UNIT 2 DEVELOPMENT OF EXTENSION EDUCATION IN INDIA

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2.0 INTRODUCTION

In this Unit, we attempt to present you the historical development of extension education in India. Agricultural extension work, an important force in agricultural change, has a venerable, albeit largely unrecorded history. It is a significant social innovation which has been created, adapted and developed over the centuries. Its evolution extends over nearly four thousand years, although its modem forms are largely a product of the past two centuries. Today, the organizations and the personnel engaged in agricultural extension encompass a diverse range of socially sanctioned and legitimate activities which seek to enlarge and improve the abilities of not only the farm people but different sections of population to adopt more appropriate and often new practices as well as to adjust to changing conditions and societal needs.

Extension education in India aimed at the integrated development of rural, remote and underdeveloped areas of the country, is of relatively recent origin (1952-53). Its administrative set-up had begun for agricultural development in India, as the outcome of several reforms and efforts made over years. It had its beginning in the 1860's and basically started with the focus on agricultural development work. For the purpose of our discussion, we divide the development of extension education into the following four stages.

Stage I : Pre-independence era (1866-1947).

Stage II: Post-independence era (1947-1953).

Stage III: Community Development and Extension Service era (1953-1960).

Stage IV: Intensive Agricultural Development era (1960 onwards).

2.1 OBJECTIVES

After going through this Unit, it is expected that you will be able to:

- Describe the historical efforts in extension since pre-independence era;
- Compare and analyse the significance and shortcomings of the extension efforts in different stages / eras;
- Explain the differences between Community Development and Extension Education programmes; and
- Appreciate the increasing need and diversity of the extension programmes and the concomitant administrative changes including democratic decentralisation aimed at effective implementation of the programmes.

2.2 STAGE-I: PRE-INDEPENDENCE ERA (1866-1947)

In this section, we focus on agricultural extension in India in the pre-independence period. This period had witnessed many famine commissions leading to the birth of the Department of Agriculture and many efforts of rural reconstruction which are discussed below.

2.2.1 Birth of the Department of Agriculture

The Department of Agriculture owes its origin to different Commissions which are discussed below.

2.2.1.1 Famine Commission (1866)

The history of agricultural administration in India dates back to the year 1866, when the Famine Commission was appointed after the great famine in Bengal and Orissa in 1866. Later, in 1869, the representation made by the Manchester Cotton Supply Association for improvement of cotton and for a separate Department of Agriculture provided a stimulus for a serious consideration of the question of agricultural improvement. As a result of these efforts, the Department of Revenue, Agriculture and Commerce, as one department, commenced to function as a branch of the Secretariat of the Government of India in June 1871, and continued to do so until 1879 when the financial stringency necessitated a reshuffling of the portfolios. However, this Department could not exercise any real influence on the problems of agricultural development except the collection of simple agricultural statistics (Adivireddy, 1997).

2.2.1.2 Famine Commission (1880)

As the recurrence of famine in India appeared unavoidable, the Famine Commission of 1880 strongly recommended for establishment of the Department of Agriculture at the Centre under the control of a Secretary and for simultaneous formation, in every province, of a Department of Agriculture with a large subordinate establishment working under an executive officer. The proposals of this commission powerfully influenced the Government's decision for agrarian reform in India for the next twenty years. Consequently, a new Secretariat for Agriculture came up in 1881, and by 1882 Agricultural Departments in most of

the States started functioning. At the centre, the Department was known as the Imperial Department of Agriculture, headed by the Inspector General of Agriculture (Ibid).

2.2.1.3 Famine Commission (1901)

The next great advance was made as a result of the report of the Famine Commission of 1901. The following were the main outcomes of this report (Ibid).

- Imperial Agricultural Research Institute at Pusa was established which marked the beginning of an organized agricultural research.
- An Agricultural College was also started at Pusa institute with an experimental farm.
- The link between colleges (as other colleges were started later on) and the districts was to be provided by experimental farms.
- Scientific and expert staff was entertained in the Departments of Agriculture by creation of posts of Horticulturist and Agronomist, and
- The Indian Agriculture Service was constituted at the Centre.

The Government of India Act of 1919 empowered the transfer of all the departments closely connected with rural development to the major provinces and agricultural development became a State subject. Subsequently, based on the recommendations of the Royal Commission of 1924, recruitment to the Indian Agricultural Service ceased to function.

2.2.2 Efforts of Rural Reconstruction

Diversified efforts aimed at rural reconstruction have also contributed significantly to the development of extension in India. Some of the salient efforts are as follows.

2.2.2.1 Sir Daniel Hamilton's Scheme of Rural Reconstruction (1903)

In 1903, Sir Daniel Hamilton formed a scheme to create model villages, in an area in urban Bengal, based on cooperative principles. He organised one village of this type and set up one Cooperative Credit Society which functioned up to 1916. In 1924, he organised a Central Cooperative Bank and Cooperative Marketing Society and established a Rural Reconstruction Institute in 1934. The Institute provided training facilities in cottage and subsidiary industries (Adivireddy, 1997).

2.2.2.2 Rural Reconstruction Institute, Shriniketan (1921)

Shri Rabindra Nath Tagore, under his scheme of rural development work, started youth organizations in the villages in the Kaligram Pargana of his Zamindari with the help of K. Elmhirst. He tried to create a class of functionary workers who could learn to identify themselves with the people. In 1921, he established a Rural Reconstruction Institute at Shantiniketan and called it as Shriniketan. A group of eight villages was the centre of the programme. The activities of the institute were development of agriculture, cooperatives, industries and education through village organisations. His emphasis was on education as it will change the outlook of the people and focused on the slogan of 'Education for all'. Following were the objectives of the programme:

- 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; and
- To improve village sanitation.

These objectives were desired to be achieved by: a) Creating a spirit of "self help and mutual help" b) Developing village leadership, c) Organizing village scouts called Brati Balika, d) Establishing training centres for handicrafts, and e) Establishing a demonstration centre at Shantiniketan.

Under its agricultural programme, the Institute conducted demonstrations in the farmers' holdings on improved practices; established a dairy to supply pure milk and better animals to the farmers for breeding; and established a poultry farm for the same purpose. The students and workers from the institute trained weavers, organised their cooperatives and provided facilities for training in tanning, pottery, embroidery, tailoring, etc. The institute could not get much help from the government and it could not conduct research work, so its work remained limited to the eight villages only.

2.2.2.3 Gandhi's Scheme and Sevagram Project

People know Gandhiji not only as a Mahatma, or a political leader and agitater, but also as a social and economic reformer. He made people knew that India lives in villages and that the common man's uplift is the uplift of the country. Regarding development work in the country, he emphasized that, the "Salvation of India lies in Cottages". The key words of his economy are: i) Decentralized production and equal distribution of wealth, ii) Equal distribution of wealth brought about not by the cruel process of extermination but through the hearts of the owners by persuasion and appeal to the better sense of man; and iii) Self-sufficiency of Indian villages. He laid emphasis on the self-sufficiency of Indian villages as: a) he wanted to eradicate the class of middlemen / exploiters so that the farmer could get the full price for his produce, and b) he wanted that the tiller should be able to consume his own products like fruits, milk, vegetables, etc.

For the emancipation of villagers, he formulated an 18-point programme, which included the promotion of village industries, basic and adult education, rural sanitation, uplift of backward tribes, uplift of women, education in public health and hygiene, propagation of national language, love for the mother tongue, economic equality, organisation of Kisans, labourers and students, and so on. He sought to make the villagers self-sufficient and to develop in them that moral stamina which was essential to stand up against oppression and injustice. Truly speaking, the Gandhian constructive programme was a movement of the people, by the people and for the people. His small works became big organisations and institutions, and the simple ideas of that time became philosophies. His emphasis on Khadi became the Charkha movement and then, the All-India Khadi and Village Industries Board. His thought, against untouchability and the caste system, resulted in the organisation of Harijan Sewak Sangh. Similar mention may be made of Hindustani Prachar Sangh, Sarvodaya, Bhudan Movement, etc. He created leaders like Vinoba, Nehru, Jayaprakash Narayan, Mira Ben, etc., who came from common stock, but got inspiration from Gandhiji. The Satyagrah Ashram at Sabarmati, and later Sevagram in Wardha, became not only places of training but of pilgrimage (Dahama and Bhatnagar, 2007).

2.2.2.4 Marthandam (1921)

It was set up under the auspices of Y.M.C.A. (Young Men's Christian Association) in Travancore in 1921. It was intended to symbolize the three-fold development of spirit, mind and body, and evolved a five-sided programme, representing a development, not only spiritual, mental and physical, but also economic and social. The pioneer in this work was Dr. Spencer Hatch, an American agricultural expert. The essential technique of the centre was 'Self-help with intimate expert counsel'. From the demonstration centre at Marthandam, about hundred villages were covered through Y.M.C.A. centres in villages. The extension secretary supervised the work. Marthandam was in a strategic position to serve the villages. It kept bulls and goats, model bee-hives, demonstration plots for improving grain and vegetable seeds, poultry run with egg-laying hens, a weaving shed, etc. Inside the centre, there was equipment like honey extractors, health charts and the items needed for other cottage vocations. At the Centre, cottage vocations were taught and agricultural implements tested (Ray, 2007).

2.2.2.5 Gurgaon Experiment (1927)

Rural uplift movement on a mass scale was first started during 1927 by Mr. F. L. Brayne, Deputy Commissioner in the Gurgaon district of Punjab, adjacent to Delhi. Under his programme, a village guide was posted in each village who was to act as a channel through which the advice of experts in various departments could be passed on to the villagers. Main objectives of the project were: increasing agricultural production, and improvement of health and home. The programme of introducing improved seeds, implements, methods of cultivation, etc., was started throughout the district. As these village guides were not technical men, very little of permanent value was achieved (Adivireddy, 1997).

2.2.2.6 The Royal Commission Report 1928

The Royal Commission Report (1928) established a firm foundation for the coordinated research activity. It also imbibed the agricultural administration with a new life indicating ways and means to make the organization dynamic in its activities. The main observations and recommendations of this commission were:

- The organization should be based on research for full measure of success.
 Interchange should be freely permitted between the administrative, research and teaching branches in the early years of service;
- 2) There should be a body for agricultural research at the national level for promotion, guidance and coordination of research work in India. It will also take up training of research workers, impart information on agriculture and allied areas and publication of scientific papers;
- The Director of Agriculture should have in him the combination of administrative capacity and high scientific qualification; and
- 4) There should not be any restriction on the field recruitment to the superior provincial agricultural services in India.

2.2.2.7 Rural Reconstruction Programme in Baroda (1932)

V. T. Krishnamachari in Baroda State conducted rural reconstruction programme in 1932. His programme aimed at developing a will to live better and to develop capacity for self-help and self-reliance. The programme included the items like improvement of communications, digging of water wells, distribution of seeds and establishment of Panchayats, Cooperatives, etc. (Adivireddy, 1997).

2.2.2.8 Firka Development Scheme of Madras State (1946)

It was Government sponsored scheme aimed at attainment of the Gandhian ideal of Gram Swaraj by bringing about not only educational, economic, sanitary and other improvements in villages, but also by making the people self-confident. This programme was started by Madras Government under the leadership of Shri T. Prakasam. The scheme was launched in the last quarter of 1946 in 34 Firkas throughout the State, and on April 1, 1950, it was extended to another 50 additional Firkas, at the rate of two Firkas for each district. The selection of the Firkas was based on considerations of the general backwardness of the area. Main aim of the scheme was to make the people "self-sufficient and self-reliant". The scheme, which aimed at attacking the rural problems as a whole, as well as in parts, consisted of short-term plans for the development of rural communications, water supply, formation of Panchayats, organization of cooperatives and programmes for sanitation, and also long-term plans to make the area self-sufficient through agricultural, irrigational and livestock improvements, and the development of Khadi (hand-made cloth) and other Cottage Industries. Main outcome of the scheme was establishment of cooperative societies. It was later realized that these efforts were restricted in scope and lacked coordination; they proved ineffective owing largely to lack of direction, support and encouragement from the central authority (Dahama and Bhatnagar, 2007).

2.2.3 Shortcomings of the Extension Efforts in this Stage

The extension efforts in this stage suffered from certain shortcomings. Important among these shortcomings are as follows (Adivireddy, 1997).

- Most of the efforts were of individual initiative.
- · Government backing and financing was not forthcoming.
- Most of the efforts were isolated, uneven, and discontinuous.
- Staff was mostly inexperienced and untrained.
- Plans and programmes were ill-defined and unbalanced.
- No evaluation was carried out, hence results were not known.
- Association and coordination of other development Departments was limited.
- Involvement of people in planning and execution was limited.

Check Your Progress		
Notes: a) Space given below the question is for writing your answer.		
	b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions"	
1)	Write in brief about the efforts of rural reconstruction in the pre- independence period.	
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2)	Mention the major shortcomings of the extension efforts of pre- independence era.	

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2.3 STAGE-II: POST-INDEPENDENCE ERA (1947-1952)

In the beginning of post-independence era major focus has been on increasing the agricultural production with grow more food campaign as a popular programme.

