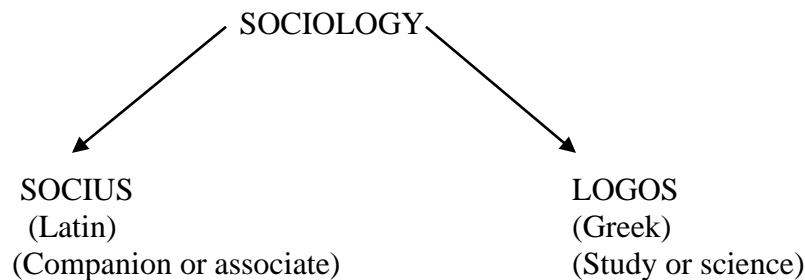


Sociology and Rural Sociology

Sociology

Sociology is the science of human relationships. *Auguste Comte (1798-1857), a French Philosopher* is traditionally considered as the father of sociology. Comte, who invented the term ‘Sociology’, was the first man to distinguish the subject matter of sociology from all the other sciences. Comte introduced the word ‘Sociology’ for the first time in his famous book “Positive Philosophy” at about 1839. The term sociology is derived from Latin word ‘socius’ meaning companion or associate and the other is Greek word ‘logos’ meaning study or science.



Thus, the etymological meaning of sociology is the science of society. He defined sociology as the science of social phenomena “subject to natural and invariable laws, the discovery of which is the object of investigation”.

Definition of Sociology

1. Sociology is the science of society or social phenomena. **L. F. Ward**
2. Sociology aims at the study of the conditions and consequences of human interactions and interrelations. **M. Ginsberg**
3. Sociology describes the behaviour of man in groups. **Yong**
4. Sociology is the study of the nature of social relationship. **MacIver**
5. Sociology is the science of collective representation. **E. Durkheim**
6. Sociology is the science of collective behaviours. **Park & berges**
7. Sociology is the study of interactions of human brain. **Hobhouse**
8. Sociology is a systematic description and explanation of society viewed as a whole. **Giddings**

Thus, it may be defined as the study of the ways in which social experiences function in developing, functioning, maturing and repressing human beings through inter-personal stimulation. Since these ways of making and re-making the members are social processes, sociology may be said to be a study of social processes. Sociologists utilize scientific methods in their research studies to develop a body of accurate and reliable knowledge about human relationships. The content or subject matter of sociology is not literary writing as is assumed by many people. It is a detailed and systematic study of society. There are animal societies also but sociology studies only human societies. Human beings have progressed to a large extent and therefore, sociology is used for the systematic study of the human being in group relations. Sociology is concerned with people and without people or human beings there cannot be sociology, it cannot be in isolation as its main emphasis is on their relationship with other persons. They stay in groups and therefore the sociologists study people organized in families, friendship groups, temples, schools, industrial plants and in other organizations. The fundamental process in any society is interaction or social interaction. In short, sociology studies the social behavior of people, their different social groups and the intra and interrelationship of these social groups. Sociology is the web or tissue of human interaction and interrelationship.

Rural Sociology

Rural sociology is the systematic study of people living in rural areas and who are living by or are immediately dependent on agriculture. It is made up of two terms rural and sociology that is science of rural society. It is the study of the sociology of life in the rural environment, which systematically studies the rural communities to discover their conditions and tendencies and formulate the principles of progress as the term implies. It is limited to the study of various aspects of rural society.

Definition of Rural Sociology

1. Rural sociology is the body of facts and principles of the systematized knowledge, which has developed the application of scientific method in the study of human relationships in rural environment and people, engaged directly or indirectly in agriculture occupation. An extension worker is a change agent. Transfer or communication of innovations is the main job of these changes agents. But for introducing improved farm practices, an understanding of the farmer, his social and cultural environment within which he operates, his home, his village and the local region is necessary. **Smith**

2. Sociology of rural life is a study of rural population, rural social organization and the social processes operative in rural society. Probably, it is more logical, however, to refer to it as systematized knowledge of rural social relationships. **F. Stuart**
3. The sociology of rural life is a study of rural population and the social processes operative in rural society. **F.S. Chapin**
4. Rural Sociology is the sociology of rural life in the rural environment. **Sanderson**
5. Rural sociology is the science of rural society. The laws of the structure and development of rural society in general can aid us in discovering the special laws governing a particular society. **A. R. Desai**
6. Rural sociology is the study of human relationship in rural environment. **Burtand**

Hence, rural sociology is expected to develop greater understanding of the behaviour of rural people and rural society. In addition to providing scientific knowledge about rural society and laws governing its development, it should serve as a guide and suggest practical programmes of reform or construction of that society in the economic, social and cultural fields.

Scope of Rural Sociology

The scope of rural sociology is very wide as it studies the relationships and interactions in the village society. Rural sociology works in three areas:

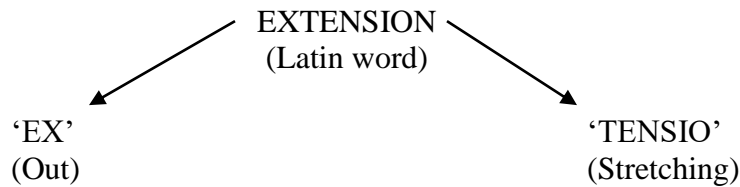
- a) Accumulation and use of sociological knowledge and use it for solving the present problems of rural society.
- b) Direct its efforts in obtaining sociological knowledge by empirical research procedures.
- c) Channel its efforts by keeping faith in the methods used in this discipline in solving the problems of rural society.

Rural sociology has become an important aspect of the science of sociology and has made a unique contribution on its own. Most of the people of the world are rural and most of them live in the so-called, under developed areas. These people are reproducing at a faster rate than those in the more advanced areas and if these trends continue, will finally dominate the world.

Significance of Rural Sociology in Agricultural extension

The word Extension is derived from the Latin roots 'Ex' meaning 'out' and 'tensio' meaning 'stretching'. Thus the term extension education means the type of education, which is stretched out into the villages and fields beyond the limits of schools and colleges to which formal type of education is normally confined. In other words the word 'extension' used in this context signifies

an *OUT OF SCHOOL* system of education. The three links in the chain of rural development are research, teaching and extension.



Agricultural extension is defined as a special branch of extension education which deals with the transfer of agricultural technologies from lab to land. It is concerned with agricultural education aimed at assisting people to bring about continuous improvement in their physical and social well being through individual and cooperative efforts. It makes available to the villagers, scientific information and also guidance in the application of such information in solving their problems. Villagers are educated to change their attitudes so as to raise their standard of living.

Interrelationship between Rural Sociology and Extension

Rural Sociology	Extension
It is a scientific study of the laws of the structure and development of rural society.	It is non-formal education for the rural people with a view to develop rural society on desirable lines.
It studies the attitudes and behaviour of rural people.	It seeks to modify or change for the better, the attitudes and behaviour of village people.
It studies the needs and interests of rural society.	It helps rural people to discover their needs and problems, and builds educational programmes based on these needs and wants.
It analyses rural social relationships, or group organizations and leadership in rural areas, the social processes like cooperation, association competition etc. among village people.	It fosters and utilizes village organization and leadership and favorable social processes, to achieve its objective of rural development.
It studies social situations and assembles social facts of rural society.	It makes use of such social data as a basis for building up its extension programmes for rural areas.
It investigates the social, cultural, political and religious problems of rural society.	It also studies these problems with reference to their impact on extension work in villages.

Social Ecology

Social ecology is not a term in common use. It has been chosen to express an integrating and contextual focus. The use of the word *social* underlies the belief that it is people who make meaning. Meaning is not out there in nature, or in the events themselves that we participate in. Meaning is understood to be a social construction (cf. Berger & Luckman, 1966). *Ecology*, the second word in our title, conveys the community of living and non-living things, and all the intricacies of their coherence and change. Social ecology is then a way of integrating the practice of science, the use of technology, and the expression of human values. It draws from any 'body of knowledge' in its pursuit of designing activities that result in self-respecting, sensitive and social behaviours which show an awareness of social and ecological responsibilities. The context for action and the subsequent critical reflection on the consequences of those actions need to involve the actor's relationship with the physical environment, the cultural setting and its history, organizational aspects, and an understanding of the constraints and possibilities set by an individual's cognitive processes.

The term "social ecology" was given by Murray Bookchin (1964) in his book "Ecology & Revolutionary Thought". It is the study of the reciprocal relationship between the human society and the ecological infrastructure. Social Ecology is a critical social theory founded by American anarchist and libertarian socialist author Murray Bookchin. Conceptualized as a critique of current social, political, and anti-ecological trends, it espouses a reconstructive, ecological, communitarian, and ethical approach to society. This version advocates a reconstructive and transformative outlook on social and environmental issues, and promotes a directly democratic, confederal politics. As a body of ideas, social ecology envisions a moral economy that moves beyond scarcity and hierarchy, toward a world that re-harmonizes human communities with the natural world, while celebrating diversity, creativity and freedom. Bookchin suggests that the roots of current ecological and social problems can be traced to hierarchical modes of social organization. Social ecologists claim that the systemic issue of hierarchy cannot be resisted by individual actions alone such as ethical consumerism but must be addressed by more nuanced ethical thinking and collective activity grounded in radically

democratic ideals. The complexity of relationships between people and nature is emphasized, along with the importance of establishing more mutualistic social structures that take account of this.

History/Genesis of Social Ecology

Over the past quarter-century, a broad social and ecological philosophy has emerged under the name “social ecology.” While this philosophy has recently been most closely associated with the thought of social theorist Murray Bookchin, it continues a long tradition of ecological communitarian thought going back well into the nineteenth century. The lineage of social ecology is often thought to originate in the mutualistic, communitarian ideas of the anarchist geographer Kropotkin (1842–1921).

One can certainly not deny that despite Kropotkin’s positivistic tendencies and his problematical conception of nature, he has an important relationship to social ecology. His ideas concerning mutual aid, political and economic decentralization, human-scaled production, communitarian values, and the history of democracy have all made important contributions to the tradition. However, it is rooted much more deeply in the thought of another great anarchist thinker, the French geographer Elisée Reclus (1830–1905). During the latter half of the last century, and into the beginning of the present one, Reclus developed a far-ranging “social geography” that laid the foundations of a social ecology, as it explored the history of the interaction between human society and the natural world, starting with the emergence of homo sapiens and extending to Reclus’ own era of urbanization, technological development, political and economic globalization, and embryonic international cooperation.

Reclus envisioned humanity achieving a free, communitarian society in harmony with the natural world. His extensive historical studies trace the long record of experiments in cooperation, direct democracy and human freedom, from the ancient Greek polis, through Icelandic democracy, medieval free cities and independent Swiss cantons, to modern movements for social transformation and human emancipation. At the same time, he depicts the rise and development of the modern centralized state, concentrated capital and authoritarian ideologies. His sweeping historical account includes an extensive critique of both capitalism and authoritarian socialism from an egalitarian and anti-authoritarian perspective, and an analysis of the destructive ecological effects of modern technology and industry allied with the power of

capital and the state. It is notable that a century ago Reclus' social theory attempted to reconcile a concern for justice in human society with compassionate treatment of other species and respect for the whole of life on earth — a philosophical problematic that has only recently reemerged in ecophilosophy and environmental ethics.

Many of the themes in Reclus' work were developed further by the Scottish botanist and social thinker Patrick Geddes (1854–1932), who described his work as “biosophy,” the philosophical study of the biosphere. Geddes focuses on the need to create decentralized communities in harmony with surrounding cultural and ecological regions and proposes the development of new technologies (neotechnics) that would foster humane, ecologically-balanced communities. He envisions an organically developing cooperative society, based on the practice of mutual aid at the most basic social levels and spreading throughout society as these small communities voluntarily federate into larger associations. Geddes orients his work around the concepts of “Place, Work, and Folk,” envisioning a process of incorporating the particularities of the natural region, humane, skillful and creative modes of production, and organically developing local culture into his “Eutopia” or good community. Geddes calls his approach a “sociography,” or synthesis of sociological and geographical studies. He applies this approach in his idea of the detailed regional survey as a means of achieving community planning that is rooted in natural and cultural realities and grows out of them organically. He thus makes an important contribution to developing the empirical and bioregional side of the social ecological tradition.

Many of Geddes' insights were later integrated into the expansive vision of society, nature, and technology of his student, the American historian and social theorist Lewis Mumford (1895–1992), who is one of the most pivotal figures in the development of the social ecological tradition. Ramachandra Guha is certainly right when he states that “the range and richness of Mumford's thought mark him as the pioneer American social ecologist ...” Most of the fundamental concepts to which Bookchin later attached to the term “social ecology” were borrowed from Mumford's much earlier ecological regionalism. The philosophical basis for Mumford's social analysis is what he calls an “organic” view of reality, a holistic and developmental approach he explicitly identifies as an “ecological” one. In accord with this outlook, he sees the evolution of human society as a continuation of a cosmic process of organic

growth, emergence, and development. Yet he also sees human history as the scene of a counter-movement within society and nature, a growing process of mechanization.

