



Directorate of Distance and Continuing Education

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M.A. ECONOMICS

(First Year)

Rural Economics

(SECE11)

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RURAL ECONOMICS

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UNIT-I

Introduction of Rural Economics

1.1 Scope and definitions

The rural economy encompasses a diversity of livelihoods; it is not limited only to the agricultural sector and production of primary goods. Broadly, the rural economy may be categorized into: the agricultural/farm sector producing primary goods; and the non-agriculture/non-farm sector, which includes all non-agricultural economic activities that generate income for rural households. Thus, non-farm sector activities are highly heterogeneous, including mining, manufacturing, utilities, construction, commerce, tourism, transport, and financial, personal and government services. Economic diversification of the rural economy refers to the shift from agriculture to non-farm sector activities within rural areas, or to the diversification of economic outputs within these sectors.

There is considerable evidence that agricultural growth and productivity is an important engine to ensure such a transformation. Increasing the productivity of the agricultural sector has significant multiplier effects in stimulating other sectors of the rural economy. In areas where there has been a robust growth in the agricultural sector, the rural non-farm economy (RNFE) has also rapidly expanded, leading to increased income and stability for rural populations.

Patterns of rural employment in developing countries demonstrate that most households do not specialize in either agriculture or non-farm activities, but seek incomes from a combination of farm and non-farm sources. Thus, household participation in the non-farm economy may be part-time or seasonal. The decision to diversify incomes in rural households tends to be based on “push factors”, such as risk reduction, reaction to crisis, liquidity to stabilize income flows, or due to “pull factors”, i.e. through the realization of strategic opportunities or complementarity between different productive activities.

To secure the potential of economic diversification for poverty reduction and decent work, three main policy priorities are suggested:

1. Strengthening small farms, because they employ the vast majority of the agricultural labour force, represent the largest production and employment potential, and generate the biggest share of rural incomes. A dynamic development of small farms can serve as an engine for the development of a vibrant and diversified local economy, while at the same time small farms depend on the local economy for inputs, services and as a market

for their products. On the other hand, large commercial farms or plantations, though often characterized by decent work challenges, may not, need a diversified local economy to flourish as they can link up directly to more distant urban markets.

2. Developing food product markets, breaking down the barrier of risk for food-crop producers: The risk-averse strategies of farmers, combined with difficulties in linking to international markets, explain the predominance of food-crop production – mainly cereals and root crops – in the choice of producers. The link to international markets, when it exists, happens primarily via traditional export crops (cotton, groundnuts, coffee), which mobilize traditional trade circuits. High value-added exports are generally very localized, linked to specialized operators and benefit only a low proportion of agricultural holdings. Food product markets at the national and sub-regional levels remain the most accessible. They also benefit from strong and sustainable demand. Developing food product markets, and reducing risk for the producer, is central for innovation and rural diversification.
3. Implementing such an approach must take place in the framework of territorial policies aiming at strengthening rural-urban linkages through the promotion and development of the service functions of small cities and country towns, often neglected in favour of larger metropolitan cities.

1.2 Interdisciplinary Perspective of Rural Economics

Rural areas are affected significantly by social and economic changes. Specifically, demographic changes increased the social and cultural diversity of many rural areas causing an expansion in the cultural and economic horizons of rural people and producing at the same time conflicts in their interests, values and lifestyles. On the other hand, the economy of rural areas is becoming more diversified as the service sector grows significantly at the expense of agriculture. The dynamics of rural change and the uneven development observed in many rural areas are the subject of many studies for policy formulation and program implementation. Devising a rural development policy involves making political choices to ease community adjustments to structural economic changes. The development of these policies requires information on rural trends on economic and societal conditions. This information can be drawn from appropriate indicators describing the rural conditions. In technical terms, indicators are statistical variables which transform data into useful information (OECD, 1994).

According to an OECD (1994) report on rural indicators, an official single definition on "rural" does not exist. In most definitions "rural" is defined negatively as not being "urban" or "agglomerated". Basically, "rural" is a spatial concept that deals with the conditions and trends, options and opportunities in an area. The concepts used for the designation of rural areas are: The geographic unit, the criteria used to characterize the units, and the quantitative thresholds that define the border-line between "rural" and other categories.

The basic geographic units for rural areas vary from the smallest administrative unit in Europe, the French Commune, which has an average population of 2,000 inhabitants and a surface area of 15 sq. km. to the largest American county with an average population of 50,000 inhabitants and a surface area of 3,000 sq. km. For simplification, the terms "rural" or "urban" are used at the regional level, while the degree of rurality as being "more or less" rural is used for larger areas.

The criteria used to characterize an area as rural or not are numerous, such as the size of population, population density, commuting distance, share of agriculture, etc.,

Following, the rural/urban problem is reviewed from an interdisciplinary perspective by presenting the Sociologic, Geographic and Economic Traditions along with their possible contribution to the development of rural areas are,

A. Sociologic Tradition

The work of the thinkers of sociological theory and analysis, who wrote in the late nineteenth and early twentieth centuries, is considered as the classic tradition. Sociologists continue to refer to these classical writings and rely on those thinkers' theoretical ideas by employing their concepts and continuing to investigate the questions they raised. The classic tradition provides the theoretical foundations of the sociological perspective.

In order to define the scope and substance of sociology, it is most likely that the majority of sociologists will agree that "Sociology is a social science devoted to the study of human groups of all kinds and all sizes. A group may be defined as two or more interacting individuals. The interaction of individuals gives rise to a variety of social relations and social processes such as cooperation, competition, conflict, and domination. The full range of human behavior and relations is the subject matter of sociology. We call sociology a science because our main intellectual aim is to comprehend and explain the workings of the social world. Like all

sciences, sociology pursues truth and knowledge by employing methods of inquiry based on logic and evidence and by subjecting theories and findings to an ongoing critical examination"

B. Geographic Tradition

Many Sociologists believe that a human being lives and acts in two environments: the human and the physical and therefore, the universal source of social change is the relations of humans to their environment. Furthermore, the physical environment of human society is never purely physical. Topography and other physical conditions are profoundly altered by human activity through technology, social organization, and cultural values. Therefore, the source of social change is to be sought in human social organization and in its relation to the physical environment. Economic Geography, and more specifically the spatial organization of agriculture, can help in differentiating rural/urban areas. Rural areas are not homogeneous. Much heterogeneity exists which results in the differentiation of the rural areas. The physical resources (topography, soils and climate) introduce the geographical diversity of rural areas.

The relative location of rural areas in respect to urban areas is another important determinant of diversity. Rural areas face different problems based on their relative location with respect to urban areas. For example, rural areas close to urban areas could experience 'Problems such as over-use by recreation with increased land value, and damages by vandals, etc, while rural areas far away from urban areas could face problems of high transportation cost, lack of hospitals and services etc.

The structure of rural settlements which ranges from the settlement system of scattered farms to the huge agricultural towns is another differentiation of rural areas. Other factors of differentiation are the system of land tenure, the dominant types of farm enterprises, their market orientation and technological levels, the educational levels of farmers, the role of part time farming and the population and employment trends of the rural areas

These rural areas are classified into four types of functional or spatial differences in development: a) Lagging regions which are rural areas that have not yet evolved completely, b) Declining regions which are rural areas that evolved but are unable to compete effectively and experience decline. c) Competitive regions which are rural areas that express conditions of urbanity and modernization, and d) Specialized regions which are rural areas with a unique economic activity like mining, forestry, tourism etc.

The need and the development potential of these types of rural areas are different and therefore rural development initiatives must be sensitive to these regional differences.

C. Economic Tradition

Because of changes in the broader socioeconomic system, rural areas have been undergoing rapid changes as their economies and societies restructure. Farming remains the major activity and land use in many rural areas, therefore, changes in agricultural structures and relationships are important for finding answers to the rural/urban problem. Technical, social, financial, economic and behavioural structures and patterns of interaction are the characteristics of different socioeconomic systems of production. Systems change and can be even replaced. When a newly emerging system is concentrated geographically, then this area is ready for differentiated development of the dominant system over geographic space and through time.

Classical economists from the late eighteenth century started to study the process of the long-run economic growth with its causes, its impact on other macro-economic variables and the prospects for sustaining growth in the long term. In the 1940's and early 1950's some economists, who are considered now to be the classical political economists in dynamic theory, focused their attention to the causes of the relative poverty of underdeveloped countries and the potential way forward to economic progress in these pre-industrial regions. The founding father of the classical school, Adams Smith (1776), believed that a dynamic growth can be generated in manufacturing as well as agriculture, which can generate advances in total output and labour productivity.

Adam Smith observed that the division of labour or specialization raises labour productivity for three reasons:

- (1) Workers become more efficient in the performance of particular tasks.
- (2) Job specialization reduces time spent switching tasks.
- (3) Job specialization also increases the scope for designing improved tools and machines to raise labour productivity.

However, while market expansion provides the opportunity and inducement for growth in output and productivity, the latter will only occur if firms respond to new opportunities by committing increased resources to production, and require firms to mobilize additional working

capital in order to take on extra labour. Smith identified that savings can only be achieved by three groups in society who have sufficient income: landlords, merchants and manufacturers. Furthermore, Smith saw manufacturing with trade as a more important source of increased savings and output than agriculture. However, for Smith, technical change in agriculture was not a problem and manufacturers and foreign commerce together have given birth to the principal improvements of agriculture. Therefore, Smith saw the urban sector, with its merchant and manufacturing classes, as the leading, dynamic sector in economic growth in contemporary Europe.

In 1911 it was Young who published an article which reinterpreted Smith's analysis identifying three possible impediments:

(1) Inelastic demand for certain products.

(2) Supply inelasticities due to shortages of raw materials.

(3) The high investment costs of exploiting new technologies. Young thought that advances in science and technology would make it possible to break raw material supply inelasticities and that similar advances would help to lower the investment costs of exploiting new technologies.

However, two other classical economists Malthus (1798) and Ricardo (1817) gave reasons for supposing that the agricultural sector could impose a break on rising real wages and, in case of Ricardo, on overall economic expansion as well.

Malthus believed that any rise in mass living standards could only be temporary because the increase in population would cause food shortages. Therefore, rise in wages and mass living standards, followed by a period of population expansion will eventually outstrip the capacity of the agricultural sector to meet the growing demand for food. This will result in the decline of birth rate and the population growth and will lead to labour shortages with the cycle repeating itself.

On the other hand, Ricardo's more sophisticated analysis says that economic growth leads to an increase in demand for labour which in turn leads to a rise in wages and consequently, an increase in population which will generate an increase in demand for food. As food demand increases, farmers have to increase the total cultivated area by bringing probably less good land under the plough, which can have many consequences like, increase of marginal cost of production, which can cause higher prices of food and higher money

workers' wages until all economic growth will come to a halt. Generally, the emphasis of classical growth theory is on the following features:

- The importance of market expansion as a stimulus for the expansion of total output and increase of labour productivity.
- The importance of profits for financing new investment.
- The importance of technological change in raising labour productivity.
- The need to liberalize trade as a means of enlarging the market.

In the early twentieth century, Arthur Young argued that technical innovation can itself generate an extension of the market through raising labour productivity and hence, incomes and demand. Furthermore, two major traditions were developed in the nineteenth-century German literature of growth-stage theories:

- (a) Friedrich List and the German Historical School and
- (b) Karl Marx and the Marxists.

The work of List based in his five stages: savage, pastoral, agricultural, agricultural-manufacturing, and agricultural manufacturing-commercial is of contemporary interest because of his emphasis on nationalist industrial and commercial policies in achieving a transition from an agricultural to an industrial economy.

The Marxian dynamic theory emphasizes that the capitalist system drives to accumulate wealth through productive investment. Marx based his stage classification on stages in production technology and associated changes in the system of property rights and ideology. His stages include primitive communism, ancient slavery, medieval feudalism, industrial capitalism, and socialism. In the Marxian system, economies evolve through these stages, driven by the forces generated by struggles between two classes, one controlling the means of production to combine with labour and the other possessing no means of production but labour. The class struggle reflects the continuing contradiction between the evolution of economic institutions and progress in production technology. In spite of the unrealistic assumption that society is organized in two socioeconomic classes, Marxist analysis is an evolutionary economic theory because apart from ideological considerations, the work of Marx is of contemporary significance due to the major importance which he gave to the role of technical change in shaping economic institutions. In contrast to the classical economists, he viewed

increasing returns to scale as an important source of growth in the agricultural, as well as in the industrial sector.

1.3 Components rural economy

The main components of rural economics are,

1. Agriculture

We are aware that the occupation of most of the individuals in rural areas is agriculture, and it is dependent on environmental conditions. Empowering the farmers by educating them with dynamic ways of agriculture is one of the components of rural development.

2. Ecological settings

It is all about generating awareness and educating people about using and conserving natural resources, for example, educating about soil wetness, solar exposure and wind exposure, biogas combustion, etc.

3. Technology

This component includes generating awareness about the significance of technology. Various new agricultural technologies are going to make their work manageable and are going to increase their yields.

4. Infrastructure and self-reliance

Infrastructure is an integral part of rural development. It includes facilities such as roads, transportations, communities, power supplies, electricity supplies, water supplies, etc. the people in rural areas, are blessed with great skills men and artisans. Using their art and craft can make them more self-reliant in every aspect.

5. Law and order

A distributive law and order can help individuals in managing their tasks effectively. It is one of the vital components of rural development.

6. Medical and healthcare

People in rural areas are facing poor health and sanitation due to poverty. Generating awareness and employment opportunities to people can help them to raise their livelihood healthily.

7. Education

Education is not only the fundamental right of every individual but also it is a need to bring a better society. Hence, this component of rural development is all about increasing access to education to individuals in rural development. These approaches and components to bring sustainable rural development.

1.4 The structure of rural economics:

- **Agriculture-centric economy:**

Rural economy massively relies on agriculture (more than 50% of the population directly or indirectly depend upon agriculture), which is dependent on unpredictable monsoon and prone to droughts and floods. This leads to low and erratic income for farmers and agricultural workers. Due to factors like small landholdings, lack of modern techniques, and inadequate infrastructure, farmers often face low productivity and income instability.

- **Lack of non-agricultural job opportunities:**

Lack of access to financial resources, such as credit, insurance and savings, limits the ability of rural people to invest in productive activities, cope with shocks and diversify their livelihoods. Industries and businesses tend to concentrate in urban areas, resulting in a lack of diverse economic activities in rural regions.

- **Inadequate infrastructure:**

Lack of adequate infrastructure, such as roads, electricity, irrigation, telecommunications, housing, health and education, hampers the growth of non-farm sectors and reduces access to markets, services and opportunities.

- **Limited access to education and skills training:**

Low levels of education and skills among rural people restrict their employability and mobility in the labour market. Many rural children drop out of school due to poverty, lack of sanitation facilities, early marriage or household work. The lack of educational and vocational opportunities hinders the development of new economic sectors.

- **Social and cultural factors:**

Social inequalities based on caste, gender, religion or ethnicity also affect the economic opportunities and outcomes of rural people. Women, scheduled castes and tribes, minorities

and other marginalized groups face discrimination, exclusion and violence that limit their economic potential.