2.3.1 Grow More Food Campaign (1947)

Grow More Food (GMF) Campaign was launched in the year 1947 as a major organized effort aimed at increasing the agricultural production in India. Under this programme additional staff was provided at District and Sub-divisional

(Taluka) levels. The need for coordinating the activities of the development departments was strongly felt and emphasized in 1949. But, even after four years of working of this programme, it was observed that the system was not functioning properly and cultivator's response towards the programme was very poor. Moreover, all the departments of rural development were working in isolation and reaching the people directly without any close coordination. A committee was appointed to enquire into the working of this programme and to suggest ways and means of improving it.

2.3.1.1 G. M. F. Enquiry Committee Report (1952)

The main recommendations of the G. M. F. Enquiry Committee (1952) were:

- The administrative machinery of the Government should be reorganized and equipped for the efficient discharge of the duties imposed on it under the new concept of welfare state in India;
- The best non-official leadership available should be mobilized for guiding the 60 million farm families in the villages in their effort to improve their own conditions;
- An extension organization should be setup for rural work which would reach every farmer and assist in the coordinated development of all aspects of rural life;
- The pattern of staffing should consist of a B.D.O., four technical officers and twelve V. L.Ws. for a Tehsil or Taluk, with an average of 120 villages;
- The development activities at the District level will be under the Collector assisted by Specialists. The non-official side will consist of a District Board to which MPs and MLAs should be added as members.
- At the State level there should be a cabinet and a non-official board for facilitating joint action. The Development Commissioner should be in-charge of the entire rural development programme; and
- The economic aspect of village life cannot be detached from broader social
 aspect. Agricultural improvement is, in every respect, linked up with a whole
 set of social problems. All aspects of life are inter-related and no lasting
 results can be achieved if individual aspects of it are dealt with in isolation.

2.3.2 Etawah Project (1948-52)

Several experiments in rural reconstruction under-taken by official and non-official agencies in the past contributed towards new thinking about reorganizing the set-up for rural development. It was during such time the Pilot Project in Rural Planning and Development, Etawah, played a key role and it can be regarded as a forerunner of the Community Development Projects in India. After an initial period of trial and error lasting over a year and a half, an administrative pattern was evolved which for the first time facilitated extension activities to percolate to the village level (Ray, 2007).

The activities of different development departments were channelized through one common agency and the concept of a Multipurpose Village Level Worker was started. The project was started in collaboration with U.P. Government and central government by Albert Mayer. This project first started in 64 villages, was later extended to 97 villages. The major objective of the programme was to see degree of production and social improvement initiative and cooperation that could be attained from an average area.

Check Your Progress		
Notes: a) Space given below the question is for writing your answer.		
	b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".	
3)	Write about Grow More Food Campaign and the recommendations of G. M. F. Enquiry Committee Report.	
4)	Explain the efforts of Albert Mayer under Etawah Project.	

2.4 STAGE-III: COMMUNITY DEVELOPMENT AND NATIONAL EXTENSION SERVICE ERA (1952-60)

The developments under this era or stage are broadly discussed under the following two heads - Community Development and National Extension Service.

2.4.1 Community Development (CD) (1952)

The concept of community development began in this era of extension development. The programmes were launched under this concept of extension.

2.4.1.1 Concept of Community Development

A community consists of persons in social interaction within a geographical area and having common centers of interest and activities, and functioning together in the chief concern of life (Adivireddy, 1997).

• Development: It is an orderly movement of individual from lower level of functioning to the higher level of functioning.

 Community Development is a movement designed to promote better living for the whole community with the active participation and on the initiative of the community concerned. It consists of technically-aided and locally organized self-help activities.

Community development has been described by Murkerji (mentioned in Adivireddy, 1997) as a:

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

The two essential elements in community development are:

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

2.4.1.2 Principles of Community Development

There are certain principles of community development. These include the following (Adivireddy, 1997).

- Activities undertaken must correspond to the basic needs of the community; the projects should be initiated in response to the expressed needs of the people.
- ii) Local improvements may be achieved through unrelated efforts in each substantive fields through multipurpose programmes.
- iii) Changed attitudes in people are as important as the material achievements of community projects during the initial stages of development.
- iv) Community development aims at increased and better participation of the people in community affairs.
- v) Identification, encouragement and training of *local leadership* should be a basic objective in any programme.
- vi) Greater reliance on the participation of women and youth in community projects invigorates (refreshes) development programmes.
- vii) To be fully effective, self-help projects for communities require both intensive and extensive assistance by the Government.
- viii) Implementation of a community development programme on a national scale requires adoption of consistent policies, and specific administrative arrangements.

- ix) The resources of *voluntary non-governmental organizations* should be fully utilized in community development programmes at the local, national and international level.
- x) Economic and social progress at the local level necessitates parallel development on a wider national scale.

2.4.1.3 Objectives of Community Development

The fundamental or basic objective of Community Development in India is the development of people or "Destination Man". Its brad and specific objectives are as follows (Adivireddy, 1997).

- i) Broad objectives include promotion of:
 - Economic development,
 - · Social Justice, and
 - Democratic growth.
- ii) The specific objectives of the Community Development programme include the following.
 - a) To assist each village in having effective Panchayats, cooperatives and schools:
 - b) Through these village institutions, to plan and carry out integrated multiphased family, village, Block and District plans for:
 - Increasing agricultural production,
 - Improving existing village crafts and industries and organizing new ones,
 - Providing minimum essential health services and improving health practices,
 - Providing required educational facilities for children and an adult education programme,
 - Providing recreational facilities and programmes,
 - · Improving housing and family living conditions, and
 - Providing programmes for village women and youth.

2.4.1.4 Implementation of Community Development Projects

Paul Hoffman, President of American Ford Foundation made a study tour in India and initiated Community Development (CD) programme. Accordingly, 15 pilot Community Development Projects were started in 1951 in India on the lines of Etawah project with the financial assistance of Ford Foundation. Later on the Government of India started 55 Community Development projects on October 2, 1952 covering 27,388 villages and 16.4 million population including previous 15 projects (Adivireddy, 1997).

Each CD project targeted 300 villages, 450-500 square miles, 2 lakh population and 1,50,000 acres. Each CD project was divided into 3 Development Blocks. Each Development block covers 100 villages, 150-200 square miles, 60,000-70,000 population and 50,000 acres. Each Development block has 10-20 groups

of 5-10 villages each. Each group has one VLW known as Gram Sevak. This programme started with areas of assured rainfall, good fertile soils, and composite type (Rural-cum-urban) area.

Each CD project lasted for a period of 3 years divided into 5 stages.

- i) Conception stage: Selection of area for projects, its economic survey and planning — 3 months.
- ii) Initiation stage: Temporary housing, establishing communication, collection of required material 6 months.
- iii) Operation stage: Taking up of approved activities 18 months.
- iv) Consolidation stage: winding up of the programme 6 months.
- v) Finalization stage: final touches and introduction to the villagers for further carryout of the programmes themselves 3 months.

Administrative structure: Each project had a Project Officer who was assisted by Subject Matter Specialists for Agriculture, Animal Husbandry, Cooperation, Engineering, etc. with 60 Multipurpose Village Level Workers (MPVLWs).

2.4.2 National Extension Service (NES) (1953)

The response of the villagers to the CD programme was tremendous. Hence, the Government of India decided to expand the coverage of the programme to other parts of the country with some what less intensive approach than CD project. This programme was named as National Extension Service (NES) started on October 2, 1953.

The idea behind NES was to cover entire country by 1960. Basic idea of both CD and NES was same and the perational unit in both CD and NES was Development Block. Activities under NES programme were less intensive than those of CD. Both were complementary, interwoven, and were run concurrently. Each NES block covers 100 villages, 65,000 population. Each block is headed by Block Development Officer (BDO) assisted by Extension Officers with 10 Multi-purpose Village Level Workers (MPVLWs). Later on both CD and NES programmes were merged and converted as follows.

Extensive Block Post-intensive Block (NES) 3 years (CD) 3 Years

B. R. Mehta (1957) recommended six years for each project. According to the recommendations of National Development Council no distinction was made between CD and NES and formed into 2 stages of 5 years each. Till 1958 this scheme was implemented. Later, as per the recommendations of Balvanth Rai Mehta Committee, Democratic Decentralization (Panchayat Raj) came into existence.

2.4.3 Democratic Decentralization (Panchayat Raj System)

In this sub-section, let us look at some important aspects of the Panchayat Raj System, which paved the way for decentralized implementation of extension system.

2.4.3.1 Concept of Democratic Decentralization

The word *democracy* is derived from Greek roots 'demos' meaning people and 'cracy' meaning rule of. Democracy thus means the government of the people.

Decentralization means devolution of central authority among local units close to the areas served; authority devolves by this process on people's local institutions. The *important features* of the concept of democratic centralization include the following.

- As the term 'democratic decentralization' was not easily understood by the people 'Panchayat Raj' was evolved in its place.
- Panchayat Raj is a system of government. Horizontally it is a network of village Panchayats and vertically it is an organized growth of Panchayats raising up to national level.
- Its philosophy is based on the concept of self-help. It aims at making democracy real with the maximum decentralization of power to the local units of government.
- Its primary objective is to achieve intensive and continuous development of each area through people's participation.

Rajasthan is the first State in the country to adopt democratic decentralization on October 2, 1959 followed by Andhra Pradesh on 1st November 1959.

2.4.3.2 Panchayat Raj System

There are three tiers in the Panchayat Raj System which is the constitutional mechanism of democratic decentralization (Jalihal and Veerabhadraiah, 2007). The three tiers include the following.

- 1) Gram Panchayat at village level.
- 2) Panchayat Samithi at block level (in A.P., it is now Mandal level).
- 3) Zilla Parishad at district level.
- 1) Gram Panchayat: This is the first formal democratic local institution. It is the primary tier of rural local government. It is the cabinet of village elders directly elected by adult citizens of the village. Each Gram Panchayat consists of 5 to 17 members with five years tenure. There is provision for reservation for women, SCs and STs. The Sarpanch is elected by members of the Panchayat. Sarpanch should convene Gram Sabha meeting at least once in six months, and the meeting of members once in a month. The Gram Panchayat functions as agents of Samithi and Z.P. Each Gram Panchayat will have functional committees.

General Functions of Gram Panchayats are mainly representative, regulatory, administrative, and service or development-oriented. Specific Functions of Gram Panchayat included:

Public health and sanitation,

- Water supply,
- · Street lighting,
- Registration of births and deaths,
- Maternity and child welfare,
- Construction and maintenance of village roads, tanks and wells,
- Provision of elementary education,
- Maintenance of dispensaries, libraries and reading rooms,
- Control of fairs and festivals,
- Planting of trees in public places.
- 2) Panchayat Samithi: It is the Block level administration. Its members include Sarpanches of all Village panchayats, Local MLA and MLC and one person nominated by Collector. There will be reservation for two women, one SC, one ST and two experienced persons. President and Vice-president will be elected by the members. Block Development Officer (BDO) will be the Chief Executive. There are seven Standing Committees (SCs) viz. Planning and production, Cooperation and Industries, Education, Women welfare, Social welfare, Communication, and Taxation and finance. Each Standing Committee has seven members including the President. The President will be the Chairman of all Standing Committees.

Functions of Panchayat Samithi: The main functions of Panchayat Samithi include the following.

- Agricultural development
- Animal husbandry and fisheries
- Rural health and sanitation
- Primary education
- Social education
- Development of communications
- Cooperation and cottage industries
- Women welfare and social welfare
- Management of trusts
- Protection of forests
- Rural housing
- Publicity
- Supervision and guidance to Panchayats

3) Zilla Parishad: It is the District level administration. Its members include Presidents of all Panchayat Samithis, Local MLA, MP and MLC, two women representatives, one SC, one ST and two persons interested in rural development. Chairman and Vice-Chairman will be elected by members. One Secretary appointed by Government. There are 7 Standing Committees (SCs) in each Parishad. Each Standing Committee has nine members. District Collector will be the Chairman of all the Standing Committees.

Functions of Zilla Parishad include the following.

- i) Scrutinizing and approval of budget of Panchayat Samithis.
- ii) Distribution of ad hoc grants to Blocks.
- iii) Preparation and consolidation of plans of Blocks.
- iv) Execution of plans common to two to three Blocks.
- Advising the government on implementation of schemes in Panchayats and Panchayat Samithis.
- vi) Establishment and maintenance of secondary, vocational and industrial schools.

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

Andhra Pradesh has passed the Act with slight modifications and implemented it in three-stage system viz; Gram Panchayat, Mandal Praja Parishad and Zilla Praja Parishad and in this Act every Mandal Praja Parishad has a Revenue Mandal. Every mandal in Andhra Pradesh consists of 12-14 villages with a population of 35,000-50,000. Villages within a limit of 10-12 Kms from the headquarter of the Mandal are provided with the facilities of bank, bus stand, railway station, Primary Health Centre, Veterinary dispensary, police station, post office, telephone exchange, high school, marketing facilities and agricultural go-down facilities. Revenue record of all the Tahsil Offices are now shifted to the concerned mandal headquarters. Mandal system is thus a modified form of Panchayat Raj system that brings the public nearer to developmental administration. It seeks greater involvement of the SC and ST and weaker sections and women members in democratic ways of functioning of the mandal system.

