



FYBA

RURAL DEVELOPMENT PAPER - I

SEMESTER - II

INTRODUCTION TO RURAL DEVELOPMENT

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CONTENTS

Unit No.	Title	Page No.
Semester - II		
1.	Rural Administration	01
2.	Land Revenue Administration	17
3.	Rural Economy	37
4.	Importance of Natural Resources in Rural Development	55
5.	Rural Infrastructure	83
6.	Transport, Communication, Drinking Water and Electrification	99
7.	Rural Infrastructure (Market and Finance)	114
8.	Key Issues of Rural Development Poverty, Literacy and Health	128
9.	Key Issues of Rural Communities (Poverty, Indebtedness and Agrarian Crisis& Farmers)	148



I

INTRODUCTION TO RURAL DEVELOPMENT

SEMESTER – II

I DEMOCRATIC DECENTRALIZATION AND REVENUE ADMINISTRATION IN MAHARASHTRA

- Historical background of Panchayat Raj System in India.
- Concept of Panchayat Raj
- Structures and Functions of Panchayat Raj in Maharashtra
- Introduction to Revenue Administration, Scope of Revenue Administration
- Structures and Functions of Revenue Administration in Maharashtra

II INTRODUCTION TO RURAL ECONOMY

- Rural Economy in India : Nature and Changing patterns
- Role of Agriculture in Rural Development.
- Pattern of land holdings
- Types of Agricultural Labours and their problems
- Importance of Natural Resources & Agricultural Allied Activities in Rural Development.

III RURAL INFRASTRUCTURE

- Concept of Rural Infrastructure
- Role of Rural Infrastructure in Rural Development
- Transport and Communication
- Drinking Water and Sanitation
- Electrification
- Marketing
- Finance.

IV KEY ISSUES OF RURAL COMMUNITIES

- Poverty
- Education
- Health
- Indebtedness
- Agrarian crisis and farmer's suicide.

II

SR NO.	NAME OF THE BOOK	NAME OF THE AUTHOR	NAME OF THE PUBLICATION & YEAR
1	Rural Development	Dr. I. Satya Sundaram	Himalaya Publishing House, Year -2007
2	Social Change In India	B Kuppuswamy	Vikas Publishing House, New Delhi, Year- 1984
3	Rural Economy And Rural Society Towards Development	Gopal lal Jain	Mangaldeep publication Jaipur, Year- 2000
4	Management Of Rural Development and Resources vol. II	Gopal Lal Jain	Mangaldeep publication, Jaipur, Year 2002
5	Rural Development and Volountry organisation	Shahin Razi	Classical Publishing company, New Delhi, Year -2005
6	Rural Housing & Infrastructure Problems In India	Dr. Prabhu Dayal Chaudhary	Prateeksha Publications, Jaipur, Year - 2010
7	Panchayat Raj System In India	Shilaja Nagendra	Ishika Publishing House, Jaipur, Year -2015
8	Foundation Course II	Waghmare & Liman	Sheth Publication, Year -2013



Unit -1

RURAL ADMINISTRATION

Dr. Pravin T. Sanaye

Unit Structure :

- 1.0 Objectives
- 1.1 Introduction
- 1.2 Historical background of Panchayat Raj system
- 1.3 Panchayat Raj
- 1.4 Panchayat Raj in Maharashtra
- 1.5 Gram Sabha
- 1.6 Gram Panchayat
- 1.7 Panchayat Samiti
- 1.8 Zilla Parishad
- 1.9 Summary
- 1.10 Self - Study

1.0 Objectives

- To study the historical background of panchayat raj system
- To study the development of panchayat raj system
- To review the Maharashtra panchayat raj systems structure and functions
- To review the panchayat raj three tier systems officers and their functions

1.1 INTRODUCTION

The panchayati 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" literally means "assembly" (ayat) of five (panch) wise and respected elders chosen and accepted by the local community. However, there are different forms of assemblies. Traditionally, these assemblies settled disputes between individuals and villages. Modern Indian government has decentralized several administrative functions to the local level, empowering elected gram panchayats. Gram panchayats are not to be confused with the unelected khappanchayats (or caste panchayats) found in some parts of Northern India.

1.2 HISTORICAL BACKGROUND OF PANCHAYAT RAJ SYSTEM

In the time of the Rig-Veda (1700 BC), evidences suggest that self-governing village bodies called 'sabhas' existed. With the passage of time, these bodies became panchayats (council of five persons). Panchayats were functional institutions of grassroots governance in almost every village. The Village Panchayat or elected council had large powers, both executive and judicial. Land was distributed by this panchayat which also collected taxes out of the produce and paid the government's share on behalf of the village. Above a number of these village councils there was a larger panchayat or council to supervise and interfere if necessary. Casteism and feudalistic system of governance under Mughal rule in the medieval period slowly eroded the self-government in villages. A new class of feudal chiefs and revenue collectors (zamindars) emerged between the ruler and the people. And, so began the stagnation and decline of self-government in villages.

During the British rule, the autonomy of panchayats gradually declined with the establishment of local civil and criminal courts, revenue and police organisations, the increase in communications, the growth of individualism and the operation of the individual Ryotwari (landholder-wise) system as against the Mahalwari or village tenure system.

During British rule, the panchayat had never been the priority of the British rulers. The rulers were interested in the creation of 'controlled' local bodies, which could help them in their trading interests by collecting taxes for them. When the colonial administration came under severe financial pressure after the 1857 uprising, the remedy sought was decentralisation in terms of transferring responsibility for road and public works to local bodies. However, the thrust of this 'compelled' decentralisation was with respect to municipal administration.

"The panchayat was destroyed by the East India Company when it was granted the office of Diwan in 1765 by the Mughal Emperor as part of reparation after his defeat at Buxar. As Diwan the Company took two decisions. The first was that it abolished the village land record office and created a company official called Patwari. The Patwari became the official record keeper for a number of villages. The second was the creation of the office of magistrate and the abolition of village police. The magistrate carried out policing functions through the Darogha who had always been a state functionary under the Faujdar. The primary purpose of these measures was the collection of land revenue by fiat. The depredations of the Patwari and the Darogha are part of our folklore

and it led to the worst famine in Bengal. The effects of the famine lingered right to the end of the 18th century. These two measures completely disempowered the village community and destroyed the panchayat. After 1857 the British tried to restore the panchayat by giving it powers to try minor offences and to resolve village disputes. But these measures never restored the lost powers of the village community."

From 1870 that Viceroy Lord Mayo's Resolution (for decentralisation of power to bring about administrative efficiency in meeting people's demand and to add to the finances of colonial regime) gave the needed impetus to the development of local institutions. It was a landmark in the evolution of colonial policy towards local government. The real benchmarking of the government policy on decentralisation can, however, be attributed to Lord Ripon who, in his famous resolution on local self-government on May 18, 1882, recognised the twin considerations of local government: (i) administrative efficiency and (ii) political education. The Ripon Resolution, which focused on towns, provided for local bodies consisting of a large majority of elected non-official members and presided over by a non-official chairperson. This resolution met with resistance from colonial administrators. The progress of local self-government was tardy with only half-hearted steps taken in setting up municipal bodies. Rural decentralization remained a neglected area of administrative reform.

The Royal Commission on Decentralisation (1907) under the chairmanship of C.E.H. Hobhouse recognised the importance of panchayats at the village level. The commission recommended that "it is most desirable, alike in the interests of decentralisation and in order to associate the people with the local tasks of administration, that an attempt should be made to constitute and develop village panchayats for the administration of local village affairs".

But, the Montague-Chemsford reforms (1919) brought local self-government as a provincial transferred subject, under the domain of Indian ministers in the provinces. Due to organisational and fiscal constraints, the reform was unable to make panchayat institutions truly democratic and vibrant. However, the most significant development of this period was the 'establishment of village panchayats in a number of provinces, that were no longer mere ad hoc judicial tribunals, but representative institutions symbolising the corporate character of the village and having a wide jurisdiction in respect of civic matters'. By 1925, eight provinces had passed panchayat acts and by 1926, six native states had also passed panchayat laws.

The provincial autonomy under the Government of India Act, 1935, marked the evolution of panchayats in India. Popularly elected governments in provinces enacted legislations to further democratise institutions of local self-government. But the system of responsible government at the grassroots level was least responsible. D.P. Mishra, the then minister for local self-government under the Government of India Act of 1935 in Central Provinces was of the view that 'the working of our local bodies... in our province and perhaps in the whole country presents a tragic picture... 'Inefficiency' and 'local body' have become synonymous terms.

In spite of various committees such as the Royal Commission on Decentralization (1907), the report of Montague and Chemsford on constitutional reform (1919), the Government of India Resolution (1919), etc., a hierarchical administrative structure based on supervision and control evolved. The administrator became the focal point of rural governance. The British were not concerned with decentralised democracy but were aiming for colonial objectives.

The Indian National Congress from the 1920s to 1947, emphasized the issue of all-India Swaraj, and organized movements for Independence under the leadership of Mahatma Gandhi. The task of preparing any sort of blueprint for the local level was neglected as a result. There was no consensus among the top leaders regarding the status and role to be assigned to the institution of rural local self-government; rather there were divergent views on the subject. On the one end Gandhi favoured Village Swaraj and strengthening the village panchayat to the fullest extent and on the other end, Dr. B.R. Ambedkar opposed this idea. He believed that the village represented regressive India, a source of oppression. The model state hence had to build safeguards against such social oppression and the only way it could be done was through the adoption of the parliamentary model of politics. During the drafting of the Constitution of India, Panchayati Raj Institutions were placed in the non-justiciable part of the Constitution, the Directive Principles of State Policy, as Article 40. The Article read 'the State shall take steps to organise village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-government'. However, no worthwhile legislation was enacted either at the national or state level to implement it.

In the four decades since the adoption of the Constitution, panchayat raj institutions have travelled from the non-justiciable part of the Constitution to one where, through a separate amendment, a whole new status has been added to their history.

1.3 PANCHAYAT RAJ

Panchayat Raj is a System of Governance in which gram panchayats are the basic units of administration. It has 3 levels: Gram (village, though it can comprise more than one village), Janpad (block) and Zilla (district).

The term "panchayat raj" is relatively new, having originated during the British Administration. Raj literally means "rule". Mahatma Gandhi advocated Panchayati Raj, a decentralized form of Government where each village is responsible for its own affairs, as the foundation of India's political system. The term for such a vision was Gram Swaraj ("village self-governance"). The leader of the panchayat was generally called the Mukhiya, a position which was both hereditary and elected.

The Balwant Rai Mehta Committee (1957)

In 1957, Balwant Rai Mehta Committee studied the Community Development Projects and the National Extension Service and assessed the extent to which the movement had succeeded in utilising local initiatives and in creating institutions to ensure continuity in the process of improving economic and social conditions in rural areas. The Committee held that community development would only be deep and enduring when the community was involved in the planning, decision-making and implementation process.

The suggestions were for as follows:-

An early establishment of elected local bodies and devolution to them of necessary resources, power and authority, that the basic unit of democratic decentralisation was at the block / samiti level since the area of jurisdiction of the local body should neither be too large nor too small. The block was large enough for efficiency and economy of administration, and small enough for sustaining a sense of involvement in the citizens, such body must not be constrained by too much control by the government or government agencies, the body must be constituted for five years by indirect elections from the village panchayats, its functions should cover the development of agriculture in all its aspects, the promotion of local industries and other services such as drinking water, road building, etc., and the higher level body, Zilla Parishad, would play an advisory role.

The PRI structure did not develop the requisite democratic momentum and failed to cater to the needs of rural development. There are various reasons for such an outcome which include political and bureaucratic resistance at the state level to share power and resources with local level institutions, domination of local

elites over the major share of the benefits of welfare schemes, lack of capability at the local level and lack of political will.

Ashok Mehta Committee (1978)

With the coming of the Janata Party into power at the Centre in 1977, a serious view was taken of the weaknesses in the functioning of Panchayati Raj. It was decided to appoint a high-level committee under the chairmanship of Ashok Mehta to examine and suggest measures to strengthen PRIs. The Committee had to evolve an effective decentralised system of development for PRIs.

They made the following recommendations:-

The district is a viable administrative unit for which planning, coordination and resource allocation are feasible and technical expertise available, PRIs as a two-tier system, with Mandal Panchayat at the base and Zilla. Parishad at the top, the PRIs are capable of planning for themselves with the resources available to them, district planning should take care of the urban-rural continuum, representation of SCs and STs in the election to PRIs on the basis of their population, four-year term of PRIs, participation of political parties in elections, any financial devolution should be committed to accepting that much of the developmental functions at the district level would be played by the panchayats. The states of Karnataka, Andhra Pradesh and West Bengal passed new legislation based on this report. However, the flux in politics at the state level did not allow these institutions to develop their own political dynamics.

G.V.K. Rao Committee (1985)

The G.V.K.Rao Committee was appointed to once again look at various aspects of PRIs. The Committee was of the opinion that a total view of rural development must be taken in which PRIs must play a central role in handling people's problems. It recommended the following:

- 1) PRIs have to be activated and provided with all the required support to become effective organisations,
- 2) PRIs at district level and below should be assigned the work of planning, implementation and monitoring of rural development programmes, and
- 3) The block development office should be the spinal cord of the rural development process.

L.M. Singhvi Committee (1986)

L.M. Singhvi Committee studied panchayati raj. The Gram Sabha was considered as the base of a decentralised democracy, and PRIs viewed as institutions of self-governance which would

actually facilitate the participation of the people in the process of planning and development. It recommended:

- 1) Local self-government should be constitutionally recognised, protected and preserved by the inclusion of new chapter in the Constitution,
- 2) Non-involvement of political parties in Panchayat elections.

The suggestion of giving panchayats constitutional status was opposed by the Sarkaria Commission. But the idea, however, gained momentum in the late 1980s especially because of the endorsement by the late Prime Minister Rajiv Gandhi, who introduced the 64th Constitutional Amendment Bill in 1989. The 64th Amendment Bill was prepared and introduced in the lower house of Parliament. But it got defeated in the Rajya Sabha as non-convincing. He lost the general elections too. In 1989, the National Front introduced the 74th Constitutional Amendment Bill, which could not become an Act because of the dissolution of the Ninth Lok Sabha. All these various suggestions and recommendations and means of strengthening PRIs were considered while formulating the new Constitutional Amendment Act. The 73rd Constitutional Amendment Act.

The idea which produced the 73rd Amendment was not a response to pressure from the grassroots, but to an increasing recognition that the institutional initiatives of the preceding decade had not delivered, that the extent of rural poverty was still much too large and thus the existing structure of government needed to be reformed. It is interesting to note that this idea evolved from the Centre and the state governments. It was a political drive to see PRIs as a solution to the governmental crisis that India was experiencing. The Constitutional (73rd Amendment) Act, passed in 1992 by the Narsimha Rao government, came into force on April 24, 1993. It was meant to provide constitutional sanction to establish "democracy at the grassroots level as it is at the state level or national level". Its main features are as follows:

- a) The Gram Sabha or village assembly as a deliberative body to decentralised governance has been envisaged as the foundation of the Panchayati Raj System.
- b) A uniform three-tier structure of panchayats at village (Gram Panchayat — GP), intermediate or block (Panchayat Samiti — PS) and district (Zilla Parishad — ZP) levels.
- c) All the seats in a panchayat at every level are to be filled by elections from respective territorial constituencies.
- d) Not less than one-third of the total seats for membership as well as office of chairpersons of each tier have to be reserved for women.

- e) Reservation for weaker castes and tribes (SCs and STs) have to be provided at all levels in proportion to their population in the panchayats.
- f) To supervise, direct and control the regular and smooth elections to panchayats, a State Election Commission has to be constituted in every State and UT.
- g) The Act has ensured constitution of a State Finance Commission in every State/UT, for every five years, to suggest measures to strengthen finances of panchayati raj institutions.
- h) To promote bottom-up-planning, the District Planning Committee (DPC) in every district has been accorded constitutional status.
- i) An indicative list of 29 items has been given in Eleventh Schedule of the Constitution. Panchayats are expected to play an effective role in planning and implementation of works related to these 29 items.

Present scenario

At present, there are about 3 million elected representatives at all levels of the panchayat 1/2th[of which are women. These members represent more than 2.4 lakh Gram Panchayats, about 6,000 intermediate level tiers and more than 500 district panchayats. Spread over the length and breadth of the country, the new panchayats cover about 96 per cent of India's more than 5.8 lakh villages and nearly 99.6 percent of rural population. This is the largest experiment in decentralisation of governance in the history of humanity.

The Constitution visualises panchayats as institutions of self-governance. However, giving due consideration to the federal structure of our polity, most of the financial powers and authorities to be endowed on panchayats have been left at the discretion of concerned state legislatures. Consequently, the powers and functions vested in PRIs vary from state to state. These provisions combine representative and direct democracy into a synergy and are expected to result in an extension and deepening of democracy in India. Hence, panchayats have journeyed from an institution within the culture of India to attain constitutional status.

This is one the biggest democracy in the world where village level democratic structures are functioning for their development.

1.4 PANCHAYAT RAJ IN MAHARASHTRA

Local government in Maharashtra

Local government in Maharashtra State follows the general structure of Local Governance in India and is broadly classified into

two categories: Urban Local Governance and Rural Local Governance.

Urban Local Governance

Urban local governance can be classified as either by Municipal Corporation or by Municipal Council.

Municipal Corporations

Large urban areas are governed by Municipal Corporations(also called just Corporations). The area under each Corporation is further divided up into Wards. An individual ward or collection of wards within a corporation sometimes have its own administrative body called a Ward Committee. There are 26 Municipal Corporations in Maharashtra.

Municipal councils

Smaller urban areas are governed by Municipal Council or Municipal Boards (also called just Municipalities). Municipalities are further subdivided into Wards, which may be grouped together into Ward Councils. One or more corporators are elected to represent each ward. There are 433 municipalities in Maharashtra.

Rural Local Governance

Rural governance in India is based on the Panchayati Raj system. It is a three tier system, with the Zilla Parishad at the district level, Blocks at the middle level and Village Council at the lowest level.

Zilla parishad

Zilla Parishad(commonly known as ZP) is a local government body at the district level in India. It looks after the administration of the rural area of the district and its office is located at the district headquarters.

There are 33 Zilla Parishads in Maharashtra, one each in every district.

Panchayat samiti

Panchayat Samiti is a local government body at the Tehsil or Taluka level in India. It works for the villages of the Tehsil or Taluka that together are called a Development Block. The Panchayat Samiti is the link between the Gram Panchayat and Zilla Parishad.

There are 355 panchayat samitis or block panchayats in Maharashtra.

Gram panchayat

Gram Panchayats are local self-government bodies at the village level. They are a cornerstone of the Panchayati Raj System.

A gram panchayat can be set up in villages with a population of more than five hundred. There is a common gram panchayat for two or more villages if the population of these villages is less than five hundred, whereupon it is called a group-gram panchayat.

There are 33 Zilla Parishads, 351 Panchayat Samities and 27896 Gram Panchayats in Maharashtra.

1.5 GRAM SABHA

Gram sabhas includes all the adult citizen voters of the village. It is empowered to support or topple down the gram panchayat body. This gram sabha can contribute to the number of decisions taken by the gram panchayat and can facilitate to modify weak decisions whenever they feel. The gram panchayat can be established for a village having a population more than 750 to 25,000. The villages having less population are grouped under group-gram sabha. The member count usually ranges from 7 to 17 depending on the strength of the village population. These form various Committees, viz. Agriculture, Animal Husbandry, Public Works, Social Welfare and Health and sanitation in village Gram Panchayat.

Gram sabhas meetings

According to Sec 6 (3) of APPR ACT, the meeting of a gram sabha should compulsorily be held twice in a year. The Government also notifies the two dates on which the meeting is to be held compulsorily. The gram sabha meeting should be held on every 14 April and 3 October. Conduct of gram sabha twice yearly is a minimum, not maximum - Gram sabha can be convened as and when necessary and as many times as possible, depending on the need. In States like Andhra Pradesh, Arunachal Pradesh, Bihar, Karnataka, Punjab, Sikkim and Uttar Pradesh there are statutory provisions to hold the gram sabha two times a year, whereas in states like Assam, Goa, Gujarat, Himachal Pradesh, Kerala, Madhya Pradesh, Tamil Nadu, Orissa, Chhattisgarh and Rajasthan the gram sabhas are held 4 times a year. Gram sabhas are held 6 times in a year in Maharashtra.

Videographing of gram sabha proceedings

The Ministry of Panchayati Raj has advised the State Governments and Union Territories that in regard to sensitive, controversial and contentious issues such as those relating to forest produce, land acquisition, mining & natural resources likely to affect the traditions and way of life of the community, and on which the consensual agreement of the Gram Sabha is necessary and transparency of decision making is imperative, to make a full video-and-audio-graphic record of all gram sabha meetings and

proceedings therein and the members present. The Ministry has also advised the State Governments to retain a copy of such record in both the Panchayat office and in the District Panchayat Secretary's office and to issue directions to the District Collectors/ ZP/ CEOs to take necessary administrative action to enable the gram panchayat to make and keep such records.

1.6 GRAM PANCHAYAT

A Gram Panchayat is a local self-government institution at the village or small town level in India and has a Sarpanch as its elected head. Under British Colonial rule, the role of panchayats were strengthened, whereas under post-independence they were given little right of co-determination. After attempts to deal with local matters at the national level, panchayats were reintroduced as institutions of local self-governance in 1992. As of 2002 there were about 265,000 gram panchayats in India. The gram panchayat is the corner stone of the panchayati raj system.

The Sarpanch, or elected head, has the responsibilities of Maintaining street lights, construction and repair work of roads in villages and also the village markets, fairs, collection of tax, festivals and celebrations.

Keeping a record of births, deaths and marriages in the village. Looking after public health and hygiene by providing facilities for Sanitation and drinking water. Providing free education. To organise the meetings of Gramsabha and Grampanchayat

A gram panchayat consists of between 7 and 20 members, elected from the wards of the village, and they are called a "panch". People of the village select a panch, with one-eighth of seats reserved for female candidates. To establish a gram panchayat in a village, the population of the village should be at least 500 people of voting age.

Sources of income

The main source of income of the gram panchayat is the property tax levied on buildings and open spaces within the village. Other sources of income include professional tax, taxes on pilgrimage, animal trade, grant received from the State Government in proportion of land revenue and the grants received from the District Councils of India –Zilla Parishad

The gramsevak / gram vikas officer is the communicator in government and village panchayat and works for the sarpanch. The district planning commission (DPC) is also responsible for disbursing cash to the gram panchayat.

1.7 PANCHAYAT SAMITI

Panchayat samiti is a local government body at the tehsil (taluka) level in India. It works for the villages of the tehsil that together are called a Development Block. The Panchayat Samiti is the link between the Gram Panchayat(village council) and the Zilla Parishad(district board). There are a number of variations in the name of this institution in the various states. For example, it is known as Mandal Praja Parishad in Andhra Pradesh, Taluka Panchayat in Gujarat, and Mandal Panchayat in Karnataka.

Composition

Typically, a panchayat samiti is composed of ex officio members (all sarpanchas of the panchayat samiti area, the MPs (Rajya Sabha and Lok Sabha) and MLAs (Vidhan Sabha) of the area, and the Sub Divisional Officer of the subdivision), otherwise unrepresented members (representatives of Scheduled caste and Scheduled Tribes and women), associate members (such as a farmer of the area, a representative of the cooperative societies, and one from the agricultural marketing services sector), and the elected members of that panchayat block (tehsil) on the Zilla Parishad(district board).

The samiti is elected for five years and is headed by a chairman and deputy chairman elected by the members of the panchayat samiti.

Composition of mandal parishads

A Mandal Parishad is constituted for a revenue Mandal, as such, both the Mandal Parishads and the revenue Mandals are coterminous. A mandal Parishad is composed of the following members:

Mandal Parishad Territorial constituency members. Members of the Legislative Assembly having jurisdiction over the Mandal. Members of the House of people having jurisdiction over the Mandal. Members of the council of States who are voters in the Mandal. One co-opted member, belonging to minorities. The Mandal Parishad Territorial constituency (MPTC) members are directly elected by the voters, whereas, the Mandal President is elected by the MPTC members. The members are elected for a term of five year. The elections to MPTC s is done on political party basis. The elections are conducted by the state election commission. The Sarpanches of the Villages in the Mandal are permanent invitees to the Mandal Parishad meetings.

Departments

The most common departments found in a panchayat samiti are:

Administration
 Finance
 Public works (especially water and roads)
 Agriculture
 Health
 Education
 Social welfare
 Information Technology

Each department in a panchayat samiti has its own officer, most often these are state government employees acting as extension officers, but occasionally in more revenue-rich panchayat samiti, these may be local employees. A government appointed block development officer (BDO) is the supervisor of the extension officers, and executive officer to the panchayat samiti and becomes, in effect, its administrative chief over all operations.

Sources of income

The income of the panchayat samiti comes from three sources:

Taxes levied upon land and water usage, professional taxes, liquor taxes and others income generating programmes grants-in-aid and loans from the State Government and the local zilla parishad voluntary contributions.

For many of the panchayat samiti the main source of income becomes state aid. For others, the traditional taxing function provides the bulk of revenues. Tax revenues are often shared between the gram panchayats and the panchayat samiti.

Functions and Powers of Panchayat Samiti

Panchayat Samiti collects all the prospective plans prepared at Gram [HYPERLINK "http://en.wikipedia.org/wiki/Gram_Panchayat"](http://en.wikipedia.org/wiki/Gram_Panchayat) [HYPERLINK](http://en.wikipedia.org/wiki/Gram_Panchayat)

["http://en.wikipedia.org/wiki/Gram_Panchayat"](http://en.wikipedia.org/wiki/Gram_Panchayat) Panchayat level and processes them for funding and implementation by evaluating them from the angles of financial constraints, social welfare and area development. It also identifies and prioritize the issues which needs to be addressed at block level.

- 1) Panchayat Samiti has to channel all development programs which would evoke people involvement and participation within their jurisdiction.

- 2) They have to exercise the powers for planning, executing and evaluating their programs.
- 3) Panchayat Samiti has to secure firm support of the people for which the program is implemented and continued.
- 4) The powers are used to make efficient use of local resources for whole taluka.
- 5) The powers are utilized to sanction the budget, plans and modification of the village level work at various locations.
- 6) The loans available with Development Department through banks may be spent and recovered timely.
- 7) The President and Members of the Panchayat Samiti need to include economical, social and cultural aspects of Development Block.
- 8) Panchayat Samiti acts as intermediary for handing over the activities or official program sanctioned by the government at village level.
- 9) Block Development Officer has to supervise overall programs of the Panchayat Samiti and keeps on reporting to the higher authorities. He is supported with Subject Matter Specialist and Ministerial staff at his head quarter.
- 10) Panchayat Samiti has to reach the grass root level with felt need based programs to the people. It has to certain the very specific local problems of different nature and the same have to be presented in the form of proposals to higher authority.

1.8 ZILLA PARISHAD

The District Council or Zilla Parishad or Zilla Parishad, District Panchayat, or Zilla Panchayat is the third tier of the Panchayati Raj system. Zilla Parishad is an elected body. Chairpersons or Block Pramukh of Block Samitis are also represented in Zilla Parishad. The members of the State Legislature and the members of the Parliament of India are members of the Zilla Parishad. Members of the Zilla Parishad are elected from the district on the basis of adult franchise for a term of five years. Zilla Parishad has minimum of 50 and maximum of 75 members. There are seats reserved for Scheduled Caste, Scheduled Tribes, backward classes and women. Councillors chosen by direct election from electoral divisions in the District and The Chairmen of all the Panchayat Samitis form the members of Zilla Parishad. The Parishad is headed by a President and a Vice-President.

Administrative structure

The Chief Executive Officer (CEO), who is an [IAS](#) officer, heads the administrative machinery of the Zilla Parishad. He may also be District Magistrate in some states. The CEO supervises the divisions of the Parishad and executes its development schemes.

Function

Provide essential services and facilities to the rural population and the planning and execution of the development programmes for the district. Supply improved seeds to farmers. Inform them of new techniques of training. Undertake construction of small-scale irrigation projects and percolation tanks. Maintain pastures and grazing lands. Set up and run schools in villages. Execute programs for adult literacy. Run libraries. Start Primary Health Centres and hospitals in villages. Start vaccination drives against epidemics and family welfare campaigns. Construct bridges and roads. Execute plans for the development of the scheduled castes and tribes. Run ashram shala's for adivasi children. Set up free hostels for scheduled caste students.

Encourage entrepreneurs to start small-scale industries like Cottage industries, handicraft, agriculture produce processing mills, dairy farms, etc. Implement rural employment schemes. They construct roads, schools, & public properties. And they take care of the public properties. They even supply work for the poor people (scheduled tribes, scheduled caste, lower caste).

Sources of income

Taxes on water, pilgrimage, markets, etc. Fixed grant from the State Government in proportion with the land revenue and money for works and schemes assigned to the Parishad. The Zilla Parishad can collect some money from the panchayats with the approval of the government. It gets a share from the income from local taxes.

1.9 SUMMARY:

The word "panchayat" literally means "assembly" (ayat) of five (panch) wise and respected elders chosen and accepted by the local community. However, there are different forms of assemblies. Traditionally, these assemblies settled disputes between individuals and villages. Modern Indian government has decentralized several administrative functions to the local level, empowering elected gram panchayats. The Constitution visualises panchayats as institutions of self-governance. However, giving due consideration to the federal structure of our polity, most of the financial powers and authorities to be endowed on panchayats have been left at the discretion of concerned state legislatures. Consequently, the

powers and functions vested in PRIs vary from state to state. This is one the biggest democracy in the world where village level democratic structures are functioning for their development.

1.10 SELF-STUDY:

1. Explain the three - tier system of Panchayat Raj system.
2. Explain the structure and the working of Gram Panchayat.
3. Explain the structure and the working of Panchayat Samiti.
4. Explain the structure and the working of Zilla Parishad.
5. Write short notes:-
 - Powers and duties of Gramsevak.
 - Powers and duties of Block Development Officer.
 - Powers and duties of Chief Executive Officer.
 - Gramsabha.
 - Royal Commission on Decentralisation (1907)

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Unit - 2

LAND REVENUE ADMINISTRATION

Dr. Clementine Rebello

Unit Structure :

- 2.0 Objectives
- 2.1 Introduction
- 2.2 Departments of Revenue Administration
- 2.3 Revenue Division
- 2.4 Revenue Officers - their powers and duties
- 2.5 Duties and functions of circle officers & Circle Inspectors
- 2.6 Talathis / Patwaris
- 2.7 Summary
- 2.8 Self-study

2.0 OBJECTIVES

Main Objective of Land Revenue Administration is;

1. To assess and collect of land revenue, collection of local cess on behalf of local bodies, collection of court fees, recovery of loans and advances, other dues of various departments, and all other dues recoverable as arrears of land revenue,
2. To Prepare and maintain "Land Records" related to revenue accounts,
3. To exercise the statutory powers endowed under the Maharashtra Land Revenue Code, 1966, the Mamlatdar Courts Act, the Land Acquisition Act, 1894 and various other land reform enactments.

2.1 INTRODUCTION

The history of Land Administration dates back to the olden days of kings and Kingdoms. The Land Revenue was the major source of revenue for the kings. The prosperity of the kingdom was depending upon levy of tax and its recovery. The Minister of Vijapur kingdom Todarmal was the founder of Ryotwari land revenue system. This system was introduced by Chhatrapati Shivaji Maharaj in his "Hindavi Swaraj". This system became so popular that British rule was compelled to adopt this system In old Bombay Province.

The present system of preparing and maintaining land records is a scientific form of Ryotwari Land Revenue System.