- **Limited access to credit and financial services:**

Rural communities often face difficulties in accessing credit and financial services. This makes it challenging for entrepreneurs and small businesses to start or expand their operations. The lack of financial support hampers the growth of diverse economic activities.

1.5 The characteristics of rural economics

Main characteristics of rural economy are:

1. Village is an Institution:

The Village is a primary institution and it satisfies almost all the needs of the rural community. The rural people have a feeling of belongingness and a sense of unity towards each other.

2. Dependence on Agriculture:

The rural economy depends much on nature and agricultural activities. Agriculture and allied activities are the main occupation in rural areas.

3. Life of Rural People:

Lifestyles in villages are very simple. Public services like education, housing, health and sanitation, transport and communication, banking, roads and markets are limited and unavailable. Rural people rely much on faith, superstitions and traditional cultural practices. The standards of living of majority of rural people are poor and pitiable. In terms of methods of production, social organization and political mobilization, rural sector is extremely backward and weak. In recent years, the incidence of alcohol drinking has gone up.

4. Population Density:

Population density, measured by number of persons living per sq. km is very low and houses are scattered in the entire villages.

5. Employment:

There exists unemployment, seasonal unemployment and underemployment in rural areas. Unemployment refers to the situation of people with willingness and ability to work but is not getting employed. Underemployment also called disguised unemployment is the situation of people employed in excess, over and above the requirement. Disguised unemployment is a situation Where people work but no increase in production. Both the situations are common in rural areas.

6. Poverty:

Poverty is a condition where the basic needs of the people like food, clothing and shelter are not being met. According to the 2011-12 estimates, about 22 crores of people in rural areas are poor and live below the poverty line.

7. Indebtedness:

People in rural areas are highly indebted owing to poverty and underemployment, lack of farm and non-farm employment opportunities, low wage employment, seasonality in production, poor marketing network etc. A famous British writer Sir Malcolm Darling (1925) stated that „An Indian farmer is born in debt, lives in debt, dies in debt and bequeaths debt“. Since formal loan facilities are not available to the villagers, they depend on local money lenders who, like a parasite, squeeze the villagers. Hence the villagers commit suicide frequently.

8. Rural Income:

The income of the rural people is constrained as the rural economy is not sufficiently vibrant to provide them with jobs or self – employment opportunities.

Large proportion of labourers and skilled persons are underemployed and the scope for increasing their income is limited.

9. Dependency:

Rural households are largely dependent on social grants and remittances from family members working in urban areas and cities.

10. Dualism:

Dualism means the co-existence of two extremely different features like developed and underdeveloped, organised and unorganised, traditional and modern, regulated and unregulated, poor and rich, skilled and unskilled and similar contradicting situations in a region. These characteristics are very common in rural areas.

11. Inequality:

The distributions of income, wealth and assets are highly skewed among rural people. There are number of historical, social, economic and political reasons behind the existence of inequality. Landlords and landowners dominate the rural activities. Land, livestock and other assets are owned by a few people.

12. Migration:

Rural people are forced to migrate from villages to urban areas in order to seek gainful employment for their livelihood. This character of the development gives rise to the formation of cities. Enmity and Lack of basic amenities in rural areas also push the people to migrate to

urban areas. This is called “double poisoning” by Schumacher, one side villages are empty, on the other side towns are congested. His book is „Small is Beautiful“ describes the dangers of the present kind of development.

1.6 Pre and Post-Independence of Rural Economy

Generally speaking, the concept of economy deals with production, distribution and consumption of material goods and services. Material goods are produced with certain means, raw materials, technology and labour. Moreover, people enter into social relations for organisation of production. Produced goods are distributed among the various sections of society. Society also fulfils the need of different kind of services. Further, we find that historical experiences of human society show changes in economic life over a period of time, which is accompanied by changes in society as a whole. We have therefore taken a historical perspective to describe rural economy in India.

1.6.1 Ancient Period

Rural economy in India goes back to the Indus Valley Civilisation (c. 2600- 1500 B.C.). This was an urban civilisation having a wide agricultural base. Plough cultivation was known to the rural people. Its evidence was found in archaeological excavations at Kalibangan in Ganganagar, Rajasthan. Crops like wheat, rice, peas, sesame and cotton were grown in the flood plains of the Indus river and its tributaries. Food grains from the rural areas were stored for the townsmen. This is testified by the existence of granaries at various Indus towns. Potters made earthen wares and metal workers manufactured articles of copper and bronze.

This form of economy however changed to pastoral and semi-nomadic way of life

- i) **Pastoral Economy** in the beginning of the Rigvedic period (c. 1500-1000 BC) there occurred a complete rupture with the earlier economy. The life of the Rigvedic people was pastoral and semi-nomadic. Their main occupation was cattle rearing. Cows, goats, sheep and horses were domesticated. Pasture ground was under common control. Towards the end of the period people started settling in villages. They also took to cultivation by means of the plough drawn by oxen. Arts and crafts such as leatherwork and wool weaving were practised. The society was largely egalitarian and un-hierarchical.

- ii) **Agricultural Economy** During the later Vedic Phase (c. 1000-600 BC) agricultural economy became predominant. Cattle remained the chief movable property of the people. The wooden plough with the khadira ploughshare was used for cultivation. Crops such as barley, wheat, rice and lentils were grown. Various arts and crafts were practised like that of carpenter, weaver, leather-worker, metal-worker, potter etc. Functional specialisation of labour took place and the society was organised on caste and Varna lines. The Brahman performed prayers and rituals. The Kshatriya earned their livelihood by means of war and government. The Vaisya were engaged in agriculture and Shudra formed a small serving order. Land was possessed by families. Cultivation and allied activities were conducted with family labour. There were no karmakara or hired labourers. Taxes and tributes were collected in kind from the peasants by the king and his officers. The priests and warriors had hardly any connection with the primary aspect of production. The beginnings of the jajmani system could be traced to this period.
- iii) **Introduction of Iron** Iron-based production in agriculture and crafts became central in the age of the Buddha (c. 600-322 BC). Now, iron ploughshare, socketed axes, knives, razors, sickles and other tools were used for productive purposes. Rice, wheat, barley, millets, pulses, sugarcane and cotton were grown extensively. A considerable portion of land was possessed by the two upper varna, that is, the Brahman and the Kshatriya. But a greater part of the land was in the hands of gahapati (peasant proprietors) belonging to the Vaisya varna. Peasants paid taxes directly to the king. Villages supplied food for the king, nobles, merchants, soldiers and artisans who lived in towns, with the growth of urbanisation.
- iv) **State and Agriculture** State control of agriculture became an important feature of the Mauryan period (c. 322-200 BC). Big farms were established and managed by the state. Slaves and hired labourers belonging to the Shudra varna were employed in them. Moreover, the state provided tax concessions and support in the form of cattle, seed and money to the Vaisya and Shudra to settle in new settlements for extension of agriculture. Royal tax on agriculture was one-sixth of the produce which could be raised in the time of emergency. State provided some irrigation Rural Economy facilities and levied cess for the same. But in the post-Mauryan

period (c. 200BC-AD 300) no state farm was maintained. Land was mainly in the possession of individual cultivators.

- v) **Feudal Relationships** A feudal type of society started emerging during the Gupta period (AD 300- 600) which gradually got stabilised. Land grants were made by the Gupta emperors, their feudatories and private individuals which created a class of powerful intermediaries between the king and the masses. Grants of land and villages were made to the Brahmans and temples. They got the land cultivated by permanent as well as temporary tenants belonging to Vaisya and Shudra varna. They collected land rent from the peasants without any obligation to give a share of it to the king. The feudatories were also assigned administrative powers in their areas. But free peasants cultivating land with their family labour and paying taxes to the king in areas not gifted to anyone probably still possessed a major portion of the land. At the same time their position depreciated due to imposition of various taxes. Further, land grant became more common during the post-Gupta period. Grants of land to officials in lieu of cash salaries got intensified in this phase. The grantees could deprive peasants of their means of production and curtail their rights to the use of land and pastures.

Village economy assumed a somewhat self-sufficient character with the decline of trade and urban centres. Local needs were met through local production. The jajmani system got reinforced by the royal charters instructing the peasants and artisans to stick to their villages. Artisans were paid in kind for their services to the peasants at harvest time.

Thus through the increase in landlords we find the development of a feudal type of society. These landlords had control over the instrument of production operated by the peasants. Society was divided into two basic classes, one of landlords and the other of peasant producers.

1.6.2 Medieval Period

A judicious combination of agriculture and village cotton industries based on agricultural products characterises the medieval rural economy. Production was mainly for local consumption. But a part of the rural produce entered local trade. Villagers bought only a limited number of things from outside like salt, iron and a few consumer goods. Money hardly entered into transaction in the villages. The jajmani system continued with the mode of

payment of kind. Now let us take a brief look at the state of farming, arts and crafts, trade and the nature of classes in rural areas during this period.

1. Farming

It was a period of abundance of cultivable land. Agriculture provided food for people and fodder for cattle. A large number of crops were grown such as wheat, barley, millet, peas, rice, sesame, gram, oilseeds, cotton etc. Land was irrigated by wells, dams and canals. Some water-lifting devices were also used. But generally use of the traditional implements in agriculture and crafts continued. The vast area of land depended mainly on nature (rainfall) for sustenance, as is largely the case even now

2. Arts and Crafts

A variety of arts and crafts based on agricultural produce were practised in rural areas. Villagers manufactured ropes and baskets, sugar and jaggery (gur), bows and arrows, drums, leather buckets, etc. Various categories of craftsmen specialised in their hereditary caste occupations such as weaver, carpenter, leather-worker, blacksmith, potter, cobbler, washerman, barber, water-carrier, scavenger and oil-presser. These manufacturers and craftsmen fulfilled most of the needs of the rural people. Irfan Habib (1963: 60) observes that there would have been little left that a village would need from outside.

3. Trade

Both long distance inter-region trade and local trade were carried during the medieval period. Long distance caravan trade dealt in high value goods. Banjara (nomadic groups) monopolised trade in goods of bulk like foodgrains, sugar, butter and salt. Local trade largely meant the trade between towns and villages. Townsmen received from the rural areas foodstuffs to eat and raw materials for manufacturing various goods.

4. Classes in Rural Areas

During the medieval period the entire rural population was divided into two broad classes, i.e. the big land-holders who collected land revenue from peasants in addition to owning tax-free land and the masses comprising peasants, artisans and landless labourers. The big land-holders constituted the rural segment of the ruling class headed by emperor and his nobles. They were known as khirt, mugaddam and chaudhuri during the Sultanate period and deskhmukh, patil, nayak and usually malik during the Mughal period. They had a good life without directly

participating in the process of production. They collected land tax from the peasants and owned their own land free from taxes. They were generally prosperous enough to ride horses, wear fine clothes, own good houses, gold, and silver ornaments and thus maintain a high standard of life.

The peasants constituted the majority of the rural population. They cultivated their land with family labour and earned their livelihood. They had to pay land tax, which was usually, one-third but sometimes reached one-half of the produce. Land revenue was generally paid in cash. In addition, the peasants had to pay other taxes e.g. shari (house tax) and charai (grazing tax) under Rural Economy certain rulers like Allauddin Khilji. Having been subjected to various taxes they had a very hard life to live. Landless labourers formed another significant portion of the rural population. They worked on the land of wealthy landholders. They were in agricultural bondage of the large landowners. Some were slaves of the plough and others in domestic slavery of wealthy land-holders. They constituted a service class of hereditary serfs. In general, it has been observed that the life of the peasants, landless labourers and artisans was hard. Contemporary writings show that the masses sold their children during droughts and famines simply for the sake of their survival.

1.6.3 Colonial Rural Economy

The rural economy underwent some important changes during the colonial rule in India. De-industrialisation, new land revenue settlements, like the zamindari, ryotwari and mahalwari systems and commercialisation of agriculture were some of the important features of the rural economy during this period. The measures introduced by the British also caused a considerable strain to the jajmani system. Let us look at each of these points one by one.

A. De-industrialisation

The British colonial rule in India shattered the traditional rural economy. It broke up the sustainable pattern of growth of rural economy. The healthy union between agriculture and village industries was destroyed. Indian economy was subordinated to the interest British trade and industry. Rural artisan industries were hard hit under the British rule. Domestic goods were made with primitive techniques on a small scale. They could not compete with mass-produced machine made cheaper goods imported from Britain. The cotton spinning and weaving industries suffered the most. Silk and woollen textiles also were badly affected. Similarly, tanning, dyeing, oil-pressing and iron industries suffered due to introduction of machines for these purposes. Moreover, introduction of railways hastened the process of decline of the rural

industries. Now, the British goods could reach the remotest corner of the rural areas. Increased export of agricultural raw materials from India for British industries injured Indian handicrafts. The ruin of village arts and crafts led to de-industrialisation of rural economy. There was a rapid decline in the per centage of population dependent on industries from 18 per cent to 8 per cent (Sarkar 1983: 30). Cotton spinners and weavers in the villages were almost wiped out as a result of mill-made cloth from England. The other village artisans too were affected by imports from England. As a result, the dependence of people on agriculture increased. This strained the traditional jajmani system.

B. New Land Revenue Policy

In different parts of the country the British introduced three types of land revenue settlements i.e., the zamindari, the ryotwari and the mahalwari systems. But they had similar consequences everywhere. A very oppressive class of landlords emerged and the peasantry got impoverished. Let us examine each of these systems one by one.

1. Permanent Settlement

Under the permanent settlement (also known as the Zamindari settlement) the zamindars (landlords) were given hereditary ownership, over very large tracts of land known as zamindaris. They had to pay a certain portion of the land revenue they derived from the peasantry to the colonial government keeping the rest for themselves. The share of the government was fixed in perpetuity. However, the landlords could raise the rate of land revenue collected from the peasants at their will for their own advantage. This they normally did in order to meet the growing desire for an extravagant life style. The result was disastrous for the tenants, as they grew impoverished. Moreover, the peasants were made mere tenants being deprived of their long-standing rights to the soil and other customary rights. Further, the peasants had to pay land rent in time irrespective of good or bad harvest failing which they were dispossessed of their land by the landlords. This forced them to take loans from the moneylenders or from the zamindars (landlords) themselves. The peasants were even compelled to sell part of their land for paying the rent. Their indebtedness kept on mounting and added to their poverty.