Check Your Progress		
Notes: a) Space given below the question is for writing your answer.		
	b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".	
5)	Explain the concept of Community Development? Write the principles and objectives of Community Development.	
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2.5 STAGE-IV: INTENSIVE EXTENSION DEVELOPMENT ERA (1960 ONWARDS)

In this era there have been intensified efforts for development of extension with focus gradually shifted from purely agricultural and community development to technological development to development with social justice to infrastructure development, among others. Government of India launched various programmes and the significant of them are discussed below.

2.5.1 Intensive Agricultural District Programme (IADP) (1960)

A team of Ford Foundation agricultural experts, after visiting various States in India in 1959, recommended intensified development efforts in selected districts/ areas with assured irrigation facilities, minimum natural hazards and well-developed Panchayats and Cooperatives so that rapid increase in production could be made. The government accepted the ideas and started Intensive Agricultural District Programme (IADP) in July 1960 in seven selected districts of various states (including West Godavari of Andhra Pradesh) during first phase and twenty one districts during second phase (Adivireddy, 1997).

Central idea behind the programme was that "Increased agricultural production leads to economic growth which in turn brings the welfare of the society". Intensive efforts for production were undertaken with the combination of all the technological improvements and concentration of manpower and resources in selected areas. IADP is popularly known as 'package programme' because of the collective and simultaneous application of all improved practices, namely, improved seeds, irrigation, fertilizers, plant protection, implements, storage facilities, marketing facilities, credit, etc.

Achievements of IADP:

- Technical assistance was given to farmers in preparing production plans.
- The cultivators were provided simultaneously with all supplies and services at right time and in adequate quantities through cooperatives.
- Credit was given to all those who had their production plans and participated in the programme.
- Marketing and storage facilities were developed within bullock cart distance.
- Covered all the important cash crops grown in the districts, although emphasis
 was laid on the increase of food grain crops.

Drawbacks: Less staff, poor communication facilities, poor training for staff, etc. were the setbacks of the programme.

2.5.2 Intensive Agricultural Area Programme (IAAP) (1964)

The favourable experiences with IADP had led to the consideration of the possibilities of extending the concept of IADP to other promising districts in India. The Agricultural Production Board (1964) agreed with the observations of mid-term appraisal of third five-year plan and recommended Intensive Agricultural Area Programme (IAAP) for 20 to 25 per cent of the cultivated area of the country. Thus, IAAP was started in 114 districts in March 1964 and later it was extended to 150 districts (Adivireddy, 1997).

Criteria for selection of districts: These criteria included the following.

- The IAAP was taken up in areas having assured irrigation.
- Selection of districts and blocks was made on the basis of predominant crops (entire crop economy of the area was kept in view).
- Area was selected based on the use of various intensive and coordinated aids for production (infrastructure facilities).

The staffing pattern of the IAAP districts was less intensive than in the IADP districts. However, the mode of operation was similar. In general, the Village Level Workers (VLWs) were increased from 10 per block to 15 or 20 per block, from one to two Agricultural Extension Officers (AEOs) and districts staff from 2 to 3 Subject-Matter Specialists.

Achievements of IAAP:

- Achieved the increased production by exploiting the land resources.
- Package approach was covered in 1410 community blocks spread over 114 districts in India.
- Increased production in 20-25 per cent of the cultivated area was achieved.
- Effective coordination between officials and non-officials was achieved.
- Multiplication of improved seed and its distribution to all cultivable land.
- Minor irrigation was undertaken in the villages, both through community participation and on an individual basis.

2.5.3 High-Yielding Varieties Programme (HYVP) (1966)

While both the IADP and IAAP were concerned with the promotion of intensive agriculture, they operated within the limitations set by the exotic crop varieties, which had low fertilizer response. In the year, 1963-64, few Mexican dwarf wheat varieties were tried out on selected basis and in 1964-65 an exotic variety of rice TN-1 was tried and the results were encouraging.

The draft outline of the Fourth Five Year Plan, therefore, stressed the need for evolving a new approach for boosting-up agricultural production over a short span of time. Two programmes, namely, HYVP and MCP (Multiple Cropping Programme), were launched in the year 1966-67 which constituted the two major planks of the new agricultural strategy under the Fourth Five Year Plan (Adivireddy, 1997). Operationally, the state government has taken up the following steps.

- Selection of areas in each state for implementation of HYVP.
- ii) A phased programme of coverage of HYVP was prepared.
- iii) Development of staff on par with the IADP pattern in the selected districts.
- iv) Working out a training programme for all levels.
- v) Proper arrangement of inputs like fertilizers, seeds, pesticides, plant protection equipment, and credit on the basis of proper need assessment.

2.5.4 National Family Welfare Programme (1966)

The 'clinical approach' relied upon by the Government in implementing the Family Planning Programme launched in 1952 did not yield satisfactory results. The programme was later expanded to encompass maternal and child health, family welfare, and nutrition and was popularly called or renamed as Family Welfare Programme in 1966 and gave extension orientation to it. The focus has accordingly been shifted from 'clinical approach' to 'cafeteria approach' through extension to educate the target families / population about different methods and techniques of family planning so as to enable them choose from the available methods and techniques that suit to their context and welfare.

In the IV Five Year Plan (1969-74), high priority was accorded to the programme and it was proposed to reduce birth rate from 35 per thousand to 32 per thousand by the end of plan. 16.5 million Couples, constituting about 16.5% of the couples in the reproductive age group, were protected against conception by the end of IV Plan (pbhealth.gov.in/pdf/FW.pdf).

In the V Plan (1974-79) the objective of was to bring down the birth rate to 30 per thousand by the end of 1978-79 by increasing integration of family planning services with those of Health, Maternal and Child Health (MCH) and Nutrition, so that the programme became more readily acceptable. The years 1975-76 and 1976-77 recorded a phenomenal increase in performance of sterilisation. However, in view of rigidity in enforcement of targets by field functionaries and an element of coercion in the implementation of the programme in 1976-77 in some areas, the programme received a set-back during 1977-78. As a result, the Government made it clear that there was no place for force or coercion or compulsion or for pressure of any sort under the programme and the programme was implemented

as an integral part of "Family Welfare" relying solely on mass education and motivation. The name of the programme also was changed to Family Welfare from Family Planning.

In the VI Plan (1980-85), certain long-term demographic goals of reaching net reproduction rate of unity were envisaged. The Family Welfare Programme during VII five year plan (1985-90) was continued on a purely voluntary basis with emphasis on promoting spacing methods, securing maximum community participation and promoting maternal and child health care. The Universal Immunization Programme (UIP) was launched in 1985 to provide universal coverage of infants and pregnant women with immunization against identified vaccine preventable diseases and extended it to all the districts in the country.

The approach adopted during the Seventh Five Year Plan was continued during 1990-92. For effective community participation, Mahila Swasthya Sanghs (MSS) at village level were constituted in 1990-91. MSS consists of 15 persons — 10 representing the varied social segments in the community and five functionaries involved in women's welfare activities at village level such as the Adult Education Instructor, Anganwadi Worker, Primary School Teacher, Mahila Mukhya Sevika and the Dai. Auxiliary Nurse Midwife (ANM) is the Member-Convener. From the year 1992-93, the UIP has been strengthened and expanded into the Child Survival and Safe Motherhood (CSSM) Project. Under the Safe Motherhood component, training of traditional birth attendants, provision of aseptic delivery kits and strengthening of first referral units to deal with high risk and obstetric emergencies were taken up.

To impart new dynamism to the Family Welfare Programme, several new initiatives were introduced and ongoing schemes were revamped in the Eighth Plan (1992-97). Realizing that Government efforts alone would not be sufficient, greater stress has been laid on the involvement of NGOs to supplement and complement the Government efforts in propagating and motivating the people for adoption of small family norm. Reduction in the population growth rate has been recognized as one of the priority objectives during the Ninth and Tenth Plan period. The strategies followed were:

- To assess the needs for reproductive and child health at PHC level and undertake area-specific micro planning.
- ii) To provide need-based, demand-driven, high quality, integrated reproductive and child health care reducing the infant and maternal morbidity and mortality resulting in a reduction in the desired level of fertility.

Contraceptives: The National Family Welfare Programme provides the following contraceptive services for spacing births: a) Condoms, b) Oral Contraceptive Pill, c) Intra-Uterine Devices (IUD).

• Whereas condoms and oral contraceptive pills have been provided through free distribution scheme and social marketing scheme, IUD has been provided only under free distribution scheme. Under Social Marketing Programme, contraceptives, both condoms and oral pills, are sold at subsidized rates. In addition, contraceptives are commercially sold by manufacturing companies under their brand names also; Govt. of India does not provide any subsidy for the commercial sale.

- Copper-T: Cu-T is one of the important spacing methods offered under the Family Welfare Programme. Cu-T is supplied free of cost to all the States/UTs by Govt. of India for insertion at the PHCs, Sub-centres and Hospitals by trained Medical Practitioners/trained Health Workers. The earlier version of Cu-T 200 'B' (IUDs) has been replaced by Cu-T 380-A from 2002-03 onwards which provides protection for a longer period (about 10 years) as against Cu-T 200 'B' which provided protection for about 3 years only.
- Emergency Contraceptive Pill (ECP) was introduced under Family Welfare
 Programme during 2002-03. The emergency contraceptives is the method
 that can be used to prevent unwanted pregnancy after an unprotected act of
 sexual intercourse (including sexual assault, rape or sexual coercion) or in
 contraceptive failure. Emergency Contraceptive is to be taken on prescription
 of Medical Practitioners.
- Terminal methods: Under National Family Welfare Programme following Terminal/Permanent Methods are being provided to the eligible couples.
 - A) Tubectomy: i) Mini Lap Tubectomy, and ii) Lapro Tubectomy. Laparoscopic sterilization is a relatively quicker method of female sterilization.
 - B) Vasectomy: i) Conventional Vasectomy, and ii) No-Scalpel Vasectomy. It is one of the most effective contraceptive methods available for males. It is an improvement on the conventional vasectomy with practically no side effects or complications. This new method is now being offered to men who have completed their families. The No-Scalpel Vasectomy project is being implemented in the country to help men adopt male sterilization and thus promote male participation in the Family Welfare programme.

2.5.5 Small Farmers Development Agency (SFDA) (1970-1971)

The 1960's witnessed revolutionary changes in India's food production; from the situation of huge deficit in the early sixties the country achieved near self-sufficiency in food grains. However, it was observed that only some pockets of the country and certain categories of farmers were benefited through the programmes of green revolution. To correct this disparity the programmes like Small Farmers Development Agency (SFDA), Marginal Farmers and Agricultural Labourer (MFAL) Scheme, etc. were started by the government. In India 70% of farmers are small farmers and marginal farmers and suffering from indebtedness and facing the clutches of money lenders. The Credit institutions have not helped small and marginal farmers earlier. SFDA programme started in 1970-71 was intended to help the small farmers in their farm production. It was introduced in 46 districts spread throughout the country. Each project covers 50,000 potentially viable small farmers. Small farmer is one having 2.5 to 5.0 acres of dry land (Ray, 2007).

Main functions of SFDA include:

- Identifying small farmers and investigating their problems;
- Formulating economic programmes for them;
- Promoting rural industries;

- Evolving institutional, financial and administrative arrangements;
- Facilitating storage and marketing; and
- Strengthening cooperatives.

Organizational Pattern of SFDA is given below.

- State level: A Coordination Committee was formed with Development Commissioner or the Chief Secretary as its Chairman, and all Heads of Development departments as its members.
- Project level: Project Officer, Assistant Project Officer, Administration and Coordinating Cell.
- Activities: Land development, soil conservation, minor irrigation, HYVs, multiple cropping and working in coordination with other departments.
- Funding for the activities was done by giving 25% as subsidy and the rest as loan.

2.5.6 Marginal Farmers and Agricultural Labourers Scheme (MFAL) (1971-1972)

One of the objectives of the Fourth Five-year plan was to enable the marginal and agricultural labour to participate in the process of development and to share its benefits. In pursuance of these objectives the projects of MFAL were designed. Although the programme was launched in the year 1969, the actual implementation of this programme started in the year 1971-72. Forty one MFAL projects were taken up as pilot experiments and designed to improve the conditions of weaker sections and to generate greater employment opportunities.

- Criteria adopted for identification of beneficiaries: Marginal farmers were
 those having land holding of less than 2.5 acres of dry land. Agricultural
 labourers are those who have more than 50 per cent of their income from
 agricultural wages. MFAL scheme covered about 1500 marginal farmers
 and 5000 agricultural labourers in each project (Dahama and Bhatnagar,
 2007).
- Main functions of MFAL: These included the following.
 - Appropriate technology and its transfer to farmers.
 - > Efficient input-supply system including credit.
 - Adequate marketing and storage facilities.
 - > Well-developed extension service.
- Projects for marginal farmers: Minor irrigation, soil conservation, land development, land shaping, animal husbandry, crop husbandry, introduction of high-yielding varieties and improved agricultural implements.
- Projects of agricultural labour: Providing adequate opportunities for offseason employment, poultry-keeping, piggery, sheep and goat-rearing.
- Subsidy criteria: 33.3 per cent of subsidy was given to marginal farmers and 50 per cent subsidy to agricultural labourers.