Much like Reclus before him, Mumford depicts history as a great struggle between freedom and oppression. In Mumford's interpretation of this drama, we find on one side the forces of mechanization, power, domination, and division, and on the other, the impulse toward organism, creativity, love, and unification. The tragedy of history is the increasing ascendancy of mechanism, and the progressive destruction of our organic ties to nature and to one another. The dominant moment of history, he says, has been "one long retreat from the vitalities and creativities of a self-sustaining environment and a stimulating and balanced communal life."

Mumford describes the first decisive step in this process as the creation in the ancient world of the Megamachine, in the form of regimented, mechanized massing of human labor-power under hierarchical control to build the pyramids as an expression of despotic power. While the Megamachine in this primal barbaric form has persisted and evolved over history, it reemerges in the modern world in a much more complex, technological manifestation, with vastly increased power, diverse political, economic and cultural expressions, and apparent imperviousness to human control or even comprehension. Mumford sees the results of this historical movement as the emergence of a new totalitarian order founded on technological domination, economic rationality and profit, and fueled by a culture of obsessive consumption. The results are a loss of authentic selfhood, a dissolution of organic community, and a disordered, destructive relationship to the natural world.

Mumford's vision of the process of reversing these historical tendencies is a social ecological one. He foresees a process of social decentralization in which democratic institutions are recreated at local and regional levels as part of organic but diverse communities. "Real human communities," he contends, are those that combine unity with diversity and "preserve social as well as visual variety." Following Geddes and prefiguring bioregionalism, Mumford believes that the local community must be rooted in the natural and cultural realities of the region. "Strong regional centers of culture" are the basis for "an active and securely grounded local life." Regionalism is not only an ecological concept, but also a political and cultural one, and is the crucial link between the most particular and local dimensions and the most universal and global ones. "The rebuilding of regional cultures" Mumford says, "will give depth and maturity to the world culture that has likewise long been in the process of formation." Mumford contends that an

epochal process of personal and social transformation is necessary if the course of history is to be redirected toward a humane, ecological, life-affirming future. Much in the spirit of communitarian philosopher Martin Buber (1878–1965), he foresees a humanized, cooperative world culture emerging out of regenerated regional cultures that arise in turn out of a regenerated human spirit.

While he begins with a general perspective on society and nature that is close to Mumford's, Bookchin makes a number of crucial contributions to the further development of a social ecology. Most significantly, he broadens the theoretical basis of the communitarian, organicist, and regionalist tradition developed by Reclus, Geddes and Mumford by making dialectical analysis a central focus. He thereby opens the way for more critical and theoretically sophisticated discussions of concepts like holism, unity-in-diversity, development, and relatedness. He also develops Mumford's defense of an organic world view into a more explicitly ecological theoretical perspective. Mumford's analysis of the historical transformation of organic society into the Megamachine is expanded in Bookchin's somewhat broader account of the emergence of diverse forms of domination and of the rise of hierarchical society. He devotes more detailed attention to the interaction of the state, economic classes, patriarchy, gerontocracy, and other factors in the evolution of domination. Of particular importance is Bookchin's emphasis on the central role of the developing global capitalist economy in ecological crisis, which corrects Mumford's tendency to overemphasize the technical at the expense of the economic. He also adds some additional chapters to the "history of freedom," especially in his discussions of the mutualistic, liberatory and ecological dimensions of tribal societies, millenarian religious movements and utopian experiments. Finally, while his predecessors presented a rather general vision of a politics that was anti-authoritarian, democratic, decentralist and ecological, Bookchin gives a concrete political direction to the discussion of such a politics in his proposals for libertarian municipalism and confederalism.

Some of these contributions have come at a considerable cost. Although Bookchin develops and expands the tradition of social ecology in important ways, he has at the same time also narrowed it through dogmatic and non-dialectical attempts at philosophical system-building, through an increasingly sectarian politics, and through intemperate and divisive attacks on "competing" ecophilosophies and on diverse expressions of his own tradition. To the extent that social ecology has been identified with Bookchinist sectarianism, its potential as an

ecophilosophy has not been widely appreciated. Fortunately, the fundamental issues posed by a social ecology will not fade away in the smoke of ephemeral (and eminently forgettable) partisan skirmishes. Inevitably, a broad, vibrant, and inherently self-critical tradition like social ecology will resist attempts to restrict it in a manner that contradicts its most fundamental values of holism, unity-in-diversity, organic growth and dialectical self-transcendence. Thus, despite its temporary setbacks, the project of a social ecology continues to develop as a general theoretical orientation, as an approach to the analysis of specific problems, and as a guide to practical efforts at social and ecological regeneration.

- There has always been a tussle between development and the environment.
- It was presumed that industrialisation was the major cause for the ecological degradation.

Objectives of Social Ecology

- Conservation of biodiversity.
- Sustainable development.
- Reducing the dependency of the society on the ecosystem.
- Creating awareness about the environment.

Challenges in Social Ecology

- 1. Industrialization:** The industrial development provides better job opportunities to the people and improves the overall infrastructure of the region. On the contrary of these positive impacts, there are some negative impacts also. Industrialisation affects the traditional local economic pattern, creates health hazards by polluting the environment and alters the demographic orientation by inviting skilled labour from outside followed by income inequality among the people. Related to this, there is mining activity which may generate employment but on the other hand causes instability of the ground surface and causes pollution (contamination of soil, groundwater and surface water by chemicals from mining processes) (**Behera, 2015**).

Industrialization carries with it the seeds of environmental damage, assisted and abetted by both needs and greed of man. Activities such as manufacturing, processing, transportation and consumption not only deplete the stock of natural resources but also add stress to the environmental system by accumulating the stock of wastes.

Industrialisation is on the increase, which of course is necessary for the progress of human civilization but so is the environmental pollution due to emissions and waste generated from these industries. The industrial pollution due to its nature has the potential to cause irreversible reactions in the environment and hence is posing a major threat to our very existence. Since the carrying capacity of the environment is not unlimited and some areas or ecosystems are more susceptible to adverse environmental impacts than others, unplanned and haphazard industrialisation has substantially increased the risk to the environment.

- 2. Development:** The rapid growing population and economic development is leading to a number of environmental issues in India because of the uncontrolled growth of urbanization and industrialization, expansion and massive intensification of agriculture, and the destruction of forests. Major environmental issues are forest and agricultural degradation of land, resource depletion (water, mineral, forest, sand, rocks etc.), environmental degradation, public health, loss of biodiversity, loss of resilience in ecosystems, livelihood security for the poor. It is estimated that the country's population will increase to about 1.26 billion by the year 2016. The projected population indicates that India will be the first most populous country in the world and China will be ranking second in the year 2050. India having 18% of the world's population on 2.4% of world's total area has greatly increased the pressure on its natural resources. Water shortages, soil exhaustion and erosion, deforestation, air and water pollution afflicts many areas. India's water supply and sanitation issues are related to many environmental issues. It changes it. Usually to the detriment of the original inhabitants, and often to the long term detriment of the future inhabitants, all for the short term gain of the developers.
- 3. Improving lifestyle:** Lifestyle refers simply to the defining characteristics or qualities of a particular way of life, be it of an individual, a nation, or an entire culture. Modern Lifestyle has contributed to all kinds of pollution, wastage of resources, climate change and putting various species in endangered list. Modern civilization and culture have been already exercising its tremendous potential to alter our environment, too frequently in adverse ways, on regional as well as even on global scales. For the continued development and even survival of civilization man must make every possible effort to understand and the worth of better use his environment. Since the dawn, population

of civilization man has been interfering with the nature, hence our environment is under consent threat. It is widely acknowledged that modern lifestyles and developmental models exceed earth's ability to support human beings and other organisms in terms of providing clean and adequate natural resources. An important concept related to modern lifestyles and the resulting environmental degradation is that of the 'ecological footprint'. Ecological footprint is a measure of people's demand on natural ecosystems. It is a measure of the area of biologically productive-land and water an individual population or activity needs to produce the resources it consumes and absorb the waste it generates using current technology and resource management practices.

The primitive man gradually discovered fire, invented tools and used them to fulfill his everlasting favor of development which resulted in bringing about drastic changes in the environment. Early man was nomadic and after exhausting the available resources, he shifted in groups to other places in groups limited. Due to population, its impact on the surrounding was less harmful. Then advent of agriculture and e lu ally rapid development of industrial sector led to the growth of population which increased demand for food and basic amenities.

Particularly, the 19th and 20th centuries have witnessed number of vital changes and growth in the process of development. It ultimately affected the quality of environment adversely process. In the name of development, forests denudated, lakes and rivers have become loaded with poisonous effluents and hazardous chemicals and air is degraded with noxious and poisonous gases. It has been proved beyond any doubt that pollution especially by sulphur dioxide and suspended matter particulates is responsible for numerous aspiratory diseases such as bronchitis, constrictive ventilator disease and asthma etc. Likewise the number of patients suffering from lung cancer has risen due to the discharge of hydrocarbons from coals combustion. Petrol-chemicals and automobile exhausts. Chemical in petrol such as lead, barium, manganese discharged by motor vehicles adversely affect the health of people. Further a huge amount of consumption of fuels like wood, gas, coal and oil increase the amount of carbon dioxide injection in the air.

The nature cannot assimilate all through its regenerative cycle. The excess of carbon dioxide in the atmosphere results into rise in the temperature of the earth. It is

worth mentioning here that most of the pollutants are discharged beyond the assimilative capacity of the nature.

Environment quality has deteriorated due to uncontrolled mechanization, overuse of natural resources deforestation excessive use of pesticides and fertilizers in farms. Though greener evolution has unshared era of food self sufficiency but has resulted in excessive use of harmful pesticides, insecticides and other chemicals on crops too. The danger of contamination looms large on human life and food chain. This generally rises from the extensive use of chemicals. It is being realized by the humanity at this juncture that the life on this earth stands at the crossroads in choosing the alternative out of environment and development of various kinds.

- 4. Over-population:** Overpopulation is an undesirable condition where the number of existing human population exceeds the carrying capacity of Earth. Overpopulation is caused by number of factors. Reduced mortality rate, better medical facilities, depletion of precious resources are few of the causes which results in overpopulation. It is possible for a sparsely populated area to become densely populated if it is not able to sustain life. Growing advances in technology with each coming year has affected humanity in many ways. One of these has been the ability to save lives and create better medical treatment for all. A direct result of this has been increased lifespan and the growth of the population. In the past fifty or so years, the growth of population has boomed and has turned into overpopulation. In the history of our species, the birth and death rate have always been able to balance each and maintain a population growth rate that is sustainable. Developing nations face the problem of overpopulation more than developed countries, but it affects most of the Earth as of now. The effects of overpopulation are quite severe. The first of these is the depletion of resources. The Earth can only produce a limited amount of water and food, which is falling short of the current needs. Most of the environmental damage being seen in the last fifty odd years is because of the growing number of people on the planet. They are cutting down forests, hunting wildlife in a reckless manner, causing pollution and creating a host of problems. Those engaged in talking about overpopulation have noticed that acts of violence and aggression outside of a war zone have increased tremendously while competing for resources.

Overpopulation in developing countries puts a major strain on the resources it should be utilizing for development. Conflicts over water are becoming a source of tension between countries, which could result in wars. It causes more diseases to spread and makes them harder to control. Starvation is a huge issue facing the world and the mortality rate for children is being fuelled by it. Poverty is the biggest hallmark we see when talking about overpopulation. All of this will only become worse if solutions are not sought out for the factors affecting our population. We can no longer prevent it, but there are ways to control it. When a country becomes overpopulated, it gives rise to unemployment as there are fewer jobs to support a large number of people. Rise in unemployment gives rise to crime as people will steal various items to feed their family and provide them basic amenities of life. As the difference between demand and supply continues to expand due to overpopulation, it raises the prices of various commodities including food, shelter and healthcare. This means that people have to pay more to survive and feed their families.

Social Ecology in Indian Context

1. **Chipko Movement:** Chipko Movement, started in 1970's, was a non violent movement aimed at protection and conservation of trees and forests from being destroyed. The name of the Chipko movement originated from the word 'embrace' as the villagers used to hug the trees and protect them from wood cutters from cutting them. Chipko movement was based on the Gandhian philosophy of peaceful resistance to achieve the goals. It was the strong uprising against those people, who were destroying the natural resources of the forests and disturbing the whole ecological balance. The Chipko Movement gained momentum under Sunderlal Bahuguna, an eco activist, who spent his whole life persuading and educating the villagers, to protest against the destruction of the forests and the Himalayan mountains by the government. It was he, who made appeal to the Prime Minister of India Mrs Indira Gandhi to ban the cutting of trees. He shouted the slogan 'ecology is the permanent economy'. Another main leader of the movement was Mr. Chandi Prasad Bhatt, who advocated the development of small scale local industries, which were based on the sustainable use of the forests resources for the local benefits. One of the major achievements of the Chipko movement was the ban on cutting the trees for the 15 years in the forests of Uttar Pradesh in 1980. Later on the ban was imposed in Himachal Pradesh, Karnataka, Rajasthan, Bihar, Western Ghats and

Vindhayas. All this was done on the order of the Indian Prime Minister after the strong protests by the activists throughout the country.