Ryotwari Settlement

In the Ryotwari areas the cultivator was recognised as the owner of his land, subject to the payment of land revenue directly collected by the state, which acted in practice as a

zamindar. The rate of land revenue was periodically revised and raised compelling the peasants to get trapped in indebtedness to the money-lenders or lose land in case of inability to pay the dues.

iii) Mahalwari Settlement

The Mahalwari settlement of land revenue was made by the government with landlords or heads of families who collectively claimed to be the landlords of the village or the estate (mahal). In this case also the peasants suffered in the same manner. Therefore, Bipin Chandra rightly commented that the peasantry was crushed under the triple burden of the government, the zamindar or landlord, and the money-lender. Thus the peasants' life under this system was characterised by poverty and famine.

iv) Consequences of the New Policy

Other important consequences of the new land revenue policies were the ruin of most of the old zamindars and rise of new landlordism. The government was very rigid in collecting land revenue from the zamindars. The old zamindars had lived in villages. They were lenient in collection of revenue from the peasants especially in bad times. Therefore, failure in payment of revenue on their part to the government resulted in the dispossession of the zamindari. The government then auctioned off the zamindari. In most areas these came into the possession of merchants and money-lenders. These new zamindars generally lived in towns and were very ruthless in the collection of land revenue even in case of failure of crops. In addition, the process of subinfeudation grew up. Subinfeudation means that the landlords sublet their right to collect land revenue to other persons on profitable terms. They in turn also sublet their rights to the other. Thus developed a chain of rent-receiving intermediaries between the state and the actual cultivator. The burden of cultivators increased. In sum, Bipin Chandra (1977: 189) observed that as a result of overcrowding of agriculture, excessive land revenue demand, growth of landlordism, increasing indebtedness and growing impoverishment of the cultivators, Indian agriculture began to stagnate and even deteriorate, resulting in extremely low yields per acre.

C. Commercialisation of Agriculture

Another impact of the British rule was commercialisation of agriculture. The rate of land revenue was high. It had to be paid in cash. Moreover, the manner of collection of revenue was also very rigid. Hence, the cultivators were forced to sell a significant portion

of their produce in market after harvest, at low prices. The cultivator was to remain half-fed or go empty-stomach. There was no improvement in the technique of agricultural production, which could enable cultivators to produce surplus grains for sale in the market. In fact, it was a forced entry of cultivators in the market economy.

Further, foreign capital was invested in plantation of indigo, tea and coffee in India. The produce was meant to be sold in the European market. Cotton was also exported from India to feed the British textile mills. This increased the penetration of money economy in rural areas and interlinked the Indian economy with the international market for serving the British interests. The Indian peasant was made to bear the burden of wildly fluctuating market prices, which accentuated their misery. Growing of commercial crops and high-priced food grains like wheat instead of poor person's food-crops such as jowar, bajra or pulses often caused havoc in famine years. Production of commercial crops required higher inputs, which increased the dependence of the peasantry on money-lenders for more loans. Thus they remain trapped in indebtedness. Sumit Sarkar (1983: 32) aptly remarks that for the vast majority of poorer peasants, commercialisation was often a forced process.

Due to abject poverty of peasants and landless labourers the zamindars and money-lenders could exact forced labour and begar from them and impose on them illegal exactions. The practice of serfdom and debt slavery prevailed widely. Social tyranny over the masses was perpetuated.

The Jajmani System

we observed that the British colonial rule shattered the traditional rural economy and caused a strain on the jajmani system. The jajmani system was a very important rural social institution in traditional India. It grew up during the ancient phase of Indian history when occupational differentiation and specialisation of various arts, crafts and menial services developed and owners and non-owners of land emerged in villages. It maintained its vitality in the medieval period. But it started declining during the colonial period and now it is very weak in villages. It is known as baluta, aya, and miland in different regions of India. The jajmani is a system of economic, social and ritual bond between different castes in villages. Landowning upper and intermediate castes are patrons and others belonging to poor lower castes serve the patrons. The patrons are known as jajman and the service castes are called Kam Karnewale or Kamin or Purjan. The service castes like carpenter, blacksmith, potter, barber, leather-worker and water-carrier offer their services to the landowning upper and

intermediate castes, e.g. Rajput, Bhumihar and Jat etc. in the North and Kamma, Reddi and Lingayat etc. in the South. The service castes are usually paid in kind. They are also entitled to other considerations like free house site in addition to free food, clothing etc. on certain occasions e.g. festivals, birth, death and marriage. The jajmani relations also extend to neighbouring villages. The service castes have their jajmans (clients) outside the village where they live. Wherever problems regarding rights and obligations or other matters related to the jajmani system develop, they are settled by the caste panchayats and village panchayats. However, the jajmani relations primarily operate at family level. Each family in the village maintain an enduring (hereditary), exclusive (family to family) and multiple (economic, social and ritual) bond with other families belonging to different castes and occupations and thus continue with the patron-client relationship.

Still a significant number of families are found in villages continuing with the jajmani relations. But the system has become very weak over the years in the modern period. This has happened due to various changes taking place in the rural areas, such as, increasing commercialisation of agriculture and growth of capitalist farming, increasing circulation of money, wage labour, urban migration, education and dissociation of caste and occupation

1.6.4 Rural Economy After Independence

Since Independence a lot of changes have taken place in the rural economic scene. In this section we shall focus on land reforms, the green revolution and rural development programmes and impact of new economic policy on rural economy.

Land Reforms

After Independence of India from the British rule various land reform measures were introduced to change the agrarian structure for establishment of a prosperous and egalitarian society. Here we will first look at the changes and then discuss their impact on rural economy.

A. Changes in the Agrarian Structure

- i) First step was the abolition of the Zamindari system. Its objective was to bring the cultivators into direct relationship with the state through eliminating the intermediary interests of the zamindars and the chain of subinfeudation. The intermediaries were allowed to retain their khudkasht i.e. land for personal cultivation. The rest of their land had to be with the tenants for which the zamindars were compensated by the

revenue. This measure led to eviction of tenants on a large scale by the zamindars who claimed major portion of their land as khudkasht.

- ii) Secondly, the tenancy reform measure taken by the state aimed at providing security of tenure, reduction of rent and facilitating acquisition of ownership rights by tenant cultivators. Usually when tenants were found to be cultivating the land for a continuous period of five years they were declared permanent or 'protected' tenants who could not be easily evicted by the landowner. Land rent was reduced. It was one-fourth or one-sixth of the value of the gross produce. The tenants got the right to acquire ownership of land they cultivated by paying rent for a limited number of years, say, eight years or ten years. A substantial number of tenants acquired security of tenure and ownership of land. But this measure also led to the eviction of tenants. Subtle and concealed tenancy arrangements were made. The phenomenon of share-cropping became more common. Landlords continued to exploit tenants.

- iii) Thirdly, ceilings were imposed on present family landholdings as well as on future acquisitions. The state had to acquire surplus land from the big landowners with due compensation and distribute the same among the marginal peasants, small peasants and landless agricultural labourers. However, delay in enactment and implementation of the law enabled the landlords either to sell off their surplus land or to partition the land and transfer the same in the name of relatives and friends and thereby evading the law to a great extent.

- iv) Another land legislation concerned consolidation of fragmented landholdings of landholders. Once implemented this measure would promote adequate investment of capital and inputs in land and boost efficiency and economy in agriculture.

B. Impact of Land Reforms

The overall impact of land reforms was far from satisfactory. Smaller tenants were evicted from land in large number and forced into highly exploitative system of share-cropping. They received much less protection and suffered more than the bigger ones. Continued dominance of landlords was maintained. Rural Economy It was found that in spite of the land reforms the land concentration did not change much. For example, Chattopadhyay (1989: 123-124) showed that in 1954-55, about 47 per cent of households in the size-class of 0.00 to 0.99 acres owned 1.38 per cent of land. Even in 1971-72, this size-class consisting of about 45 per cent of households owned only 2.07 per cent of land. But in 1954-55, about 1.5 per cent of households in the size-class of 40 acres and above, owned about 20 per cent of land. Further in 1971-72 about 2 per cent of households in size-class 25 acres and above owned about 23 per cent of land.

However, the intermediate classes of peasants have benefited replacing the older zamindars in politico-economic matters to some extent in the country side. The power of the feudal families is on the wane throughout the country.

Since Independence the National government amended the constitution thirteen times to incorporate 277 land laws in the Ninth Schedule in favour of the land reforms. The latest was in 1995, the Seventy-eighth amendment of the Constitution to incorporate 27 land laws in the Ninth Schedule. According to the Government reports, since the inception of the ceiling laws, the total quantum of land declared surplus in the entire country till 2001 is 73.66 lakh acres. Out of this about 64.95 lakh acres have been taken possession of and a total area of 53.79 lakh acres have been distributed to 55.84 lakh beneficiaries, of whom about 36 per cent belong to scheduled castes and around 15 per cent belong to scheduled tribes.

C. The Green Revolution

A process of very important biological and mechanical innovations in agriculture begun since the mid-sixties is known as the Green Revolution. In the beginning, it covered the states of Punjab, Haryana and western Uttar Pradesh. Gradually, it has penetrated into certain areas of some other states. In these areas, cultivators use high yielding variety of seeds, high doses of chemical fertilisers, abundant supply of water for irrigation, and modern agricultural implements like tractors, powered threshers, tube wells, pump sets, etc.

The total area under the high-yielding-varieties programme was a negligible 1.9 million hectares in the financial year of 1960. Since then the growth has been spectacular, increasing the same to nearly 15.4 million hectares by the financial year of 1970, 43.1 million hectares by the financial year of 1980, and 63.9 million hectares by financial year 1990. The rate of growth decreased significantly in the late 1980s, as additional suitable land was not available.

This important change in agriculture has increased the cropping intensity, total output and productivity of agriculture. Demand of agricultural labourers has increased. Employment of hired labourers in agriculture has become more prevalent. Gap in supply of labour in states like Punjab has been filled by migrant labourers from other states, e.g., Bihar and eastern Uttar Pradesh. Further, the progressive farmers cultivate their land under personal supervision rather than leasing out to tenants. In addition, they lease-in land from poor peasants who cannot afford costly inputs required for cultivation. According to Andre Beteille (1986: 89) the most striking features of these farms is that they are organised in a manner which resembles more a business enterprise than a feudal estate .

The major benefits of the Green Revolution in India were experienced mainly in northern and north western India between 1965 and early 1980s; the programme resulted in a substantial increase in the production of food grains, mainly wheat and rice. Food-grain yields continued to increase throughout 1980s, but the dramatic changes in the years between 1965 and 1980 were not duplicated. In the 1980s, the area under high yielding varieties continued to increase, but the rate of growth overall was slower. The Eighth Five Year Plan aimed at making high-yielding varieties available to the whole country and more productive strains of other crops.

Let us now look at some other aspects of the impact of Green Revolution on rural society.

I. Causes of Disparity in Agricultural Production

The Indian Green Revolution created wide regional and interstate disparities. The plan was implemented only in areas with assured supplies of water and the means to control it, large inputs of fertilizers, and adequate farm credit. These inputs were easily available in some parts of the states of Punjab, Haryana, and western Uttar Pradesh; thus, yields increased most in these states. In other states, such as Andhra Pradesh and Tamil Nadu, in areas where these inputs were not assured, the results were limited or negligible, leading to considerable variation

in crop yields within these states. As discussed by Bhalla (1974: 109) the Green Revolution has led to accentuation of inter-region and inter-district disparities in agricultural productivity and income. However, gains of this progress have been unevenly distributed among various agrarian classes. The benefits have largely gone to large landowners. Marginal and small cultivators are unable to obtain higher output because of their small landholdings. In addition, it has been pointed out that marginal and small cultivators are highly indebted to cooperative and other financial institutions for financing the high cost-inputs for agriculture found that the gap between the non-progressive and progressive cultivators had also widened.

II. Class Differentiation

The Green Revolution has also resulted in differentiation within the peasant class, which is a sign of capitalist growth in agriculture. In her study of Haryana agricultural holdings operating 15 acres or less, Patnaik (1987: 199-208) found two peasant classes. The first one were the rural well-to-do and the labour hiring classes of the rich and middle peasants. The second one were the rural poor, the remaining classes of the peasantry, e.g. small and poor peasants. The former possessed large household assets, virtually monopolised modern agricultural equipment and sold nearly three-fifth and over two-fifths of their output in the market. But the latter owned meagre household assets, traditional livestock and implements and sold merely one-third of output in market. The new technology therefore, favoured the large landholders and small landholders did not derive much benefit out of the new technology.

The benefits of the Green Revolution and rural development programmes have been mainly cornered by the big landowners and rich peasants. The small peasants and agricultural labourer are steeped in poverty, unemployment and underemployment even at the beginning of twenty-first century. The gap between the rural rich and the rural poor has in fact widened.

Growth of a capitalist trend in agriculture has been noted in a study done on Rural Economy the Punjab economy with regard to land relations, capital accumulation and existence and increase of wage labour. Regarding land relations Patnaik's study noted that 10 per cent of farmers owning more than 20 acres of land, own more than 37 per cent of land. Capital accumulation was observed in that the top 10 per cent of the farmers accounted for 68.75 per cent of tractors, 24.72 per cent of the tube wells/pumping sets, 20.40 per cent of the threshers and 42.86 per cent of the land purchased in Punjab. Further, the proportion of pure tenants had fallen and the proportion of agricultural labourer to the total agricultural workforce had increased from 17.3 per cent to 32.1 per cent between 1961 and 1971. In the year 1991 a

majority of 66.8 per cent of the main workers were employed in agricultural and allied industrial sectors. Out of the total agricultural workforce 40 per cent were agricultural labourers.

As per 2001 census 26.7 per cent of the total workforce are agricultural labourers and about 70 per cent of the population depend on agriculture for their livelihood. Cash wages of agricultural labourers have increased but a more than proportionate increase in prices has eroded their real wages. The relative share of the labourers in agricultural income has declined in comparison with other classes.

1.7 Rural Development

When India achieved Independence its rural economy was plagued with extreme backwardness in agriculture and village industries, poverty, unemployment and underemployment. The government launched a series of development programmes for rural areas to meet these challenges. First, the Community Development Project (CDP) was started in 1952. Its main emphasis was on economic growth and minimum all-round development of the whole community with the help of local participation. It covered programmes like improvements in agriculture, animal husbandry, village and small industries, health and sanitation, social education etc. However, its experiences showed that the benefit of development was cornered by the already rich and powerful rural upper classes who are rich and powerful.

1.7.1 Meaning of Rural Development:

This word development is more often used in economics. The word development with reference to rural development includes three constituent parts which include - Agricultural development, Economic development and Overall development of the rural community. This are the three important aspects of rural development. "Development" means changing the economic condition of the economically feeble community.

1.7.2 Definition of rural development

According to Robert McNamara, "Giving stress on the development of the weak or feeble rural community like small farmers, landless farmers and rural artisans and an overall development of the rural area is Rural Development."

According to Dr. Swaminathan, “The process of developing the weaker sections of the rural society and making them strong in all aspects is rural development.”

According to Chester Bolls, “Rural development is not limited only to agriculture but improving the standard of small scale industries, educational development, advanced communication, rural electrification, rural health, population control centre and to give encouragement to rural culture is rural development.”

1.7.3 Nature of Rural Development

Rural Development is a Social Science:

Study of the rural community and their problems:

Here a study of rural environment and the community living in it is done. The social, economic, political and cultural study is taken into consideration in rural environment. We can see the problems like poverty, illiteracy, superstitions, ill health, lack of motivation, fatalist attitude, and opposition to the changes to be brought to change the lifestyle or disinterest in changing themselves. An explanation to the above issues is done in the study of social sciences in rural development.

Idealistic Discussion:

While studying the rural community and their problems what measures are to be adopted is discussed in this issue. Measures such as rural diversification, generating self-employment for the unemployed, active participation of the rural people at the grassroots level planning through the medium of gram-sabha, awareness generation through the voluntary organizations, development of the weaker sections of the society through cooperation are suggested. Gandhiji's concept of Gram Swarajya and the concept of Decentralization of the democracy there are the ideal concepts for bringing about a change in the rural community. Guidance is given in the social science of rural development to change the present situation to an idealistic situation.