2.2 DEPARTMENTS OF REVENUE ADMINISTRATION

Revenue administration is divided into four separate departments which are as mentioned below:

- i. Recovery of Revenue
- ii. Measuring of lands
- iii. The registration of land alienations and
- iv. Treasury

i) Recovery of Revenue -

Every person in the state comes in contact with this department as it performs duties like issue of ration cards, caste certificate, election duties, etc along with the revenue recovery work. The top to bottom order of officers working for this department is as follows:

- Revenue Minister
- Secretary, Addl. Secretary Asst. Secretary etc.
- Divisional Commissioners
- Collectors
- Sub- Divisional Officers
- Tahasildars / Naib Tahasildars
- Circle Inspectors/Circle Officers
- Talathis/Patwaris
- Kotwals

Measuring of Lands -

This department is commonly known as Survey Department. This department deals with the measuring of land, fixing boundaries of holdings, settling assessment of the agricultural land. They determine boundaries of villages, cities and towns and fixes boundary marks. They also keep land records. Top to bottom order of Revenue Officers of this department is as mentioned below:-

- Revenue Minister
- Secretary
- Settlement Commissioner
- Director of Land Records
- Dy. Director of Land Records
- Superintendent of Land Records
- District Inspector of Land Records
- Taluka Inspector of land Records

- Surveyor or Survey Tahasildar
- Land Measurer

The registration of land alienations -

The transfer of land is legal and valid if the same is registered as per provisions of Transfer of Property Act, and the Indian Registration Act, 1908. The land transfers are registered with the Sub-Registrar who is having his office in each Taluka.

Treasury -

The land revenue was the main source of income of the state. Therefore it was necessary to have treasury department on Taluka level to deposit the amount collected by revenue officers. During the course of time the control of treasury was taken over by finance department and since then this department seized to be part of revenue department. However it is duty of collector to visit and inspect this department as he is the head of the district administration.

Check your progress

Q- What are the different departments of Revenue Administration?

2.3 REVENUE DIVISION

For the purpose of revenue administration the Government has divided State into 6 divisions 35 districts and 399 talukas. Each District is divided into Subdivisions for administrative convenience. Each Division may consist of 4 to 5 talukas. These talukas are further subdivided into revenue circles and circles into revenue sazas. Sazas consist of a group of villages. Divisional Commissioner is in charge of the "Division". District administration is under control of Collector Officer in charge of Sub-Division is called Sub-Divisional Officer and Tahsildar is chief officer on taluka level. On village level Circle Inspector / Officer is head of revenue circle and saza is under charge of a Talathi.

2.4 REVENUE OFFICERS: THEIR POWERS AND DUTIES

Divisional Commissioner

In the revenue matters Divisional Commissioner is the Chief Controlling Authority under the superintendence, direction and control of the State Government. All the powers in respect of revenue matters are delegated to the Divisional Commissioner.

Collector

The Collector occupies a central place in the district administration. He is the head of the Revenue administration in the district and acts as the coordinating officer among all the officers of the Government in the district. He plays a pivotal role in the administration of the district.

The collector is empowered to convert use of land from one purpose to another purpose. The collector is responsible in respect of (1) fixation, (2) collection and (3) accounting of the land revenue of the lands which are liable to payment of land revenue.

The Collector is also responsible for the collection of fees and taxes under various other Acts such as the Indian Stamp Act, the Indian Court Fees Act, the Bombay Entertainment Duty Act, the Sales Tax Act, the Bombay Village Panchayats Act, etc. Thus the collector and his establishment have to undertake the recovery of such dues when necessary as arrears of land revenue under the provisions of various Acts. In regard to the administration of the Indian Forests Act, the ultimate responsibility for the administration of the Forest department, so far as his district is concerned, lies with him and the Divisional Forest Officer is his assistant for the purpose except in matters relating to the technique of forestry.

The administration and implementation of the various land tenure abolition Acts including the Bombay Tenancy and Agricultural Lands Act, 1948 and the Maharashtra Agricultural Lands (Ceiling on Holdings) Act, 1961, rests with the Collector. He is also an appellate authority to hear appeals under various sections of these Acts.

According to the Maharashtra Agricultural Lands (Ceiling on Holdings) Act, 1961, a particular ceiling limit has been fixed in the district. Thus the excess land has to be taken over by Government by paying compensation and the disposal of such surplus land has to be made by the Collector. He is empowered to award compensation under the Land Acquisition Act. Although the powers and functions under this Act are delegated to the Special Land

Acquisition Officers he exercises the control over such officers and also takes review of the work done by them.

As a District Registrar, the Collector controls the administration of the registration department in the district.

Collector also acts as the District Magistrate in case of maintenance of Law and Order and General Administration, as District Election Officer in case of conduct of Election. Collector plays a key role during natural disaster period like flood, earthquake, landslide, cyclone/storm damage or fire incidence. He generally takes prompt action whenever situation arises in any part of the district, and provides assistance either in cash or kind to the victims according to the nature of damage.

The Collector is assisted by number of officers at the headquarters.

Resident Deputy Collector -

The Resident Deputy Collector is appointed to relive the Collector of his ordinary routine duties. In the absence of collector he is to look after important urgent work and to see that work of collectorate goes on smoothly. He has to coordinate the work of District offices with that of subordinate offices functioning at Taluka levels and Sub-Divisional levels.

Sub-Divisional Officer -

Officer in charge of Sub-Division is called Sub-Divisional Officer or Dy. Collector or Asst. Collector. In revenue matter he acts as coordinator in between Tahsildars of his Sub-Division and the District Collector. The Sub divisional Offices are a replica of Collectorate in the matter of number of sections. The Sub-Divisional Officer is the first appellate authority in respect of revenue matters handled by his subordinates Sub Divisional Officer is also the Sub Divisional Magistrate having jurisdiction over his division.

The Sub-Divisional Officer is also the Returning Officer for Assembly constituencies and he is the Asst. Returning Officer for the Parliamentary Constituency in his sub-division.

Tehsildar and Naib Tehsildars -

The officer in-charge of a tahsil is called Tahsildar. Tahsildar has powers of coordination and distribution of work among Circle Revenue Officers, the Tehsildar and Naib-Tehsildars are responsible for collection of land revenue and other dues payable to the Government. They remain in touch with the subordinate revenue staff. They observe the seasonal conditions and condition of crops. They listen to the difficulties of the cultivators. The Tehsildar and Naib-Tehsildars extensively tour the areas in their

jurisdiction. They decide urgent matters on the spot, like correction of entries in the account books, providing relief to the people faced with natural calamities, etc. They also sit in the courts to settle disputes in connection with Land Reformation Acts, entries in account books, etc. Any application regarding land revenue is to be addressed to the Tahasildar. Tahasildar takes decision on the application after due enquiry. For elections to the Vidhan Sabha, a Tahasildar is, invariably be appointed as Assistant Returning Officer for the constituency / constituencies falling in his Tahsil. They hold the powers of Executive Magistrate.

Circle Inspector / Officer

Circle Inspector is village level Revenue Officer working under Tehsildar and Naib Tehsildar. The Circle Officer and the Circle Inspector in charge of a circle shall exercise such powers over the Talathi in his circle and perform such duties and functions as may from time to time be prescribed.

Check your progress

Q- What are the powers and duties of Revenue officers?

2.5 DUTIES AND FUNCTIONS OF CIRCLE OFFICERS AND CIRCLE INSPECTORS

1) Subject to the orders of the Tahsildar or, as the case may be, Naib- Tahsildar, every Circle Officer and Circle Inspector shall be responsible for the supervision of the revenue administration and the land records of every village in their circles. They shall, from time to time in each year inspect every village in their respective jurisdiction, get themselves acquainted with the qualifications and conduct of the village officers and the state of crops and the condition of the people in such village and report promptly to the Tahsildar or, as the case may be, the Naib- Tahsildar, any matter requiring orders of superior officers and shall see that the orders passed by such officers are properly and expeditiously implemented.

2) In particular, the Circle Officer and the Circle Inspector shall - (a) inspect the works for which loans have been granted to the

villagers under the provisions of the Agriculturists Loans Act, 1883, or the Land Improvement Loans Act, 1884, or as the case may be the Bombay Non-Agriculturists' Loans Act, 1928 to ascertain -

- i) that the tagai advances have been duly recorded in the Record of Rights;
- ii) that they have been spent for the purposes for which they were given; and
- iii) that the conditions attached to the grant of such advances are properly observed by the persons concerned;

(b) inquire into the collection of Government revenue, ascertain the reason why such revenue is in arrears, examine the Talathi's balance and ascertain that remittances to the treasury are duly made;

(c) test a reasonable number of receipts in respect of land revenue paid and other dues by oral examination of the persons concerned and by comparison with the ledger; and, where any corrections are made by them in the receipt books, initial against such corrections and record a note at the end of a village ledger stating by their numbers which accounts have been verified;

(d) note down the dates of their visits and inspections in the diary and visit book of the Talathi, as well as in their own diaries;

(e) examine the diary of the Talathi, make remarks in the column provided for the purpose and note them briefly in his own diary;

(f) assist in the preparation of annual valuation of crops of every village in their circle; and satisfy themselves that due publicity has been given to orders regarding suspension or remission of land revenue;

(g) during the period commencing from 1st July and ending on 30th September, compile taluka statistical return and do such officeworks as the Tahsildar or as the case may be Naib- Tahsildar or the District Inspector of Land Records may direct;

(h) verify whether all fragments have been duly entered in the Record of Rights and notices of entries in the register of mutation in the prescribed form given to the parties concerned as required by sub-section (2) of Section 6 of the Bombay Prevention of Fragmentation and Consolidation of Holdings Act, 1947 ;

(i) check whether any transactions have taken place in contravention of the provisions of the relevant tenancy law and the Bombay Prevention of Fragmentation and Consolidation of Holdings Act, 1947, and whether such transactions have been

reported to the Tahsildar for action; and whether, in making the entries in respect of such transaction in the Record of Rights, the procedure laid down by Government in that behalf, if any, has been duly followed;

(j) inquire whether a tenant actually cultivating land is the same as entered in the Record of Rights ; and whether all cases of discrepancies, if any, are duly reported to the Tahsildar ;

(k) check whether landlords issue receipts as required by the provisions in the relevant tenancy law, and verify whether any landlord recovers rent in excess, or in the form of labour or service in contravention of the provisions of such law, and whether all such cases are reported to the Tahsildar for action;

(l) check whether any tenant has subdivided or sub-let the land and where in any case the tenant has so subdivided or sub-let the land, report such cases to the Tahsildar for action;

(m) check building operations to see whether any law for the prevention of urban development has been contravened, and if so, see what further steps have been taken;

(n) verify, periodically, the non-agricultural plots, the plots in the gaathan leased or granted, the lands given out on special terms and the lands vesting in the village panchayat with a view to detecting encroachments and breaches of such terms;

(o) inspect all inam lands and report cases of sales, leases and transfers of land made in contravention of the terms of the grant or of the provisions of the Code or any law for the time being in force;

(p) check whether the conditions attached to grants of lands or impartible or inalienable tenure are properly observed by the grantees;

(q) perform as many crop cutting experiments as required for the purpose of fixing annewari of crops and assessing the rents under the relevant tenancy law;

(r) check whether the register showing cases of discrepancy in maps, village atlas, and the Record of Rights as compared to the actual state of things in the holdings, which require regularisation is maintained up-to-date;

(s) when no special staff for the purpose has been appointed, verify the food stocks in Government godowns in their circle, by making a percentage check of bags of each kind of grain, and inspect fair price shops;

(t) check the list of survey numbers situated on the banks of rivers and nallas, which are subject to alluvial and diluvial changes;

(u) ensure that action is taken in time to revise the assessment, the guarantee period of which is about to expire and renew leases before the expiry of their respective terms;

(v) report to the Tahsildar or, as the case may be, Naib-Tahsildar, the auctionable items like melon beds and eksali leases; and

(w) report to the Tahsildar, the Sub-divisional Officer and the Collector the occurrence of natural and other calamities such as flood, fire, frost, hailstorm, locust swarm, epidemic diseases relating to human beings or animals and failure of crops in villages in their circle and send a rough estimate of loss due to such calamities.

3. Duties of Circle Officers and Circle Inspectors in time of scarcity - Every Circle Officer and Circle Inspector shall watch every season for detecting the signs of impending scarcity and be ready to report, whenever called upon, the crop condition of their circle. On receipt of information that the crops of any village are adversely affected by the unfavourable nature of the season, or excessive or insufficient rainfall or any other reason, they shall forthwith visit that village and make requisite enquiries and observations and report the result of such observations to the Tahsildar or, as the case may be, Naib Tehsildar. Whenever any scarcity or conditions akin to scarcity, are reported, the Circle Officer and Circle Inspector shall perform such functions relating to relief measures as may be entrusted to them by the State Government or by their superior officers.

4. Circle Officer and Circle Inspector to intimate their tour programme Except during the period commencing on the 1st day of July and ending on the 15th day of September, every Circle Officer, or as the case may be, Circle Inspector shall send every Saturday to the District Inspector of Land Records and the Tahsildar, as the case may be, Naib-Tahsildar, a postcard showing the villages in which he expects to be working on each day of the following fortnights.

5. Touring- Every Circle Officer and Circle Inspector shall ordinarily tour for twenty days in a month during the fair season (i.e., the period commencing on the first day of October and ending on the 30th day of June) and for not less than thirty days in the aggregate during the period commencing on the 1st day of July and ending on the 30th day of September. They shall make at least fifteen night halts outside their circle headquarters in each month during the fair season and six night halts during other seasons. If, for any reason they are prevented from attaining this standard in any month they shall make up the deficiency in the month following.

6. Diary of Circle Officer and Circle Inspector - Every Circle Officer and Circle

Inspector shall submit in such form as may be determined in that behalf by the State Government, a diary monthly to the Tehsildar or, as the case may be, the Naib- Tahsildar who shall forward it with remarks through the District Inspector of Land Records to the Sub-divisional Officer by whom it shall be returned also through the Tahsildar. The Circle Officer, or as the case may be, the Circle Inspector shall not ask for orders on any point in the diary but shall make a separate report in the matter after making a note in the diary about the circumstances under which such report is made. An office copy of the diary containing copies of all remarks made by the superior officers shall be kept by the Circle Officer or, as the case may be, the Circle Inspector in his office. This entry of remarks shall be invariably made before finally returning the diary of record to the Tehsildar. The office copy of the diary shall be produced for perusal of any superior officer on his visit for inspection.

7. Inward and outward register - Every Circle Officer and Circle Inspector shall keep a single register for inward and outward correspondence in the form prescribed by the State Government for the purpose, the pages of which shall be stamped and numbered at the taluka office on the 1st day of August.

8. Circle Officer and Circle Inspector to reside in their respective Circle - Every Circle Officer and the Circle Inspector shall reside in their respective circles in a village fixed by the Collector.

9. Report about unauthorised diversion of land - Every Circle Inspector and Circle Officer shall be responsible for detecting and reporting to the Tahsildar or, as the case may be, the Naib-Tahsildar every case of conservation of use of land from the purpose for which it was assessed to another. The report shall be accompanied by a sketch map showing the extent of the land, the use whereof is so converted, its assessment and proposals regarding its re-assessment on the basis of prescribed rates and other factors governing the re-assessment.

10. Inspection of sub-divisions - Every Circle Officer and Circle Inspector shall inspect the register showing the newly formed sub-divisions and amalgamated subdivisions and report to the District Inspector of Land Records through the Tahsildar every year, information about the number of subdivisions to be measured through the Tahsildar.

11. Duties of Circle Officer and Circle Inspector while on inspection - Whenever a Circle Officer and Circle Inspector visits a village for

inspection, he shall select survey numbers of both cultivated and waste lands in different parts of the village for inspection in such manner as to cover within one year all varieties of crops grown in the village. In every five years or such longer period not exceeding ten years as the Collector may determine having regard to the size of the circle, each survey number shall be inspected at least once, in order to avoid the recurrence of errors and misunderstanding on the part of the Talathi and to ensure that the Talathi shall really inspect the survey number. The Circle Officer and Circle Inspector shall inspect holding to test the recording of hissas and tenancies, the entry of fruit trees, and other valuable trees and details of irrigation works in the record of rights and crop statement entries of areas under crops in the crop statement and the maintenance of village map.

12. Inspection when Talathi has failed to fill in crop statement - Where the Circle Officer or the Circle Inspector finds at the time of his visit to a village that the Talathi of the village has not duly filled in the crop statement, he shall record that fact in his diary with the substance of the Talathi's explanation and shall inspect any selected survey numbers with the Talathi who shall record the result of the inspection in the crop statement.

13. Crop statement, etc. to be kept in Chavdi - The Circle Officer and the Circle Inspector shall ensure that crop statement and forms of all other land records and maps prescribed for a village under Section 156 of the Code are kept in the Chavdi.

14. Registration of double crops and crop mixtures - Every Circle Officer and Circle Inspector shall during inspection give careful attention to the correct registration of double and mixed crops. Where two crops one after the other, are sown and reaped in the same area in the same year, each shall be credited with such full area. Where on account of the failure of the crop sown first, a second crop is sown, such second crop only shall be registered. In mixed crop of all kinds, the area shall be apportioned between each variety of the crop with as great an accuracy as possible.

15. Registration of fallow and other lands - Every Circle Officer and Circle Inspector shall

(i) Verify whether any land is lying uncultivated for two or more consecutive years through the default of the landlord or the tenant and report such cases to the Tahsildar or, as the case may be, the Naib-Tahsildar;

(ii) Cause to be registered in the crop register, all lands which have been actually sown; irrespective of whether there is a yield of crops or not, and all fallow lands and the areas there of;

Provided that no such registration shall be necessary -

(a) In the case of dry crop lands, if the area is not more than 0.1012 hectare; (b) in the case of garden land, of the area is not more than 0.0253 hectare; and (c) in the case of crops sown in the Pot Kharab lands:

Provided further that whether on account of the failure of any variety of crop sown in any land fresh sowing of another variety of crop has been made in that land, the crop which is sown afresh shall be registered in the crop register.

16. Inspection of lands - The Circle Officer and the Circle Inspector shall detect all encroachments and unauthorised occupation of any land which is the property of the State Government and shall inspect all waste lands disposed of in accordance with the rules regulating the disposal of waste land with a view to verifying whether they are brought under cultivation and whether the conditions subject to which they were granted have been fulfilled by the grantee. Where in any case the Circle Officer or the Circle Inspector detects encroachment on any lands which are the property of the State Government or detects unauthorised cultivation, he shall forthwith report those cases to the Tahsildar for necessary action.

17. Inspection of boundary and survey marks - It shall be the duty of the Circle Officer and the Circle Inspector to inspect the boundary and survey marks (not being those under the control of the Forest Department).

18. Repairs to boundary and survey marks - The repairs to boundary and survey marks for which the State Government is responsible shall be made by the Circle Officer and Circle Inspector at Government cost.

19. Report to District Inspector of Land Records in certain cases - When the Circle Officer or, as the case may be, the Circle Inspector cannot fix a boundary or survey mark without the field book, or if he is in doubt as to how to deal with any case, he shall report the matter to the District Inspector of Land Records for orders.

20. Inspection of live-stock return-

(1) Every Circle Officer and Circle Inspector shall check the entries in the live-stock return prepared by the Talathi as hereinafter provided, namely:-

- (i) In villages having less than five hundred population.
- (ii) In villages having more than five hundred but less than one thousand population.
- (iii) In villages having more than one thousand population

Checking shall be made by house-to-house visitation, supplemented by inquiry from the residents in the villages concerned and by frequent references to the previous returns. Where all entries are not checked, the entries not checked during any visit to the village shall be selected for checking in the subsequent visit to that village. The Circle Officer or, as the case may be, the Circle Inspector shall note in his diary, the serial number of the first and the last of the entries checked.

(2) Every Circle Officer or, as the case may be, Circle Inspector shall show in his diary the number of entries checked, the number of entries found incorrect and the number and kind of errors detected. Whenever any errors are to be corrected, he shall do so in red ink by bracketing the error and inserting the correct entries by interlineation or, side notes or, by inserting entirely fresh entries, and authenticate such interlineations, side notes or, as the case may be, fresh entries by his signature. Where any gross carelessness is noticed, he shall take the Talathi explanation and forward it to the Tahsildar for orders.

(3) Every Circle Officer and Circle Inspector shall take note of the increase or decrease in the figures of the census of live-stock of different kinds and shall inquire into causes thereof and record the explanation given thereof by the Talathi.

21. Recording sources of water supply - Every Circle Officer and Circle Inspector shall cause to be indicated, by appropriate symbols, in the village map prepared in accordance with Section 156 of the Code, all wells, bandharas and tanks in all holdings in the village and report the matter to the District Inspector of Land Records.

22. Inspection of sources of water supply - Every Circle Officer and Circle Inspector shall frequently check quinquennial register of water supply maintained by the Talathi and visit wells and other sources of water supply in the gaothan and wells, tanks and bandharas in all holdings in the village for testing the said register. If the entry in the register is found to be correct, the Circle Officer or, as the case may be, the Circle Inspector shall initial against it and if the entry is not correct, he shall correct it in red ink.

23. Circle Officer and Circle Inspector to perform functions entrusted to them by

Collector - Without prejudice to the foregoing provisions, every Circle Officer and Circle Inspector shall, subject to orders of the State Government, perform such other functions relating to the revenue and general administration of the district for which the Collector is responsible as may be entrusted to them by the

Collector and shall carry out such special and general directions as may be given by the Collector in that behalf.

2.6 TALATHIS / PATWARIS

Whereas, the collector is regarded as the pivot of the district administration, the Talathi is the representative of Government at the village level. He has usually one to five villages in his charge. His local knowledge is so extensive that there is hardly any information about the village and its occupants of which he is not aware or of which he cannot make a guess. As such, he is viewed as the eyes and ears of the Collector. The duties of the Talathi includes field inspections, recording of crops, revision reports relating to mutations, partitions, recovery of revenue or rents, and all amounts recoverable as arrears of land revenue, preparations and maintenance of the "Records of Rights". He is also required to assist in providing relief to agriculturists in distress or in census operations. It is also the duty of a Talathi to prepare, whenever called upon by any superior revenue or police officer of the taluka or district to do so all writings connected with the concerns of a village which are required either for the use of the Central or State Government or the public, such as notices, reports of inquests, and depositions and examinations in criminal matters.

Duties and function of Talathis are specified in various sections of the code and the rules thereunder. Some of the sections and rules are as follows:-

Under Section 44 Sub-Section (4) The person to whom (Non Agricultural) permission is granted or deemed to have been granted has to inform the Tahsildar in writing through the village officers (Talathi) the date on which the change of user of land commenced. Talathi has to inform to Tahsildar, the change of use of land within three days on receipt of information received to him by person concerned. Section 76 Section

Every revenue officer and every Talathi receiving payment of land revenue shall, at the time when such payment is received by him, give a written receipt for the same.

Check your progress

Q- Write short note on Talathis / patwaris.

Maharashtra Land Revenue Code 1966:

One of the objectives of land revenue administration is to recover the revenue. So it is obvious that failure to pay arrears of land revenue makes the holding liable to forfeiture. On forfeiture the occupancy ceases to be property of the occupant under section 72 of MLR Code 1966. The forfeited land shall not change hands by way of inheritance or by will. Under section 36 A, the land of a Tribal cannot be transferred in favour of any non-Tribal without permission of State Government and/or Collector as the case may be.

Bombay Tenancy and Agricultural Lands Act, 1948:

To gain maximum revenue from the land in India the British rulers introduced three major forms of land settlements namely Zamindari, Ryotwari and Mahalwari. Under the influence of these systems actual cultivators turned into tenants. These land system created intermediary between the State and the actual tillers of the soil. These intermediaries had no interest in improvement of the land. Against this background intermediary interests were abolished by the Government by framing policy "Land to the tillers" In the Maharashtra under section 32 of the Bombay Tenancy and Agricultural Lands Act, 1948 provides compulsory transfer of ownership rights of tenanted lands to the tenants from 1st April 1957 which is known as the "Tillers' Day". There is complete sale and purchase on the tiller's day. The title of landlord passes immediately to the tenant on the tiller's day. The tiller who purchased the land under this act is classified as an Occupant Class II. The land of Occupant Class II is heritable but transfer of land is valid subject to fulfilling conditions imposed by the Government.

No land purchased by tenant under section 32, 32F, [32I, 32 O, 33 C, or 43 ID or sold to any person under section 32 P or 64 shall be transferred by sale, gift, exchange, mortgaged, leased or assignment, without the previous sanctioned of the collector. Sanctioned is not required when land is to be mortgaged in favour of Government.

The collector may grant permission for transfer of land in any of the following circumstances, namely:-

That the land is required for agricultural purpose by industrial or commercial undertaking in connection with any industrial or commercial operations carried on by such undertaking;

That the transfer is for the benefit of any educational or charitable institution;

That the land is required by a co- operative farming society;

That the land is being sold in execution of a decree of a Civil Court or for the recovery of arrears of land revenue under the provision of the code;

That the land is being sold bonafide for any non agricultural purpose;

That the land is being sold by a land owner on the ground that –

- i. He is permanently giving up the by profession of an agriculturist, or
- ii. He is permanently rendered incapable of cultivating the land personally;

That the land is being gifted in favour of-

- i. The bodies or institution mentioned d in section 88A and clauses a & b of section 88B or ii. A member of landowners family;

1) That the land is being exchanged-

- i. With the land of equal or nearly equal value owned and cultivated personally by the member of the same family; or
- ii. With the land of equal or nearly equal value situate in the same village owned and cultivated personally by another land owner with a view to forming compact block of his holding or with view to having better management of the land:

Provided that, the total land held and cultivated personally by any of the parties to the exchange whether as a owner or tenant or partly as does not exceed the area as a result of exchange;

- i) That the land is being leased by a landowner who is a minor; or a widow or person subject to any physical or mental disability or the member of the armed forces or among the land owners holding the land jointly;
- ii) That the land is being portioned among the heirs or survivors of the deceased land owner;
- iii) That the land is being mortgaged in favour of society registered or deem to be registered under the Maharashtra Co-op Societies Act 1960 for raising a loan for paying the purchase price of such land.
- iv) That the land is being transferred to the person who by reason of acquisition of his land for any development project has been displaced and requires to be resettled.

Where sanctioned for sale of land given in the circumstances specified in the clauses a, b, c, e, or f it shall be subject to the condition of the land owner paying to the State Government a nazrana equal to 40 times assessment of the land.

In the case of portioned sanctioned under clause 'j' it shall be subjected to the condition that the are allotted to each sharer

shall not be less than the unit specified by the State Government under clause c of sub section I of sub-section 27.

Transfer to non agriculturist barred under Section 63

No sale, gifts, exchange or lease of any land shall be valid in favour of person who is not an agriculturist. However collector may grant permission for transfer under the below mentioned conditions:

- a) Such a person bona fide requires the land for a non agricultural purposes; or
- b) The land is required for the benefit of an industrial or commercial undertaking or an educational or charitable institution; or
- c) Such land being mortgaged, mortgage has obtained from collector a certificate that he intends to take the profession of an agriculturist and agrees to cultivate the land personally; or
- d) The land is required by co-op society; or
- e) The land is required for cultivating it by a personally by a person, who, not being an agriculturist, intends to take to the profession of agriculture and to whom collector has given certificate that such person is intend to take to the profession of agriculture and is capable of cultivating land personally; or
- f) Such land is being sold in execution of decree of a civil court, or recovering arrear of land revenue.

Transfer to non agriculturist for bonafide industrial use:

No permission is required to sell the land to the person who may or may not be an agriculturist for the purpose of bonafide industrial use if the land situated within the industrial zone of a draft plan or final regional plan or draft of final town planning scheme prepared under the MRTP Act 1966 and the area where no such plans or scheme exists.

The Bombay Prevention of Fragmentation and Consolidation of Holdings Act, 1947:

Under this act government is empowered to declare the area as a "local area" for determine minimum size of any class of land that can be cultivated profitably as a separate plot. The size of the land so determined is called standard area. Fragments means plot of agricultural land of less extent than the appropriate standard area determined for the local area.

Under section 7:

"Fragment" is not allowed to transfer except to the owner of a contiguous survey number or recognized sub-division of survey numbers. Also no land shall be transferred so as to create "fragment".

Under section 8:

No land in local area shall be transferred or partitioned so as to create fragment.

Under section 27:

There is ban on transfer of land, execution of awards and decrees during the continuance of the consolidation of holdings.

Under section 31:

There are restrictions on alienation and sub division of consolidated holdings.

Maharashtra Agricultural land Ceiling on Holding Act, 1961

The basic objective of fixation of ceiling on landholdings is to acquire land above a certain level from the present landholders for its distribution among the landless. It is primarily a redistributive measure based on the principle of socio-economic justice.

This act is restricting the size of holdings which a person or family can own. Acquisition of land in excess of the ceiling is prohibited. Land rendered surplus to the ceiling is taken over by the state and distributed among the weaker sections of the community. Any person or family cannot hold land in excess of ceiling area fixed on 26th September 1961. Person or family can not transfer surplus land until the land in excess of the ceiling area is determined under the act.(Section 8) A person possessing land in excess of ceiling area can not acquire land by transfer. (Section 9) The land held by individual or the family of the Maharashtra State or the part of India is to be taken into consideration while calculating the ceiling area. For fixing ceiling areas lands have been classified in five classes as detailed below

Class of Land	Ceiling Area	
	Hectares	Acres
Land with assured supply of water for irrigation and capable of yielding at least two crops in a year	7-28-43	18
Land which has assured supply of water for only one crop.	10-92-65	27
Land which has un-assured supply of water for only one crop.	14-56-86	36
Dry Land situated in Mumbai Sub Urban District and Districts of Thane, Raigad, Ratnagiri, Sindhudurg, Bhandara, Gadchiroli, Sironcha talukas of Chandrapur District which is under paddy cultivation for continuous period of three years.	14-56-86	36
Dry Crop Lands other than all above lands.	21-85-29	54

The Maharashtra Co-op Act, 1960 : While taking loan from co-operative society member is furnishing undertaking to the society that he is mortgaging his own agricultural land against the said loan amount. Under section 48, a charge on land continues until the whole debt, due to the society is satisfied.

Transfer of Property Act, 1882

Section 52 of the Transfer of Property Act provides that during the pendency of any litigation affecting the immovable property it can not be transferred or otherwise dealt with by any party to the suit so as to affect the rights of the other party under any decree or order which may be made therein.

Registration Act, 1908

- i) Section 17 of the Registration Act, 1908 lays down different categories of documents for which registration is compulsory. The documents relating to the following transactions of immovable properties are required to be compulsorily registered; Instruments of gift of *immovable property
- ii) Lease of immovable property from year to year or for any term exceeding one year or reserving a yearly rent.
- iii) Instruments which create or extinguish any right or title to or in an immovable property of a value of more than one hundred rupees.

* “Immovable property includes: “Land, buildings, hereditary allowances, rights to ways, lights, fisheries or any other benefit to arise out of land, and things attached to the earth, or permanently fastened to any thing which is attached to the earth, but not standing timber, growing crops nor grass.”

Under section 49 of the above act, if the registration of the above transactions are not made the transactions are to be treated as a null and void.

Wakf Land

Wakf is a permanent dedication of movable or immovable properties for religious, pious or charitable purposes as recognized by Muslim Law. No transfer of immovable of a wakf, by way of sale or mortgage, exchange or lease for period of exceeding three years is validly allowed without previous sanctioned of the Wakf Board.

Trust Lands

These lands attract the provisions of the charitable Trust Acts. The trustees are competent to dispose of the trust property exercising the powers vested in them by the Trust Deed.

2.7 SUMMARY

The Land Revenue was the major source of revenue for the kings. The prosperity of the kingdom was depending upon levy of tax and its recovery. The Minister of Vijapur kingdom Todarmal was the founder of Ryotwari land revenue system. This system was introduced by Chhatrapati Shivaji Maharaj in his "Hindavi Swaraj". This system became so popular that British rule was compelled to adopt this system. Every person in the state comes in contact with this department as it performs duties like issue of ration cards, caste certificate, election duties, etc along with the revenue recovery work. It is duty of collector to visit and inspect this department as he is the head of the district administration. Tahsildar has powers of coordination and distribution of work among Circle Revenue Officers, the Tehsildar and Naib-Tehsildars are responsible for collection of land revenue and other dues payable to the Government. Talathi is viewed as the eyes and ears of the Collector.

2.8 SELF-STUDY:

1. What are the powers and duties of revenue officers?
2. What are the duties of circle officers and circle inspectors?
3. Write in short about the different land ceiling acts in Maharashtra 1961.
4. Write short note on Bombay Tenancy and Agricultural Lands Act, 1948'.
5. Explain the functions and duties of Talathis.
6. Write in short the main objective of Land Revenue Administration.

