DAV University, Jalandhar

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Chapter 1

Technology Projects of The ICAR

The projects are:

- All India Coordinated Project on National Demonstrations
- Operational Research Project
- Krishi Vigyan Kendra (Agricultural Science Centre)
- Lab to Land Programme.

Project 1. All India Coordinated Project on National Demonstrations:

A Nationwide programme of demonstrations, known as National Demonstrations (ND) on major food crops was launched in 1964. The rationale behind the scheme was that unless the scientists could demonstrate what they advocated, their advice might not be heeded by the farmers. It was a nationwide project with a uniform design and pattern.

It differed from other demonstrations in the following four major aspects:

1. There was a specific yield target and there was no separate control plot near the demonstration. The idea

behind this principle was that the entire living memory of the farmers about the yield potential of the crop, as well as the entire block in which the demonstration had been laid out, would serve as the control.

- 2. The area of the demonstration plot was about one hectare (it could be one acre if bigger plots were not available), so that the feasibility of raising a good crop could be strikingly and unquestionably demonstrated.
- 3. The farmers in whose plots the demonstrations were laid out were the actual cultivators with small holdings, so that the high yields obtained were not attributed to the effects of affluence.
- 4. The agricultural scientists conducted these demonstrations in association with local extension agencies / workers.
- The national demonstrations were intended to show the genetic production potentiality of new technologies and to influence both the farmers and the extension agencies.

The specific objectives of national demonstrations, according to Prasad, Choudhary and Nayar (1987), were as follows:

- 1. To demonstrate convincingly to the farmers and extension personnel the genetic production potentialities of major crops per unit area of land and per unit time, and encourage them to adopt and popularize these technologies for accelerating production.
- 2. To fully exploit these demonstrations for the purpose of training farmers and field extension functionaries in improved cultivation practices.
- 3. To provide the research workers an opportunity to get firsthand knowledge of the problems being faced by the

farmers in adopting high yielding varieties and recommended package of practices.

- 4. To determine the income and employment generation potentialities of the crops / subjects under demonstration, and educate the farmers and extension agents about them.
- 5. To influence the extension systems of the State Departments of Agriculture, voluntary organizations etc. in the country by demonstrating the yield gaps and pointing out operational constraints.

Regarding performance it was observed that on an average, 50 percent of the demonstrations exceeded the targeted yields of 9 and 11 tonnes per hectare from 2- and 3-crop demonstrations respectively.

Project 2: Operational Research Project:

The Operational Research Project (ORP), according to Prasad, Choudhary and Nayar (1987), aimed at disseminating the proven technology in a discipline/area among farmers on a watershed basis, covering the whole village or a cluster of villages, and concurrently studying constraints (technological, extension or administrative) as barriers to the rapid spread of improved technical know-how.

The conceptual framework of ORP was that it was primarily devoted to demonstrating the impact of new technologies on a large scale involving a whole village or a cluster of villages at a time. It attempted to involve allied agencies and institutions to show the need for interinstitutional and interdisciplinary approach, the method and the way they could be made to work together.

The ORPs considered two kinds of problems: first, the common agricultural problems affecting the farming community requiring group or community action, e.g. plant

protection and rodent control; and secondly, total resources development of the watershed area.

The specific objectives of ORP were as follows:

- 1. To test, adopt and demonstrate the new agricultural technology on farmers' fields in a whole village or in a cluster of few contiguous villages/watershed area.
- 2. To determine the profitability of the new technologies and their pace of spread among the farmers.
- 3. To identify the constraints both technological, as well as socio-economic which are barriers to rapid change.
- 4. To demonstrate group action as a method of popularizing the modern technologies at a faster rate.

The ORPs were initiated in 1974-75. The ORPs demonstrated latest agricultural technologies on the farmers' fields to influence the farmers as well as the State extension agencies. It also studied the socio-economic, technological, extension and administrative barriers which were coming in the way of rapid transfer of technologies and pointed out the same to the extension agencies.

Project 3. Krishi Vigyan Kendra (Agricultural Science Centre):

The Krishi Vigyan Kendra (KVK), according to Prasad, Choudhary and Nayar (1987), is designed to impart need-based and skill-oriented vocational training to the practising farmers, in-service field level extension workers, and to those who wish to go in for self-employment.

Mandates of KVK

 Conduct 'On Farm Testing' (OFT) in farmers' field for identifying technologies suitable for location specific sustainable land-use systems.

- Organize 'Frontline Demonstrations' (FLD) on various crops/livestock to generate production data and feedback.
- Organize training programmes to update the extension personal with recent advances in agricultural research on a regular basis.
- Organize short and long term training courses in Agriculture and allied enterprises for farmers, rural youth and unemployed women with emphasis on "Learning by doing" for higher output and to generate self employment.
- Function as knowledge cum resource centre for agriculture and allied sectors in the district.
- Production of quality seeds and planting materials for distribution among the farmers.

Krishi Vigyan Kendras		No. of KVKs	
ATARI, Zone I, Ludhiana – 69 KVKs			
	Himachal Pradesh	13	
	Jammu and Kashmir	21	
	Punjab	22	
	Uttarakhand	13	
ATARI, Zor			
	Delhi	01	
	Haryana	18	
Rajasthan		44	
ATARI, Zor	ATARI, Zone III, Kanpur– 83 KVKs		
Uttar Pradesh		83	
ATARI, Zone IV, Patna- 63 KVKs			
	Bihar		
	Jharkhand	24	

ATARI, Zone V, Kolkata– 59 KVKs			
	A & N Islands	03	
	Odisha	33	
	West Bengal	23	
ATARI, Zon	ne VI, Guwahati- 46 KVKs		
	Assam	26	
	<u>Mizoram</u>	08	
	Nagaland	11	
	Tripura	07	
ATARI, Zon	ne VIII, Pune– 79 KVKs		
	Maharashtra	47	
	Gujarat	30	
	Goa	02	
ATARI, Zon	ne IX, Jabalpur– 79 KVKs		
	Chattisgarh	27	
	Madhya Pradesh	52	
ATARI, Zon	ne X, Hyderabad– 74 KVKs		
	Tamil Nadu	31	
	Puducherry	03	
	Andhra Pradesh	24	
	Telangana	16	
ATARI, Zon			
	Karnataka	33	
	Kerala	14	
	Lakshadweep	01	
Total		706	

The basic concepts of a KVK are:

1. The centre will impart learning through work-experience and, hence, will be concerned with technical literacy, the

- acquisition of which does not necessarily require as a precondition the ability to read and write.
- 2. The centre will impart training only to those extension agents who are already employed or to practising farmers and fishermen. In other words, the centres will cater to the needs of those who are already employed, or those who wish to be self-employed.
- 3. There will be no uniform syllabus for a KVK. The syllabus and programme of each centre will be tailored according to the felt needs, natural resources and the potentials for agricultural growth in that particular area.

The three fundamental principles, viz.:

- (i) Agricultural production as the prime goal,
- (ii) Work-experience as the main method of imparting training, and
- (iii) Priority to weaker sections of the society, are the backbone of the KVK programme.

The main idea is to influence the productivity to achieve social justice for the most needy and deserving weaker sections of the society like the tribal farmers, small and marginal farmers, agricultural labourers, drought and flood affected farmers, and so on.

Need-based training courses are designed for different types of clientele. Courses are based on the information received through family and village survey. No certificate or diploma is awarded irrespective of the duration of the courses.

After the training, follow-up extension programmes are organized for converting the acquired skills of the trainees

into practice. While designing the courses, the concept of farming system is taken into account to make the enterprises commercially viable.