• Credit institutions: Commercial banks, Primary Agricultural Cooperative Societies, Central Cooperative Society.

Organizational Pattern:

- At State level: A Coordination Committee with Development Commissioner or the Chief Secretary as Chairman and all Heads of Development departments as members.
- Project level: Project Officer, Asst. Project Officer, Administration and Coordinating Cell.
- Implementation: It was done through registered agencies and other field level institutions with Collector as Chairman of implementation bodies.

2.5.7 Integrated Tribal Development Agency (ITDA) (1971-1972)

ITDA was specially designed to develop tribal areas and tribal people. The programme was initiated during 1971-72 with 6 pilot development projects. Slow phase of development, deteriorating conditions of law and order and exploitation of tribals by certain non-tribals caused the government to start these agencies (Ray, 2007).

Objectives of ITDA were:

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

Special features of ITDA:

- Narrowing down the gap between the levels of development of tribal areas and other areas.
- Revision of excise and forest policies.
- Organising training programmes in agro and forest-based industries.
- Restructuring administration of tribal areas.
- Setting-up of tribal development corporation.
- Initiate special programmes for tribal development.
- Providing subsidy to the extent of 50% to 70% and allowing the remaining as loan.

Organizational Pattern:

- State level: Coordination committee with Development Commissioner / Chief Secretary as Chairman and Heads of Development departments as members.
- Project level: Project Officer, Asst. Project Officer, Administration and Coordinating Cell.

2.5.8 Drought Prone Area Programme (DPAP) (1973-74)

This programme was first launched by GOI during 1973-74 to address special problems of drought prone areas. DPAP aims to mitigate the adverse effects of drought on the production of crops and livestock, and on productivity of land, water and human resources. It strives to encourage restoration of ecological balance and seeks to improve the economic and social conditions of the poor and the disadvantaged sections of the rural community.

DPAP is a people's programme with Government assistance. There is a specific arrangement for maintenance of assets and social audit by Panchayati Raj Institutions. Development of all categories of land belonging to Gram Panchayat, Government and individuals falls within the limits of the selected watersheds for development. Allocation is shared equally by the Centre and State Government on 50:50 basis. Watershed Committee contributes to maintenance of the assets created. Utilization of 50% of allocation under the Employment Assurance Scheme (EAS) is for the Watershed Development. Funds were directly released for sanction of projects and release of funds to Watershed Committees and Project Implementing Agencies (PIAs).

Village community including self-help groups undertake area development by planning and implementation of projects on watershed basis through Watershed Associations and Watershed Committees constituted from among themselves. The Government supplements their work by creating social awareness, imparting training and providing technical support through the Project Implementation Agencies (Dahama and Bhatnagar, 2007).

2.5.9 Training and Visit System (T & V System) (1974)

The reorganized agricultural extension system popularly known as Training and Visit system was developed by the World Bank expert Daniel Benor. It is also known as Benor system as Mr. Benor was instrumental in introducing this innovation (new concept) in agricultural extension. In India this system was evolved on the basis of experience gained in the command areas of Andhra Pradesh, Madhya Pradesh and Rajasthan under World Bank assistance. The main objective of this system was to remove shortcomings in the then existing agricultural extension system. This system has given the country a new vision bringing farm scientists and field extension functionaries closer with sole intension of improving production and income of farmers.

The basic spirit behind T & V system is that any land, even though it may not have produced a satisfactory crop in the past, can be made to yield an optimum crop according to its capacity within the crop season of 4-5 months only, provided the farmer does what he is advised to do on his farm step by step as per the stage of crop growth every week or fortnight. T and V system was started in 1974 and was implemented in all the States by 1985. The methodology of T & V system provides for a management system which can ensure delivery of expert knowhow in every field on a state-wide basis and every week or fortnight basis. Transfer of know-how from Subject-Matter Specialist (SMS) to the farmers is ensured in two stages.

 Training: Transfer of know-how from Subject-Matter Specialist to the extension worker.

ii) Visits: Transfer of know-how obtained during the training from extension workers to farmers.

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

- i) Professionalism: The extension staff must keep in close touch with relevant scientific developments and research in order to formulate specific recommendations that will be useful to farmers in all kinds of resource situations. This can be achieved only if each extension worker is fully and continuously trained to handle his particular responsibilities in a professional manner.
- ii) Single line of command: The extension service must be under a single line of technical and administrative command within the Department of Agriculture. Support is required from teaching and research institutions, input supply and other agricultural support organizations and local government bodies, but all extension workers should be responsible administratively and technically to a unit within only one department.
- iii) Concentration of efforts: All extension staff work only on agricultural extension. Staff is not responsible for the supply of inputs, data collection, distribution of subsidies, processing of loans, or any other activity not directly related to extension. It is assumed that the effective span of control for supervision or guidance is about eight. Similarly, extension-oriented research concentrates on key constraints to increase production and income that are faced by the farmers.
- iv) Time-bound work: Messages and skills are taught to farmers in a regular, timely fashion, so that they will make best use of the resources at their command. The VEW (Village Extension Worker) must visit his farmers regularly on a fixed day, usually once each fortnight. All other extension staff must make timely and regular visits to the field.
- v) Field and Farmer orientation: The contact of extension staff must be on a regular basis, on a schedule known to farmers and with a large number of farmers representing all major farming and socio-economic types. While spending almost all of their time in the field meetings with farmers, extension workers must attempt to understand farmers' production conditions and constraints in order that appropriate production recommendations are formulated.
- vi) Regular and continuous training: Regular and continuous training of extension staff is required both to teach and discuss with them the specific production recommendations needed by farmers for the coming fortnight and to up-date and upgrade their professional skills. Moreover, the basic training sessions, fortnightly training and monthly workshops are the key means of bringing actual farmers problems to the attention of research, identifying research findings of immediate relevance to farmers, and of developing the production recommendations that fit to specific local conditions.

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

The organizational pattern of the T& V System of agricultural extension evolved by Benor: The entire organization is based on the total number of farm families which one (Village Extension Worker (VEW) can reasonably cover. It is organized in such a manner that the Agricultural Extension Officer (AEO) guides, trains and supervises about 6 to 8 VEOs/VEWs and 6 to 8 AEOs are in turn guided and supervised by a Sub-Divisional Extension Officer (SDEO). The SDEOs are supported by a team of Subject-Matter Specialists. 4 to 8 SDEOs are supervised by Divisional Extension Officer (DEO) who is also supported by SMSs depending upon the number of districts the DEO is supervising, either directly or through an intermediate superior, Zonal Extension Officer (ZEO) (Adivireddy, 1997).

The DEO would be involved in regular training of the VEWs and AEOs as and when needed. At zonal level, the ZEO will be responsible for all extension activities in his district and will be assisted by a few administrative staff only. The headquarters level may be different from state to state. It would be best if the headquarters deal with agricultural extension exclusively and were called extension service rather than Department of Agriculture. The Director of Agriculture Extension or ADA (Additional Director of Agriculture) would be assisted by three deputies in-charge of administration of technical aspects in execution and implementation of work.

2.5.10 Integrated Rural Development Programme (IRDP) (1978-1979)

IRDP was launched during 1978-79 by the Government of India. For implementing 'IRDP' District Rural Development Agency (DRDA) was set up at district level. It is a massive poverty alleviation programme, especially targeting the rural poor who are below the poverty line (Ray, 2007).

Objectives:

- To assist selected families of target group in rural areas to cross the poverty line by taking self-employment.
- To generate additional employment and to raise income level of identified target groups.
- To apply science and technology for the benefit of rural population.
- To provide full employment to the beneficiaries through production programmes.

Salient features:

 The identified target group consists of small farmers, marginal farmers agricultural labourers, rural artisans and other families below the poverty line.

- Family is the unit of development.
- It provides income-generating assets including working capital (subsidies) and institutional credit.
- At least 30 per cent of assisted families are drawn from SCs and STs.
- A minimum of 30 per cent of total beneficiaries should be women.
- Importance of industries in agricultural sector.
- Emphasis is on Block planning 3000 families for each Block covering 600 families per year for five years.
- The nature of infrastructural facilities available are to be kept in mind while selecting the scheme.

2.5.11 Training of Rural Youth for Self-Employment (TRYSEM) (1979)

The national scheme of Training of Rural Youth for Self-Employment (TRYSEM) was initiated in August 1979 with the principal objective of removal of unemployment among the youth. The main thrust of the scheme is on equipping rural youth with necessary skills and technology to enable them to take up self-employment. The scheme proposed to train about 2 lakh rural youth every year in various skills. The strategy for training includes institutional training, training, through local servicing and industrial units, master-craftsmen, artisans and skilled workers.

The beneficiaries of this programme include small and marginal farmers, agricultural labourers, rural artisans and also persons below the poverty line who may not fall in the above categories. Only the youth between the age group of 18 to 35 years are eligible under this programme (Ray, 2007).

During institutional training the stipend is given to the trainees. The provision of central assistance is 50:50 matching basis. The beneficiary is provided with subsidy from IRDP / TRYSEM funds and loans from the institutional training agency. Training is provided on the basis of actual need and requirement. It is a facilitating component of IRDP and DRDA is responsible for implementation. Among the trainees, 30% reservation is for SCs/STs and 1/3 for women. It is also expected to fulfill the skill requirements of DWCRA beneficiaries.

2.5.12 Development of Women and Children in Rural Areas (DWCRA) (1982)

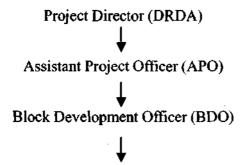
DWCRA programme was launched in 1982, as a part of the Integrated Rural Development Program (IRDP). Its aim was to empower rural women living below the poverty line (BPL) by way of organizing them to create sustainable incomegenerating activities through self-employment. It was the first programme of its kind that specifically focused on improving the quality of life of rural women. A unique feature of DWCRA, unlike other IRDP components, was that along with improvement in income it also focused on access to health, education, safe drinking water, sanitation, nutrition, etc. Thus, it not only aimed at economic development but also intended to promote social development. Another unique feature of the programme was that it emphasized group activity. It was thought that in the long run women's empowerment depends on creation of a movement that promotes awareness and self-reliance (Ray, 2007).

Objectives: The objectives of DWCRA include the following.

- To help and promote self-employment among the rural women, who are below poverty line, by providing skill training in vocations which are acceptable to the beneficiaries by encouraging productivity and introducing new activities;
- To organize the beneficiaries into groups and promote economic and social reliance;
- To generate income for the rural poor by creating avenues for production of goods and services;
- iv) To organize production-enhancing programmes in rural areas; and
- v) To provide for care of children of the working women by providing an improved environment, care and food by establishing Balwadis.

DWCRA facilitates women to: i) improve their earning; ii) acquire new skills; iii) reduce their daily work; iv) have better access to credit facilities; and v) participate in social service.

Administrative set up of DWCRA is as given below.



Gram Sevaks / Anganwadi Workers from ICDS Blocks

2.5.13 National Agriculture Extension Project (1983)

The basic objective of NAEP was to bridge the gap between the research system with that of extension system so that the transfer of technology takes place at a much faster rate resulting in higher production and prosperity in the rural sector in general and agricultural sector in particular. In spite of these special extension efforts, there remained large gaps in achievement in certain sectors which needed more concerted attention (Ray, 2007).

2.5.14 Technology Mission on Oilseeds (1986)

India has been one of the largest importers of edible oils. In 1986, the Indian government tried to counter the mounting imports of vegetable oils, which represented a drain on the foreign exchange reserves. Technology Mission on Oilseeds (TMO) was launched through Department of Agriculture Research & Education (DARE) under the chairmanship of Secretary Department of Agriculture & Cooperation (DAC) with DG, ICAR being its Co-chairmen, to increase the production of oilseeds, reduce the import of oilseeds and achieve self-sufficiency in edible oils. Consequent to the setting-up of TMO a major breakthrough in increasing oilseed production was achieved through an integrated approach by introducing new crop technologies, better supply of inputs and

extension services support for marketing and post-harvest technologies, and excellent coordination and co-operation between various organizations, departments and Ministries. The TMO was somewhat similar in content and objective to the Green Revolution, which had revolutionized the Indian food grains sector, especially wheat and rice production. The higher production figures during the latter half of the 1980s and the first half of the 1990s may be attributed to this programme. The TMO was transferred from DARE to DAC in March, 1990. Keeping in view the success on oilseeds production, pulses were brought under the Technology Mission in 1990. Oil Palm and Maize were also brought under the Technology Mission in 1992-93 and 1995-96 respectively.