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Unit - 3

RURAL ECONOMY

Dr. Clementine Rebello

Unit Structure :

- 3.0 Objectives
- 3.1 Introduction
- 3.2 Concept of Agriculture
 - 9.2.1 Types of farming
- 3.3 Role of Agriculture in Rural Development
- 3.4 Types of Land Holding
- 3.5 Concept of Agricultural Labourers
- 3.6 Reasons for Increase in the Number of Agricultural Labourers
- 3.7 Problems of the Agricultural Labourers
- 3.8 Measures to Solve the Problems of the Agricultural Labourers
- 3.9 Summary
- 3.10 Self-Study

3.0 OBJECTIVES:

- 1) To study basically the Nature of the Agriculture, Types of Land Holdings and agricultural labourers.
- 2) To study the Role of Agricultural Occupation in Rural Development.
- 3) To understand the problems of the Agricultural Labourers and Suggest measures for the same.

3.1 INTRODUCTION

Agriculture is looked upon as the oldest occupation in the world. Since the ancient period agriculture is looked upon as the source of livelihood. Out of the total population of India 68% live in villages. The main occupation of this population is agriculture. So India is regarded as Agricultural Land. The requirements of the basic needs like food-grains and vegetables, fruits are available through agriculture. The raw material needed for the industries in the Indian economy is obtained through agriculture only. Out of the

total labour available in the country 65% labour gets work from agricultural operations. The main occupation of the people in the rural India is agriculture. Agriculture has a major share in the countries national income.

3.2 CONCEPT OF AGRICULTURE

India's main occupation is agriculture. Majority population's occupation is agriculture and operations related to it. Indian agriculture is very peculiar. It can be explained as follows.

- 1) Indian agriculture is devoid of any of the consolidation of Indian agriculture is not defective because of its nature of land holding pattern.
- 2) If we compare other occupations and agriculture the utilization of resources in agriculture is very less.
- 3) As majority population of the country's population depends on agriculture, there is more stress on the agriculture.
- 4) Indian agricultural production is very less compared to the countries agricultural production in the world.
- 5) Indian agriculture is seasonal so partial unemployment, disguised unemployment is seen on large scale in this sector.
- 6) Indian agriculture is based on traditional methods, so factors necessary to increase the agricultural production is less.
- 7) Indian agricultural land has become infertile due to continuous usage of same cultivating pattern everywhere and every time.
- 8) Indian agriculture depends on the natural rainwater and so the favourable and unfavorable conditions affect this occupation. Depending on nature is one of the characteristic features of Indian agriculture.
- 9) One more characteristic feature of Indian agriculture is its barren land. Out of the total land available for agriculture most of the land is kept barren. This barren land can be brought under cultivation.
- 10) Indian agricultural land is subdivided and fragmented. Illiteracy amongst the farmers, their disposition, law of inheritance in India, improper implementation of the laws in existence are some of the reasons.
- 11) Indian farmers are illiterate and most of the conditions of the farmer's economic status is not so good.
- 12) The profit of the agricultural production does not reach the farmers but the sellers of this agricultural production and the producers of the raw and finished goods.

- 13) There are lots of middlemen in the Indian trading system as it is not perfect. The result is that the Indian agricultural trading system (sales and purchase) system has been corrupted.
- 14) Food grains production is more in the Indian agricultural sector. Production of commercial crops proportion is very less.
- 15) Indian agriculture still uses traditional methods of agriculture. But to a small extent scientific method is used to increase the agricultural production.

3.2.1 Types of farming

As India is a land of geographical diversities there are variations in the type of farming. There are different types of farming existing all over India. They are as follows.

1) According to the size:

The size of the farm is taken into consideration for cultivation and planting. Accordingly there are three types of farming.

- a) Small Farming
- b) Medium Farming
- c) Large Farming

Due to geographical diversity and variations in the soil types the size of the farm is changeable.

2) According to the price of the agricultural productivity:

The agricultural product produced also decides the type of farming. It can be divided into types.

- a) Specialized Farming- When, income is generated by taking only one specific crop it is called specialized farming.
- b) Normal Farming- When, income is generated by growing different types of crops then that type of farming is called normal farming.

3) Nature of the Occupation:

While adopting the farming occupation the production purpose and its usage decide the type of farming. It is divided into two types.

- a) Farming as a source of livelihood- When farming is done as a source of livelihood; the production obtained is used only for the family consumption. This type of farming is called livelihood farming.
- b) Commercial Farming- In this type of farming the production is taken only for selling in the market. Profit is the only motive behind this type of farming.

4) Organized Farming:

Agricultural occupation is a very wide concept. This occupation is an organized nature of work and is divided into six types. They are as follows.

A) Individual Farming:

In this type the farming is based on personal nature or individual type. The farmer carries the farming operations out himself and he also takes help of his family members. This type of farming is called individual farming.

B) Joint Farming:

In this type of farming the factors like land, labour, capital required for the production of crops are synthesized together equally and then the production is distributed equally amongst them. This type of farming is called joint farming.

C) Co-operative Farming:

In this type of farming farmers come together to cultivate the land on co-operative basis. The production is distributed on the basis of co-operation they have given to each other. This type of farming is called co-operative farming.

D) Corporate Farming:

In this type of farming capital factor is utilized on a large scale. Farming also is done on large scale. The labourers work in the fields to earn from farming. In-charge manager is appointed to supervise on the labourers. To earn maximum profit is the main aim of the capital investor.

E) State Farming:

This type of farming requires large amount of capital investment. The government invests large amount of capital in this type of farming. The government manages the farming. Paid workers work under the observation of the management of the government.

F) Collective Farming:

In collective farming the land does not belong to any individual but all the farmers own it collectively and they collectively do the farming operations. The agricultural implements used, are their own. The farmer gets his share according to the contribution he has done to get the production.

5) Based on Land Ownership

Depending on the availability of land factor it is of two types.

A) Share Cropping:

In this type of farming the landlord provides the land required for farming. In return the landlord is given a section. Out of the total production excluding the production from the given section to the owner the remaining production goes to the farmer.

B) Peasant Proprietorship:

In this type of farming the required land for farming is acquired from the government. In return a section of land is given to the government. In the same way the land given is of conventional in nature and can be transferred.

6) Nature of Labour

There are different types of works to be done in farming. Depending on the availability of labour there are two types of farming. They are as follows.

A) Family farming:

There are different types of farming operations while cultivating the land. The farmer takes help of his family members to do the labour work in the farming operations.

This type of farming is called family farming.

B) Labour Farming:

In this type of farming the agricultural operations are done with the help of paid labourers. The labourers are given wages in return of the work done on the farms. The above type of farming cannot be strictly practiced. The agricultural occupation is very complicated.

3.3 ROLE OF AGRICULTURE IN RURAL DEVELOPMENT

Mahatma Gandhi had said that agriculture is the source of livelihood of Indian people. People practicing agriculture live in villages. If the villages are to be developed preference has to be given agricultural development and its allied activities and subsidiary occupations.

Countries economic development depends on agricultural development. Agriculture is the base of countries economy. Agriculture contributes to around 43% in the national income. Agriculture plays an important role in the economic development. As modernization takes place dependency on agriculture decreases. The raw material required for industrial development is supplied by the agricultural sector. Agriculture plays an important role to meet the needs of the increasing population and its demand

for food supply, national income in the economy, raw material required for industries, to help to increase employment.

Agricultural sector plays an important role in the economic development. It is as follows.

Source of Livelihood of Majority of Population:

Out of total India's population more than 70% population depend on agricultural sector for their livelihood. The population depending on agricultural sector decreased by 6%. It means still majority of population is depending on agriculture for its livelihood.

Share in the National Income:

Agricultural sector plays an important role in India's National Income. Out of total national income agriculture gives 42% of its share. Out of the total population of the country 67% of it is engaged in the primary sector i.e. agriculture. 12.7% engaged in the secondary sector i.e. industries; while 20.5% population in the tertiary sector i.e. small scale and cottage industries.

Economic stability:

It is said that the economic inequality amongst the developed and developing nations in the world has increased because of the increase in population depending on agriculture. Out of India's total population majority of it lives in rural areas and its main occupation is agriculture. This agricultural sector has generated employment depending on agriculture and allied & subsidiary occupations. As a result the majority rural population has attained a state of stability.

Important from the point of view of social and political:

We have to consider from the social and political point of view when we think of agricultural sector in India. Even though it is the farmer's personal view regarding what to grow, where to sell; the government has declared various schemes for agricultural development. So it has to be considered from the social point of view. Agriculture is the main source of income for the government also. So it is very essential to coordinate these two sources - social and political and develop healthy relations amongst each other.

5) Fodder for Domestic Animals:

Different types of crops are grown to fulfill the needs of the country's population. The main produce i.e. the seeds are used to fulfill the needs of the country's food-grains demand while the remains or sub products i.e. leaves, fodder, etc. are used to fulfill the needs of the domestic animals. The problem of fodder is faced on a large scale in a country like India having maximum domestic animals. To fulfill the needs of these domestic animals agriculture plays an important role.

Source of income to the government:

Agriculture plays an important role in the Indian economy. Secondary and tertiary sector depending on agriculture play an important role in the country's economy. Different taxes levied by the government on agriculture are a source of income to the country. Agriculture is looked upon as a sure source of income to the government.

Beneficial for industrial development:

Industries play an important role in the industrial development of the country. The agricultural produce has a lot of importance in the industrial development. As the agricultural sector provides raw material throughout the year the industrial production continues throughout the year in full fledge.

Importance in Trade:

There are two types of trades the internal and external trade. The agricultural produce obtained from the agricultural sector plays an important role in the internal trade of the country. Large scale of country's population is engaged in this type of trade like to reach the agricultural produce from the agricultural sector to the consumer- in the same way a good consumer for the farmers agricultural produce, help to get a proper price for the produce, wholesalers and retailers, traders, co-operative consumers societies, store rooms, distributing institutions, processing industries, etc. the source of livelihood of all of these is the agricultural produce.

In external trade the trade is done with other countries. In this type of trade the food grains and other agricultural produce is exported to other countries of the world. We get a lot of foreign currency by exporting goods like sugar, cotton, grapes, onions, sweet-limes, oranges, mangoes, bananas, roses etc.

Supply of Food Grains to the people:

The countries population has to depend on the agricultural produce obtained from agricultural sector in the country. To fulfill the needs of the countries food grains cereals, pulses are grown in the farms. There is need of one more Green Revolution to fulfill the needs of the increasing population.

10) Development of the means of Transport and communication:

It is very important to develop the means of transport and communication for agricultural development. The farmers should be able to take the agricultural produce to the market and also should know about the information of the goods that have come and that have been sent out from the market. In the same way he has to know the market prices for his agricultural produce. For this

communication system is very useful. All this contributes to an increase in the farmer's agricultural production. The development of transport and agriculture was possible because of its association with the sale of agricultural produce.

Check your progress

Q-1 Explain the role of agriculture in Indian economy.

3.4 LAND REFORMS INTRODUCTION

There are many reasons behind less agricultural productivity in India. If development is to be thought of then we have to think of the increase in the agricultural production. Factors such as social, economic and mental are related to the increase in the agricultural production. If an individual has to be given benefit of technology it has to be seen whether the person has favourable mentality, how much benefit he will get directly.

Indian land reforms have an adverse effect on the agricultural development. To improve agriculture these land reforms are to be studied in detailed. In this land reform it is studied whether the land belongs to the farmer himself or he has given land on lease to cultivate.

The distribution and division of land in India is uneven. The main occupation of the rural people is agriculture. The existing class structure in rural India is based on the ownership of land. Big farmers, medium farmers, small farmers and agricultural labourers class is seen in rural India. The distribution of land is uneven in these classes. This distribution of land is related to the ownership of land.

Land Reforms in India

Land reforms existed in India from the ancient period. They are as follows:

1) Zamindari System -

During the British reign in 1793 Lord Cornwallis brought this system in India in which a dependent class of Zamindars was created. The main aim behind this was to collect revenue from Indian people to run the British administration. As the revenue

collection was on permanent basis the middlemen appointed by the British took benefit of this and started exploiting the cultivators. The British government felt the need to create such a group to be in power so they gave the ownership of land to the middlemen collecting revenue on their behalf. From this the Zamindars class emerged.

There were two systems in Zamindari system.

a) Stable system -

In this system the agricultural tax to be paid to the government was fixed. After paying the agricultural tax to the government collected from the peasants the Zamindars would get a commission of 9% of the revenue paid.

b) Unstable system-

In this system the agricultural tax to be paid was fixed for a period of 20-40 years. In this unstable system the period was fixed for a long period of 40 years, which was a very long period, and it would get converted into stable system.

In this system the Zamindars themselves would not cultivate the land. They would give some section of land to other people to cultivate or to the bonded labourers. In return the cultivators or bonded labourers had to give a share in the form of the crop production. This resulted in the dominance of the Zamindars and exploitation of the bonded labourer or cultivator.

Mahalwari System:

In Mahalwari system the available land in the village whether fertile cultivable land or barren land belonged to the whole of the village and to any one in person. As it was village owned land it was called as Mahalwari system. In the Mahalwari system as the land was owned by the village it was duty of the whole village to pay the tax to the government. The tax to be paid to the government by the village as a whole was fixed for 30-40 years. After some years it was changed. As it was the duty of the whole village to pay the tax the villagers were given land on rent and the tax was collected according to the section of land given to cultivate. The village had appointed a person called Labardar to collect the taxes from the cultivators and then paying to the government. The tax collector belonged to the village itself. For this work the Labardar was paid a part or commission of 5% or panchotra by the village.

Rayatwari System:

In this system there used to be an owner of the land, but the ultimate owner of the land was the government. The government used to give land to cultivate to the rayats. In return the rayats had to give a specific amount of money to the government, which was

called as agricultural tax. In this system if the rayat doesn't pay the agricultural tax to the government, then his ownership on land comes to an end. The rayat has the right to use the land or hand over for cultivation or sell the land till he pays the agricultural land. The government and the rayat are the two relations and the operation is that the rayat pays the agricultural tax to the government. If the government increases the agricultural tax, then it can use it for the development works. If there is no increase in the agricultural tax then after paying the tax the remaining amount remains with the rayat. Rayat uses that remaining extra amount for agricultural development. In this system the tax is collected on a temporary basis on the assessment of land.

Check your progress

Q Explain the different types of land reforms in India existing since the ancient period.

3.5 AGRICULTURAL LABOURERS:

Introduction

India is an agricultural country. People living in the rural areas mainly depend on agriculture for their livelihood. If the distribution of agricultural land is observed it is seen that some people have large section of land while some don't have a single piece of land. The big farmers owning big portion of land themselves don't cultivate the land. They require other people to cultivate this land. While those who don't have land they have to work on other's land for their livelihood. This people working on other's farm and getting returns in the form of money are called agricultural labourers. Amongst the people living in rural areas and depending on farming 68-70% people are agricultural labourers. While learning agricultural economy a study of these agricultural labourers is very important.

Concept of Agricultural Labourers

Total cultivable land in our country is 305 million hectare and out of that 142 million hectare land is under cultivation. As agriculture is a primary occupation a single farmer cannot do it alone. There are different works in the agricultural operations and these are time bound works. To complete these work in time the

farmer engages his family members in this work and sometimes he also has to take other people's help.

Those people working on other's farm or agricultural land are called agricultural labourers.

The proportion of these agricultural labourers in rural India is more. Agricultural labour mainly works in the agricultural fields only. In return of his work he takes money in the form of labour. There are different views regarding the concept of agricultural labour. Different definitions are to be taken in view to clearly understand the nature of agricultural labourers.

Agricultural Labour Investigation Committee of 1950-51

"The one who is engaged in the agricultural work and accept money for the work done on the farm is called an agricultural labourer."

Second Agricultural Labour Investigation Committee of 1956-57

"People engaged in agricultural work are agricultural workers, but people engaged in allied activities or subsidiary occupations like dairy industry, animal husbandry, poultry, etc. are also called agricultural labourers."

National Labour Commission

An unskilled and unorganized labourer depending on his labour for his livelihood is called an agricultural labourer. From the above reason the concept of agricultural labour is very clear.

A specific society or a class cannot be included in the concept of agricultural labourer. There are two types of agricultural labourers. The first is the one who is an agricultural labourer but has no land to cultivate. The only source of his livelihood is his labour.

Second type of agricultural labourer is the marginal farmer the one who has a small portion of land for cultivation. But the income generated from that is not enough for his livelihood. He has to work on other's farm to earn his livelihood by giving his labour and in return earning money from that to fulfill his family needs.

The definition given by the agricultural labour investigation committee of 1950-51 is incomplete. The agricultural labourers working on the farms do not work for the whole year. Certain changes had to be made while clearing the concept of agricultural labourer. Those people working in the fields for more than 50% of the days of the year should be called agricultural labourers. The family whose earning members work for more than 50% of the income to be earned through agriculture as its main occupation, then that family is to be called as agricultural labourer family.

The second agricultural labour investigation committee of 1956-57 also made changes in the definition given by it. They have included in it the people engaged in allied and subsidiary occupations like animal husbandry, dairy industry, poultry, etc. in the definition of agricultural labourers.

National labour commission defined agricultural labourer as those labourers whose earn a maximum income from the agriculture, those who have only labour to be sold and those who are unskilled and unorganized are to be called as agricultural labourers. From the above definition it can be seen that there is difference of opinion while thinking of the concept of agricultural labourer.

3.6 REASONS BEHIND THE INCREASE IN THE NUMBER OF AGRICULTURAL LABOURERS

The agricultural labourers class was not there till the Britishers came to India. In the beginning of the 19th century population did not increase too much, people were engaged in agriculture and other occupations. As an individual couldn't get work on the farms he used to engage himself in other village industries. But after few years there was an increase in the number of agricultural labourers.

There are different reasons for the increase in the number of agricultural labourers.

They are as follows-

1) Increase in the Population

Out of the total population 74% lives in rural areas and its main source of livelihood is agriculture. Increasing population is a stress on agriculture. There is no increase in agricultural land nor any occupations are developed based on agriculture, as a result the rural population has no other alternative than to depend on agriculture.

2) Unavailability of employment

In the olden days villages were self-sufficient. People were engaged in village industries and barter system prevailed in olden days. But as population increased there was no increase in the allied occupations and other employment assurances. There was no other alternative than agriculture as other occupations or industries were not developed. As a result this population worked as agricultural labourers in the fields.

3) Indebtedness

For all the agricultural operations farmer needs money. As the farmer had small land holding or marginal land holding he couldn't get the benefit of the monetary institutions established to provide loan to the farmers for agricultural purpose. As the farmer doesn't get timely monetary help he has to take loan from the moneylender by keeping his land as a pledge. This results in the farmer turning to an agricultural labourer.

4) Subdivision and Fragmentation

The subdivision and fragmentation of land is increasing at a great speed. As the agricultural land is divided it does not remain as profitable cultivable land. The result is that the farmer's only source of livelihood the land doesn't give him income. So the owner of the land had to work on other's farm to earn his livelihood, as there is no other alternative.

5) Deterioration of Village Industries

Before the British came to India the villages were self sufficient in nature. Village industries were there on a large scale in rural India. After the British came to India these village industries deteriorated and came to an end. Centralized production of goods in the industries affected the village industries and they were no to be seen. The people engaged in village industries had no other source of income so they had to divert themselves towards agriculture and they started to work as agricultural labourers in the agricultural sector.

6) Bonded Farm Labourers Problems

New discoveries brought new inventions in the agricultural field. Due to mechanization of agriculture the owner himself started to cultivate the land. The bonded farm labourers who cultivated the land for owner years after years had no work in the fields after the mechanization in agriculture. As the bonded farm labourer was unorganized and financially weak he couldn't fight for justice. The bonded farm labourer had no other alternative than to work on other big farmers land.

7) Costlier Production Technology

After independence many new discoveries and inventions were made to improve agricultural sector in India. But in India a few people own majority of land that started using this new technology in their fields. As the new technique to be used is costlier and needs the small farmers and marginal farmers could not use lot of capital. The small and marginal farmers couldn't withstand this competition in the agricultural sector. As a result they had no other alternative than to work on other farmers fields.

Check your progress

Q- What are the reasons behind the increase in the number of agricultural labourers ?

3.7 REASONS FOR THE DETERIORATING CONDITION OF FARM LABOURERS

The proportion of the farm labourers working in the agricultural sector is very large in India. They are looked upon as inferior class as they are financially weak. The reasons for this deteriorating condition of farm labourers are as follows:

1) Illiteracy of the farmers

As the economic condition of the farmers is not so good, even though there are educational opportunities and facilities they are not able to avail these facilities. The farm labourer is illiterate so he doesn't have knowledge about the facilities, legal rights he can take benefit of. This results in the exploitation and cheating of the farm labourer by the zamindar, big farmers and moneylenders in the village. Even the other people from the village cheat them, as they are illiterate.

2) Unemployment

Farm labourer works in the agricultural sector. Agriculture is of seasonal nature so there is work on the farms for a specific period only. Rest of the time he has to engage himself in some other work. As he immediately doesn't get work in other sectors he has to remain unemployed compulsorily. It means he has to face partial unemployment.

3) Rate of Labour

The working hours of the agricultural labourer in the agricultural sector are 10-12 hours. It depends on the situation how many hours he has to work in the fields. The reason for this is that as agriculture is depending on nature if the conditions are favourable for agricultural operations the farm labourer has to work for many hours, as the work has to be completed within the favourable period only. But the labour the agricultural labourer gets compared to his working hours, nature of work, and period of work- is very less.

4) Number of Members in the Family

The source of entertainment is very less or not at all in the homes of the agricultural labourers in the rural areas. The only source of entertainment for him is sex that is available. As a result the work of procreation continues after every two years. Therefore the number of members in the family is more. The farmer has to work hard to compensate the needs of the family members due to his economically weak condition and the increasing number of family members

5) Land Owners Policy

The landowner's policy plays an important role in case of the agricultural labourer. The agricultural labourers are exploited to a great extent by the landowners to save their money and increase the income level

They are not ready to increase the labour given to labourers as they have a tendency that if they increase the labour of the labourers their income level will decrease. In the same way their policy is to increase the working hours of the labourers and to increase their own income.

6) Gloomy Nature of Government Policy

The gloomy nature and attitude of the government is responsible for the low-income status, inferior status in the society. The government to improve the status of the agricultural labourers framed many schemes and laws. The machinery to implement the laws for the agricultural labourers is not framed in a proper manner

7) Unorganized Agricultural Labourers

The rural agricultural labourers are not well organized as the industrial sector workers are. Due to their ignorance and illiteracy they are unaware of the benefits of the well-organized sector. The nature of agricultural work and the labourers wages are the factors responsible for the unorganized sector of the agricultural labourers.

Check your Progress

Q- What are the reasons for the Deteriorating Condition of Farm Labourers

3.8 REMEDIES AND SUGGESTION TO IMPROVE THE CONDITIONS OF THE AGRICULTURAL LABOURERS

The number of agricultural labourers is on the increase in India and it is essential to improve their deteriorating condition. To improve their condition government has made different laws and policies have been framed

1) Development of Village and Cottage industries -

Agriculture in rural India is of seasonal nature and the employment generated also is of seasonal nature. As a result during the off-season the labourer has to remain unemployed. During the seasonal unemployment various allied and subsidiary occupations such as village industries and cottage industries should be generated based on agriculture. So that it would help to reduce the unemployment and raise the economic level of the agricultural labourer in the society.

2) To fix the working hours of the labour -

As per the Indian industries act the working hours of the workers working in the industrial sector is fixed. If they work for more than the fixed hours they are liable to overtime wages separately As the working hours are not fixed the question of giving overtime wages doesn't arise. Due to which physical exploitation and exertion is forced by the landlord.

3) Implementation of the labour law -

Minimum wages law was passed by the central government in 1948. According to this law the labourer should get minimum wages for his work. This was to be implemented by the state government. But it is seen that the state government has not shown keen interest in implementing this law. It is the state government who has to take initiative in implementing this minimum wages law.

4) Technical education -

As the rural agricultural labourers are not trained technically the only type of work they can do is of physical labour. They don't have any technical skill. But if they are given technical education during the seasonal unemployment in agriculture they can temporarily work in the industrial sector and earn income for their livelihood to raise their standard of living in the society.

5) Organization of agricultural labourers -

The agricultural labourers are unorganized even though they are in huge numbers. They are not aware of their rights and also do not demand their rights, due to which they do not get facilities available for them. The need of the hour is to organize the agricultural sector.

6) Distribution of the different work undertaken by the government to the agricultural labourers organization -

Government undertakes different task under rural development like construction of roads, digging of lakes, building dams, nalla bunding etc. that requires labourers. Government should establish labourers organization and should assign them the different task of the government on contract basis so that employment is generated in the seasonal unemployment period and the labourers economic status can be improved.

7) Improvement in the agricultural pattern -

Indian agriculture depends on rain. Employment is generated on large scale in the agricultural sector on the rainy season only. In the non-seasonal season the labourers have to remain unemployed. By making development and changes in the agricultural pattern employment can be generated all the year round.

Check your progress

Q - Give some remedies and suggestion to improve the conditions of the agricultural labourers.

3.9 SUMMARY

India is an agricultural country whose economy depends on agriculture. But still agricultural occupation is not considered as an occupation, but is seen as a means of livelihood of the rural population. Agriculture plays an important role in the Indian economy. Therefore need for new developments and remedies are essential. Changes in the land holding patterns are to be made if agricultural occupation is to be considered as an occupation and not a source of livelihood. Land to the tiller law should be strictly implemented so that the farmer would have love and affection for the land and he put all his efforts in the agricultural operations to increase the agricultural operations. The agricultural labourers should be given justice by implementing the laws made for them so that agricultural production can be increased which in turn will increase agricultural income and can be used for agricultural development.

3.10 SELF STUDY

1. Explain the different types of farming's.
2. What is the role of agriculture in rural development?
3. Write in short about the different land reforms in India?
4. What are the reasons behind the increase in the number of agricultural labourers?
5. Give reasons for the deteriorating conditions of farm labourers.
6. Suggest remedies to improve the condition of the agricultural labourers.

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Unit - 4

IMPORTANCE OF NATURAL RESOURCES IN RURAL DEVELOPMENT

Dr. Clementine Rebello

Unit Structure :

- 4.0 Objectives
- 4.1 Introduction
- 4.2 Concept of natural resources
- 4.3 Factors of the natural resources and its importance in Rural Development
 - 4.3.1 Land
 - 4.3.2 Water
 - 4.3.3 Weather
 - 4.3.4 Forests Resources
 - 4.3.5 Animal Resources
 - 4.3.6 Fisheries
 - 4.3.7 Energy Resources
- 4.4 Importance of agricultural allied and subsidiary occupations
- 4.5 Agricultural allied activities and subsidiary occupations
- 4.6 Integrated Farming System
- 4.7 Determinants of farming system
- 4.8 Development of Rural Backyard Poultry
 - 4.8.1 Dairy Farming
 - 4.8.2 Goat and Sheep Rearing
 - 4.8.3 Piggery
 - 4.8.4 Duck Rearing
 - 4.8.5 Apiculture
 - 4.8.6 Fishery
 - 4.8.7 Sericulture
 - 4.8.8 Mushroom Cultivation
 - 4.8.9 Agroforestry
- 4.9 Farming System Approach to Research Development
- 4.10 Core characteristics of Farming system approach
- 4.11 Summary
- 4.12 Self study

4.0 OBJECTIVES

- 1) To study the concept of Natural Resources.
- 2) To study the factors of Natural Resources.
- 3) To study the importance of Natural Resources in rural development.
- 4) To review the contribution of allied and subsidiary occupations in rural development.
- 5) To study the different occupations related with the agricultural allied activities.
- 6) To study the subsidiary occupations based on agriculture.

4.1 INTRODUCTION

Human beings are always in search of way to develop himself. With the available technique and technology, research and hard-work he always has tried to raise his standard of living. The numerical changes and the qualitative changes that are brought in the living standard of human beings is called as the developmental process. Natural resources are very important in this developmental process. With the cooperation of the natural resources other similar supportive arrangements can work to their efficiency. In this development process changes take place in the economic, social, cultural, political and environment point of view.

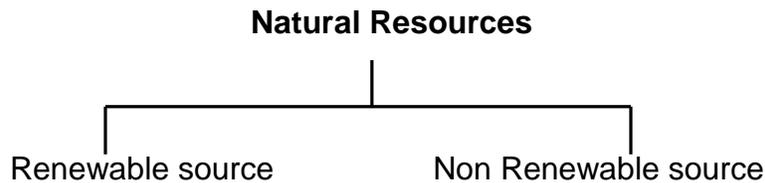
India is an agricultural country. Even though efforts were taken to make India like other developed countries after independence, still we are lagging behind. 70% of our population lives in villages and their main occupation is agriculture. 72% of the farmers in India are small, very small and marginal farmers. For these people agriculture is a supplementary activity is done only for livelihood. As a result the production of crops is less and does not fulfill the needs of the family.

Their agriculture depends on rain i.e. the four months from June to September. This type of agriculture is of seasonal type. The remaining months these farmers work on others farm to earn livelihood. But still agriculture in India does not provide an all round employment and income source. An alternative source for income generation is therefore necessary. This alternative source can be the agricultural allied activities and subsidiary occupations based on agriculture. This results in an all round employment throughout the year in the villages and they need not migrate to other regions in search of jobs. Their problem of earning a livelihood and income generation is solved due to these activities.

4.2 CONCEPT OF NATURAL RESOURCES

Natural resources play an important role in the process of development. The natural resource are used on a large scale for the rapidly increasing population, industrialization and the race between different countries to become economically strong. The major problem in front of the world is to preserve the quantity and quality of the natural resources and also to keep stable the available resources.

Natural Resource can be divided into two types:



Renewable source of energy means it can be regenerated. Plants, animals, air, water etc.

Non-Renewable source of energy means it cannot be regenerated.

Metal minerals are available in the natural form. If used its shape and form can be changed but its existence is not destroyed. But if mineral oil is used they cannot be regenerated. It takes years and years for the formation of mineral oil. It is not formed again and again. So they have to be used very carefully as they are extinct. Man has started to make use of natural resources to make progress in the industries and technology long back. For this he made use of available natural resources. In other words we can say the developmental process is but to raise the standard of living of human beings. In this process contribution of plants has great importance. So it is essential to study rural development and natural resources in totality.

Robert McNamara has defined rural development as - "Rural Development means an overall development of the rural areas by giving stress on the development of the weaker sections of the society like small farmers, landless agricultural laborers and rural artisans".

Rural development is a process and natural resources is essential for this. These natural resources are available in land, weather, forest, animals, oceans, energy, human resource and waste material. These resources are not available equally

everywhere. It is available in different forms and in different quantity in different places. It is used as per its availability. So the available natural resource in different places more or less is to be used very skillfully. If developmental planning is done taking into consideration the availability of natural resource then the desired objectives can be achieved.

4.3 FACTORS OF NATURAL RESOURCES

10.3.1 Land

Land is an important factor of the natural resources. Man uses land for different purposes. Land is considered as an important factor of the production factor. Depending on the Ph value the fertility of the soil is decided and accordingly it is brought. Land value depends on the fertility of the soil. Weather and climate of the region, composition of land, type of soil, formation of soil and other factors affect the fertility of the soil. Classification of the soil can be done on the Ph factor of the soil. The quality and possible production of food grains can be estimated. We can increase the production capacity of the soil by making some technical changes and using the biotic factors which can increase the fertility of the soil.

Land is one of the factors of production. Land and soil are non renewable sources as they cannot be produced. So a proper planning and management of the utilization of the usage of land is to be done. Land is an important factor in the agricultural process. Out of the total land available in India 60% of the land is under agricultural sector. The geographical condition in different region is different. Depending on the type of soil it is used accordingly. To increase the fertility of the soil it has to be maintained and conserved. But due to industrial development in the rural areas land in the respective areas is utilized for setting up industries and for the infrastructure required. As a result percentage of the productive land is decreased. Along with rural development infrastructural development includes water supply, electricity, transport and communication uses the productive land decreases the percentage of productive land. The usage of productive land for industrialization reduces the percentage of agricultural production.