2. **Bhopal Gas Tragedy:** Bhopal disaster that took place in 1984 in India presents one of the most tragic cases of environmental pollution ever. There is absolutely no doubt that pollution has grown into a serious environmental issue as we know it because of its undeniably adverse impact on our whole planet. Environmental pollution affects not only people, animals and vegetation but also the wider environment such as mountains, rocks, lakes, rivers and so on. In the days following the gas leak, the leaves on the trees near the factory yellowed and fell off the branches. Around 2,000 animals, mostly livestock such as goats and buffalo, were killed by the gas leak. The Indian government prohibited fishing in the area for fear that the rivers and lakes were polluted. The food supply in Bhopal became scarce due to suppliers' fears of food safety. Nearby crop growth was also affected by the leak. According to authorities, 36 wards in the region were considered to be "gas affected." These 36 wards contained a population of some 520,000 people. The initial effects of exposure were coughing, severe eye irritation and a feeling of suffocation, burning in the respiratory tract, blepharospasm, breathlessness, stomach pains and vomiting. People awakened by these symptoms fled away from the plant. Those who ran inhaled more than those who had a vehicle to ride. Owing to their height, children and other people of shorter stature inhaled higher concentrations.
3. **Sardar Sarovar Dam:** The Sardar Sarovar Dam is located on river Narmada in State of Gujarat. It is 170 Km (106 miles) upstream from where the river flows into the Gulf of Khambhat in the Arabian Sea. The purpose of construction of the dam was to make optimum use of Narmada waters to solve the problems of irrigation in certain parts of the Country. Today the Sardar Sarovar Project is one of the largest water resources projects of India covering four major States - Maharashtra, Madhya Pradesh, Gujarat and Rajasthan. With 1133 cumecs (40000 cusecs) capacity at the head regulator, and 532 km. length, the Narmada Main Canal would be the largest irrigation canal in the World. The dam devastated human lives and biodiversity by inundating thousands of acres of forests and agricultural land. The Construction of the Narmada dam was opposed by Narmada Bachao Andolan (NBA) an anti-dam organization.

4. **Jatadhari (Paradip):** POSCO India Private Limited, Bhubaneswar has proposed to setup a coal based integrated steel plant south of Paradeep and therefore require a minor port to handle their cargo. This minor port requires a water front at Jatadharmohan creek near Paradeep. The steel plant and port have been set up after the signing of a memorandum of understanding (MoU) between POSCO, Korea and the State Government of Orissa in June 2005. The captive minor port is located at the mouth of the Jatadharmohan creek, at Paradeep port. The proposed site is located mainly in Dhinkia, Gobindpur, Nuagana and Trilochanpur villages in Jagatsinghpur district of Orissa. The basic objective of the project is to: facilitate the transport of raw material and finished product (steel) for the upcoming steel plant of the company. The Jatadhari River and the Mohana are crucial for rain water drainage of Jagatsinghpur district. Alteration in the site topography would alter the flow pattern which would in turn cause floods. The flooding of the region and other associated impacts of such topographical change is a serious cause of concern which has been neglected. With Paradip fast emerging as a major petro-chemical hub, the state government has begun an environment impact assessment of areas lying close to the industrial zone in a bid to attempt to sustain ambient surroundings. The government has laid emphasis on environment control measures as Paradip is fast striding towards massive industrialisation. With the centre bracketing Paradip under mega petroleum, chemicals and petro-chemical investment region (PCPIR), the importance of the port town has gone up manifold with investment to the tune of Rs 2.74 lakh. Anybody travelling to Paradip could easily feel that he has stepped into a pollution zone. Unarguably, Paradip would figure as country's most polluted port city. The pungent smell is everywhere. Spurt in respiratory ailments has become the order of the day in Port Township. Dust particles coming out of raw materials transportation and port's cargo handling often envelop the skyline. Ore transportation has become a major pollutant agent in the port township area.

It has been observed that 'contemporary forms of environmental degradation present one of the most, if not the most, complex and catastrophic dilemmas of modernity (Goldblatt, 1996). There is a general agreement that the economic expansion of a century and half has had alarming consequences for the global environment. Depletion of the ozone layer, air pollution, loss of forests and bio-diversity, extinction of plant and animal species, loss of marine life, soil and water pollution have occurred at an alarming rate. Especially in post-war years, release of toxic

matters into the environment, world-wide expansion of nuclear energy, acid rains, new chemical pesticides, non-biodegradable plastics and other harmful chemicals have come to pose a threat to life itself. In the recent decades, however, we have witnessed the growth of environmental movements/conflicts, of environmental politics, which may play an important role in checking the deterioration of our environment at the local and global levels.

Rural Society

Society is defined as a group of people in more or less permanent association who are organized for their collective activities and who feel that they belong together.

It is a group of people who have lived together long enough, sharing common values and general interests, to be considered as a social unit. Rural societies are found in the rural areas like villages and urban societies in the urban areas like towns, cities, industrial and commercial centers.

Definition of Society

1. Society is the complex of organized associations and institutions within the community. **D. H. Cole**
2. Society is the union itself, the organization, the sum of formal relations in which associating individuals are bound together. **Giddings**
3. Society is the complex of groups. **J. B. Chitamber**
4. Just as life is not a thing but a process of living. So society is not a thing but a process of associating. **Reuter**
5. A web of social relationship is called society. **MacIver & Page**

Characteristics of Rural Society

Rural people are different from those living in urban areas. These differences are mainly due to the environment and its consequent impact on the personalities and the lives of the people. Here we are mainly interested in the characteristics of rural people. These characteristics are studied in relation to the urban people. These characteristics are most easily distinguished by comparing them with those of urban life. Some such rural urban differences are discussed below:

- i. **General Environment and Orientation to Nature:** The rural people are closely associated with nature as they live in that environment. They have to face the vagaries of nature like rains, heat, drought etc. It has direct effect on their lives. Due to this they build up their beliefs and convictions about nature. These are different from that of the urban people. Rural people because of their geographic location in rural areas are closely associated with nature. They have constantly to content with natural elements-rain, heat,

frost, snow and drought over which they have no control. For farmers these elements are vital.

- ii. **Occupation:** Agriculture is main economic activity of rural people. It is based predominantly on Agriculture. Agriculture is the main source of livelihood. The land is distributed between certain families. The distribution of land is between a big land owner and rest of the community, possession of which (land) has prestige value.

Most of the rural people depend on agriculture for their livelihoods. The non-agricultural jobs are few and are not of much economic importance. In urban areas most of the jobs are non agricultural and more specialized. In a factory, the jobs of the foreman, manager and executive are different. A farmer on the other hand must be competent in a variety of skills-soil improvement, repairs to machine, skills in controlling pest and diseases, skills as animal husbandry-man and skills of agricultural economics as business manager as he handles the marketing, distribution, overall planning and operation of his farming enterprise. Farmers thus have to acquire a wide range of specialization as compared to the urban workers.

- iii. **Size of Community:** The rural communities are always smaller than the urban communities. The land to man ratio is higher in rural areas as most of the rural people depend on agriculture. The density of population per square mile is low as compared to urban areas.

- iv. **Homogeneity and Heterogeneity:** Being a part of a small community, members of a village share common interests and major occupations through frequent face to face contacts. A city, on the other hand, has a heterogeneous population, comprised of persons from a wide variety of sub-cultures-many interests, cultures, occupations, patterns of behaviour and even languages make up the widely heterogeneous city population.

Homogeneity is the similarity of social and psychological characteristics in the population such as languages, beliefs, mores and patterns of behaviour. In this sense the rural population is more homogeneous. The urban population is more heterogeneous as it comprises persons from a wide variety of sub-cultures, interests, occupations and patterns of behaviour including language.

- v. **Social Differentiation:** The heterogeneity of city's population by necessity indicates a high degree of social differentiation. City services, its utilities, and educational,

recreational, religious, business and residential facilities are therefore purposefully organized with division of labour and mutual interdependence.

There are many urban services namely, educational, recreational, religious, business and residential. These are internationally organized to serve specific purposes. These services have made the division of labour and differentiated the urban society as per the objective of the services. In contrast, rural society is more homogeneous in nature, relatively independent and with a low degree of social differentiation.

vi. Social Stratification: Society is divided into high class and low class groups. The high class group is on the top of the ladder, the middle group is in the centre and low class group is at the bottom. This gap between the high and low classes is more in urban areas as is evident from the wealthy and poor or palaces and slums. This range is not so wide in rural areas. Most of the rural society tends to belong to the middle class. The very rich and very poor move to the city. The rich move to the city as they desire to obtain more than what is provided by the rural areas. On the other hand, the poor move to urban areas in search of job opportunities, in order to supplement their income.

vii. Social Mobility: It refers to the movement from one social group to another. It may be in the occupational mobility from one occupation to another, territorial mobility from rural to urban areas or within the rural and urban areas. Social mobility is more from rural areas to urban areas. A series of both horizontal and vertical moves are seen in urban areas.

Because of the heterogeneous urban population, the concentration of institutions, more opportunities for mobility exist; hence a higher degree of social and occupational mobility exists in urban than in rural areas. In addition mobility from rural to urban areas is greater than urban to rural, although the latter does exist and in some countries, such as the United States of America, is quite marked.

viii. Social Interaction: The pattern and type of social interaction is different in urban and rural areas. The rural population is smaller and less dense than the urban population. The contacts through various mass media like radio, television, magazines, posters, newspapers etc. are low in informal and personal. The urban contacts may be frequent but they tend to be more cursory, formal and impersonal.

ix. Social Control: Social pressure by the community in rural areas is strong, and conformity to social norms is more by informal social pressure than by other means of social control. In urban areas control is more by formal, impersonal means of law-prescribed rules and regulations with penalties for infringement.

Informal social pressures act more as a means of social control in rural areas due to personal and informal contacts. Due to the small size and homogeneity of rural communities there is a more informal atmosphere in rural areas. In urban areas, control is more by formal interpersonal means of law-prescribed rules and regulations with penalties for violation.

x. Leadership pattern: There is more face to face contact in rural areas and hence the leadership is more on the basis of personal traits of the leaders or their representatives. The leadership in urban areas is more impersonal.

Mainly because of far greater face to face contacts and more intimate knowledge of individuals than is possible in urban areas.

xi. Social Solidarity: There is more informal non contractual personal relationship in rural areas. The cohesion and utility in rural areas is due to common traits, similarity of experiences and common objectives which are shared by rural people. In urban areas unity and experience are based on differences and dissimilarities, division of labour, inrependence and socialization. There is more impersonal, strictly formal and contractual kind of relationship.

xii. Standard of living: Home conveniences, public utilities, educational, recreational and religious facilities for living can be provided if supported by a sufficient population base. While urban areas have such concentration and density of population and are able to provide these conveniences, rural communities usually do not.

This gap between rural and urban differences is being narrowed due to the communication of new ideas and the extension of service facilities to rural areas. A complete closure of this gap will not be possible in the near future. However, questions are being raised regarding the desirability of urbanizing the rural area. Instead of this the recent approach is on modernizing the rural area, in which efforts is made to utilize the rural environment to benefit the rural people

without altering the rural scene to a great extent. Effort is being made to strike an ecological balance in rural areas.

Differences between Rural and Urban Society

Rural people are different from those living in urban areas. There are certain differences and relationship between rural and urban societies. The differences are mainly due to the environment and its consequent impact on the lives of the people. The rural-urban difference is presented with reference to certain characteristics in the table given below:

S. No.	Characteristics	Rural Society	Urban Society
1.	General environment and orientation to nature	Closely associated with nature. Direct effect of natural elements like rains, drought, heat, etc, on their lives	Remote from nature. Predominance of manmade environment
2.	Occupation	Major occupation is farming. Non-agricultural occupations are secondary in importance	Most of the jobs are nonagricultural and specialized
3.	Working conditions	Being agriculture work in open air	Work in closed environment. Greater isolation from nature. Poor fresh air
4.	Family	Works as a unit. More unity or integrity and more contacts between members	Work in different occupations and contact is less between members
5.	Size of the community	‘Agriculturalism’ and size of Communities are negatively correlated. Community is small in size. Land to man ratio is higher	Large. Less land per person
6.	Density of population	Low density of population	High density of population
7.	Material possession	Less	Different types and more
8.	Homogeneity and heterogeneity	More homogeneous. Similarity in social and psychological characteristics in the population. Such as beliefs, language etc,	More heterogeneous. Wide variety of interests, occupations, languages etc.
9.	Social institutions	Most of the institutions are a natural outgrowth of rural social life. Less of enacted (approved or created) institutions	Numerous enacted institutions

10.	Social stratification and differentiation	Less among groups and low degree of differentiation. Gap between higher and lower classes is less	Different types of groups like professional, occupational etc, and high degree of differentiation. Gap between the higher and lower classes is more
11.	Hierarchy	Less in number e.g. lower, middle and upper classes	More in number e.g. upper-upper, upper-middle, upper-lower, middle-upper and so On
12.	Social contacts and Type	Less number, social interaction is narrow. Primary contacts are more predominant. Personal and relatively durable relations. Man is interacted as a human	Large number, social interaction is wider. Secondary contacts are predominant. Impersonal, casual and short-lived relations. Man is interacted as number and address
13.	Social mobility	Occupational and territorial mobility is less intensive. Normally the migration current carries more individuals from countryside to the cities	Occupational and territorial mobility is found more intensive. Urbanity and social mobility are positively correlated. Only in the period of social crises migration is from cities to countryside
14.	Social control	Informal control i.e. more related to the values and traditions of the society	Formal control i.e. legally
15.	Social change	Rural life is relatively static and stable	Urban social life is under constant social change
16.	Social solidarity (unity)	Strong sense of belonging and unity due to common objectives, similarities and personal relationships	Comparatively less sense of belonging and unity due to dissimilarities and impersonal kinds of relationships
17.	Standard of living	Low standard of living	High standard of living
18.	Educational facilities	Less	More
19.	Economy	Subsistence	Cash
20.	Communication	Less transport facilities, bad roads etc	Many transport facilities, better roads, communication etc
21.	Society	A simple, uni-group society	A complex, multi-group society
22.	Culture	Sacred	Secular (all religions are equal)

Social Groups

Social structure is composed of groups. Organizations, institutions, community etc, are the forms of human associations. Society functions through different forms of human beings to fulfill needs and purposes. Man functions in society through different forms of groups. Man is born in a social group and his first association is with his mother and the family members. He associates with groups in some way or other. Individual nowhere lives in isolation. This tendency to unite in groups is one of the important characteristics of human beings. Social groups are the units out of which society is constructed. Study of group is of primary importance in the study of society and also important as a part of the total structure of society. Group is a medium through which we learn culture. The process of socialization takes place in groups.

