 there was no distinction between CD blocks and NES. All NES blocks became CD blocks was achieved by October 1963.

NES covered almost all the villages in the country; for this national programme apart from the existing system, a new administrative organisation was built. At central level Planning Commission itself headed by PM acted for direction and coordination of development. It was assisted by an advisory board comprising of secretaries of several Central Ministries concerned. An administrator for CDP was appointed to work under the control of the Central Committee for the overall management of the programme.
At state level, a state development committee under the chief minister was set-up with several ministers as its members. It was assisted by the state level advisory aboard with development department secretaries. A development commissioner was responsible for management of the programme.

At district level, there was a district development council (DDC), headed by the District Collector. Various district level development officers, as well as non-officials such as legislative etc., direction of development commissioner is responsible for implementing all the projects within the district.

Project advisory committee in the block was headed by Block Development Officer (BDO). Several officials and non-officials are the members of this committee. Blocks were formed with the cutting edge of about 100 villages with an approximate population of 60,000 to 80,000. District Committee to guide and support BDO to implement the multi dimensional development project. The BDO was assisted by a number of extension officers representing agriculture, animal husbandry, cooperative, industries, health, social education etc.

The Block was divided into a number of circles of villages and a multi-purpose village level worker was appointed at each circle to motivate, guide and assist rural people to improve their social and economic conditions. A few multi-purpose women workers (gram sevikas) were also appointed to motivate and help rural women. The central government provided substantial grants to state governments so as to augment their resources for allocation of funds to each development block. On the completion of first five years of the programme, the planning Commision appointed a high-ranking study team headed by Balvant Rai Mehta, Chief Minister of Gujarat. This team pointed out both positive results and inadequacies in the implementation of the programme. The study team made a significant recommendation with implementation of a programme. According to it there should be effective administrative decentralisation for the implementation of the programme. The decentralised administration was to be placed under the
control of elected and integrated local self-government system ordinarily of 3 tiered bodies from village level to block level and then to district level. This democratic decentralised system was named as "Panchayat Raj". CDP was by and large bureaucratised management.

**Objectives of NES**

(i) to change the outlook of village people;
(ii) to make the people participate effectively in development programmes;
(iii) to develop village leaders accepted by all; and 
(iv) to increase the employment and production.

**Defects of CD/nes**

(i) Uneven distribution of benefits;
(ii) Absence of clear-cut priorities;
(iii) Lack of self reliance and mutual aids; and
(iv) Inadequate emphasis on development of cottage and small scale industries and agriculture.

**Intensive Agricultural District Programme (IADP-1960)**

The major outcome of the above thinking was the formulation of a strategy of intensive approach to agricultural production, specially the food grains. A new programme named as IADP was formulated which was launched gradually from 1960. The third five year plan (1961- 1966) incorporated this programme into the planned development process.

This programme was popularly known as a "package programme". This name was given because of the collective and simultaneous application of all practices of improved seeds, irrigation, fertilizer, plant protection, implements, credit, etc. This programme was started in July 1960 in seven selected districts in various states. They were (I) West Godavari in AP, (ii) Shahabad in Bihar, (iii) Tanjore in Tamil Nadu, (iv) Raipur in MP, (v) Ludhiana in Punjab; (vi)Pali in Rajasthan; and (vii) Aligarh in UP. The selections of these districts were done on the basis of
their high potentiality for increasing the yield in shorter time. These selected districts had secured water supply for irrigation, well developed cooperatives, good physical infrastructure and minimum hazards.

**Objectives**

1. to achieve rapid increase in the level of agriculture production through a concentration of financial, technical, extension and administrative resources;
2. to achieve a self-generating breakthrough in productivity and to raise the production potential by stimulating the human and physical process of change; and
3. to demonstrate the most effective ways of increasing production and thus, to provide lessons for extending such intensified agricultural production programmes to other areas.

**Short coming**

- Educational approach to reach farmers was lacking.
- VLW were found below standard and were not able to impress farmers.

**Intensive Agricultural Area Programme (IAAP-1964)**

During the third five year plan 30 per cent increase in food grain production was achieved through IADP. The intensive promotion of agriculture was very popular among policy-makers and administrators. As a result of this a revised version of IADP with less intensive and therefore less costly programme was formulated and launched in selected blocks of 150 districts. It was named as IAAP. The selected blocks were to have the same physical conditions as in the case of selection of districts for IADP. Under this programme 20 to 25 per cent of the cultivated area of the country was brought under the intensive agricultural development. Implementation of IAAP was accepted by Agricultural Production Board and came into operation in March 1964. This programme also followed
the package approaches of use of improved methods. The uses of interrelated factors of physical, social and institutional were also followed in a strategic combination mainly to produce an impact on agricultural production. Th management of these programmes did not function as envisaged. There were many weaknesses of deficiency in inter-agency and inter-personal coordination, inadequate staff motivation, malpractices, non-formulation of local production plans on proper lines and delay in delivery of inputs to farmers. However, the production and productivity were modest. The highly adverse conditions (droughts) during 1966-68 served as a big blow. The foodgrains output was still insufficient to meet the rising domestic demands. Imports were also continued to supplement the local production.

**High Yielding Variety Programme (HYVP-1966)**

HYVP is launched in 1966, which helped the country in attaining self-sufficiency in food. The technological development did not remain confined to the introduction of high yielding crop varieties alone. These were combined with the application of high analysis and balanced fertilizer, irrigation, plant protection, improved implements etc, which made a 'green revolution' possible in the country. The pervasive influence of high yielding technology spread to other areas of farm production such as animal production, fishery, sericulture, social forestry etc. Punjab, Haryana and Western parts of UP were initially selected for the phased launching of this strategy. The cultivation of HYV since 1966-67 had resulted in a substantial increase in food grains production. Wheat production was doubled. Rice production also had a substantial increase, though not as much as in the case of wheat. The target of coverage of 2.5 crore hectares of area under HYVs of cereals and millets under fourth five year plan was exceeded. The coverage was more than four crore hectares.
Institutional Village Linkage Programme (IVLP)

IVLP is an innovative program developed by the ICAR to help scientists to have direct interaction with the farming community so that appropriate technologies are developed for farmers. Here research, extension and farmers establish firm links by carrying together the assessment and refinement functions in the technology development and dissemination process. This helps the research system to generate a cafeteria of technologies, which are more productive in small production system, more profitable in commercial production system and gender sensitive for removal of drudgery of farmwomen. Research and Extension as an Integral Part of Technology Development

Objectives of IVLP as per ICAR guidelines are as follows

1. To introduce technological intervention with emphasis on stability and sustainability along with productivity of small production systems.
2. To introduce and integrate the appropriate technologies to sustain technological interventions and their integration to maintain productivity and profitability taking environmental issues into consideration in a comparatively well-defined production system.
3. To introduce and integrate the appropriate technologies to increase the agricultural productivity with marketable surplus in commercial on and off-farm production systems.
4. To facilitate adoption of appropriate post-harvest technologies for conservation and on farm value addition to agricultural products, by-products and waste for greater economic dividend and national priorities.
5. To facilitate adoption of appropriate technologies for removal of drudgery, increase efficiency and higher income of farm women.
6. To monitor socio-economic impact of the technological/technology modules based on environmental at meso and mega levels.
The National Agricultural Technology Project (NATP)
The National Agricultural Technology Project (NATP) is a dynamic instrument of introducing major changes in the Agricultural Research and Extension systems of the country, besides developing their capabilities to meet future challenges. The project was initiated by Ministry of Agriculture, Govt. of India with the financial assistance of World Bank and would be implemented with the assistance of MANAGE in 28 districts covering 7 states, viz. Andhra Pradesh, Bihar, Jharkhand, Himachal Pradesh, Maharashtra, Orissa and Punjab over a period of 5 years (1998-2003). The World Bank assisted National Agricultural Technology Project (NATP) aims at improving research and extension services. The Research component of NATP is being implemented by the Indian council of Agricultural Research (ICAR) and the Extension component by the Department of Agriculture and Co-operation. The different Project Implementing Agencies (PIAs) involved in implementation of the ITD component of NATP are:

a. Directorate of Extension (DOE)
b. National Institute of Agricultural Extension Management (MANAGE)
c. NATP cell at State Head Quarters
d. State Agricultural Management and Extension Training Institute (SAMETI)
e. District Level Agricultural Technology Management Agencies (ATMAs)

The Extension component termed as "Innovations in Technology Dissemination" (ITD) envisages an integrated extension delivery at district level and is being pilot tested in seven participating states, viz. Andhra Pradesh, Bihar, Jharkhand, Himachal Pradesh, Maharashtra, Orissa, Punjab.

The purpose of this component is to test new approaches to technology transfer, new organizational arrangements, and operational procedures. One of the goal is to decentralize decision making to the district level through the creation of Agricultural Technology Management Agency (ATMA) as a registered society. The second goal is to increase farmer input into programme planning and
resource allocation especially at the block level and increase accountability to stakeholders. The third goal is to increase programme coordination and integration. Funds would be provided to 28 pilot districts in seven states to create Agricultural Technology Management Agency which will bring together researchers, extensionists, farmers and other stakeholders (including NGOs and the corporate sector) to make, on the basis of joint diagnostic studies, district Extension Plans and recommendations for expanded adaptive research to introduce innovations in technology dissemination matched to local needs and characteristics.

Four districts in each of the seven participating states are identified for pilot testing as detailed below:

Andhra Pradesh: Kurnool, Prakasam, Adilabad and Chittoor
Bihar: Muzaffarpur, Madhubani, Munger, Patna Rural
Jharkhand: Dumka, Jamtara, Palamau, Chaibara
Himachal Pradesh: Shimla, Hamirpur, Kangra, Bilaspur
Maharashtra: Ahmednagar, Amravati, Aurangabad, and Ratnagiri
Orissa: Khurda, Koraput, Ganjam, Sambhalpur
Punjab: Gurdaspur, Jalandhar, Sangrur and Faridkot

In each of the pilot districts, an Agricultural Technology Management Agency (ATMA) would be established as a registered society for integrating research and extension activities.

Small Farmers' Development Agency (SFDA) and Marginal Farmers' and Agricultural Labourers' Agency (MFALA)

Several official committees from the closing years of the decade of the sixties onwards began to draw the attention of the Government to the inadequacy of existing development process to enable very small and small cultivators, owning less than two hectares of land who constitute the majority of farmers, to improve their income and quality of life. The Rural Credit Inquiry Committee in 1969
highlighted the depressed condition of these farmers and recommended the setting up of SFDA in selected districts. The fourth plan endorsed this viewpoint and recommended the formation of this agency. The Government accepted the recommendation made in the fourth plan and set up two separate agencies of SFDA and MFALA in selected districts. The farmers were those owning less than two hectares each. Marginal farmers were those owning less than two hectares each. The agricultural labourers were those having only a homestead and getting more than 50 per cent of income from wages.

These agencies started functioning from 1971-72 onwards in a number of selected districts. Some years later MFALA was amalgamated with SFDA to form one unified corporate body and continued to be known as SFDA.

**Objectives**

The basic objective of this agency was to enable selected target groups of marginal and small farmers and agricultural labourers to improve their income through productive activities and improving their existing ones. The concrete steps for the above objectives were:

i. identification of target groups in selected districts;

ii. formulation of viable agricultural and non-agricultural schemes for the target groups;

iii. provision of subsidy at the rate of 25 per cent and 33 per cent of the total cost of an approved scheme to the selected beneficiaries and also helping them to get institutionalised credit from cooperatives and nationalised banks.

iv. Coordinate the various public sector agencies located in the area to promote inputs and requisite support to the selected target groups; and

v. Promotion of common facilities of providing storage, marketing as well as strengthening co-operative institutions for providing credit.

Each sanctioned agency was expected to identify and help 50,000 small farmers to become economically viable by adopting improved technology and making use
of the credit and inputs required. About 15,000 marginal farmers and 5,000 agricultural labourers were to be identified and helped to start or expand self-employment activities.