The main objective of the KVK is to provide a strong training support for bringing about production breakthrough in agriculture.

The specific objectives are as follows:

- 1. Plan and conduct survey of the operational area to prepare the resource inventory with special reference to identify the training needs of the farming community.
- Compile all relevant recommendations/package of practices for the district to be meaningfully utilized in the training courses and the follow-up extension programmes.
- 3. Plan and conduct production oriented, need-based, short and long duration training courses both on the campus, as well as in the villages for various target groups with priority on the weaker and poorer sections.
- 4. Organize Farm Science Clubs, both in rural schools and in villages to inculcate in the younger generation a liking for and an interest in agricultural and allied sciences and for scientific farming through supervised projects.
- Develop and maintain the campus farms and demonstration units on scientific lines as the facilities for providing work- experience to the trainees as also dissemination of the latest technical knowhow.
- 6. Provide practical training facilities of the centre to the teachers and the students of vocational agriculture of higher secondary schools.

- 7. Impart some general education to the rural illiterates and school drop outs in order to make them not only good farmers but also better citizens.
- 8. Provide training facilities in homemaking and nutrition education for rural community and gradually encompass other important areas such as home crafts and cottage industries, consistent with the requirements of integrated rural development, in collaboration with concerned organizations.

The objectives stated here are common for all the KVKs. In addition, each KVK has to have a MANDATE i.e. a specific set of responsibilities to perform. The mandate of a KVK is unique for it and is determined on the basis of the most important needs of the clientele, their resources and constraints, and nature of the ecosystem. The success of a KVK is judged by the extent to which it fulfills its obligations specified in the mandate.

The first KVK was established in 1974 at Pondicherry under Tamil Nadu Agricultural University. The priority for establishing KVKs is given to hilly areas, drought prone areas, forest areas, coastal areas, flood prone areas, and areas dominated with tribal farmers, weaker sections, small farmers and landless labourers. The objective is to gradually cover the entire country with one KVK in each district, priority being given to the backward areas.

Project 4. Lab to Land Programme:

The Lab to Land Programme (LLP) was launched by the ICAR in 1979 as a part of its Golden Jubilee celebration. The overall objective of the programme was to improve the economic condition of the small and marginal farmers and landless agricultural labourers, particularly scheduled castes and scheduled tribes, by transfer of improved technology

developed by the agricultural universities, research institutes etc.

The specific objectives of the lab to land programme, according to Prasad, Choudhary and Nayar (1987) were:

- 1. Study and understand the background and resources of the selected farmers and landless agricultural labourers. To introduce low-cost relevant agricultural and allied technologies on their farms and homes for increasing their employment, production and income.
- 2. Assist the farmers to develop feasible farm plans keeping in view the availability of technologies, needs and resources of the farmers, and the resources which could be made available from external sources and agencies.
- 3. Guide and help the farmers in adopting improved technologies as per their farm plans, and demonstrate to them the economic viability of those technologies as well as methods of cultivation and farm management.
- 4. Organize training programmes and other extension activities, in relation to their adopted practices, and prepare them for active participation in agricultural development programmes of the State.
- Make the farmers aware of the various opportunities and agencies which they could utilize to their economic advantage.
- 6. Develop functional relations and linkages with the scientists and institutions for future guidance, advisory services and help.
- 7. Utilize this project as a feedback mechanism for the agricultural scientists and extension functionaries.

The programme was initiated with 75,000 farm families over the whole country. Major thrust in the programme was

to introduce the most appropriate technologies that would help in the diversification of labour use and introduction of supplementary sources of income.

Five-Year Plan for Rural Development

According to 2011 census, the country's rural population is almost 83.25 crore (68.8% of total population). There has been wide consensus that the rural development should be inclusive and sustainable in order to alleviate the poverty. The tentative Gross Budgetary Support (GBS) for the Ministry of Rural Development for the Twelfth Five Year Plan (2012-17) is Rs. 44,3261 crore (against the Rs. 29,1682 crores of Eleventh Plan period) which includes the major programs. Although agriculture now accounts for only 14% of Gross Domestic Product (GDP), it is still the main source of livelihood for the majority of the rural population. As such rapid growth of agriculture is critical for inclusiveness. Important structural changes are taking place within the sector and there are definite signs of improved performance (Sarkar, 2014). Agricultural growth has accelerated compared to the Tenth Plan and diversification is proceeding (GOI, 2012). According to MoA GOI (2014) as per the land use statistics 2011-12, the total geographical area of the country is 328.7 mha, of which 140.8 mha is reported as net sown area and 195.2 million hectares is the gross cropped area with a cropping intensity of 138.7%. The net irrigated area is 65.3 million hectares. Agriculture and Allied Sector contributed approximately 13.9% of India's GDP (at constant 2004-05 prices) during 201314. (CSO, MoSPI, 2014). There has been a continuous decline in the share of agriculture and allied sector in the GDP from 14.6% in 2010-11 to 13.9 % in 2012-13 (IDFCRDN, 2014). Falling share of Agriculture and Allied Sectors in GDP is an expected outcome in a fast growing and structurally changing economy.

Five-Year Plans for Agricultural and Rural Development First Five-Year Plan (1951-56)

Agriculture was given the topmost priority in this plan. It directed towards increasing production and strengthening economic infrastructures like irrigation, power and transport after independence. There was an acute food shortage in the country and to solve the food problem priority was given to increase production of food grains. The abolition of zamindari system, launching of the community development programme, growing more food campaign along with improvement in other related spheres like marketing, fisheries, animal husbandry, soil conservation and forestry were the notable features. The production of food grains increased from 54 million tones in 1950-51 to million tones and production of all agricultural commodities increased by 22.2% to 32% at the end of the Plan. The total outlay during this plan was to be spent on agriculture and irrigation. The targets set for the plan were almost achieved and even in some cases, exceeded. 'Community Development Programme' (CDP) was launched on 2 October 1952, through which emphasis was given to the development of agriculture, irrigation, energy and power, industry and minerals, village small scale industry, transport, employment etc. The National Extension Service Programme, Mettur Dam, Hirakud Dam, and Bhakra Nangal Dam were established as irrigation programme during the plan (GOI, 1952) The Government had taken steps providing fund for agriculture workers especially to rehabilitate the landless workers. These workers were granted economic fund, training in agriculture, soil conservation and other related agricultural issues were also given consideration. Importance also was given in improving the transport and communication, social services, railway services, telegraphs etc. During this plan,

five Indian Institute of Technology were set up in five locations in India. To improve the higher education i.e. college and university education the University Grants Commission was set up in India. The target growth of national income of the first five year plan was 2.1% and achieved 3.6%.

Second Five-Year Plan (1956-61)

In this plan, emphasis was shifted from agriculture to industry and only about 21% of the actual plan expenditure was spent for agricultural development. The food production rose from 65.8 million tones to 79.7 million tones as against the fixed target of 80.5 million tones. There was a shortfall in the production of all crops except sugarcane. The second plan was based on the Mahalanobis model, which is an economic development model developed by the Indian statistician P. C. Mahalanobis in 1953. The Khadi and Village Industries Programme, Intensive Agricultural District Programme, Tribal Area Development Programme, Village Housing Projects Scheme were the major programmes of rural reconstruction. The Intensive Agricultural District Program (IADP) was introduced in 1962 for increasing of production with the help of essential elements such as supply of fertilizers, pesticides, improve of seeds etc. The objectives of the plan were increase of national income, reduction of poverty, rapid industrialization, reduction of inequality in wealth, large expansion of employment opportunities etc. (GOI, 1956). Heavy industries were established like Hydroelectric power projects and five steel plants at Bhilai, Dugapur and Rourkela were established in India. In 1958, the Atomic Energy Commission was formed under Homi J. Bhabha as the first Chairman. The Tata Institute of Fundamental Research was established as a research institute. The target growth of national income in this plan was 4.5% and achieved 3.6%.