Definitions of Group

1. Groups are aggregate or categories of people who have a consciousness of membership and interaction. **Hortan & Hunt**
2. A group is an aggregate of individuals which persists in time, which has one or more interests and activities in common and which is organized. **Green**
3. Wherever two or more individuals come together and influence one another, they may be said to constitute a social group. **Ogburn & Nimkoff**
4. A group is a collection of individuals who have relations to one another that make them interdependent to some significant degree. **Cartwright & Zander**
5. Groups are defined as two or more people in reciprocal interaction with one another. **J. B. Chitambar**
6. A group is a collection of individuals whose existence as collection contributes in rewarding to the individual's needs. **Bass**
7. A group has two or more persons who are interacting with one another in such manner that each person influences and is influenced by each other person. **Stephen P. Robbins.**

Definitions of Social Group

1. Social group as a collection of human beings who enter into distinctive social relationships with one another. **Maclever**

2. Social group is a unit of two or more people in reciprocal interaction or communication with each other. **J. B. Chitambar**
3. A social group is a collection of two or more individuals in which there are psychological interactions and reciprocal roles based upon durable contacts, shared norms, interests, distinctive pattern of collective behavior and structural organization of leadership and followership. **Sharif and Sharif**
4. A social group may be defined as a unit consisting of plural number of separate organisms to have a collective perception of their unity and who have the ability to act and/or are acting in a manner towards their environment. **Smith**

Elements of Social Group

1. Social unit
2. Psychological interactions and reciprocal roles
3. Durable contacts
4. Distinctive pattern of collective behavior
5. Sharing of norms and interests
6. Pattern of leadership and follower ship

Types of Social Groups

Social groups are classified from different angles. No single classification is applicable to all social groups. Major social groups as classified by eminent sociologist are presented in the following paragraphs:

Type of group/s	Based on
Primary and Secondary groups	The type of relationship
Formal and Informal groups	Mode of organization and functioning
Voluntary and involuntary groups	Structure and type of membership
Horizontal and vertical groups	Social class
In and out groups	Personal feelings
Locality groups	Territory or locality
Small and large groups	Size
Reference group	

Primary and Secondary Group:

Based on the type of relationship groups are divided into primary and secondary groups: the details are as follows as given by Rogers 1960: Primary groups are relationship directed whereas

secondary groups are goal oriented. The persons in primary group have face to face relationships, such as family and a play group. A secondary group is one where the relationships are indirect. The members of a secondary group have little personal affection and their relationships are governed by the fulfillment of some objective. The specific characteristics of primary and secondary are compared here under:

Primary group	Secondary group
Small in size, often less than 20 to 30 persons are members	Large in size
Personal and intimate relationships among members are there	Impersonal and aloof(distant) relationships among members
Face to face association	Less face to face contact. Contact mostly through other communication media.
Permanency is there and members are together over a long period of time	Temporary membership. Members spend relatively little time together
Members are well acquainted and have a strong sense of loyalty or 'we' feeling and a strong amount of group pressure is present	Members are not well acquainted and anonymity prevails
Relations among members are mostly informal	The relations are mostly formal
Informality is most common i.e. group does not have any name, officers etc	Formality prevails i.e. group often has a name, officers and a regular meeting place
Group discussions are more traditional and non rational	Group discussions are more rational and the emphasis is on efficiency
E.g. family, friendship group, play group etc	E.g. political groups, labour unions, trade unions, employees associations etc

In urban societies secondary relationships are more as compared to the rural society. Primary groups like friends and relatives, directly influence the behaviour of the individual. The impersonal nature of relationship in the secondary group like producer and salesman pr workers in big organizations makes for the absence of the bondage which the primary relations have.

Formal and Informal groups

Based on mode of organization and functioning groups are divided in to formal and informal groups. As the name indicates the formal groups have procedures of functioning. These groups have:

- I. A name of title
- II. Selected and titled officers

- III. A written purposes, and
- IV. A regular, common, meeting time and place.

Informal groups like friends, group of neighbourhood do not have any such characteristics. There is no organization of rules. The members have maximum freedom to think and act. The formal groups such as village councils, farmer’s societies and school committees have definite rules of operation. This discipline of action gives stability to these groups, whereas the informal groups can break at any time.

Formal group	Informal group
These are formally organized and have prescribed structure i.e. constitution by-laws etc	These are not formally organized and lack prescribed structure
E.g. Labour union, village council, students union etc	E.g. family, friendship group, play group etc

Voluntary and Involuntary Groups

Based on structure and type of membership groups are divided in to voluntary, involuntary and delegate groups:

Voluntary group	Involuntary group
A person becomes member of the group based on his choice	Persons become members of the group not according to their choice i.e. by birth, by residence, by location etc
E.g. friendship group, play group etc	E.g. family, neighbourhood, community etc.

Horizontal and Vertical Groups

Based on social class groups are divided in the horizontal and vertical groups. The term horizontal group is used to describe members who are alike in the status or position in class system of society. Thus, all farmers, blacksmiths and carpenters would be members of their respective horizontal group in the village. In addition, those persons with like incomes, but different occupations, may belong to a horizontal group, if income level is closely related to prestige rating, which may not be true in some societies. Vertical groups are those groups that are composed of members from different social status and whose membership cuts vertically across the “horizontal” groupings in society.

Horizontal group	Vertical group
The members of this group are alike or similar in status or position in the class system of the society	The groups that are composed of members from different social strata (social status) and whose membership cuts vertically across the horizontal groupings in the society
E.g. caste	E.g. race, nation etc

In and Out Groups

Based on personal feelings the groups have been divided in and out groups. The criterion for classification is group boundary which is generally determined by the attitude or feeling the people have towards their own group and towards others. An in group is one which the persons feel they belong and with which they identify themselves strongly. Not only they themselves, but others also feel them to be internal part of these groups. An out group is one with which other individuals cannot identify themselves. The individuals feel themselves outsiders to the group and the group also has a similar reciprocal feeling towards the individuals. Matter of vital interest are not shared with the out group members.

In group	Out group
Persons in this group feel that they belong to that group based on their attitudes of the members towards their own social groups	Persons in this group do not feel that they belong to that group based on their attitudes
E.g. my family, my class, my church etc.	E.g. their family, their class, their church etc.

Locality Groups

The classification considers locality as one bond for holding groups together. E.g. Neighbourhoods, communities or villages, towns, taluks, districts, regions (e.g. Mewar, Marwad, Rajasthan), and nations.

Small and Large Groups

Groups may vary and be placed on a continuum on the basis of number of members with the minimum number being the dyad or pair at one end and at the other, the maximum who can interact and communicate with one another. Based on the size of the groups the groups are divided in to small and large groups:

Small group	Large group
The number of members is less than 30	The number of members is more
E.g. family, play group etc.	E.g. political group, labour union etc.

Reference Groups

A reference group may be defined as a group with which the individual feels identified, the norms and objectives of which he accepts (Hartley, 1965). In this group the individual feels identified with the group but he may or may not be the member of the group, the group influences individual. He/she shares the objectives of this group, which he/she accepts. The reference group provides the standards that guide behavior even when the standards are contrary to earlier membership groups. To understand the behavior of human beings we must know their reference groups. Every person in society has his/her reference group. It is a group of persons whom an individual consults before taking an important decision. A reference group, therefore, may contain members from the primary group, informal group or formal group. In complex societies a person can be a member of different reference groups. But in communities like a village a person has a specific reference group. The decision taken in consultation with a reference group naturally influences the behaviour of the member. Sometimes a person may not be a so-called member of any reference group but he/she may consult a group of experienced and respected persons in society and take decisions according to their advice.

Factors Considered in formation and organization of Groups

A group is a unit of two or more people in reciprocal communication and interaction with each other. People generally associate with each other because of common ancestry; territory shared is common, similar body characteristics and common interests. Group formation promotes discipline, loyalty, group responsibility and group pressure. There are two important factors in formation of groups:

1. The common interests and needs are satisfied by participating in the group. Common interests are the basis for formation of some groups. There are several special interest groups in the society. A group of young farmers come together and form youth club for fulfilling need of obtaining information and inputs for adopting improved farm practices.

2. Human beings since ages live in groups due to their instinct of others. The members of the group fulfill his/her needs. It is impossible and unthinkable to live outside the group. He/she understands the advantageous of living in the group and hence he/she forms the groups to meet his/her need.

In addition there are four major bases upon which people associate in group life have:

- I. Common ancestry
- II. Territory shared in common
- III. Similar body characteristics, and
- IV. Common interests

Motivation in Group Formation

In most of the cases the people become members of the group by choice. If people are held compulsory in the group then it lasts till the pressure is on the group. It is observed that the individual join the groups for the following reasons:

- I. Interest in groups: They are personally interested in the objective for which the group is organized and which it seeks to gain.
- II. Friends in the group: The individuals join the group because their friends are already members of the groups.
- III. Friendly relations: The friendly atmosphere or relations and effective cooperation among members of the group attract the outsiders for joining the group.
- IV. Common culture: Persons with common culture i.e. common values and purposes come together. Birds of the same feather come together as they want to promote common values and purposes.

Role of Social Groups in Agricultural Extension

Social groups play vital role in the development of the society. It is therefore advised that an extension worker should work in collaboration with the groups for the welfare of the society. If he/she can obtain the participation of the groups in the development activities then his/her work can be accelerated. The significant role played by the group can be summarized below:

- I. A member's loyalty to the growth is in direct relationship to the extent of his/her participation in group discussions and activities. Hence, good group relationship needs to be encouraged in the group.

- II. As the extent and frequency of an individual's interaction with other members of the group increased, he/she become more tolerant of, and more friendly with others and with objectives of the group. Extension worker should arrange group meeting and discussions in which the members can interact and participate. They will be able to play more positive role by participating through groups.
- III. All members do not participate equally in group activities. Their participation in lower and heightened in group activities in accordance with their conception of their status in the group. The members can be assigned certain roles by which they will feel elevated.
- IV. The zeal and constancy with which an individual played his/her role in a group depended upon the degree of honorable recognition given by the group. Intermittently the group should organize such events in which the good workers are honored and rewarded for good work. This will help in encouraging them for fruitful work for the group and the society.

In short the extension worker should obtain the participation of the groups in the development programmes for advancement of agriculture.

Social Stratification

Social stratification is a term used in the social sciences to describe the relative social position of persons in a given social group, category, geographical region or other social unit. It derives from the Latin word *stratum* (plural *strata*; parallel, horizontal layers) referring to a given society's categorization of its people into rankings of socioeconomic tiers based on factors like wealth, income, social status, occupation and power. The placing of people in strata or layers is called stratification. Human society is not homogeneous but heterogeneous. Social stratification is a particular form of social inequality. All societies arrange their members in terms of superiority, inferiority and equality. Stratification is a process of interaction or differentiation whereby some people come to rank higher than others.

Social stratification is a condition in which social status differences in a group or society are prominent. Geologists talk about layers of rock or strata. In the same way we find layer upon layer pattern existing in a society. In some societies or communities however, there are only small social status differences among the members. This society or community is said to have only a small degree of stratification. In construct, another community may have sharp and extreme difference in social status. The community is said to be highly stratified.