Scientific Attitude and Suggested Facets:

Suggested facets are more important in the social sciences of rural development because rural development is an action oriented social science. Rural social science was put forward with the objective to solve the problems of the rural community. That is why study of programs whether they are governmental or non-governmental is done in this rural social science.

Interrelated Scientific Facets:

Though rural development is a social science it deals with the materialistic, humanistic, scientific attitude. Agriculture and rural economy, genetically engineering and environmental science are the different facets of this. It considers all the issues of this facet.

Rural Development is a Process:

Rural development is an important process to bring about an overall development and change in the rural community. Its nature is as follows:

People's Agitation:

Community development program was started with the objective of rural development. After few years it became a people's agitation a mass movement. As rural development is a program of the people, by the people and for the people. In the process of rural development rural community should have the attitude of developing or bringing about a change in the society and for bringing about this change there should be spontaneous and active participation of the people. For this Balwantrai Mehta had put forward the concept of Democratic decentralization and three-tier Panchayat Raj system. As per his recommendation the three-tier system of Panchayat raj came into existence. Voluntary organizations also came forward. Co-operative movement made it possible, for the development process to get mobility.

Extensive Objectives:

Objectives of rural development are extensive in nature and include all the facets of rural life. Agricultural development, developing available water resources, Infrastructural development, human resource development, conservation of natural resources and its proper utility, economic development, social change, etc objectives have been put forward. To full fill this objectives various programs, schemes and projects have been undertaken. As a result, the objective of rural development has become of extensive nature.

Processing Industries:

Developing agricultural processing industries, motivating industrialization in the rural areas, establishing industries based on co-operation so that maximum benefit reaches the producer. Developing Infrastructural Facilities: Providing transport and communication facilities, provision of drinking water, rural electrification, bringing the level of education to the highest, providing health facilities and creating favorable conditions for the development of human resources.

1.7.4 Scope of Rural Development

Area wise India is big country. Its area is 32,87,263 sq. km. Population of the country is more than 120 crores, but 70% resides in the rural areas. The geographical condition is different everywhere. There is vast diversity in the climate, rainfall, quality of soil, natural resources, and various occupations having in the rural areas. The rural areas in different regions have different problems. Many measures had been taken in the post-independence period but there was no solution to these problems. As a result, rural development has gained importance to solve the problems in the rural areas. Therefore, the scope of rural development is extensive. This can be understood from the following points.

To bring about a Change in the Rural Occupational Structure:

Agriculture is the main occupation in the rural areas. Out of the total population 64.5% population is directly engaged in farming. But the majority small farmers and marginal farmers use traditional method of farming due to which they could not progress. Due to unstable economic condition capital investment in the agricultural sector was not possible. As a result, agriculture remained undeveloped. Therefore, provision of credit supply to the agricultural sector, water facilities, provision of agricultural implements and allied and subsidiary occupation is very important. If the rural population is provided with some occupations, they can be a means to generate regular income to the families. So we can say the scope of rural development is extensive with the point of view of rural occupations and industries.

Basic Necessities:

To create favourable conditions for rural development it is essential to provide basic necessities in the rural areas. To develop and provide the facilities like transport, communication, unemployment, markets, electric supply, water supply the scope of rural development has become extensive.

Industrial Development:

The occupation carried on in the rural areas, are of primary sector in nature. The raw material is created from this. But the processing industries on the raw material is maximum in the cities. Therefore, the benefits of the production are reached to the traders in the cities due to which the economic condition in the rural areas is not improved. Therefore, there is a big chance that, processing on raw material industries should be established in the rural areas itself.

Social Development:

People from different caste and religion reside in the rural areas. Also many traditional, undesirable customs are seen in the rural community. This results in the adverse effects on the progress of the rural community. Rural community is scattered and there are many problems in the backward community staying in the remotest areas. Development of this whole community and include them in the development process is very essential. To solve the basic problems and bring about a social development of this community rural development scope has become extensive.

Developing Human Resource:

Total utilization of the available human resource is possible only if rural human resource is utilized to its full capacity. For this spread of education and provision of higher education is necessary. To develop the skills in the human resource training facilities are to be provided. Health facilities are essential to increase the efficiency and to preserve the human resource. It is then only we can utilize the human resource to its fullest in the development process. Therefore, there is an extensive scope in the rural human resource development, which motivates the economic development.

Developing Natural Resources:

Natural resources are available in abundance in the rural areas. As this natural resource is not utilized it is remaining in the dormant state. To develop this natural resource capital is required in large proportion so that it can be used for economic development. To develop the factors like land, water, minerals, animal resources, ocean wealth in proper proportion and make its use in economic development the scope of rural development has to be extensive.

Population Control:

The main obstacle in the rural development is the increasing population at a faster rate. If the population is not controlled development is not possible at any cost. Population control is an important factor so the scope of rural has to be extensive.

UNIT-II

Rural Resources and Rural Development Theories

2.1 CONCEPT OF NATURAL RESOURCES

Natural resources are crucial to the development process. They are widely utilised in the constantly expanding population, industrialisation, and competition between nations to develop their economies. A significant issue the globe faces is how to maintain the amount and quality of natural resources while simultaneously maintaining the stability of the resources that are now accessible.

2.2 Importance of Natural Resources:

The extremely intricate relationship between living things and non-living things can be supported by natural resources. The three main ways that people use natural resources are for food and drink, housing and infrastructure, and mobility.

Food and drink: This include agricultural products as well as naturally available foods such as food-grains, fish from fresh water and seas, seeds and nuts, medicines, herbs and plants. They also include drinking water, as well as water for sanitation and household use.

Mobility: This includes automobiles, trains, water vessels, aeroplanes together with all the fuel from natural resources that power them.

Housing and infrastructure: The houses, public places, roads and constructed objects, all the energy for heating and cooling that we consume in our homes come from the wood, metals, stone and other materials.

Beyond these three major areas of resource consumption, we consume much more resources from our environment on a daily basis.

2.3 Nature of natural resources

The role of natural resources in sustaining life on earth is extremely important and we must ensure that we protect the environment and also make it easy for it to replenish itself naturally. Natural resources are the bases of life.

1) **Source of fresh air and water** - Life without air and water is impossible and natural environment is the source of fresh air, water necessary for all living and non-living things on

earth. If these important sources are polluted, it will affect all the living beings on earth. Nature always seems to apply its natural processes to refine and purify them.

2) **Habitat** - Soil, forests and water are the habitat of different animals. Human beings use soil, water, minerals and forest resources for building houses, bridges and roads. Soil is the habitat of micro-organisms, insects, worms and plants. Water is habitat for aquatic animals. Forest is the living place of wild animals and it also purifies the environment by reducing the CO₂ level and other various harmful and poisonous gases in the atmosphere. Without forest and trees help in the increase in rainfall.

3) **Source of food** - The land and forest are important natural resources and good source of food to living beings.

4) **Natural beauty** - Natural beauty of a country attract tourists from different places and leads to the economic growth of the country. Tourism industry flourishes and develops contributing to the National Economy of the country. It also helps for the development of tourism industry by attracting tourists.

5) **Economic development** - Economic development of a nation depends on the availability and utility of its natural resources. Proper use of natural resources helps in the economic development. Agriculture and industrial development depends on the availability of these resources. Natural resources help for the tourism development and increase revenue.

6) **Area of study and research** - Nature is a vast and complex phenomenon. It is so wide that even a tiny part of it is enough for conducting study and research programs.

2.4 Types of Natural Resources

1. Land

Land is an important factor of the natural resources. Man uses land for different purposes. Land is one of the factors of production. Land and soil are non-renewable sources and 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.

2. Water

Water factor depends on many other factors as it is a limited natural resource and conservation of it is very essential. Underground water level can be increased by means of water saving methods like percolating the water in the ground, by building bunds to stop flowing water and equal distribution of water, digging trenches to store water and thereby increase underground water level and most important is to plant more and more trees to increase the water level. This water can be utilized during the non-rainy seasons.

3. Weather

Weather is one of the important dominant factors. It is not possible for us to control weather as it is beyond the capacity of human beings. 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 favourable climate for it. 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.

4. Forests Resources

Plants and trees are also important factors of natural resources. Land under forest is important like the land under agriculture. Forest includes dense cluster of trees, dispersed trees, pastures, shrubs, grass, creepers. These different factors protect and conserve the forest. Forest resources stop soil erosion due to the rain and fertility of the soil is improved with the help of different byproducts of trees like fallen leaves, flowers, fruits, stems, twigs and other byproducts. Trees slow down the force of flowing water and help to percolate the flowing water in the soil. Trees help to reduce the pollution created by the growing industries by inhaling carbon dioxide and exhaling oxygen. Major solution to solve the pollution problem is to grow more trees. Trees and plants help to make the human life happier.

5. Animal Resources

Rural economy of India depends on agriculture and the animal resources required for doing agricultural operations. Rearing animals is also one of the allied activities and subsidiary occupation of the farmers. Animal husbandry, poultry, piggery, goat and sheep rearing, duck rearing, honeybee keeping, sericulture, fish farming are undertaken as subsidiary occupations along with agriculture. In some places these occupations are practiced as main occupations. Transport facilities like trucks and tractors cannot reach the farms in the remotest areas of rural

India. So animal resources are used for cultivating land, transport of goods and other related works.

6. Fisheries

Fish available in the sea is also a natural resource. Fish has high protein content useful for human beings and 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 resulting in the decrease of population 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 income can be increased in turn raise their standard of living.

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 like wood, coal, cow-dung, kerosene, diesel and petrol are used to fulfill the need for energy. As these sources of energy are available naturally they are limited. The unlimited use of these limited natural resources (i.e. non-renewable source of energy) by human beings is on the verge of extinction resulting in an imbalance in the nature. 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, tidal energy, hydroelectricity, nuclear power for peaceful purpose. In rural and urban areas bio-waste collected from animals and human beings can be used to prepare biogas or methane gas for fuel purpose and the slurry can be used as a fertilizer in the fields which increases the fertility of the soil, food waste can be decomposed to form manure and can be used for gardens, kitchen gardens and also be supplied to rural farms. Using biogas and other appropriate technology has reduced the cutting of wood for fuel in rural areas to a great extent

2.5 Natural Resource Management (NRM)

Natural Resources Management (NRM) refers to the sustainable utilization of major natural resources, such as land, water, air, minerals, forests, fisheries, and wild flora and fauna. Over-exploitation of natural resources by growing population has resulted in various severe problems

like Destruction of vegetation has resulted in land degradation, denudation, soil erosion, landslides, floods, drought and unbalanced ecosystems. A balanced ecosystem is an urgent need as the natural resources (land, water, biodiversity and genetic resources, biomass resources, forests, livestock and fisheries) – the very foundation of human survival, progress and prosperity, have been degrading fast, and the unprecedented pace of their erosion is one of the root causes of the agrarian crisis that the country is facing. The demographic and socio-economic pressures notwithstanding, the unmindful agricultural intensification, over use of marginal lands, imbalanced use of fertilizers, organic matter depletion and deteriorating soil health, extensive diversion of prime agricultural lands to non- agricultural uses, misuse and inefficient use of irrigation water, depleting aquifers, salivation of fertile lands and water logging, deforestation, biodiversity loss and genetic erosion, and climate change are the main underlying causes. It is true that nature takes care of its resources through natural process over a period of time and maintains them. But ever- increasing population, developmental activities and technological modernisation have over- exploited available resources without taking into consideration the damage and consequences for coming generations. Vegetation plays an important role in protecting land and water. These resources are being depleted at an alarming rate because of human intervention.

A vast effort is now needed to understand the economic, social, and cultural functions of customs and practices of different social groups involved in agricultural development and territorial management in order to prioritize problems and arrive at a consensus of all those affected concerning environmental protection. Social science research is needed into marketing of agricultural products, circulation of cooking fuels, village-town relations, and migration in order to determine the effects of these phenomena on management and conservation of natural resources in rural areas. Experimental research should be directed toward finding practical solutions to problems encountered by rural cultivators. Different research organizations should coordinate their programs to avoid duplication of effort, and developing countries should be furnished access to new techniques resulting from research conducted by developed countries. Local populations must be involved in reforestation, water conservation, and other projects at every stage from preliminary planning to execution, if such plans are to succeed. Local populations themselves should be able to care for equipment and infrastructure involved in these efforts. Improved techniques of environmental protection must also be developed at the micro level of individual farms and pastures. National governments must redefine their role so that they become facilitators of local action without coercively imposing programs from above.

2.6 Applications of Science and Technology

The main objective of the science and technology applications is to empower the knowledge of the people. It means developing the capability amongst the individuals to achieve their goals and objectives through the generation, acquisition and use of knowledge

1. Energy:

Energy is essential for agriculture for inputs such as fertilizers, for delivery of water and for transportation. It is also needed to bring about rural industrialization. The single largest source of energy continues to be firewood, and this will continue for quite some time. Therefore, large scale afforestation efforts are called for on scientific lines and involving the rural population to meet their fuel requirements. Biomass generation through the techniques of tissue culture is of great benefit. The non-conventional energy sources which are renewable, decentralized and non-polluting are particularly relevant to rural areas which are unlikely to obtain electricity for their needs for a long time to come. Biogas plants, smokeless stoves, solar cookers, pumps, solar water pumping systems, solar domestic lighting systems, community lighting and television systems and solar battery charging units are the sources of energy that have led to decentralization of rural industrialization leading to generation of employment and transformation of natural resources into products of higher value.

2. Water

Water is the most crucial single resource for the survival of human life. Every effort will have to be made to improve the availability of drinking water in rural areas; it is necessary to devise and implement scientific methods for water harvesting, conservation and recycling. Clean water supply in the rural areas has to be given the highest priority; remote sensing is a powerful technique utilized for water targeting. This effort calls for community participation, technology transfer, evaluation and assessment of existing rural water supply systems, studies on maintenance of water distribution system, development and rehabilitation of springs and use of hydraulic rams for water supply in hilly areas, use of solar energy for rural water supply, development of integrated package for water treatment, to make the water drinkable.

3. Biotechnology

In the field of biotechnology, developments relating to bio-fertilizers, aquaculture, biomass production through tissue culture techniques, embryo-transfer technology to upgrade cattle, herds, etc. have enormous, potential for employment generation and increasing

efficiency and productivity for activities in daily life in rural areas; mechanisms to make these effective on a large scale have to be taken into consideration.

4. Information Technology:

Use of information technology in sectors like agriculture, irrigation, energy, health, family planning, education, employment and transportation are vital for bringing about a major transformation in the rural sector. Information related to local resources, skills and expertise is important to carry out effective decentralized planning. The National Informatics Centre (NIC) was set up in 1975 by the Department of Electronics, it has developed a District Information System, and this established a center in each district of the country. There are a large number of training and information transfer programs which have been based on the nationwide satellite communication network; this will assist in making available valuable information for district and local planning

5. Space Technology:

There are a wide range of applications of remote sensing technology in areas of disaster warning for coastal fishermen, inland/marine fisheries, minor irrigation, water targeting for drinking water, wasteland identification, vegetation mapping, drought monitoring, etc. Already, with the use of space imagery ground water potential zone maps have been prepared for more than 370 districts which include 91 DPAP districts and 20 DDP districts. A new development relates to the forecast for better fish catches in the coastal regions by making use of the satellite data. It is expected that optimal utilization of space technology can result in better dissemination of information through satellite based communication and broadcasting. This will be of great relevance to remote areas.