The total number of beneficiaries identified did not cover all the target group households. Secondly, even among the identified beneficiary households only half of those were given some assistance. Thirdly, the assistance in the form of subsidy and institutional credits was too small in many cases to enable the very poor households to improve their economic conditions.

**Integrated Tribal Development Agency (ITDA)**

A detailed and comprehensive review of the tribal peoples’ problem was taken up on the eve of the Fifth Five Year Plan period. The main objective of ITDA is socio-economic development of tribal communities through income generating schemes allied with Infrastructure Development programmes and protection of the tribal communities against exploitation.

The ITDA project areas are generally contiguous areas of the size of a Tehsil or Block or more in which the ST population is 50% or more of the total. Due to the demographic profile of the tribal people in these regions, however, the ITDPs in Assam, Karnataka, Tamil Nadu, and West Bengal may be smaller or not contiguous. Andhra Pradesh and Orissa have opted for an Agency model under the Registration of Societies Act and the ITDPs there are known as ITD Agencies (ITDAs).

So far, 194 ITDPs/ITDAs have been delineated in the country. In Jammu and Kashmir though no ITDP has been delineated yet, the areas having ST Population in the State are treated as covered under the TSP strategy. In eight states having scheduled areas the ITDPs/ITDAs is generally co-terminus with TSP areas. The ITDPs/ITDAs are headed by Project Officers though they may be designated Project Administrators or Project Directors.
Integrated Rural Development Programme (IRDP)

Genesis

The CDP launched in 1952 could not bring expected change in improving the conditions of rural masses or there was not much achievement in the areas of agricultural development.

The apparent failure of the CDP was the main reason for the evolution of the IRDP. The main drawbacks of the CDP were

- Uneven distribution of the benefits of the programme
- Absence of clearly defined priority in the programmes.
- The inability of the CDP to recognise and solve the inherent conflicts in the inter and intra target groups.
- Lack of mass participation.
- More bureaucratic.

So, it was considered necessary to go in firstly for a programme directed mainly at agriculture and secondly to attempt the process of development in selected areas. Thus, in 1960 Intensive Agricultural District Programme (IADP) was formed and implemented. In this programme, efforts to boost agricultural production were concentrated in areas with better prospects of higher yields (package programme). The success achieved in increasing agricultural production under IADP, led the Government to extend the programme to other districts with slight modifications under the name of Intensive Agricultural area Programme (IADP) in 1964.

The food situation became alarming; particularly due to successive famines during 1964-67 and this happened despite intensive efforts in selected areas. In order to overcome this crisis, the GOI launched a new agricultural strategy known as High Yielding Varieties Programme (HYVP) in 1966. The achievement was the single goal of increasing agricultural production. This
unusual shift in the rural development strategy in favour of increasing agricultural production led to the accentuation of regional disparities on one hand and economic inequalities among different sections of the population on the other. Various reports revealed that the gains of intensive development efforts, including institutional credit flew more towards large and resourceful farmers to the neglect of small farmers, landless labourers, tenants and artisans. On realisation of the above, there was a shift in the rural development strategy. The main purpose of such a change in the approach was to make deliberate efforts to flow development benefits to the poorer sections and the backward areas. Accordingly, Small Farmers Development Agency (SFDA); Marginal Farmers and Agricultural Labourers (MFAL); Drought Prone Area Programme (DPAP); Hill Area Development Programme (HADP) etc., were implemented.

The beneficiary-oriented programmes as well as area development programmes, despite some successes could not make much dent into the problem of poverty and unemployment. Considering the magnitude and dimensions of rural poverty, the rural development strategy, therefore, took a major turn in its emphasis, content, coverage and methodology. This resulted in launching of the programme “Integrated Rural Development Programme (IRDP) in 1978-79, covering 2,300 developments blocks and extended to all the 5011 blocks in 2nd October, 1980. For implementing the programme, DRDA was set up at district level. IRDP envisages the integration of methodology and approach of both beneficiary oriented programmes as well as area development efforts for the purpose of poverty alleviation as well as increasing productivity.

The goal of poverty alleviation was achieved by having two main instruments:

i. a set of self-employment schemes for the poor i.e., IRDP and its two sub-programmes of TRYSEM and DWCRA.

ii. Wage employment programmes like NREP (1980) and RLEGP (1983). These have now been merged into Jawahar Rozgar Yojana (JRY).
**Objectives of IRDP**

The main objectives are creating assets, employment, increased income, removal of poverty and minimising inequality. The guide lines given to achieve the objectives include:

1. To provide gainful employment and increase the purchasing power of rural poor.
2. The job opportunities must be provided through the application of science and technology in making optimum use of existing local resources.
3. The programme must be simple enough to operate and be economically viable to ensure quick self-reliance of its beneficiaries.

For achieving its objective of rural poverty alleviation, IRDP aimed at the provision of assets to the identified poor in the form of Government subsidy and bank credit on reasonable rate of interest.

**Operation**

For managing the programme a corporate governmental agency name as District Rural Development (DRDA) was set up at district level. DRDA is guided and directed and supported by a governing council headed by the Project Officer of DRDA. The District Collector, Heads of District Officers, legislators, Panchayat Union Chairmen and some other non-officials from the member.

The existing development block was strengthened to enable it to bear the additional responsibility of implementing DRDA directed and supported programmes. IRDP is a centrally sponsored scheme implemented by DRDA of the states. The scheme is funded on 50:50 basis by the centre and the states.

The integration involves several categories of:

i. Spatial integration (integration between areas)

ii. Sectoral integration (integration between agriculture, off-farm activities, industries, etc.)

iii. Integration in economic and social development.
iv. Integration of total area and target group approach.

v. Integration of human and other resources.

vi. Integration of income generating schemes.

vii. Integration of credit with technical services.

Thus IRDP involves integration both in its means and ends.

**Short comings**

Since 1985 the Government has promoted concurrent evaluation of the implementation and impact of the programme. This evaluation had indicated that there has been some increase in income but only a minority of them could cross the newly determined poverty line of 6400 rupees. Various evaluation indicated the followings:

1. the resources provided were inadequate in majority of the cases;
2. there were large number of over dues due to one reason or the other
3. poor quality of assets provided to the beneficiaries in many cases;
4. the follow up of the beneficiaries was inadequate;
5. delay in provision of assets and preliminary high costs incurred by beneficiaries;
6. lacking of training facilities to farmers;
7. delay in releasing subsidy;
8. bribes taken by various functionaries concerned;
9. very inadequate supporting facilities or services;
10. non-availability of loans for making capital; and
11. Lack of guidance about insurance cover.

**Swarnjayanti Gram Swarozgar Yojana (SGSY)**

**Objective:** The objective of Swarnjayanti Gram Swarozgar Yojana (SGSY) is to provide sustainable income to the rural poor. The program aims at establishing a large number of micro-enterprises in the rural areas, building upon the potential
of the rural poor. It is envisaged that every family assisted under SGSY will be brought above the poverty line in a period of three years.

**Scope:** Launched on 1st April 1999, the program replaces the earlier self-employment and allied program.

Integrated Rural Development Program (IRDP), Training of Rural Youth for Self Employment (TRYSEM), Development of Woman and Children in Rural Areas (DWCRA), Supply of Integrated Tool-kit for Rural Artisans (SITRA), Ganga Kalyan Yojana (GKY) and Million Well Scheme (MWS), which are no longer in operation.

The program covers families below poverty line in operation. The country, within this target group, reserving 50 per cent of benefits for SCs/ STs, 40 per cent for women and three per cent for physically handicapped persons has provided special safeguards. It is proposed to cover 30 per cent of the rural poor in each block in the next 5 years.

**Strategy:** SGSY is a Credit-cum-subsidy program. It covers all aspects of self-employment, such as organization of the poor into self-help groups, training, credit technology, infrastructure and marketing. Efforts would be made to involve women members in each self-help group. SGSY lays emphasis on activity clusters. Four / five activities will be identified for each block with the approval of Panchayat Smitis. The Gram Sabha will authenticate the list of families below poverty line identified in BPL census. Identification of individual families suitable for each key activity will be made through a participatory process. Closer attention will be paid skill development of the beneficiaries known as swarozgaris and their technology and marketing needs.

**Employment Oriented Programmes**

**Training of Rural Youth for Self-Employment (TRYSEM-1979)**
With a view to provide technical skills to rural youth to equip them to take up self-employment in the fields of agriculture and allied activities, industries, services and trade the scheme TRYSEM was launched by GOI in August 15, 1979. It now operates as a component of IRDP. Its’ main features are:

i. to provide need-based technical skills to rural youth aged 18-35 years who belong to the category of the poor, to enable them to take up self-employment and to some extent even wage employment.

ii. Training is provided at the regular training institutions like polytechnics or under selected master craftsman.

iii. At least 30 per cent of the trainees should belong to SCs/STs and at least 33 per cent should be women.

iv. Marketing facilities for the products made by beneficiaries are improved.

v. The trainees are given stipend and tool kits during the period of training and are eligible after training for assistance under IRDP to start a viable economic activity suited to the learned skills.

vi. Non-recurring grants are made for strengthening the training infrastructure of the institution involved in TRYSEM.

vii. Rapport is being established by DRDA and employment exchanges for exploring employment opportunities for the trained youth.

The major trades under TRYSEM are tailoring, printing and binding, basket making, radio repair, electrical works, pump repair, carpentry, blacksmithy, production of mushroom, honey processing, cultivation of medicinal herbs and plants, poultry farming, fruit plants nursery, processing of fruits and vegetables, sericulture, installation of biogas plants etc.

**Jawahar Rozgar Yojana (JRY-1989)**

The latest employment generating programme launched by the Government was the Jawahar Rozgar Yojana, introduced from **1st April, 1989**, as an integration of
National Rural Employment Programme (NREP) and Rural Landless Employment Guarantee Programme (RLEGP).

It is stated to be a nationwide programme implemented through village panchayats, basically aimed at providing supplementary gainful employment to at least one member of about 44 million rural poor families who seek unskilled employment for a minimum period of 50 to 100 days in a year. The financial resources were shared by centre and the state in the ratio of 80:20.

**Objectives**

i. Generation of additional gainful employment for the employed and underemployed persons in the rural areas.

ii. Creation of sustained employment by strengthening the rural social and economic infrastructure.

iii. Creating productive community and social assets in favour of the rural poor for the direct and continuing benefits.

iv. Positive impact on wage levels of rural poor.

v. Overall improvement in the quality of life in rural areas.

**Million wells scheme**

It is a sub scheme under JRY. Objective is to include farmers amongst SCs/STs and the free bonded labourers. During 1994-95, more than 5 lakh wells have been constructed during the last three years at a cost of Rs.1631 crores.

**Indra Awas Yojana**

Indira Awaas Yojana was started in May 1985 as a sub-scheme of Jawahar Rozgar Yojana. 1 January, 1996 it is being implemented as an independent scheme.

**Objective:** The objective of Indira Awas Yojana (IAY) is primarily to help construction of new dwelling units as well conversion of unserviceable Kutcha
houses into Pucca/Semi Pucca by Members of Scheduled Castes / Scheduled Tribes, freed bonded labourers and also non-SC/ST rural poor below the poverty line by extending them grant-in-aid.

**Development of Women and Children in Rural Areas (1982)**

The need for introducing specific programmes for the development of poor women was felt. Many programmes were launched for them. One such programme formulated and launched since September 1982 in DWCRA. It aims at motivating and assisting women to engage themselves in a productive activity for earning a substantial income as well as to improve the quality of their own and children’s life. Thus, though the economic activity is the priority, the social betterment of the women and their children is also aimed at. It is partly supported by UNICEF and is jointly financed by Union and State Governments. It operates in conjunction with IRDP and TRYSEM. The main features of this programme are:

i. Women of identified poor families are organised into groups of 15-20 each for taking up income generating activities suited to their skills and aptitude.

ii. Group members are given training usually under TRYSEM.

iii. Each group selects one of its members as group organiser who is to help women in the selection of economic activities suited to their skills and aptitude, procurement of raw materials etc.

iv. Besides engaging in economic activity, each group is expected to be recipient of benefits of other development and welfare programmes.

v. Multi-purpose centre are being set up to serve as the central place for the working of women groups.