Definition of Social Stratification

1. Social stratification is the division of population into two or more layers, each of which is relatively homogeneous and between which there are differences in privileges (opportunities), restrictions, rewards and obligations. **Lundberg, 1968**
2. Social Stratification is a horizontal division of society in to higher and lowers social units. **Raymond Murray**
3. A pattern of superimposed categories of differential privilege is termed as social stratification. **Cuber, 1954**
4. Stratification is simply a process of interaction or differentiation whereby some people come to rank higher than others. **Suther Land**
5. The process by which individuals and groups are ranked in more or less enduring hierarchy or status is known as stratification. **Ogburn & Nimkoff**

6. Social stratification refers to “arrangement of any social group or society into hierarchy of positions that are unequal with regard to power, property, social evaluation and psychic gratification. **Melvin M Tumin**
7. Social stratification is the division of society into permanent groups of categories linked with each other by the relationship of superiority and subordination. **Gisbert , P.**
8. Social Stratification refers to the ranking of individuals on a scale of superiority-inferiority-equality, according to some commonly accepted basis of valuation. **Williams**
9. Social stratification is the division of population into two or more layers, each of which is relatively homogeneous and between which there are difference in privileges, restrictions, reward and obligation. **Chitamber J. B., 1973**

Different basis for social stratification are:

1. Ethnic stratification: it is based on racial groups one dominating the other.
2. Social basis for stratification: It is based on purely social factors.

Functions of Stratification

The stratification provides several services to the society. These services or functions of stratification are described below following Shankar Rao and Chitamber:

1. **Accomplish essential jobs:** Stratification in society induces people to perform essential jobs by distributing different amount of prestige and privilege to various strata.
Example: In Indian army, there are different strata from General to Lieutenant, each marked with visible symbols denoting rank, specific roles and role expectations, norms and prescribed standards of behaviour and interrelationships- all clearly organized to do the job efficiently and systematically.
2. **Enhances competition among the members in a social system:** Stratification helps ensure individual to reach at the top position in the society blessed with prestige, comfort, rewards etc. by the process of competition. This process of competition helps ensure that more efficient people are able to rise to the top and their ability can best be used.
3. **Regulate and control individual and group relationships and participation:** stratification tends to regulate participation of individuals and groups in the total life of society giving them access to certain areas and restricting them to others.

Example: In Mizoram particular day of the week has been allotted for boys and girls to participate in the Church for prayer.

4. **Prevents waste of resources:** the stratification system prevents the waste of scarce of resources.

Example: It would be wastage of resources and talents of the Subject Matter Specialists in agriculture, if they are engaged in performing routine office work, administrative job etc.

5. **Promotes social integration and structure:** Stratification in society has a strong integrative function. The ancient Aryan society was stratified into four varnas like the Brahmin, Kshatriyas, Vaishyas and the shudras, each varna had been performing a specific job for the integration of the society. Till now caste system is prevalent in Indian rural society involving specific occupations, roles and functions.

6. **Promote the prestige and pride of the particular social class or caste or region:** Stratification helps promote the prestige and pride of the society of a particular region.

Example: the “Kanchipuram Sari” of Tamil Nadu which has got a Geographical Indication Certificate under TRIPs (Trade Related Intellectual Property Rights) is a reputed art of Tamil Nadu for centuries. The sari has always been in demand across the country, finding special place in weddings. Weaving a Kanchipuram is a matter of pride of the community and the region.

Types or Forms of Stratification

- I. Caste system
- II. Class system
- III. Social mobility

I. Caste System

The term ‘Caste’ was derived from the Portuguese word ‘casta’ meaning lineage or race. Caste is a closed class. As compared to class, the caste is the most rigid, clearly graded type of social stratification. This has been often referred to as one of the extreme forms of closed class systems. This has been the most rigid social stratification. No matter the intelligence/diligence or whatever personal qualities, it has nothing to do with the caste system. The lineage is the only criterion. One can never move to upper caste. It is determined only by birth. However, on certain conditions one may even be expelled from his/her caste group.

Definition of Caste

1. A caste is social category whose members are assigned a permanent status within a given social hierarchy and whose contacts are restricted accordingly. **Lundberg G. A., 1968**
2. When a class is somewhat strictly hereditary we may call it a caste. **Coolen**
3. Caste is a closed class. **Majumdar & Madan**
4. Caste is a system of stratification in which mobility up and down the status ladder, at least ideally may not occur. **Green, A. G.**

Characteristics of Rigid Caste System

1. The caste system is determined slowly by birth and there is no vertical social mobility.
2. In other words, caste is a closed class system with clearly demarcated status and role of its members. One is born into a caste, lives and dies in it.
3. When a class is somewhat strictly hereditary we may call it as caste – Cooley
4. An individual is borne into a caste of his parents and can rise no further. Status is determined by birth. Type of caste consciousness acts as a barrier to social progress.
5. India is cited as the most perfect instance of closed but not open system which is extremely differentiated.

Determinants of Caste

1. The family in to which the individual takes birth and its name
2. The way of dressing
3. The privileges, rewards and restrictions
4. The way of performing religious rights etc

II. Class System

Classes are not established by legal or religious provisions. Class systems are typically more fluid than the other types of stratification and the boundaries between classes are never clear-cut. There are no formal restrictions on inter-marriage between people from different classes. Some of the characteristics include individual's achievement, social mobility, economic status and class consciousness. Thus, class is a large scale grouping of people who share common economic resources, which strongly influence the types of life style they are able to lead; ownership of wealth, together with occupation, is the chief basis of class differences. The classes that exist in India are (I) upper class (II) middle class and (III) lower or working class.

A social class may be defined as abstract category of persons arranged in levels according to the social status they possess. There are no firm lines dividing one category from the other. Class is a principal basis of social stratification found especially in the modern civilised countries. In societies where all men are free before the law, stratification may be based upon accepted and self estimation of superiority or inferiority.

Definition of Class

1. This is not the rigid stratification as that of caste system. The people can move from the one stratum to other. It is not at all based on the inheritance. **Rogers, E. M., 1960**
2. A social class is any portion of a community forked off from the rest by social status".
Maclver and Page
3. Social classes may be described as portions of the community, or collection of individuals, standing to each other in the relation of quality and marked off from other persons by accepted standards of superiority and inferiority. **Ginsberg**
4. Social classes are aggregates of individuals who have the same opportunities of acquiring goods, the same exhibited standard of living. **Max Weber**
5. A social class is the aggregate of persons having essentially the same social status in a given society. **Ogburn & Nimkoff**

Characteristics of Class System

1. Class system is based on occupation, wealth, education, age and sex.
2. A class system is a hierarchy of status group. This status is achieved by ability. In general there are three classes – upper middle & lower.
3. A system based on the recognition of the superior – inferior positions. Feeling of superiority & inferiority in relation to those who stand or below in the social hierarchy. In these three classes there are such feelings the upper class people feel they are superior to the other two whereas the lower class feels it is inferior to the upper class.
4. A system in which boundaries between classes are fluid and are less precisely defined.
5. Class system is associated with class consciousness. The behavior action is determined by this class consciousness. It consists in the realization of similarity of attitude and behaviour with members of their own and others groups.
6. Sub-classes, classes are divided into different groups. Similar to caste system, the class system is divided.

7. A social class is not unstable like mob or crowd. It is relatively stable in nature.
8. Class system is an open system.
9. There's social restriction in this too. In general there is endogamy in a class. To maintain their status & position they mix among themselves & it is seldom that marriage between upper & lower class is wished. Distinction between Caste & class.
10. A social class is differentiated from other classes by its life style or mode of living viz. kind of house, means of recreation, communication pattern, way of dressing or mode of dress etc.

III. Social Mobility

Social mobility refers to the movement within the social structure, from one social position to another. It means a change in social status. All societies provide some opportunity for social mobility. But the societies differ from each other to extent in which individuals can move from one class or status level to another. The movement of individuals or groups from one stratum of society to another is known as social mobility. It is said that the greater the amount of social mobility, the more open the class structure. The concept of social mobility has fundamental importance in ascertaining the relative “openness” of a social structure. The nature, forms, direction and magnitude of social mobility depends on the nature and types of social stratification. Sociologists study social mobility in order to find out the relative ‘openness’ of a social structure. Any group that improves its standard will also improve its social status. But the rate of social mobility is not uniform in all the countries. It differs from society to society from time to time. In India the rate of mobility is naturally low because of agriculture being the predominant occupation and the continuity of caste system as compared to the other countries of the world.

Definition of Social Mobility

The term social mobility usually refers to the ‘movement of individuals and group from one stratum of society to another or vertical mobility. However, three type of social mobility have been identified vertical, horizontal and geographical (**Chitamber, J. B., 1973**).

1. **Vertical:** mobility means to the two-way movement up or down have individual and groups from one stratum to another. It brings changes in class, occupation and power. It involves movement from lower to higher or higher to lower. There are two types of vertical mobility. One is upward and other is downward mobility. When an individual

moves from lower status to higher status, it is called upward mobility. For example, if the son of a peon joins a bank as an officer, it is said to be upward social mobility but if he loses the job due to any other reason or inefficiency, he is downwardly mobile from his previous job. So downward mobility takes place when a person moves down from one position to another and change his status.

2. **Horizontal:** Mobility refers to movement of individuals between positions of society that are roughly of the same of the social status or in other words we may say that it is movement within the same status of society. It means that the ranks of these two groups are not different. It indicates change in position without the change in status. For example, if a teacher leaves one school and joins another school or a bank officer leaves one branch to work in another or change of residence is the horizontal mobility.
3. **Geographical:** This mobility means the movement of group from one geographic area to another; the geographical mobility may also involve vertical or horizontal movement.

Factors contributing upward movement

The following are some of the criteria of upward movement:

1. Change in living standard,
2. Change in the residential area,
3. Changes in behaviour in order to meet upper class level,
4. Sometimes even change in name, and
5. Marriage with mate of higher social status has also been the criteria of upward movement.

Difference between class and caste

The following table summarizes a comparison between the class and caste system of the society:

Characteristics	Class pattern	Caste pattern
Considering oneself inferior or superior	Application to all classes	Applicable as per position of the caste
Behaviour as per defined role norm	Less rigid	More rigid
Self definitions	Label and awareness is vague	Rigid labels and awareness
Change and mobility	Can change his/her class and move to other class as per expectation	Cannot change his/her caste. Rigid system.

Material objects	Possession of valued objects increases as class position increases	Possession of valued object increases as caste position increases
Justification of system	Pragmatic “this worldly” justification	Strong religious endorsement
Status	Status can be achieved in the class	Status is ascribed as per caste system.

Culture

The extension education brings about the changes in the behaviour complex of the rural people. The behavior is in turn influenced by the cultural factors, extension workers, therefore should have knowledge of the culture of the rural people. *Learned behavior, which has been organized into patterns and is shared and transmitted among the members of society, is known as culture.* Sociologists have developed the concept of culture in order to explain the regularity in human actions. The sociological meaning of the term culture differs sharply from the literary (bookish) use. In conventional (usual) usage, the word culture is employed to designate only the behavior systems that are regarded as refinements such as paintings, music, art etc. But culture also includes all the activities that are characteristics of a given group of people.

In social science, culture is the pattern of learned behaviour and the products of behaviour shared by the members of a society and transmitted among them. Culture is continuously changing and being altered as it is passed from person to person. As said that culture is:

- I. the patterns of learned behaviour and
- II. the products of behaviour
- III. shared by the members of society and
- IV. transmitted among them.

Definition of Culture

1. Culture is the continually changing pattern of learned behaviour and the products of learned behaviour (including attitudes, values, knowledge and material objects), which are shared by and transmitted among the members of society. **Cuber J. F., 1968**
2. Culture may be defined as the pattern of learned behaviour shared by the members of a society. It includes not only the way of making things, and doing things but the pattern of relationships among people, the attitudes they foster, the beliefs and ideas they have and even the feelings with which they respond. Culture is not merely customs, though customs are a part of culture. For, culture is the patterned whole of responses, the more or less consistent unity that links the many diverse elements of living into a way of life.

Sargent et al., 1958

3. says that culture is that complex whole which includes knowledge, beliefs, art, morals, laws, customs and any other capabilities acquired by man as member of society.

Taylor

4. Culture may be the thought in terms of three different orders:

Two overt (which can be seen) orders of culture are:

- I. Material products of industry, implements, tools etc
- II. Overt behavioral patterns like customs, folkways etc

One covert (which cannot be seen or hidden) order of culture is:

- III. Psychological like attitudes, values etc. held by the individuals or groups

Ralph Linton

The study of culture helps to understand the behaviour of people in different parts of the world. The desired change cannot be successfully brought about without clear comprehension of the concept of culture. Extension worker should have knowledge of elements of culture that are important in relation to his work.

Culture is the sum total of the ways in which human beings live, transmitted from generation to generation by learning. It is the pattern of learned behaviour including technology and dimensions of science both material and non material. In learned behaviour, a baby learns and imitates her parents teachers, playmates and others. Ferals and isolated offer proof culture is learned and not inherited. It is product of behaviour, In the society this includes material objects such as football, goalposts, stadiums etc. Non material aspects of culture are attitudes, values and knowledge of the society members. It is shared by the people of the society; Indian culture has some definite patterns which are shared by the Indians. The patterns of Indian society are somewhat different than the American society. It is transmitted or passed on from old members to new members entering the society by the process of socialization and learning. Socialization is the process by which a culture is learned. It is development of personality in the individual. By formal education the culture is transmitted from one generation to another.

Functions of Culture

Five main functions of culture are:

- I. Providing a series of patterns
- II. The mechanism for meeting the biological demands
- III. It provides the rules- cooperation, competitions etc.