Third Five-Year Plan (1961-66)

The objective of this plan was to achieve self-sufficiency in food grains and to increase the agricultural production to meet the needs of industry and export. The plan accorded higher priority (20.5%) to agriculture and irrigation than to industrial development (20.1%). The plan targeted to increase overall agricultural production by 30%, but the achievements were disappointing. The actual output of food grains was 88.4 million tones in 1964-65 and 72.3 million tons in 1965-66, caused due to the drought condition of 1965-66. Food production was increased by 10% only as against the target of 30%. Consequently, the country has to import Rs. 1,100 crores worth of food grains to meet the domestic demand. Many cement and fertilizer plants were built. At the grass root level many schools have been started to improve primary education. During this period the State Electricity Boards and State Secondary Education Boards were formed. States were made responsible for secondary and higher education. State road transportation corporations were formed and local road building became a state responsibility. The target growth of national income was 5.6% and achieved 3.9%. Applied Nutrition Program, Tribal Development Block Programme, Rural Works Programme, Intensive Agricultural Area Programme, The Rural Industries Projects, High Yielding Variety Programme etc were started. The Applied Nutrition Programme was introduced in the rural areas in 1962 in collaboration with UNICEF (Arora, 1986). The objectives of the programme were production and distribution of nutritious food for pre-school children, pregnant and nursing mothers. In 1957, Balwant Rai Mahta Committee recommended to form the three tiers Panchayatiraj i.e. Gram Panchayatiraj at village level, Panchayats Samiti at Block level and Zilaparishad at District level. The three tier system of Panchayatiraj Raj was first adopted by Rajasthan on 2 October, 1959.

Three Annual Plans (1966-69)

From 1966-1969 the three interim annual plans were made for development. During this period, a high priority was given to minor irrigation and this was followed by adoption of a high yielding variety programme to increase agricultural production and productivity. Thus, this period is considered crucial for Indian agriculture as the green revolution took place during this period and the Government set Agricultural Prices Commission to assure minimum support prices to farmers and the Food Corporation of India for maintaining buffer-stock to overcome fluctuation in the of food grains and supplies their prices. Due implementation of HYV programme, there was a recorded food grain production of 95.6 million tones in 1968-69.

Fourth Five-Year Plan (1969-74)

The Fourth Plan had two objectives for the agricultural sector; (i) to provide the conditions necessary for a sustained increase of food production by about 5% per annum over the decade 1969-78 and (ii) to enable a large section of the rural population including small farmers, farmers in the dry areas and agricultural labourers to participate in the process of agricultural development and share its benefit. The Green Revolution introduced during the annual plans had a good result and the farmers particularly in the wheat producing belt were here interested to adopt HYV cultivation. The actual production of food grain was 104.7 million tones in 1973-74 as against the targeted increase of 129 million tones. The plan highlighted on the 'social justice' and 'Garibihatao'. It emphasized on the improvement of poor and down-trodden

classes. The Government emphasized on nationalization of banks and 14 major Indian banks recognized as national bank. Target growth of the national income was 5.7% and achieved 3.3%. The Crash Scheme for Rural Employment, Programme, Prone Area Small Development Agency, Tribal Area Development Agency, and Pilot Intensive Rural Employment Programme were the major rural development programmes during this period. The restoration of ecological balance, soil and conservation, development of small and marginal farmers and agricultural, management of irrigation resources etc. were the objectives of this plan (GOI, 1969). The Pilot Intensive Rural Employment Programme (PIREP), it was started and implemented in areas having different socio-economic conditions on a pilot basis. The Small Farmers Development Agency (SFDA) and the Marginal Farmers and Agricultural Labourers Development Agency (MFALDA) were launched to improve the socio-economic conditions of the small and marginal farmers by providing dug wells, pump sets, tube wells and proving loans for animal husbandry, diary, sheep and goat rearing, poultry etc. In 1970-1971 the Tribal Area Development programme (TADP) was started in tribal areas in four states Andra Pradesh, Bihar, Madhya Pradesh and Orissa. The objectives of the programme was bringing the tribal areas in the mainstream of economic development of the country in the fields of agriculture, animal husbandry, irrigation development, construction road, land reforms etc. In 1974, the Minimum Needs Programme (MNP) introduced during the tenure of four plans to raise the standard of living below the poverty line. The objectives of the programme were the providing minimum elementary education for the children, public health facilities, family planning, preventive

medicine, nutrition, improvement of urban slums areas, reconstruction of village roads etc.

Fifth Five Year Plan (1974-1979)

During the Fifth Plan, Rs. 8080 crores (nearly 21% of the plan outlay) was made for agricultural development and irrigation. The plan accorded priority for the spread of HYV greater use of fertilizer, pesticides and cultivation, insecticides to increase agricultural production. The plan also provided special emphasis on; (i) small and marginal farmers, (ii) dry farming technique, (iii) evolving HYV seeds for other crops like paddy, (iv) social conservation measures on saline and alkaline soils and for desert land reclamation. During this plan, the production of food grains increased substantially (232.5 million tones). But the output of pulses and oil-seeds, paddy remained stagnant and caused considerable hardship for the common man. The plan was terminated in 1978 instead of 1979. The Hill Area Development Programme, Special Livestock Production Programme, Food for Work Programme, Desert Development Programme, Training of Youth for Self-employment were started. In 1975-1976 the GOI initiated a Special Livestock Production Programme (SLPP) on the basis of the recommendations of the National Agriculture Commission on for providing employment opportunities to the weaker sections of the rural mob. The Desert Development Programme (DDP) was started in 1977-1978 for raising the level of production, income, employment of people of the desert areas. The program started in 131 Blocks in 21 Districts in five states (Rajasthan, Haryana, Gujarat, Himachal Pradesh, and Jammu & Kashmir). On 15 August, 1979 the Training of Rural Youth for Self-Employment (TRYSEM) is launched by the Government. The programme is designed as an instrument for transforming the rural youth into a productive force. From 18-35 age groups of the rural youth belonging below the poverty line are eligible for training. Both male and female belonging to SCs/STs were eligible with general categories. The training are imparted through formal training institutions such as Industrial Training Institutes, Polytechnics, Krishi Vighan Kendras, Nehru Yuva Kendras, Khadi and Village Industries Centres, Voluntary Organisations and also through reputed master craftsmen (GOI, 1974). The target growth of national income was 4.4% and actual growth was 4.9%.

Rolling Plan (1978 - 80)

There were two Sixth Plans. Government put forward a plan for 1978-1983. However, the government lasted for only 2 years. Congress Government returned to power in 1980 and launched a different plan.