**Integrated Child Development Services (ICDS) Scheme**

Launched on **2nd October 1975**, today, ICDS Scheme represents one of the world’s largest and most unique programmes for early childhood development.
ICDS is the foremost symbol of India’s commitment to her children – India’s response to the challenge of providing pre-school education on one hand and breaking the vicious cycle of malnutrition, morbidity, reduced learning capacity and mortality, on the other.

**Objectives:** The Integrated Child Development Services (ICDS) Scheme was launched in 1975 with the following objectives:

i. to improve the nutritional and health status of children in the age-group 0-6 years;

ii. to lay the foundation for proper psychological, physical and social development of the child;

iii. to reduce the incidence of mortality, morbidity, malnutrition and school dropout;

iv. to achieve effective co-ordination of policy and implementation amongst the various departments to promote child development; and

v. To enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper nutrition and health education.

**Rashtriya Mahila Kosh (RMK)**

Rashtriya Mahila Kosh (RMK) was set up in March 1993 as an independent registered society by the Department of Women & Child Development in Government of India’s Ministry of Human Resource Development. It has been felt for some time in India that the credit needs of poor women, particularly in the unorganised sector, have not been adequately addressed by the formal financial institutions in the country. The vast gap between demand for and supply of credit to this sector established the need for a National Credit Fund for Women.
UNIT 2: Community Development

Community Development

Community: A community is a group of people, who live in a common geographical area and have an interest in each other for the purpose of making a better living.

Development: It is a gradual growth with sequential phases of change. It is socio-economic progress or overall growth in desirable changes in all sectors of rural life.

Community Development: It is a continuous social process for change and wherein the group of people of a community organize themselves for planning and action, define their common and individual needs and problems, make up plans to meet their needs and solve the problems with execution of their, plans by utilizing maximum local community resources and supplement these resources whenever it is necessary.

Origin of Community Development: Based on the experiences within the country and abroad, the recommendations of the Fiscal Commission (1949) and the Grow More Food Enquiry Committee (1952) the CDP was launched on October 2, 1952, the birth-day of Mahatma Gandhi. At the initial stage in 1952 there were 55 community projects in 3 blocks. Each of the community development projects covered an area of about 450-500 sq.miles with about 300 villages and a population of about 2 lakhs. Each project area has been divided into three development blocks. A development block consisted of about 100 villages with about 150-170 sq.miles and a population of about 60-70 thousands. Each block was further divided into groups of 5-10 villages each. Each such group formed the area of operation for a village level worker (Gram Sevak) who was the basic level extension functionary in the community development programme. The need for rapid extension of the programme to other parts of the
country led to the National Extension Service (NES) alongside the CDP on October 2, 1953 covering the entire country within a period of 10 years. In 1957, the Balvantroy Mehta team recommended the establishment of statutory elective of local leaders i.e., Panchayat Raj Institutions (Village Panchayat, Panchayat Union and District Development Council). This programme laid emphasis on all round development of the whole community with special emphasis on weaker and under privileged sections through the use of area development, self-help and integrated approaches. The CDP, however, could not bring expected change in improving the conditions of rural masses or there was not much development in the area of agricultural development.

Stages of community development

There are three stages that community development processes go through:

I. **Stage One: Relationship Building:** Building relationships of trust and developing friendships are crucial to successful community development. Getting to know the people in your own group and the groups with which you are working is the first stage in the process of creating a sustainable working relationship. Take time to get to know the people in your Friendship group.

II. **Stage Two: Process Development:** Once good relationships have been developed, groups can begin to plan activities. This will involve sharing ideas, dreams, aspirations and visions, and learning about the community in which you are working. What are their strengths? What are their needs? What are their aspirations?

III. **Stage Three: The Consolidation of Structures and Mechanisms:** At this stage commissions, committees and task forces or interest groups are formed to plan and implement the activities and programs that have been collectively decided upon. These structures are also responsible for keeping the information flowing between the groups and out into the wider community,
and often carry out the monitoring and evaluation processes that keep the programs and activities vibrant and sustainable.

**Objectives of community development**

- To introduce a change in farm, house, public service facilities.
- To bring specific changes in crops, animal production and management.
- To mobilizes the individual, group activities and their plans for the needs.
- To take participation of community people.
- To identify the felt need of community.
- To rank the needs and resources to be used
- To take actions for planning and implementing.
- To desire for change in knowledge, attitude and skill of the people through Community actions.
- To utilize the resources and local organizations for community welfare.
- To involve village leaders and Government machinery for long term efforts continuously.

**Organizational set-up for community development extension service:** The organizational set-up for Community development Programme runs form the national level through state, district and block levels to the village level and there are three main constituents of this new set-up.

(a) The direct-line staff such as State Development Commissioner, B.D.O and Village Level Worker.

(b) The auxiliary or specialist staff, such as different heads of technical departments at the state and district levels and extension officers at the block level.

(c) Panchayati Raj System- The Zila Parishads, Block Samitis and Village Panchayats.

**I. National Level:** At the National level programme, the policies are formulated by the National Development Council presided over by the Prime Minister of
India. Membership of the Council consists of the Central ministers of the concerned ministers, chief ministers of all states, and members of the Planning Commission. The Planning Commission provides guidance for Plan formulation and gives it approval to annual and Five-year Plans of the states as well as of the Centre. The Ministry of Agriculture and Irrigation is responsible for giving national guidance, policy formulation and technical assistance in regard to Agriculture Extension and Community Development (now Rural Development programmes). In the Agriculture department, the Agricultural Commissioner, Government of India, assisted by a number of assistant commissioners and directors, with the supporting staff, is in charge of all agricultural development programmes at the national level. Within this Department, special mention may be made of the Directorate of Extension Training responsible for the training of Extension officers, VLWs, instructors of Village-Level Workers Training Centres and others and the Directorate of Farm Information which is concerned with the dissemination of new agricultural technology and innovations through various media.

II. State Level: At state level also, there is usually a State Development Committee presided over by the Chief Minister of the state with the other concerned ministers as its members. This Committee is responsible for the state’s plan and programmes and for fixing the targets for regions and districts. Besides this committee, there are usually a number of other advisory or technical committees. As regards the actual administrative functioning the State Developments Commissioner is the top-level executive responsible for directing, coordinating and providing overall guidance for development programmes and maintaining a two-way channel of communication between the state governments and the Central government. He co-ordinates the activities of different development departments, such as agriculture, animal husbandry, co-operation, panchayati raj, health, education, irrigation, power
and electricity. The heads of these technical departments are responsible for planning and implementing the technical programmes and for providing the necessary technical guidance, manpower and support.

III. District Level: At the district level also, there is usually a District Development or District Planning Committee presided over by the District Collector or Deputy Commissioner. The other members of this committee are the heads of the departments in the district, chairman and vice-chairman of the district boards, representatives of voluntary organizations, local bodies and members of parliament and state legislatures. In the states, where the Panchayati Raj is operating, the Zila Parishads are responsible for planning, co-ordination and consolidating the development programme in the district. The District collector is the key official who co-ordinates the activities of all development departments at the districts level. The district-level technical heads of agriculture, animal husbandry, co-operation, panchayats, public health, irrigation, education and rural industries are responsible for planning and implementing the development programmes relating to their departments, Administratively, they are responsible to the district collector on one hand and to their state heads of development departments on the other.

IV. Block Level: A district is subdivided into a number of community development programmes. The block development officer is the head of the block team, and co-ordinates all the activities of the development departments at the block level. He is assisted by eight extension officers form different fields, namely agriculture, animal husbandry, health, co-operation, panchayats, engineering, social education and rural industry. At the non-official level in the states, where the Panchayati Rah has been implemented, the Panchayati samiti (also called the Block), this Samiti) has the statutory powers for formulating and executing development programmes.
The Samiti is assisted by the B.D.O. and the extension officers. Wherever the panchayati Raj is not working, there are block development advisory committees.

V. Village Level: At the village level, the multi-purpose village-level worker is the main extension staff. He is the last extension functionary in the administrative hierarchy and is the main contact person. He is responsible for all developmental work at the village level, and forms a connecting link between the various technical departments and the rural people. Usually, in a normal community development block, there are 10 village-level workers. Their number has been double in the intensive Agricultural Development Programme (IADP) blocks. On the non-official side, usually there is Panchayat in every village or for a cluster of villages, and is responsible for planning and implementing the community development programmes and ensuring people’s participation in them.

Rural development programmes in India

The concept of rural development: India is predominantly an agrarian country with 70-75 per cent (about 80 crores) of its population living in more than five lakh villages. Agriculture is the predominant livelihood occupation and the rural population largely consists of small and marginal farmers, agricultural labourers, artisans and scheduled castes and scheduled tribes. A large part of this rural population (more than 200 million) is still living below the poverty line and is the focus of rural development programmes. From the pre-independence era of Mahatma Gandhi, every government after the Independence of the country in 1947 has committed itself to rural development. Rural: As per the Webster’s dictionary rural means “open land” and according to the United States census rural includes all persons living outside urban area and who live on farm.
Agriculture is generally the main occupation in rural areas. Development: It refers to growth, evolution, and stage of inducement or progress.

According to Ensminger (1974) rural development is a process of transformation from traditionally oriented rural culture towards an acceptance and reliance on science and technology. The major objectives of the rural development programs are:

- To achieve enhanced production and productivity in the rural areas
- To bring about a greater socio-economic equity
- To bring about a spatial balance in social and economic development
- To bring about improvement in the ecological environment so that it may be conducive to growth and happiness
- To develop broad based community participation in the process of development

Rural development programme: Rural Development in a democratic society is not a matter only of plans and statistics, targets and budgets technology and methods, material and professional staff organization and machinery to administer them, but one of using these mechanisms skilfully as means for changing the mind, heart and actions of the people in ways that in improvements educationally, socially, economically and morally. Hence, the process is of working with people, not for them, of helping to become self-reliant, not dependent on others, of making people the central actors in the drama, not the stage hands or spectators. So the key to rural development in a free society is the human element, not material aid. The central means is education of the people in ways of improving their farms, home and community. This change must emerge from the people’s own decisions to act, result from their own efforts, and utilize their own resources to the maximum. To progress along these lines requires careful mobilization of the resources for promoting advancement and sharp focusing of them on changing the minds of people educationally.
Extension Approach to Rural Development: The extension approach uses the extension teaching methods for educating the people. It believes that the extension service can transform static economy into a dynamic economy. While improving the quality of family and community life, it emphasis the communication of information about innovative technical practices. It is mostly followed in America and Asia today and is referred to as the conventional or classical model of extension. This model was prepared by the Professors of the Land Grant Colleges who sought to make agricultural extension a separate scientific profession with its basic concepts, theory, principles and methodologies. The disciples who propagated this idea are the Americans and those who studied in the American Universities. They helped to establish this model in developing countries.

Objectives:

✓ The main objective is to persuade and help farmers in increasing agricultural production by adopting improved agricultural practices.
✓ It also aimed at improving the rural family life be educated the women and youth in the rural family life by educating the village people.

Pre-Independence experiments in rural development

1. Shriniketan Attempt: In 1908, Shri Rabindranath Tagore, under his Scheme of Rural Development work, started Youth Organizations in the villages in the Kaligram Pargana of his Zamindari (West Bengal). He tried to create the field workers who could identify themselves with the people. In 1921, he established a Rural Reconstruction Institute at Shantiniketan, in collaboration with Mr. L.K. Elmhirst. A group of eight villages was the center of the programme.