- IV. It provides as to how the adjustment are to be made under different situations and needs, and
- V. It provides many times readymade adjustment to the particular situations already framed for the particular society.

Ways in which culture is involved in group life

- I. Descriptive: Culture includes customs, beliefs, morals, art and knowledge.
- II. Historical: Culture is the sum total of social heritage.
- III. Normative: Culture is composed of traditions, attitudes and ideas that control human behaviour.
- IV. Psychological: Culture is the means by which people try to obtain their goals.
- V. Structural: Culture is an organization of conventional understandings of learned behaviour.
- VI. Genetic: Culture arises from and includes all the products of social interaction.

Characteristics of Culture

Culture has the following characteristics:

- I. **Culture is learned**– learned through the process of socialization, communication, training etc.
- II. **Culture is transmitted from generation to generation**- learned from parents and through to children.
- III. **Culture is universal as well as unique**- culture is found in all societies, but each society has its own specific cultural pattern.
- IV. **Culture is static as well as dynamic**- culture has permanence, but it changes over time. That is, culture maintains both continuity and change in a society.
- V. **Culture is integrative**- while different aspects of culture may pull in different directions, there is consistency and integration so that the society is held together.
- VI. **Culture builds conformity**- the patterns of behaviour in a culture are considered as ideal, towards which people are expected to strive.
- VII. **Culture is relative**- there is nothing like good culture or bad culture. Culture is interpreted according to a person's or a society's own experience.
- VIII. **Culture is diverse**- culture varies from country to country and in different areas within a country. Ecological diversity is an important source of cultural difference.

Elements of culture

In general culture comprises of several elements which are being discussed here:

Beliefs: Beliefs are fixed ideas in the mind and we tend to hold them true, they are the facts but not always scientifically true, yet handed down from generation to generation and become the dogma of realization; beliefs are strong faith over non-scientific facts. Belief system is the view of individual and group about the world in which he lives. A belief constitutes the life philosophy of an individual. More specifically- a belief system may be defined as an organized body of ideas, attitude and convictions centered on values or things regarded as precious to the group.

Norms: Where there are no norms, there is also no society (Ummad Singh). A norm is short, is a standardized mode of procedure, a way of doing something that is acceptable to our society (Biarstedi). All societies have some norms or rules which specify appropriate and inappropriate behaviour. An individual is rewarded or punished as he/she conforms to or deviate from the rules. Norms are the general rules that govern or regulate social action. Norms are the blue print for behaviour, setting limits within which individuals may seek alternate ways to achieve their goals.

Values: Values may be regarded as important ratings which people attach to things, conditions and circumstances. They may also be regarded as goals and objectives to which people orient their thinking, action and feelings. Values are the most general statements of the legitimate ends that guide social action.

Cultural laws: These are consciously and deliberately formulated behaviour patterns. Men are aware of having created them or certainly of having codified them. They are rational and practical in character.

Cultural pattern: Cultural pattern is an objective expression of a way of doing or believing that is common to a number of people. It ranges from the very simple to the very complex. It becomes the behaviour trait of children, youth and adults.

Folkways: Folkways are those ways of action which are common to a society or a group and that are handed down from one generation to the next generation. The folkways are in general, the habits of the individual and the customs of the group, arising naturally, spontaneously and growing up slowly around the different phases of life order. Folkways are the recognized or accepted ways of behaving in society (**MacIver & Page**). Folkways are the group what habit to

the individual that is they are customary ways of action in regard to specific situations which are common in society (**Grooves & Noor**). Thus, it is reasoned that when the folkways have added to them the conceptions of group welfare, standards of right and wrong, they are converted into mores (**MacIver & Page**).

Mores: Mores are those forms of action which the group regards as essential and right. Mores are the common ways of acting which are definitely regarded as right and proper than the folkways and leads to a degree of severity of punishment, if violated. Thus it is reasoned that when the folkways have added to the human conceptions of group welfare, and standards of right and wrong, they are converted into mores.

Taboos: Generally the term 'more' is used for the positive action or things that ought to be done but the term 'taboo' is used for the negative action and for the things that one ought not to do. Taboo means forbid. It refers to the prohibitions of the types of behavior because of some magical, supernatural (God) or religious sanction. Taboos are the type of mores for which the society does not give consent, eg. marriage within the family among Hindus is a taboo. In other words taboos are restrictions communicated through verbal "don't" and are the unwritten laws of the society.

Customs: The sociologists have used various terms in order to classify various human acts of behavior. If these various types of human behavior are organized, they are called customs. **Maclever** defined customs as socially accorded (agreed) or accredited (given) ways of acting. Customs are the accepted ways in which people do things together. Customs are socially prescribed forms of behavior transmitted by tradition and enforced by social disapproval of its violation (not doing). Customs may also be defined as a habitual form of meeting people. Training the young, supporting the aged etc are some of the customs of society. Our acting, our dressing, our worship are controlled to a great extent by customs. We agree most of the customs of the group to which we belong. Custom is usage (habit) its essential feature is that it is a generally observed code of conduct. Its sanction (punishment) is fear of public opinion. Human behavior is not individualized. It has some definite forms. It occurs in regular fashion. Customs are thought of as being well-established and difficult to change. Customs are generally a group action. Unconsciously we conform to the customs of our own society. Folkway if transmitted by tradition and followed generation after generation may become custom.

Rituals: Ritual is prescribed form of behavior for certain occasions and certain actions are designated in prescribed manner. Ritual may be defined as a pattern of behavior or ceremony,

which has become the customary way of dealing with certain situations. Generally it is discussed as an aspect of religion. Religion is found in all established form of activities. It may include prayers. Military organization and other formally organized groups have adhered to a prescribed form of behavior known as ritualism.

A regular rhythmic procedure controlling a succession of acts directed to the purposeful and repeated in the appropriate occasion for example worship, festival dance etc.

Ceremony: It is more comprehensive concept within the ritual folks. They are the established procedure of formal and dignified ways to make and impress the importance of an event or occasion.

Public Opinion: Public means open to all, opinion means ideas, conviction of belief related to programming activities. Public opinion is the social judgment of a self conscious community on a question of general importance. It includes public discussions or the unexpressed picture insides the minds of human beings. The picture of themselves, of others, or their needs, purpose and relationship from public opinion.

Differences between mores and folkways:

Mores	Folkways
These are socially acceptable ways of behaviour that involve standards	These are customary ways of behaving in society
These are rigidly enforced and if not followed by a person the individual get severe penalty	Persons who do not conform may be subjected to criticism or be considered ‘strange’ but would not necessarily penalized
Patterns of behavior which are considered essential by the society	Expected form of behaviour but not rigidly enforced
If violated the group or society may be disturbed or divided	If violated will not have severe effect on society
E.g. Monogamy, honesty etc.	E.g. Good manners, greeting others etc.

Differences between mores and taboos:

Mores	Taboos
Mores refer to positive action	Taboos refer to negative action
Mores are the customs regarded by the members of the society as vital or essential	They are the customs which are forbidden
Things ought to be done	Things ought not to be done
E.g. Monogamy, honesty etc.	E.g. eating of beef in Hindu religion etc.

Role of culture in agricultural extension:

- I. Culture is dynamic and continuously changes because of internal as well as external forces of stimuli. Community development aims at bringing about the changes in the culture of rural people towards desired goals. Scientific understanding of the culture is therefore basic E.g. Improved pig rearing in Muslim village is not possible.
- II. It is possible to record greater success when the improved practices introduced are in familiar terms i.e. something that is already present in the culture E.g. Improved plough with iron ploughshare Change is more likely to occur in those aspects of culture where there is lack of adjustment or stress, then in those aspects, which are established and fixed. E.g. Introduction of improved practices in areas which are rehabilitated on account of floods or fire.
- III. Change in technology is usually more readily accounted than change in other aspects of culture E.g. Introducing of improved seed of a crop.

Social Institutions

Social institutions have been created by man from social relationships in society to meet such basic needs as stability, law and order and clearly defined roles of authority and decision making.

Every organization is dependent upon certain recognized and established set of rules, traditions and usages. These usages and rules may be given the name of institutions. These are the forms of procedure which are recognized and accepted by society and govern the relations between individuals and groups.

Definition

According to Wood ward and Maxwell “An institution is a set of folkways and mores into a unit which serves a number of social functions.

Fitcher, JH (1964) “An institution is a relatively permanent structure of social patterns of roles and relations that people enact in certain sanctioned and unified ways for the purpose satisfying basic needs”.

According to Horton “An institution is an organized system of social relationships which embodies certain common values and procedures and meets certain basic needs of society.

Landis (1955) “Social institutions are formal cultural structures devised to meet basic social needs”.

Elements of Social Institutions

- I. A Group of People
- II. United by common interests
- III. Having material resources
- IV. Having norms
- V. Fulfill some social need

Characteristics

- I. Institutions are the means of controlling individuals.
- II. Institutions depend upon the collective activities of men.
- III. The institution has some definite procedures which are formed on the basis of customs and dogmas.
- IV. Institution is more stable than other means of social control.
- V. Every institution has some rules which must be compulsorily obeyed by the Individual.

Importance

Socially prescribed roles are an integral part of institutions. The following points are stated to emphasize their importance.

- I. Institutions involve formulation distinctive kinds of roles and their fulfillment. Each institution is a structure of related roles, which embodies common values in society.
- II. These roles are interrelated and form a network of obligations and rights.
- III. Through the functioning of the patterns of interrelated roles , the institution performs some important functions for society- be it physical sustenance of members through economic institutions or maintenance of peace, law, order and protection through the institution of government.
- IV. Each member of society participates and plays a role in the network of roles that constitute as institution in society. The basic institution of society-religion, educational, government, economic and family is such that no member of society can exist without participation in some way in them.
- V. Society considers this system of role and relationships so important as to protect and perpetuate it through legal enactment, religious sanctions or other forms of formal and or informal pressures and sanctions.

Important Function-the Institution

- I. Generally has more than one function.
- II. Defines procedures or action and reasons for action in addition to defining roles.
- III. Functions as social control of its members.

- IV. Prepares their members for effective participation.
- V. Consists a set of attitudes, roles and expectations.
- VI. Functions in achieving some of basic needs of man.

Major Institutions in Rural Society

Five major institutions in rural sociology are political, educational, economic, family and religion.

Institution	Function
Family	Bearing and rearing children
Economic	Providing food, clothing and shelter
Political/Government	Enforcing laws, rules and standards
Religious	Promoting cooperative attitudes, faith, hope, charity
Education	Socializing persons into basic values and practices of society

- I. **Family:** is the most basic social institution in a society, and is a system of organized relationship involving workable and dependable ways of meeting basic social needs. It is the most multi functional of all institutions in society. It is a system of organized relationships involving workable and dependable ways of meeting basic social needs. The family fulfills the following tasks:
- a. Sex regulation
 - b. Reproduction and perpetuation of family and human race
 - c. Socialization
 - d. Provision of economic maintenance and livelihood
 - e. Provision of love, affection and security of individual
 - f. Provision of class status to individuals of the family into which we have been born.

The family has tremendous influence on the individual, his behaviour and his action for it moulds him from infancy and has significant influence on the development of his personality.

Some additional features of family

Successful family according to Maciver should:

- I. Satisfy sex needs,
- II. Protection and care of children
- III. Sharing of home affairs.

Types of Family

Conjugal- Nuclear or primary- Consists of husband, wife and their children.

Consanguine- Extended or joint family- Some other relative besides the above. It is a group of nuclear or primary families.

Both the above two types may exhibit any of the following forms:

A. Form of the family on the basis of dominance

Patriarchal: here the man is dominant (common in north India).

Matriarchal: here woman is dominant

- a) Children brought up in the house of the parents of mothers
- b) Father does not live with mother and visits his wife and children accordingly.

B. Form of the family on the basis of lineage

Patrilineal: Lineage or class on male line.

Matrilineal: Lineage or class on female line.

C. Form of the family on the basis of circle

Patriarchal: Wife joins the relatives of husband.

Matriarchal: Husband joins the relatives of wife's

D. Form of the family on the basis of form of marriage

Polyandrous: More than one husband.

Polygynous: More than one wife.

The network of relationships revolving around cooperative forms of relationships between the sexes for reproduction, care, nurture and socialization of children and other such functions of the family extends and operates within culturally defined patterns of behaviour, fulfilling carefully

prescribed roles. As in the case of the other institutions, the families in India and in other parts of the world are in the midst of change and many functions of the family has a tremendous influence on the individual, his behaviour and his action for it moulds him from infancy and has significant influence on the development of his personality.