Due to industrialization in the rural areas more land is required for setting up new industries. Agricultural land is used along with barren land for setting up industries has resulted in the decrease in the land under crops. Some regions have the problem of high salinity of the soil. So such land is used for industrial projects. The problem of employment of the laborers working in the agricultural fields has come in light due to rural industrialization. While acquiring land for industries problems like increasing

population, land conservation has to be counted for. Fertility of the soil is disturbed due to water logging in the fields, use of chemical fertilizers in an unorganized manner, wrong methods of agricultural operations and overall usage of land or industrial purpose which results in the decrease in the agricultural productivity. Out of the total geographical land 40% is under barren land. This land is unused. But if this land is maintained properly it can be used for agricultural purpose. For ex- this land can be used for horticultural plantations (mango plantation).

4.3.2 Water

Water factor depends on many other factors. Water is a limited natural resource and conservation of it is very essential. Water is to be stored for agriculture and other purposes. Under water level of the ground can be increased by means of water saving methods like percolating the water in the ground, it can be stopped by building bunds to stop flowing water and equal distribution of water. This water can be utilized during the non- rainy seasons. Due to new technology underground water is utilized on larger scale reducing the water to a larger level. Sugarcane crop requires water on a large scale. Those regions taking sugarcane crops require large quantity of water.

Water conservation methods are implemented everywhere to deal with the water storage problem. Available water is related to the various factors like soil conservation, afforestation, and bunding on the mountain slopes. The more conservation of water the more availability of water. During the rainy season konkan region receives more than 100% of the rain, but still they face the water problem. It is not the nature but we are responsible for the water problem. we should take more efforts to conserve water through bunding and making the water percolate in the soil to increase the surface water and the underground water level. So planning is essential so that we don't face the water problem.

Water is required for industrialization, increasing population, urbanization, and other reasons. More water will be required due to increasing industrialization, population, urbanization and other reasons. To fulfill these needs millions of rupees have been invested on various schemes for the same. Water facilities were provided to the urban areas through the water schemes from the rural areas. But the fact is that no measures were taken for water conservation in the rural areas, which is the greatest demerit of our planning. Because of this even after 66 years of independence we are not able to solve the water problem of our country. There is consistency of rainfall in our country with increase or decrease in the proportion of rainfall. If the rain -water is conserved at the time of rainfall we won't ever face drinking water problem in future. Water from many rivers simply flows down towards the sea or

oceans. Even water from the melted ice from the Himalayas flows down the rivers in large proportions. This gift of nature is to be preserved and conserved and utilized in an organized manner.

4.3.3 Weather

It is one of the important dominant factors. It is not possible for us to control weather. It is beyond the capacity of human beings to gain control on weather. But it is possible to study it and use it to increase our agricultural production. Plants, trees, fruits, flowers, vegetables grow in the region having favorable climate for it. As a result we can study the effects of climate and weather in a region and the crops related to it will help us to take agricultural production on a large scale. The other profession related to weather is fishery. A detailed study of weather and climate is to be made to provide necessary information related to this to the people depending on agriculture and other occupations related to it. This will help in the increase in the production and subsequently raise their standard of living.

4.3.4 Forests Resources

Plants and trees are very important factors of natural resources. Land under forest is also important like the land under agriculture. Welfare and happiness of the human being is in the conservation of forest resources. Forest resources motivate human development. Forest includes dense cluster of trees, dispersed trees, pastures, shrubs, grass, creepers. These different factors protect and conserve the forest. Forest resources help to stop soil erosion due to the rain. Fertility of the soil is improved with the help of different byproducts of trees like leaves, flowers, fruits, stems, twigs and other byproducts. Trees help to percolate the flowing water in the soil. Trees help to reduce the pollution created by the growing industries. Major solution to solve the pollution problem is to grow more trees. Trees and plants help to make the human life happier.

Forest is also related to birds and animals and other wild animals. Forest provides food, fodder and shelter to the animals and birds. It also protects the animals on the verge of extinction. It provides medicines and medicinal herbs for human beings. Fruits, flowers, leaves, stems, twigs, barks of the tree is used for making different types of medicines, organic fertilizer and compost fertilizer. Forest help in the development of human life. But still man has deteriorated the forest in large proportion. Only industrialization doesn't mean development. Forests have been destroyed for urbanization and industrialization.

To fulfill the needs of growing industrialization and urbanization trees are cut down on large proportion, forests are destroyed on large scale. Forest resource is renewable but it also

requires time. We cannot grow trees in one day. As a result we are facing the problems like pollution of all the resources, ecological balance is disturbed, global warming problem has come up. If this deterioration goes on continuing human life will be in danger. This problem has to be taken very seriously. To some extent people have understood the demerits of deforestation. Programs of Afforestation, Van Mahotsav, plant more trees, social forestry have been undertaken. Constructive work has to be undertaken for forest conservation.

4.3.5 Animal Resources

Rural economy of India depends on agriculture. For doing agricultural operations animal resources are used. Rearing animals is also one of the allied activities and subsidiary occupation of the farmers. Animal husbandry, poultry occupations are undertaken as subsidiary occupations along with agriculture. In some places these occupations are practiced as main occupations. The objectives behind practicing these occupations are the necessity of food, requirement of money or utilizing the available manpower. Transport facilities like truck, tractors cannot reach the farms in the remote villages of India. So animal resources are used for cultivating land, transport of goods and other related works. Majority of the rural people are non-vegetarian. Allied activities and subsidiary occupations help to solve the non-vegetarian food problem in the rural areas. We get food and milk from animals, transport and agricultural problem is solved with the help of animals. We also get manure from the dung of animals.

Animals have significant importance in the rural economy. Integrated Rural Development program was implemented to solve the poverty problem in the rural areas. This program utilized the available animal resources in the rural areas. Some of the families do not have land for cultivation, but they can use the barren land or meadows for rearing animals. By doing this it was expected that these families earn a minimum income for their living. Out of the total available animal resources in the world 1/6 of it is in India. It is our responsibility to take proper care of our animal resources. Food, fodder, health and hygiene, shelter, cleanliness of the animal shelter and the surrounding area along with medical facilities are the essential things to be taken care of.

Human beings made use of animals for fulfilling their needs and for their benefit. But they did not take proper care of the animal resources as a result the animals of pure breed have become rare. It is very essential to preserve our animal wealth so that the good quality breeds can improve their production capacity and can increase the employment opportunities in the rural areas. For this a proper planning and implementation of the program for the animal resources is necessary.

4.3.6 Fisheries

Fish available in the sea is also a natural resource. Fish has high protein content useful for human beings. Nowadays fishing is done on large scale with the help of mechanized boats. The net used in this type of fishing not only catches big fishes but also small fishes that are not grown properly. It results in the decrease of proportion of fishes in the sea. Mechanized boats have not only minimized the fish catch in the sea but also the problem of employment and source of living has aroused. Fish food is also available from rivers and ponds from which the need is fulfilled. To increase the production of fishes in the sea fishermen should be taken into confidence to accept the idea of marine park, so the problem of fishermen employment and their income can be increased in turn raise their standard of living.

4.3.7 Energy resources

Energy resources have a greater significance in the development process. It is necessary for agricultural processes, transport, in industries, cooking process, for domestic use. In India traditional sources of energy are used to fulfill the need for energy. This includes wood, coal, cow-dung, kerosene, diesel and petrol. As these sources of energy are available naturally they are limited. The unlimited use of these natural resources (i.e non-renewable source of energy) by human beings is on the verge of extinction. As a result an imbalance in the nature has been created. A solution to this problem is to find an alternative source of energy. In other words we can say we have to use renewable source of energy like solar energy, wind energy, hydroelectricity, nuclear power for peaceful purpose.

In rural areas the proportion of animals is more compared to the urban areas, as a result their waste is collected on large scale. In the same way waste from agricultural products, human excreta are also available which can be used in the biogas plant. The methane gas produced in this is used for fuel purpose and the slurry produced from this is used as fertilizer for crops. The use of slurry increases the fertility of soil and increases the productivity. Biogas has solved the problem of fuel in the rural areas. Cutting of wood for fuel has stopped to a great extent and the environmental has been maintained in the rural areas. Human brain and human power is also a natural resource that has to be utilized with the help of science and technology. But while doing this balance in the environment has to be maintained which will lead to a better future for the human beings on earth.

Check your progress

Q - Explain in detail the factors of natural resources.

4.4 IMPORTANCE OF AGRICULTURAL ALLIED AND SUBSIDIARY OCCUPATIONS

Agriculture is the main occupation in rural areas but allied activities and subsidiary occupations are also practiced along with it. In order to increase the income, development and effective growth in agricultural production these activities have great significance.

1) Very less capital is required to begin these activities:

As the allied and subsidiary occupation are on small scale the capital required is very less. These activities can be started at home or in the rest of the land not used for agriculture. Activities like fishery, bee-keeping, poultry, animal husbandry can be started at home or in the farms wherever land is available. There is no need to spend money to purchase land or build shade for animals. These activities do not require purchasing land, construction work, taking land on rent, costly machineries or transport cost. So it can be done with minimum capital required. As the farmers are poor they don't have big sum of money to invest on large scale. If these type of activities are started in the villages the development process will take momentum.

2) Minimum skill required:

These activities do not require special skills to start. Experience is the only thing that helps in these activities. No technical knowledge is required. Minimum skill is required for this. For ex: - milching the cows and buffaloes is the only skill required when cows and buffaloes are reared for dairy business. This knowledge is acquired hereditary from father and mother to the son.

Observations also help to learn the minimum skills required for these activities.

3) Availability of locally available raw material for these activities:

The allied activities and subsidiary occupations are depending on agriculture, so the required raw material is available from the agricultural operations and in the rural areas. Here no transport cost has to be borne by the people as the raw material is available locally. This business is never in loss or closed due to unavailability of the raw material. As the raw material is available all the year round the business is in good condition and provides employment throughout the year in the rural areas.

4) Availability of employment in large scale:

Even though agriculture is an all round activity the employment generated is of seasonal nature. But due to the allied activities and subsidiary occupations employment is generated in the non-seasonal period. In the dairy business it is the human power that is required and not the machines.

5) It solves the unemployment problem:

Rural unemployment is a big problem. Seasonal unemployment, disguised unemployment, incomplete unemployment are the types of unemployment seen in the rural areas. Employment is available only in the agricultural season. The conditions of the farmers in the non- agricultural season is very critical. The allied activities and subsidiary occupations would create employment on a large scale prove helpful to solve the problem of unemployment.

6) Distribution of the goods produced is not a problem:

The production taken in the allied and subsidiary occupations is based on the requirements of the people in the area and is of local nature. So the demand for the goods does not decrease in the village or the nearby villages. As the goods produced are frequently in need it is not necessary to produce the goods on a large scale. The goods produced are consumed and therefore there is no extra stock left due to which the businessman has to suffer loss.

7) Goods produced are as per the consumers demand:

The goods produced in the allied and subsidiary occupations are produced as per the demands of the consumer. The goods produced are manufactured with the help of raw material available in the village itself. There is great demand for the produce as it is sold in the local village market itself. Goods are supplied as per the demand. Scarcity of goods is never generated from this type of business. Goods are produced as per the demand of the consumer and as a result no problem of artificial scarcity of goods, hoarding of goods or increasing prices.

8) Helps to keep away the inequality in the rural society:

Economic inequality persists in large proportion in the rural areas. It is because in rural areas few people have more land and many people have less land. People having large percentage of land are the landlords and the horticulturists. While people having less land are marginal farmers. Economic disparity can be seen on large scale in this category. To reduce this disparity in the rural areas allied and subsidiary occupations are to be created in the rural areas. This will create employment opportunities for the poor and a rise in their income will be seen.

9) Poverty eradication is possible:

Poverty is one of the biggest issue faced by the rural people. Most of the population lives not only in poverty but lives below the poverty line. Their minimum needs are also not fulfilled. If this situation is to be changed rural industrialization is a solution. Agricultural allied activities and subsidiary occupation are to be started in the rural areas, which will generate employment and their basic minimum needs would be fulfilled.

10) Availability of foreign currency through exports:

Goods produced from the allied and subsidiary activities can be exported to other countries and in return the rural areas can be developed with money earned through foreign exchange. It is for this reason Indian government has adopted the liberalization policy. Government has consented to produce only export goods in the agricultural sector. Agricultural related activities like poultry, fishery, sericulture, animal husbandry can be started in the rural areas. The produce from these activities can be exported to other foreign countries, and foreign exchange can be generated.

11) Migration to the urban areas can be minimized to a great extent:

Due to unemployment in the rural areas the rural community started migrating towards the urban areas on large scale. It can be changed by generating employment through allied activities and subsidiary occupations in the rural areas. Migration of people from rural areas to urban areas will be stopped. The problem of increasing slums in the urban areas, pollution and other related problems can be minimized.

12) Economic development will gain momentum:

If agricultural allied activities and subsidiary occupations are made available to the people in the rural areas the large human power and the available natural resource can be utilized to its fullest and thus will give momentum to the economic development of the country. If this happens naturally savings of income will increase and in turn will be invested in the production activities in

the rural areas. Our countries economic development can be done at a faster rate due to the rural development.

Check your progress :

Q 1 Explain the importance of agricultural allied activities and subsidiary occupations in the rural development of our country?

4.5 AGRICULTURAL ALLIED ACTIVITIES AND SUBSIDIARY OCCUPATIONS

To meet the multiple objectives of poverty reduction, food security, competitiveness and sustainability, several researchers have recommended the farming systems approach to research and development. A farming system is the result of complex interactions among a number of inter-dependent components, where an individual farmer allocates certain quantities and qualities of four factors of production, namely land, labour, capital and management to which he has access. Farming systems research is considered a powerful tool for natural and human resource management in developing countries such as India. This is a multidisciplinary whole-farm approach and very effective in solving the problems of small and marginal farmers. The approach aims at increasing income and employment from small-holdings by integrating various farm enterprises and recycling crop residues and by-products within the farm itself.

The Indian economy is predominantly rural and agricultural, and the declining trend in size of land holding poses a serious challenge to the sustainability and profitability of farming. In view of the decline in per capita availability of land from 0.5 ha in 1950-51 to 0.15 ha by the turn of the century and a projected further decline to less than 0.1 ha by 2020, it is imperative to develop strategies and agricultural technologies that enable adequate employment and income generation, especially for small and marginal farmers who constitute more than 80% of the farming community. The crop and cropping system based perspective of research needs to make way for farming systems based research conducted in a holistic manner for the sound management of available resources by small farmers.

4.6 INTEGRATED FARMING SYSTEM

Under the gradual shrinking of land holding, it is necessary to integrate land based enterprises like fishery, poultry, duckery, apiary, field and horticultural crops, etc. within the biophysical and socio-economic environment of the farmers to make farming more profitable and dependable. No single farm enterprise is likely to be able to sustain the small and marginal farmers without resorting to Integrated Farming Systems (IFS) for the generation of adequate income and gainful employment year round. Farming systems approach, therefore, is a valuable approach to addressing the problems of sustainable economic growth for farming communities in India. The basic aim of IFS is to derive a set of resource development and utilization practices, which lead to substantial and sustained increase in agricultural production. There exists a chain of interactions among the components within the farming systems and it becomes difficult to deal with such inter-linking complex systems. This is one of the reasons for slow and inadequate progress in the field of farming systems research in the country. This problem can be overcome by construction and application of suitable whole farm models. However, it should be mentioned that inadequacy of available data from the whole farm perspective currently constrains the development of whole farm models.

Integrated farming systems are often less risky, if managed efficiently, they benefit from synergisms among enterprises, diversity in produce, and environmental soundness. On this basis, IFS model have been suggested by several workers for the development of small and marginal farms across the country.

The farming systems can be described and understood as by its structure and functioning. The structure in its wider sense includes among others, the land use pattern, production relations, land tenures, size of holding and their distribution, irrigation, marketing including transport and storage, credit institutions and financial markets and research and education. Thus, the “farming system” is the result of a complex interaction among a number of interdependent components. To achieve it, the individual farmer allocates certain quantities and qualities of four factors of production: land, labour, capital and management, which has access the processes, like crop, livestock and off farm enterprises in a manner, which within the knowledge he possess will maximize the attainment of goal he is striving for.

The Farming System, as a concept, takes into account the components of soil, water, crops, livestock, labour, capital, energy and other resources with the farm family at the center managing agricultural and related activities. The farm families functions within

the limitation of its capability and resources, the socio-cultural setting, and the interaction of these components with the physical, biological and economic factors.

Farming system focuses on:

- a) The interdependencies between components under the control of household and, how these components interact with the physical, biological and socio-economic factors, which is not under the control of household.
- b) Farm household is the basic unit of farming system and interdependent farming enterprises carried out on the farm.
- c) Farmers are subjected to many socio-economic, bio-physical, institutional, administrative and technological constraints.
- d) The operator of the farming system is farmer or the farming family.

Check your progress

Q- Give the importance of agricultural allied and subsidiary occupations.

4.7 DETERMINANTS OF FARMING SYSTEMS

The key categories of determinants influencing farming system are as follows:

i) Natural Resources and Climate: The interaction of natural resources, climate and population determines the physical basis for farming systems. The increased variability of climate, and thus agricultural productivity, substantially increases the risk faced by farmers, with the concomitant reduction in investment and input use. Certain soil and water regimes are suitable only for given type of crops. Similarly, some of the physical and geographical features e.g. drainage characteristics, elevations and slopes as well as climatic factors e.g. total rainfall and its distribution, minimum and maximum temperature, humidity and intensity of sunlight etc. are other factors which have to be taken in to considerations while making decision with respect to selection of enterprise for a farming systems.

ii) Science and Technology: Investment in agricultural science and technology has expanded rapidly during the last four decades. During this period, major technical and institutional reforms occurred, which shaped the pattern of technology development and dissemination.

The research driven growth in developing countries has been green revolution, where it achieved considerable achievement in the field of food grain production and for this the policy and other aspects supported the farming system for such achievement. Research has been focused principally upon intensifying crop and livestock production. There has been for less research on integrated technologies for diversifying the livelihoods of small farmers in developing countries and increasing the sustainability of land use.

Despite these weaknesses, the natural and global research agenda is gradually moving from a focus on individual crop performance to a growing acceptance of the importance of increased system productivity. There has been emphasis in recent agriculture of targeting technologies towards women farmers and poorer households.

iii) Trade Liberalization and Market Development: Markets have a critical role to play in agricultural development as they form the linkages between farm, rural and urban economics upon which the development processes depend. As a result of the reduction of impediments to international trade and investment, the process of trade liberalization is already generating changes in the structure of production at all levels-including smallholder-farming systems in many developing countries. Not only the market development is accelerating, but patterns of production and natural resources usage are also changing profoundly in response to market forces. The availability of new production, post harvest and transport technologies will also change demand patterns due to delivery of new products or established products in new forms to markets, where they have been previously unattainable.

iv) Policies, Institutions and Public goods: The development of dynamic farming systems requires a conducive policy environment. Moreover, the establishment of the farm-rural-urban linkages requires effective demand. Policy makers have increasingly shifted their attention to the potential to increase the efficiency of service delivery through the restructuring of institutions. The production incentives have dramatic effect on farming systems. Policies on land ownership, water management and taxation reform etc have a great bearing on types of farming system in a region or area.

v) Information and Human Capital: The evolution of farming systems based upon increasing specialization (e.g. large scale broiler units) or integrated intensification (e.g. rice-fish-ducks) has required extra knowledge on the part of farm operators. The need for better information and enhanced human capital has also increased, as production systems have become more integrated with regional, national and international market systems.

Lack of education, information and training is frequently a key limiting factor to smallholder development. Many observers anticipated an information revolution i.e. bridge gap of knowledge between scientists and farmers will be very key factor for agricultural growth of these small farmers. Whilst in the past many development efforts failed women-because planners had a poor understanding of the role women play in farming and household food security-greater efforts are being made to take account of their actual situations. It is increasingly recognized and acknowledged by development workers that the empowerment of women is the key to raising levels of child and family nutrition, improving the production and distribution of food and agricultural products, and enhancing the living conditions of rural populations. It has been concluded that, if women in

Similarly, better access to credit, land and extension services would enable women to make an even greater contribution to eliminating rural hunger and poverty. As gender bias is progressively eliminated during coming years - often in the face of severe cultural and religious barriers productivity within many farming systems will be transformed.

vi) Indigenous Technological Knowledge: Indigenous technical knowledge is the knowledge that people in a given community has developed over times, and continues to develop. It is based on experience, often tested over long period of use, adapted to local culture and environment, dynamic and changing, and lays emphasis on minimizing risks rather than maximizing profits. The ITK covers a wide spectrum – soil water and nutrient management; pasture and fodder management; crop cultivation; plant protection; farm equipment, farm power, post-harvest preservation and management; agroforestry; biodiversity conservation and also exploitation; animal rearing and health care; animal products preservation and management; fisheries and fish preservation; and ethnic foods and homestead management. Thus, the ITK of a farmer has a great influence in managing the farm and farming system.

Components of Farming Systems

The potential enterprises which are important in farming system in the way of making a significant impact of farm by

generating adequate income and employment and providing livelihood security are as follows:

Crop production is an important farming practice adopted invariably by every farmer. It is an integral part of farm activities in the country. Cropping systems based on climate, soil and water availability have to be evolved for realizing the potential production levels through efficient use of available resources. The cropping system should provide enough food for the family, fodder to the cattle and generate sufficient cash income for domestic and cultivation expenses. These objectives could be achieved by adopting intensive cropping. Methods of intensive cropping include multiple cropping and intercropping. Intensive cropping may pose some practical difficulties such as shorter turnaround time lapse for land preparation before the succeeding crop and labour shortage at peak periods of agricultural activities. These practical handicaps can easily be overcome by making modifications in the cropping techniques. Alteration of crop geometry may help to accommodate intercrops without losing the base crop population.

Check your progress

Q- What are the determinants of Farming Systems ?

4.8 DEVELOPMENT OF RURAL BACKYARD POULTRY

With rapid growth in population providing food security has taken the Govt. as well as planner in a quandary. The availability of agricultural land being limited, increased production in agriculture front has become a matter of concern for every Government. Government of India is according top priority for increasing the food production so as to double it by the end of five year plan. In poultry sector these exists a large scope to enhance food production through both layer and broiler farming. If these sectors will be explored then it will hugger in multiplier effects both in production and employment. 80% of the population of the State in rural areas eke out their livelihood mostly from agriculture and allied activities. Because of variations in weather, lack of inputs required for agriculture it has been observed that agriculture hardly provides employment ranging from 120 to 150 days in a year. Besides,

employment for an additional 40-45 days are derived from wage employment, service and other activities. Thus an average individual gets employment for half a year. Government has been laying thrust in providing gainful employment for the rest period of the year for the work force and in this backdrop the challenge before the Govt. is to expand activities under allied sector. Besides, providing employment this will generate additional income for the rural household. Added to this, this sector will be in a position for utilization of the unproductive woman power in a productive manner. To amplify this assumption it has been calculated that a backyard poultry unit of 25 to 50 can generate employment for 40 to 50 size man days.. In addition to this commercial activities under this sector will also encourage unemployed educated youths in a great manner youths to set up their own units. These activities will create sustainable means of livelihood in the rural areas along with bridging the gap in demand and production in egg, meat and milk.

4.8.1 Dairy Farming

Dairy farming is an important source of income to farmers. Besides producing milk and/or draft power, the dairy animals are also good source of farm yard manure, which is good source of organic matter for improving soil fertility. The farm byproducts in turn are gainfully utilized for feeding the animals. Though the total milk production in the country as per current estimates have crossed 90 million tons /annum marks, the per capita availability of milk is still about 220g/day against the minimum requirement of 250g/day as recommended by Indian Council of Medical Research. The dairy sector in India is characterized by very large number of and very low productivity. Around 70% of Indian cows and 60% of buffaloes have very low productivity. This sector is highly livelihood intensive and provides supplementary incomes to over 70% of all rural and quite a few urban households. The sector is highly gender sensitive and over 90% of the households dairy enterprise is managed by family's women folk.

(a) Cattle Rearing: Cattle rearing in India are carried out under a variety of adverse climatic and environmental conditions. The cattle are broadly classified into three groups.

- (i) Draft breeds: The bullocks of these breeds are good draft animals, but the cows are poor milkers, e.g. Nagore, Hallikar, Kangeyam, Mali.
- (ii) Dairy breeds: The cows are high milk yielders, but the bullocks are of poor draft quality, e.g., Sahiwal, Sindhi, Gir.
- (iii) Dual purpose: The cows are fairly good milkers and the bullocks are with good draft work capacity, e.g., Haryana, Ongole and Kankrej.

Exotic breeds: The exotic breeds are high milk yielder e.g., Jersey, Holstein-Friesian, Ayrshire, Brown Swiss and Guernsey.

(b) Buffaloes: Important dairy breeds of buffalo are Murrah, Nili Ravi (which has its home tract in Pakistan), Mehsana, Surti, Jafarabadi, Godavari and Bhadawari. Of these Godavari has been evolved through crossing local buffaloes in coastal regions of Andhra Pradesh with Murrah.

4.8.2 Goat and Sheep Rearing

The system of sheep and goat rearing in India is different from that adopted in the developed countries. In general, smaller units are mostly maintained as against large scale in fenced areas in the developed countries.

(i) Goat Rearing: In India, activity of goat rearing is sustained in different kinds of environments, including dry, hot, wet and cold, high mountains or low lying plains. The activity is also associated with different systems such as crop or animal-based, pastoral or sedentary, single animal or mixed herd, small or large scale. Goat is mainly reared for meat, milk, hide and skin. Goat meat is the preferred meat in the country. A goat on hoof (live goat) fetches a better price than a sheep on hoof.

(ii) Sheep Rearing: Sheep are well adapted to many areas. They are excellent gleaners and make use of much of the waste feed. They consume large quantities of roughage, converting a relatively cheap food into a good cash product. Housing need not be elaborate or expensive. However, to protect the flock from predatory animals, the height of the fencing should be raised to two meters. Breeds of Indian Sheep: There are three types of sheep in India based on the geographical division of the country.

(i) The temperate Himalayan region: Gurez, Karanah, Bhakarwal, Gaddi, Rampur- Bushiar.

(ii) Dry western Region: Lohi, Bikaneri, Marwadi, Kutchi, Kathiawari

(iii) Southern Region: Deccani, Nellore, Bellary, Mandya, Bandur

4.8.3 Piggery

Pigs are maintained for the production of pork. They are fed with inedible feeds, forages, certain grain by products obtained from mills, meat byproducts damaged feeds and garbage. Most of these feeds are either not edible or not very palatable to human beings. The pig grows fast and is a prolific breeder, farrowing 10 to 12 piglets at a time. It is capable of producing two litters per year under good management conditions. The carcass return is high at 65-70% of the live weight.

4.8.4 Duck Rearing

Ducks account for about 7% of the poultry population in India. They are popular in states like West Bengal, Orissa, Andhra Pradesh, Tamil Nadu, Kerala, Tripura and Jammu and Kashmir. Ducks are predominantly of indigenous type and reared for egg production on natural foraging. They have a production potential of about 130-140 eggs/bird/year. Ducks are quite hardy, more easily brooded and resistant to common avian diseases. In places like marshy riverside, wetland and barren moors where chicken or any other type of stock do not flourish, duck rearing can be better alternative.

4.8.5 Apiculture

Apiculture is the science and culture of honeybees and their management. Apiculture is a subsidiary occupation and it is an additional source of income for farm families. It requires low investments and so can be taken up by small, marginal and landless farmers and educated unemployed youth.

4.8.6 Fishery

Ponds serve various useful purposes, viz., domestic requirement of water, supplementary irrigation source to adjoining crop fields and pisciculture. With the traditional management, farmers obtain hardly 300-400 kg of wild and culture fish per ha annually. However, composite- fish culture with the stocking density of 5000-7500 fingerlings/ ha and supplementary feeding can boost the total biomass production.

Species of fish:

- (i) Among the Indian major carps, Catla (*Catla catla*) is the fast growing fish. It consumes a lot of vegetation and decomposing higher plants. It is mainly a surface and column feeder.
- (ii) Rohu (*Labeo rohita*) is a column feeder and feeds on growing fish. It consumes a lot of vegetation and decomposing higher plants. It is mainly a column and surface feeder.
- (iii) Calbasu (*Labeo calbasu*) is a bottom feeder on detritus. Mrigal (*Cirrhinus mrigala*) is also a bottom feeder, taking detritus to large extent, diatoms, filamentous and other algae and higher plants. Common carp (*Cyprinus carpio*) is a bottom feeder and omnivorous.
- (iv) Silver carp (*Hypophthalmichthys molitrix*) is mainly a surface and phytoplankton- feeder and also feeds on micro-plants.
- (v) Grass carp (*Ctenopharyngodon idella*) is a specialized feeder on aquatic plants, cut- grass and other vegetable matter. It is also a fast growing exotic fish.

Composite Fish Culture: The phytophagous fish (Catla, Rohu and Mrigal) can be combined with omnivorous (Common carp),

plankton-feed (Silver carp) and mud-eaters (Mrigal and Calbasu) in a composite fish culture system.

4.8.7 Sericulture

India is the second largest producer of silk in the world with an annual silk production of 23,679 MT (Provisional) in 2012-13. India has the unique distinction of being the only country producing all the five kinds of silk namely, Mulberry, Eri, Muga, Tropical Tasar and Temperate Tasar. Among them, mulberry silk is the most popular variety, which contributes around 79% of the country's silk production. Sericulture is an important labour-intensive and agro-based cottage industry providing gainful occupation to around 7.63 million persons in rural and semi-urban areas in India. Of these, a sizeable number of workers belong to the economically weaker sections of society. There is substantial involvement of women in this Industry.

In India, sericulture is mostly a village-based industry providing employment opportunities to a large section of the population. Although sericulture is considered as a subsidiary occupation, technological innovation has made it possible to take it up on an intensive scale capable of generating adequate income. It is also capable of providing continuous income to farmers. Silk and silk goods are very good foreign exchange earners. The present global scenario clearly indicates the enormous opportunities for the Indian silk Industry.

Central Silk Board

For the development of silk industry in India, the Central Silk Board, a statutory body, is functioning under the administrative control of the Ministry of Textiles, Govt. of India with its Headquarters at Bengaluru.

The following are the important functions assigned to the Board.

Promoting the development of silk industry by such measures as it thinks fit.

Undertaking, assisting and encouraging scientific, technological and Economic Research.

(c) Devising means for improved methods of mulberry cultivation, silkworm rearing, developing and distributing healthy silkworm seeds, improving methods of silk reeling, improving the quality and production of raw silk.

Improving the marketing of raw silk.

The collection and compilation of statistics relating to the sector.

Advising the Govt. of India on all matters relating to the development of silk industry including import and export of raw silk.

The silk goods exports from India comprise mainly items of natural silk, fabrics, made-ups, readymade garments, silk carpets and silk waste. The category of silk fabrics viz., dress materials, sarees and scarves & stoles constitute the bulk of silk exports followed by readymade garments with contribution around 60% and 30%, respectively to the total silk export earnings of the country. The Indian silk goods have high export potential because of their distinctiveness and low production cost. Indian silk exports, which reach more than 190 countries, have increased over the years. The demand for Indian silk is not only in the domestic market but in global markets too. The USA, the UK, Italy, the UAE, Germany and Spain are the top importers of Indian silk products. Indian silk are steadily gaining greater demand in the new markets like Latin America and Russia also.

4.8.8 Mushroom Cultivation

Mushroom is an edible fungus with great diversity in shape, size and colour. Essentially mushroom is a vegetable that is cultivated in protected farms in a highly sanitized atmosphere. Just like other vegetables, mushroom contains 90% moisture with high in quality protein. Mushrooms are fairly good source of vitamin C and B complex. The protein have 60-70% digestibility and contain all essential amino acids. It is also rich source of minerals like Calcium, Phosphorus, Potassium and Copper. They contain less fat and CHO and are considered good for diabetic and blood pressure patients.

4.8.9 Agroforestry

Agroforestry is a collective name for land use systems and technologies, in which woody perennials (trees, shrubs, palms, bamboos etc) are deliberately combined on the same land-management unit as agricultural crops and/or animals, either in some form of spatial arrangement or in a temporal sequence.

In agroforestry systems, there are ecological and economical interactions among different components. That implies that: (i) agroforestry normally involves two or more species of plants (or plants and animals) at least one of which is woody perennials; (ii) an agroforestry system always has two or more outputs; (iii) the cycle of an agroforestry system is always more than one year; and (iv) even the simplest agroforestry system is structurally, functionally, and socio- economically more complex than a monocropping system. Agroforestry is important for meeting fodder, fuel wood and small timber of farmers, conserving soil and water,

maintenance of soil fertility, controlling salinity and waterlogging, positive environment impact and alternate land use for marginal and degraded lands. Selection of proper land use systems conserve biophysical resources of non-arable land besides providing day-to-day needs of farmer and livestock within the farming system.