Objectives:

• To create a real interest in people for rural welfare work.
• To study rural problems and to translate conclusions into action.
• To help villagers develop their resources.
• To improve village sanitation.

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<tr>
<th>Method used</th>
<th>Activities</th>
<th>Short-comings</th>
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<tr>
<td>2. Developing village leadership.</td>
<td>2. Dairy to supply pure milk and animals to farmers or breeding.</td>
<td>2. Confined to limited villages.</td>
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<td></td>
<td>4. Training and organizing the weavers.</td>
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<td></td>
<td>5. Training in tanning, pottery, embroidery, tailoring etc.</td>
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<td>6. Film shows, meetings, village meals.</td>
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2. **Gurgaon experiment:** Rural uplift movement on a mass scale was first started by Mr. F.L. Brayne, Dy. Commissioner in the Gurgaon district of Punjab in 1920-21. The work gathered momentum after 1933 when Mr. Brayne was appointed as Commissioner of Rural Reconstruction in the Punjab. In 1935-36, the Government of India granted 1 crore for the work which acted as a stimulus. After that the work was transferred to the Cooperative Department and Better Living Societies were organized to take up this work in the villages.

**Objectives:**

- To increase agricultural production.
- To stop wastage of money on social and religious functions.
- To improve healthy standard of the people.
- To organize welfare programmes.
Activities:

- Appointment of village guides.
- Propaganda through films, folk songs, dramas etc.
- Rural Economics and domestic Economics School

Short Comings:

- A one man show.
- Village guides were un-experienced and untrained.
- No comprehensive planning.
- No continuity in the work.
- Limited to few villages.
- Force not persuasion

3. Sewagram Attempt: It was started under the guidance of Mahatma Gandhi as All India Spinners Association in 1920 and later as All India Village Industries Association at Wardha in 1933. Gandhi believed that the ‘Salvation of India lies in Cottages’.

The Key Words of his Economy were:

- Decentralize production and equal distribution of wealth and
- Self-sufficiency of Indian Villages.

Objectives:

- To provide service to the under privileged.
- To achieve self-dependency.
- To provide basic education to people.

Activities: His 10 points programme for emancipation of villages included:

1. Promotion of village industries.
2. Basic and adult education.
3. Rural sanitation.
4. Upliftment of backward communities.
5. Upliftment of women.
6. Education in public health and hygiene.
7. Propagation of national language.
8. Love for the mother tongue.
10. Organization of farmers, Labours, Students etc.

4. Marathandam Attempt: This project was started by Mr. Spencer Hatch, an American Agricultural Expert in Travancore State under the auspices of Y.M.C.A. in 1921.

Objectives: To bring about completed upward development towards a more abundant life for rural people spiritually, mentally, physically, socially and economically.

Activities:
- Self-help with intimate expert counsel working principles of the centre.
- Agriculture.
- Bee Keeping.
- Cottage Industries.
- Poultry Keeping etc.
- Community projects.

Strong Points:
- Special training of staff, their enthusiasm and sincerity was developed.
- A comprehensive plan.
- Started with the existing conditions.
- Low cost

Short Comings:
- Lack of adequate funds.
- Lack of Government banking.
• Lack of continuous contacts with the villagers.
• Religious standing of the institution.

Post-independence Rural Development Programmes

1. Etawah Project: The idea of this pilot project was conceived in 1945 but was put into action in September, 1948 at Mahewa Village about 11 miles away from Etawah in United Province. Lt. Col. Albert Mayer of U.S.A. was the Originator of this project. Initially 64 villages were selected which then increased to 97. The Government of UP and Point-4 programme of U.S.A. provided help for this project.

Objectives:
• To see the extent of improvement possible in an average district.
• To see how quickly results could be achieved.
• To ascertain the permanency and applicability of results to other areas.
• To find out methods of gaining and growing confidence of the villagers.
• To build up a sense of community living.
• To build up a spirit of self-help in the villagers.

Activities:
1. Broadening the mental horizons of the villagers by educative and persuasive approach.
2. Training of village level workers.
3. Co-ordination between Departments and Agencies.
5. Covered subjects like crop yields, soil conservations, animal husbandry sanitation and social education.

Strong Points:
• Villager’s participation.
• Planning and integrated approach.
2. Nilokheri Project (1948): Shri S.K. Dey pioneer person for this project later Union Minister for community Development and Cooperatives up to 1965 was the central figure of this project. It was originally started to rehabilitate 7000 displaced persons from Pakistan. Later it was integrated with 100 surrounding villages making a rural cum urban township. The scheme was called as “Mazdoor Manzil”.

**Objectives:** Rehabilitation of the displaced persons from Pakistan

2. Self-sufficiency for the township in all the essential requirements of life

**Activities:**

1. School
2. Agricultural Farm
3. Poly-Technique training centre
4. Dairy farm
5. Poultry farm, Piggery
6. Horticultural garden
7. Printing Press
8. Garment factory
9. Engineering workshop

**Training and Visit System (1974)**

Training and Visit system was developed by World Bank Expert Daniel Benor. Initially (13) Major states in India adopted Training and Visit system but later on most of the states are practicing this system since 1984 onwards. The Training and Visit system has a simple organization and infra structure with defined objectives. It is based on regular visit to the farmers and periodical trainings to the extension workers. It has wide popularity because it provides problems oriented guidance, flexible management and continuous feedback from the farmers.

**Meaning and Concept of Training and Visit System:** The Training and Visit system in Agricultural Extension Education is designed for building a lined professional extension service that is capable of guiding the farmers in agricultural production and raising their income by providing appropriate plans for country development.
The extension workers working at various levels are updated with latest technology feasible and viable to the needy farmers by arranging frequent training programmes. Similarly, they have scheduled programme of the visits to the contact farmers for advising and directing to follow appropriate technology and solving the vary problems faced by the farmer on his field. These are the basic requirement of the Training and Visit system. The T&V system was introduced with World Bank assistance in Chambal (MP), Rajasthan canal and Pochampad & Nagarjunsagar (AP) areas in Kharif 1974. It is introduced earliest in the project Se han project in Turkey. West Bengal and Rajasthan were the first states in India to taken up as a whole under T&V system in 1975 (MoA, 1982).

**Proposed staffing pattern (MoA, GoI, 1982)**

**Field level:** One Agriculture Extension Officer for supervision of 8 Village Level Workers (VLWs). According to the government, VLWs should devote 75 percent of their time in agriculture.

**Sub-Divisional Level:** One sub-divisional agricultural officer who should be supported by a team of SMS especially in the field of Agronomy and Plant pathologist along with a training officer.

**District Level:** There should be a chief Agricultural Officer of the rank of Deputy Director of Agriculture who should be responsible for entire agricultural development work in the district.

**State Level:** Director of Agriculture who should be assisted by an Additional Director of Agriculture (Extension). The ADA is responsible for supervising the extension service and ensuring its smooth operation. The ADA Extension may supported by three deputies.

1. In-charge of Administration including Management and Finance
2. Technical and professional aspects
3. Execution and implementation including monitoring and evaluation

**Jawahar rozgar yojana**
The NREP and RLEGP were merged in April 1989 under the Jawahar Rozgar Yojana (JRY).

- The JRY was meant to generate meaningful employment opportunities for the unemployed and underemployed in rural areas through the creation of economic infrastructure and community and social assets.
- Initially, the JRY also included the Indira Awas Yojana (IAY) and the MWS. Both these schemes were made into independent schemes in 1996.
- The JRY was revamped from 1 April 1999 as the Jawahar Gram Samridhi Yojana (JGSY).
- It now became a programme for the creation of rural economic infrastructure with employment generation as a secondary objective.
- The 60:40 wage labour/material ratios in the JRY was relaxed.
- The programme is implemented by the village panchayats and provides for specific benefits to SCs/STs, the disabled and the maintenance of community assets created in the past.

**Agriculture Technology Information Centre (ATIC)**

The importance of an appropriate information package and its dissemination as an input has assumed added emphasis in this “information age”. The kind of information and the way it is to be used are critical factor to the growth of agriculture. It is also worth noting that it is no longer enough for research to generate information alone. The required information is also to be delivered to the end user at one place. This information must be direct, clear and easily understandable and without any room for distortion. There is a greater need for coordination between researchers and technology users. A higher degree of integration needs to be achieved by having a formal management mechanism linking scientists or department in charges of different disciplines (though engaged in interdependent tasks) on the one hand to the technology users on the other. The linkage mechanism should be with formal, permanent, mandated,
facilitated and designated function. The establishment of an agricultural Technology Information Centre will provide such a mechanism beyond the individual unit of a research institution to contribute to the dissemination of the information. This will serve as a single window delivery system for services and products of research for the areas in which the concerned institute is involved.

The cornerstone of India’s agricultural revolution has been the availability of improved varieties of cereals, oilseeds, pulses, etc. breed of livestock including poultry and fisheries; horticultural plant materials, and improve management practice for increase productivity, sustainability and stability of various crops and livestock enterprises. This has raised the search by farmers for future availability of seed, planting materials and other materials, easy accessibility to diagnostic services for soil fertility and plant protection, availability of appropriate information through leaflets and pamphlets and increased scope in sale of consultancy services. Often the farmers are not aware as to whom and where to approach for field problems. It is felt that the facility of a ‘single window’ approach at the entrance of the ICAR Institute/State Agricultural Universities will enable the farmers to have the required information for the solution to their problems related to the areas in which the concerned institute is involved. Because of the dominance of small and resource poor farmers and concentration of poor people in several sectors, public institutions like ICAR institutes and SAU’s will continue to play a vital role in supply of information for increasing the overall productivity in agriculture.

**The rationale for establishment of ATIC are:**

1. To provide diagnostic services for soil and water testing, plant and livestock health.
2. To supply research products such as seeds and other planning materials, poultry strains, livestock breeds, fish seed, processed products, etc, emerging form the institution for testing and adaptation by various clientele.
3. Providing information through published literature and communication materials as well as audio—visual aids.
4. Providing an opportunity to the institutes/SAU/s to generate some resource through the sale of their technologies.

The important criteria of Agricultural Technology Information are:

1. Availability (or accessibility) of new technologies,
2. Relevance of new technologies
3. Responsiveness of new technologies to the needs of different categories of farmers and
4. Sustainability of such unit within the overall institutional system

The Agricultural Technology Information Centre (ATIC) is a “single window” support system lining the various units of a research institution with intermediary users and end users (farmers) in decision making and problem solving exercise. By building on the past investment in infrastructures in these institutions considerable farm worthy techniques/ technologies/ knowledge material have been developed in the institutions which can provide the techniques, technologies, seeds and planting materials to the farmers and other organizations for taking up the frontier technologies, to the field. This will facilitate in dealing effectively with the complexity and diversity of information system and channels. Such information will be useful for:

i. Farmers;
ii. Farmer-entrepreneurs;
iii. Extension workers and development agencies;
iv. NGOs; and
v. Private sector organization.

These centres will provide a ‘balanced scorecard’ in terms of

1. Financial- Resource generation and financial sustainability;
2. Customers-measures on performance of the technology from the customer’s point of view
3. Process- the performance of key internal processes in terms of providing quality services, seed and plant materials, etc. linkage with district extension system and, spread of improved technology and productivity in the area: and
4. Learning- the ability of the research organization to improve continuously and innovate in its products, services and processes.

Objectives:
The objectives for establishment of such centres as a single window system are as follows:

1. To provide a ‘single window’ delivery system for the products and species available from an institution to the farmers and other interested groups as process of innovativeness in Technology Dissemination at the institute level.
2. To facilitate direct the farmers access to the institutional resources available in terms of technology, advice, technology products, etc. for reducing technology dissemination losses and
3. To provide mechanism for feedback from the users to the institute

Integrated Rural Development Programme (1979-80)
The concept of an Integrated Rural Development Programme was first proposed in the central budget of 1976-77.