- II. Economic:** Economy provides basic physical sustenance of the society by meeting the needs for food, shelter, clothing, and other necessary supply and services. Economic institutions include agriculture, industry, marketing, credit and banking system, co-operatives etc.
- III. Political/Govt.:** Government as political institution, administers the regulatory functions of Law and order, and maintains security in society. Form of government and its method of working depend on the accepted patterns of behaviour in a society. Development work is now-a-days a major responsibility of the government. For effective implementation of programmes, government may decentralize its functioning by creating local self-government like panchayats at different level.
- IV. Religious:** - Religion is belief in supernatural. Religion constitutes a set of beliefs regarding the ultimate power in the universe, the ideal and proper pattern of behaviour, and ceremonial ways to expressing these beliefs. Religion also provides a foundation for the mores of the society. Taboos in various cultures have religious sanction. Religion provides a means by which individuals can face crises and ups and downs in life with strength and fortitude.
- V. Education:** is the process of socialization, which begins informally at home and then formally in educational institutions. Education as an institution helps develop knowledge, skill, attitudes and understanding of the people and strive to make them competent members of the society. Education widens the mental horizon of the people and makes them receptive to new ideas.

Social Change and Development

Change means a difference observed over a period of time. Social means man and his relationships with others. Social change is a continuous process over a period of time in which differences in human relationships takes place.

Social change involves change in the structure or function of society. Social interaction involving social processes in society takes place in accordance with existing norms and values in organizations and institutions. Social change takes place in the structure and functioning of these forms.

The concept of development can be viewed as a process of realizing certain goals or values, such as improved health, improved housing, better nutrition, more communications, improved transportation, increased command over resources etc. It is fundamentally a process of transformation that involves the whole society- its economic, social, political and physical structure as well as the value system and way of life of the people. Development is referred to as a process of continuous progress, unyoking the people from the stages of dependency towards self-reliance, assuring equitable distribution of opportunities and resources and ensuring socio-economic justice and harmony among all sections of the society.

Definition of Change

1. Change means that large number of persons is engaging in activities that differ from those which they or their immediate forefathers engaged in some time before.

Merrill and Eldredge

Definition of Social Change

1. Social change is a term used to describe variations in, or modifications of any aspect of social processes, social patterns, social interaction or social organization. **Jones**
2. Social change refers to a process responsive to many types of changes; to changes the man in made condition of life; to changes in the attitudes and beliefs of men, and to the changes that go beyond the human control to the biological and the physical nature of things. **Maclver and Page**

3. Social change may be defined as modification in ways of doing and thinking of people. **M.D. Jenson**
4. By social change, I understand a change in social structure, e.g., the size of the society, the composition or the balance of its parts or the type of its organization. **Morris Ginsberg**
5. By Social change is meant only such alternations as occur in social organization – that is, the structure and functions of society. **Kingsley Davis**
6. Social change involves alternations in the structure or functioning of societal forms or processes themselves. **Parker**
7. The social change means change in existing condition in society-whether in existing group relationships and interaction together with the resulting structure and former in the cultures (material and non-material) shared by members of society. **Chitamber J. B. (1973)**
8. Social change may be defined as a new fashion or mode, either modifying or replacing the old, in the life of people or in the operation of a society. **H.T. Mazumdar**
9. Social change may be defined as the process in which is discernible significant alternation in the structure and functioning of a particular social system. **B. Kuppuswamy**
10. Social change is the intelligible process in which we can discover significant alterations in the structure and functioning to determinate social system. **Alyin Boskoff**
11. Social change represents any observable differences in any social phenomena over any period of time. **Lunderb and Larsen**

Social change involves a change in the structure or function or societal forms. Social interaction involving social processes in society takes place in accordance with existing norms and values in organizations, institutions and other societal forms without alteration in these societal forms and within their framework. Thus, social change involves alteration in the structure and function of society. Implied in it is cultural change, as culture is an integral part of society. Social change occurs in societies, it is slow in primitive and folk societies and rapid in complex modern societies.

Rural Social Change

When it is viewed within the rural setting, it is termed rural social change. The fact is that changes take place in the rural, sub-urban and urban areas. Change could be in all attributes of a societal unit such as in number, quality and importance. It could be introduced from internal or external sources to the society or both. It could be planned, when it is more effective and predictable, or unplanned. It could be by force, when it is quick with early gains but not enduring, or voluntary, when it is slow but enduring. It could be total, when it is comprehensive or segmental when it affects a part of the system.

Aspects of Social Change

- I. Structural change:** It involves change in roles, emergence of new roles, changes in class and caste structure and changes in social institutions such as family, the government or educational system.
- II. Functional change:** It refers to changes in interactional processes between persons and groups. Changes may be in the frequency of social contacts, a shift from primary to secondary group relationships, internal personal to formal contractual relationships, co-operative to competitive form of relationships etc.
- III. Cultural change:** It refers to changes in the culture of society, through discovery, invention, adoption and diffusion of new technology, cultural borrowing etc.

Factors Associated with Acceptance of Social Change

- I. Need for change:** Unless a change is recognized by the society as significant and important, the likelihood of its acceptance is less. The need for change must be perceived by the society as a felt need. To be accepted, the change must be perceived by society as contributing toward the achievement of goals.
- II. Desirable innovations:** Innovation may be a technology or an idea must be relevant to the need for change and perceived as desirable by the society, bringing some benefit to it. The benefit may be in terms of more yield and income; reduction in cost, saving of time and labour or better functioning of institutions and organizations in the society. Compatibility of the innovation with the culture of the society is an essential condition for its acceptance.

III. Proper communication: Social change cannot take place without communication. Communication methods adopted must be appropriate to the society. Communication should be timely and the methods and aids are to be skillfully used with sufficient credibility to be accepted by the society.

IV. Patterns of change: In the process of social change, a system may attain following states of equilibrium. These are presented below:

Types of Rural Social Change

Many types of social change are noticeable in the lives of the rural population of the developing countries such as India. The various types of such changes are as follows:

I. Political change: This is the change in the distribution and operation of social and political power. Democratically elected governments are now common in the less developed countries of the world. For example in India, a democratic government had been in place since 1945. Although when elections are held, there is constant accusation of rigging by the competing political parties. The law enforcement agencies are frequently accused of supporting one political party or other. The people therefore place little confidence in the electoral process of choosing political leaders, yet they have frequently failed to come up with a more acceptable formula.

Changes in the political organization through changes in personnel running the political system could be advantageous if enough time is given each good government to fulfill its promises. Political changes have the following advantageous:

- a) A government which is not responsive to the aspirations of the people can be changed.
 - b) Politicians who have outlived the peak of their effectiveness can be changed.
 - c) A tyrannical government can be changed.
 - d) People with better qualifications and greater enthusiasm to serve can be given the chance to serve, and
 - e) Political power can be distributed among the various social groups in a country.
- The impact of political change is therefore witnessed in both rural and urban sectors of a country.

- II. Changes in the use of leisure through recreation:** One social sector which had witnessed a noticeable social change in rural areas of India had been in the use of leisure through the recreational sector. In many parts of the country, Particularly in the urban areas, parks, flower gardens, swimming pools and zoological gardens for animals have been established as holiday resort for the citizen. However, rural entertainments which made the village life enjoyable such as hide and seek game during the full moon, competitive wrestling, routine and competitive swimming, some village band sets have virtually disappeared. These recreational opportunities should be modernized to contribute to the quality of rural life, rather than allow them to die.
- III. Economic change:** Rural areas of the developing world had undergone some degree of economic change particularly during the post independence era. In India, for example, with the increased exploitation of economic resources, salaries have increased by more than 1,000 per cent in government establishments over the past six decades. A greater number of roads have been constructed to link rural with urban areas. Some dual carriage express ways have been constructed in the economically active parts of the country to link goods from the rural areas and major cities to the sea for export. It must be admitted that changes in the processing, storage and distribution of economic goods have been rather slow. Storage of agricultural products such as maize, cowpeas and rice is still largely in bags, guards, bare floor and ceilings of buildings. The practice of storing in cribs is fairly satisfactory, while the use of silo for grain storage or refrigeration for preserving fresh fruits, fish and vegetables is becoming a common feature.
- IV. Technological change:** This is the continuous process of change within the technical materials and physical practices and objects in a society. The early man started by making use of stones to produce fire and to hunt animals. Today technology change has resulted in using matches to prepare fire and guns to hunt animals. Perhaps the most striking technological change in the rural areas has been in the area of farming. The changes have taken place in the physical, biological and cultural dimensions of agriculture. Within the physical sphere, the early man used sharp sticks to dig the ground for utilization. Technological changes in many less developed countries have resulted in the hoes and cutlasses for cultivation. The use of tractor and its attachments such as trailers for haulage of farm produce and inputs, ploughs, harrows and ridges, is more

popular in the developed than less developed countries of the world due to the following reasons:

- a) Lack of spare parts to repair broken down machines,
- b) Inadequate number of mechanics to repair the broken down vehicles,
- c) Inadequate number of operators to handle the machines,
- d) Inadequate observance of maintenance schedules,
- e) Poor adaptability of tools to soil types, and
- f) The costs of the machines are too high for the small scale farmers to afford.

However, large government company or private farms have used tractors and their attachments to their benefits over the years.

In the biological sphere of technological social change, improved varieties of crops and breeds of livestock have been introduced to farmers. The if brown cowpeas which is upright with bunches of pods and more erect growth allow easier harvesting and more convenient cultural operations such as weeding than the spreading variety which it replaced.

In the chemical sphere, technological social change includes introduction of fertilizers to enrich poor soils and consequently crop yield, introduction of pest and disease control chemicals and others.

Technology change has taken place in other sectors of rural life apart from agriculture. Use of vehicles has largely replaced tracking from villages to the town or market. Widespread use of radio provides entertainment and current affairs programme. Kerosene stoves have replaced firewood for providing cooking fire in some homes. Corrugated iron sheets roofing has replaced thatched roofs. Technological change therefore takes place in all parts of the rural community, namely the farm, home and community.

V. Cultural change: Culture consists of material and non material aspects. Cultural change is therefore alterations in the nonmaterial and artifacts of the society. The material aspect of cultural changes is mainly technical. Examples are use of aluminum cooking post instead of clay pots, use of metal eating plates and utensils instead of clay plates and wooden utensils etc.

The change in non-material aspects of culture are also numerous. If the institution of the rural family is considered as social system in terms of its elements and social processes, the cultural changes which had taken place can be elucidated with some

examples. The objective of a typical rural family, in many parts of India particularly in the south, has shifted from marrying for their children and settling them in farming to assisting them to acquire formal education, or at least undergo technical apprenticeship training and then settle to profitable employment. The norm of not calling elders by name still persists as a reflection of the value of respect for age which is universally resistant to change.

VI. Behavioural change: This includes favourable change in the knowledge, skill and attitude of people as a result of their exposures to educational experiences. Residents of rural areas are exposed to information which has led to acquisition of better knowledge, skill and attitude in the economic and social spheres. Agriculture is the major occupation of rural people. Improvement in knowledge of crop and live stock pests and disease control measures, higher yielding crop varieties, better spacing of crops, weeding, cultivation, harvesting, processing, storage and marketing operations had taken place. The skill to practice such knowledge is also taught largely by agricultural extension workers through the method demonstration technique. In India educational change had resulted from increase in number of schools in the rural areas, and change in the system of education.

Barriers to Social Change

Culture Values and attitudes	Social Group Solidarity	Psychological Different Cross cultural perception
Tradition	Mutual obligations within the framework of family, kin and friendship pattern	In general
Fatalism	Small group dynamics	Perception of the role of government
Cultural ethnocentrism	Public opinion	Differential role perception
Pride and dignity	Conflict	Differing perception of purpose.
Norms of modesty	Functionalism	Communication problem
Relative values	Vested interests	Language difficulties
Logical incompatibility cultural traits	Authority within family	Learning problems
Unforeseen consequences of planned innovation	Authority in the political structure	---

Social Process

Social processes are so important that sociology is often defined as the science of social interaction. The concept of social process refers to some of the general and recurrent forms that social interaction may take. The interaction or mutual activity is the essence of social life. Interaction between individuals and groups occurs in the form of social process. Social processes refer to forms of social interaction that occur again and again. MacIver observes, "Social process is the manner in which the relations of the members of a group, once brought together, acquire a certain distinctive character." Social interaction and social process are interrelated. The one cannot be understood without the other. Interaction refers to an action done in response to another action, but when this interaction through repetition leads to a result, it is called a social process. Thus, when the husband and wife are led to help each other out of sympathy or love and this mutual help assumes the form of cooperation it becomes a social process.

Definition of Social process

1. The term social process refers to the repetitive form of behavior which is commonly found in social life. **Horton and Hunt**
2. Social Process is the manner in which the relations of the members of a group, once bought together, acquire a distinctive character. **Maclver**
3. By social process we mean those ways of interacting which we can observe when individuals and groups meet and establish system of relationships or what happens when changes disturb already existing modes of life. **Gillin and Gillin**
4. Social processes are the various modes of social interaction between individuals or groups including co-operation and conflict, social differentiation and integration, development, arrest and decay. **Morris Ginsberg**
5. Social processes are merely the characteristics ways in which interaction occurs. **A. W. Green**

Types of Social processes

Social processes have been classified numerously by sociologists. It is classified according to certain bases:

1. Based on Unity or Opposition

a) Conjunctive Social Processes

They refer to patterned forms of social interactions which lead to unity organization, cooperation and harmony. In some degree, the conjunctive social processes are always expressive of the social vices of injustice and hatred. As used here, virtues and vices are taken not as moral habits but as patterned forms of social relations that include both external and conceptual patterned of behaviour. The three conjunctive social processes are co-operation, accommodation and assimilation. Each of these is an identifiable form of social relation in which the participating persons achieve some objective considered beneficial and desirable to themselves.

b) Disjunctive Social Processes

They refer to patterned forms of social interactions which lead to disunity, disorganization, division, and disharmony. They are those processes in which people are pushed farther apart and become less solidaristic. The disjunctive social process may be described as negative to the extent that they reflect injustice and hostility among people. The three disjunctive or negative social processes are conflict, contravention and competition.