The different commonly followed agroforestry systems in India are: (1) Agri-silviculture (crops + trees), which is popularly known as farm forestry (2) Agri-horticulture (crops + fruit trees); (3) Silvi-pasture (Trees + pasture + animals); (4) Agri-horti-silviculture (crops + fruit trees + MPTS + pasture); (5) Horti-silvi-pasture (fruit trees + MPTs+ Pasture); (6) Agri-silvi-pasture (crops + trees + Pasture); (7) Homestead agroforestry (multiple combination of various components); (8) Silvi-apiculture (trees + honey bees); (9) Agri-pisci-silviculture (crops + fish + MPTS); (10) Pisci-silviculture (Fish + MPTs) etc. 20

4.9 FARMING SYSTEM APPROACH TO RESEARCH AND DEVELOPMENT

Farming system research has emerged as a major theme in international agricultural research and rural development. The farming system approach to research and rural development has two interrelated thrusts. One is to develop an understanding of the farm household, the environment in which it operates, and the constraints it faces, together with identifying and testing potential solutions to those constraints. The second thrusts involve the dissemination of the most promising solutions to other farm households facing similar problems. The central issue of the approach is that the analysis of farming systems within which the rural poor live and work can provide powerful insights in to strategic priorities for the reduction of the poverty and hunger now affecting so many of their lives.

Farming System Research (FSR) Concept

The FSR concept was developed in 1970s in response to the observation that groups of small-scale farm families operating in harsh environment were not benefiting from the conventional agricultural research and extension strategies.

The farming system, as a concept, takes into account the components of soil, water, crops, livestock, labour, capital, energy and other resources with the farm family at the center managing agricultural and related activities. The farm family functions within the limitations of its capability and resources, socio-cultural setting and interaction of these components with physical, biological and economic factors. The term FSR in its broadest sense is any

research that views the farm in a holistic manner and considers interactions (between components and of components with environment) in the system.

This type of research is most appropriately carried out by interdisciplinary teams of scientists, who, continuously interact with farmers in the identification of problems and in advising ways of solving them. It aims at generating and transferring technologies to increase the resource productivity for an identified group of farmers.

Objectives and Principles

The FSR advocates that: (i) development of relevant and viable technology for small farmers having the full knowledge of the existing farming system and (ii) that technology should be evaluated not solely in terms of its technical performance but in terms of its conformity to the goals, need and socio- economic circumstances of the targeted small farm system with special reference to profitability and employment generation.

FSR is based on the following basic principles:

Make the farm household self-sufficient and make the farm free being vulnerable from external forces.

Enterprise diversification to increase income, employment, risk minimization, improvement in natural resources, environment and diet of farm families.

The interactions between the components and the components with the environments

Check your progress

Q - What is Farming System Approach to Research and Development?

4.10 Core Characteristics of Farming System Research:

Many of the core activities of FSR / E can be operationalized in different ways. The approach is open to multiple interpretation. Despite the variations in their perceptions about FSR / E among the

practitioners the approach has certain distinctive core characters. These are:

- i) It is problem solving: As an applied problem solving approach, it emphasizes on developing and transferring appropriate technologies to overcome production constraints through diagnosis of biophysical, socio-economic and institutional constraints that influence technological solutions.
- ii) It is holistic: The whole farm is viewed as a system encompassing interacting subsystems, and no potential enterprise is considered in isolation.
- iii) It acknowledges the location specificity of technological solutions: Recognizing the location specific nature of agricultural production problems, it emphasizes on testing and adaptation of technological solutions based on agro-ecological and socio-economic specificities.
- iv) It defines specific client groups: Emphasis is made on the identification of specific and relatively homogeneous groups of farmers with similar problems and circumstances for whom technology is to be developed as the specific client groups. On the basis of common environmental parameters, production patterns and management practices, relatively homogeneous recommendation domains need to be identified.
- v) It is farmer participatory: It revolves round the basic principle that successful agricultural research and development efforts should start and end with the farmers (Rhoades and Booth, 1982). Farmer participation is ensured at different stages of technology generation and transfer processes such as system description, problem diagnosis, design and implementation of on- farm trials, and providing feedback through monitoring and evaluation.
- vi) It gives weightage to ITK system: The Indigenous Technical Knowledge (ITK), which is time tested at the farmer's level for sustainability through a dynamic process of integrating new innovations into the system as they arise, has to be properly understood by the scientists and utilised in their research activities.
- vii) It is concerned with 'Bottom-up' research strategy: It begins with an understanding of existing farming system and the identification of key production constraints.
- viii) It is interdisciplinary: It lays greater emphasis on interdisciplinary cooperation among the scientists from different areas of specialisation to solve agricultural problems that are of concern to farmers.
- ix) It emphasizes extensive on-farm activities: It involves problem analysis through diagnostic surveys, on-farm testing of the developed technologies, and providing feedback through

evaluation to influence the research agenda of the experiment stations. It provides a structural framework for the farmers to express their preferences and apply their evaluation criteria for selecting technologies suiting to their circumstances.

- x) It is gender sensitive: While explicitly acknowledging the gender-differentiated roles of farm family in agriculture, it emphasizes the critical review of farming systems in terms of activities analysis, access and control over resources and benefits and implications in developing relevant research agenda.
- xi) It is iterative: Instead of trying to know everything about a system at a time, it requires step- by-step analysis of only key functional relationships.
- xii) It is dynamic: It involves recurrent analysis of the farming systems, permitting continuous learning and adaptations.
- xiii) It recognizes interdependencies among multiple clients: The generation, dissemination and adoption of relevant technologies to improve the productivity and sustainability of agriculture require productive and interactive linkages among the policy planners, scientists, developmental agencies and farmers. The approach attaches more importance for this critical factor.
- xiv) It focuses on actual adoption: It is to be judged by the extent to which it influences the production of socially desirable technologies that diffuse quickly amongst specified groups of farmer clients.
- xv) It focuses on sustainability: It seeks to harness the strengths of the existing farming practices, and to ensure that productivity gains are environmentally acceptable. Towards preserving the natural resource base and strengthening the agricultural production base, it attempts to develop technologies that are environment friendly and economically viable.
- xvi) It complements experiment station research: It only complements but does not substitute on station research. It has to draw upon the scientific knowledge and technologies generated at research stations. It has to be kept in mind that the approach is not being promoted as panacea for all maladies of local agricultural production systems.

Procedures and Methodologies: Generally farming system research is conducted by the following three possible ways:

FSR: On-farm Adaptive Research (OFAR)

FSR: On-station studies

FSR: Study of farming system by modeling, using suitable computer software.

On-farm research: On-farm research refers to the research which is conducted at farmers' field in relatively large plots compared to conventional on-station research with active participation of the farmers with the hope that technology generated through the combined efforts of researchers and farmers will be realistic to the socio-economic environment of the resource poor group and the problematic situations that the farmers practically face during the process of farming. While conducting on-farm research in farming system perspective the following principles needs to be considered.

- i) The whole farm viewed as a system - the research is conducted with recognition and emphasis on choice of priorities that reflect the whole farm.
- ii) Avoid complex procedures that require scarce and highly qualified individuals to collect and analyse data.
- iii) Maximise the returns by making results more widely applicable. This means defining target groups of farmers (recommendation domains) in broad terms.

Check your progress

Q- What are the core characteristics of Farming Systems Approach?

4.11 SUMMARY

Human beings always strive for their development. For this he makes use of the different factors available in the nature for ex-animals, land, plants etc. his progress and prosperity depends on the available natural resources. But in the developmental process man has started destroying the natural resources available to him, which has created problems of environmental imbalance and global warming. So it is very essential for man to make use of the available natural resources very carefully. For the survival of human being man has to conserve these available natural resources. To meet the multiple objectives of poverty reduction, food security, competitiveness and sustainability, several researchers have recommended the farming systems approach to research and development. A farming system is the result of complex interactions among a number of inter-dependent components, where an

individual farmer allocates certain quantities and qualities of four factors of production, namely land, labour, capital and management to which he has access. Government has been laying thrust in providing gainful employment for the rest period of the year for the work force and in this backdrop the challenge before the Govt. is to expand activities under allied sector. Besides, providing employment this will generate additional income for the rural household. Added to this, this sector will be in a position for utilization of the unproductive woman power in a productive manner.

4.12 SELF-STUDY

1. What are natural resources and explain the factors of it?
2. Explain the importance of natural resources in rural development.
3. Explain agricultural allied and subsidiary occupations and its importance in rural development?
4. Explain in short the different allied and subsidiary occupations what can be done along with agriculture?
5. Explain the relation of dairy and animal husbandry to agriculture?
6. Write in detail - Farming System Research
 - What are the determinants of farming systems?
 - Development of Rural Backyard Poultry - write in short.
7. Discuss the core characteristics of Farming System Approach.
8. Write short notes on:
 - i) On farm research
 - ii) Sericulture
 - iii) Agroforestry
 - iv) Mushroom cultivation

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Unit - 5

RURAL INFRASTRUCTURE

Dr. Clementine Rebello

Unit Structure :

- 5.0 Objectives
- 5.1 Introduction
 - 5.1.1 Level of Infrastructure Development
 - 5.1.2 Rural Infrastructure and Agricultural Development
 - 5.1.3 Rural Infrastructure and Poverty Alleviation
 - 5.1.4 Rural Infrastructure and International Competitiveness
- 5.2 Problems of the poor
- 5.3 Strategy for Sustainable development
- 5.4 Importance of rural infrastructure in rural development
- 5.5 Concept of rural infrastructure
- 5.6 Role of Rural Infrastructure in Rural Development
- 5.7 Development of Infrastructure
- 5.8 Summary
- 5.9 Self study

5.0 OBJECTIVES

1. Can study the rural basic infrastructures
2. Can study the problems of the poor and strategy for sustainable development
3. To know the importance of rural infrastructure in rural development
4. To understand the concept of rural infrastructure
5. To know the role of infrastructure and its development

5.1 INTRODUCTION

Infrastructure plays a crucial role not only for the country's economic growth but also in the progress of human development. Rural areas account for a larger part of the geographical area in India. Census 2011 reports that there are 6.4 lakh villages in India, which shelter more than two-third of the country's population. It has been a major problem to provide basic infrastructure facilities to this

large section of the population, which is spread across 3.28 million square kilometer of the country's geographical area.

Infrastructure development plays a key role in both the economic growth and poverty reduction of the country and it must become more inclusive as the country matures.

The developing countries having low income have many rural infrastructural deficiencies despite having a large variation in the rural infrastructure.

The deficiencies in rural infrastructure in transport system, energy, telecommunication, etc. leads to poor functioning of the other related infrastructural facilities. It is very true that the development of rural infrastructure promotes growth and poverty alleviation and the economic rates of return to the investments are also high.

A country's prosperity depends upon the countries agricultural sector, its market and development in the industrial sector. Electricity, supply of finance and transport facility, machines, tools and implements, skilled workers, energy, market place are all important and all the above said facilities are called as the infrastructures of the economy. The infrastructure facility is very important from the point of view of development of the country. India being land of villages developing India means developing the Indian villages in reality. Infrastructures play an important role in rural development as transport and communication connect the villages to the market areas, and energy & irrigation are necessary for agriculture and village industries.

Scientific development, information technology mobilizes the development of agricultural industries. Development of human resources depends on the education and health facilities provided. Investment in rural infrastructure is the need of today. Planning commission realized the need of the hour and from the first five years plan it decided to make an increase in the investments in rural infrastructures. Increase in the investment in countries infrastructure is seen as per the necessity.

5.1.1 Level of Infrastructure Development

Development of physical as well as social infrastructure plays an important role in the overall advancement of the rural economy, by directly contributing to employment generation and asset creation. Improved network of physical infrastructure facilities such as well-built roads, irrigation, rail links, power and telecommunications, information technology, food storage, cold chains, market-growth centers, processing of produce and social infrastructure support, viz., health and education, water and

sanitation and veterinary services & co-operatives are essential for the development of the rural economy, especially in the era of liberalization, privatization and globalization (LPG).

5.1.2 Rural Infrastructure and Agricultural Development

The importance of good infrastructure for agricultural development in developing economies is widely recognized. "Roads, electricity supplies, telecommunications, and other infrastructure services are limited in all rural areas, although they are of key importance to stimulate agricultural investment and growth." (Food and Agriculture Organisation of the United Nations - FAO 1996 chapter 10, page - 15) It also said, "Better communications are a key requirement. They reduce transportation cost, increase competition, reduce marketing margins, and in this way can directly improve farm incomes and private investment opportunities" (ibid). Investment in infrastructure increases farmer's access to input and output markets, helps to stimulate the rural non-farm economy, increases consumer demand in rural areas and facilitates the integration of less-favoured rural areas into national and international economies.

5.1.3 Rural Infrastructure and Poverty Alleviation

The impact of rural infrastructure on poverty level is significant and particularly in the context of achieving Millennium Development Goals (MDG) in the developing countries. Investment on the infrastructural facilities leads to an increase in the real income in both agriculture and non-agriculture sectors leading to a decline in the poverty level. A direct contribution to poverty alleviation is made by reducing the consumption level and by providing necessary services like health, housing, safe drinking water, basic sanitation in the initial stage of development. Providing little finance along with basic infrastructural facilities can generate incomes in both small-scale agriculture and non-agricultural rural enterprises. Rural infrastructure acts as a catalyst in alleviating poverty but still large disparity is found in the rural and urban areas in India.

5.1.4 Rural Infrastructure and International Competitiveness

Without making significant investments in rural infrastructure like roads, transportation and market facilities the potential benefits of trade liberalization and globalization in a developing country like India where majority of the population lives in rural areas and agriculture playing an important role can't be obtained. Better domestic infrastructure could contribute to international competitiveness through the three channels. They are a) Improving Price Competitiveness; b) Improving Non-Price Competitiveness; and c) Attracting Foreign Direct Investments (FDI).

Check your Progress :

Q- Infrastructure plays a crucial role not only for the country's economic growth but also in the progress of human development. Explain.

5.2 PROBLEMS OF THE RURAL POOR

Its high time for a change in the planning strategy. The rural development programmes should identify the problems of the poor and address the local needs, instead of forcing them to accept the preconceived plans. There should be equal opportunity for the people and active participation by the people in the society including the weaker sections and women should be there. The programme should facilitate sustainable management of natural resources and environmental protection and lead to better quality of life. The reasons for rural poverty can be attributed to lack of resources, confidence among the poor and management for implementing the development programmes.

Lack of Resources: Most of the rural families depend on agro-based activities for their livelihood, where land is the limiting factor. Over 75% of the farmers own less than two hectares of land. As the percentage of agricultural land is under irrigation is less and the much is under rainfed areas, a large number of people are seasonally employed, causing severe underemployment for over 250 days in a year. Many farmers are not able to invest in necessary inputs to increase their agricultural production even though they have good quality land along with assured source of water. Lack of improved germ-plasm, inadequate nutritional supplement and poor plant protection are the other reasons for lower crop yields. The average crop yield in India is 1.9 tons as compared to the world average of 2.5 tons/ha and 4 tons/ha in China. Motivating the farmers to adopt improved crop management practices with timely supply of critical inputs will help to boost the agricultural production.

Lack of Confidence among Poor People:

Due to lack of education, awareness and confidence our natural resources are not used optimally. This has resulted in the negligence of various development schemes introduced for

sustainable use of the available resources. It is feasible to make sustainable use of the available natural resources through application of appropriate technology and use of unemployed labour. To ensure success it is necessary to support the people with an appropriate technology package with critical inputs and build a strong infrastructure at various levels to provide necessary services.

In spite of many success stories, most of the small and poor farmers are not confident about their ability to participate in the development programmes. Neither are they confident about the appropriateness of the technologies, nor are they convinced about the capabilities of the development agencies involved in launching these projects. Poor farmers who have been receiving financial assistance in the past from the Government and other donor agencies lack adequate motivation and training. In the absence of their felt needs, they have been misusing these inputs for unproductive purposes or for mere survival without fulfilling the project goals. In this process, many poor farmers have developed a 'dependency syndrome' and expect outsiders to provide the means for their livelihood. They have lost confidence in themselves as well as in the outsiders.

Lack of Management:

Rural development projects are often implemented without adequate planning. Sectorial development activities may not give expected results in the absence of an integrated approach to tackle the multidimensional interrelated problems. Apart from integration of various sectors, many of these projects lack proper planning and resource mobilisation. Unlike industries, rural development projects are not implemented on sound management principles taking into consideration the required inputs, technologies, human skills and opportunities for marketing the produce.

Check your Progress :

Q- Discuss the problems of the rural poor.

5.3 STRATEGY FOR SUSTAINABLE DEVELOPMENT

The development programme should identify the problems and options to solve these problems, based on the available resources and technologies. The agricultural development programme should identify the available resources such as quality of the land, quantity of water, weather conditions and select suitable crops that are most productive. A suitable market where price recovery for the produce will be maximum is ensured if timely supply of inputs, finance are provided in a project.

Developing the capacity of the target groups through establishment of local organisations is also necessary. Even after the project is terminated and the services of outside resource persons are withdrawn such organisations can organise procurement and distribution of necessary inputs and marketing of the produce. Availability of labour and their educational level to adopt necessary skills is also an important consideration. However, in most of the villages, idle labour is available in plenty and skills required for implementing agro-based projects are less sophisticated. Hence, the labour availability is not a critical factor, but motivating them to take active part in the programme is the key to success.

5.4 IMPORTANCE OF RURAL INFRASTRUCTURE IN RURAL DEVELOPMENT

Social and economic infrastructure is very important in the rural development. Development is faster due to the infrastructural facilities. Rural infrastructure plays an important in the development of human resources. It can be described in the following ways.

1) To reduce the rural backwardness

To gain momentum for economic development infrastructural facilities are very much essential. Constructions of roads make way for the transport facility, so that the agricultural produce can be taken to the market. Due to transport and communication facilities the farmer can communicate with the market area. Therefore he can take decisions related to the production and sales of his agricultural produce. Spread of education and cultural give and take is possible due to the infrastructural facilities. Increase in the agricultural production can be done through modernization of agriculture. Standard of living of the rural areas increases and rural backwardness decreases.

2) Development of human resources

Development of human resources depends on the important factors like education, health and pure drinking water. Skilled man

power is available by educating the mass. Poverty can be minimized if there is growth in the industrial sector. Growth in the population can be controlled. The human resources can be healthy and strong due to the provision of health facilities and pure drinking water.

3) Increase in the momentum of production factors

If the rural infrastructure is developed it can be connected to the various modes of transport and communication media. This helps in the give and take of ideas, market and product information at faster rate. Information regarding the employment, trade, capital, etc is available.

4) For the development of the agricultural sector

Modernization of agriculture depends on the availability of the infrastructural amenities. Irrigation facilities help to increase the agricultural production. Electrical pumps can be used if electricity is there. More land can be brought under cultivation with the use of modern irrigation facilities like drip irrigation and sprinkler irrigation. Extension of transport and communication facilities and the market areas, help in gaining proper market value for the agricultural produce. Development in the agricultural sector is possible because of all these facilities.

5) Momentum to the rural industrial sector

Infrastructural facilities are essential for the development of industries. If facilities like water, electricity, transport, communication, markets, financial institutions, etc are provided in the rural areas, industrialist would be eager to start industries in the rural areas. Industries based on processing of agricultural produce will gain momentum. People will get employment locally and problem of unemployment will be overcome.

6) Decrease in the poverty

Economic development is due to rural infrastructure. There is an increase in the agricultural production and industrialization gains momentum. The employment is generated in the agricultural and non-agricultural sector. As a result there is an increase in the income and poverty is minimized.

7) Social and Cultural progress

Transport and communication facilities are developed due to infrastructure. Exchange of ideas and culture is possible. We get information of different methods of production from other various areas, their culture and traditions. New ideas are generated and are helpful in the development process.

Infrastructure is one of the social capitals. Infrastructural investment leads rural development. But the fact is there is no

desired progress in the rural infrastructure. As a result the development of the rural areas is very slow and there are obstacles in the path in the development process. The big farmers took benefit of the big and medium irrigation projects. Small and marginal farmers did not get the benefit due to the negligence of the small irrigation projects.

Check your Progress :

Q- Explain the importance of rural infrastructure in rural development.

5.5 CONCEPT OF RURAL INFRASTRUCTURE

Rural infrastructure plays an important part in the economic and social development of the country. Basic infrastructure is the capital of the society. It is difficult to define social and economic infrastructures because of their flexibility. Paul, Rosenten, Reigner, and Narks have defined social and economic as 'Investment done in the work which is socially beneficial'. Those social investments that are indirectly beneficial to the production processes are termed as basic infrastructure. Rural infrastructure directly does not produce goods but create a favorable condition for raising the economic level.

To achieve the goal of rural development, to gain momentum in the development process rural infrastructure plays an important part. Social and cultural development also depends on the infrastructure. After adopting the concept of welfare state government is making a large investment in the rural infrastructure. By adopting the policies of privatization, liberalization and globalization since 1990 private sector is investing on large scale on the infrastructure. Due to which there was a drastic change in the infrastructural facilities.

Following factors are included in the rural infrastructure:

1) Public Amenities-

- a) Electricity for the agricultural and industrial sector.
- b) Transport and communication –indivisible factor of the development process.

- c) Supply of drinking water through taps for people's health.
- d) Disposal of filth and waste matter for health and cleanliness.

2) Public construction-

- a) Construction of roads for the transport of agricultural produce, raw material and finished products from the industrial sector.
- b) Irrigation projects to supply water to the agricultural sector.

3) Public transport service-

- a) Transport is one of the important factors of the basic infrastructure. It includes road transport, railway transport, waterways and airways. Transport service is very essential for transporting the agricultural produce to the market. Economic and social development takes place because of transport service.

Check your Progress :

Q – Explain the concept of rural infrastructure.

Since independence, many government initiatives have taken place like IRDP, Indira Awas Yojana, etc. The policy makers have tried to upgrade the rural infrastructure over the last few decades. Information and Communication technology (ICT) has also played a significant role in education and healthcare sector. At the grass-root level e-Panchayats have played an important role in implementing effective governance.

The development of only urban areas will lead to catastrophic consequences in the long run. Therefore a need was felt to implement various policies / programs in rural India. Rural Infrastructure Development Fund (RIDF), Bharat Nirman, Mission 2007 have emerged with specified goals to be achieved. Developing the infrastructure has to be one of the priorities in rural India. Social development is not possible if basic amenities and developing infrastructure in rural areas are not provided. As it is not possible for the government to reach every nook and corner, NGOs /SHGs / private parties to participate in the development process and in implementing the rural infrastructure projects.

5.6 ROLE OF RURAL INFRASTRUCTURE IN RURAL DEVELOPMENT

In any country, infrastructure plays a very important role in supporting nations economic growth. Typically, rural infrastructure assumes great importance in India because of the country's predominantly rural nature and the crucial linkages of rural infrastructure to economic growth, poverty alleviation and human development as a whole in the country. In fact, as per Census 2011, there are 6.4 lakh villages in India, which shelter more than two-third of the country's population. In such a scenario, the role and importance of rural infrastructure in India cannot be negated. It is to be noted that rural infrastructure includes irrigation, rural housing, rural water supply, rural electrification and rural telecommunication connectivity. In general, rural infrastructure can provide basic amenities that improve the quality of life of the rural people. It is also very crucial for agriculture and agro-industries. For example, development of rural infrastructure can lead to improved access to market centres for the rural producers, better availability of inputs and raw materials at reduced prices and improved mobility.

If we talk about the rural road infrastructure, then it can provide mobility and connectivity to more than 800 million people living in rural areas. Better network of rural roads can provide a boost to the agricultural activities by making water, seeds and other raw materials needed for farming reach in time to the farmer. Rural roads can provide better connectivity by enhancing employment opportunities too in the non-agriculture sector as masses can move freely from one place to another. Rural roads can ensure that the rural areas are served with better public services and all the benefits offered by the state reach the far-flung and remotest areas easily. Thus overall, rural road infrastructure can help in eradicating poverty in rural areas as it can provide better livelihood to people and better access to education and health services and other basic services.

Further, rural electrification infrastructure can very well cater to the requirements of agriculture and other activities including irrigation pump sets, small and medium industries, khadi and village industries, cold storage chains, healthcare, education and rural IT. Rural water supply system infrastructure can lead to sustainability of systems and sources and tackle the problem of water quality, thereby, increasing good health of people. As far as rural housing infrastructure is considered, it can improve the living standard of the people.

Development of rural power, irrigation, water, sanitation and road infrastructure can increase productivity, savings, income and tourism and result in better jobs and health of rural people. Thus, better infrastructure has the potential to promote overall growth of the rural community and impact the country's economy as well.

India has developed a reasonably wide road network in the last few decades. As far as rural India is concerned, the road network has been increased from 3,54,530 km in 1971 to 24,50,559 km in 2008 (including 10,61,809 lakh km roads constructed under Jawahar Rozgar Yojana and Pradhan Mantri Gram Sadak Yojana) registering an annual compound growth rate of 5.4 percent over this period. However, the rural surfaced road coverage is just 33 percent of the total rural road network in India. The kutcha roads, which are highly vulnerable and inaccessible particularly during the rainy season, cover a large portion in total rural road network. Given the wide diversity in physical structure of the country, the need for greater surfaced road connectivity is important particularly in the hilly terrains and low lying areas.

Power Electricity has become a necessity for every household. The governments at the Centre and States have been trying to push various reforms in power sector in order to provide Electricity to people at affordable prices. According to the Central Electricity Authority, Government of India, a total of 5,56,633 villages have been electrified, which stands at 87 percent of total villages in the country at present. However, even within the electrified villages, many households are not connected with electricity. The Census 2011 indicates that 45 percent of the rural households are not connected with electricity and depend on kerosene and other means for lighting. In terms of the per capita power consumption level, India continues to be among the low performing countries in the world.

The Central Government has launched a few policies like provisioning of 1 kwh of free power per day to the BPL families. The hybrid electricity provisioning through off-grid connectivity and power supply from cogeneration, solar and micro-hydro projects have been some of the programmes implemented by the Central Government to bring the remote villages under the coverage of power supply.

Housing

The housing conditions in rural India have not improved much. According to Census 2011, as much as 20.7 percent of the total 206 million (or 20.6 crore) occupied rural houses are with thatched roofs. These houses are not safe for living, highly vulnerable to rainfall, wind blow, fire and many other accidents. Some of the government interventions, such as, Indira Awas

Yojana (IAY), operation of corpus funds like Rural Infrastructure Development Fund (RIDF) by the National Bank for Agriculture and Rural Development (NABARD) and Rural Housing Fund by the National Housing Bank, aim at promoting rural housing in the country. However, a lot more needs to be done to provide better housing facilities to the rural population.

Education

The 8th All India School Education Survey (AISE) report shows that there are 6.75 lakh primary schools functioning in rural areas in the country, which means that on an average every village in India has a primary school. Even in terms of the number of classrooms, availability of safe drinking water facilities, toilet facilities etc. the school infrastructure in rural India needs a lot more improvement. Therefore, governments at various levels need to be pro-active to develop and maintain the infrastructure for education in rural areas.

Health

Health infrastructure in rural India is still quite inadequate. As on March 2011, the total of 6.4 lakh villages in the country were covered with only 23,887 Primary Health Centres (PHCs) and 1,48,124 Sub-Centres. This shows that, on an average, 4.3 villages have one sub-centre and only one PHC exists for as many as 27 villages. Added to this, many health centres are also run without doctors (or absentee doctors) and in some cases treatment is done by unskilled healthcare workers. Absence of connectivity to the villages and inadequate number of health centres and skilled health workers still endangers the life of rural population in the country.

Drinking Water and Sanitation

Provisioning of safe drinking water to every household should be one of the basic policy priorities. However, the Census 2011 reports a mere 30 percent of rural area being covered with tapped water supply. Households in the remaining rural areas in the country depend on other means like hand pumps, bore well and fetching water from nearby rivers and canals etc. The poor sanitation facilities in the rural belt have been an equally challenging issue for the government. The Census 2011 report reveals that 69.3 percent of rural households in the country still resort to open defecation. The Union Ministry of Drinking Water and Sanitation also reports that many Primary Schools and Anganwadi Centres in the rural areas do not yet have toilets. Hence, provisioning of safe drinking water and sanitation facilities in rural areas need to be a top priority for the government now. We need to remember that rural economy still plays a significant role in India's overall economy. The rural sector has a very high potential in terms labour and natural resources, which are the basic inputs in production process. However, among other factors, lack of

adequate infrastructure has been driving the rural labour into poverty and deprivation.

Provisioning of basic infrastructure facilities would help in tapping the vast resources in the rural areas in India. Therefore, the gaps in rural infrastructure need to be addressed properly so as to achieve redistributive growth and alleviate poverty in the country.

Check your Progress :

Q- What role does rural infrastructure play in rural development?

5.7 DEVELOPMENT OF INFRASTRUCTURE

To sort out the above problems, we need to develop a strong infrastructure at various levels. Apart from mobilising people, infrastructure is also necessary to organise input supply, finance, post-production processing and marketing of the produce. Inadequate marketing network is another major bottleneck in agriculture. The farmers should be oriented to make a swift forecast of the demand for various commodities and exploit the opportunities. There is good scope for setting up market outlets to reach the customers without involving too many middlemen. Such agencies can support farmers with seeds of improved varieties, finance and other critical inputs for optimising their crop yields.

The Agricultural Marketing Boards, Milk Cooperatives and Federations that are inefficient and politically oriented presently provide marketing services. Many of these cooperatives are not competent and are outdated. Very often they end up in losses because of mis-management and ignorance. In this process, the innocent farmers suffer heavy losses. Presently, only a few Farmers' Organisations, Sugar Cooperatives, Milk Unions, Grape Growers Cooperatives, Apple Growers Cooperatives and Tea Growers' Association, etc. are fairly successful only because of their professional approach in operating the business. The strength of these organisations can be extended to other crops in different regions. Development of village level farmers' organisations, which can directly deal with reliable business houses or trade outlets should also be encouraged. Industries can play a significant role in strengthening such market oriented village level organisations.

Self Help Group (SHG) of 10-20 farmers can be an effective non-formal organisation to provide necessary services and facilities to the members. The SHGs should preferably consist of a homogeneous group of members, preferably separate for men and women. These groups can share their concerns and plans on various development activities to be undertaken jointly and individually. They can also organise procurement of agricultural inputs, credit, technical services and marketing of the produce. Several SHGs can jointly form a village level or block level Farmers' Association or Cooperative Federation to organise technology transfer, processing, marketing and other services.

Voluntary Organisations working at the block level can play a significant role in capacity building of the SHGs and Farmers' Organisations and facilitate a close link between the SHGs and Gram Panchayats. NGOs can also help the SHGs to arrange processing and marketing of the produce through various industries and consumer organisations. The role of Technology Development Institutions and Financial Institutions can also be made very effective, if they can establish a close link with the village level organisations and SHGs.

Agricultural extension services are presently being provided by the Zilla Panchayat through Gram Sevaks. However, most of them are ineffective in dealing with farmers who are located far away and are least receptive. Thus, the technology transfer in backward areas is extremely slow. Even the earlier effort to disburse bank loans to farmers either directly or through the cooperative societies has not been successful due to lack of motivation and inadequate pressure from their peer groups. These drawbacks can be minimised through the formation of SHGs and involvement of local voluntary organisations.

Check your Progress :

Q- Write short note on development of infrastructure.

5.8 SUMMARY

Infrastructure plays a crucial role not only for the country's economic growth but also in the progress of human development.

The deficiencies in rural infrastructure in transport system, energy, telecommunication, etc. leads to poor functioning of the other related infrastructural facilities. Infrastructures play an important role in rural development as transport and communication connect the villages to the market areas, and energy & irrigation are necessary for agriculture and village industries.