- In 2nd Oct 1980 covered the whole nation
- It is also called “Anti-Poverty Alleviation Programme”

IRDP launched on October 2nd. 1980 all over the Country and accordingly all the 15 Blocks of Boudh- Kandhamal district have been covered under the Scheme. Since then, prior the above period, IRDP was in operation in 8 blocks of the district since 1978-79. The IRDP continues to be a major poverty alleviation
programme in the field of Rural Development. The objective of IRDP is to enable identified rural poor families to cross the poverty line by providing productive assets and inputs to the target groups. The assets which could be in primary, secondary or tertiary sector are provided through financial assistance in the form of subsidy by the Govt. and term credit advanced by financial institutions. The programme is implemented in all the blocks in the country as a centrally sponsored scheme funded on 50:50 basis by the central and state govt. The Scheme is merged with another scheme named SGSY since 01.04.1999.

**Limitations:**

1. In the integrated rural development, the village has been treated as a homogeneous concept and as a unit of development which is not there. Thus there is a serious problem of uneconomic and non-viable villages or rural settlements that can form a more economically efficient base for integrated rural development.

2. No attempt was made to consider the policy of distribution of land or for a more equitable distribution pattern and revitalizing the possessing of other productive assets in the rural areas by limiting size of individuals units.

3. Inability of science and technology to solve, by itself, the problem of rural poverty.

**Agricultural technology management agency (ATMA)**

Agricultural Technology Management Agency (ATMA) is one of the innovations technology dissemination components of National Agricultural Technology Project (NATP). ATMA functions as a registered society at District level and serves as a focal point for integrating research and extension activities and helps in decentralizing the management of agricultural technology transfer. The members of ATMA include the representatives of Department of Agriculture, Animal Husbandry, Horticulture, and Fisheries. Each research-extension unit would retain its institutional identity and the management committee of ATMA
would plan extension activities. At present ATMA is in operation in twenty-four district spread over six states viz., Andhra Pradesh, Bihar, Orissa, Maharashtra, Punjab and Himachal Pradesh.

**Objectives:** The objectives of ATMA are:

1. To strengthen research – extension – farmer linkages
2. To provide an effective mechanism for co-ordination and management of activities of different agencies involved in technology adaption / validation and dissemination at the district level and below.
3. To increase the quality and type of technologies being disseminated.
4. To move towards shared ownership of the agricultural technology system by key shareholders.
5. To develop new partnerships with the private institutions including NGOs.

**Constitution**

Under ATMA, there is a provision for Governing Board which functions as a policy making body and provides guidance as well as reviews progress and functioning of ATMA. A separate Management Committee constituted under ATMA would be responsible for planning and reviewing of the day to day activities. The composition and key functions of Governing Board and Management Committee as per ICAR (1998), NATP document are given below.

**ATMA Governing Board Composition**

1. District magistrate/Collector  Chairman
2. Chief Executive Officer (CEO)  Vice-Chairman
3. Joint Director/Deputy Director (Agri.)  Member
4. A member from ZRS/KVk  
5. One farmer representative  
6. One livestock producer  
7. One horticulture farmer  
8. Representative of women farmer interest group  

9. One SC/ST farmer representative  
10. A Representative of NGO  
11. Lead Bank Officer of the District  
12. A representative of NGO  
13. Representative of Input Supply Association  
14. Representative if Input Supply Association  
15. Project Director of ATMA  
16. One Fisheries/Sericulture representative  

**Key functions:**  
The Key function of ATMA Governing Board would include the following functions and tasks.  

1. Review and approve strategic and annual work plans that are prepared and submitted by the participating units.  
2. Receive and review annual reports carried out by the participating units, providing feedback and direction to the participating units, a needed, about the 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.  
4. Foster the organization and development of farmer's interest groups and farmer’s organization within the district.  
5. Facilitate the greater involvement of private sector and firms and organizations in providing inputs, technical support, agro-forestry and marketing services to farmers.  
6. Encourage agriculture lending institutions to increase the availability of capital to resource poor and marginal farmers, especially children and women farmers.
7. Encourage each line department, plus the KVK and ZRS to establish farmer advisory committee to provide feedback and input into their respective research and extension programme.

8. Enter into contract and agreements as appropriate to promote and support agricultural development activity within district.

9. Identify other sources of financial support that would help ensure the financial sustainability of ATMA and its participating units.

10. Establishing revolving funds / accounts for each participating unit, and encourage each unit to make available technical services, such as artificial insemination or soil testing, on a cost recovery basis moving towards full cost recovery in a phased manner.

11. Arrange for the periodic audit of ATMA's financial accounts and

12. Adopt and amend the rules and by-laws for the ATMA

Management committee Composition

1. Project Director ATMA Chairman
2. District head of Dept. of Agriculture Member
3. District head of Dept. of Horticulture "
4. District head of Dept. of Animal Husbandry "
5. District head of Dept. of Fisheries "
6. District head of Dept. of Sericulture "
7. District head of appropriate line
8. Head, KVK/ZRS "
9. One representative of NGO, in charge of Farmer's organization "
10. Two representatives of farmer' organizations (One year rotation basis) "

Key functions

The key functions and tasks to be carried out by the ATMA management committee would include the following:
1. Carry out periodic Participatory Rural Appraisal to identify the problems and constraints faced by different socio-economic groups and farmers within the district.

2. Prepare an integrated, strategic technology plan for the district that would specify short and medium term adaptive research as well as technology validation and refinement and extension priorities for the district, these priorities should reflect the important farmer's constraints, identified during the PRA.

3. Prepare annual work plans that would be submitted to ATMA Governing Board for review position, modification and approval.

4. Maintain appropriate project accounts for submission to technology dissemination unit for audit purposes.

5. Coordinate the execution of this annual work plan through participant line departments, ZRS, KVKs, NGOs, FIGs /FOs and allied institutions, including private sector firms.

6. Establish coordinating mechanism at the block level, such as Farmer Advisory Centre, that would integrate extension and technology transfer activities at the block and village levels.

7. Provide annual performance reports to the Governing Board outlining the various researches, extension and related activities that were actually carried out, including target achieved.

8. Provide secretariat to governing board and initiate action or policy direction, investment decision and other guidance received from the board.

**Salient Features of ATMA**

1. Creating Farmer Advisory Committee to improve feedback.

2. Using NGOs to organize farmers.

3. Encouraging private sector involvement in technology transfer.

4. Validation and refining technologies through research units in the district.
5. Bottom up planning procedure.
6. Increased use of Information Technology (ARIS, WWW)
7. In-service training to increase staff competence.
8. Developing new Public-Private partnerships.
9. Formation and strengthening of farmer's interest group.

**Process of Working of ATMA**

1. Diagnostic survey by researchers and extension worker along with other government staff from the agriculture and other line departments, NGOs and representatives of corporate sector processors, input suppliers, bank and farmer representatives using PRA techniques.
2. Identification of problems currently affecting the technology dissemination system and limiting its performance of sustainability.
3. Determination of the main opportunities and constraints (markets, input supplies, financial and social factors, the natural resource base etc.) that should be considered for development planning.
4. Formulation of Strategic Adaptive Research and Extension Plan for the District, setting out technical objectives as well as innovations to be introduced into the organizations and funding of technology dissemination.
5. Preparation of specific action plus implementation responsibilities of the public sector and other stockholders for the specific year.
UNIT 3: Extension Programme Planning, Monitoring and Evaluation

Extension Programme Planning

Extension programme

The word 'programme' has several distinct meanings in the dictionary. It means a proclamation, a prospectus, a list of events, a plan of procedure; a course of action prepared or announced beforehand, a logical sequence of operations to be performed in solving a problem. According to Kelsey and Hearne (1949), an "extension programme" is a statement of situation, objectives, problems and solutions'.

Leagans (1961) says that an "extension programme" is a set of clearly defined, consciously conceived objectives or ends, derived from an adequate analysis of the situation, which are to be achieved through extension teaching activity'. Lawrence (1962) says that an "extension programme" is the sum total of all the activities and undertakings of a county extension services. It includes: (i) programme planning process; (ii) written programme statement; (iii) plan of work; (iv) programme execution; (v) results; and (vi) evaluation. From the above definitions, it is clear that an extension programme:

- Is a written statement;
- Is the end product of extension programme planning;
- Includes a statement of situation, objectives, problems and solutions;
- Is relatively permanent but requires constant revision;
- May include long-term as well as short-term programme objectives;
- Forms the basis of extension teaching plans;
- Has been drawn up in advance; and
- Has been built on the basis of content.
So, we can define an extension programme as a written statement of situation, objectives, problems and solutions which has been prepared on the basis of an adequate and systematic planning effort, and which forms the basis of extension teaching activities in a specific area, for a given period.

**Some important terminologies in extension programme planning**

**Programme:** is a written statement containing a more pertinent factual data used in decision-making, the problems agreed upon with priority assignment and the possible solutions to the problems'.

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

**Project:** is a single item of the annual plant containing the method of solution of a single selected problem.

**Calendar of work:** is a plan of work arranged chronologically, according to the time when step of work is to be done. It is a time schedule of work.

**Aim:** is a broad objective. It is a generalised statement of direction and may have several objectives. It is also said to be an end in view to give direction to the creative process.

**Objective:** is a direction of movement. A well stated objective is always measurable. It is also said to be a goal of growth.

**Goal:** is a distance in any given direction, proposed to be covered in a given time.

**Extension programme planning**

It is defined as a social action, decision-making, inter actionable process in which advance thinking is needed for identifying the needs, interests and resources of the people through educational means to prepare a blueprint for
action we are now ready to formally define this concept. However, it appears appropriate here to list some of the definitions of extension programme planning as given in the literature:

1. Programme planning is viewed as a process through which representatives of the people are intensively involved with extension personnel and other professional people in four activities (Boyle, 1965):
   - Studying facts and trends;
   - Identifying problems and opportunities based on these facts and trends;
   - Making decisions about problems and opportunities that should be given priority; and
   - Establishing objectives or recommendations for future economic and social development of a community through educational programmes.

2. This is the process whereby the people in the country, through their leaders, plan their extension programme. Country and state professional extension staff members assist in this process. The end-result of this process is a written programme statement (Lawrence, 1962).

3. Extension programme planning is the process of determining, developing and executing programmes. It is a continuous process, whereby farm people, with the guidance and leadership of extension personnel, attempt to determine, analyse and solve local problems. In this, there are three characteristics:
   - What needs to be done;
   - When it should be done; and
   - How it should be done (Musgraw, 1962).

4. An organized and purposeful process initiated and guided by the agent, to involve a particular group of people in the process of studying their interests, needs and problems, deciding upon and planning education and other actions to change their situation in desired ways and making commitments regarding the role and responsibilities of the participants (Olson, 1962).
An analysis of these and other definitions of extension programme planning implies that it:

- Is a decision-making, social process;
- Involves advance thinking;
- Is a progressive step-by-step process;
- Uses educational means in defining the goals and situations;
- Is built around improved technology, people, their needs, interests, resources, values, attitudes and skills; and
- The end-product is a written statement of situation, problems, objectives and solutions.

Thus extension programme planning may be defined as:

- A decision-making, social-action process in which extension educators involve people's representatives,
- To determine their needs, problems, resources and priorities,
- In order to decide on an extension programme consisting of situation analysis, problems, objectives and solutions,
- This will form the basis of extension teaching plans for a given period.

Having described the concepts of planning and extension programme, now the stage is set to examine the concept of extension programme planning. A few points need to be explicated before attempting a definition.