Objectives of the Mission: The main objectives of the Mission were to make the country self-reliant as early as possible in edible and non-edible oils and reduce imports through integrated approach involving different developmental, scientific, input, banking and marketing agencies. It was also envisaged that the Mission would:

- Aim at increasing production and productivity of the different oilseed crops in 180 districts through assured input supply and technology packages;
- Develop location-specific technologies for each of the crops for maximizing production;
- Produce adequate quantities of breeder's seed, foundation seed and certified seed of different oilseed crops;
- Take up mass multiplication of tissue-cultured plants of oil palm and coconut.
 Modernize cryo-preservation of important germplasms of oilseed crops and also develop facilities for importing superior oil-yielding plants from outside;
- Organize seed-gardens to produce superior quality variety and hybrid materials of oil palm and coconut;
- Create an awareness about the improved and emerging technologies in selected Blocks through National Demonstrations, Operational Research Projects, Krishi Vigyan Kendras and Lab-to-Land Programmes;
- Assist the developmental workers in training and imparting latest technologies of science; and
- Help modernize the processing technology to increase the output and improve the safety and quality of oil.

It was further envisaged that the Mission would concentrate first on the major crops which contributed the maximum to the edible oils economy of India. The crops that received priority were groundnut, rapeseed-mustard, soybean, sunflower, safflower, linseed, sesame and niger in the given order. It was further provided that the Mission would also give priority to non-edible oilseed crops to meet the requirement of industry (agricoop.nic.in/Annual-Rep04-05/chap4.pdf).

2.5.15 Watershed Development Project (WSDP) (1987)

Watershed approach was conventionally aimed at treating degraded lands with the help of low-cost and locally-assessed technologies such as in-situ soil and moisture conservation measures, afforestation, etc. through a participatory approach that seeks to secure closer involvement of user-community. The broad objective was the promotion of overall economic development and improvement of socio-economic conditions and resources of poor sections of people in project area. Different programmes were taken up by the Govt. of India at different points of time such as Drought Prone Area Programme (DPAP) and the Desert Area Development Programme (DADP) which were brought into watershed mode in the year 1987 (Ray, 2007).

Watershed Area: A watershed is a geohydrological unit which drains into a common point. The watershed approach is a project-based Ridge to valley approach for in-situ soil and water conservation. The unit of development of a watershed area will be about 500 hectares, it may vary keeping in view the geographical location, size of the village, etc. The project will primarily aim at treatment of non-forest wasteland and identified drought prone and desert areas. However, if any watershed area consists of some forest land it should also be treated simultaneously under the project. The thematic maps of the project area will be generated and used for implementation of programmes.

Objectives: The objectives of watershed development are as follows.

- Developing wastelands, degraded lands, drought-prone and desert areas on watershed basis keeping in view the capability of the land, site conditions and local names.
- Promoting the overall economic development and improving the socioeconomic condition of the resource-poor and disadvantaged sections inhabiting in the project area.
- Mitigating the adverse effects of extreme climatic conditions such as drought and desertification on crops, human and livestock population for their overall improvement.
- Restoring ecological balance by harvesting, conserving and developing natural resources i.e. land, water, vegetative cover, etc.
- Encouraging the village communities for sustained community action for the operation and maintenance of assets created and further development of potential natural resources in the watershed areas.
- Finding simple, easy and affordable technological solutions and institutional arrangements that make use of and build upon the local technical knowledge on the available material.
- Employment generation, poverty alleviation, community empowerment and development of human and other economic resources of village.

Implementation of the programme: This programme is mainly implemented through Zilla Parishad (Z.P), District Rural Development Agency (DRDA), NGO, etc.

Sources of funding: District Watershed Management Agency (DWMA), National Bank for Agriculture and Rural Development (NABARD), Foreign funding, Private institutions, National Watershed Development Programme for Rain-fed Areas (NWDPRA). If 84% is funded by NABARD then the remaining 16% should be funded by the beneficiaries in terms of Sramadhanam to the same watershed.

Organizational structure: Project officer, Agronomist, Horticulturist, Engineer, Social mobiliser and Mahila co-coordinator.

2.5.16 Jawahar Rojgar Yojana (JRY) (1989)

The programme was launched on 1st April 1989. It is a centrally sponsored scheme implemented by state governments. This is one of the massive employment generation schemes under poverty alleviation programmes. The expenditure is shared by the central and state governments on 80:20 basis. The central assistance is released directly to the districts. Not less than 80% of the allotted amount will be given to village Panchayats (Adivireddy, 1997).

Objectives: The primary and secondary objectives of JRY are as follows.

- Primary objective: Generation of additional gainful employment for the unemployed and underemployed men and women in rural areas.
- Secondary objective: Creation of sustained employment by strengthening rural economic infrastructure and assets and by improving the overall quality of life in the rural areas.

Special features of JRY include:

- Creation of productive community assets for direct and continuous benefits to the poor groups.
- Improvement in the overall quality of life in the rural area.
- People below poverty line are the target group.
- SCs and STs are given preference.
- 30% of employment opportunities will be reserved for women.
- Special integrated projects in coordination with other programmes shall be formulated for the nomadic tribes.
- It is implemented all over the country through the village Panchayat.
- Employment for at least one member in a family for 50-100 days in a year.
- Each Panchayat with 3000 to 4000 population gets 0.8 to 1.0 lakh rupees per year.

2.5.17 Rastriya Mahila Khosh (RMK) (1993)

It has been well known fact that the credit needs of the poor, especially women and particularly those in the unorganized sector, have not been adequately addressed by the formal financial institutions of the country. Varied experiences in this sector had established the need for a quasi-formal credit delivery mechanism, which is client-friendly, has simple and minimal procedures, disburses quickly and repeatedly, has flexible repayment schedules, links thrift and savings with credit, and has relatively low transaction costs both for the borrower and the lender. The Government of India had established the "Rashtriya Mahila Kosh" (National Credit Fund for Women) RMK in 1993 to address such needs (Sagar Mondal and Ray, 2006).

The main objectives and functions of the RMK are as follows:

- To undertake activities for promotion of the credit as an instrument of socioeconomic change and development through a package of financial and social development services for women.
- ii) To demonstrate and replicate participatory approaches in the organization of women's groups for effective utilization of credit resources leading to self-reliance.
- iii) To promote and support experiments in the voluntary and formal sectors using innovative methodologies to deliver credit and other social services to disadvantaged women.
- iv) To sensitize existing government delivery mechanisms for increasing the visibility of poor women as a vital and viable clientele with regard to the conventional financial institutions.
- v) To promote research, study, documentation and analysis of the role of credit and its management.
- vi) To co-operate with and secure the co-operation of the Central Government, State Governments and Union Territory Administrations, Credit institutions, industrial and commercial organizations, Non-governmental, Voluntary and other Organizations and Bodies in promoting the objectives of the RMK.
- vii) To accept subscriptions, grants, contributions, donations, loans, guarantees, gifts, bequests, etc., on such terms and conditions consistent with the aims and objectives of the RMK.

Administrative Structure:

- The RMK is being administered by a Governing Board of sixteen members consisting of senior officials of Central and State Governments and specialists and representatives of organizations active in the field of micro-credit for women.
- The Executive Director is the Chief Executive Officer of the RMK responsible for proper administration of its affairs under the overall supervision, direction and control of the Governing Board.

2.5.18 Mahila Samridhi Yojana (MSY) (1993)

Mahila Samridhi Yojana was started on 2nd October 1993. It envisages training to group of women in women-friendly production-oriented trades, linked with micro-credit after the training. National Minority Development Corporation (NMDC) encourages the State Channelizing Agencies (SCAs) as well as NGOs for implementation of the schemes. SCAs are assisted in meeting their 85% of the expenditure on training while NGOs are assisted in meeting 100% expenditure on training under the Scheme of MSY.

Objectives of MSY are:

- To provide economic security to the rural women, and
- To encourage the saving habit among them.

The Department of Women and Child Development is the nodal agency for MSY. Under this plan, the rural women of above 18 years of age can open their saving account in the rural post office of their own area with a minimum of Rs.4 or its multiplier. On the amount not withdrawn for 1 year, 25% of the deposited amount is given to the depositor by the government in the form of encouragement amount. Such accounts opened under the scheme account are provided 25% bonus with a maximum of Rs.300 every year (Sagar Mondal and Ray, 2006).

2.5.19 Pulse Polio Programme (1995)

Humans are the only reservoir/carrier of Polio Virus called Wild Polio Virus. It has three types I, II, and III. It is type II which is the first one to get eliminated, followed by type III and then type I Polio Virus from the human environment. Elimination of type II virus generally indicates a good/satisfactory Routine Immunization System/Coverage in an area. The country has already eliminated Type-II Virus two years ago. The Strategy for elimination/eradication is by having an equally strong system of 4 components. These are: Strong Routine Immunization, well Conducted Pulse Polio Rounds, Selective / Focal Mop-up rounds and a Sensitive and Responsive AFP System (delhi.gov.in/wps/wcm/.../latest.../pulse+polio).

Importance: All infants below 1 year are supposed to be receiving a birth dose of 'OPV' called 'zero' dose followed by 3 doses at 6, 10 & 14 weeks of age alongside DPT 3 doses. Then, 1st booster of OPV is at 1½ year along with DPT, followed again with 2nd booster at 4½ to 5 years along with DT. Now, it has been proved conclusively that pulse polio doses are complementary to the routine doses and are not a substitute to routine polio vaccine. The constant migration of population, the newer birth cohort in the state and the left-overs need to be covered effectively. To sustain and improve the routine coverage of OPV it is quite an opportunity on the Pulse Polio day to apprise the parents about the need of routine immunization.

India launched the Pulse Polio Immunization (PPI) program in 1995 as a result of World Health Organization's (WHO) Global Polio Eradication Initiative. Under this programme, all children under 5 years are given 2 doses of Oral Polio Vaccine (OPV) in December and January every year until polio is eradicated.

PPI was initiated with the objective of achieving hundred percent coverage under OPV. It aims to reach the unreached children through improved social mobilization, plan mop-up operations in areas where poliovirus has almost disappeared and maintain high level of morale among the public.

2.5.20 Institute-Village Linkage Programme (IVLP) (1995-96)

The Indian Agricultural Research Institute (IARI), New Delhi has initiated an Institute-Village Linkage Programme (IVLP) in 4 villages viz. Garhi Randhala, Tatesar, Punjab Khor and Auchandi in Delhi State. Recently developed IARI technologies on crop production, fruit and vegetable cultivation, animal husbandry and dairying were introduced on the farms and households of one thousand farmers, mostly small and marginal. IVLP provides scientists opportunities to test or demonstrate new technologies on farmers' fields and get direct feedback from farmers. Application of new technologies is tested under different production systems viz. Small farms, Green revolution farms and Commercial farms.

A pilot project on Technology Assessment and Refinement through IVLP has been launched from the rabi season of 1995-96 for a period of 3 agricultural seasons in 42 centers in the country under selected ICAR Institutes and SAUs with an estimated budget of Rs.101.6 millions. The project is envisaged to cover about 42,000 farm families (Ray, 2007).

Objectives of IVLP are:

- To introduce technological interventions with emphasis on stability and sustainability along with productivity on small farm production systems;
- 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 farm production systems; and
 - increase the agricultural productivity with marketable surplus in commercial and off-farm production systems;
- To facilitate adoption of appropriate post-harvest technologies for conservation and on-farm value addition of agricultural products, by-products and wastes for greater economic dividend and national priorities;
- To facilitate adoption of appropriate technologies for removal of drudgery, increasing efficiency and higher income of farm women;
- To monitor socio-economic impact of the technological intervention for different farm production systems;
- To identify extrapolation (estimation or evaluative) domains for new technology/technology-modules based on environmental characterization at meso and mega levels; and
- To adopt systems approach in the project which enables scientists to develop technologies as per the demands of the farming situations.

2.5.21 Agricultural Human Resource Development Programme (AHRDP) (1995)

The World Bank-aided AHRD project, launched in the year 1995, is meant for financially assisting the Indian agricultural education sector. The project aimed at improving the quality and relevance of higher agricultural education through in-service training programmes and effective management of agricultural human resources.

In India, Andhra Pradesh, Haryana and Tamil Nadu being the three states and ANGRAU (Acharya N. G. Ranga Agricultural University), HAU (Haryana Agricultural University), TNAU (Tamil Nadu Agricultural University) and TNUAS (Tamil Nadu University of Animal Sciences) are the four agricultural universities selected under this project (Sagar Mondal and Ray, 2006).

Salient Features of AHRDP include:

i) AHRDP was initiated to fulfill its objective of financing to equip laboratories and class rooms for better teaching programmes, staff training for better faculty teaching skills, library modernization for effective services and computerization for better management and administration.

- ii) Much of the infrastructure and equipment available in the State Agricultural Universities (SAUs) have become obsolete (outdated) and unserviceable and that has a direct bearing on the standard and quality of education. The SAUs are to be provided with financial assistance for the purchase of modern equipment and furniture needed for improvement of classroom, laboratory and farms.
- iii) The improvement of teachers' competence will have direct bearing on the quality of teaching. Hence, the project financed to depute teachers of SAUs for training in advanced studies in reputed institutions of India and abroad.
- iv) Lack of adequate resources has severely affected the usefulness of libraries. To overcome this deficiency, the project financed the purchase of needed equipment, latest text books, journals, etc for the libraries.
- v) Computerization at all levels of SAUs is essential for better administration and management. Hence, the project financed the SAUs for effective computer systems and establishing computer network.