Sixth Five-Year Plan (1980-85)

The Sixth Five-Year Plan recognized that the growth of the Indian economy depends significantly on a rapid growth in agriculture and rural development. The main objective of the plan was to increase agricultural production, generate employment and income opportunities in rural areas and strengthen the forces of modernization for achieving selfreliance. Further, the plan aimed at accelerating the pace of the implementation of the land reforms and institution building for beneficiaries. The plan aimed at 3.8% annual growth in agricultural production. But, the actual growth-rate was 4.3%. This plan was officially held as a great success particularly due to its success on the agricultural fund. Onechild policy adapted to birth control. Integrated Rural Development Programme (IRDP), National Employment Programme (NREP). In 1980, replaced the erstwhile Food for Work and launched NREP. Creation of employment, creation of rural economy, livelihood improvement of rural poor etc. are the objectives of the NREP. The major rural development programmes such as SFDA, MFALDA, NREP, IRDP, DPAP and the MNP have become too well known. They are part of the 20-point programme of 1982. In 1982, the Development of Women and Children in Rural Areas (DWCRA) is formulated for the development of women and children especially belonging to the SCs and STs. The target group of the DWCRA is as Rural Landless Employment Guarantee The Programme (RLEGP) was introduced in 1983 with the objectives of providing employment opportunities for at least one member of every landless household. The wages for workers paid under this programme partly in food and partly in cash. RLEGP merged with JRY programme. The target growth of the national income was 5.2% and actual growth was 5.3%.

Seventh Five-Year Plan (1985-90)

The Seventh Plan aimed at an annual average increase of 4% in agricultural production. The plan allocated Rs. 39,770 crores for agricultural sector (22% of the total plan outlay). The major programmes adopted during the plan were, a special rice production programme in the eastern region, national water-shed programme for rain-fed agriculture, national oil-seed development project and social forestry. Unfortunately enough, the first three years of this plan were poor monsoon years. As a result, agricultural production received a set-back during these years. However, it increased sufficiently during the last two years for which the agricultural production recorded a commendable growth of This plan was constituted with several antipoverty 4 1% programmes. On 1st April, 1989, Jawahar Rozgar Yogana was launched with merged the earlier two employment schemes namely, RLEGP and NREP. Employment for the unemployed in rural areas, strengthening the rural economic

infrastructure and improvement in the overall quality of life in rural areas were the objectives of the JRY. It was a centrally sponsored scheme and expenditure was shared by central government and state government in the ratio of 80:20. The Million Wells Scheme (MSW) programme launched in 1988-1999 providing open imitation wells free of cost to rural poor, small and marginal farmers belonging to SCs/STs and free bonded labourers including scheme of Bhoodhan and land ceiling. Indira AwasYojana (IAY) is an integrated part of RLEGP. The aim of the Yojana is providing dwelling house to the poorest of the poor of the rural masses belonging to SCs/STs and bonded labourers. The houses should have a smokeless kitchen and sanitary latrine. The target of national growth income was 5.05% and its actual growth was 5.8%.

Eighth Five-Year Plan (1992-97)

The basic objectives of this plan were to consolidate the gains already achieved in agricultural productivity and production during the last 40 years; to sustain agricultural productivity and production in order to meet the increased demands of the growing population; to enlarge the income of the farmers; to create more-employment opportunities in the agricultural sector; and to step up agricultural exports. 22% of the total plan outlay amounting to Rs. 93,680 crores was allotted for agriculture and irrigation. The Plan targets a growth rate of 4.1% per annum for the

agricultural sector. Thus, during different plan periods, the Government has accorded vital importance to the agricultural sector and has tried to increase the agricultural production and productivity through different policy measures. In 1989-1991 period was an economic instability in India and hence no five year plan was implemented. Between 1990 and 1992, there were only Annual Plans. The privatization and

liberalization were started from this period of five year plan. Modernization of industries was target goal of the eighth Plan. During this plan India became as a member of the WTO on 1 January, 1995. The major objectives of the eight plans were - control rapid population growth, poverty eradication, increase employment, strengthening the infrastructure, develop tourism management, human resource development, Involvement of Panchayatiraj in rural development, Nagar Palikas Law, NGO's and Decentralizations of power and people's participation in governmental policies. In this plan, target national growth income was 5.6% and achieved 6.78%. During this plan period the major programmes were IRDP, JRY, IAY and MWS.

Ninth Five-Year Plan (1997-2002)

Ninth Five Year Plan was developed in the context of four important dimensions: (i) Quality of life, (ii) generation of productive employment, (iii) regional balance and (iv) selfreliance. Target growth was 6.5% but 5.35% actual growth achieved. It was formulated from 1997-2002 with the prime objectives like drastic industrialization human development, poverty eradication, self-reliance in economy, increase employment, to provide basic infrastructure of life like education for all, safe drinking water, provide primary health care, food security, women empowerment etc. During 1999-2000 the IRDP, TRYSEM, DWCRA, SITRA, MWS were merged to form a new self-employment program called rename as Swarna Jayantri Gram Swarajgar Yojana (SJGSY) with effect from 1st April, 1999. The eradication of poverty, security of nutritional food, water supply, empowerment of women and socially disadvantages groups, provide universal primary education, health, shelter etc. (GOI, 1997).

Tenth Five-Year Plan (2002-2007)

During the tenth five year plan under Swarna Jayanti Gram Swarozgar Yojana (SJGSY) emphasized to form 1.25 lakhs SHG benefiting 25 lakhs women, establishment of micro enterprises, training for improvement of skill and capacity building, credit linkages vocational training for about 5 lakhs rural women, etc. The erstwhile wage employment Programmes. JGSY and EAs were merged and a new scheme namely Sampoorna Grameen Rozgar Yojana (SGRY) was launched from 15th August, 2001. The Pradhan Mantri Gram Sadak Yojana (PMGSY) introduced in the year 2000-2001 for road connectivity in the rural areas. During this plan a new scheme viz, Rastriya Sam Vikas Yojana was introduced to investigate the real problems of high poverty, unemployment etc. which would remove barriers to growth and accelerate the development process. The scheme is founded by Central and State Government in the ratio of 75:25. The target growth was 8.1% of national income and achieved 7.7%.

Eleventh Five-Year Plan (2007-2012)

The eleventh five year plan was constituted with two rural development program i.e. Bharat Nirman Programme and flagship program to provide opportunities to improve living conditions as well as livelihoods. The objective of the Bharat Nirman Programme is to impart a sense of urgency to create rural infrastructure by setting time-bound goals under various schemes, creation of average rate of irrigation, rural roads connectivity for rural development, poverty alleviation in India, rural electrification, pure drinking water etc. which form a part of the Bharat Nirman Program. In order to roads connectivity for rural habitations Pradhan Mantri Gram SadakYojana (PMGSY) was launched as a hundred CSS in December, 2000. The flagship programs were included

National Rural Employment Guarantee Programme (NREGP), National Rural Health Mission (NRHM), Integrated Child Development Services (ICDS), Sarva Shiksha Abhiyan (SSA), Mid-Day-Meal (MDM), National Social Assistance Programme (NSAP), Total Sanitation Campaign (TSC), Backward Regions Grant Fund (BRGF). The BRGF has replaced the Rastriya Sam Vikas Yojana (RSVY) in order to provide a more participative approach through the involvement of Panchayati raj institutions (GOI, 2007).

Twelfth Five-Year Plan (2012-2017):

Twelfth Five Year plan is devoted to agricultural and rural development and committed to all round development of the country. The following seven major flagship programmes are operating in rural areas. MGNREGA, NFRLM, IAY, NRDWP, TSP, IWDP, PMGSY, RGGVY (GOI, 2012). Besides these, the Government of India launched the other programmes for uplift of the poor classes like village self-sufficiency scheme, Member of Legislative Assembly Constituency Development Scheme, Integrated Sanitary Complex for Women, Clean Village Campaign and Rural Sanitation, Capital programme of Infrastructure Development by rural local Bodies, Construction of village Administrative Officers Office Buildings, Rejuvenation of water Bodies and Rain Water Harvesting in Rural Areas etc.