6. Television and Radio:

These are the technological means that have improved the lives of the rural people; they take pleasure in watching various shows and movies on the television and enjoy listening to the radio. Television and radio systems have become their major sources of entertainment and they even learn various things that they apply in their daily works, for example, programs on the television relating to agriculture benefit the farmers and they apply the appropriate methods in their occupation.

2.7 Problems of rural development

In rural areas are outlined several typical problems.

1. Low income and employment

Low income and employment are among the main problems inherent in the rural areas. They emerge in several aspects: problems with the labour force, low labour productivity, lower prices of agricultural products.

2. Surplus of labour force

Typical feature of the rural areas is the surplus of labour force due to fewer jobs that are opened. Most new jobs are for unskilled workers, so the wages and nature of the work are unattractive. Workers with higher qualification migrates to the cities. In rural areas remains peoples mostly in retirement age. These problems can be solved by creating more employment opportunities and extra income for the people of these regions. Problems of the labour force are the most serious and difficult to solve because they affect people with their skills, initiatives and opportunities. Besides unemployment, another problem is the depopulation of the rural areas and strong aging. In rural areas there is also low labour productivity, which may be increased by introducing more modern technology, upgrading skills of workers, providing better working conditions.

3. Low prices of agricultural products.

One of the reasons for lower income of the people in rural areas are the low prices of agricultural products. Thanks to market forces demand for basic goods grows up more slowly than that of luxury goods and services. Sometimes purchase prices are maintained intentionally low, when there is only one buyer (or group of purchasers) in agricultural production. To solve this problem at least partially, many farmers are trying to increase their income by processing the raw material and production of finished products, i.e. closing the production cycle. In many regions is not developed cooperation of farmers.

4. Poor working and living conditions

Second group of problems are associated with poor working and living conditions in the rural areas due to underdeveloped infrastructure and public services. In the state of infrastructure - roads, water supply and sewerage, electrical and communications networks, is more than poor. This situation, together with the low quality of health and education, is the

main reason for migration and depopulation of rural areas. Solving these problems is possible through close cooperation with local government authorities which make efficient the use of opportunities provided to regional or rural development.

5. Economic insecurity

Another problem is economic insecurity generated by the realization of agricultural production. The market economy mechanisms increase the role of supply and demand as factors that dictates the prices of agricultural production. The adverse natural conditions are also a factor for inconsistency in people's incomes.

6. Low quality of life

State of the environment further reduces the quality of life in rural areas. Much of the agricultural lands are polluted with pesticides or by industrial plants, making it difficult to produce quality and healthy products. However, rural also have many beautiful places with preserved natural environment, a prerequisite for development of ecological and rural tourism.

2.8 Prospect of Rural Resources

- i. Rural development has to be assigned an active and preceding role in overall development planning and process and not be viewed as an appendage of urban-centred development. It is important that policymakers of countries with a large rural sector identify and learn about the beginning of the processes that put successful countries on a path to rapid industrialization and not focus just on the outcomes achieved at the end of these processes.
- ii. Rural development needs to be redirected away from environmental damage to environmental protection. Most of the natural capital of a country is located in rural areas, and agriculture—which is typically the predominant economic sector in rural areas—is intimately connected with nature: it simultaneously impacts and depends on it. The sustainability and resilience of rural development therefore are intrinsically dependent on greater preservation of the environment. An important objective of sustainable rural development is to build resilience and reduce the vulnerability of rural livelihoods to climate change, pandemics, climate related natural disasters or extreme weather events. Better protection of forests and wilderness will also help to prevent frequent occurrences of zoonotic epidemics and pandemics such as COVID-19.

- iii. Rural development efforts have to be cognizant of the new potential created by the digital technologies of the fourth industrial revolution and try to make the best use of them. The new technologies are undercutting the technological rationale for the rural-urban divide. Thanks to advances in communications technologies and other technologies, such as 3D printing, economic activities that once were confined to cities can now also be easily carried out in rural areas—a transition that has been accelerated by the COVID-19 experience. Policymakers need to make sure that rural residents can adopt and use these new technologies to switch to precision agriculture and to catch-up with urban economies and populations in terms of overall productivity.
- iv. Rural development needs to make better use of in situ urbanization as a way of achieving a more balanced rural-urban spatial combination. A guided approach towards in situ urbanization is required to ensure that rural residents enjoy an income and a standard of living similar to that of urban residents; that migrants do not end up in urban slums and squalor; and that wasteful sprawls and unjustified agricultural expansion done at the expense of forests and wilderness are avoided.
- v. Successful rural development requires careful choice of the agricultural models that are suitable for a country. Based on an understanding of national socioeconomic conditions and resource availability, incentives and regulations should be adjusted to ensure an optimal combination of agricultural models that are consistent with sustainable development objectives.
- vi. Rural development strategy has to be country specific because of its greater dependence on the local physical and institutional conditions. In a similar vein, the pursuit of rural-urban spatial combination must also account for local conditions, such as per capita land availability, natural resource endowment, and other physical conditions.

2.9 W.W. Rostow and the Stages of Economic Development

One of the key thinkers in 20th-century Development Studies was W.W. Rostow, an American and government official. Prior to Rostow, approaches to development had been based on the assumption that was characterized by the Western world (wealthier, more powerful countries at the time), which were able to advance from the initial stages of underdevelopment. Accordingly, other countries should model themselves after the West, aspiring to a "modern" state of capitalism and liberal democracy. Using these ideas, Rostow

penned his classic "Stages of Economic Growth" in 1960, which presented five steps through which all countries must pass to become developed: 1) traditional society, 2) preconditions to take-off, 3) take-off, 4) drive to maturity and 5) age of high mass consumption. The model asserted that all countries exist somewhere on this linear spectrum, and climb upward through each stage in the development process.

1. Traditional Society:

This initial stage of traditional society signifies a primitive society having no access to modern science and technology. In other words, it is a society based on primitive technology and primitive attitude towards the physical World. Thus, Rostow defines a traditional society "as one whose structure is developed within the limited production function based on pre-Newtonian science and technology and as pre-Newtonian attitudes towards the physical world"

However, Rostow does not view this traditional society as being completely static. In this stage of a society output could be increasing through the expansion of land area under cultivation or through the discovery and spread of a new crop but the critical fact about this type of society is that there is limit to attainable output per head. This limit arises due to the absence of access to modern science and technology. This type of a society allocates a large proportion of its resources to agriculture and is characterised by a hierarchical social structure in which there is little possibility for vertical mobility.

2. Pre-Conditions or the Preparatory Stage:

The covers a long period of a century or more during which the preconditions for take-off are established.

These conditions mainly comprise fundamental changes in the social, political and economic fields; for example:

- a) A change in society's attitudes towards science, risk-taking and profit-earning;
- b) The adaptability of the labour force;
- c) Political sovereignty;
- d) Development of a centralised tax system and financial institutions; and

- e) The construction of certain economic and social infrastructure like railways, ports, power generation and educational institutions. India did some of these things in the First Five Year plan period (1951-56).

It is evident from above that in this second stage of growth foundations for economic transformation are laid. The people start using modern science and technology for increasing productivity in both agriculture and industry.

3. The “Take-off” Stage:

This is the crucial stage which covers a relatively brief period of two to three decades in which the economy transforms itself in such a way that economic growth subsequently takes place more or less automatically. “The take-off” is defined as “the interval during which the rate of investment increases in such a way that real output per capita rises and this initial increase carries with it radical changes in the techniques of production and the disposition of income flows which perpetuate the new scale of investment and perpetuate thereby the rising trend in per capita output.”

Thus, the term “take-off” implies three things: first the proportion of investment to national income must rise from 5% to 10% and more so as to outstrip the likely population growth; secondly, the period must be relatively short so that it should show the characteristics of an economic revolution; and thirdly, it must culminate in self-sustaining and self-generating economic growth.

4. Drive to Maturity: Period of Self-Sustained Growth:

This stage of economic growth occurs when the economy becomes mature and is capable of generating self-sustained growth. The rates of saving and investment are of such a magnitude that economic development becomes automatic. Overall capital per head increases as the economy matures. The structure of the economy changes increasingly.

The initial key industries which sparked the take-off decelerate as diminishing returns set in. But the average rate of growth is maintained by a succession of new rapidly-growing sectors with a new set of leading sectors. The proportion of the population engaged in agriculture and other rural pursuits declines, and the structure of the country's foreign trade undergoes a radical change.

5. Stage of Mass Consumption:

In this stage of development per capita income of country rises to such a high level that consumption basket of the people increases beyond food, clothing and shelters to articles of comforts and luxuries on a mass scale. Further, with progressive industrialisation and urbanisation of the economy values of people change in favour of more consumption of luxuries and high styles of living. New types of industries producing durable consumer goods come into existence which satisfies the wants for more consumption. These new industries producing durable consumer goods become the new leading sectors of economic growth.

2.10 The Lewis-Ranis-Fei model

The Lewis (1954) theory of dualistic economic development provides the seminal contribution to theories of economic development particularly for labour-surplus and resource-poor developing countries. In the Lewis theory, the economy is assumed to comprise the agricultural and non-agricultural sectors. The agricultural sector is assumed to have vast amounts of surplus labour that result in an extremely low, close to zero, marginal productivity of labour. The agricultural wage rate is presumed to follow the sharing rule and be equal to average productivity, which is also known as the institutional wage. The non-agricultural sector has an abundance capital and resources relative to labour. It pursues profit and employs labour at a wage rate higher than the agricultural institutional wage by approximately 30 percent (Lewis, 1954, p.150). The non-agricultural sector accumulates capital by drawing surplus labour out of the agricultural sector. The expansion of the non-agricultural sector takes advantage of the infinitely elastic supply of labour from the agricultural sector due to its labour surplus. When the surplus labour is exhausted, the labour supply curve in the non-agricultural sector becomes upward-sloping

Ranis and Fei (1961) formalised Lewis's theory by combining it with Rostow's (1956) three "linear-stages-of-growth" theory. They disassembled Lewis's two-stage economic development into three phases, defined by the marginal productivity of agricultural labour. They assume the economy to be stagnant in its pre-conditioning stage. The breakout point marks the creation of an infant non-agricultural sector and the entry into phase one. Agricultural labour starts to be reallocated to the non-agricultural sector. Due to the abundance of surplus agricultural labour, its marginal productivity is extremely low and average labour productivity defines the agricultural institutional wage. When the redundant agricultural labour force has

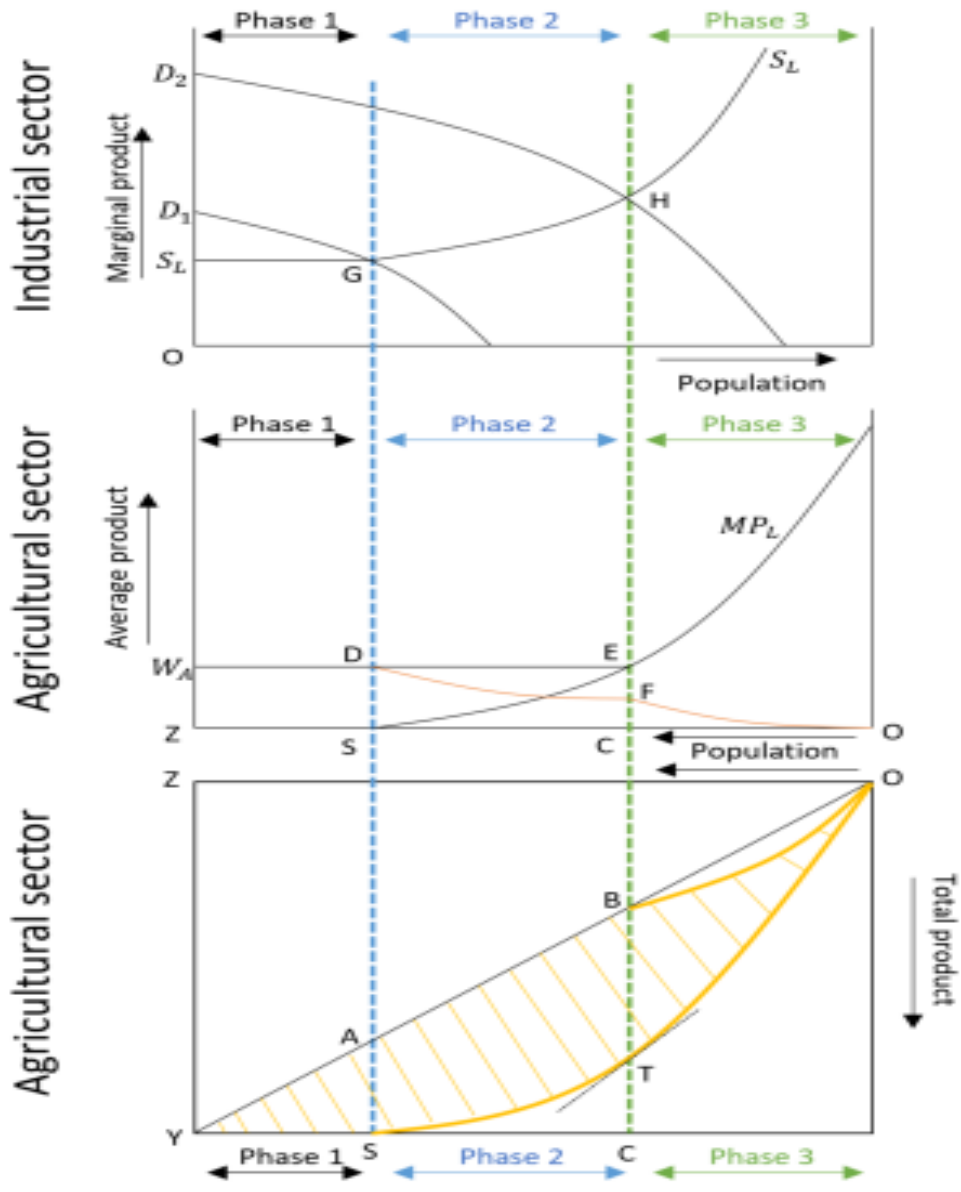
been reallocated, the agricultural marginal productivity of labour starts to rise but is still lower than the institutional wage. This marks the shortage point at which the economy enters phase two of development. During phase two the remaining agricultural unemployment is gradually absorbed. At the end of this process the economy reaches the commercialisation point and enters phase three where the agricultural labour market is fully commercialised. Diagram below illustrates the three phases defined by Ranis-Fei.

Process of Transition

1. Industrial Sector

The diagram below depicts the process of transition in both the industrial and agricultural sectors. The top figure shows the marginal product and demand curves of the industrial sector. As in the Lewis Model, the marginal product of labour in the industrial sector is also the demand curve for labour, shown by D_1 and D_2 . The supply of labour is shown by the curve S_L , which is horizontal up to point G because of surplus labour in the agriculture sector. The wages and employment are determined by the intersection of demand and supply of labour.