2.5.22 National Agricultural Technology Project (NATP) (1998)

The NATP was initiated in the year 1998 by the by the Ministry of Agriculture, Govt. of India with the financial assistance of the World Bank which was expected to finance the initial five years of support to the project. NATP was intended to shift the balance of technology generation, assessment and dissemination programmes towards greater location-specificity needed for the future. The purpose of this project was to consolidate earlier investments and address specific system constrains, weaknesses and gaps not addressed earlier (Sagar Mondal and Ray, 2006). The basic premise of NATP is that research and extension programmes should be farmer-centered and demand-driven.

Objectives of NATP included the following:

- To address key constraints, which limit the efficient use of the public resources;
- To improve the relevance of technology generation, refinement, assessment
 and transfer programmes to the changing needs of farmers and processors
 and thus the contributions made by improved agricultural technology to
 key national objectives of food security, economic growth, equity, alleviation
 of rural poverty and conservation of natural resources.

Strategy of NATP aimed at:

- Improving the efficiency of public research and technology assessment and dissemination institutions by strengthening management tools and procedures and raising human skills.
- Stressing improvements in priority setting and resource allocation, stronger links and co-operation with external sources of expertise in agricultural sciences, the improvement of staff incentives and accountability, and current monitoring and impact evaluation.
- Adapting the organization and management to improve the staff skills, modes
 of operation and programmes of public research and technology assessment
 and transfer of services to make them more relevant to the current and
 upcoming needs, especially for location-specific interdisciplinary
 programmes of production, systems research and development focused on
 technologies in the public goods category.

- Facilitating the entry of other private actors or producers into research and extension activities wherever appropriate.
- Accumulating replicable experience to guide further change.

2.5.22.1 Agricultural Technology Information Center (ATIC) (1999)

The Agricultural Technology Information Centre (ATIC) was started during the year 1999 under the National Agriculture Technology Project (NATP). The Centre provides information on agriculture technologies in addition to providing other inputs like seeds, plant materials, etc. including advisory services through single-window system. The ATIC is intended to provide formal management mechanism between the scientists and technology users (http://www.uasbangalore.edu.in/asp/atic.asp).

The Agricultural Technology Information Centers (ATIC) is a "Single window" support system linking the various units of a research institution with intermediary-users and end-users (farmers) in decision-making and problem-solving exercise. The ATICs provides greater coordination and intensive interaction between the researchers and technology users beyond individual units of research institutions in contributing towards the dissemination of information. Thus, each ATIC will serve as a "single window system" with an objective to help farmers and other stake holders such as Farmer-entrepreneurs, Extension workers, Development agencies, Non-Government Agencies (NGOs) and private sector organizations to provide solutions to the farmers location-specific problems in agriculture and make available all the technological information along with technology inputs and products for testing and use by them. The ATICs need to be demand-driven, financially sustainable and well integrated with research and with greater emphasis on location-specific and system-based sustainable technologies (Sagar Mondal and Ray, 2006).

The rationale of establishing ATIC is as follows.

- To provide diagnostic services for soil and water testing, plant and livestock health;
- ii) To supply research products such as seeds and other planting material, poultry strains, live stock breeds, fish seed, processed products, etc, emerging from the institution for testing and adaptation by various clienteles;
- iii) To provide information through published literature and other communication-media and materials including audio-visual aids; and
- iv) To provide an opportunity to the institutes/SAUs to generate some resource through the sale of their technologies.

Objectives of ATIC are:

- To provide a single window delivery system for the products and species available from an institution to the farmers and other interested groups as a process of innovativeness in technology dissemination at the institute level;
- ii) To facilitate the farmers' direct access to the institutional resources available in terms of technology, advice, technology products, etc., for reducing technology dissemination losses; and
- iii) To provide mechanism for feedback from the users to the institute.

2.5.22.2 Agricultural Technology Management Agency (ATMA) (2001-02)

This scheme was started during the year 2001-02 to encourage formation of Agricultural Technology Management Agency (ATMA). ATMA is a society to be formed by key stake holders involved in agricultural activities for sustainable agricultural development in the district. It is a focal point for integrating research and extension activities and decentralizing day-to-day management of the public agriculture technology system (ATS).

It is a registered society responsible for technology dissemination at the district level. It would be able to receive and expend project funds, enter into contracts and agreements and maintain revolving accounts that can be used to collect fees and thereby recover operating cost.

ATMA would be increasingly responsible for all the technology dissemination activities at the district level. It would have linkage with all the line departments, research organizations, non-governmental organizations and agencies associated with agricultural development in the district.

Research and Extension units within the project district such as ZRS or substations, KVKs, and the key line departments of Agriculture, Animal Husbandry, horticulture and fisheries, etc, would become constituent members of ATMA. Each Research-Extension (R-E) unit would retain its institutional identity and affiliation. But, the programmes and procedures concerning district-wise R-E activities would be determined by ATMA governing board to be implemented by its management committee (MC).

Organizational Structure of Agricultural Technology Management Agency (ATMA)

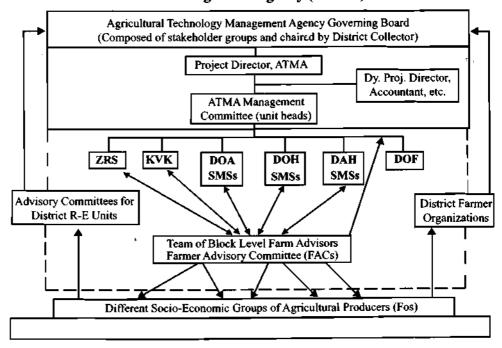


Figure 2.1: Organizational Structure of ATMA

Source: www.manage.gov.in/extnref/ATMA.pdf

Aims and objectives of ATMA are:

- i) To identify location-specific needs of farming community for farming systembased agricultural development;
- ii) To setup priorities for sustainable agricultural development with farming system approach;
- iii) To draw plans for production-based system activities to be undertaken by farmers / ultimate users;
- iv) To execute plans through line departments, training institutions, NGOs, farmers' organizations and allied institutions;
- v) To coordinate efforts being made by various line departments, NGOs, farmers' organizations and allied institutions to strengthen research-extension-farmers linkages in the district and to promote collaboration and coordination between various state-funded technical departments;
- vi) To facilitate the empowerment of farmers / producers through assistance for mobilization, organization into associations, cooperatives, etc., for their increased participation in planning, marketing, technology-dissemination and agro-processing, etc; and
- vii) To facilitate market interventions for value addition to farm produce.

2.5.23 Market-led Extension (1999-2000)

Indian agriculture has made rapid strides in the last half century by augmenting the annual food grain production from 51 million tonnes in the early fifties to 209 million tonnes in 1999-2000 and steered the country to a status of self-sufficiency. It has been successful in keeping pace with the rising food demand of growing population. Food grain production quadrupled in the last 50 years while population nearly tripled from 350 million to one billion during this period. Significantly, the extension system had played its role untiringly in transfer of production technologies from lab to land besides the agricultural scientists, farmers and marketing network.

Though the production has increased dramatically, not so much bothered about remunerative prices. Small and marginal farmers generally prone to sell their produce on "as is where basis" due to several constraints like repayment of personal hand loans and to meet domestic needs. Quantum increase in production alone could not help the farmers, hence need is felt to sensitize the farmers about the existence of market facilities, good returns on the produce, etc.

With the globalization of market, farmers have to transform themselves from mere producers-cum-sellers in the domestic market to a wider market to best realize the returns for their investments, risks and efforts. If this is to be achieved, farmers need to know answers to questions like: what to produce, when to produce, how much to produce, when and where to sell, at what price and in what form to sell their produce? Farmers have been receiving most of the production technologies from extension system. However, the extension system now needs to be oriented with knowledge and skills related to the market.

In the changing scenario of Indian agriculture, with newly added facets and challenges of marketing, the extension system is likely to undergo series of *crises* (Sagar Mondal and Ray, 2006).

- Knowledge and skill input crisis: Besides the production technologies, the extension educationists now have to get equipped with latest market-related information which requires additional funding for their further training.
- Efficacy crisis: Since the extension system is already under criticism with increasing demand for its enriched role, it needs to gear-up itself to perform multiple activities to prove its efficacy.
- Credibility crisis: Even with all the market-knowledge and efficacy in performing their role, the personnel extension system may face the credibility crisis due to rapid and unexpected changes in the market.
- Reorganization structure crisis: with the assumption of new roles, the
 organizational structure may be prone to changes and the system has to
 adjust itself to this shock.

To avoid such crises, there is a need for paradigm shift from production-led extension to market-led extension.

Table 2.1: Paradigm Shift from Production-led Extension to Market-led Extension

	Production-led Extension	Market-led Extension
Purpose / objective	Transfer of production technologies.	Enabling farmers to get optimum returns out of the enterprise.
Expected end results	Delivery of messages. Adoption of package of practices by most of the farmers.	High returns.
Farmers seen as	Progressive and high producers.	Entrepreneurs and "Agripreneurs".
Focus	Production / yields — "Seed to seed"	Whole process as an enterprise/high returns — "money to money"
Technology	Fixed package recommended for an agro-climatic zone covering very huge area irrespective of different farming situations.	Diverse baskets of package of practices suitable to local situations /farming systems.
Extension educationist interactions	Messages, Training, Motivating, Recommending.	Joint analysis of the issues — varied choices for adoption consultation.
Linkages / liaison	Research-Extension-Farmer.	Research-Extension—Farmer extended by market linkages.
Extension educationist's role	Limited to delivery mode and feedback to research system.	Enriched — with market intelligence, besides the TOT function. Establishment of marketing and agro-processing linkages between farmer groups, markets and processors.
Contact with farmers	Individual	Farmers interest groups. Focused groups / SHGs.
Maintenance of Records	Not much importance as the focus was on production.	Very important as agriculture is viewed as an enterprise to understand the cost-benefit ratio and the profits generated.
Information Technology support	Emphasis on production technologies.	Market intelligence including likely price trends, demand position, current prices market prices, communication network etc. besides production technologies.

Market-led extension system establishes its position by helping the farmers realize high returns for the produce and minimize the production costs to improve the product value and marketability. Information technology — electronic and print media — need to be harnessed to disseminate the production and market information. Indian farmers have moved from subsistence to self-sufficiency due to advent of production technologies. In order to be successful in the liberalized market scenario they have to shift their focus from 'supply-driven' to 'market-driven' strategies and produce according to the market needs and earn high returns.

2.5.24 Swarnajayanthi Grama Swarozgar Yojana (SGSY) (1999)

Swaranjaynati Gram Swarozgar Yojana (SGSY), a Centrally Sponsored Scheme was launched with effect from 1-4-1999 by merging IRDP and allied programmes like TRYSEM, DWCRA, MWS into a single self-employment programme. Funds under the SGSY are shared by the Central and State Governments in the ratio of 75:25. SGSY aims at establishing a large number of micro-enterprises in the rural areas built upon the potential of the rural poor. Under the SGSY, assistance is given to the poor families living below the poverty line in rural areas for taking up self-employment. The persons taking up self-employment are called swarozgaris. They may take up the activity either individually or in groups, called the Self-Help Groups and emphasis was given to group approach in this programme. For successful self-employment, it is necessary to take up the right activity. For this purpose, 4 to 5 activities are selected in each Block with the help of officials, non-officials and the Bankers. These are called 'Key Activities', and should be such that they give the Swarozgaris substantial income (Sagar Mondal and Ray, 2006).

Objectives of SGSY are:

- Focused approach to poverty alleviation.
- Capitalizing advantages of group lending.
- Overcoming the problems associated with multiplicity of programmes.

The aim of SGSY is to bring every assisted family above poverty line within three years time. SGSY is intended to be a holistic programme of micro-enterprises covering all aspects of self-employment viz. formation of self-help groups, capacity building, planning activity, infrastructure build-up, technology, credit and marketing. This programme adopted a project approach in each key activity identified in the locality by integrating various agencies like District Rural Development Agencies, Panchayat Raj Institutions, Banks, line departments, non-governmental agencies and other semi-government agencies The effort is to cover 30% of the rural poor in each Block in the next five years. Identification of individual families suitable for each key activity is done through a participatory approach.

SGSY is a credit-cum-subsidy programme where credit forms the critical component. SGSY seeks to promote multiple credit rather than one-time credit injection. This programme lays emphasis on skill development through training courses. It also proposes to ensure technology up-gradation in identified activity clusters. Market intelligence, developments of markets, consultancy services, etc. are the market promotion activities envisaged under this programme. SGSY provided for uniform subsidy at 30% of the project cost, subject to a maximum

of Rs.7500. In respect of SC/STs, the subsidy and the maximum were 50% and Rs.10,000/- respectively. For *group Swarozgaris* the subsidy was kept at 50% of the project cost, subject to a maximum of Rs.1.25 lakhs. There was no limit on subsidy for irrigation projects. Subsidy will be back-ended. The programme expected at least 50% of the swarozgaris (self-employment seekers) to be SC/STs, 40% to be women and 3% disabled.

2.5.25 Providing Urban Amenities in Rural Areas (PURA) (2004)

PURA is a Rural Development programme announced by The President of India on the eve of 54th Republic day of India i.e. on 26th January 2004. The programme aims at providing amenities similar to urban areas to the rural people. Cluster-based approach was adopted to achieve uniform development of rural areas (rural.nic.in/.../pura/Presentation).