1. **Extension programme planning is a process.**

The dictionary meaning of 'process' is 'any phenomenon which shows a continuous change in time' or 'any continuous operation or treatment'. If we accept this concept of process, we view events and relationships as dynamic, ongoing, ever-changing and continuous. When we label something as a process, we also mean that it does not have a beginning, an end, a fixed sequence of events. It is not static, at rest. The basis for the concept of process is the belief that man cannot discover the structure of physically reality; man must create it.
This **definition** of process suggests that 'a process is involved in which a series of actions culminates in the accomplishment of a goal' (Boyle, 1965). Viewed in this way, the concept of process involves a **method**, i.e., a process should be viewed as a sequential set of steps or several systematically ordered steps of planning, the performance of which leads to the accomplishment of a goal.

2. **Extension programme planning is a decision-making process.**

Planning is basically a decision-making process- and so is extension programme planning. In extension programme planning, scientific facts are put to value judgements of the people through the implementation of a rational planning model in order to decide a programme which will be carried out through the extension teaching activities.

3. **Extension programme planning requires advance thinking.**

If we could know 'where we are' and 'where we are to go' we could better judge 'what to do' and 'how to do'. This statement lies at the heart of the nature of planning. Good extension programme planning is an intellectual activity since it usually involves a study and use of facts and principles. It requires knowledge, imagination and reasoning ability.

4. **Extension programme planning requires skill and ability on the part of planners.**

Planning effective extension education programmes requires a number of high-level professional skills. It needs abilities include understanding and skill in the following broad areas:

- Understanding the nature and role of extension education organization.
- Knowledge and understanding of the technology related to the subject with which the programme is concerned.
- Ability to clarify the objectives of a programme and to so state them that they are useful in guiding its execution.
- Skill at seeing the relationship between principles and practice.
• Skill at inquiry and human relationships.

5. **Extension programme planning is built round content.**
A programme regarding any extension activity can only be built on the basis of content. Without some express purpose, there can be no planning. Extension programme planning is built around available improved technology, the people, their resources, problems, needs and interests.

6. **Extension programme planning is a social action process.**
Extension programme planning involves interaction and the decisions so taken in the form of a programme affect others. Interaction assumes some type of communication between two or more people in the planning process. So when the extension staff involving specialists and people's representatives decides on the programme content for extension teaching for the coming year, it is involved in social planning.

7. **Extension programme planning is a collaborative effort.**
Extension programme planning is a collaborative effort involving identification, assessment, evaluation of needs, problems, resources, priorities and solutions.

8. **Extension programme planning is a system.**
Extension programme planning is a system as its procedures and processes are interrelated, ordered and linked progressively to form a collective whole. It includes several subprocesses, such as planning, designing, implementing, evaluation etc.

9. **The end-product of extension programme planning is an extension programme.**
According to Vanderberg (1965), 'the primary purpose of any planning, first and foremost is that of developing a sound, defensible and progressive course of action or plan. In the process followed, many other benefits might accrue, such as the education of participants, but we want a plan which can and will be used'.
Rationale of programme planning

Kelsey and Hearne (1949) have given the following rationale for a planned extension programme. According to them, sound extension programme planning:

1. Is based on analysis of the facts in the situation;
2. selects problems based on needs;
3. determines objectives and solutions which offer satisfaction;
4. reflects performance with flexibility;
5. incorporate balance with emphasis;
6. envisages a definite plan of work;
7. is a continuous process;
8. is a teaching process;
9. is a coordinating process;
10. involves local people and their institutions; and
11. Provides for evaluation of results.
12. Progress requires a design.
13. Planning gives direction.
14. Effective learning requires a plan.
15. Planning precedes action.

Thus it could be said that planning programmes is an integral part of the development process and ensures better and efficient utilization of resources, accountability and human development.

Principles of Programme Planning

After a critical analysis of the programme planning principles available in extension literature, Sandhu (1965) identified a set of principles that may be applicable in developing countries.
1. **Extension programme planning is based on analysis of the facts in a situation**: It is important to take into account the conditions that exist at a particular time. This implies that factors such as land, crops, economic trends, social structure, economic status of the people, their habits, traditions and culture, in fact, everything about the area in which the job is to be done and its people, may be considered while planning an extension programme for an area.

2. **Extension programme planning selects problems based on people's interests and needs**: Sound programme building selects problems based on people's needs. It is necessary to select these problems which are most urgent and of widest concern. Choice of problems must be from among those highlighted by an analysis of the facts regarding what are felt and unfelt needs. To be effective, extension work must begin with the interests of the families. It must meet interest and use them as a spring-board for developing further interests. It is common knowledge that people join together because of mutual interests and needs.

3. **Extension programme planning determines definite objectives and solutions which offer satisfaction**: In order to hold interest, we must set working objectives and offer solutions which are within reach and which will give satisfaction on achievement. This is related to motivation for action. People must see how they or their communities are going to benefit from the proposed solutions.

4. **Extension programme planning has permanence with flexibility**: Any good programme must be forward looking and permanent. Permanence means anticipating years of related and well organized effort. Along with this lower process, which both follow and makes a long-term trend, experience has shown that particular items will need to be changed to meet unforeseen contingencies or emergencies. Without flexibility, the programme may not, in fact, meet the needs of the people. A programme should be prepared well in advance of its
execution but not too far ahead of time. Ordinary events may subject it to change in part though not in total. It is obvious that an extension programme must be kept flexible to meet the changing needs and interests of the people.

5. **Extension programme planning has balance with emphasis:** A good programme should cover the majority of people's important interests. It must be comprehensive enough to embrace all groups, creeds and races at all levels and community, block, state, national and international problems. It is futile to deal with only one phase of life in a community as an end in itself. At the same time, a few of the most important or timely problems should be chosen for emphasis. To avoid scattered effort, something must stand out. Decisions must be made as to which of the needs are most urgent. The next consideration in choosing items for emphasis is to promote efficiency by permitting a good distribution of time and effort throughout the year. Too many things carried out simultaneously will divide either the worker's or the people's attention.

6. **Extension programme planning has a definite plan of work:** No matter how well a programme is thought through, it is of no use unless carried out. This implies good organization and careful planning for action. A plan of work is an outline of procedure so arranged as to enable efficient execution of the entire programme. It is the answer to what, where, when and how the job will be done. In carrying out programme plans, different leaders and groups may work on various phases, i.e., the women in the community may work on one segment, the men on a second segment and youth-club members on a third. Organization should be used as a tool to accomplish these purposes, never as an end in itself.

7. **Extension programme planning is an educational process:** The people who do the planning may participate in local surveys and neighbourhood observations. This provides an opportunity for them to learn more about their own community and area and increases their interest. The extension worker has the responsibilities of providing local leaders with the knowledge, skills and
attitudes; they must have; if they are to help in educationally serving the people. Essentially, learning takes place through the experiences the learner has and the responses he makes to the stimuli of his environment.

8. **Extension programme planning is a continuous process:** Since programme planning is viewed as an educational process and since education is seen as a continuous process, therefore it logically holds that extension programme planning is a continuous process. There is no question of exhausting new knowledge, either in the subject matter with which we deal or in the methods of teaching. With the constant flux of agricultural technology, extension education is faced with an increasingly more difficult job as it tries to serve the needs and interests of the people. Sutton (1961) said that extension in a changing society must adjust and plan for the future to serve the needs of people. He set forth five steps within might be useful in making necessary adjustments:

i. Keep choice to the people

ii. Be flexible and ready to grasp with firmness new problems as they arise.

iii. Work with people in seeking practical solutions to their problems.

iv. Keep abreast of technological and social change.

v. Close the gap between research discovery and practical application.

It is obvious that tomorrow's problem will not be the same as today's. So extension must make periodic adjustments in its plans to meet the changing problems. It is therefore necessary to view extension programme planning as a continuous process though its recurrence is cyclic.

9. **Extension programme planning is a co-ordinating process:** Extension programme planning finds the most important problems and seeks agreement on definite objectives. It coordinates the efforts of all interested leaders, groups and agencies and considers the use of resources. It obtains the interest and cooperation of many people by showing them why things need to be done. This is important in working with people. Within the extension organization, the block
staff may work together on an integrated programme, each member devoting part of his energy to appropriate phases.

10. **Extension programme planning involves local people and their institutions:** Involvement of local people and their institutions is very essential for the success of any programme for their development. People become interested and give better support to the programme when they are involved in the planning process. So, extension programmes should be planned with the people and not for them.

11. **Extension programme planning provides for evaluation of results:** Since extension programme planning involves decision-making procedures, so evaluation is important in order to make intelligent decisions aimed at achieving the stated objectives. Matthews (1962) pointed out that extension programme planning and evaluation go together. Kelsey and Hearne (1949) have said that all other principles of programme building are related to evaluation. Effective evaluation will, of course, depend on clear objectives, knowing which people we are trying to teach and having records of the results in terms that reflect changes in their action. Starting a programme with the intention of engaging in a careful evaluation at the close of a specific period has a salutary effect on all the intermediate processes. However, provision has to be made both for concurrent and ex-post facto types of evaluation.
Steps of extension programme planning

The various phases and steps involved in this model are:

1. **Collection of facts**: It is starting point of programme planning process. Pertinent data may be collected from the available records and by survey of the area. Information relating to the people, their enterprise, levels of technology, facilities and constraints, values etc., relevant to programme building may be collected.

2. **Analysis of situation**: Situation analysis involves collection, analysis and interpretation of the existing facts. The data and information are collected and then analysed with the help of local people. This shall help in understanding the situation in its proper perspective. Good planning depends on the availability of adequate and reliable data and scientific elaboration and interpretation of the same. The following criteria should be met in order to ensure that this step has been adequately followed.
3. Identification of problems: A proper analysis and interpretation of the data shall help in correctly identifying problems. There may be many problems, but only urgent and significant ones which may be solved with available resources and within the limits of time, should be selected. Selection of problems to be tackled will involve identification, classification and selection with due regard to priorities. Identification of problems will be done on the basis of situation analysis. Once the problems have been identified, it is desirable that they be properly classified into the following categories:

- Problems which can be solved by the people themselves with no outside financial aid.
- Problems which can be solved by the people with the aid of the Panchayat Samiti.
- Problems which can only be solved with the help of Government funds.

The following conditions will exist when the requirements of this step have been adequately met:

- Of the identified problems, the most felt and of widest concern are selected by the extension agents and people's representatives.
- Selected problems are related to the family, community block and situation.
For tackling the selected problems, the time is scheduled on greatest priority basis

4. **Determine objectives and goals**: It is essential in the programme planning process that before deciding on the projects to be undertaken, basic objectives of the programme are determined by the villagers in consultation with the extension staff. The objective should be direct and stated in clear terms. To make the objectives realistic and actionable, there is need to state them in terms of specific goals. In the determination of goals it may be necessary to again go through the data information analysed; to find out what could actually be done in the existing situation, with the available resources and time, which will be compatible and with which the people shall cooperate. The following conditions or qualities will exist when objectives have been determined adequately and properly:
  - Objectives have been determined relating to major problems, need and/or interests as determined by the programme planning committee.
  - Both immediate and long-term objectives have been determined.

5. **Developing Plan of Work and Calendar of operations**: The plan of work should be in written form and shall indicate who shall do what job i.e. what the change agent system and the client system shall do; which institutions, organizations, service departments shall be involved; what will be the financial requirement and how it shall be met; what arrangements shall be made for marketing of the produce, training of the farmers so on. The plan should have all the essential details and on important point should be left out. Preparing a plan of activities directed towards solving selected problems is an important step. A plan of work is the listing of activities by which the objectives already decided upon are to be achieved. The following conditions should exist in a good plan:
  - The plan of work is in written form.
• It has been developed co-operatively by the extension workers and people's representatives.
• It identifies the specific educational job to be done.
• The plan indicates for each educational job.
  ✓ How it will be done
  ✓ When it will be done
  ✓ Where it will be done
  ✓ Who will do it
  ✓ What people are to be reached
• The subject matter is appropriate considering the people's level of interests, knowledge, attitude and available time and technology.
• The plan provides for the needed training of extension workers and leaders.
• Specific changes to be achieved or evidence of accomplishment are indicated clearly.