Objective of Rural Development

The main objective of the Rural Development is improving the living standards of rural people by utilizing the easily available natural and human resources. The other objectives of rural development programmers are as follow:

- 1. Development of agriculture and allied activities.
- 2. Development of village and cottage industries and handicrafts.

- Development of socio-economic infrastructure which includes setting up of rural banks, co-operatives, schools etc.
- 4. Development of community services and facilities i.e. drinking water, electricity, rural roads, health services etc.
- 5. Development of Human resource mobilization.

Agriculture & Rural Development Programme

1) Agriculture Development Programmes

S. No.	Agricultural Development Programme	Year of Beginning	Objective/Description
1	Intensive Agriculture District Program (IADP)	1960	To provide loan, seeds, fertilizer tools to the farmers.
2	Intensive Agriculture Area Program (IAAP)	1964	To develop the special harvest.
3	High Yielding Variety Program (HYVP)	1966	To increase productivity of food grains by adopting latest varieties of inputs for crops.
4	Green Revolution	1966	To increase the food <i>grains</i> , specially food production.
5	Nationalization of banks	1969	To provide loans for agriculture, rural development and other priority sector.
6	Marginal Farmer and Agriculture Labour Agency (MFALA)	1973	For technical and financial assistance to marginal and small farmer and agricultural labour.
7	Small Farmer Development Agency (SFDA)	1974	For technical and financial assistance to small farmers.
8	Farmer Agriculture Service Centres (FASC)	1983	To popularize the use of improved agricultural instruments and tool kits.
9	Comprehensive Crop Insurance Scheme	1985	For insurance of agricultural crops.
10	Agricultural and Rural Debt Relief Scheme (ARDRS)	1990	To exempt bank loans uptoRs. 10,000 of rural artisans and weaver.

11	Intensive Cotton Development Programme (ICDP)	2000	To enhance the production, per unit area through (a) technology transfer, (b) supply of quality seeds, (c) elevating IPM activities / and (d) providing adequate and timely supply of inputs to the farmers.
12	Minikit Programme for Rice, Wheat & Coarse Cereals	1974	To increase the productivity by popularising the use of newly released hybrid/high yielding varieties and spread the area coverage under location specific high yielding varieties/hybrids.
13	Accelerated Maize Development Programme (AMDP)	1995	To increase maize production and productivity in the country from 10 million tonnes to 11.44 million tonnes and from 1.5 tonnes / hectare to 1.80 tonnes / hectare respectively upto the terminal year of 9th Plan i.e. 2001-2002 (revised).
14	National Pulses Development Project (NPDP)	1986	To increase the production of pulses in the country to achieve self-sufficiency.
15	Oil Palm Development Programme (OPDP)	1992	To promote oil palm cultivation in the country.
16	National Oilseeds and Vegetable Oils development Board (NOVOD)	1984	The main functions of the NOVOD Board are very comprehensive and cover the entire gamut of activities associated with the oil seeds and vegetable oil industry including — production, marketing, trade, storage, processing, research and development, financing and advisory role to the formulation of integrated policy and programme of development of oil seeds and vegetable oil.

15	C (D)	1001	To increase production
17	Coconut Development Board	1981	 and productivity of coconut. To bring additional area under coconut in potential non-traditional areas. To develop new technologies for product diversification and byproduct utilisation. To strengthen mechanism for transfer of technologies. To elevate the income level of small and marginal farmers engaged in coconut cultivation. To build up sound information basis for coconut industry and market information. To generate ample employment opportunities in the rural sector.
18	Watershed Development Council (WDC)	1983	Central Sector Scheme (HQ Scheme)
19	National Agriculture Technology Project (NATP)	1999	Location specific ,demand driven TOT to the farmers with research extension farmer linkages etc.
20	Agriculture Technology Management Agency (ATMA)	1999	Autonomous district level institution to make extension system decentralized and demand driven by constituting ATMA Governing Board and ATMA Management Committee.
21	Pradhan Mantri Gram SadakYojana (PMGSY)	2000	To provide casy accessibility to rural community by connecting every village by all weather roads

22	Antyodaya Anna Yojana (AAY)	2000	To provide food-grains (wheat, rice) at highly subsidized rate to the bel
			families (Rs. 2.perk for wheat. R.M. per kg forrice).
23	Sampoorna Gramin Rozgar Yojana (SGRY)	2001-02	To provide additional wage employment to all rural poor (BPL & APL) & food security.
24	National Forest Action Programme (NFAP)	2002	Livelihood based forest resource management by Joint Forest Management (JFM) committee.
25	Kisaan Call Centre (KCC)	2004	KCC agents responding farmers queries in 23 local dialects. Toll free no. 1551 of BSNL/MTNL from 6 A.M to 10 P.M.

Rural Development Programmes Before Independence

S. No.	Year	Name of Social Worker	Name of the Programmes & Place	Key Objectives
1	1901	British Govt	The Famine Commission	Appointment of experts for improvement of agriculture
2	1903	Sir Daniel	Scheme of Rural Reconstruction in Sunder ban Bengal	Experimentation with model villages Organisation of a Central Cooperative Bank and Cooperative Marketing Society.
3	1921	Ravindernath Tagore	Shriniketan Experiment in Bengal	A group of 8 villages selected for development of agriculture, cottage industries etc., started a youth movement called "Bratachari Movement" and "Shiksha Satra"

4	1921	Dr. Spencer	Marthandam	From the Demonstration
		1	Experiment near	centre at Marthandam, about
			Trivandram	100 villages were covered
				for improving grain
				vegetables seeds poultry,
				bee keeping etc.
5	1927	Mr. F.L.	Gurgaon	The Program introduced
		Brayne	Experiment in	improved seeds,
		Brayne	Punjab	implements, method of
				cultivation with the help of
				village guide
6	1928	British Govt.	Royal	Visual Demonstration to
			Commission on	motivate farmers in farmer's
			Agriculture	field & appointment of
				Director of Agriculture
7	1933	Mahatma	Sewagram	To serve under privileged
		Gandhi	Experiment in	villagers & make them self
			Wardha	sufficient& reliant
8	1947	Govt. of India	Grow more food	To increase Agricultural
			Campaign	Production

The main objective of rural development has been to remove poverty of the people and fill the widened gap between the rich and the poor. This has been also vocalized in the policy of the government which says: said, 'Rural poverty alleviation has been the primary concern in the economic planning and development process of the country, rural development which encompasses the entire gamut of improvement in the overall quality of life in the rural areas can be achieved through eradication of poverty in rural areas.'

Keeping in view the planning policy in mind, various schemes of development, especially the development of agriculture, the main occupation of the rural people, have been introduced.

The major early programmes were:

- a) Intensive Agricultural Area Programme (IAAP)
- b) Intensive Agricultural District Programme (IADP)
- c) High Yielding Varieties Programme (HYVP)
- d) Rural Industries Projects and Rural Artisans Programmes (RIP and RAP).

Besides the above programmes, several poverty alleviation programmes have also been launched by the central and state governments for the rural people. These are discussed in the following paragraphs below:

1. 20-PointProgramme:

This has been a major programme of rural development encompassing various aspects of rural people. This programme is associated with former Prime Minister Indira Gandhi, who introduced it in July 1975 for reducing poverty and economic exploitation and for the uplift of weaker sections of society. She gave the slogan 'Garibi Hatao' during parliamentary elections.

The important goals of this programme were:

- a) Welfare of the rural masses.
- b) Increase in rural employment.
- c) Minimum wages to landless labourers.
- d) Uplift of the SC and ST people.
- e) Growth of housing facilities.
- f) New programmes of family planning.
- g) Extension of primary health facilities.
- h) Making primary education more effective.
- i) Welfare of women and children.
- j) Some other programmes—drinking water facilities, public distribution system, increasing power production, etc.