The supply curve S_L starts sloping upwards after point G because surplus labour from the agriculture sector is absorbed by the industrial sector. Therefore, more labour is supplied only at higher wages. As a result, wages will rise and the supply curve will be upward sloping after the surplus labour is depleted from the agricultural sector. With an increase in capital, the marginal product and the demand curve will shift upward from D_1 to D_2 as development occurs. This will also expand the industrial sector and its employment.



2. Agriculture Sector

The bottom two figures of the diagram show the process of transition in the agricultural sector. Initially, the economy is operating at point Y in the last figure. The amount of surplus labour is equal to SY at this point. With development, this surplus labour shifts from agriculture to the industrial sector. Because of the existence of surplus labour, the total product does not fall in the agriculture sector. The OS curve shows the total product, which reaches the maximum at point S and does not increase beyond that point because of surplus labour. The wages in the agricultural sector are not determined by its marginal product. Wages are equal to the slope of OY (which is ZY / OY). These real wages are fixed due to institutional factors because the wages will fall to 0 if determined by marginal product because the marginal product

is 0 due to redundant labour. Hence, institutional wages are fixed at W_A shown in the second figure.

3. The rise in wages

The wages in the agricultural sector will start rising as labour is reduced beyond point C. At this point C, the institutional wages W will be equal to the competitive wage level as shown by point T. Point T is tangent to the total product curve. Beyond this point, wages will be determined by market forces as they rise above institutional wages. The quantity of labour YC is referred to as disguised unemployment in the agricultural sector. This is because the marginal product of labour is below the institutional wages ($W_M > MP_L$) as more labour is employed. This is evident in the second part of the diagram. The marginal product curve falls below the wage level when labour is greater than point C and the MP_L curve reaches zero at point S (total product reaches the maximum in the third diagram).

Shortage Point- The S in this transition is called the shortage point because the average agricultural surplus (AAS) starts falling as labour reduces in the agricultural sector. The total agricultural surplus (TAS) is still rising at this point. TAS is shown by the shaded region in the third diagram and the AAS is shown by the curve $W_A DFO$ in the second diagram. As seen in the diagram, the total agricultural surplus will increase in Phase 1. However, TAS starts falling as labour falls lower than S. Here, AAS also starts to fall as shown by the DF portion of the curve. Because the average agricultural surplus available starts decreasing, point S is called the shortage point as the agricultural sector starts developing a shortage of surplus.

Commercialization Point- The Point C in the diagrams represents the commercialization of agriculture. This is because the wages in agriculture will start rising as the shortages in AAS increase (shown by the fall in AAS in portion FO of the curve) rapidly with a decrease in labour below point C. The landowners will be willing to pay more for agricultural labour. On the other hand, industrial sector wages will also have to increase more to attract agricultural labour beyond this point. Hence, this point represents a landmark in the development process because the agriculture sector is commercialised. There is no disguised unemployment with excess labour transferred to the industrial sector.

Phase	Agricultural sector	Industrial sector	Total agricultural surplus (TAS)	Average agricultural surplus (AAS)
Phase 1	Institutional wage W_A	Constant wages as surplus or redundant labour are being absorbed	Increasing TAS	AAS equal to the institutional wage
Phase 2	S = shortage point Institutional wage W_A	Wages start rising because surplus labour has been removed from agriculture YC = disguised unemployment in the agriculture sector	TAS still rising	AAS starts declining leading to shortages in output surplus
Phase 3	C = commercialization point Wages start rising	Wages keep increasing	TAS starts falling	AAS declines rapidly

Criticism

1. **Institutional Factors:** surplus labour is not the only reason that explains the underdevelopment of the agriculture sector in certain economies. In many cases, it has been observed that underdeveloped economies do not have surplus labour in the agriculture sector. Some institutional factors, such as feudal structure, prevailing within these economies are the major reason behind their underdeveloped agriculture sector.
2. **Zero marginal product:** the assumption of zero marginal product of labour in phase 1 has been heavily criticized. When labour shifts to the industrial sector initially, the Total product does not fall in the agriculture sector. For MPL to be zero, the agricultural labour has to be very large. Various studies have shown that this assumption does not hold in reality.
3. **Capital-intensive technology:** as seen in the Lewis Model, the growth in the industrial sector may not necessarily lead to a shift of labour from agriculture to the industrial sector. With technological progress, the industrial sector may witness the development of capital-intensive technology. In this case, the industrial sector will grow but without any additional employment of labour.

2.11 Gandhian Approach to Rural Development

Gandhi was neither a pure academic nor an economist, the socio-economic conditions of the 19th century world; the circumstances and surroundings in which he was born and brought up, all these have exerted influences on Gandhi's ideas and principles. The Indian villages were self-sufficient economic units before the colonial era. Village industries and handicrafts flourished highly in the pre-British India. Trade and commerce were of a high order during that period. As a result of the British rule in India the capital that had accumulated in India over these centuries drained away. As a result, the self-sufficient, self-reliant and autonomous nature of Indian villages was completely destroyed. These socio-economic conditions that existed in India during Gandhi's times also influenced him in shaping many of his economic ideas like swadeshi, self-sufficiency, self-reliance, emphasis on village and cottage industries etc. His opposition to the multiplication of wants and the creation of urban-industrial civilization is linked with his love of the ancient Indian villages-their self-sufficient, self-reliant, autonomous and prosperous nature. By emphasizing khadi and other village and cottage industries in his economic philosophy Gandhi wanted to rejuvenate the self-sufficient nature of ancient Indian village system.

Gandhi says, 'my idea of village Swaraj is that it is a complete republic, independent of its neighbor's for its own vital wants, and yet interdependent where dependence is a necessity. Thus, each village's first concern would be to grow its own food crops and cotton for its cloth. It should have a reserve of its own for its cattle, recreation and playground for adults and children. Education will be compulsory up to the final basic course. As far as possible, each activity may be conducted on a co-operative basis. There will be no caste discrimination such as we have today with their graded untouchability. Nonviolence with its technique of Satyagraha and non-cooperation must have the sanction of village community'.

1. Importance of Grama Swaraj in Rural Sector

The term Grama Swaraj means self-rule and self-restrains. In this ideal village if people are doing any wrong thing or ill-legal activities it would not be treated in a harsh method rather reformation of the mental attitude of the culprit is the panacea. While emphasizing the concept of village swaraj, Gandhi's intention was to create a non-exploitative, non-violent, non-competitive society in the near future. The article written by Gandhi in Harijan in 1942, very

clearly says that 'my idea of village swaraj depend upon perfect democracy based on individual freedom'. Some of the main elements included in the Gandhian concept of village swaraj are trusteeship, swadeshi, bread labour, self-sufficiency, decentralization, co-operation and equality. By swaraj his intention was to liberate the human beings from evils, bondage and low human dignity.

2. Relevance of Swadeshi in Rural Sector

Gandhi had announced swadeshi movement in order to boycott the foreign clothes and the other foreign items. Gandhi defines swadeshi as, 'that spirit within us which restricts us to the use and service of our immediate surroundings to the exclusion of the more remote'. The main aim was that all the villages in India would be well and sufficient enough to produce essential items for its own survival. In the villages, the success of swadeshi depends upon the people's attitude for buying the products which are made locally. At the same time Gandhi never liked to keep ill feeling or bad attitude towards the foreign people or their product. The doctrine completely depends on self-less service based on love and ahimsa. In case of any need the villagers should have the responsibility supply essentials commodities to the nearby villages. In the moral field its emphasis is to attain the decentralized economy so that village development would take place simultaneously in the country (Shashi Prabha Sharma: 1992). Khadhi was an instrument put forward by Gandhi to communicate the idea of swadeshi. Production for use, not for a market is the essence of Khadhi economics. The pathetic condition of the British India forced him to emphasize on Khadhi as providing relief to the poverty-stricken masses. Thus he placed spinning wheel at the center of his economics.

3. Relevance of Bread- Labour in the Rural Sector

Gandhi had developed this concept by reading the books of Ruskin, Tolstoy and New Testament. According to Gandhi he who eats without offering sacrifice eats stolen foods. Sacrifice here means bread labour. Bread labour concept would give new vigour among the many unemployed people living in the rural areas of the country. People can attain essential items such as food, shelter, and clothing by doing the physical labour in far and near places of the villages. No labour is too mean for one who wants earn an honest penny.

4. Relevance for Trusteeship in Rural Sector

The idea envisaged by Gandhi for the concept of trusteeship got great admiration and wide discussion all around the world. “Gandhi advised the owners of property to consider themselves as trustees of the property which really belonged to the whole society and manage it accordingly, taking only what they needed for their own upkeep but using the rest for the welfare of society.” (Mathai,2000) As per the concept people who have enough money should act as a trusty and use the money wisely for essential purposes. The greedy mind and the money-oriented life style were the real cause behind the increase of various social problems and criminality in society. By implementing this concept society can avoid class war and the fight between poor and the rich. In many rural places of India especially in remote areas people are almost living like slaves and the rich land lords are exploiting the skill and manpower of these poor for increasing their profit. But the trusteeship concept says that the landlords should donate excess land to hundreds of landless people living in our country.

5. Implication of Sarvodaya in the Rural Sector

The meaning of Sarvodaya is welfare of all. This concept asserts that development should reach to the last person in the society. Truth and non-violence are the two main components associated with this concept. Here Gandhi had specifically mentioned the reframed social and economic order which is more convenient to rural people. The basic unit of sarvodaya society is the self-sufficient village having the ability to fulfil all the basic needs of the people in the rural sector (Abraham Kurian, 2013). Ultimate aim of sarvodaya movement is to uplift the downtrodden and to make a silent revolution in the society through the change of people’s attitude as well as appropriate development strategy concerned to the rural people.

6. Self-Sufficient Village Economy

Gandhi wanted every village to be self-contained republic, each village should grow articles for its own consumption. The solution to the problems of villages was given the top priority in his plan so that poverty could be eradicated and people would be happy and self-reliant. He laid emphasis on the revival of village industries like soap making, paper making, Khadhi industries etc. The village will serve as a part of the decentralized economy. The village economy must satisfy two major objectives. The first, it would provide maximum employment and income to the inhabitants, and second, it would generate equality, freedom and justice. In

villages, there are village industries and cottage industries. The production, consumption and distribution of villages industries are confined within them. In the case of cottage industries, the articles may be produced for the entire country and sometimes for foreign countries. Gandhi believed that in large scale industries there is a sense of alienation. In village industries human capability expansion is feasible through nonviolent methods.

7. Sustainable and Environment Friendly Development

Gandhi has strongly recommended the eco-friendly cultivation and production method. “Gandhi believed that economic productivity, environmental protection, maintenance of resources and social justice should go together with growth” (Asha Patel, 2005). Gandhi was against the policy of over exploitation of natural resources in order to get rapid economic growth by blindly following the western method of development.

8. Constructive Programme and its Relevance for Rural Development

Gandhi has designed constructive programme which includes eighteen programmes for the reconstruction of Indian villages. The Gandhian movements of rural reconstruction consist of:

- | | | |
|------------------------------|------------------------------------|----------------------|
| a. Communal unity | g. Basic education | m. Economic equality |
| b. Removal of untouchability | h. Adult education | n. Kisans (farmers) |
| c. Prohibition | i. Women | o. Labour |
| d. Khadi | j. Education in health and hygiene | p. Adivasis |
| e. Other village industries | k. Provincial language | q. Lepers |
| f. Village sanitation | l. National language | r. Students |

Gandhi had intense desire to see the development of the poor and the downtrodden who live in the rural areas. He strongly believed that not only the material progress but also the progress of morality is very essential for the success of the country. Gandhi had introduced

constructive programme consisting of eighteen items especially for the wellbeing of rural people.

9. Socio-Economic Activities of GSGSK

Gandhi Samaraka Grama Seva Kendram (GSGSK), S.L.Puram, Alapuzha is the district level branch of Gandhi Smaraka Nidi, Trivandrum. The latter is the Kerala state unit of Gandhi Memorial National Trust Delhi. GSGSK was established in the year 1958 as a non-profit, secular, nonpolitical institution to take rural development programmes. The territorial jurisdiction of GSGSK is Alapuzha district covering 71 Grama panchayat, 12 block panchayat and 5 municipalities. During these eventful years of existence GSGSK has won laurels for its spectacular achievements in the socio-economic space of the district. The vision of GSGSK is the creation of a casteless and classless society referred to as “Sarvodaya society” by Gandhi. In this society, there is political, economic and social equality for all; every person is conscious of his duties and responsibilities and everyone works for the material and moral wellbeing of himself and the society.

UNIT III

Demography

3.1 Demography

3.1.1 Natural growth rate

The rate of natural increase or the growth rate of population refers to the difference between the birth rate and the death rate. When this difference is zero (or, in practice, very small) then we say that the population has 'stabilised', or has reached the 'replacement level', which is the rate of growth required for new generations to replace the older ones that are dying out. Sometimes, societies can experience a negative growth rate – that is, their fertility levels are below the replacement rate.

3.1.2 Fertility rate

The fertility rate refers to the number of live births per 1000 women in the child-bearing age group, usually taken to be 15 to 49 years. But like the other rates discussed on the previous page (the birth and death rates) this is a 'crude' rate – it is a rough average for an entire population and does not take into account the differences across age groups. Differences across age groups can sometimes be very significant in affecting the meaning of indicators. That is why demographers also calculate age-specific rates.

3.1.3 Infant mortality rate

The infant mortality rate is the number of deaths of babies before the age of one year per 1000 live births.

3.1.4 Maternal mortality rate

The maternal mortality rate is the number of women who die in childbirth per 1,00,000 live births

High rates of infant and maternal mortality are an unambiguous indicator of backwardness and poverty; development is accompanied by sharp falls in these rates as medical facilities and levels of education, awareness and prosperity increase.

3.1.5 Life expectancy

This refers to the estimated number of years that an average person is expected to survive. It is calculated on the basis of data on age-specific death rates in a given area over a period of time.

3.1.6 Sex ratio

The sex ratio refers to the number of females per 1000 males in a given area at a specified time period. Historically, all over the world it has been found that there are slightly more females than males in most countries. This is despite the fact that; slightly more male babies are born than female ones; nature seems to produce roughly 943 to 952 female babies for every 1000 males.

First, girl babies appear to have an advantage over boy babies in terms of resistance to disease in infancy. At the other end of the life cycle, women have tended to outlive men in most societies, so that there are older women than men. The combination of these two factors leads to a sex ratio of roughly 1050 females per 1000 males in most contexts.

3.1.7 Age structure of the population ratio

The age structure of the population refers to the proportion of persons in different age groups relative to the total population. The age structure changes in response to changes in levels of development and the average life expectancy. Initially, poor medical facilities, prevalence of disease and other factors make for a relatively short life span. Moreover, high infant and maternal mortality rates also have an impact on the age structure. With development, quality of life improves and with it the life expectancy also improves. This changes the age structure: relatively smaller proportions of the population are found in the younger age groups and larger proportions in the older age groups. This is also referred to as the ageing of the population.