Scientific development, information technology mobilizes the development of agricultural industries. Development of human resources depends on the education and health facilities provided. Investment in rural infrastructure is the need of today. Planning commission realized the need of the hour and from the first five years plan it decided to make an increase in the investments in rural infrastructures. Increase in the investment in countries infrastructure is seen as per the necessity. Rural infrastructure acts as a catalyst in alleviating poverty but still large disparity is found in the rural and urban areas in India. Without making significant investments in rural infrastructure like roads, transportation and market facilities the potential benefits of trade liberalization and globalization in a developing country like India where majority of the population lives in rural areas and agriculture playing an important role can't be obtained. Rural infrastructure assumes great importance in India because of the country's predominantly rural nature and the crucial linkages of rural infrastructure to economic growth, poverty alleviation and human development as a whole in the country.

5.9 SELF STUDY

1. Infrastructure plays a crucial role not only for the country's economic growth but also in the progress of human development. Explain.
2. Discuss the problems of the rural poor.
3. Explain the importance of rural infrastructure in rural development.
4. Explain the concept of rural infrastructure.
5. What role does rural infrastructure play in rural development?
6. Write short note on development of infrastructure.
7. Write short notes on:
 - Rural Infrastructure and Agricultural Development and poverty alleviation
 - Lack of Confidence among Poor People
 - Lack of resources and management

- Strategy for Sustainable Development
- Factors included in the rural infrastructure
- Drinking Water and Sanitation

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Unit - 6

TRANSPORT, COMMUNICATION, DRINKING WATER AND ELECTRIFICATION

Dr. Anjali D. Patil

Unit Structure :

- 6.0 Objectives
- 6.1 Introduction
- 6.2 Transport and Communication
 - 6.2.1 Transport
 - 6.2.2 Information and Communication technology (ICT)
- 6.3 Drinking Water
 - 6.3.1 Drinking water supply and sanitation in India
 - 6.3.2 Sanitation
 - 6.3.3 Demand-driven approaches in rural water supply
- 6.4 Rural Electrification
- 6.5 Summary
- 6.6 Self- Study

6.0 OBJECTIVES

- To study the importance of Transport and Communication.
- To know about the drinking water facilities in the rural areas.
- Information regarding rural electrification will be available.

6.1 INTRODUCTION

Rural roads are an important sector in rural development, which deals in all aspects of development including agriculture, health, education, forestry, fisheries, small-scale industries, trade, commerce etc. that depends on good communication.

Technology has become a part of life and livelihood of any country. In the 20th century, rapid technological advances led to rising standards of living, literacy, health and life expectancy. Transport and communication helps in connecting with the world in no time. The lack of adequate sanitation and safe water has significant negative health impacts. India's huge and growing

population is putting a severe strain on all of the country's natural resources. Most water sources are contaminated by sewage and agricultural runoff. India has made progress in the supply of safe water to its people, but gross disparity in coverage exists across the country. Therefore it is very important to provide safe drinking water, safe and hygienic environment and sanitation facilities in rural areas.

Rural electrification program has been the extension of the grid to cover the rural areas, so far not covered. This has certainly helped in making electricity available to a significant section. Only recently, most of the planners and policy makers have realized the futility of trying to achieve 100% electrification through grid extension. There is need for more comprehensive approach to rural electrification.

6.2 TRANSPORT AND COMMUNICATION

Transport and Communication are an integral part of rural development.

6.2.1 Transport :

Rural road connectivity is not only the key component of Rural Development in India, but also recognized as an effective poverty reduction program. An improved accessibility to all quarters of a village is an indispensable prerequisite for the provision of adequate living conditions in rural areas. The interdependency in change of land use and transportation is not promoted in rural areas and this keeps the economic system inactive in these areas. The absence of roads in rural areas leads to stagnation of socio-economic conditions of the villagers.

The network planning should promote the objectives like accessibility and connectivity to most of the places in the region. A proper skeleton of road network will create a promotional impact of land use activity.

Transportation is the movement of people, animals and goods from one location to another. Modes of transport include air, rail, road, water, cable, pipeline and space. Transport is important because it enables trade between people, which is essential for the development of civilizations.

Roadways

A road is an identifiable route, way or path between two or more places. Roads are typically smoothed, paved, or otherwise prepared to allow easy travel, though they need not be, and historically many roads were simply recognizable routes without

any formal construction or maintenance. In urban areas, roads may pass through a city or village and be named as streets serving a dual function as urban space easement and route. Road transport offers a complete freedom to road users to transfer the vehicle from one lane to the other and from one road to another according to the need and convenience. It is possible to provide door- to - door service only by road transport.

Rail Transport

Railways are an important means of land transport. The India railway system is today the largest in Asia and the second largest in the world. The Indian railways carry crores of passengers and heavy and bulky goods from one part of country to another. Railways connect all the important towns and cities. Railways provide a cheap and fast means of transport. In many times of crisis, such as floods, famines and wars, railways carry men and materials to places where they are most needed. In big cities, we have local train service also. Kolkata is the only city in our country, which has an underground railway system, called the Metro service. Freight trains traditionally used [boxcar sHYPERLINK "http://en.wikipedia.org/wiki/Box_car"](http://en.wikipedia.org/wiki/Box_car), requiring manual loading and unloading of the [cargo](#). Railways have directly or indirectly have created employment opportunities throughout. Transport of goods has become easier from different parts of the country. It has resulted in the growth of industrial sector in the country.

Air Transport

Aero planes are the fastest means of transport. All our major cities are connected to one another and to almost every part of the world through air transport. Air transport has made not only our country but also the entire world very small.

Helicopters and aeroplanes are pressed into service in times of floods, other natural calamities or accidents. However, air travel is expensive. It is also not possible to transport heavy and bulky goods by air.

The development of fast means of transport has increased the trade not only within the country, but also between different countries of the world. It is now possible to buy goods produced in other parts of the country, and the world, from our local market.

Water Transport

Ships and boats are means of water transport. Ships sail in the oceans and seas, carrying all types of goods from one part of the world to another. India has many ports along its long coastline. Steamers and boats sail along big rivers carrying passengers and goods from town to town, along their banks in India. Big rivers like the Ganga and Brahmaputra are used extensively as an inland

means of water transport. The backwaters of Kerala are also widely used for water transport. Water transport may be slow as compared to road, rail or air transport but it is a cheap way to transport bulky goods over long distances. In the same way water transport is carried out through rivers, lakes, canals, creeks.

Check your Progress:

Q- Explain the various modes of transport.

6.2.2 Information and Communication technology (ICT)

Since early 90s Information and Communication Technologies are playing a pivotal role in the development process. In the globalization era, India using ICTs to promote their development programs as well as reaches the poor to strengthen their livelihood.

Technology is a double-edged sword in present days. It has become a part of life and livelihood of the people in the country. In the 20th century, rapid technological advances led to rising standards of living, literacy, health and life expectancy. The promise of Information and Communication Technologies (ICTs) for the 21st century likewise presents both opportunities and challenges. ICTs, like all technologies, are tools. In the era of globalization information revolution and the extraordinary increase in the spread of knowledge have given birth to a new era- one of knowledge and information that affects directly economic, social, cultural and political activities of all regions of the world, including India.

In easy terms ICT is defined as technologies that facilitate communication, processing and transmission of information in the electronic format. The progress of any market mainly depends on the access to information. The Information and Communication Technologies (ICTs) greatly facilitate the flow of information and knowledge by presenting the rural consumers extraordinary opportunities to attain their own entitlements. There is a comprehensible relationship between ICTs and the rural consumer empowerment.

ICT can be used as an effective tool for rural consumer empowerment. The rural consumer acting solely will be able to

obtain the information they require once they have access to Internet. The knowledge obtained is sufficient to begin the process of identifying and mobilizing proper information resources. It can be used to create the demand that will generate the detailed information requirements necessary for the construction of useful information system.

Beneficial for the farmers

One of the benefits of ICT lies in providing timely and accurate information. Now the rural consumer can get information about the weather, including monsoon and threat of floods and other natural calamities. It reduces the farmer's dependence on uncontrollable natural factors and also allows them to plan their crops accordingly. It acts as a warning signal and helps the farmers to avoid risks.

ICT has remarkable potential to make the information available at the right time thereby empowering the rural consumer. It is considered as the lifeline of economic and social development of the rural consumers.

Hindrances in implementing ICT in rural areas-

- a) Due to lack of awareness about information technology and illiteracy it can be a hindrance in implementing ICT in rural areas
- b) Inadequate, inconsistent and unpredictable power supply in the rural areas poses a serious threat to efficiency of ICT.
- c) Non- accessibility of secure, robust and economical broadband connectivity in rural market continues to hamper the growth of ICT.
- d) Poor people and disadvantaged group like women may have restraint in the use of ICT for their specific purpose.
- e) Software packages and content not in local language is another hindrance for rural consumers as most of the rural consumer are not comfortable in English language.
- f) Short lifecycle of IT assets due to high rate of depreciation and obsolescence is another factor acting as a threat to the viability of ICTs.

Developing ICT for Rural Consumers-Planning and Implementation:

Assessing the information needs are very essential elements in the context of ICT for rural consumers. The marketers and software developers should keep in mind wide range of resources and applications of ICT that are of potential use to the consumers. Actually it is the information that has direct impact on the demands of the rural market so it is of paramount importance that any

applications should be developed only after an accurate assessment of the needs and wants of the rural consumers. The organizations have to use rapid and participatory rural appraisals and other survey instruments to ensure timely and accurate information about the rural market. These tools could be used in the context of ICT initiatives. Once the information needs of the consumers are assessed, marketing plan and software applications should be developed with continuous involvement and feedback from rural consumers. For effective utilization of information about the rural consumers, the information has to be divided into different information networks and organized accordingly. The working group of the ministry of IT recommended computer education at the block level by establishing computer education amenities in rural areas. This is a segment where investment is required incessantly in order to improve the educational standards of the rural consumer.

Initiatives for rural consumers need to be approached with a measure of carefulness. The challenge is to help build the capacity of market intermediaries or assist in the establishment and promotion of consumer information centers. To achieve sustainability marketing strategy must deal with the real needs of the rural consumers. The rural youth has to be given a major place in the whole plan. Training the youth to broaden the concept of ICT successfully is very essential. It should be made mandatory for the sarpanch to be computer literate. Software packages in local languages need to be developed to have a wider usage of ICT by rural consumers. Incentive should be provided to encourage the rural consumer to adopt the program. The Panchayat can propose the names of few persons to get training in information technology. There is also a gender dimension to the information needed. For instance, quite often women require specific health related information. The position of women has to be dominant in the villages. Rural women have proved their mettle in many endeavors like in the development of cooperatives and SHGs (Self Help Group). The women have to assume larger responsibilities, as they are the promoters of tomorrow's citizens. The rural consumers should have a sense of ownership of the knowledge management centers; otherwise it will be difficult to sustain them.

The ICT network should include information on preventive health issues, to prevent any possible spread of epidemics and other diseases. Ministry of Information technology (MIT) has also initiated a development project on telemedicine in association with leading medical institutes. Community radio and the All India Radio can be of immense help in communicating up to date information to those who will benefit from it. In order to reach to the bottom of the pyramid level an integrated ICT system is of supreme value. It is very important that the content be made available to the rural

consumer in their local language so that they decipher the content easily. Mobile phones can be also used as a potential source of growth. Mobiles allow communication to bridge the digital divide by leapfrogging and breaking the hierarchical pattern of technology diffusion. Short message Service (SMS) can be used to deliver a wide range of information to rural consumers like crop prices, weather patterns, utility services etc. Panchayat are the movers of rural economy. To promote ICT in rural market, the best way is to make panchayat IT savvy. The development of online panchayat will lead to efficient selling and distribution of crops. With the availability of the Internet in rural market, the procurement process can be reorganized. The requirement of the middlemen will be reduced to a great extent. Farmers can deal with the end users like the industrial buyer and consumers directly. It will bring about synergy of farmers and manufacturers and equally benefit them. Farmers will receive more value and the industrial buyer will enjoy less cost and better quality of agricultural products. This will make panchayat hub of distribution and selling in the rural market and thus can protect the farmers from exploitation.

One of the important methods is by arranging seminars at the village level. Education is the moral fiber of any state. In this regard, exclusive programs and television channels are dedicated to direct the education chapters. This has become possible in rural areas as they cannot leave the daily employment and come to nearby towns to avail education. In this regard, educational programs on television are a forward step.

Some private companies have been extremely successful in implementing ICT in villages. It has brought about exceptional transformation in the rural market and is helping to lessen the rural seclusion. It has lead to more transparency for farmers and improved their productivity and incomes. It demonstrates that a large corporation can play a major role in organizing markets and increasing the efficiency of an agricultural system in ways that benefit both farmers and stakeholders.

The rapid expansion of Information and communication technology will significantly improve the living standards of the rural consumers. The need to carry out research on implementation of ICT in the rural market is of utmost importance. The application of ICT in various sectors of rural market such as education, health, agriculture, farming and rural economic development will definitely accelerate the rural growth. Despite the fact that ICT has significantly entered into all aspects of our lives, impact of ICT in rural areas is very limited. The answer therefore lies in effective transfer of funds from the urban areas to the rural areas to initiate the development in the rural areas. At the same time the attitude of rural consumers also needs to be changed as they think that

developmental work is the task of government only. It can be observed that at the village level, where the panchayats are given money for various projects and they get the work done by villagers by paying them meager amount. They are thus exploited because of illiteracy and general ignorance. Hence the slogan of consumer involvement works only when the villagers see some tangible benefits. We can infer from our experience that a close and continuing association between information providers and consumers is essential for effective information delivery.

Check your Progress :

Q- Explain the different means of Communication.

6.3 DRINKING WATER

India's huge and growing population is putting a severe strain on all of the country's natural resources. Most water sources are contaminated by sewage and agricultural runoff. India has made progress in the supply of safe water to its people, but gross disparity in coverage exists across the country. Hygiene practices also continue to be a problem in India. Latrine usage is extremely poor in rural areas of the country; only 14% of the rural population has access to a latrine. Hand washing is also very low, increasing the spread of disease. In order to decrease the amount of disease spread through drinking water, latrine usage and hygiene must be improved simultaneously.

6.3.1 Drinking water supply and sanitation in India continue to be inadequate, despite longstanding efforts by the various levels of government and communities at improving coverage. The level of investment in water and sanitation, albeit low by international standards, has increased in size during the 2000s. Access has also increased significantly. At the same time, local government institutions in charge of operating and maintaining the infrastructure are seen as weak and lack the financial resources to carry out their functions. In addition, only two Indian cities have continuous water supply and an estimated 69% of Indians still lack access to improved sanitation facilities.

A number of innovative approaches to improve water supply and sanitation have been tested in India, in particular in the early 2000s. These include demand-driven approaches in rural water supply since 1999, community-led total sanitation, a public-private partnerships to improve the continuity of urban water supply in Karnataka, and the use of micro-credit to women in order to improve access to water. The government of Delhi decided that beginning on 1 January 2014 it will provide 666 liters of free water every day to households with functioning water meters.

Water supply and water resources-

Depleting ground water table and deteriorating ground water quality are threatening the sustainability of both urban and rural water supply in many parts of India. The supply of cities that depend on surface water is threatened by pollution, increasing water scarcity and conflicts among users.

In some coastal areas seawater desalination is becoming an important source of drinking water supply.

Responsibility for water supply and sanitation

Water supply and sanitation is a State responsibility under the Indian Constitution. States may give the responsibility to the Panchayat Raj Institutions (PRI) in rural areas. At present, states generally plan, design and execute water supply schemes (and often operate them) through their State Departments (of Public Health Engineering or Rural Development Engineering) or State Water Boards. Highly centralized decision-making and approvals at the state level, which are characteristic of the Indian civil service, affect the management of water supply and sanitation services.

6.3.2 Sanitation

Most Indians depend on on-site sanitation facilities. Recently, access to on-site sanitation has been increased in both rural and urban areas. In rural areas, total sanitation has been successful. In urban areas, a good practice is the Slum Sanitation Program in Mumbai that has provided access to sanitation for a quarter million slum dwellers. Sewerage, where available, is often in a bad state. Of the 2.5 Billion people in the world that defecate openly, some 665 million live in India. This is of greater concern as 88% of deaths from diarrhea occurring because of unsafe water, inadequate sanitation and poor hygiene.

Policy and regulation

Various Ministries share the responsibility for water supply and sanitation at the central and state level. At the central level three Ministries have responsibilities in the sector: The Ministry of Drinking Water and Sanitation (until 2011 the Department of Drinking Water Supply in the Ministry of Rural Development) is

responsible for rural water supply and sanitation; the Ministry of Housing and Urban Poverty Alleviation and the Ministry of Urban Development share the responsibility for urban water supply and sanitation. Rural areas. There are about a 100,000 rural water supply systems in India. At least in some states, responsibility for service provision is in the process of being partially transferred from State Water Boards and district governments to Panchayat Raj Institutions (PRI) at the block or village. Where this transfer has been initiated, it seems to be more advanced for single-village water schemes than for more complex multi-village water schemes. Households themselves in the form of latrines typically provide rural sanitation.

Innovative approaches

A number of innovative approaches to improve water supply and sanitation have been tested in India. These include community-led total sanitation, demand-driven approaches in rural water supply, and the use of micro-credit to women in order to improve access to water.

Community-led total sanitation

A demand-driven and people-centered sanitation program was initiated under the name Total Sanitation Campaign (TSC) or Community-led total sanitation. It evolved from the limited achievements of the first structured program for rural sanitation in India, the Central Rural Sanitation Program, which had minimal community participation. The main goal of Total Sanitation Campaign is to eradicate the practice of open defecation by 2017. Community-led total sanitation is not focused on building infrastructure, but on preventing open defecation through peer pressure and shame. In Maharashtra where the program started more than 2000 Gram Panchayats have achieved "open defecation free" status. Villages that achieve this status receive monetary rewards and high publicity under a program called Nirmal Gram Puraskar.

6.3.3 Demand-driven approaches in rural water supply

Most rural water supply schemes in India use a centralized, supply-driven approach, i.e. a government institution designs a project and has it built with little community consultation and no capacity building for the community, often requiring no water fees to be paid for its subsequent operation. The program, called Swajaldhara, decentralizes service delivery responsibility to rural local governments and user groups. Under the new approach communities are being consulted and trained, and users agree up-front to pay a tariff that is set at a level sufficiently high to cover operation and maintenance costs.

Since water users have to pay lower or no tariffs under the supply-driven approach, this discourages them to opt for a demand-driven approach, even if the likelihood of the systems operating on a sustainable basis is higher under a demand-driven approach. Cost recovery in rural areas is low and a majority of the rural water systems are defunct for lack of maintenance. Some state governments subsidize rural water systems, but funds are scarce and insufficient.

Check your Progress :

Q – Give the importance of Drinking Water.

6.4 RURAL ELECTRIFICATION

Rural electrification is the process of bringing electrical power to the rural and remote areas. Electricity is used not only for lighting and household purposes, but it also for mechanization of many farming operations, such as threshing, milking, and hoisting grain for storage. In areas facing labor shortages, this allows for greater productivity at reduced cost.

Rural areas in India are electrified non-uniformly, with richer states being able to provide a majority of the villages with power while poorer states still struggling to do so. The Rural Electrification Corporation Limited was formed to specifically address the issue of providing electricity in all the villages across the country. Poverty, lack of resources, lack of political will, poor planning and electricity theft are some of the major causes which has left many villages in India without electricity, while urban areas have enjoyed growth in electricity consumption and capacity. Programs such as the JNN solar mission, Pradhan Mantri Gram Vidyut Yojana have been implemented to fasten the pace of electrification and diversify the procedure. The work is also on going for reducing wastage, providing better equipments and improving the overall infrastructure for electrical transmissions in villages.

6.4.1 Background

One of the key challenges of the electricity sector is development of rural electrification. This has been a problem not only in India but also across the globe. Even today, vast majorities

of the people in the rural areas in the developing and underdeveloped countries do not have access to commercial forms of energy like electricity. Most of these people are dependent on the traditional fuels of wood, dung and crop residue and often use primitive and inefficient technologies. For many, this combination barely allows fulfillment of the basic human needs of nutrition, warmth and light, let alone the possibility of harnessing energy for productive uses which might begin to permit escape from the cycle of poverty.

Indian Story

There are different parameters used to measure the level of rural electrification. For the current practice, the emphasis is on the number of villages connected to the grid. Initially, a village was classified as electrified if electricity was being used within its revenue area for any purpose whatsoever. Subsequently, this definition of village electrification was reviewed in consultation with the State Governments and State Electricity Boards and modified, as "A village will be deemed to be electrified if electricity is used in the inhabited locality within the revenue boundary of the village for any purpose whatsoever."

On a deeper analysis, this data reveals very little. It does not truly represent the extent of electrification in the rural areas. Interestingly, only 44 % of the rural households have access to electricity. 6 of the 27 Indian states have more than 80% of the rural households without access to electricity.

In order to make the metric for measuring level of rural electrification somewhat meaningful, it has been decided to revise the definition of village electrification and a new proposed definition of village electrification is as under:

- 1) Basic infrastructure such as Distribution Transformer and Distribution lines are provided in the inhabited locality as well as the Dalit Basti/ hamlet where it exists. (For electrification through Non Conventional Energy Sources a Distribution transformer may not be necessary).
- 2) Electricity is provided to public places like Schools, Panchayat Office, Health Centres, Dispensaries, Community centers etc. and
- 3) The number of households electrified should be at least 10% of the total number of households in the village.

The above definition came into effect in the year 2004-05.

6.4.2 Rural Electrification Approach

So far the interpretation of rural electrification programs has been the extension of the grid to cover the rural areas, so far not covered. This has certainly helped in making electricity available to a significant section. However, there are several limitations to the approach of rural electrification being treated as a grid extension issue. Only recently, most of the planners and policy makers have realized the futility of trying to achieve 100% electrification through grid extension. There is need for more comprehensive approach to rural electrification.

Rajiv Gandhi Yojana

Rajiv Gandhi Gramin Vidyutikaran Yojana (RGGVY) was launched in April 2005. It aims at providing electricity in all villages and habitations in four years and provides access to electricity to all rural households. Importantly this program has been brought under the ambit of Bharat Nirman. Under RGGVY, electricity distribution infrastructures envisaged to establish Rural Electricity Distribution Backbone (REDB). This infrastructure would cater to the requirements of agriculture and other activities in rural areas including irrigation pump sets, small and medium industries, khadi and village industries, health care, education and IT. This would facilitate overall rural development, employment generation and poverty alleviation. Subsidy towards capital expenditure to the tune of 90% will be provided Rural Electrification Corporation Limited (REC), which is a nodal agency for implementation of the schemes. Electrification of the un electrified Below Poverty Line (BPL) households will be financed with 100% capital subsidy @ Rs 1500/- per connection in rural habitations. The Management of Rural Electrification is mandated through franchisee. The services of Central Public Sector Undertakings (CPSU) are available to the states for assisting them in the execution of Rural Electrification Projects.

6.4.3 Rural Electrification & Panchayati Raj

The Constitution (73rd Amendment) Act, 1992 provided a constitutional status to the Panchayati Raj Institutions (PRIs). There has been a paradigm shift in the approach for rural development focusing on decentralization and devolution of financial & administrative power. The three-tier PRI structure would have powers and responsibilities the preparation of plans for economic development and social justice. The 11th schedule of the 73rd Amendment specifies 29 areas of responsibility covering different aspects of village life, which the State may transfer to the PRIs along with the necessary means and decision-making ability. Rural electrification including electricity distribution is the 14th subject of the aforementioned Schedule.

Pursuant to the Amendment, many of the States have initiated moves to transfer the electricity distribution and rural electrification tasks to the Panchayats. Government of Maharashtra had constituted a study group to analyze the issues related to Transfer of Maharashtra State Electricity Board's Rural Electricity Distribution & Rural Electrification Scheme to Panchayats.

Check your Progress :

Q – Give the importance of rural electrification in rural development.

6.5 SUMMARY

From the modes of transports it is understood that these modes of transport are very important to bring about the economic and social development in the rural areas. It is due to the transport facilities new investments would be attracted in the rural areas and give momentum to rural development. A proper skeleton of road network will create a promotional impact of land use activity. Technology is a double-edged sword in present days. The application of ICT in various sectors of rural market such as education, health, agriculture, farming and rural economic development will definitely accelerate the rural growth. A demand-driven and people-centered sanitation program was initiated under the name Total Sanitation Campaign (TSC) or Community-led total sanitation. Rural water supply schemes in India use a centralized, supply-driven approach. Only recently, most of the planners and policy makers have realized the futility of trying to achieve 100% electrification through grid extension.

6.6 SELF –STUDY

1. Give the information of the various modes of transport.
2. Explain the importance of Information and Communication Technology.
3. Explain the important factors of rural infrastructures.
4. Short notes
 - a) Drinking water
 - b) Rural Electrification
 - c) Cleanliness and Hygiene
 - d) Rural health, nutrition, water supply, and cleanliness.

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Unit - 7

RURAL INFRASTRUCTURE (MARKET AND FINANCE)

Dr. Anjali D.Patil

Unit Structure :

- 7.0 Objectives
- 7.1 Introduction
- 7.2 Markets
 - 7.2.1 Types of agricultural markets
 - 7.2.2 Importance of Agricultural Marketing System
 - 7.2.3 Defects in the distribution system
 - 7.2.4 Measures to remove the drawbacks in the agricultural distribution system
- 7.3 Finance
 - 7.3.1 Types of loans
 - 7.3.2 Reasons and effects of rural indebtedness
 - 7.3.3 Institutions providing financial assistance in the rural areas
- 7.4 Summary
- 7.5 Self-study

7.0 OBJECTIVES

- Will get information regarding agricultural markets
- Can study the sources of rural finance
- Can study in detail the rural markets and finance

7.1 INTRODUCTION

Societies economic status proves whether the society is developed or not. Rural economic status and progress depends on the agriculture and allied activities. Indebted is also seen on large scale in the rural society. Even though the government institutions provide financial assistance at low rate rural community depends on the non- institutional sources for financial assistance. Instead of using loan for productive purpose it is used for unproductive purpose. As a result indebtedness has increased in the rural society.

7.2 MARKETS

Success of any business depends on the production and effective and efficient market strategy. The agricultural production also needs an efficient and coherent market like that of industrial market. In the olden days agricultural production was only for the livelihood of the farmers and if a little surplus was sold in the market. Taking agricultural production for market purpose was not all the motive of the farmers. During the British rule agriculture was commercialized and the production was taken for market purpose. After independence agricultural movement gained momentum. Due to green revolution agricultural production increased and there was a necessity to take the surplus agricultural production to the market. The agricultural production increased consistently due to the increase in institutional finance and basic infrastructural facilities. So there was a need of markets to sell the agricultural produce.

Market is such a system due to which the producer and buyer are brought together and a favorable climate is created for trade and business. In agricultural trading traders, middlemen and agents are the link between the producer and the consumer. 'Market' is a wide concept. It includes the trading of goods and services and other related activities and businesses.

7.2.1 Types of Agricultural Markets

1) Village Market - If the weekly market place is far away and the goods produced are in less quantity then the farmer sells his produce in the village market only. Other than this there are other reasons like need of money, inadequate transport facility, indebtedness and many other minor things are responsible to force the farmer to sell the agricultural produce in the village market.

2) Primary Market - If the farmer has little surplus production then he sells the agricultural produce in the primary market. Such village is the center point of nearby 8-10 villages. The farmer gets more money if he sells goods in this market compared to the village market.

3) Wholesale Market - Trading of agricultural goods takes place on large scale in this market. Primary wholesale market and secondary wholesale market are the two types of wholesale markets. In the primary market the traders buy and sell the goods, while in the secondary market the traders sell the goods to other traders. Farmers are not a part of this market.

4) Central Market - The goods purchased in the whole year by the traders from the secondary market step by step are sold in the

central market. The consumers purchase the goods as per their need.

5) Village Fair - Temporary markets are set-up at places of pilgrimage. Goods like food-grains, vegetables and animals are traded here.

Agricultural trading has to be made efficient for getting proper price for the agricultural goods. The chain of middlemen will be eliminated and the farmer and the consumer would get justice. For this government and co-operatives have taken initiative by establishing the markets. They are as follows:

Cooperative Institutes for sale and purchase of goods

Co-operative institutions are set up to give suitable price for the agricultural commodity. A three- tier system of institutions is established for this. At village level primary sale and purchase institutions are setup. At taluka or zilla level central co-operative sale and purchase institute and at state level state co-operative sale and purchase institute has been established.

Government sale and purchase mechanism

If the prices of commodities start decreasing after the agricultural season this system or institution compulsory purchases the agricultural goods, gives a supportive price for the goods. This institution works on the basis of integrated system of sale and purchase.

Agricultural Marketing Committees

With the help of specific rules and regulations the state government establishes these agricultural marketing committees and they are to work abiding the laws. They provide a suitable price for the commodity and agricultural distribution system to the farmers. These markets are established to eliminate the middlemen in the marketing of agricultural produce.

Check your progress

Q- Name the different types of markets.

7.2.2 Importance of Agricultural Marketing System

Development of agricultural sector depends on the distribution of agricultural marketing system. If the marketing and distribution system is well organized and efficient then only the agricultural production can be increased. Importance of agricultural marketing and distribution can be briefed in the following manner.

1) Inspiration for production -

Inspiration or motivation is always necessary while taking production in any sector. This is very much helpful in case of agricultural production. An appropriate market is essential to sell the surplus agricultural goods. If the marketing system is efficient, it helps in inspiring the farmers to increase the agricultural production to a large extent.

2) Fair price for the crops -

If the market system is effective the farmers will receive a fair price for their agricultural product. If the farmers get a fair price for his crops they will be inspired to increase the production. Due to increase in the agricultural production industrial development will gain momentum and indirectly will be helping in the economic development of the country.

3) Stability in the prices -

Marketing system is very important for the prices of agricultural commodity to be stable. Relevant market system, storage facilities help the farmers to wait till proper time comes for the product to be sold and stability in the prices is created.

4) High standard of living -

Agricultural produce gets good price due to a well organized and well mobilized market which gives a hike in the income of farmers and his standard of living is raised. Even the good demand for industrial goods from the farmers, helps to create a favorable environment for the industrial development.

5) A universal price level -

About 70% of the daily consumption goods are related to agriculture. A change in the price of agricultural produce brings about a change in the overall price level. A suitable market keep the prices stable and it results stability in the universal prices also.

7.2.3 Defects or demerits or drawbacks in the distribution system

Market system of the rural economy is defective. As a result the organized traders cheat the farmer. The defects are as follows:

1) Unorganized Farmers -

Farmers are illiterate and financially poor as a result they are cheated by the organized trading community. There were no efforts taken to organize the farmers.

2) Unnecessary Chain Of Middlemen -

There is a chain of unwanted middlemen and traders in the agricultural market who cheat the farmers. As a result the farmers get very low price for their agricultural produce or they go in loss and the middlemen take the profit.

3) Unauthorized Weights and Scale Measures -

Middlemen cheat the farmers by using unauthorized weights and scale measures in the agricultural markets. These middlemen cheat the farmers by using unfair means of weighing, like they use bigger weights while purchasing and smaller weights while selling the agricultural goods.

4) Inadequate Storage Facilities -

A good storage facility helps the durability of the agricultural produce. Due to lack of storage facility the farmer cannot store his agricultural produce for longer period. He has to sell it at a price determined by the trader or at a very low rate and thus incur loss. The storage facilities and capacity to store the goods is poor in our country, so the farmers have to sell the goods during the season as there is no other alternative.

5) Ignorance about the Market Condition -

Agricultural prices are unstable now and then and the farmers are ignorant about the changes in the market prices. As a result farmer cannot take right decision regarding the production to be taken and selling it at the right time and right place.

6) Lack of Standardization and Grading -

To get a fair price for the agricultural products grading them is essential. Standardization of all the agricultural products is not decided. Still those goods which are standardized, that are to be sold in the market there are no grading facilities in all the markets before the goods are sold. As a result the farmers don't get good price for their agricultural produce.

7) Deceitful Practices in the market -

Farmers do not get full payment as per the decided price for the agricultural goods. After selling the goods they have to money in the form of taxes like octroi, brokerage or commission, porter's charges, charity, etc. keeping in view the profit of traders the middlemen betray the farmers by cheating them. Brokers charge heavy brokerage charges from the farmers. For all the above

reasons and other malpractices the farmers get entangled in indebtedness.