Mission: "Holistic and accelerated development of compact rural areas around a potential growth centre in a Panchayat (or group of Panchayats) through Public-Private Partnership (PPP) for provision of urban amenities in rural areas thereby improving the quality of life to bridge the rural-urban divide".

Primary Objective is to provide urban amenities in rural areas. Other objectives include: i) Reduction in migration from rural to urban areas, and ii) Ensuring insitu livelihood opportunities.

Project area: A Gram Panchayat / a cluster of geographically contiguous Gram Panchayats with a population of about 25,000 – 40,000. It is a scheme to bridge rural-urban areas and achieve balanced socio-economic development by identifying the village clusters with growth potential and creating following types of connectivity within them:

- Road, Transport and Power Connectivity;
- Electronic Connectivity (IT, Telecom);
- Knowledge Connectivity (Educational Training Institutes); and
- Market Connectivity.

Amenities to be provided include the following.

- i) Water supply
 - Piped-water supply through individual household connections.
 - Sustainability of water supply through water harvesting and water recharge activities.
- ii) Sewerage
 - 100% coverage of sewerage connections to individual households.
- iii) Solid waste management (SWM)
 - 100% coverage of SWM services to individual households.
 - Scientific treatment of solid waste.
- iv) Village streets and drainage
 - 100% of village streets paved along with storm water drains covering the entire rural population.
 - 100% of village streets to have street lighting.

- v) Increase in employment
 - Increased economic activity for employment of the entire village population.
 - Improving the standard of living to halt the migration of the population to the urban areas.

2.5.26 National Rural Health Mission (NRHM) (2005-2012)

Recognizing the importance of health in the process of economic and social development and improving the quality of life of our citizens, the Government of India has resolved to launch the National Rural Health Mission during 2005 to carry out necessary architectural correction in the basic health care delivery system. The Mission adopts a synergistic approach by relating health to determinants of good health viz. segments of nutrition, sanitation, hygiene and safe drinking water. It also aims at mainstreaming the Indian systems of medicine to facilitate health care. The Plan of Action includes increasing public expenditure on health, reducing regional imbalance in health infrastructure, pooling resources, integration of organizational structures, optimization of health manpower, decentralization and district management of health programmes, community participation and ownership of assets, induction of management and financial personnel into district health system, and operationalizing community health centers into functional hospitals meeting Indian Public Health Standards in each Block of the Country (www.apard.gov.in/ nrhm_ap.pdf).

Goals of the mission: These include the following.

- Improving the availability of and access to quality health care by people, especially for those residing in rural areas, the poor, women and children.
- Reduction in Infant Mortality Rate (IMR) and Maternal Mortality Ratio (MMR).
- Universal access to public health services such as women's health, child health, water, sanitation and hygiene, immunization, and nutrition.
- Prevention and control of communicable and non-communicable diseases including locally endemic diseases.
- Enhancing access to integrated comprehensive primary healthcare.
- Population stabilization, gender and demographic balance.
- Revitalization of local health traditions and mainstream AYUSH.
- Promotion of healthy life-styles.

Strategies:

- i) Core strategies are the following.
 - Train and enhance capacity of Panchayat Raj Institutions (PRIs) to own, control and manage public health services.
 - Promote access to improved healthcare at household level through the female health activist (ASHA).
 - Health plan for each village through Village Health Committee of the Panchayat.

- Strengthening sub-centre through a untied fund to enable local planning and action and more Multi-Purpose Workers (MPWs).
- Strengthening existing PHCs and CHCs, and provision of 30-50 bedded CHC per lakh population for improved curative care to a normative standard (Indian Public Health Standards defining personnel, equipment and management standards).
- Preparation and implementation of an inter-sectoral District Health Plan
 prepared by the District Health Mission, including drinking water,
 sanitation and hygiene, and nutrition.
- Integrating vertical Health and Family Welfare programmes at National, State, Block, and District levels.
- Technical support to National, State and District Health Missions for public health management.
- Strengthening capacities for data collection, assessment and review for evidence-based planning, monitoring and supervision.
- Formulation of transparent policies for deployment and career development of human resources for health.
- Developing capacities for preventive health care at all levels for promoting healthy life styles, reduction in consumption of tobacco and alcohol, etc.
- Promoting non-profit sector particularly in underserved areas.

ii) Supplementary Strategies: These include the following.

- Regulation of Private Sector including the informal rural practitioners to ensure availability of quality service to citizens at reasonable cost.
- Promotion of Public-Private Partnerships for achieving public health goals.
- Mainstreaming AYUSH revitalizing local health traditions.
- Reorienting medical education to support rural health issues including regulation of Medical care and Medical Ethics.
- Effective and viable risk pooling and social health insurance to provide health security to the poor by ensuring accessible, affordable, accountable and good quality hospital care.

2.5.27 National Agricultural Innovation Project (2006)

Agriculture is and will continue to be the main driver of country's economic growth with social justice. Our agriculture did extremely well and it was on the ascendancy till the mid-nineties, but after that the growth slowed down. Since 1996-97 the growth rate of agricultural GDP has been, on an average, 1.75 % per year in contrast to the rate of 4% that is required. On the other hand, the farmer has been facing rising input costs, declining returns from the inputs, uncertain market, increasing role of market in agriculture and blurring of distinction between the domestic market and the international market. To assist the farmer in these changing contexts, new strategies and innovative solutions are urgently required

which in turn will require technological support. Hence, the agricultural research system which generates technologies has to conduct the business of agricultural research in an innovative way. Therefore, World Bank aided National Agricultural Innovation Project (NAIP) has been conceived to pilot this innovation in conducting agricultural research (ww.naip.icar.org.in/downloads/pip.pdf).

The basic principles of NAIP include the following.

- Providing the agricultural research and technology development system an
 explicit development and business perspective through innovative models.
 In other words, the agricultural research system should be able to support
 agriculture as a business venture and also as a means of security of livelihood
 of the rural India while maintaining excellence in science.
- 2) Making the National Agricultural Research System (NARS) a 'pluralistic' system where every organisation public, private or civil society having stake in agricultural research has to play a role.
- 3) Working in well-defined partnership groups with clear common goals and understanding on sharing responsibilities and benefits.
- 4) Funding through competition so that a wide choice of excellent innovative ideas come in from the stakeholders themselves.
- 5) Working with focus, plan and time-frames.
- 6) Developing well-tested models for application of agricultural research and technology for profitability of farming, income generation and poverty alleviation.

Objectives of NAIP: The overall general objective of NAIP is to facilitate an accelerated and sustainable transformation of the Indian agriculture so that it can support poverty alleviation and income generation through collaborative development and application of agricultural innovations by the public organizations in partnership with farmers' groups, the private sector and other stakeholders.

The specific objectives envisaged are:

- To build the critical capacity of the ICAR as a catalyzing agent for management of change in the Indian NARS.
- To promote 'production to consumption systems research' in priority areas / themes to enhance productivity, nutrition, profitability, income and employment.
- 3) To improve livelihood security of rural people living in the selected disadvantaged regions through technology-led innovation systems, encompassing the wider process of social and economic change covering all stakeholders.
- 4) To build capacity to undertake basic and strategic research in frontier areas to meet challenges in technology development in the immediate and predictable future.

In order to address the problems plaguing Indian agriculture, it is critical to redirect and augment resources devoted to agricultural research to the farming and

livelihood systems of the poor rural communities. To utilize the technological breakthroughs that are already available for commercial use, the agricultural research priorities and strategies will have to be revisited and new system-wide approaches need to be developed and adopted.

The NAIP envisages to put up a coordinated effort on the following:

- Policy and technology options will be screened or tested by the end-user for applicability as well as for economic, social and environmental sustainability.
- In the applied and adaptive research projects, the end-user of innovations will be involved from the start of programme and projects and will remain partner till their completion.
- Both indigenous knowledge and frontier technologies will be used to generate the targeted products.

Research and Development Priorities of the NAIP: National Agricultural Policy, the Tenth Five-Year Plan of India (2002-07) including its Mid-Term Appraisal Report, the recommendations of the National Commission of Farmers and several consultations held with a wide array of stakeholders reflected the following broad national and sectoral level thrust areas.

- i) Agricultural Diversification: For making the Indian agriculture profitable, sustainable and competitive, target should be a multi-faceted approach with greater appreciation for various site-specific needs and compulsions of the farming systems, agro-climatic conditions, endowments of land and water resources, rural infrastructure, and the market-demand both within and outside the country. Facilitating services and support systems, covering credit, extension, marketing, prices, etc are critical for successful diversification. This would require efficient field operations / hatchery management; facilitating and improving processing, post-harvesting management and marketing; quality assurance and strengthening of infrastructure for rapid multiplication of disease-free planting material. On-farm experimentation should be accorded high priority for testing and disseminating technologies suitable for increasing food, feed, fodder and fuel (rural energy) security, and improving the livelihoods of resource-poor farmers.
- ii) Livestock and Fisheries Production: Emerging as "sunrise sectors" livestock in India is largely owned by small and marginal farmers and landless people in rural areas, especially in the dry land areas. So, this sector's rapid growth provides direct benefits to the poorer households. Further, the contribution of women in these sectors is substantial. Focused attention on genetic upgradation, nutrition, management, disease surveillance and control, production of feeds, diagnostic kits and vaccines, post-harvest handling and processing and marketing of livestock and aquaculture produce, by-produce and wastes will certainly bring prosperity to the poor and gains to the country. Studies on monitoring and control of trans-boundary livestock diseases have important implications for human health, international trade and compliance with hygiene and sanitary requirements of the importing country.
- iii) Genetic Resources and Bio-prospecting: Genetic resources (plant, animal and microbial) constitute one of the most important and invaluable natural resources and their proper documentation and effective utilization is an

important endeavour. Regular improvements in germplasm (plants and animals, including fish and microbes) and nutritional value of staple foods, besides management of diseases and pests of crops and livestock need to be continually attempted. Bio-prospecting will have to lay the foundation for effective mining and targeting the transfer of genes for specific traits. The vast microbial gene pool has to be explored and utilized for crop and animal improvement. This is the capital and knowledge-intensive sector, but at the same time warrants strong public-public and public-private partnerships. Interactions between research institutions and the industry need to be strengthened for realizing the full potential of frontier sciences.

- iv) Natural Resource Management: In view of the increasing water scarcity and the growing competition for water-use in agriculture, household and industry, efficient and sustainable management of water resources, with focus on watersheds and local-level community management is needed. Through its Consortia approach, the NAIP will aim to combine short- and possibly long-term economic benefits (farmers' interests) with long-term environmental concerns (public interest) and favorable institutional development. Soil health has been affected adversely owing to depletion of organic carbon, imbalanced use of nutrients, micronutrient deficiency, Integrated Production and Nutrient Management (IPNM) approach with appropriate policies, precision-agriculture, etc. may be explored to tackle the inadequate replenishment of nutrients to the soil. Global warming is becoming an important issue for sustainable agriculture. Understanding its effects and developing adaptation and mitigation strategies should receive attention. Selected areas having competitive advantage and technologies that support modern organic farming may be generated/strengthened. This research will not only contribute to enhanced nutritional and environmental security but also improve export prospects of agri-products.
- v) Integrated Pest Management: Pesticides are often not accessible to small-scale farmers and also skills and knowledge related to sound use of pesticides is lacking. Pesticide-misuse is therefore a significant health and economic hazard to producers, consumers and the environment. The evolution of new races, pathotypes, strains and biotypes of the pathogens and insect-pests worsens the scenario further. In this context, to manage such biotic stresses, efficient and effective integrated approaches are required. Consortia within the NAIP may take up elaboration and validation of IPM policies and practices for the ecologically-tolerable and economically-sustainable use of pesticides.
- vi) Value-addition and Post-harvest Processing: Value-addition to and post-harvest processing of agri-produce is an area of immense significance to meet the global competition. At present, only 7% of the output of the agricultural sector is provided value-addition and 2% of the volume of perishables is processed. In view of the small and scattered farm holdings and a majority of farmers being resource-poor, strengthening of cooperatives, self-help groups, and contract-farming assumes significance. Processing technologies need to follow the changing consumption patterns. Establishing local storage and small-scale processing capacity to minimize post-harvest losses is important.

vii) Research on Policy Analysis and Market Intelligence: In the scenario of globalization and emergence of increasingly competitive, fast-changing and quality-conscious markets the importance of market intelligence to predict the trends and develop models for forecasts cannot be overemphasized. Integration of markets within the country and with world markets, supported by appropriate policies, needs to be seriously considered.

2.5.28 Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) (2005/2009)

Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) was enacted by legislation on August 25, 2005 and the Scheme was launched in 2006. It was initially called the *National Rural Employment Guarantee Act (NREGA)* but was renamed as MNREGA on 2 October 2009. The scheme provides a legal guarantee for one hundred days of employment in every financial year to adult members of any rural household willing to do public work-related unskilled manual work at the statutory minimum wage of Rs.100 per day. The Central government outlay for scheme is Rs.40,100 crores in Financial Year 2010-11.