3.1.8 Dependency ratio

The dependency ratio is a measure comparing the portion of a population which is composed of dependents (i.e., elderly people who are too old to work, and children who are too young to work) with the portion that is in the working age group, generally defined as 15

to 64 years. The dependency ratio is equal to the population below 15 or above 64, divided by population in the 15-64 age group. This is usually expressed as a percentage. A rising dependency ratio is a cause for worry in countries that are facing an ageing population, since it becomes difficult for a relatively smaller proportion of working-age people to carry the burden of providing for a relatively larger proportion of dependents. On the other hand, a falling dependency ratio can be a source of economic growth and prosperity due to the larger proportion of workers relative to non-workers. This is sometimes referred to as the 'demographic dividend', or benefit flowing from the changing age structure. However, this benefit is temporary because the larger pool of working age people will eventually turn into non-working old people.

3.2 Density of Population

Density of population, is expressed as number of persons per unit area. It helps in getting a better understanding of the spatial distribution of population in relation to land. The density of population in India is 382 persons per sq km (2011). There has been a steady increase of more than 200 persons per sq km over the last 50 years as the density of population increased from 117 persons/ sq km in 1951 to 382 persons/sq km in 2011.

3.2.1 Growth of population

Growth of population is the change in the number of people living in a particular area between two points of time. Its rate is expressed in percentage. Population growth has two components namely; natural and induced. While the natural growth is analysed by assessing the crude birth and death rates, the induced components are explained by the volume of inward and outward movement of people in any given area. However, in the present chapter, we will only discuss the natural growth of India's population.

Phase I

The period from 1901-1921 is referred to as a period of stagnant or stationary phase of growth of India's population, since in this period growth rate was very low, even recording a negative growth rate during 1911-1921. Both the birth rate and death rate were high keeping the rate of increase low. Poor health and medical services, illiteracy of people at large and

inefficient distribution system of food and other basic necessities were largely responsible for a high birth and death rates in this period.

Phase II

The decades 1921-1951 are referred to as the period of steady population growth. An overall improvement in health and sanitation throughout the country brought down the mortality rate. At the same time better transport and communication system improved distribution system. The crude birth rate remained high in this period leading to higher growth rate than the previous phase. This is impressive at the backdrop of Great Economic Depression, 1920s and World War II.

Phase III

The decades 1951-1981 are referred to as the period of population explosion in India, which was caused by a rapid fall in the mortality rate but a high fertility rate of population in the country. The average annual growth rate was as high as 2.2 per cent. It is in this period, after the Independence, that developmental activities were introduced through a centralised planning process and economy started showing up ensuring the improvement of living condition of people at large. Consequently, there was a high natural increase and higher growth rate. Besides, increased international migration bringing in Tibetans, Bangladeshis, Nepalis and even people from Pakistan contributed to the high growth rate.

Phase IV

In the post 1981 till present, the growth rate of country's population though remained high, has started slowing down gradually. A downward trend of crude birth rate is held responsible for such a population growth. This was, in turn, affected by an increase in the mean age at marriage, improved quality of life particularly education of females in the country. The growth rate of population is, however, still high in the country, and it has been projected by World Development Report that population of India will touch 1,350 million by 2025.

3.2.2 Demographic Trends in India

India is the second largest country in the world in terms of the size of population. It is next to China. India's population constitutes nearly 15 percent of the total world population

while her geographical area is only 2.4 percent of the world area. India's national income which is barely two percent of the total global income clearly shows the tremendous strain of population on her economy

3.2.3 Causes of Population Increase

Rapidly increasing population of India is a result of prevailing high birth rates and a large decline in the death rate in our country. Thus analysis of factors which account for high birth rate and the factors that have contributed to a large decline in the death rate is to be done.

The main causes for high birth rate are:

- The practice of early marriage is one of the main cause of the rapid increase in population. This gives wider reproductive period.
- Poverty of the masses in poor villagers is the another reason.
- India's tropical climate making for earlier puberty, her joint family system, the institution of polygamy is also responsible for rapid growth of population.
- Lack of conscious family planning had also kept birth rate in India very high.
- The age and sex composition of the population and the fertility of women during the child-bearing age in India are most helpful for rapid growth of population.

The main causes for decline in death rate are:

- Widespread and Improved medical and health facilities.
- Controlled spread of famines in India due to development of the means of transport and communications.
- Control on dreaded diseases like malaria and TB and diseases like small pox, chicken pox etc. have been completely eradicated.

- Improvements in hygiene in both rural and urban areas and supply of pure drinking water.
- Improvements in overall economic conditions of the masses have contributed to the sharp fall in the death rate.

Population Explosion – An Obstacle to India’s Economic Development India today is grossly overpopulated. The Census of Population 2011 shows that we are now having over one billion people in India. This means that the country has to support over 16 percent of world population on just about 2.4 percent of total world area. And as country is short of capital and technology to fully exploit its resources, it means that most of the Indians live in poverty, face unemployment and suffer from ill health. No wonder that in spite of half a century of development, over a fourth of India’s population lives below poverty line.

In the underdeveloped countries of today, increasing population is more of a hindrance to the development of the economy. It is now universally agreed that an effective control of population growth is necessary if our development efforts is to yield any result.

Major Problems Created by Growth of Population in Development of an Economy in India Following problems arise due to population explosion.

- Increasing population has eaten up much of the additional income that has been generated in the economy during the period of the Five-Year Plans. As against a eighteen fold increase in national income, the per capita income has gone up barely fivefold over this period of five decades.

- Population explosion in India has resulted in a serious food shortage in the country. In spite of the fact that more than seventy percent of the working people are engaged in agriculture, Indian people still do not get even the minimum necessary amount of food.

- Increasing population with the growing number of children adds more to the unproductive population of the country.

- In India, due to population growth, by the end of 2009-10, the number of unemployed persons was estimated to be over 66 million. The present estimate of unemployment in India by many economists is nearly 80 to 90 million persons.

- Population growth hampers the growth of capital formation and reduces volume of savings

- Increase in population reduces per capita income and lowers the standard of living of the masses; it makes the people less efficient.

- Rural areas have become the worst sufferers. The problems faced by the rural areas are lower per capita, availability of land; increased subdivision and fragmentation of land holdings, disguised unemployment, increase in debt etc., which all contribute to reduced efficiency and poverty in rural areas.

3.3 Family Welfare Programme

Family Welfare Programme is implemented as a people's programme involving the active co-operation of community at large to improve Maternal and Child Health Services and thereby to stabilize the population growth. Tamil Nadu is the model State in the introduction of "Community Needs Assessment Approach" to all the States in the country. The success of Family Welfare Programme in the State has been attributed to several factors including strong social and political commitments and good administrative back up.

Family Welfare programme includes the following activities:

- | | |
|--|---|
| 1. Sterilization Programme | 9. Green card Scheme |
| 2. IUD Programme (Intrauterine Device) | 10. Rural Family Welfare centre |
| 3. Contraceptive Programme | 11. LHV Centre (Lady Health – visitor |
| 4. Family Planning Insurance Scheme. | 12. Immunization |
| 5. Janani Surakshya Yojana. | 13. Infant Mortality Reduction Mission. |
| 6. Nutrition programme | 14. Medical Termination of pregnancy |
| 7. Urban Family welfare programme | 15. Reproductive and child Health Programme |
| 8. Urban revamping Scheme | |

3.4 Nature of Rural Occupations:

Farming

This is the major source of livelihood in rural India, but not the only one. Farmers do agricultural activities in their lands and do sowing, weeding and harvesting, etc and earn the profits at the end. Sometimes, because of bad weather or monsoon, their crops get destroyed, and they have to suffer a lot. They have to depend on other sources of income as well, like the dairy business, etc.

Poultry or Dairy Business

People also conduct these businesses in rural areas as they usually keep livestock etc. They used to sell the milk of cows, buffalo or goats, etc. Not only this but beekeeping is also done in rural areas most frequently for the production of honey.

Agricultural Laborers

These are those people who do not own agricultural land, and they used to work on other farmers' lands during the specific season. They comprise two-fifth of the rural population in India. They do not own permanent jobs, but seasonal jobs like during sowing or harvesting season. The remaining days of the year, they are unemployed, which leads to seasonal unemployment.

Handicrafts

India has a huge heritage and culture with immense talent in every corner of the country. Handicrafts are also a significant source of income in rural areas, which are made by hand such as pottery making, basket making, weaving, printing, painting, etc. The livelihood opportunities in handicrafts depend upon the heritage and culture of the region and also on the skills of the person. Most of the handcrafted items are costly and attract several tourists in the tourist places in India.

Small and Cottage Industries

These are the industries that are run in the houses and family members contribute to that business, such as pottery or basket making, furniture, shawls, mats, caps, woolen or crochet

work, etc. There is no need for large capital for investment or big land facilities to start any small business and even no need occurs to hire laborers as well because family members work in this which saves the cost of hiring labor from the outside.

3.5 Work participation of economy

It is important to learn about participation of Males & Females in Economy, so that corrective decision may be taken for overall economic growth of the Nation. The phenomenon of female economic activity and women's employment in each of these segment are main issues in the economy of all developing nations. The economic activity may be classified as organized and unorganized, each of which may be in the formal or informal sector. Participation of women in economic activities in formal sectors of industries, services and agricultural sector is measurable, but activities of women in informal sectors such as house works, training and education of children, activities in agricultural sectors and household services are still not measurable. Although women constitute a little less than the half of the economically active population, but their contribution to economic activity is far below its potential. The progress toward gender equality in respect of participation in economic activities seems to have stalled.

3.5.1 Labour Force Participation Rate (LFPR)

According to the Centre for Monitoring Indian Economy (CMIE), the labour force consists of people who are 15 years or older, and belong to either of the following two categories:

- Are Employed
- Are unemployed and are willing to work and are actively looking for a job.

Reasons for lower Labour Force Participation Rate (LFPR)

- The main reason for India's LFPR being low is the abysmally low level of female LFPR.
- According to CMIE data, as of December 2021, while the male LFPR was 67.4%, the female LFPR was as low as 9.4%.
- In other words, less than one in 10 working-age women in India are even demanding work.
- Even if one sources data from the India's female labour force participation rate is around 25% when the global average is 47%.

- The reasons or low women LFPR is essentially about the working conditions — such as law and order, efficient public transportation, violence against women, societal norms etc. — being far from conducive for women to seek work.
 - Further, lot of women in India are exclusively involved within their own homes (caring for their family)

Female participation in labour force has remained lower than male participation as women account for most of the unpaid work, and when women are employed in paid work, they are overrepresented in the informal sector and among the poor.

3.5.2 Workforce Participation Rate

As per Census 2011, the workforce participation rate for females is 25.51% against 53.26% for males. Rural sector has a better female workforce participation rate of 30.02% compared with 53.03% for males whereas for urban sector. In Rural, Himachal Pradesh has max female workforce participation rate (47.4) whereas Tamil Nadu has max (21.8) among major states. Workforce participation is more less equal for rural and urban males, but there is a huge gap in rural and urban females' workforce participation. Rural India has more than 50% workers in self-employed category, whereas Urban India has more than 40% workers in self-employed and regular wage categories as per NSS 68th Round (2011-12).

UNIT IV

Rural poverty and Unemployment

4.1 Rural Poverty in India

The structural transformation of rural economies in India has broadly passed through three phases. In the first phase, during early 1950s to mid-1960s, the agricultural sector was restructured by implementing land reforms and by building up basic physical and institutional infrastructure such as development of irrigation and supply of institutional credit to the farmers. The second phase starting from mid to late 1960s was characterized by the green revolution and its extension. The last phase i.e., the 1990s is characterized by introduction of macroeconomic reforms including structural adjustments and globalization which had a profound impact on rural economy influencing the rural poor. The following sections give an insight of the rural poverty in India during pre-reform i.e., before 1991-92 and post reform i.e., after 1991-92 periods.

Ahluwalia (1978) observed in a state level study of India that rural poverty depicted a fluctuating pattern with the incidence of rural poverty falling in the periods of good agricultural performance and rising in the periods of poor performance, suggesting evidence of trickle down associated with agricultural growth. However, in seven states accounting for three-quarters of rural poor, a significant inverse relationship was observed between the incidence of rural poverty and per capita agricultural Net Domestic Product (NDP). In 1987-88 decline in rural poverty was primarily achieved by depletion of government stock through large volume of Public Distribution System (Tendulkar and Jain, 1995).

The Planning Commission estimates show a declining trend in the incidence of rural poverty during 1980s. This is consistent with the observed rise in real wages in rural areas in most parts of the country during this period (Jose, 1988). The rise in real wages in agriculture is mainly due to a shift of labour force from agricultural to non-agricultural occupation (Bhalla et al., 1991). The expansion of self-employment as well as wage employment schemes under the poverty alleviation programmes during the eighties have contributed in the rise of agricultural wages by increasing the off-farm employment opportunities. These employment generation programmes account for at least 60% incremental employment generation in rural areas in 1980s (Rao et al., 1988). The reform process started in India since mid-1991 ranging

from price, tax, fiscal and monetary to trade reforms causing impact on prices and income. Liberalization and removal of agricultural trade restriction changed the cropping pattern and increased the prices of food grains in the short-run.

Accordingly, the incidence of rural poverty in 1992 is estimated as 44%, which rose from 35% in 1990-91 (Chandrasekhar and Sen, 1996). It can be seen that rural poverty increased substantially during the first 18 months of reform at all India level. According to Tendulkar and Jain (1995), rural areas in Andhra Pradesh (AP), Assam, Bihar, Karnataka, Maharashtra, Uttar Pradesh (UP) and Rajasthan experienced sharp reduction in average per capita total expenditure. Rural poverty in these states increased sharply during the reform period. The poverty gap ratio calculated by World Bank (Sen, 1997) in 1992 increased to 10.9%, higher than that of 1986-87 at 10%, indicating that economic reforms have adversely affected the rural poor.

4.2 Causes of Rural Poverty:

Rural poverty is a multi-dimensional social problem. Its causes are varied. They are as follows:

1. Climatic factors:

Climatic conditions constitute an important cause of poverty. The hot climate of India reduces the capacity of people especially the ruralites to work for which production severely suffers. Frequent flood, famine, earthquake and cyclone cause heavy damage to agriculture. Moreover, absence of timely rain, excessive or deficient rain affect severely country's agricultural production.

2. Demographic factors: The following demographic factors are accountable for poverty in India.

- a) **Rapid growth of population:** Rapid growth of population aggravates the poverty of the people. The growth of population exceeds the rate of growth in national income. Population growth not only creates difficulties in the removal of poverty but also lowers the per capita income which tends to increase poverty. The burden of this reduction in per capita income is borne heavily by

the poor people. Population growth at a faster rate increases labour supply which tends to lower the wage rate.

- b) **Size of family:** Size of the family has significant bearing on rural poverty. The larger the size of family, the lower is the per capita income, and the lower is the standard of living. The persistence of the joint family system has contributed to the health and earning capacity of the ruralites.

3. Personal causes:

- i) **Lack of motivation:** Lack of motivation is an important cause of rural poverty. Some ruralites do not have a motive to work hard or even to earn something. This accounts for the poverty of the ruralites.
- ii) **Idleness:** Most of the rural people are lazy, dull and reluctant to work. Hence they rot in poverty.