The programme was discontinued with the change in government (during Janata Party government). However, it was revised in 1982 after the coming of congress government at the centre with an emphasis on eradicating poverty and reducing income inequalities, removing social and economic disparities and improving the quality of life.

2. Integrated Rural Development Programme(IRDP):

The programme was launched by the Centre in March 1976 as a major instrument of the government to alleviate poverty. Its main feature was to enable selected families to cross the poverty line in a given time-frame by taking up self-employment in various activities like agriculture, horticulture, animal husbandry, weaving and handicrafts and services and business activities. The target group consisted of small and marginal farmers, agricultural labourers and rural artisans having annual income below Rs 11,000 defined as poverty line in the Eighth Plan. Among the selected families, it is stipulated that at least 50 per cent of assisted families should be from SCs and STs. Furthermore, 40 per cent of the coverage should be of women beneficiaries. In spite of its many important features, the programme has also been criticized widely.

The main criticisms against the programme are:

- a. There was much corruption, misuse and malpractice in the implementation of the programme at every level—from selection of beneficiary families to the distribution of loans. Bribing was a sine qua non for obtaining a loan.
- b. The poor people were not well conversant about the programme. They took less interest in the programme because they were afraid of being cheated. Moreover, they were unable to fill up complicated forms and find the 'guarantors' for themselves.

- c. The bank officials, through which loans were to be given, were often reluctant towards these poor borrowers.
- d. It was found that this scheme also could not make any significant impact in the generation of employment in rural areas.
- e. Several studies indicated that IRDP loans neither raised the living standard of the beneficiaries, nor does it had any impact in the alleviation of rural poverty for which this scheme was launched.

3. Training Rural Youths for Self-Employment (TRYSEM):

This scheme was launched in 1979 to provide technical skills (training) to rural youths (between 18-35 years) living below the poverty line, to enable them to seek employment in fields of agriculture, industry, services and business activities.

As in other schemes of poverty alleviation, in this scheme also, youths belonging to SCs and STs and ex-servicemen, who had passed ninth class, were given priority. One-third seats were reserved for women. The beneficiaries of this scheme after completion of training were absorbed in the IRDP scheme. According to an estimate, up to 1995-96, about two lakh youths were being trained every year, of whom about 45 per cent became self-employed and 30 per cent got regular employment.

In spite of being a good scheme, it has many shortcomings. For example,

- a. its coverage is very small in relation to need;
- the amount of stipend given to the trainees (about Rs 75 to 200 per month) to motivate the youth is very meagre to join training programme
- c. skills imparted in the training are of very low level and not linked with rural industrialization process.

4. Food for Work Programme (FWP):

This programme was introduced in 1977 by the then Janata government with the objective to provide employment to the unemployed/underemployed village persons during the slack season. The wages paid to the workers were in kind, i.e., food grains. The works undertaken were flood protection, maintenance of existing roads, construction of new link roads, improvement of irrigation facilities, construction of school buildings, medical and health centres and Panchayat Ghars (community halls) etc.

5. National Rural Employment Programme (NREP):

This is redesigned programme of FWP, planned for creating additional employment opportunities in the rural areas with the help of surplus food grains. It was started in 1980 as a part of the Sixth Plan (1980-85). This programme was especially for those rural people who largely depended on wage employment but had no source of income during lean agricultural period. PRIs were actively involved in this programme. Later on, this programme was merged with Jawahar Rozgar Yojana (JRY).

6. Rural Landless Employment Guarantee Programme (RLEGP):

Special schemes were formulated by some states such as Maharashtra and Gujarat to provide increasing employment opportunities to rural people, especially landless people. Maharashtra started the Employment Guarantee Scheme (EGS) for the unemployed in rural areas. The Gujarat government's scheme provided for unskilled jobs to the unemployed workers on different projects. This scheme was later on merged into JRY along with NREP.

7. Jawahar Rozgar Yojana (JRY):

This programme came into existence in April 1989 with

the merger of the NREP and the RLEGP. Under this scheme, it was expected to provide at least one member of each poor family (BPL family) an employment for 50 to 100 days in a year at a work near his/her residence. About 30 per cent of the jobs under this programme were reserved for women. The scheme was implemented through Village Panchayats.

8. Antyodaya Yojana:

The Hindi word 'antyodaya' is a combination of two words—ant meaning end or bottom level and udaya meaning development. Thus, as a whole, it implies the development or welfare of a person standing at the end of the queue (lowest level), that is, the poorest of the poor. This programme was initiated by the Government of Rajasthan on 2nd October 1977 for special assistance to persons living below the poverty line (BPL). It was later on picked up by the then Janata government at the centre in 1978. The idea was to select five of the poorest families from each village every year and help them in their economic betterment.

For the selection of beneficiary families, a few economic criteria were laid down, in order of priority:

- a) families under severe destitution without any productive assets with no member in the age group of 15-59 years capable of any economic activity;
- families without any productive assets of land or cattle but having one or more persons capable of working and with a per capita income up to Rs 20 per month;
- c) families having some productive assets with per capita income upto Rs. 30 per month; and
- d) families having per capita income upto Rs. 40 per month.

Under this scheme, assistance was given in the form of allotting land for cultivation, monthly pension (Rs 30-40 per

month), bank loan for purchasing bullocks, buffaloes, cows, goats and pigs, basket making, carpentry tools, opening a tailor's shop, a tea shop, a barber's shop or agrocer's shop and manufacturing activities like niwar-making, soapmaking, etc. Following the footsteps of the Government of Rajasthan, UP and Himachal governments also launched it on the same lines in 1980. The scheme has seen much ups and downs with many shortcomings, such as delay in the payment of loans, apathy on the part of government officials, etc. 'Antyodaya,' as preached by Mahatma Gandhi, has disappeared into 'ananta' or eternity and is replaced with 'swantyodaya', meaning one's own development. It places emphasis on 'myself mentality'.

9. Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREGS):

After independence, for the development of rural society, particularly to develop the socio-economic life of the rural poor, many schemes and programmes were launched from time to time but unfortunately the fruits of these programmes reached to a very low proportion of these people.

It was estimated about 70 per cent of rural population was still deprived of the necessities of life. For the purpose of extending the benefits to rural people, a new scheme was launched, and legislation was enacted under the name 'National Rural Employment Guarantee Act' (NREGA).

This scheme was initially started in 200 districts of the country from February 2006 and from April 2008, it has been extended to cover all the districts of the country. The main objective of the scheme is to provide 100 days employment to rural unemployed people. In this scheme, employment to women is also provided.

Like other rural development schemes, this scheme is also plagued with many problems—workers' identification

and registration, muster rolls, works attendance, calculations and disbursement of wages and overall transparency. In recent months, people from all circles have also voiced great concern about the rampant corruption in this scheme.

Some Other Development Schemes:

1. Pradhan Mantri Adarsh Gram Sadak Yojana (PMAGSY):

It focuses on integrated development of 100 villages with a 50 per cent population of SCs.

2. Bharat NirmanYojana:

It was launched in 2005 for building infrastructure and basic amenities in rural areas. It comprises of six components-rural housing, irrigation, drinking water, rural roads, electrification and rural telephony.

3. Indira Awas Yojana:

It is one of the six components of Bharat Nirman Yojana. It was introduced in 1985-86. It aims to help built or upgrade the households of people living under BPL.