6. **Follow through the Plan of Work and Calendar of operations**: The approved programme should be carried out, step by step, according to the plan of work and in a co-ordinated manner. This is not a routine type of work as many people may think. Training of participants, communication of information, conducting method demonstrations, making regular visits and monitoring are some of the important functions the extension agent shall perform at this stage. The success of a programme depends on the methods used to implement it. It should be ensured that-
• the plans for coordination including calendar of activities within and outside extension agency system.
• the techniques, methods and materials vary appropriate to the situation and clientele.
• the subject matter used was appropriate considering the people and their objectives.
• the plans for shared responsibilities were followed.

7. **Evaluation of Progress**: Evaluation is the process of determining the extent to which we have been able to attain our objectives. All programmes must have an in-built system of evaluation to know how well the work is done. It should be a continuous process not only to measure the end result but also to ensure that all the steps are correctly followed. Evaluation may be formal or informal, depending on the importance of the programme and also on the availability of trained manpower, funds, facilities and time. Concurrent and *ex-post facto* review of progress towards the objectives is an essential phase of extension programme planning. This keeps the extension agency on the right track and helps in differentiating means from ends. Evaluation of the activities should be undertaken jointly by the extension staff and the people's representative organisations at different levels. Conditions that will exist when this guideline is met are as under:

• Evaluation plans were developed for each of the phases of the programme to be evaluated as indicated in the annual plan of work.

• A report of accomplishments and implications was made to the extension governing group. The governing group in projecting their plans for extension activities gave the findings from the report of accomplishments and implications.

8. **Reconsideration**: Revision of programme on the basis of result of evaluation, if needed. It helps in making necessary correction and modification in programme.

**Meaning and scope of monitoring**

The word "monitor" is derived from the Latin word meaning to 'warn'.

**Definition of Monitoring**

‘The processes of keeping a watch on the progress of project vis-à-vis its target and time schedule (Kartar Singh)
A continuous/Periodic review and surveillance by the project Management, at every level of the implementation of an activity to ensure that input deliveries, work schedules, targeted outputs and other required actions are proceeding according to plan.

Another way of defining Monitoring is that it is a process of measuring, recording, collecting, processing and communicating information to assist project management decision-making. To be precise and brief, “Monitoring system is an information system for management decision making”.

**Purpose and objective of monitoring**

**Chart: Gamut of Monitoring**

<table>
<thead>
<tr>
<th>What?</th>
<th>Check, review, overview, keep track, observe, control, guide, correct, inspect, supervise, verify, feedback, follow-up of the</th>
<th>Progress of programme implementation with reference to Action Plan.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why?</td>
<td>To ensure successful implementation of the project by identifying shortfalls, deviations, problems and the reasons thereof</td>
<td>Take appropriate corrective/ remedial action to keep the project on track</td>
</tr>
<tr>
<td>When?</td>
<td>During the implementation of the project continuously/ periodically</td>
<td>From inception till completion of the project (concurrently with project implementation)</td>
</tr>
<tr>
<td>Who?</td>
<td>By the project management team at different levels</td>
<td>Including beneficiaries (Participatory Monitoring)</td>
</tr>
</tbody>
</table>

**Basic Concepts in Monitoring**

Four concepts are basic to monitoring and evaluation. They correspond, respectively, to operational investment (e.g., investment in extension per family), operational efficiency (e.g., the number of visits, meetings, demonstrations, and trials, per extension worker), technical efficiency (e.g., the number of adopters, output, and value added), and extension-induced changes (e.g., production, productivity, income,
and income distribution) (Ruthenburg, 1985, p. 120). Capability, effectiveness, and efficiency fall in the monitoring domain. Impact falls in the evaluation domain.

i) **Capability** is command that programme has over physical, financial, and human resources, enabling it to serve its clients (eg. the farmers, mothers, children). It is reflected by extension's outreach, intensity, technical competence, and physical and financial resources. Extension performance depends directly upon its capability.

ii) **Effectiveness** is defined by a handbook on productivity management as "the degree to which goals are attained". Extension has many goals such as social goals (e.g., farmer family welfare) and economic goals (e.g., increased income), among these, operational goals (e.g., physical and financial targets) are of special significance because their attainment makes realization of other goals possible.

iii) **Efficiency** is usually measured by the rates at which farmers target group adopt recommended practices. Adoption rates of varying degrees of complexity can be conceived (Casey & Lury, 1982).

iv) **Impact** can be measured by a simple indicator, like yield of a crop per hectare, Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR), Minimum Levels of Learning (MLL), and Learning Achievement, etc. Such indicators provide ultimate tests for the success of any sectoral programmes.

**Basic Elements in Monitoring**

The purpose of a programme is to convert a set of **RESOURCES** into desired **RESULTS**. Resources are **INPUTS** and results are **OUTCOMES**. Inputs to outcomes happen in a sequence as detailed below:

i) **Input**: Goods, Funds, Services, Manpower, Technology and other resources provided in a project with the expectation of **OUTPUTS**.

ii) **Results**: Certain things happen immediately, and certain things ultimately, while certain things in between these two (intermediate). According to this sequence,
results can be grouped into three broad categories, such as productivity, production and income.

iii) **Output** (Immediate results): Specific products or services, which an activity is expected to produce from its inputs in order to achieve the set objectives (increased irrigation, fertilizer use, health facility created etc).

iv) **Effect**: Outcome of the use of the project outputs above the realization of expected effects in a project will lead to desired impact - Intermediate results. In the recent M & E literature effects, are described as outcomes.

V) **Impact**: Outcome of Project Effects (broad long term objectives: Standard of living and reducing poverty both at individual and community level) - Ultimate results. Impact is described as the outcomes for a community or region than on individuals. It may include direct and indirect as well as primary, secondary and tertiary level.

**Why we need monitoring?**

- To check on progress
- To assess productivity and result
- To monitor resource utilization
- To decide on future support and action

**Principle of monitoring:**

- Simple
- Timely
- Relevant
- Accurate
- Participatory
- Flexible
- Action oriented
- Cost effective
Types of Monitoring

1. **Beneficiary Contact Monitoring:** Beneficiary Contact Monitoring is the key to successful overall project monitoring. Physical and financial monitoring - generally measures a project's provision and delivery of services and inputs. But project managers also need to know whether their services are being accepted and how they are being integrated into, for example, farmers' systems.

Beneficiary contact monitoring is taken up:

- To maintain records for each participant (feasibility of credit, Health, Education, Nutrition and similar projects) and to analyze these periodically to monitor the penetration of the service and the establishment of a clientele.
- To establish a regular schedule of surveys to enable managers to measure the progress of a project and the responses of its beneficiaries. Formal sampling techniques must be used to get statistically significant data from these surveys.
- To use informal interviews to alert managers to outstanding success stories or problems.

2. **Process Monitoring:** As discussed earlier, project implementation begins with deployment of inputs1 resources to realize some specific outputs. The conversion of inputs into outputs will involve certain methods, activities, and completion of certain events. This happens in a sequence as below:

- **Process:** It is the way in which activities are conducted. Processes are continuous and cuts across activities. For example rapport building as a process is relevant to village entry activities, SHG formation activities, training, etc.
- **Milestones:** These are a series of achievements that leads to a completion of stage in an activity (an event).
- **Activities:** These are what we do to deliver the output. Activities always have a beginning and an end and are associated with numbers linked to a budget.
- **Output:** This is what a project delivers before the close of the project. Process monitoring is an approach that ensures that processes are steered to achieve the
desired results and that quality is maintained throughout. As long as there is a focus, not only on the inputs and outputs, but the way in which the outputs are being delivered, and quality indicators are devised and tracked, process monitoring would be useful and successful.

**Techniques of Monitoring**

1. **Regular progress report**: Progress reports submitted by field staff and records at District and Block levels should contain physical and financial progress vis-à-vis targets, coverage by blocks, composition of groups (SCISTI Others), activities, etc. From the financial and physical progress report, it is often possible to make a rapid assessment of whether, and to what extent, the original activities of the scheme have been fulfilled, and whether it is working successfully within the allocated budget. Disbursement of funds for the scheme can be matched against other data/schemes.

2. **Monitoring staff performance (review)**: Monitoring the staff performance can ensure that individuals are effectively employed to fulfil given tasks. Ideally, all those employed in a project should meet regularly, to discuss their progress, and match this against targets and objectives, and discuss problems and possible changes.

3. **Tour reports by field staff**: Often, the most useful information about qualitative aspects of a programme are obtained from the tour reports submitted by field staff; this is especially true in the case when the project is very small and the participants may possess only low levels of education and literacy.

4. **Participant Observation**: The field staff may stay in the villages and observe the groups closely so as to obtain sensitive, first-hand insights.

5. **Reports from visitors**: The project staffs ensure that all visitors to the project area (Project Director, State Level Officials, Researchers, etc) provide a short report on their impressions of the schemes. They can provide insights/information on new
developments, exchange of experiences and help in further developing the programme.

6. **Interviews**: Group members and community leaders should be interviewed on their attitude towards the scheme and resultant behavioral changes.

7. **Participatory Monitoring**: In this latest technique, the beneficiaries themselves are made partners in monitoring evaluation. Project staff and beneficiaries discuss and assess the performance together, in order to understand how they have performed, what the problems are and what the future holds for them. The project staffs mainly play a guiding role to formulate appropriate questions and eliciting answers. For example, the group can be prompted to draw inferences from the bank record books, savings books, etc.

8. **Key informants**: In addition to our regular contacts (as per protocol, Sarpanch/VDO), we must try to interact with other people who may be useful sources of information e.g. Village Teacher, Village Postmaster, Women, Kirana Shop, etc.

9. **Complaints/grievances Petitions**: Many a times, complaints and grievances petition from people in general and target group in particular may throw some light on the actual performance of the scheme. Every project should make provisions for such source of information as part of monitoring mechanism.

**Types of Monitoring Indicators**

i. **Quantitative indicators**: Provide numeric information about a change in a situation. For example, number of village organizations formed, centimetres of rainfall last quarter, number of farmers using improved variety of wheat, etc.

ii. **Direct indicators**: Provide information, which expressly relates to what is being measured. If, for example, information on crop yield is required then crop yields are measured.

iii. **Indirect indicators**: Essential information, chosen from amongst many types of information to serve as substitutes (or proxy indicators) for answering questions or
responding to statements that are difficult to measure. For example, if we are interested in measuring the level of poverty in a community, instead of choosing direct indicators for income, indirect indicators for poverty may be chosen, e.g. persons are poor if they have to hire themselves out as daily unskilled labour.

iv. **Process indicators**: Steps involved in planning, designing, collecting funds, construction and operation and maintenance of a water supply scheme for example, are the processes involved in developing water supply infrastructure. Examples of process indicators are level of participation and inputs of community during planning.

v. **Progress indicators**: Seek to measure or monitor changes against stated targets. The number of trees planted, percentage of water supply scheme constructed, and operation and maintenance, training sessions held are examples of progress indicators. Progress indicators are usually but not always expressed in quantitative terms.

vi. **Qualitative indicators**: are largely descriptive statements about processes and outcomes; For, example, what is the level of participation in village organization meetings? How are decisions made by the village organization? How are community needs assessed?

**Indicators of Monitoring in Extension**

1. **Extension Capability Indicators**: Extension capability indicators must be monitored regularly not only to know the status of extension's capability at a certain point in time, but also to determine changes in it over time. These indicators should be calculated annually. They involve only desk work because they are based on in-house data.

2. **Extension Performance Indicators**: Extension performance indicators reflect extension's operational and technical efficiency. They can be grouped into two categories.
3. **Extension Effectiveness Indicators:** These can again be grouped into two subcategories: (1) single indicators and (2) unitary or composite indicators. By definition, a single indicator will reflect an aspect of extension performance, while a unitary or composite indicator will reflect two or more aspects of extension performance. It may be useful to construct a unitary or composite indicator to provide a consolidated view of extension effectiveness to management, because management is often interested in having an overall view of extension effectiveness. These indicators reflect extension's cooperation efficiency.