4. Economic causes:

- (i) **Low agricultural productivity:** Poverty and real income are very much interrelated. Increase in real income leads to reduction of the magnitude of poverty. So far as agricultural sector is concerned, the farmers even today are following the traditional method of cultivation. Hence there is low agricultural productivity resulting in rural poverty.
- (ii) **Unequal distribution of land and other assets:** Land and other forms of assets constitute sources of income for the ruralites. But, unfortunately, there has been unequal distribution of land and other assets in our economy. The size-wise distribution of operational holdings indicates a very high degree of concentration in the hands of a few farmers leading to poverty of many in the rural sector.
- (iii) **Decline of village industries:** At present consequent upon industrialization new factories and industries are being set up in rural areas. Village industries fail to compete with them in terms of quality and price. As a result, they are closed down. The workers are thrown out of employment and lead a life of poverty.

- (iv) **Immobility of labour:** Immobility of labour also accounts, for rural poverty. Even if higher wages are offered, labourers are not willing to leave their homes. The joint family system makes people lethargic and stay-at-home.

The ruralites are mostly illiterate, ignorant, conservative, superstitious and fatalistic. Poverty is considered as god-given, something preordained. All these factors lead to abysmal poverty in rural India.

- (v) **Lack of employment opportunities:** Unemployment is the reflection of poverty. Because of lack of employment opportunities, people remain either unemployed or underemployed. Most of these unemployed and underemployed workers are the small and marginal farmers and the landless agricultural labourers.

5. Social causes:

- a) **Education:** Education is an agent of social change and egalitarianism. Poverty is also said to be closely related to the levels of schooling and these two have a circular relationship. The earning power is endowed in the individual by investment in education and training. But this investment in people takes away money and lack of human investment contributes to the low earning capacity of individuals. In this way people are poor because they have little investment in themselves and poor people do not have the funds for human capital investment.
- b) **Caste system:** Caste system in India has always been responsible for rural poverty. The subordination of the low caste people by the high caste people caused the poverty of the former. Due to rigid caste system, the low caste people could not participate in the game of economic progress. A Shudra was not allowed to become a trader and a Vaisya could earn his bread only by trade. Birth would decide their occupation and their economic fate. K. V. Verghese rightly observes, "Caste system acted as a springboard for class exploitation with the result that the counterpart of the poverty of the many is the opulence of the few. The second is the cause of the first."

- c) **Joint family system:** The joint family system provides social security to its members. Some people take undue advantage of it. They live upon the income of others. They become idlers. Their normal routine of life consists in eating, sleeping and begetting children. In this way poverty gets aggravated through joint family system.
- d) **Social customs:** The ruralites spend a large percentage of annual earnings on social ceremonies like marriage, death feast etc. As a result, they remain in debt and poverty.

Growing indebtedness: In the rural sector most of the ruralites depend on borrowings from the money-lenders and land-lords to meet even their consumption expenses. Moneylenders, however, exploit the poor by charging exorbitant rates of interest and by acquiring the mortgaged land in the event of non-payment of loans.

Indebted poor farmers cannot make themselves free from the clutches of moneylenders. Their poverty is further accentuated because of indebtedness. Such indebted families continue to remain under the poverty line for generations because of this debt-trap.

4.3 Meaning of Unemployment

Unemployment- The condition of one who is capable of working, actively seeking work, but unable to find any work. It is important to note that to be considered unemployed a person must be an active member of the labour force and in search of remunerative work.

Unemployment rate

We can calculate the unemployment rate by dividing the number of unemployed people by the total number in the labour force, then multiplying by 100

Unemployment rate=Unemployed people/Total labour force×100.

4.3.1 Types of Unemployment in India:

Disguised Unemployment:

It is a phenomenon wherein more people are employed than actually needed.

It is primarily traced in the agricultural and the unorganized sectors of India.

Seasonal Unemployment:

It is unemployment that occurs during certain seasons of the year.

- Agricultural labourers in India rarely have work throughout the year. they work in agriculture as season wise.

Structural Unemployment:

It is a category of unemployment arising from the mismatch between the jobs available in the market and the skills of the available workers in the market.

- Many people in India do not get jobs due to lack of requisite skills and due to poor education level, it becomes difficult to train them.

Cyclical Unemployment:

It is a result of the business cycle, where unemployment rises during and declines with economic growth.

- Cyclical unemployment figures in India are negligible. It is a phenomenon that is mostly found in capitalist economies.

Technological Unemployment:

It is the loss of jobs due to changes in technology.

- In 2016, World Bank data predicted that the proportion of jobs threatened by automation in India is 69% year-on-year.

Frictional Unemployment:

Frictional Unemployment, also called Search Unemployment, refers to the time lag between the jobs when an individual is searching for a new job or is switching between jobs.

Vulnerable Employment:

This means people working informally, without proper job contracts and thus lacking any legal protection.

- These people are deemed 'unemployed' since records of their work are never maintained.
- It is one of the main types of unemployment in India.

Average wage/salary received by regular wage/salaried employees

the average wage/salary received by regular wage/salaried employees of economically active age group was Rs. 428.66 per day for females compared with Rs. 550.23 per day for males in rural areas. For urban areas, it was Rs. 609.7 and Rs. 805.52 per day for females and males respectively.

4.3.2 Causes of Unemployment

India as a country is on a development path, however, there are few loose ends like unemployment that barricades the growth. Here are some of the factor causes of unemployment are,

1. The Caste System: A Social Barrier to Employment

The caste system, deeply ingrained in Indian society, is a significant contributor to unemployment. It is a structure of social stratification that can potentially pervade virtually every aspect of life in India. In some regions, certain types of work are prohibited for members of particular castes. This leads to situations where jobs are often given to individuals from a specific community, rather than to those who genuinely possess the requisite skills. As a result, there is a higher prevalence of unemployment among those who deserve employment opportunities but are denied due to their caste.

2. Inadequate Economic Growth

India's economy, though steadily growing, faces challenges related to its pace of development. The role of economic growth in generating employment is crucial, and the current rate of growth is inadequate to provide sufficient job opportunities to the burgeoning

population. As the population continues to increase, the economy struggles to keep up with the demands for employment. Consequently, a growing number of people find themselves unable to secure gainful employment, leading to inadequate levels of employment nationwide.

3. Increase in Population

India's population is on track to exceed that of China by the year 2024, making it the most populous country in the 21st century. However, the country's economic growth rate is not commensurate with its population growth. This imbalance results in a larger percentage of the population being unemployed, as the job market cannot absorb the growing workforce effectively.

4. Agriculture: A Seasonal Occupation

Agriculture, a primary occupation in India, offers employment to a substantial segment of the population. However, it is primarily seasonal, with work available for only a few months each year. This seasonal nature of agricultural work leaves many agricultural labourers without employment and income for a significant portion of the year.

5. Low Rates of Saving and Investment

India faces a shortage of capital and low rates of savings and investment. Investment, which relies on savings, remains insufficient to create new job opportunities and stimulate economic growth. Moreover, there is a notable lack of investment in rural areas and tier 2 and tier 3 cities, leaving untapped employment potential unexplored.

6. Ineffective Economic Planning

One of the critical issues exacerbating unemployment in India is the absence of comprehensive national plans to bridge the significant gap between labour supply (abundant) and labour demand (lower). A well-balanced labour market is essential to ensure that those seeking jobs can secure them. Without such planning, the job market becomes highly competitive, with numerous individuals vying for a limited number of positions.

7. Labour Immobility

Cultural values that prioritize maintaining proximity to family play a significant role in labour immobility in India. Many individuals avoid long-distance travel for employment, as attachment to family is a top priority. Language, religion, and climate also contribute to the low mobility of labour. When potential job seekers are unable to relocate for work, unemployment rates rise.

8. Job Specialization and Skilling

In today's globalized economy, jobs have become highly specialized. However, India's education system often falls short in providing the necessary training and specialization required for these roles. As a result, many willing workers become unemployable due to a lack of essential skills. A study has shown that 33% of educated youth in India are unemployed because they lack the skills demanded by the job market. This highlights the urgent need for educational reforms and skill development programs.

4.4 National Programmes for Rural Development

The National Programmes are follows:

1. Legal elimination of bonded labourers.	6. Twenty point programme	11. Rural Labour Employment Guarantee Programme (RLEGP)
2. Preventing the centralisation of wealth by modifying the law.	7. Food for work programme	12. TRYSEM scheme.
3. Antyodaya plan.	8. Minimum needs programme (MNP)	13. Jawahar Rojgar Yojna (JRY)
4. Small Farmers Development Programme (SFDP)	9. Integrated Rural Development Programme (IRDP)	14. Swarna Jayanti Gram Swarozgar Yojna.
5. Drought Area Development Programme (DADP)	10. National Rural Employment Programme (NREP)	15. National Social Assistance Programme (NSAP)

16. Rural Housing Programme.	19. Nehru Rozgar Yojna (NRY)	21. Prime Minister's Integrated Urban Poverty Eradication Programme (PMIUPE)
17. Indira Awas Yojana.	20. Self-Employment Programme for the Urban Poor, (SEPUP)	
18. Pradhan Mantri Rojgar Yojna.		

4.5 Community Development Programmes and Employment Guarantees Schemes

Pradhan Mantri Rojgar Protsahan Yojana (PMRPY)

Pradhan Mantri Rojgar Protsahan Yojana (PMRPY) was launched with effect from 1.4.2016 to incentivise employers for creation of new employment. The beneficiaries registered upto 31st March, 2019 will continue to receive the benefit for 3 years from the date of registration under the scheme i.e. upto 31st March, 2022.

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

MGNREGA is to provide at least 100 days of guaranteed wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work.

Pradhan Mantri Garib kalyan Rojgar Abhiyaan (PMGKRA)

The Garib Kalyan Rojgar Abhiyaan (GKRA) is launched by Hon'ble Prime Minister on 20th June, 2020 with a mission to address the issues of returnee migrant workers and similarly affected rural population by Covid-19 pandemic through a multi-pronged strategy of providing immediate employment & livelihood opportunities to the distressed, to saturate the villages with public infrastructure and creation of livelihood assets to boost the income generation activities and enhance long term livelihood opportunities by giving focus on 25 works in 116 selected districts across 6 States with a resource envelope of Rs. 50,000 crores.

Aajeevika - National Rural Livelihoods Mission (NRLM)

Aajeevika - National Rural Livelihoods Mission (NRLM) was launched by the Ministry of Rural Development (MoRD), Government of India in June 2011. Aided in part through investment support by the World Bank, the Mission aims at creating efficient and effective institutional platforms of the rural poor, enabling them to increase household income through sustainable livelihood enhancements and improved access to financial services.

Rural Self Employment and Training Institutes (RSETIs)

RSETIs are Rural Self Employment Training Institutes, an initiative of Ministry of Rural Development (MoRD) to have dedicated infrastructure in each district of the country to impart training and skill upgradation of rural youth geared towards entrepreneurship development. RSETIs are managed by banks with active co-operation from the Government of India and State Governments.

UNIT-V

Rural Empowerment Programme

5.1 Bharat Nirman

It is a time-bound plan for rural infrastructure by the Government of India in partnership with State Governments and Panchayat Raj Institutions. It was launched in 2005. It has 6 components:

Water: Every habitation to have a safe source of drinking water: 55,067 uncovered habitations to be covered by 2009. In addition, all habitations which have slipped back from full coverage to partial coverage due to failure of source and habitations which have water quality problems to be addressed.

Roads: Every habitation over 1000 population and above (500 in hilly and tribal areas) to be provided an all-weather road: remaining 66,802 habitations to be covered by 2009.

Irrigation: 10 million hectares (100 lakhs) of additional irrigation capacity to be created by 2009 60 lakh houses to be constructed for the rural poor by 2009.

Telephone Connectivity: Every village to be connected by telephone: remaining 66,822 villages to be covered by November 2007.

Electricity: Every village to be provided electricity: remaining 1,25,000 villages to be covered by 2009 as well as connect 2.3 crore households.

Housing: To construct 60 lakh additional houses for poor under Indira Awas Yojana or Pradhan Mandhri Awas Yojana.

5.2 Provision of Urban Amenities in Rural Areas

Former president Dr A.P.J Abdul Kalam coined the PURA (Provision of Urban Amenities in Rural Areas) model in 2003 on Republic Day. The Ministry of Rural Development (MoRD) implemented the PURA scheme in seven clusters on a pilot basis for three years (2004- 05 to 2006-07). During the eleventh five-year plan, the MoRD relaunched the PURA scheme as a Central Government scheme with support from the Asian Development Bank and the Department of Economic Affairs. It implemented the PURA scheme under a

Public Private Partnership (PPP) model between the local executive bodies like the gram panchayats and private sector partners.

Objective of PURA Scheme

The scheme's primary objective is to provide urban amenities and livelihood opportunities in rural areas and bridge the rural and urban gap. It envisages an accelerated and holistic development of the rural regions around a potential growth centre in a gram panchayat through a PPP model for improving the quality of life in rural areas.

5.2.1 Features of the PURA Scheme

- ❖ The scheme's objectives are achieved under a PPP framework between gram panchayats and private sector partners with the support of the state governments.
- ❖ The central sector scheme of PURA will source the core funding and be complemented by additional support through the convergences of various Central Government schemes.
- ❖ The private sector brings on board its share of investment apart from operational expertise.
- ❖ The private sector implements and manages the scheme on considerations of economic viability but is designed to be fully aligned with the overall objective of rural development.

Amenities Provided Under PURA Scheme Following are the amenities provided under the MoRD schemes:

- ✓ Water and sewerage.
- ✓ Construction and maintenance of village streets
- ✓ Drainage
- ✓ Solid waste management

Following are the amenities provided under the Non-MoRD schemes:

- Village street lighting.

- Telecom.
- Electricity.

Following are the amenities provided under the add-on projects (Revenue earning and peoplecentric projects):

- Village-linked tourism.
- Integrated rural hub and rural market.
- Agri – common services centre, warehousing, etc.
- Any other rural-economy-based project.

5.3 Agencies for Rural Programme

District Rural Development Agency (DRDA)

The District Rural Development Agency (DRDA) has traditionally been the principal organ at the District level to oversee the implementation of different anti-poverty programmes. The primary objective of DRDA Schemes is to professionalize the DRDAs so that they are able to effectively manage the anti-poverty programmes of the Ministry of Rural Development and interact effectively with other agencies.

Objectives

The main objectives of the agency are –

- ❖ To identify the families living below the poverty line through survey conducted by the govt. servants working at field level.
- ❖ To give financial assistance to these B.P.L.families through banks and govt. sponsored schemes.
- ❖ To draw up model plans through technical departments, for executing the labour generating schemes such as Employment Assurance Scheme.

Cooperative institutions

major types of cooperatives in rural areas:

- The Primary agricultural credit or service societies
- Agricultural non-credit societies
- Co-operative farming societies
- Other agro-based cooperative societies- Dairy, Fishery, Horticulture, Handloom, Sericulture and ones promoting local handicrafts and artisans.

References:

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2. Dutt and Sundaram- Indian Economy, S.Chand Publications, New Delhi,