4. Jawaharlal Nehru National Urban Renewal Mission (JNNURM):

It was launched on 3rd December 2005. The main objective of this scheme was fast track development of cities across the country. It was focused especially on developing efficient urban infrastructure service delivery mechanism, community participation and accountability of urban local bodies and other agencies towards citizen.

5. Rajiv Awas Yojana (RAY):

This programme was announced in June 2009 with an objective to make the country slum-free.

6. National Rural Health Mission:

It was launched to make basic health care facilities accessible to the rural people.

7. National Rural Livelihood Mission:

It is meant to eradicate poverty by 2014-15.

8. National Food Security Scheme:

On the pattern of MNREGS, the central government is trying hard to bring a bill in the monsoon session (2013) to provide guarantee for food to the poor people, although it has already issued an ordinance in this regard.

Some of the Recent Agriculture & Rural Development Programmes are as below-

• Soil Health Card Scheme (SHC)

Soil Health Card (SHC) Soil Health Card was launched on 19 February 2015. This is Nation-wide program for soil health testing. Soil Health Cards will be issued every two years for all land holders in the country. Provide customized crop specific recommendations for nutrient application. The second cycle started from 1st May, 2017. In both cycles, 14.20 crore 'Soil Health Cards have been distributed to the farmers.

• National Agriculture Market (E-NAM)

- National Agriculture Market (e-NAM) Smear was approved on 1stJuly, 2015 with an initial allocation of Rs. 200 crores to link 585 wholesale APMC mandis across the country through a common eplatform.
- So far, 585 mandis of 16 States and 2 UTs have been integrated with e-NAM.
- To facilitate saying of commodities for trading on e-NAM common Tradable parameters have been

- developed for 90 commodities.
- By 31st March 2018 an amount of Rs. 170.87 crore has been released to the State. Upto 9 May 2018, total 9871956 Farmers, 1.09,725 Traders and 61220 Commission Agents were registered on e-NAM platform.
- The portal is available in English, Hindi, Gujarati, Marathi, Telugu, Bengali, Tamil and Odia. The Mobile app also developed.
- Facility of payment and quality parameters of crops are also available through BHIM and other Mobile apps.

• Pradhan Mantri Fasal Bima Yojana (PMFBY)

- Covers all food grains, oilseeds and annual commercial/horticultural crops.
- One season one rate maximum 2% for Kharif, 1.5% for Rabi and 5% for Annual Commercial/ Horticultural Crops.
- Covers all risks of crop cycle-preventive sowing; risks to standing crops and post-harvest losses.
- For losses due to hailstorm, landslide and inundation and assessment of yield losses at individual field level.
- Post-harvest losses for cut & spread crops on field upto 14 days due to cyclone cyclonic rain and unseasonal rains.
- On account payment upto 25% of sum insured due to prevented sowing or mid-season adversity.

• Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)- Micro Irrigation

There are two major components of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

- a) To adopt and encourage use of drip and sprinkler irrigation system.
- b) Development of small water sources.
- c) With the mission of PER DROP MORE CROP, the present Government has allocated more funds to PMKSY so that more area can be covered under irrigation.

• National Seed Corporation (NSC)

During the period 2014-18, 661 varieties agricultural crops and 136 varieties horticulture crops were released and notified.

528 cases for export and 579 cases for import of seeds and planting material were recommended by the EXIM Committee during the period 2014-18.

• ATMAYOJANA

Atma Yojana was established in the year 2005. Providing agricultural extension services based on their requirement to the farmers. Arrangement of research on various subjects through research institutes. Provision of 24,000 block level extension personnel for implementation of effective extension services. One 'farmer friend' from every two villages to establish synergy between farmers and extension workers.

• Rashtriya Krishi Vikas Yojana (RKVY)

Government launched revised RKVY Scheme in 2014-15 to provide more flexibility to the States for boosting investment and enhancing productivity in agriculture and allied sector.

Sub-scheme on Targeting Rice Fallow for Pulses & Oilseeds was introduced under RKVY as special scheme during 2016-17. The Allocation of Sub-scheme was Rs. 50 crores.

In order to address the problem of soil acidity, alkalinity and salinity, a sub scheme of Reclamation of Problematic Soils was introduced under RKVY in 2016-17. During 2014-18, Maharashtra, Karnataka and Odisha have taken up 34 projects under Public Private Partnership for Integrated Development of Agriculture (PPPIAD).

During 2014-15 Additional Fodder Development Programme was initiated under RKVY to address the fodder needs of cattle in drought affected states. During 2014-18, an amount of Rs 78.14 crores was released to the States.

Geo-tagging of assets created under RKVY has been initiated with technical support from National Remote Sensing Centre. More than 75,000 assets geo-tagged.

The Central share Rs. 4750 crores released for implementation of the scheme during the current year (2017-18).

The cabinet on 1st November 2017 has approved continuation of the ongoing centrally sponsored scheme (State Plan)- Rashtriya Krishi Remunerative Approaches for Agricultural and Allied Sector Rejuvenation (RKVY-RAFTAAR) for 3 years (2017-20) with allocation Rs. 15,722 crores.

• Krishi Unnatimela

The Krishi Unnati Mela is being organized every year from 2016 in which Government organizations, private companies and state governments related to agriculture and animal husbandry participated through stalls and theme area. Farmers participated from every corners of India. During Krishi Unnati Mela-2018, farmers demonstrated the integrated Model related to poultry, Shrimp farming, Sea weed culture, Re-circulating Aquaculture system model related to fishery before the Hon'ble Prime Minister.

Apart from this, frozen semen-related techniques, fishery related techniques and equipment, embryo transfer

technology and trout farming etc. were demonstrated during the mela.

• Model Contract Farming Act 2018

Farmers and agriculture-based industries has been linked for the first time by Government of India.

Farmers will fetch better price for agriculture commodities and post-harvest losses will be minimized due to this act. This act will create avenues for new employment in rural areas.

Permanent structures could not be constructed in the land of farmers.

Farmers Producer Organization (FPO) / Farmers Producer Companies (FPC) would be promoted so that farmers can be organized.

If authorized by farmers then FPO/FPC can be a contract party.

Contract farming sponsors will not have rights to transfer and dispossess possession of land, title & owners.

According to the contract, the purchase of whole quantity of one or more agricultural produce, livestock or contract agricultural product, at the pre-agreed rate is ensured.

Provision of Contract Farming Facility (CFF) has been made to promote contract farming and services at the village / Panchayat level.

The provision of dispute settlement has been done at the lowest level so that it may be possible to reach there and the disputes can be handled as early as possible.

Rural Development, Community Development Program, Panchayati Raj and co-operatives

Rural development

It is a process which aims at improving the well being and self realisation of people living outside the urbanized areas through collective process.

According to *Agarwal* (1989) rural development is a strategy designed to improve the economic and social life of rural poor.

Scope and Importance of Rural Development

Rural development is a dynamic process which is mainly concerned with the rural areas. These include agricultural growth, putting up of economic and social infrastructure, fair wages as also housing and house sites for the landless, village planning, public health, education and functional literacy, communication etc.

Rural development is a national necessity and has considerable importance in India because of the following reasons:-

- **1.** About three-fourth of India's population live in rural areas.
- **2.** Nearly half of the country's national income is derived from agriculture.
- **3.** Around seventy per cent of Indian populations get employment through agriculture.
- **4.** Bulk of raw materials for industries come from agriculture and rural sector,
- 5. Increase in industrial population can be justified only in rural populations' motivation and increasing the purchasing power to buy industrial goods.

6. Growing disparity between the urban elite and the rural poor can lead to political instability.

Objectives of Rural Development:

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

Community Development Programme

This programme was started in India just after independence on 2nd October 1952. This programme consisted of agriculture, animal husbandry, public health, social education etc. This had an aim of overall development of rural people.