As the agricultural distribution system is having many demerits and loopholes farmers get cheated and indebtedness is on the increase. Demerits in the agricultural distribution have to be eradicated so that the farmers get proper prices for their agricultural produce to be sold in the market.

Check your Progress :

Q- Give the demerits in the agricultural distribution system.

7.2.4 Measures to remove the drawbacks in the agricultural distribution system -

1) Establishment of Controlled Markets -

Royal Commission in the year 1930 recommended the establishment of controlled markets in India to eradicate the interference of middlemen in the agricultural markets and to give a proper price for the agricultural produce to the farmers. Due to controlled markets the farmers could not be cheated and they started getting suitable price for their produce. The Market committees control the controlled markets.

2) Standardization of Weights and Measures -

As the weights are not standardized farmers are cheated. The remedial measure implemented on this was the introduction of Indian Standard Institute (ISI) method. As a result the traders compulsory had to use standardized weights and measures.

3) Expansion of storage facilities -

Farmers don't have proper storage facility so he has to sell the agricultural produce at the rate at which he gets. So the co-operative institutions, state warehousing commission, central warehousing commission developed storage and warehousing facilities for the farmers. If the farmers are able to store their goods they can sell the goods when they want.

4) Standardization and Grading -

Indian Standard Institution was established in 1947 to standardize and grade the agricultural produce. Accordingly the

product is given the seal of AGMARK is given after standardizing and grading the agricultural produce.

5) Organized Farmers Community -

As the farmer class is not united the middlemen take the benefit of them. The farmers are to be united to increase their trading capacity and to fight against injustice. For this the farmer organizations have to be established in large numbers.

6) Elimination of the Middlemen -

The chain of middlemen has to be eliminated for the benefit of farmers and the consumers. For this government institutions are to be established. Due to controlled markets the chain of middlemen has come to an end to some extent. But still in the rural areas the chain of middlemen still dominates the agricultural market.

7) The Market information to the farmers -

The middlemen take advantage of the farmer's ignorance related to the market information. The farmers are to be updated of the market condition through various means of communication media and technology. By this the farmers can take appropriate decision for his produce.

8) Development of distribution system on Co-operative basis -

Co-operative institutions are to be developed on large scale to give appropriate price for the agricultural produce. They provide storage facilities and give loans on the agricultural produce.

Check your progress

Q- Suggest remedies to reduce and eliminate the demerits or drawbacks of agricultural distribution system.

7.3 FINANCE

Rural economy mainly depends on agriculture, allied and subsidiary occupations, cottage industries, village industries. Marginal and small farmers are large in number in agriculture. Due to poverty they cannot invest in agriculture. As a result indebtedness is seen on large scale. It is said that Indian farmer is

born in indebtedness, lives in indebtedness and dies in indebtedness.

Even though there are many institutions providing loan to the farmers, they find it difficult to cope up with the paperwork of the financial institutions. So the rural population depends on the private money- lenders as they provide the loan on demand.

7.3.1 Types of Loans

Types of loans depend on the requirement of the farmers maybe for agricultural purpose or for personal use.

1) Productive loan - Productive loan is used to invest for agricultural purpose and its development.

2) Unproductive Loan - Indian farmers are poor, traditional. They take loans to celebrate festivals, functions and also for livelihood and consumption purpose.

3) Loans based on Period of Time - Farmers take loan for different period of time. Accordingly they are of different types.

A] Short term loan - Loan taken for daily expenses for agricultural purpose are said to be short- term loans. For ex- Cultivation, fertilizers, seeds, harvesting, operation of beating the grains, etc. The duration of this loan is 15 to 8 months.

B] Medium term loan - Farmers require loan for building bunds, leveling of land, to purchase milch animals and many also for many other reasons. The farmer cannot repay this loan in short period. So he is given medium term loan. Tis loan is repaid progressively. The duration of this term is 1-5 years.

C] Long term loan - The amount taken is big as it is used to repay the previous loan, to purchase new land, to purchase new tractor or to make permanent changes in the agricultural land. The duration of this loan 20-25 years.

Check your progress

Q- Write a note on the types of loans.

13.3.2 Reasons for Rural Indebtedness

As agricultural operations are seasonal poverty, unemployment is seen occasionally which results in rural indebtedness. The main reasons behind this are

1) Land ownership pattern -

Due to inheritance and new land reforms the land was divided amongst the family members due to which it was divided, subdivided and fragmented into very small sections. The result was there was less production from the small portion of land. To fulfill the daily needs of consumption of the family the farmer had to take loan from the moneylender. This loan went on increasing resulting in indebtedness.

2) Uncertain Production -

Due to irregular and uncertain rain there is uncertainty in the agricultural production. The uncertainty in the production forces the farmers to take loan for their expenses.

3) Loan Inheritance -

Farmers not only inherit the property from their previous generation but also the indebtedness of his parents. As the amount of loan taken is used for their day to day needs the amount of loan goes on increasing and is never repaid resulting in the indebtedness generation to generation. So it is said that Indian farmer is born in indebtedness, lives in indebtedness and dies in indebtedness.

4) Deception in the agricultural distribution system -

Agricultural Distribution system is defective. The traders and middlemen cheat the farmers while grading, weighing, etc. As a result the farmers don't get fair price for their products. Again resulting in taking of loans for their needs.

5) Cultural and Social functions -

Rural people spend more money on cultural and social functions than their income to maintain their status in the society. If necessary they take loans to celebrate some functions in the family. This again converts into indebtedness, as the loan is not repaid.

6) Judicial Fights -

In rural areas disputes take place on the matters like distribution of water, borders of the farms, roads. These disputes are taken to the court. This court matters are fought by selling the property or by taking loan from the money-lenders. As these fight are prolonged in the court the farmers go on taking loan in hope to win the case. But it only leads to indebtedness.

7) Joint Families -

In rural areas size of the family is big i.e. joint families. The head of the family has the responsibility to feed and fulfill the needs of the family. The agricultural production taken is less, compared to the family size. So he resorts to take loan to fulfill the needs of his family.

Effects of rural indebtedness -

Due to ignorance and illiteracy of the rural people, they are cheated by the traders, moneylenders etc. Practice of allied and subsidiary activities are inadequate or nil here. As a result the farmer has no alternative than to opt for taking loan. Following demerits or effects of indebtedness can be seen.

1) Growth in landless laborers - Majority of the farmers are small and marginal farmers. In the time of crisis when taking loan he has to mortgage his livelihood source of income. As the loan is not repaid in time the amount goes on increasing and if not repaid he has to sell his land or asset. In this way a small or marginal farmer becomes landless agricultural laborer.

2) Rise in poverty - Indebtedness leads to negligence towards agriculture, resulting in the low productivity of agricultural products. As the money-lender also provides loan, so the farmer purchases goods at a low rate. This only adds to poverty. Poverty and indebtedness induces the farmer for suicide attempts.

3) Decrease in the agricultural production - To reduce the loan amount, farmer tries to repay it from the income he gets after selling the produce. As a result no money left to invest for agricultural operations. A decrease in the agricultural production is there due to unavailability of necessary equipments.

4) Increase in the addiction of bad habits- Indebtedness leads to tension and negligence towards agriculture and work. The loan is not repaid even after many efforts. So he resorts to addiction of alcohol and many other bad habits.

Check your progress

Q- Explain the reasons and effects of indebtedness.

7.3.3 Institutions providing Finance in the rural areas

To fulfill his necessities a farmer adopts different methods to obtain finance. These are called the sources of finance for agriculture.

Sources of agricultural finance

Non- institutional sources

- Money lenders
- Traders / middlemen
- Relatives

Institutional sources

- a) Government
- b) Co-operative banks
- c) Commercial banks
- d) Regional rural banks
- e) NABARD

1) Non- Institutional Sources of Finance

a) Money Lenders - He is an important source of finance as he provides money to the farmers anytime, anywhere without asking for any papers. As a result rural people depend more on him for finance than any other source. After 1959 as the network of banking spread taking loan from the moneylenders decreased to some extent. But still he is an important source of finance to the rural people.

b) Traders / middlemen - They provide money to the farmers for different works in the agricultural season in advance. Farmers after getting the agricultural production sell it to the traders/middlemen and repay the loan or money taken in advance.

c) Relatives - To solve the temporary problems farmers take loan from their relatives either on interest or without interest. The amount taken from them is very small. As soon as he gets his production he repays the money taken.

2) Institutional sources of Finance - After independence many financial institutions were set up to provide finance to the farmers for agricultural purpose.

They are as follows-

a) Government - The government provides fund for agricultural development. During natural crisis financial assistance is provided. Subsidies are given or the repayment of loan is also waved away to stop the farmer from committing suicide. Government also provides loan for land and other agricultural purpose.

b) Co-operative Societies - Recognizing the need for agricultural finance in the rural sector co-operative act was passed in 1904. So the co-operative societies were established to provide finance for short term, medium term and long term loan.

1) Co-operative Societies Providing Short Term and Medium Term Loan-

a) Primary Agricultural Co-operative Societies -

This is the basic institution providing finance. They are established at the village level for the development of the farmer's economic development. Short-term loan is given to purchase fertilizers, seeds and medium term loan is given for land leveling, to purchase agricultural implements, etc. The main aim is to put habit of saving to the members, and to provide loan on easy instalment and also its recovery. These institutions are managed and controlled by democracy method.

b) District Central Co-operative Banks -

This bank is financially stable and well organized and leads for the overall development of the area selected for cooperation. The most important work done by this bank is to provide loan to the co-operative banks provided by the state co-operative bank and also to recover the loan within the given specific period. This bank is recognized as the central machinery for providing finance to the primary co-operative institution.

c) State Co-operative Bank -

This bank works as the bankers bank for the district central co-operative bank. This bank provides finance for to the co-operative institutions by taking loan from the monetary market. It also provides loan to the rural industries and industrial co-operative institutions in the rural areas. It supervises, controls and brings systematization in the working of the district central co-operative banks.

2) Land Development banks providing Long Term loans -

Long-term loans are required for agricultural purpose. Land development bank gives long term loans for repayment of old loans, purchasing of new land, agricultural implements and such other works. This bank has two- tier system. District Land development at district level and state Land Development bank at state level. These banks give loan to the farmer for a period of 20 years on mortgage of land. While giving loan they legally check the documents of land, the reason for loan, and the capacity to repay the loan and then only they sanction the loan.

C] Commercial Banks -

Commercial Banks were established for commercial purpose. In the initial stage they financed business and industries. Due to risk and uncertainty in agricultural sector these banks didn't provide finance for agriculture. After nationalization of banks in 1969 commercial banks started providing finance to the agricultural sector. Even the weaker sections were provided finance. Rural banks were established to provide finance for rural development.

Village adoption scheme, integrated interest rate are the important programs implemented by the commercial Banks.

D] Regional Rural Banks -

These banks were established to provide finance to the rural landless laborers, craftsmen, financial needs of the small and marginal farmers. These banks provide personal loans and also loans to their institutions. They also provide loans to the co-operative institutes, businessmen in the production industry.

E) National Banks for Agriculture and Rural Development - (NABARD)

NABARD is the highest ranking bank providing finance to the agricultural sector. This bank was established on 12 July 1982. Reserve bank has given both the funds to this bank for agricultural development. It also provides indirect finance to the agricultural sector like other banks.

Check your progress

Q- Give the different sources of finance for agricultural sector.

7.4 SUMMARY

While studying market and finance information of different types of markets in the rural areas is given. Markets established by the government and co-operative institutions and its importance is given. Agricultural distribution system is defective, as a result agricultural produce does not get proper price. A review is taken so that defects in the agricultural distribution system can be eliminated and remedies be suggested for the same. While studying rural financial institutions information regarding the different types of loans, rural indebtedness, its reasons and effects is given. Non-institutional sources like moneylenders, traders and middlemen, relatives etc. are studied. Institutional sources like government, co-operative banks, commercial banks, regional rural banks; NABARD, etc. are studied here.

7.5 SELF STUDY

1. Give the defects in the agricultural marketing system and suggest remedies.
2. Give detailed information of the different types of agricultural markets.
3. Write in detail the institutional sources of finance.
4. Write short notes on:-
 - Agricultural distribution
 - Money-lenders
 - Rural Indebtedness

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Unit - 8

KEY ISSUES OF RURAL DEVELOPMENT POVERTY, LITERACY AND HEALTH

Dr. Anjali D. Patil

Unit Structure :

- 8.0 Objectives
- 8.1 Introduction
- 8.2 Concept of rural infrastructure
- 8.3 Importance of rural infrastructure in rural development
- 8.4 Education (Total Literacy Program)
 - 8.4.1 Sarva Shiksha Abhiyan
 - 8.4.2 Education to the deprived section of the society
 - 8.4.3 Alternative education schemes:
 - 8.4.4 Problems in the primary education in the rural areas
 - 8.4.5 Remedies for the compulsory primary education
- 8.5 Health (National Rural Health Campaign)
- 8.6 Summary
- 8.7 Self-Study

8.0 OBJECTIVES

- Can study the rural basic infrastructures
- Can learn about the total literacy program
- Help in understanding the importance of national rural health campaign

8.1 INTRODUCTION

Any countries prosperity depends upon the countries agriculture, its market and development in the industrial sector. Electricity, supply of finance and transport facility is essential for agricultural production. Machines, tools and implements, skilled workers, energy, market place and transport facility is important. All the above said facilities are called as the infrastructures of the economy. The infrastructures are very important from the point of view of development of the country. India is land of villages. So developing India means developing the Indian villages in reality. Infrastructures play an important role in rural development.

Transport and communication connect the villages to the market areas. Energy and irrigation are necessary for agriculture and village industries. Scientific development, information technology mobilizes the development of agricultural industries. Development of human resources depends on the education and health facilities provided. Investment in rural infrastructure is the need of today. Planning commission realized the need of the hour and therefore from the first five years plan it was decided to make an increase in the investments in rural infrastructures. Increase in the investment in countries infrastructure is seen as per the necessity.

8.2 CONCEPT OF RURAL INFRASTRUCTURE

Rural infrastructure plays an important part in the economic and social development of the country. Basic infrastructure is the capital of the society. It is difficult to define social and economic infrastructures because of their flexibility. Paul, Rosenten, Reigner, and Narks have defined social and economic as 'Investment done in the work which is socially beneficial'. Those social investments that are indirectly beneficial to the production processes are termed as basic infrastructure. Rural infrastructure directly does not produce goods but create a favorable condition for raising the economic level. To achieve the goal of rural development, to gain momentum in the development process rural infrastructure plays an important part. Social and cultural development also depends on the infrastructure. After adopting the concept of welfare state government is making a large investment in the rural infrastructure. By adopting the policies of privatization, liberalization and globalization since 1990 private sector is investing on large scale on the infrastructure. Due to which there was a drastic change in the infrastructural facilities. Following factors are included in the rural infrastructure:-

1) Public Amenities-

- Electricity for the agricultural and industrial sector.
- Transport and communication –indivisible factor of the development process.
- Supply of drinking water through taps for people's health.
- Disposal of filth and waste matter for health and cleanliness.

2) Public construction-

- Construction of roads for the transport of agricultural produce, raw material and finished products from the industrial sector.
- Irrigation projects to supply water to the agricultural sector.

3) Public transport service-

Transport is one of the important factors of the basic infrastructure. It includes road transport, railway transport, waterways and airways. Transport service is very essential for transporting the agricultural produce to the market. Economic and social development takes place because of transport service.

Check your progress

Q – Explain the concept of rural infrastructure.

8.3 IMPORTANCE OF RURAL INFRASTRUCTURE IN RURAL DEVELOPMENT

Social and economic infrastructure is very important in the rural development. Development is faster due to the infrastructural facilities. Rural infrastructure plays an important in the development of human resources. It can be described in the following ways.

- **To reduce the rural backwardness**

To gain momentum for economic development infrastructural facilities are very much essential. Constructions of roads make way for the transport facility, so that the agricultural produce can be taken to the market. Due to transport and communication facilities the farmer can communicate with the market area. Therefore he can take decisions related to the production and sales of his agricultural produce. Spread of education and cultural give and take is possible due to the infrastructural facilities. Increase in the agricultural production can be done through modernization of agriculture.

Standard of living of the rural areas increases and rural backwardness decreases.

- **Development of human resources**

Development of human resources depends on the important factors like education, health and pure drinking water. Skilled man power is available by educating the mass. Poverty can be minimized if there is growth in the industrial sector. Growth in the population can be controlled. The human resources can be healthy

and strong due to the provision of health facilities and pure drinking water.

- **Increase in the momentum of production factors**

If the rural infrastructure is developed it can be connected to the various modes of transport and communication media. This helps in the give and take of ideas, market and product information at faster rate. Information regarding the employment, trade, capital, etc is available.

- **For the development of the agricultural sector**

Modernization of agriculture depends on the availability of the infrastructural amenities. Irrigation facilities help to increase the agricultural production. Electrical pumps can be used if electricity is there. More land can be brought under cultivation with the use of modern irrigation facilities like drip irrigation and sprinkler irrigation. Extension of transport and communication facilities and the market areas, help in gaining proper market value for the agricultural produce. Development in the agricultural sector is possible because of all these facilities.

- **Momentum to the rural industrial sector**

Infrastructural facilities are essential for the development of industries. If facilities like water, electricity, transport, communication, markets, financial institutions, etc. are provided in the rural areas, industrialist would be eager to start industries in the rural areas. Industries based on processing of agricultural produce will gain momentum.

People will get employment locally and problem of unemployment will be overcome.

- **Decrease in the poverty**

Economic development is due to rural infrastructure. There is an increase in the agricultural production and industrialization gains momentum. The employment is generated in the agricultural and non-agricultural sector. As a result there is an increase in the income and poverty is minimized.

- **Social and Cultural progress**

Transport and communication facilities are developed due to infrastructure. Exchange of ideas and culture is possible. We get information of different methods of production from other various areas, their culture and traditions. New ideas are generated and are helpful in the development process.

Infrastructure is one of the social capitals. Infrastructural investment leads rural development. But the fact is there is no desired progress in the rural infrastructure. As a result the

development of the rural areas is very slow and there are obstacles in the path in the development process. The big farmers took benefit of the big and medium irrigation projects. Small and marginal farmers did not get the benefit due to the negligence of the small irrigation projects.

Check your progress

Q- Explain the importance of rural infrastructure in rural development.

8.4 EDUCATION

Education is an important principle of change. Education inculcates good values and behavioral changes in a human being. Nations development depends on education. If the human resources is literate, intelligent and inculcating good values in them a nation is developed very well. In 1971 there was 39.49% male and 18.47% literacy in India. As per 2001 census 34.62% of the population in India was illiterate. The literacy percentage in the states of Bihar, Jharkhand, Madhya Pradesh, Orissa, Rajasthan is 47 to 64 %. The Adivasi districts Nandurbar and Gadchiroli in Maharashtra have low literacy rate of 56.6% and 60.52% respectively, while the female literacy is 46.53% and 50.64%. Due to poverty and indebtedness 30-50% children from the backward class are not able to complete even their primary education.

Education before independence

As the educationist and social reformers knew the importance of education they felt the need to educate people in the pre independence period. Like –

1. Presentation of Mahatma Jyotirao Phule in front of Hunter commission 1882.
2. Compulsory education for all in Baroda province by Sayajirao Gaikwad in 1906.
3. A resolution put forward by Gopal Krishna Gokhale regarding compulsory education in the legislative council in 1910-11.
4. Compulsory education scheme by Rajarshi Shahu Maharaj in 1917-18.
5. The national education conference held under the chairmanship of Mahatma Gandhi - The Wardha Education Scheme.

Post independence education system -

Indian government understood the seriousness of educating people only after independence and started to work on it. Ignorance, illiteracy, superstitions are the obstacles in the development process. Taking into consideration the obstacles different schemes and programs like literacy program, social education, adult education, and compulsory primary education were started. Accordingly education was made compulsory for girls and boys in the age group of 6-14 by the act 45 of the Indian constitution. Even though primary education was made compulsory only half of the students came to school or were enrolled. Due to the dropout of students only half of the students would reach up to standard four. To eradicate total illiteracy in India from 5th May 1988 a program was launched to attain 100% literacy. Facilities for primary, secondary and higher secondary education, higher education and technical education were provided by the government in all the states.

Boarding schools were started in the remote and distant hilly adivasi regions for educating their students. The students were provided with writing material, food, books and other facilities. Part time classes were started for the students who left school in the middle of the term. Teachers are provided with incentives and an increase in the salary.

Blackboard operation provided the school with two rooms and a gallery, minimum two teachers out of which one would be a female teacher, black board, maps etc. were provided. Adult education centers were started to spread literacy in distant places. Indira Gandhi Open University at national level and Yashwantrao Chavan Open University in Maharashtra were started to give facilities to the adults who would like to take higher education.

Types of Education

1) Formal Education

Education given in schools and colleges, using books, the course of study, examinations, etc. is called Formal Education. Formal education is designed in a specific manner. Factors like study course, school building, time-table, teaching and learning material, etc. are very essential. The students are evaluated after completing the study course in the given period of time.

2) Non-Formal Education

Going out of the way of formal education the adults and children from the specific age group are selected and given education in a different way and different methods are used to educate. Such a type of education is called Non-Formal Education. Rural people are not able to participate in the education process due to their agricultural occupation, limited employment and their

critical financial condition. As a result they remain illiterate. With the aim to literate them to educate them Non-Formal Education program was implemented so that they can at least learn to read and write. This program was implement through the following means:

Adult Education or Education scheme -

This program was meant to educate the people who could not attend school in their childhood.

Correspondence Education -

This program was meant for the people who were not able to attend school or college on regular basis.

Part-Time Education:

This program was meant for the students of age group between 6-14 who had to stop their education for some or the other reason.

8.4.1 Sarva Shiksha Abhiyan

Sarva Shiksha Abhiyan is a well-planned program that develops the human capabilities and gives opportunities to the children in the society under 6-14 age group to get quality education to all boys and girls. This campaign of education to all is a scheme promoted by central government and primary education has to be made universal.

This responsibility has been entrusted to the Maharashtra primary education department an autonomous institution Mumbai. This program was started on 18 January 2002 to fulfill the objectives as per the central government in Maharashtra under by the Sarva Shiksha Abhiyan.

Objectives of Sarva Shiksha Abhiyan

Pre –primary and primary education is the base of higher education. To make India the most powerful nation till 2020 it is essential to raise the standard of primary education. Accepting this a program ‘Sarva Shiksha Abhiyan’ was prepared to implement in the 10th five-year plan.

Everyone should be given five years of primary education before year 2000.

Everyone should be given eight years of primary/secondary education before the year 2010.

To eliminate the deficiency at all levels, social and sex discrimination by the year 2000 and by providing an equal opportunity to get primary education to all till 2010. 4) To retain the

girl and boy students in school till the year 2010 and provide quality education to them.

Scope of Sarva Shiksha Abhiyan

There are two sides of Sarva Shiksha Abhiyan.

- 1) Sarva Shiksha Abhiyan is an outline of the union of different programs under primary education program that was meant to be universal.
- 2) To arrange financial assistance to achieve the objective of universal primary education. More importance was given to the role played by the teachers in intermediary and the decision-making process and attention was paid to develop their capacity.

Main aim of Sarva Shiksha Abhiyan

- 1) Mutual cooperation between the parents and teachers and Panchayat Raj institutions.
- 2) Education for the girls from the scheduled caste and tribes and primary education for each girl child.

Syllabus and educational planning school be prepared focusing on the child.

Voluntary organizations, Village (Gram) Education Committee and savings group of women should participate in the management of school.

Funds are available from the central and state government for the Sarva Shiksha Abhiyan. This scheme has funds for providing nutritious food for children in the school itself, allowance for being present in the school, books and uniform free of cost, 4% material cost given for the school, Ahilyabai Holkar free travel scheme, studying and teaching material distribution, Savitribai adoption scheme, free health check-up, scholarships for the physically handicapped children by the social welfare department and many other such schemes.

According to the 1986 National Education Policy and as per the decision taken in 1990 – 1991 mobilization to the universalization of education in Maharashtra, survey of the necessary educational facilities in the village, taking into consideration the geographical necessities with the help of people's participation Village (Gram) Education Committee was established.

Check your Progress :

Q- Give the scope and objectives of the Sarva Shiksha Abhiyan.

8.4.2 Education to the deprived section of the society

100% registration of students, their attendance and standard education are the essential things necessary for the universalization of primary education. Government has laid emphasis on the education of students (boys and girls) from different sectors and communities, children from the deprived sections of the society to bring them along with the main stream and to maintain their attendance in the school by giving standard education to the children. Many children face difficulties and problem while taking education. They are from some specific section deprived of education.

Deprived section of people in the society

- Children from Nomadic tribes and scheduled tribes.
- Physically and mentally challenged children.
- Children of the migrants.
- Children from the economically weaker section of the society.

Poverty in the rural areas, unconcern about education due to illiteracy, rites and rituals, customs and traditions, regional languages not included in the education system, migration are the various factors responsible for the drop-outs in the school. Government has made many good programs and schemes for the education of children from the deprived sections.

Different government schemes for the deprived section in the society

- Boarding schools for the adivasi children.
- Allowance to the girl child for attending the school.
- Study material to be prepared by using local language spoken.
- Educational allowance for the adivasi children.
- Provision of study material and uniform.
- Giving scholarship and waiving of the school exam fees.
- Savitribai Phule children adoption scheme.

- Free health checkup and free services.
- Scholarship to the physically disabled children by the Social Welfare Department.
- Integrated educational scheme or the disabled children.

Check your progress

Q - Give information or write short on the education of the deprived section of the society.

8.4.3 Alternative education schemes

1) Mahatma Phule Education Guarantee Scheme -

This scheme is prepared for the children between age group 6-14 who have left school while studying in standards 1st to IVth. The classes are conducted by the local social workers.

2) Boarding Schools -

Boarding schools can be started where there is no school in the village or in the vicinity of 1 km area. If there are 10 girls and 15 boys students who want to study these schools can be started. The gram-panchayat provides place and the required material for the school.

3) Temporary seasonal school for the children of brick factory workers -

The classes in this school are conducted for the students of age between 6-14 of standard 1st to IVth who have missed their school for a longer period in summer vacation for 45 days. The students are provided stay and food free of cost.

4) Integrated Handicapped Education Scheme -

In this scheme there is a handicapped unit of minimum 8 students who are physically handicapped and mentally challenged. The students are provided with the necessary handicapped students instruments, uniform and school study material free of cost.

5) Temporary school for the sugarcane cutting workers and other seasonal workers -

This temporary school was started on 20th October 1996 in the vicinity of the sugarcane factories for the children of sugarcane

cutting workers and other seasonal workers. The sugar factories bear the cost of food for the students staying in these schools.

6) Motivation classes -

These classes are conducted for the students who do not have the skill and capacity necessary for education so that they should not develop inferiority complex in them. School is the main center of personality development. While achieving the educational objectives through the study course mode of doing things is also taught. It also helps in preserving the values of equality, dignity of labor, national integrity. Excellent education and development of human capabilities are the important factors considered by the Sarva Shiksha Abhiyan.

Check your Progress :

Q- Give the various Alternative Education Schemes.

8.4.4 Problems in the primary education in the rural areas

Primary education is an important stage in the education process. In-order to eradicate ignorance and illiteracy in the rural areas and to spread literacy primary education is made compulsory and free through Sarva Shiksha Abhiyan. But due the backwardness of the society, illiteracy, poverty in the society it was unsuccessful. Following are the reasons for the problems in the primary education.

1) School dropouts :

Poverty is one of the main reasons for the primary school dropouts. The number of families below the poverty line is more in the rural areas. Due to poverty children from these families are preferred to go to work rather than going to school. Such families are forced to migrate in search of jobs on large scale. As a result number of school dropouts is more in such families. Early marriages or child marriages is also one of the obstacles in primary education. Elderly girl child has the responsibility to look after her younger brothers and sisters.as a result female child school dropout is seen more in rural areas.

2) Lack of educational environment

For the educational development of a child a healthy environment is essential. But due to the unavailability of the factors like lack of proper place and space, school buildings not in proper

condition, lack of good sitting arrangement, unhygienic toilet and bathroom, lack of pure drinking water facility, playing ground, computers, library educational environment cannot be created.

3) Absentee of the children in schools

As the rural society believes in traditions and culture lots of festivals and functions are celebrated in the rural areas. As a result due the functions like festivals, family and social get-together, marriages, agricultural season children don't go to school. Adivasi children remain absent in school as they go to collect flowers of moha tree. Ignorance among the parents and adults is the main reason behind the children being absent in school. As the children are irregular in school their educational graph is not satisfactory.

4) Extra activities given to the teachers other than the school-work :

The primary school teachers are given some extra work other than their school work. For ex:- election duty, census work, making list of the families below the poverty line, to search the no of migrated families, smart-card work, survey of the sea shore etc. the teachers are supposed to this extra work during the school hours only. As a result teaching is affected and the progress of the students in school is not satisfactory and the studies are neglected.

5) Indolent Inactive school education committees

According to the new education policy village school committees were formed in the rural areas. They play an important role in the school development. But in reality their contribution is very less, irregular meetings, all the members don't attend the meeting, members are not elected as per the given criteria. As a result the objective to form the village education committee is not achieved.

6) Lack of education material

For the overall development of the children educational facilities like television, computers are essential in school. But they are not provided. Even though if they are provided due indifferent attitude, ignorance, repairing of the instruments, load shedding and other problems are faced by the school.

7) Drawbacks in the school nutrition scheme

To provide nutritious food to the school children this scheme was started under the Sarva Shiksha Abhiyan. But to the hike in prices of goods and commodities and low allowance there are problems in providing the nutritious food to the children.

8) Appointment of teachers

Appointment of teachers in the primary school is only for three years as a school attendant. This results in the diversion of good talented teachers in other fields for their future prospects.

9) Other Problems

There are many loopholes in the implementation of the boarding schools, education guarantee scheme. Quality of the uniforms is not up to the mark due to insufficient funds. Responsibility of maintenance of the classrooms is given to the teachers. Many such other problems are observed in the primary education.

Check your progress

Q- Write about the problems in primary education.

**8.4.5 Remedies for the compulsory primary education:
Competent village education committees:**

The village education committees have to become competent and active for the universalization of primary education. For this members of the committee are to be elected as per the rules and regulation laid, all the members should compulsory attend the meeting and make way for the development of the school.

To stop the extra curricular work given to the teachers:

It is very essential that the burden of extra work given to the teachers should be stopped. If this work is given to the educated unemployed people and if some remuneration given then the unemployment problem will reduce to some extent and teachers can totally concentrate on their schoolwork and teaching.

To create a healthy environment for studying and provision of basic amenities:

For the overall development of the students amenities like school building, playground, cleans toilet and bathrooms, pure drinking water, computers and other study material if provided an educational environment will be created and progress in the studies of students can be seen.

Training to the teachers by the experts:

It is very important that the teachers have to improvise them by attending the training sessions organized by the experts so that they can be updated with the new technology and advanced knowledge to make themselves competent with the changing educational field and world. So regular training sessions are to be arranged for the teachers.

Concept of teacher attendant should be totally stopped:

Appointment of teachers should be made permanent while joining rather than teacher attendant if the status of education is to be raised and if intelligent and good quality teachers are to remain in the educational field.

Check your Progress :

Q- Suggest remedies to reduce the problems in the primary education.