This act was introduced with an aim of improving the purchasing power of the rural people, primarily semi or un-skilled people living in rural India, whether they are below the poverty line or not. Around one-third of the stipulated work force is women. The government is planning to open a call center, which upon becoming operational can be approached on the toll-free number, 1800-345-22-44. The Act directs state governments to implement MNREGA "schemes". Under the MGNREGA the Central Government meets the cost towards the payment of wage, 3/4 of material cost and some percentage of administrative cost. State Governments meet the cost of unemployment allowance, 1/4 of material cost and administrative cost of State council. Since the State Governments pay the unemployment allowance, they are heavily incentivized to offer employment to workers (www.nrega.net/...rural.../CFDA-..). However, it is up to the State Government to decide the amount of unemployment allowance, subject to the stipulation that it is not to be less than 1/4th the minimum wage for the first 30 days, and not less than 1/2 the minimum wage thereafter. 100 days of employment (or unemployment allowance) per household must be provided to able and willing workers every financial year.

Process: Adult members of rural households submit their name, age and address with a photo to the *Gram Panchayat*. The Panchayat registers households after verification and issues a job card. The job card contains the details of the adult member enrolled and his/her photo. A registered person can submit an application for work in writing (for at least fourteen days of continuous work) either to the Panchayat or to the Programme Officer, based on which daily unemployment allowance will be paid to the applicant, if employment is not provided to the person concerned.

Key Stakeholders are: i) Wage seekers, ii) Gram Sabha, iii) PRIs, specially the gram panchayat, iv) Programme Officer at the block level, v) District Programme Coordinator, vi) State Government, and vii) Ministry of Rural Development.

Salient Features of the Act: These features include the following.

- Adult members of a rural household, willing to do unskilled manual work, may apply for registration in writing or orally to the local Gram Panchayat.
- ii) The Gram Panchayat after due verification will issue a Job Card. The Job Card will bear the photograph of all adult members of the household willing to work under NREGA and is free of cost.
- iii) The Job Card should be issued within 15 days of application.
- iv) A Job Card holder may submit a written application for employment to the Gram Panchayat, stating the time and duration for which work is sought. The minimum days of employment have to be at least fourteen.
- v) The Gram Panchayat will issue a dated receipt of the written application for employment, against which the guarantee of providing employment within 15 days operates.
- vi) Employment will be given within 15 days of application for work, if it is not, then daily unemployment allowance as per the Act has to be paid; liability of payment of unemployment allowance is of the States.
- vii) Work should ordinarily be provided within 5 km radius of the village. In case work is provided beyond 5 km, extra wages of 10% are payable to meet additional transportation and living expenses.
- viii) Wages are to be paid according to the Minimum Wages Act 1948 for agricultural labourers in the State, unless the Centre notifies a wage rate which will not be less than Rs.60/- per day. Equal wages will be provided to both men and women.
- ix) Wages are to be paid according to piece rate or daily rate. Disbursement of wages has to be done on weekly basis and not beyond a fortnight in any case.
- x) At least one-third beneficiaries shall be women who have registered and requested work under the scheme.
- xi) Work site facilities such as crèche, drinking water, shade have to be provided.
- xii) The shelf of projects for a village will be recommended by the gram sabha and approved by the zilla panchayat.
- xiii) At least 50% of works will be allotted to Gram Panchayats for execution.
- xiv) Permissible works predominantly include water and soil conservation, afforestration and land development works.
- xv) A 60:40 wage and material ratio has to be maintained. No contractors and machinery is allowed.
- xvi) The Central Government bears the 100 percent wage cost of unskilled manual labour and 75 percent of the material cost including the wages of skilled and semi-skilled workers.
- xvii) Social Audit has to be done by the Gram Sabha.

- xviii) Grievance redressal mechanisms have to be put in place for ensuring a responsive implementation process.
- xix) All accounts and records relating to the Scheme should be available for public scrutiny along with the details of the key stakeholders, their roles and responsibilities for effective implementation of NREGS.

The MGNREGA aims to achieve twin objectives of rural development and employment. The MGNREGA stipulates that works must be targeted towards a set of specific rural development activities such as: water conservation and harvesting, afforestation, rural connectivity, flood control and protection such as construction and repair of embankments, etc. Digging of new tanks/ponds, percolation tanks and construction of small check dams are also given importance.

Check Your Progress		
Notes: a) Space given below the question is for writing your answer.		
	b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions"	
6)	List out important programmes / schemes launched during intensive extension development Era in independent India.	
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2.6 LET US SUM UP

In this unit we have discussed the history of extension education starting from the birth of the department of agriculture to the present extension programmes. Pre-independence era comprised of extension efforts made by different national leaders at different places like Shriniketan, Marthandam, Sevagram, Gurgaon, Firka development scheme, etc. The beginning of post-independence era comprising Grow More food Campaign, Etawah pilot project, Community Development, National Extension Service, Democratic Decentralization are also discussed. In addition, under post-independence era we have also highlighted the recent intensified efforts made for development of extension with focus gradually shifted from purely agricultural and community development to technological development to development with social justice to infrastructure development, among others.

2.7 ANSWERS TO 'CHECK YOUR PROGRESS' QUESTIONS

- Important efforts of rural reconstruction that took place during preindependence period are briefly described below.
 - Sir Daniel Hamilton's Scheme of Rural Reconstruction: In 1903, Sir Daniel Hamilton formed a scheme to create model villages, in an area in urban Bengal), based on cooperative principles. He organised one village of this type and set up one Cooperative - Credit Society, organised a Central Cooperative Bank and Cooperative Marketing Society and established a Rural Reconstruction Institute in 1934.
 - Shriniketan: Shri Rabindra Nath Tagore, under his scheme of rural development work, started youth organisations in the villages in the Kaligram Pargana of his Zamindari with the help of K. Elmhirst. He tried to create a class of functionary workers who could learn to identify themselves with the people. In 1921, he established a Rural Reconstruction Institute at Shantiniketan and called it as Shriniketan.
 - Sevagram: People know Gandhiji not only as a Mahatma, or a political agitator, but also as a social and economic reformer. He made people knew that India lives in village and that the common man's uplift is the uplift of the country. Regarding development work in the country, he emphasized that the "Salvation of India lies in Cottages". The key words of his economy are: (i) Decentralized production and equal distribution of wealth, (ii) self-sufficiency of Indian villages; equal distribution of wealth brought about not by the cruel process of extermination but through the hearts of the owners by persuasion and appeal to the better sense or man.
 - Marthandam: It was set up under the auspices of Y.M.C.A. (Young Men's Christian Association) in Travancore in 1921. It was intended to symbolize the three-fold development of spirit, mind and body and evolved a five-sided programme representing spiritual, mental, physical, economic and social development. The essential technique of the centre was 'self-help with intimate expert counsel'.
 - Gurgaon experiment: Rural uplift movement on a mass scale was first started during 1927 by Mr. F. L. Brayne, Deputy Commissioner in the Gurgaon district of Punjab, adjacent to Delhi. Under his programme, a village guide was posted. Main objectives of the project included: increasing agricultural production, improvement of health and home.
 - The Royal Commission Report 1928: The Royal Commission Report (1928) established a firm foundation for the coordinated research activity. It also imbibed the agricultural administration with a new life indicating ways and means to make the organization dynamic in its activities.
 - Rural Reconstruction in Baroda: V. T. Krishnamachari in Baroda state
 conducted rural reconstruction programme in 1932. His programme
 aimed at developing a will to live better and develop capacity for selfhelp and self-reliance. The programme included the items like
 improvement of communications, digging of water wells, distribution
 of seeds and establishment of Panchayats, Cooperatives, etc.

- Firka Development Scheme of Madras State: It was Government sponsored scheme aimed at the attainment of the Gandhian ideal of Gram Swaraj by bringing about not only educational, economic, sanitary and other improvements in villages, but also by making the people selfconfident. This programme was started by Madras Government under the leadership of Shri T. Prakasam.
- The major shortcomings of the extension efforts of pre-independence era are as follows.
 - Most of them were of individual initiative.
 - Government backing and financing were not forthcoming.
 - Most of the efforts are isolated, uneven, and discontinues.
 - Staff were mostly inexperienced and untrained.
 - Plans and programmes were ill-defined, and unbalanced.
 - No evaluation was carried out, hence results not known.
 - Association and coordination with other development Departments was limited.
 - Involvement of people in planning and execution was limited.
- The Grow More Food Campaign was an organized effort launched in the post-independence period (in year 1947) to increase agricultural production. It became very popular campaign in the country. Under this programme additional staffs were provided at District and Sub-divisional (Taluka) levels. But, even after four years of working of this programme, it was observed, that the system was not functioning properly and cultivators response towards the programme was very poor. Hence, a committee was appointed to enquire into the working of this programme and to suggest ways and means of improving it. The main recommendations of the G. M. F. Enquiry Committee Report (1952) were as follows:
 - The administrative machinery of the Government should be reorganized and equipped for the efficient discharge of the duties imposed on it under the new concept of India, as a welfare state;
 - The best non-official leadership available should be mobilized for guiding the 60 million farm families in the villages in their effort to improve their own condition;
 - An extension organization should be setup for rural work which would reach every farmer and assist in the coordinated development of all aspects of rural life;
 - The pattern of staffing should consist of a BDO, four technical officers and twelve VLWs for a Tahsil or Taluk, with an average of 120 villages;
 - The development activities at the District level shall be under the Collector assisted by Specialists. The non-official side shall consist of a District Board to which MPs and MLAs should be added as members;
 - At the State level there should be a cabinet and a non-official board for facilitating joint action. The Development Commissioner should be incharge of the entire rural development programme; and

Development of Extension Education in India

- The economic aspect of village life cannot be detached from broader social aspect- agricultural improvement is, in every respect linked up with a whole set of social problems. All aspects of life are inter-related and no lasting results can be achieved if individual aspects of it are dealt with in isolation.
- 4) Etawah Project (1948-52): The Pilot Project in Rural Planning and Development, Etawah, played a key role in reorganizing the set-up of rural reconstruction for rural development and can be regarded as a forerunner of the Community Development Projects in India. After an initial period of trial and error lasting over a year and a half, an administrative pattern was evolved which for the first time facilitated extension activities to percolate to the village level.
- 5) Community Development is a movement designed to promote better living for the whole community with the active participation and initiative of the community. It is technically-aided and locally-organized self-help activity for development of the community. The Principles of community development are as follows:
 - Activities undertaken must correspond to the basic needs of the community. The first project should be initiated in response to the expressed needs of the people.
 - Local improvements may be achieved through unrelated efforts in each substantive fields through multipurpose programmes.
 - Changed attitudes in people are as important as the material achievements of community projects during the initial stages of development.
 - Community development aims at increased and better participation of the people in community affairs.
 - The identification, encouragement and training of local leadership should be a basic objective in any programme.
 - Greater reliance on the participation of women and youth in community projects invigorates (refreshes) development programmes.
 - To be fully effective, self-help projects for communities require both intensive and extensive assistance by the Government.
 - Implementation of a community development programme on a national scale requires adoption of consistent policies, and specific administrative arrangements.
 - The resources of voluntary, non-governmental organizations should be fully utilized in community development programmes at the local, national and international level.
 - Economic and social progress at the local level necessitates parallel development on a wider national scale.

Objectives of community development: The fundamental or basic objective of Community Development in India is the development of people or "Destination Man". Its broad objectives are: i) Economic development, ii) Social Justice, and iii) Democratic growth.

- 6) Following are the important programmes/schemes launched during the intensive extension development era.
 - Intensive Agricultural District Programme (IADP) (1960)
 - Intensive Agricultural Area Programme (IAAP) (1964)
 - High Yielding Varieties Programme (HYVP) (1966)
 - National Family Welfare Programme (1966)
 - Small Farmers Development Agency (SFDA) (1970-1971)
 - Marginal Farmers and Agricultural Labour Scheme (MFAL) (1971-1972)
 - Integrated Tribal Development Agency (ITDA) (1971-1972)
 - Drought Prone Area Programme (DPAP) (1973-74)
 - Training and Visit system (T&V System) (1974)
 - Integrated Rural Development Programme (IRDP) (1978-1979)
 - Training of Rural Youth for Self Employment (TRYSEM) (1979)
 - Development of Women and Children in Rural Areas (DWCRA) (1982)
 - National Agriculture Extension Project (1983)
 - Technology Mission on Oilseeds (1986)
 - Watershed Development Programme (WSDP) (1987)
 - Jawahar Rojgar Yojana (JRY) (1989)
 - Rastriya Mahila Khosh (RMK) (1993)
 - Mahila Samriddi Yojana (MSY) (1993)
 - Pulse Polio Programme (1994)
 - Institute-Village Linkage Programme (IVLP) (1995-96)
 - Agricultural Human Resource Development Programme (AHRDP) (1995)
 - Swarnajayanthi Gram Swarozgar Yojana (SGSY) (1999)
 - National Agricultural Technology Project (NATP) (1999)
 - Agricultural Technology Information Center (ATIC)
 - Agricultural Technology Management Agency (ATMA) (2001-02)
 - Market-led Extension (1999-2000)
 - Providing Urban Amenities in Rural Areas (PURA) (2004)
 - National Rural Health Mission (NRHM) (2005-2012)
 - National Agricultural Innovation Project (2006)
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