4. **Project operation** embraces the many tasks performed regularly or intermittently which are essential for the proper functioning of a project. Example- the operation and maintenance of machinery and equipment, the delivery and distribution of project resources including farm inputs; credit and extension activities, and so on.

5. **Project performance** refers to the level of achievement of project targets such as, area of land under cultivation, supply of irrigation water, cropping systems and intensities, extension and adoption rates, project yields and production levels.

6. **Project impact** relates to the effects of project operation and performance on the rural people, both on and off a project, as indicated by changes in levels and distribution of farm yields, farm incomes, family nutrition and welfare, etc. It is also concerned with changes in the local environment and economy that arise from project operation and performance (e.g. soil salinity and erosion, changing farm input and product prices).

Adoption rates of varying degrees of complexity can be conceived. The simplest kind requires data relating to current year only.

T is the target number which should be reached. Thus, if,

A is the actual number reached,

D is the number adopting the recommended practice,

The following rates can be calculated:

\[
\text{Performance index} = \frac{100A}{D}
\]
Penetration index =-------
A
100 D
Achievement index =-------------
T

Evaluation
The word 'evaluation' has its origin in the Latin word "valere" meaning to be strong or valiant. Its dictionary meanings are the determination of the value, the strength or worth of something, an appraisal, an estimate of the force of or making a judgement of something. Evaluation is a periodic assessment of relevance, performance, efficiency and impact of project in context of its stated objectives.

Meaning of Evaluation
Evaluation is a process for determining systematically and objectively the relevance, efficiency, effectiveness and impact of project activities in the light of their stated objective. Since objective and unbiased assessment of project outcomes are the essential ingredients of an evaluation, generally, an independent agency is assigned the job of evaluation. It is also an organizational process for improving activities still in progress and for aiding management in future planning/programming and decision making. Evaluation provides information about past or ongoing activities as a basis for modifying or redesigning future strategies. According to Shapiro "Evaluation is the comparison of actual project impacts against the agreed strategic plans. It looks at what you set out to do, what you have accomplished and how you accomplished it."
Evaluation as applied to the field of extension education may be defined as "a process of systematic appraisal by which we determine the value, worth or meaning of an activity or an enterprise".

Definitions of evaluation: More specific definitions of evaluation are given by persons involved in rural development programmes. While most of these definitions refer specifically to the assessment of the results of programmes of extension education, they can also be applied to the training aspect of such programmes. Some definitions of evaluation are:

- It is a process, which enables the administrator to describe the effects of his programme and thereby make progressive adjustments in order to reach his goal more effectively (Jahoda and Barnit, 1955).
- Programme evaluation is the determination of the 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).
- Programme evaluation is the process of judging the worth or value of a programme. The judgement is formed by comparing the programme should be (Steele, 1970).
- Evaluation is the process of delineating, obtaining and providing useful information for judging decision alternative (Stufflebeam, 1971).
- Evaluation is a co-ordinated process carried on by the total system and its individual subsystem. It consists of making judgements about a planned programme based on established criteria and known, observable evidence (Boone, 1985).

Some Basic Features of Evaluation

- It is always with reference to stated criteria.
- It is always with reference to a point of time.
- It starts where progress reporting/monitoring/estimation surveys end.
- It establishes relationship between policies/methods and results.
- It investigates and find out factors for success/failure and suggest remedies.
More qualitative in approach and emphasis is in variability than standardization.

More purposive and less aggregative.

Its problem focus is – policy issues, problem formulation, organizational forms, administrative practices, and extension of technical content of programmes, people cooperation, attitude and impact.

Nature of evaluation

1. **Evaluation is not measurement**: Evaluation is an integral part of extension education. All aspects of extension work need evaluation. Evaluation does not mean mere measuring of achievements, which is usually done after the programme is executed. Extension being an educational process, it is necessary to evaluate management of the programme and methods used, achievements accomplished in line with the objectives and also to determine the reasons for success or failure.

2. **Evaluation is not exactly scientific research**: When we think of evaluation as a process of collecting information as a basis for making decisions, forming judgements and drawing conclusions, we realise it has much in common with scientific research. But there is a great difference between our casual everyday evaluation and scientific research. However, the difference is a matter of degree rather than kind. Casual everyday evaluation can be placed at one end of the scale and scientific research at the other end. There are five locations on the scale with no sharp lines of distinction, i.e., casual everyday evaluation, self-checking evaluation, do-it yourself evaluation, extension evaluation studies and scientific research.

**Why we need to evaluate?**
### Difference between Monitoring and Evaluation

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Monitoring</th>
<th>Evaluation</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Continuous: Starts and ends with a programme.</td>
<td>One shot operation; at a point of time (usually at completion or midway of programme)</td>
</tr>
<tr>
<td>2</td>
<td>Required for immediate use and mid-course correction.</td>
<td>Used for future planning/repllication/expansion.</td>
</tr>
<tr>
<td>3</td>
<td>Done by implementing personnel.</td>
<td>Usually by outside agency.</td>
</tr>
<tr>
<td>4</td>
<td>Quick but covers all units</td>
<td>In-depth; covers a sample</td>
</tr>
<tr>
<td>5</td>
<td>Correcting / Managing</td>
<td>Learning process</td>
</tr>
<tr>
<td>6</td>
<td>Symptomatic, early warning system.</td>
<td>Diagnostic.</td>
</tr>
</tbody>
</table>

### Principles of evaluation

i. Make extension evaluation structured and performance oriented.

ii. Relevant to policy making.
iii. Build extension evaluation as component of extension project itself.
iv. Keep extension evaluation simple and transparent.
v. Keep extension evaluation timely.
vi. Make it cost effective.
vii. Report should be readable and of practical utility.
viii. Encourage individual and group evaluation.

**Purpose of evaluation**

- To induce worker to examine programme objective critically.
- To help in making clear the purpose of programme.
- To help in examining the entire programme in terms of objective.
- To find out strong and weak point of programme.
- To determine how for the plans have progressed.
- To compare value of achievement of programme with cost.
- To provide a means for testing methods, approaches, and techniques.

**Criteria for Evaluation**

- Clearly defined objectives
- Valid instruments of measurements
- Objectivity – free from biases.
- Reliability
- Accurate evidence for changes
- Practicability

**Types of evaluation**
e) Some other classification

- **Self-evaluation:** This is to be carried out by every worker as a matter of routine. This requires the self-critical attitude which is so essential for extension work. By this self-critical attitude, the chances of an extension worker growing and continuously improving his professional competency become greater.

- **Internal evaluation:** Evaluation carried to by the agency responsible for the planning and implementation of the programme. Some of the other methods for internal evaluation are: systematic use of diaries and reports of
workers, planned visits of staff members to work spot, use of special questionnaires and proforma for observation and inquiry etc.

- **External evaluation:** Evaluation conducted by a person or a committee outside the area of operation. One of the strong features of the Indian Community Development Programme is that simultaneous with its start an independent agency, namely the Programme Evaluation Organization, was established.

**Evaluate Programme Planning**

As a result of experience, theory, research and experimentation, much information has been accumulated about how an extension programme should be planned. Progress in science and technology and the broadening of extension's clientele with the accompanying great variation in needs and interests have made the scientific planning of extension education programmes more important than ever before. There is considerable agreement on certain criteria which, if followed, make for successful extension programme planning at different levels. These criteria represent the ideal with which to compare our practices and procedures or programme planning. Some of the steps needed to evaluate or programming function in view of these criteria includes:

i. Identify the evidence needed to form a judgement about each criterion.

ii. Specify the methods that will be used to obtain the evidence, such as personal observation, personal interview or through a systematic survey.

iii. On the basis of the evidence gathered, judge whether or not each criterion is being adequately satisfied in the programme planning activities.

**Extension evaluation process**

There are several models of evaluation available in the literature. However, a very simplified version of most of these models may be quite workable for
evaluating extension programmes since, as Bhatnagar (1987) has pointed out, any extension evaluation process has to be based on certain assumptions. For example, if some inputs are provided in the form of a programme, specific outputs can be expected and if these outputs happen, then the purpose of the programme can be achieved; if the purpose is achieved, then the development goal is realised. This means that evaluation has to be so designed that the quality types and adequacy of the input measures, outputs and their impact in achieving the programme objectives have to be evaluated systematically.

**Steps of extension programme evaluation process:**

i. **Formulate evaluation objectives**: Specific objectives to be achieved through the evaluative process must be clearly and adequately identified and started. All further efforts should be knit around these objectives.

ii. **Classify programme objectives**: It is assumed that each extension programme, when formulated and implemented, will have specific well-defined objectives. Since evaluation is basically a process of determining the extent to which various extension teaching activities were organized and managed and the extent to which they contributed to achieving the goals, programme objectives must be clearly understood and if necessary, further broke down into measurable terms. This is a crucial step as all further efforts will be directed towards collecting evidence related to these objectives.

iii. **Identify indicators**: To identify indicators or the kind of evidence necessary to evaluate achievement in relation to specified programme objectives, it is necessary that specific beneficiaries of the programme be identified, the kind of behavioural changes expected in them be clearly stated, and the kin of learning experiences expected to be provided to them spelled out, together with the level of management to be achieved for
provided those learning experiences are specified. Once this is done, identification of specific indicators to measure achievements will not be difficult.

iv. **Decide the kind of information needed:** Once the indicators for evaluating the management and performance of a programme have been indicated, specific information to be collected may be worked out. Since there is usually more information than an extension worker can collect, he has to be very discriminating about the kind and amount of information that should be collected. Timing for collection of information may also need to be specified.

v. **Sampling:** The purpose of sampling is to take a relatively small number of units from a population in such a way that the evidence collected from them becomes representative evidence of the entire population. Although there are several sampling methods, perhaps stratified sampling procedures may be most suitable for extension evaluation studies, they allow inclusion of all interested groups and ensure enough heterogeneity in the sample.

vi. **Decide the design of evaluation:** An ideal design of evaluation may be an experimental one. This would allow separating the effect of the programme from other factors, by setting control and treatment groups. Several experimental designs, such as one-group pre-test-post-test design, static groups comparison, pre-test, post-test control group design, Solomon four-group design, longitudinal study design, etc. are available in literature and can be used. However, in actual practice, extension programmes are seldom run in a way that allows an experimental design of evaluation. In Pilot Projects, it might be possible to use an experimental design of evaluation. By and large, a survey method is used. This method can be used for evaluating on-going progress or as an ex-post facto evaluation of the programme, after it has completed its tenure.
vii. **Collection and analysis of evaluation evidence**: There are many methods for collecting information for evaluative purposes, such as the mail questionnaire, personal interview, distributed questionnaires, group interviews, case studies, systematic field observations, systematic study of secondary data etc. Selection of the right kind of data collection method will depend on the objectives of the evaluation, kind of information needed, time and resources available and the type of respondents from whom information is to be collected. However, whatever the method used a specific questionnaire or interview schedule or data recording sheet must be developed with care. Once the data is collected, it must be tabulated, summarized and analysed with adequate care. This step should not be rushed. To avoid delay, however, analysis may be done with the help of a computer.

viii. **Interpretation of the results in a proper way**: It is a very crucial as evaluation results can be missed also. Once tentative generalizations are arrived at, it may be appropriate and they are informally discussed among the interpreters as well as with programme planning and implementation officials, so that the results of evaluation are put in a proper perspective. The evaluation results must clearly state the achievements, failures and future adjustments needed. A written report of the evaluation findings should be prepared and made available to all concerned.

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**Reference Books**

1. Extension communication and management by G. L. Ray
2. Dimension of agricultural extension by A. K. Singh
3. Agriculture Extension by Adivi Reddy