8.5 Health (National Rural Health Mission)

The National Rural Health Mission (NRHM) is an initiative undertaken by the government [HYPERLINK "http://en.wikipedia.org/wiki/Government_of_India"](http://en.wikipedia.org/wiki/Government_of_India) [HYPERLINK "http://en.wikipedia.org/wiki/Government_of_India"](http://en.wikipedia.org/wiki/Government_of_India)of [HYPERLINK "http://en.wikipedia.org/wiki/Government_of_India"](http://en.wikipedia.org/wiki/Government_of_India) [HYPERLINK "http://en.wikipedia.org/wiki/Government_of_India"](http://en.wikipedia.org/wiki/Government_of_India)India [HYPERLINK "http://en.wikipedia.org/wiki/Government_of_India"](http://en.wikipedia.org/wiki/Government_of_India) to address the health needs of underserved rural areas. Founded in April 2005 by Indian [HYPERLINK "http://en.wikipedia.org/wiki/Government_of_India"](http://en.wikipedia.org/wiki/Government_of_India)

[HYPERLINK "http://en.wikipedia.org/wiki/Prime_Minister_of_India"](http://en.wikipedia.org/wiki/Prime_Minister_of_India) [HYPERLINK "http://en.wikipedia.org/wiki/Prime_Minister_of_India"](http://en.wikipedia.org/wiki/Prime_Minister_of_India)Prime [HYPERLINK "http://en.wikipedia.org/wiki/Prime_Minister_of_India"](http://en.wikipedia.org/wiki/Prime_Minister_of_India) [HYPERLINK "http://en.wikipedia.org/wiki/Prime_Minister_of_India"](http://en.wikipedia.org/wiki/Prime_Minister_of_India)

[HYPERLINK "http://en.wikipedia.org/wiki/Prime_Minister_of_India"](http://en.wikipedia.org/wiki/Prime_Minister_of_India)Minister Manmohan [HYPERLINK "http://en.wikipedia.org/wiki/Prime_Minister_of_India"](http://en.wikipedia.org/wiki/Prime_Minister_of_India)

[HYPERLINK "http://en.wikipedia.org/wiki/Manmohan_Singh"](http://en.wikipedia.org/wiki/Manmohan_Singh)

"http://en.wikipedia.org/wiki/Manmohan_Singh"Singh, the NRHM was initially tasked with addressing the health needs of 18 states that had been identified as having weak public health indicators.

National Rural Health Mission (2005-2012), was formally launched in Uttaranchal on 27th of October 2005 by Hon'ble Cabinet Health Minister Dr. Anbumani Ramadoss. Its focus is to strengthen primary health care through grass root level public health interventions based on community ownership.

Under the NRHM, the Empowered Action Group (EAG) States as well as North Eastern States, Jammu and Kashmir and Himachal Pradesh have been given special focus. The thrust of the mission is on establishing a fully functional, community owned, decentralized health delivery system with inter-sectoral convergence at all levels, to ensure simultaneous action on a wide range of determinants of health such as water, sanitation, education, nutrition, social and gender equality. Institutional integration within the fragmented health sector was expected to provide a focus on outcomes, measured against Indian Public Health Standards for all health facilities.

As per the 12th Plan document of the Planning Commission, the flagship programme of NRHM will be strengthened under the umbrella of National Health Mission. The focus on covering rural areas and rural population will continue along with up scaling of NRHM to include non-communicable diseases and expanding health coverage to urban areas. Accordingly, the Union Cabinet, in May 2013, has approved the launch of National Urban Health Mission (NUHM) as a sub-mission of an overarching National Health Mission (NHM), with National Rural Health Mission (NRHM) being the other sub-mission of the National Health Mission.

It constituted a spectrum of systemic deficiencies in the health system. These included lack of holistic approach, absence of linkages with collateral health determinants, gross shortage of infrastructure and human resources, lack of community ownership and accountability, non-integration of vertical disease control programs, non-responsiveness and lack of financial resources.

The NRHM employed five main approaches while addressing these issues – communitization, flexible financing, improved management through capacity building, monitoring progress against standards, and innovations in human resource management.

Development of village health plan through Village Health and Sanitation Committee (VHSC) and its integration into the district plan, which in turn has been made the main instrument for

planning, inter-sectoral convergence, implementation and monitoring, was instituted as the fulcrum of decentralization. Convergence of all programs is being ensured at village and facility level. Effective integration of health concerns with other health determinants like sanitation and hygiene, nutrition and safe drinking water through district health plan is being made. Panchayat Raj Institutions (PRIs), self-help groups, and health, nutrition and sanitation committees have been activated to seek local accountability in the delivery of programs.

In the process of communitization, the role of Non-governmental Organizations (NGOs) is critical for the success of NRHM. Their partnership is being utilized under the disease control programs, reproductive and child health, routine immunization and special immunization activities (SIAs). To this effect, a highly imaginative Janani Suraksha Yojana (JSY) is already making use of partnerships of various NGOs. Efforts are being made to involve NGOs at all levels of the health delivery system and more infrastructures in training of Accredited Social Health Activists (ASHAs).

Initiatives

Some of the major initiatives under National Health Mission (NHM) are as follows:

Accredited Social Health Activists

Community Health volunteers called Accredited Social Health Activists (ASHAs) have been engaged under the mission for establishing a link between the community and the health system. ASHA is the first port of call for any health related demands of deprived sections of the population, especially women and children, who find it difficult to access health services in rural areas. ASHA Programme is expanding across States and has particularly been successful in bringing people back to Public Health System and has increased the utilization of outpatient services, diagnostic facilities, institutional deliveries and inpatient care.

Rogi Kalyan Samiti (Patient Welfare Committee) / Hospital Management Society

The Rogi Kalyan Samiti (Patient Welfare Committee) / Hospital Management Society is a management structure that acts as a group of trustees for the hospitals to manage the affairs of the hospital. Financial assistance is provided to these Committees through untied fund to undertake activities for patient welfare.

Untied Grants to Sub-Centres

Untied Grants to Sub-Centers have been used to fund grass-root improvements in health care. Some examples include:

- 1) Improved efficacy of ANMs in the field that can now undertake better antenatal care and other health care services.
- 2) Village Health Sanitation and Nutrition Committees (VHSNC) have used untied grants to increase their involvement in their local communities to address the needs of poor households and children.

Health care contractors

NRHM has provided health care contractors to underserved areas, and has been involved in training to expand the skill set of doctors at strategically located facilities identified by the states. Similarly, due importance is given to capacity building of nursing staff and auxiliary workers such as ANMs. NHM also supports co-location of AYUSH services in Health facilities such as PHCs, CHCs and District Hospitals.

Janani Suraksha Yojana (JSY)

JSY aims to reduce maternal mortality among pregnant women by encouraging them to deliver in government health facilities. Under the scheme cash assistance is provided to eligible pregnant women for giving birth in a government health facility. Large scale demand side financing under the Janani Suraksha Yojana (JSY) has brought poor households to public sector health facilities on a scale never witnessed before.

National Mobile Medical Units (NMMUs)

Many un-served areas have been covered through National Mobile Medical Units (NMMUs).

National Ambulance Services

Free ambulance services are provided in every nook and corner of the country connected with a toll free number and reaches within 30 minutes of the call.

Janani Shishu Suraksha Karyakram (JSSK)

As part of recent initiatives and further moving in the direction of universal healthcare, Janani Shishu Suraksha Karyakram (JSSK) was introduced to provide free to and fro transport, free drugs, free diagnostic, free blood, free diet to pregnant women who come for delivery in public health institutions and sick infants up to one year.

Rashtriya Bal Swasthya Karyakram (RBSK)

A Child Health Screening and Early Intervention Services has been launched in February 2013 to screen diseases specific to childhood, developmental delays, disabilities, birth defects and deficiencies. The initiative will cover about 27 crore children between 0–18 years of age and also provide free treatment

including surgery for health problems diagnosed under this initiative.

Mother and Child Health Wings (MCH Wings)

With a focus to reduce maternal and child mortality, dedicated Mother and Child Health Wings with 100/50/30 bed capacity have been sanctioned in high case load district hospitals and CHCs which would create additional beds for mothers and children.

Free Drugs and Free Diagnostic Service

A new initiative is launched under the National Health Mission to provide Free Drugs Service and Free Diagnostic Service with a motive to lower the out of pocket expenditure on health.

District Hospital and Knowledge Center (DHKC)

As a new initiative District Hospitals are being strengthened to provide Multi-specialty healthcare including dialysis care, intensive cardiac care, cancer treatment, mental illness, emergency medical and trauma care etc. These hospitals would act as the knowledge support for clinical care in facilities below it through a tele-medicine center located in the district headquarters and also developed as centers for training of paramedics and nurses.

National Iron+ Initiative

The National Iron+ Initiative is an attempt to look at Iron Deficiency Anaemia in which beneficiaries will receive iron and folic acid supplementation irrespective of their Iron/Hb status. This initiative will bring together existing programmes (IFA supplementation for: pregnant and lactating women and; children in the age group of 6–60 months) and introduce new age groups.

What the future holds for NRHM should be seen through the lens of similar challenges ahead. Complexities in attaining inter-sectoral convergence; multidimensional strategy at district, block and village levels; cross-linkages with the issues of poverty, illiteracy, and social inertia; governance issues, including ongoing empowerment of PRIs; vibrant VHSC including safe water management; impediments in release of funds; and assured availability of incremental outlays for mission period are going to test the endurance of NRHM. The inherent riddles in public-private partnership will continue to examine the pro-people character of NRHM for a very long period. There is also a need to explore linkages with the ongoing programs like MNREGA, added with the deployment of rich repository of human resource of elderly men and women, who could be used for community mobilization. Social audit for community action is the call of the day to ensure that dreams of Mahatma Gandhi for Swaraj come true.

Check your Progress :

Q- Give the objectives and policies of the National Rural Health Mission.

Q- Give the important factors of National Rural Health Mission.

8.6 SUMMARY

Any country's prosperity depends upon the country's agriculture, its market and development in the industrial sector. The infrastructures are very important from the point of view of development of the country. Transport and communication connect the villages to the market areas. Energy and irrigation are necessary for agriculture and village industries.

Scientific development, information technology mobilizes the development of agricultural industries. Development of human resources depends on the education and health facilities provided. Rural infrastructure directly does not produce goods but creates a favorable condition for raising the economic level.

8.7 SELF - STUDY

1. Give the information of rural infrastructure.
2. Give the importance of rural infrastructure.
3. Give the objectives and policies of Sarva Shiksha Abhiyan.
4. Give information of the National Rural Health Mission.
5. Short notes
 - Alternative Education
 - Education for the deprived sections of the society
 - Primary Health Centre
 - AYUSH services and Janani Suraksha Yojana.

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Unit - 9

KEY ISSUES OF RURAL COMMUNITIES (POVERTY, INDEBTEDNESS AND AGRARIAN CRISIS & FARMERS SUICIDE)

Dr. Anjali D. Patil

Unit Structure :

- 9.0 Objectives
- 9.1 Introduction
- 9.2 Causes of rural indebtedness
- 9.3 Consequences of rural indebtedness
- 9.4 Measures to eradicate rural indebtedness
- 9.5 Globalization, Liberalization & rural society
- 9.6 Farmers suicide
- 9.7 Summary
- 9.7 Self-study

9.0 OBJECTIVES

- Can study the causes of rural indebtedness
- Can study the consequences of rural indebtedness
- Can suggest measures to eradicate rural indebtedness
- To study the effects of globalization and liberalization
- To study the causes of farmers suicide

9.1 INTRODUCTION:

Rural indebtedness has been the evergreen companion of the Indian peasants. According to a well-known saying, the Indian peasant is born in debt, lives in debt and dies in debt. The prevalence of poverty among agricultural labouring households is underlined by the prevalence of the rural indebtedness. With the increase in the level of poverty, the level of debt increases.

The burden of debt is passed on from generation to generation. The number of those in the grip of this vicious problem is even now very large, despite vigorous attempts to solve it. Rural indebtedness has eaten into the very vitals of our rural social

structure. Hence it has drawn the attention of sociologists, economists, planners, bureaucrats and others since long time past. While borrowing money the borrower does not pay attention to his repaying capacity and for him even a little debt becomes a trap out of which he cannot come out. Loans from the money-lender support the farmer as the hangman's rope supports the hanged. Rural borrowing and rural debt signify two different things. There is nothing wrong in borrowing especially when the funds are required for agricultural operations. But indebtedness arises when the income of the farmer is not sufficient to repay the debt incurred or when he spends his income for unproductive purposes and does not save for the purpose of paying off his debt. When the borrower fails to repay the loan in time and the loan goes on accumulating, he becomes indebted.

9.2 CAUSES OF RURAL INDEBTEDNESS

The factors accounting for rural indebtedness are many and varied. They are as follows:

1) Poverty of the farmers

The basic cause of the rural indebtedness in India is the extreme poverty of the farmers. The farmers being poor have to borrow for various purposes. Sometimes, the crops fail because of the failure of monsoons, or because of floods etc. They have to purchase seeds, implements, cattle etc. and since they have no past savings to draw upon, they are forced to borrow. Just as poverty forces him to borrow, it is his poverty again which forces him to have so little for paying off his debt.

2) Passion for land

The farmers in the Indian context have a tremendous passion for land. They are keen to make improvements on land. They do it mostly through borrowing.

3) Ancestral debt

The most important cause of the existing rural indebtedness is the ancestral debt. Many agriculturists start their career with a heavy burden of ancestral debt and drag the loan for the whole of their lives, taking it to be a religious and social obligation. This increases the debt burdens on the inheritors, every time the debt is thus passed on. The Royal Commission on Agriculture has aptly described this situation, in its observation that the farmer "is born in debt, lives in debt and dies in debt."

4) Ease of taking loan

Institutional agencies have fixed hours and stipulate that some formalities should be observed before the loans are

sanctioned and then paid. On the other hand, a money lender has been easily approachable even at odd hours. This encourages borrowing.

5) Litigation

Litigation, civil or criminal, is another cause of rural indebtedness. Agriculturists of standing are generally involved in various kinds of disputes such as intra-family disputes, inter-family disputes, and disputes over boundary lines, theft of crops, and division of ancestral lands etc. which often force them to go to courts of law. Such prolonged litigations involve heavy expenditure and to meet these expenses, farmers take loans which further aggravates the burden of rural indebtedness.

6) Small sized holdings

Approximately 72.6 per cent of the operational holdings in India are less than 5 acres in size. When the holdings are small, modernisation of agriculture becomes impossible. The cultivation ceases to be economical even in the best of years and the yield from land becomes insufficient for the maintenance of the farmer and his family.

On account of this reason the farmer incurs debt.

7) Illiteracy and ignorance

The illiteracy and ignorance of the peasants stand in the way of improving the economic conditions. They are not conscious about the utility of small family norms. In view of the large size of the family, they are compelled to borrow money for fulfilling the basic necessities of life.

8) Extravagant expenditure

Being bound to customs and tradition, the ruralites consider the expenses on the occasion for marriage, birth, death, and caste dinners on auspicious occasions and on some religious observance as unavoidable. Being poor, they have no reserve to fall back upon. This makes them to borrow.

They borrow at least for two reasons. In the first place, if they do not spend on these occasions, their image in the public eyes will be tarnished. Secondly, they have ambition to excel others in pomp and grandeur.

9) Malpractices of the money-lenders

The private money-lenders are known to have adopted various malpractices.

- a) They have been charging exorbitant rates of interest varying between 40 to 60 per cent per annum.

- b) They have also been found keeping false accounts.
- c) They are more interested in forcing the borrowers to part with their land by encouraging the farmers to borrow from them and get their lands mortgaged to them. (d) They have been purchasing the crops of the farmers at very low price when the latter approach them for selling their crops in order to repay their debts.
- e) When the farmers' debt has accumulated to a sufficient amount, they take away the land of the borrowers. Like a fly in the cobweb, which can rarely escape, similarly, the farmer once caught by the money-lender can rarely come out of his clutches.

10) High rates of interest

The high rates of interest also compel the cultivators to borrow. The rates vary from state to state but due to the poor economic condition of the peasants, the interest accumulates every year. Quite often it is extremely difficult to clear up even interest charges alone. The Bombay Banking Committee rightly observes, "It is not that the agriculturist repays too little, he often repays too much. It is the high rate of interest and the malpractices followed by the money-lenders that tend to perpetuate his indebtedness."

11) Pulls of high standard of living

Sometimes high standard of living constitutes the cause of indebtedness. Of late, the benefits of urbanization have reached the doorsteps of the ruralites. Poor peasants have fallen a prey to the consumeristic culture. They are attracted by the temptations of the amenities of city life. They are induced to buy them even if there is no great need for them.

12) Excessive burden of land revenue and rent

During the British rule, the land revenue was fixed high. So the farmers were not able to pay in time. Hence, they were forced to borrow. Even in the Post-Independent India excessive land revenue with its rigid procedure of collection is squarely responsible for aggravating the problem of rural indebtedness.

The rent is tasking for the small and marginal farmers. The dues being fixed, they are bound to pay even when production suffers during conditions of flood and drought. Therefore, the farmers are forced to take loans to make these payments. Consequently the burden of indebtedness increases.

13) Addiction to drinking

Drinking leads to rural indebtedness in two ways. In the first place, it gives rise to a number of quarrels and crimes resulting in litigation. Litigation as all of us know entails unnecessary expenditure. Secondly, drinking is itself an expensive habit and a good share of the peasant's income is spent for drinking.

14) Inflation

Inflation unaccompanied by corresponding increase in the income of the ruralites compels them to borrow to meet their basic needs.

15) Inadequate infrastructural facilities and institutional arrangements

Inadequate infrastructural facilities stand in the way of improving the economic condition of the farmer. Due to inadequate marketing facilities, he has no other alternative but to sell away the produce immediately after harvest at the unreasonable prices. The heavy indebtedness of the farmer also makes it difficult for him to store the produce for sale on favourable terms at a later date.

Check your progress

Q - What are the different factors accounting for the causes of rural indebtedness?

9.3 CONSEQUENCES OF RURAL INDEBTEDNESS

Rural indebtedness is dysfunctional for the rural society in more ways than one. Some of its evil consequences are as follows:

1. From the economic point of view, increasing rural indebtedness leads to growing pauperisation of the small and marginal farmers. They mortgage their landed property to the money-lenders and ultimately lose it to the latter.

In this way, they join the ranks of the landless labourers. The small farmer gets a low price while selling his produce and pays high prices for buying inputs. Hence rural indebtedness is both the cause and effect of the growing poverty of the Indian farmers.

2. Increasing rural indebtedness has also undesirable social consequences. In the first place, it creates a class of landless labourers and tenants in the place of independent farmers.

Secondly, the heavily indebted farmers are forced to pledge their own person and become bonded slaves to the landlords and moneylenders. Sometimes their women fall prey to money-lenders' caprice and vice. This has led to moral degradation of rural society.

Thirdly, in many parts of the country, the small peasants who have lost their land to the money-lenders have revolted against the latter in a violent manner. In such states the high caste money-lenders have exploited the innocent and illiterate advised and have deprived them of their meager land ownership.

Quite naturally this has been the direct cause of Naxalite movements in these areas. Dr. Thomas aptly observes, "A society steeped in debt is necessarily a social volcano. Discontent between classes is bound to arise and shouldering discontent is always dangerous."

3. Rural indebtedness has far-reaching political implications for the rural society. The money-lenders become unscrupulous politicians and exploit the heavily indebted farmers when elections to village Panchayats, co-operative societies, state assembly and Lok Sabha are held. Democracy becomes a mockery.

4. From the psychological angle we observe that the borrowers are always a frustrated lot. They always remain in the grip of worry and tension.

5. Deterioration of agriculture

As a result of indebtedness, the condition of agriculture also deteriorates. Two reasons may be attributed to this state of affairs. In the first place, the heavily indebted farmers because of paucity of funds are not in a position to modernize agriculture. This would cripple their capacity to increase their income level. Secondly, most of the farmers have to work on the moneylender's land as servants. Obviously they lack interest in work.

6. Low standard of health

The farmers burdened with a heavy debt grow weaker because they are beset with the problem of repaying it. They work hard to repay the loan which sometimes tell upon their health. They also cannot afford to have medical facilities for themselves and for their children. They cannot have any nourishing diet. All these lead to the lowering of their health standards.

Check your progress

Q- What are the consequences of rural indebtedness?

9.4 MEASURES FOR ERADICATING INDEBTEDNESS

The Government has undertaken several measures since long to put an end to rural indebtedness. They are as follows:-

- 1) (a) Removing the need for borrowing:
 - i) Steps have been taken to reduce the effective burden of land revenue and to make its payment convenient through greater elasticity in its administration and collection.
 - ii) Adequate irrigation facilities have been provided to the farmers.
 - iii) Inputs have been made available at cheap rates.
 - iv) Agro-based industries have been promoted in the rural areas.
 - v) Improvement has been effected in the sphere of means of communication and transportation. Better marketing facilities have been made available to the peasants.

- (b) Protecting the assets of the agriculturists from passing into the hands of moneylenders:

For this purpose various Acts have been passed in the past e.g. the Land Alienation Acts, the Encumbered the Estates Relief Act of 1876 etc.

(c) Regulation of the activities of moneylenders:

For this purpose various legislative measures have been enacted. They are as follows:

- i) The Deccan Agriculture Act, 1879:
Under this Act the courts were allowed to go behind the contract of debt and to modify it in favour of the borrower.
- ii) The Various Loans Act, 1918:
This Act tried to improve the legal position of the borrower.
- iii) The Regulation of Accounts Act, 1930:
It aimed at protecting the debtor from manipulated accounts by prescribing forms of accounts and insisting on the debtor being supplied with these regularly.

(d) The Punjab Relief of Indebtedness Act, 1934:

It drew a distinction between secured and unsecured loans for purposes of rate of interests.

e) Various Acts like the Punjab Registration of Moneylenders Act, 1938 provided for the registration and licensing of money lenders.

f) The Acts like the Punjab Restoration of Mortgaged Lands Act and the Punjab Debtor's Protection Act provided for restoration of

mortgaged lands on payment of nominal compensation and exempted ancestral property from attachments as also standing crops.

Nationalisation of Commercial Banks:

The commercial banks were nationalised in 1969. Since then special efforts have been made to increase the involvement of public sector banks in the development of agriculture and other associated activities in the rural areas. At present, the commercial banks are mandated to earmark 18% of their total annual lending to agricultural sector as part of priority sector lending.

They have also been associated with the rural finance through some other important schemes such as the Lead Bank Scheme, Village Adoption Scheme, Service Area Plan, Intensive Centre Scheme, Agricultural Finance Corporation etc.

Regional Rural Banks:

Regional Rural Banks have been established since 1975 as a new source of finance in the rural areas. The main objective of these banks is to provide credit and other facilities to the small and marginal farmers, agricultural labourers, artisans and small entrepreneurs. These banks are sponsored by the nationalised commercial banks. So far as the area of operation is concerned, such a bank covers one or more districts of a state.

At present, there are 196 Regional Rural Banks in the country and these have about 14500 branches.

Twenty-Point Economic Programme:

Under the 20- point programme launched in July, 1975, the government had declared a moratorium on the recovery of debt by money-lenders from farmers, landless labourers and rural artisans. Liquidation of rural indebtedness and abolition of bonded labour were two dynamic aspects of the old 20-point economic programme.

Co-operative Credit Institutions:

Co-operative finance is the best and the cheapest source of rural credit. It is because loans are advanced for productive activities and also at very low rates of interest as compared to those charged by the money-lenders and various other institutions. The Primary Agricultural Co-operative Credit Societies generally advance short- term and medium-term loans to the farmers, the Primary Land Development Banks cater to the long-term financial requirements of the farmers.

Report of the Sivaram Committee:

In its report submitted in April, 1976 the Sivaram Committee outlined the following proposals pertaining to rural indebtedness.

- (a) Consumption loans for marriages, births and deaths, religious expenses, medical expenses, education etc. should be provided by the government corporations and nationalised banks to small farmers, landless labourers and artisans.
- (b) Banks and Cooperatives should provide similar loans to marginal farmers.
- (c) Schemes should be devised to enable these classes of people to return these loans.

7. National Bank for Agriculture and Rural Development:

NABARD was set up by the Government of India on 12th July, 1982 with an authorised capital of Rs. 500 crore and a paid up capital of Rs. 100 crore. It plays the role of a catalyst of rural resurgence through injection of adequate finance for approved development projects. It is an apex institution entrusted with the responsibility of bringing about rural prosperity.

The number of schemes sanctioned as well as the financial assistance extended by the Bank for these schemes has been constantly increasing. NABARD has been paying special attention in extending credit facilities in less developed banked areas. Of late, the bank has been taking special steps for augmenting credit flow to the North East Region.

The role of NABARD in providing funds for the promotion of self-help groups, especially the 'Rural Women's Development and Empowerment Scheme' is, indeed, commendable.

Recently, the bank prepared a model scheme for the commercial banks to issue 'Kisan Credit Cards' to the farmers. The purpose of the KCC scheme is to facilitate short term credit to the farmers. The scheme has gained popularity and its implementation has been taken up by 27 commercial banks, 187 Regional Rural Banks and 334 Central Cooperative Banks.

Since its inception till the end of March 2004, more than 41 million KCCs have been issued and total loans sanctioned amounted to Rs. 97,710 crores. KCC holders are also provided personal accident insurance cover of Rs. 5,000 for death and Rs. 25,000 for disability.

Suggestions for removing Rural Indebtedness:

Several suggestions have been made for eradicating rural indebtedness. Of them, major ones are the following:

1. Measures should be devised for cancelling old debts.
2. Measures should be adopted for limiting fresh borrowing to the minimum necessary and to the productive type.
3. The government should make arrangements for giving loans to the farmers at low rates of interest.
4. In order to make loans available to the villagers, the formal procedure for the grant of loans in the co-operative societies and banks should be made as simple as possible.
5. The laws preventing money-lender to take possession of farmer's land should be strictly put to practice.
6. Efforts should be made to desist ruralites from undertaking unproductive and wasteful expenditure. Hence they ought to be educated about the harmful consequences of unproductive debts.
7. In order to reduce the dependence of the ruralites on local money-lenders, the network of institutional credit structure comprising cooperatives, commercial banks and regional rural banks should be rapidly expanded throughout the country to cater to the credit needs of the small farmers and artisans.
8. There should be a check on the practice of private money lending. The account register of the moneylenders should be checked to find out how far they have increased their landed property during the period under review. Besides, only the registered and licence holders should be allowed to advance loans.

In fine, the problem of rural indebtedness is linked with the larger issue of rural poverty. Poverty alleviation measures have to be taken up on a war footing to augment the income of the ruralites. Mobilisation of local, social and economic resources, an equitable distribution of benefits of new agricultural strategy and establishment of a good number of co-operatives and commercial banks will go a long way in mitigating the magnitude of rural indebtedness from the rural social matrix.

Check your progress

Q- What measures are taken to eradicate rural indebtedness?

9.5 GLOBALIZATION, LIBERALIZATION AND RURAL SOCIETY

The policy of liberalisation that India has been following since the late 1980s have had a very significant impact on agriculture and rural society. The policy entails participation in the World Trade Organisation (WTO), which aims to bring about a more free international trading system and requires the opening up of Indian markets to imports. After decades of state support and protected markets, Indian farmers have been exposed to competition from the global market. For instance, we have all seen imported fruits and other food items on the shelves of our local stores – items that were not available a few years ago because of import barriers. Recently, India has also decided to import wheat, a controversial decision that reverses the earlier policy of self-reliance in foodgrains. And bring back bitter memories of dependence on American food grains in the early years after Independence.

These are indicators of the process of globalisation of agriculture, or the incorporation of agriculture into the larger global market – a process that has had direct effects on farmers and rural society. For instance, in some regions such as Punjab and Karnataka, farmers enter into contracts with multinational companies (such as PepsiCo) to grow certain crops (such as tomatoes and potatoes), which the companies then buy from them for processing or export. In such ‘contract farming’ systems, the company identifies the crop to be grown, provides the seeds and other inputs, as well as the know-how and often also the working capital. In return, the farmer is assured of a market because the company guarantees that it will purchase the produce at a predetermined fixed price. Contract farming is very common now in the production of specialised items such as cut flowers, fruits such as grapes, figs and pomegranates, cotton, and oilseeds. While contract farming appears to provide financial security to farmers, it can also lead to greater insecurity as farmers become dependent on these companies for their livelihoods. Contract farming of export-oriented products such as flowers and gherkins also means that agricultural land is diverted away from food grain production. Contract farming has sociological significance in that it disengages many people from the production process and makes their own indigenous knowledge of agriculture irrelevant. In addition, contract farming caters primarily to the production of elite items, and because it usually requires high doses of fertilisers and pesticides, it is often not ecologically sustainable.

Another, and more widespread aspect of the globalisation of agriculture is the entry of multinationals into this sector as sellers of

agricultural inputs such as seeds, pesticides, and fertilisers. Over the last decade or so, the government has scaled down its agricultural development programmes, and ‘agricultural extension’ agents have been replaced in the villages by agents of seed, fertiliser, and pesticide companies. These agents are often the sole source of information for farmers about new seeds or cultivation practices, and of course they have an interest in selling their products. This has led to the increased dependence of farmers on expensive fertilisers and pesticides, which has reduced their profits, put many farmers into debt, and also created an ecological crisis in rural areas.

Check your Progress :

Q- Write short notes on:

a) Globalization

b) Liberalization

9.6 FARMERS’ SUICIDES

The spate of farmers’ suicides that has been occurring in the different parts of the country since 1997-98 can be linked to the ‘agrarian distress’ caused by structural changes in agriculture and changes in economic and agricultural policies. These include: the changed pattern of landholdings; changing cropping patterns especially due to the shift to cash crops; liberalisation policies that have exposed Indian agriculture to the forces of globalisation; heavy dependence on high-cost inputs; the withdrawal of the state from agricultural extension activities to be replaced by multinational seed and fertiliser companies; decline in state support for agriculture; and individualisation of agricultural operations. According to official statistics, there have been 8,900 suicides by

farmers between 2001 and 2006 in Andhra Pradesh, Karnataka, Kerala and Maharashtra (Suri 2006:1523).

While farmers in India for centuries have periodically faced distress due to drought, crop failures, or debt, the phenomenon of farmers' suicides appears to be new. Sociologists have attempted to explain this phenomenon by looking at the structural and social changes that have been occurring in agriculture and agrarian society. Such suicides have become 'matrix events', that is, a range of factors coalesce together to form an event. Many of the farmers who have committed suicides were marginal farmers who were attempting to increase their productivity, primarily by practising green revolution methods. However, undertaking such production meant facing several risks: the cost of production has increased tremendously due to a decrease in agricultural subsidies, the markets are not stable, and many farmers borrow heavily in order to invest in expensive inputs and improve their production. The loss of either the crop (due to spread of disease or pests, excessive rainfall, or drought), and in some cases the lack of an adequate support or market price, means that farmers are unable to bear the debt burden or sustain their families. Such distress is compounded by the changing culture in rural areas in which increased incomes are required for marriages, dowries, and to sustain new activities and expenses such as education and medical care (Vasavi 1999a). The pattern of farmer's suicide point to the significant crises that the rural areas are experiencing. Agriculture for many is becoming untenable, and state support for agriculture has declined substantially. In addition, agricultural issues are no longer key public issues, and lack of mobilization means that agriculturists are unable to form powerful pressure groups that can influence policy making in their favor.

Check your progress

Q- Write in short about farmers suicide.

9.7 SUMMARY

Rural indebtedness has been the evergreen companion of the Indian peasants. According to a well-known saying, the Indian peasant is born in debt, lives in debt and dies in debt. The burden of debt is passed on from generation to generation. Rural

indebtedness has eaten into the very vitals of our rural social structure. Rural indebtedness is dysfunctional for the rural society in more ways than one. The farmers burdened with a heavy debt grow weaker because they are beset with the problem of repaying it. The problem of rural indebtedness is linked with the larger issue of rural poverty. Poverty alleviation measures have to be taken up on a war footing to augment the income of the ruralites. Mobilisation of local, social and economic resources, an equitable distribution of benefits of new agricultural strategy and establishment of a good number of co-operatives and commercial banks will go a long way in mitigating the magnitude of rural indebtedness from the rural social matrix.

9.8 SELF-STUDY

- 1) Write short note on rural indebtedness.
- 2) What are the causes of rural indebtedness?
- 3) What are the consequences of rural indebtedness?
- 4) Give measures for eradicating indebtedness.
- 5) Give suggestions to remove rural indebtedness.
- 6) Write short notes on: Globalization and liberalization
- 7) Write in short - Farmers Suicide

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**Modified Pattern of Question Paper for Semester End Assessment implemented
from 2020-2021 For Rural Development courses at F.Y.B.A.**

Duration of examination = 3 hours

Total Marks = 100 (per semester)

All 5 questions carry 20 marks and are compulsory.
There will be internal choice in each Question.

Q1. Attempt any two questions (module 1)
20 marks

- A
- B
- C

Q2. Attempt any two questions (module 2)
20 marks

- A
- B
- C

Q3. Attempt any two questions (module 3)
20 marks

- A
- B
- C

Q4. Attempt any two questions (module 4)
20 marks

- A
- B
- C

Q5. Attempt any two questions (module 1 ,2,3,4. One question from each module)
20 marks

- A
- B
- C
- D