COMMUNITY: A group of people, who live in a geographical area and have interest in each other for the purpose of making a living.

DEVELOPMENT: This connotes growth or maturation.

Community Development is the process designed to create conditions of economic and social progress for whole of community development with its active participation.

All the districts of the country were divided into 'DEVELOPEMENT BLOCKS' & a block development officer (BDO) was made charge of each block. Below BDO

were **VILLAGE LEVEL WORKERS** responsible to keep in touch with 10-12 villages.

Principles of CDP

These were given by **Canadians Michael** and **Julie Bopp** as follows:-

- Harnessing community tensions
- Facilitating consultation about community realities and needs
- Maintaining unity & healthy human relations
- Developing a common vision of sustainable future
- Supporting core group development
- Facilitating learning
- Build effective organizations
- Programme development
- Monitoring n evaluation
- Protecting the process

Objectives of CDP

- **1. Broad term:** Economic development, social justice, democratic growth.
- **2.** Taking care of social, moral and financial progress of the villagers.
- 3. Improve housing & family conditions.
- **4.** Providing Programme for women & youth.
- **5.** Increasing agricultural production.
- **6.** Provide min health service & improving heath practice.

- **7.** Assist each village in having effective panchayat, cooperatives & schools.
- **8.** To setup and encourage cottage industries and indigenous handicrafts
- **9.** Solve problem of rural unemployment.
- 10. Optimum use of physical and human resource.

Weakness of CDP

- Most people are still illiterate & are difficult to train.
- Lack of communication channels .roads etc.
- Limitations of funds & staff for training
- A traditional society with old ways does not want to risk unless sees the result.
- Change over from an attitude of heavy dependence of the government to one of self dependence takes place very slowly.

PANCHYATI RAJ

The panchayat raj is a South Asian political system mainly in India, Pakistan, Bangladesh and Nepal. It is the oldest system of local government in the Indian subcontinent. The word "panchayat" means "assembly" of five wise and respected elders chosen and accepted by the local community. The "raj" means rule. The leader of the Panchayat was generally called the Mukhiya or Sarpanch, and occupies an elected position.

Panchayati Raj Institutions In India

Panchayati Raj is the basic unit of administration in a system of governance. The Constitutional (73rd Amendment) Act 1992 came into force in India on 24 April 1993 to provide constitutional status to the Panchayati Raj institutions. It has three levels: Gram Panchayat (village level), Mandal Parishad or the Block Samiti or Panchayat Samiti (block level) and Zila Parishad (district level).

Balwant Rai Mehta Committee-

The Balwant Rai Mehta Committee, headed by MP Balwant Rai Mehta, was a committee appointed by the Government of India in January 1957 to examine the working of the Community Development Programme and the National Extension Service and to suggest measures for their better working.

Establishment of a **three-tier panchayati raj systemgram panchayat at the village level, panchayat samiti at the block level** and **zila parishad at the district level**. These tiers should be organically linked through a device of indirect elections.

The village panchayat should be constituted with directly elected representatives, whereas the panchayat samiti and zila parishad should be constituted with indirectly elected members.

Ashok Mehta Committee-

It was constituted under the Chairmanship of Ashok Mehta to inquire into the working of the Panchayati Raj institutions and to suggest measures to strengthen them so as to enable the decentralized system of planning and development to be effective.

The three tier system of panchayati raj should be replaced by two tier system, that is, zila parishad at the district level, and below it, the mandal panchayat consisting of a group of villages with a total population of 15,000 to 20,000.

G.V.K Rao Committee-

It was constituted under the Chairmanship of G.V.K Rao by the Planning Commission in 1985. The Committee came to conclusion that the developmental process was gradually bureaucratised and divorced from the Panchayati Raj.

The district level body, that is, the Zila Parishad should be of pivotal importance in the scheme of democratic decentralization It stated that "the district is the proper unit for planning and development and the Zila Parishad should become the principal body for management of all development programmes which can be handled at that level.

L M Singhvi Committee-

In 1986, Rajiv Gandhi Government appointed an committee on revitalisation of panchayati raj institutions for democracy and development under the chairmanship of L. M Singhvi.

Co-operatives

A cooperatives is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspiration through jointly owned and democratically-controlled enterprise.

History of Co-operatives

- 1. The cooperatives were first started in Europe to serve the credit-starved people in Europe as a self-managed people's movement with no role for the government.
- 2. British India replicated the Raiffeisen-type cooperative movement in India to mitigate the miseries of poor farmers, particularly harassment by moneylenders.
- 1903 with the support of government of Bengal. It was registered under the Friendly Societies Act of British Government.
- 4. Cooperatives Credit Societies Act of India was enacted on 25 march 1904.
- Cooperatives became a State subject in 1919. In 1951,
 Central Cooperatives Unions were renamed as Central Cooperative Banks.
- Land Mortgage Cooperative Banks were established in 1938 to provide loans initially for debt relief and improvement.
- 7. Reserve Bank of India started refinancing cooperatives for seasonal agricultural operation from 1939.

- From 1948, Reserve Bank of India started refinancing State Cooperative Banks for meeting the credit needs of Central.
- In 1954, All India Rural Credit Survey Committee recommended strengthening of DCCBANKS and PACS with state partnership.
- Reorganization of PACS into viable units, FSCS,
 LAMPS started under action programme of RBI in 1964.
- 11. The establishment of Regional Rural Banks from 1975 has not reduced the problems of rural credit as they reached only 6% of the farmers.
- 12. Though the **Cooperatives** were lagging down behind in rural credit till **1991**, they regained their prime place with **62**% share in rural crop loans between **1991** and **2001**.

Principles of Co-operatives

- 1. Voluntary and open membership
- 2. Democratic member control
- 3. Economic participation by members
- 4. Autonomy and independence
- 5. Education, training and information
- 6. Cooperation among cooperatives
- 7. Concern for community.

Types of Cooperatives

 Retail Cooperatives:- Retail cooperatives are type of consumer cooperative which help create retail stores to benefit the consumer-making the retail our store. They are organized as communities ,or other **local groups** owning their own retail stores .Retail stores are often found in small communities where small business are shut down.

EXAMPLES:- hardware, food, agriculture products and even movie theatre.

2. Worker Cooperative:- Members of worker cooperative are both employees of the business as well as owners of the cooperatives. Possibilities for being as a worker cooperative includes: New business start-ups, entrepreneurs sharing high &lows of business, or a conversion of existing businesses.

EXAMPLES:- bakeries, retail stores, software development groups, and aquaculture.

3. Producer Cooperatives:- Producer cooperatives are created by producers and owned & operated by producers. Producers can decide to work together or as separate entities to help increase marketing possibly and production efficiency. They are organized to process, market, and distribute their own products. This helps lessen costs and stains in each area with a mutual benefit to each producer.

Examples:- agricultural products, lumber, carpentry and crafts.

4. Service Cooperatives:-Service cooperatives are type of **consumer cooperative** which help to fill a need in the

community. They allow consumers the opportunity to supply their own needs, gain bargaining power and share earnings. They are organized to give members more control over the service that are offered.

Examples:-service co-ops such as child care, health care clinics, and funeral services.

of a service cooperative which provide a unique form of home ownership. They allow home owners the opportunity to share costs of home ownership. They are organized as an incorporated business formed by people who wish to provide and jointly own their housing. The units in a housing cooperatives are owned by cooperatives and cannot be sold for profit.

Examples:-condominiums, rentals, single family homes, market rate, and limited equity.

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