2. Based on Formation

I. Basic or universal processes: It refers to patterned and recurrent responses observable in all human societies. There are three universal social processes:

- a) Cooperation,
- b) Competition and
- c) Conflict.

a) Cooperation

The term “Co-operation” has been derived from two Latin words: ‘Co’ means ‘together’ and ‘Operari’ meaning ‘to work’. Hence cooperation means working together or joint activity for the achievement of common goal or goals. So it is a process in which individuals or groups work unitedly for the promotion of common goals or objectives. It involves two or more persons joining their intelligence, efforts talents and resources together to attain a goal which can be

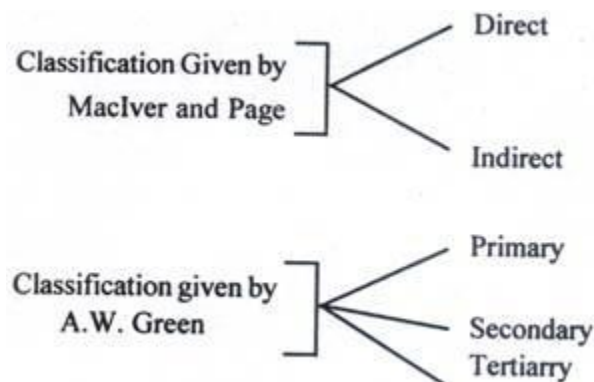
shared. It is a kind of conjoint action or an alliance of person or groups seeking some common goal or reward.

Definition of Cooperation

1. Co-operation is a form of social interaction wherein two or more persons work together to gain a common end. **Merrill and Eldrege**
2. Co-operations arises when men see that they have a common interest and have, at the same time, sufficient intelligence and self control to seek this interest through united actions- Prescribed unity of interest and the faculty of organization are the essential facts in intelligent combination. **C.H. Cooley**
3. Co-operation is the process by which the individuals or groups combine their effort, in a more or less organised way, for the attainment of common objective. **Fair Child**
4. Co-operation is “the continuous and common endeavour of two or more persons to perform a task or to reach a goal that is commonly cherished. **A.W. Green**

Types of cooperation

Different sociologists have classified cooperation in different ways. Some of the important types of cooperation are the following:



- **Direct Cooperation:** In this type of cooperation individuals are involved to perform same type of work. In the process of Co-operation when individuals and groups cooperate directly with each other, that is called direct co-operation. It permits the people to do like things together because the nature of work itself calls for the participation of men or groups in a together situation. It brings social satisfaction. It makes the difficult tasks easy.
Example: Playing together, farming activities by both men and women together.
- **Indirect Cooperation:** In this type of cooperation when individuals and groups do things individually and indirectly for the achievement of common goal that is called indirect

cooperation. This cooperation is based on the principle of division of labour and specialization.

Example: Farmers, spinners, weavers, dyers and tailors are working separately for producing clothes.

- **Primary Cooperation:** It is found in primary groups like family, neighborhood and children's play group. In this type of co-operation there is an identity of interests but no self interest among those who cooperate. Every member is conscious of the welfare of all. The rewards are shared to all members. Identification of individual group and task to be performed are interlocked.
- **Secondary Cooperation:** This type of cooperation is found in the secondary groups. In these groups the individuals cooperate with each other for the achievement of some self interest. Attitudes are more likely to be individualistic and calculating. Each person performs an assigned task and helps others perform their tasks, so that he/she can separately enjoy the fruits of his/her cooperation. This is the characteristic feature of modern civilized society which are very much witnessed in political, economic, religious, commercial, educational and other groups. It does not provide equal benefit to all its members.
- **Tertiary Co-operation:** Primary and secondary cooperation is the characteristic of individual person while tertiary cooperation characterizes the interaction among various social groups, large or small. These groups make certain adjustment voluntarily with each other under certain compelling circumstances. The attitude of groups co-operating with each other are selfish and opportunistic in the extreme. It is found between two or more political parties, tribes, religious groups and so on.

Another classification is:

- **Informal cooperation:** It is characterized as spontaneous and involves mutual give and take.
- **Formal cooperation:** It is characterized as a deliberate contractual nature and prescribes the reciprocal rights and obligations of members.
- **Symbolic cooperation:** It is a situation where two or more persons live together harmoniously and are supportive and interdependent, resulting in mutual self-interest. It involves interdependent activities, but the people involved may not be aware that their activity is a form of cooperation.

Function of Cooperation

- It makes for social cohesion and integration among the members of a group.
- It contributes to social stability and order.
- It fosters consensus and compromise in various social issues.

b) Competition

It is a form of impersonalized struggle or opposition to secure a reward or goal which cannot be shared. The most important fundamental dissociative social process is competition. It is a form of opposition or social struggle. It is a contest among individuals or groups to acquire something which has limited supply or insufficient in quantity and not easily available. It is characterized by non-co-operation. Here the competitor forces their attention on the goal or the reward they are struggling to achieve but not on themselves. They try to achieve the goal by methods other than force or fraud.

Definition of Competition

1. Competition is the impersonalized struggle among resembling creatures for goods and services which are scarce or limited in quantity. **Majumdar**
2. Competition is the struggle for possession of rewards which are limited in supply, goods, status, and power, love anything. **Horton and Hunt**
3. Competition is the struggle for the use or possession of limited goods. **H.P. Fairchild**
4. Competition is a contest to obtain something which does not exist in a quantity sufficient to meet the demand. **E.S. Bogardus**
5. Competition is an interaction without social contact. **Park and Burgess**

Types of Competition

Competition as a universal social process is found in all fields of social life. In our day to day life we come across many types or forms of competitions. It may be absolute or relative, personal and impersonal. These are discussed below:

Absolute and Relative Competition

- **Absolute competition:** In absolute competition the goal is achieved by only one person among the competitors.
Example: Among so many competitors one person becomes the leader.
- **Relative competition:** It is based on the degree to which the goal or objective may be achieved by more than one competitor.

Example: In the Olympic game, a person can gain only gold or silver or bronze medals in a particular event.

Personal and Impersonal Competition

- **Personal competition:** It involves direct, face-to-face contact between opposing parties.
- **Impersonal competition:** It involves a struggle between persons or groups not directly aware of each other.

Example: In football match the main focus is to send the ball into the rival's goal post in order to win the game.

According to **Bernard** there are four types of competition. These are:

- **Social competition:** To get high social status usually this social competition is mostly observed in open societies where individual's talent, capacity, ability as well as merit are given weightage. It is found in democratic society.
- **Economic competition:** This economic competition is present at individual and group level. It is reflected in the process of production, distribution and consumption of goods. In the economic field people compete for salaries, jobs, money, property, promotions etc. as well as higher standard of living.
- **Political Competition:** This type of competition is found in the political field. Political parties' compete to secure power. During election each and every political party competes for getting majority.
- **Cultural competition:** When two or more cultures try to show their superiority over others, this type of competition takes place. In the ancient period, there was a strong competition between the cultures of Aryans & Non-Aryans and in modern society there is cultural competition between the Hindus and the Muslims.

Functions of Competition

- Competing individuals or groups try to outdo each other and thereby innovate ways to do so.
- Competition can be a driving force to persons to develop their potentials to the fullest and attain maximum efficiency and effectiveness.
- Competition can develop productivity, creativity, and ingenuity.
- Competition of member of a society for certain goals and the competition for scarce resources lead variation or differentiation.

c) Conflict

It is a form of highly personalized and emotionalized struggle or opposition between individuals or group to attain scarce goals or values. It is an ever present process in human society. Whenever a person or persons or groups seek to gain reward not by surpassing other competitors but by preventing them from effective competition, conflict takes place. In other words, it is a competition in its more hostile and personal forms. It is a process of seeking to obtain rewards by eliminating or weakening the competitors. It is seen that conflict makes an individual or group try to frustrate the effort of another individual or group who are seeking the same object. It implies a struggle or fight among individuals or groups for a particular purpose or a number of purposes.

Definition of Conflict

1. Social conflict included all activity in which men contend against one another for any objective. **Maclver and Page**
2. Conflict is the deliberate attempt to oppose, resist or coerce the will of another or others. **A.W. Green**
3. Conflict is the social process in which individuals or groups seek their ends by directly challenging the antagonist by violence or threat of violence. **Gillin and Gillin**
4. Conflict is an opposition or struggle involving an emotional attitude of hostility as well as violent interference with autonomous choice. **Majumdar**
5. Conflict is the social process in which individual or groups seek their ends by directly challenging the antagonist by violence or threat of violence. **J.H. Fitcher**

Types of Conflict

Conflict is found in many forms in the social life. Some of the important classifications of conflict given by different sociologists are the following:

1. According to Maclver and Page there are mainly two types of conflict:
 - **Direct Conflict:** In this type of conflict the conflicting individuals or groups try to harm each other directly to attain the goal or reward at the expense of their opponents even by going to the extent of injuring or destroying their rivals.
 - **Indirect Conflict:** When the conflicting parties try to frustrate the efforts of their opponents indirectly it is called indirect conflict. The keen competition among the parties automatically takes the form of indirect conflict. For example, when two manufacturers

go on lowering the prices of their commodities till both of them are declared insolvent is indirect conflict.

2. Gillin and Gillin have given five types of conflict. They are:

- **Personal conflict:** Personal conflict refers to conflict between individuals within a group in society. It takes place among the members of the same group when there is clash in their aims and ideas. For example, the conflict between two qualified persons for a common post.
- **Racial conflict:** It takes place among different races of the World due to psychological differences. Some of the races feel superior to other races and some others feel inferior. So the feeling of superiority and inferiority causes racial conflict. For example, the conflict between Negroes and Whites.
- **Political conflict:** It is found in the political field. When the different political leaders or the political parties try to gain power in democratic countries it is called political conflict.
- **Class conflict:** This conflict arises between the different classes of the society which have opposite interest. Our modern society has been characterized by classes which are based on power, income, education etc. Although class is an open system conflict takes place among different classes due to the difference in power, income, prestige etc.
- **International conflict:** It takes place between two or more nations due to political, religious, economic, imperialistic and other reasons. When the nations try to achieve common objective by suppressing each other international conflict takes place. For example, the conflict between India and Pakistan regarding Kashmir Issue.

3. According to George Simmel there are four major forms of conflict. They are:

- **War:** It is a type of direct conflict. When all the efforts of the different nations fail to resolve the conflict, war takes place. This is the only solution to bring peace.
- **Feud:** Feud is another type of conflict which takes place among the members of the society. So it is also called intra-group conflict. It differs from society to society in degrees. It is also sometimes referred as factional strife.
- **Litigation:** Litigation is judicial by nature. In order to redress the grievances and to get justice people take the help of judiciary which is called litigation. For example, for a piece of land when two farmers take the help of judiciary. Litigation takes place.
- **Conflict of Impersonal Ideals:** When the individuals do not aim at achieving personal gain but for some ideals it is called the conflict of impersonal ideals. Here every party

tries to justify the truthfulness of its own ideals. For example, when a political party tries to show that its ideals are better than that of other political parties. This conflict takes place.

Functions of Conflict

- Conflicts may help establish unity and cohesion within a group which has been threatened by hostile and antagonistic feelings among the members.
- Conflict with the outside brings peace in the inside.
- Internal conflict becomes a stabilizing and integrating mechanism in certain instances.
- Conflict provides an outlet for the expression of suppressed emotions and frustrations.

II. Derived social processes: It refers to secondary social processes that arise out of the basic social processes. The following are the derived social processes which arise out of the basic social processes:

- a) **Acculturation:** It is a social process where a group blends in and takes on some characteristics of another culture. It is also called cultural borrowing or cultural imitation.
- b) **Assimilation:** It involves some kind of interpenetration or fusion of cultural elements whereby persons or groups accept the cultural traits, attitudes, beliefs and sentiments of another through direct, friendly and continuous contacts.
- c) **Amalgamation:** It refers to some kind of biological fusion through intermarriage of persons coming from different groups.
- d) **Differentiation:** It refers to the creation of interests resulting in individuals or groups needing or wanting different things or services rather than the same thing.
- e) **Accommodation:** The term accommodation refers to understanding, adjustment or agreement. It is a process of getting along in spite of differences. Accommodation is another important associative social process. It is, in fact, a sort of co-operation among people after their conflict comes to an end. Because conflict cannot continue for an indefinite period. It must be resolved at some stage or other. The end of conflict directs the way for accommodation.

Social Control

Social control is an influence exerted by the public or society for promoting the welfare of the group as a whole. Social control refers to the control of society over the individual. Social control implies a system of device through which society controls the activities of individual members. Social control can be defined as an application of sanctions to ensure that the members will abide by the group's norms, perform required roles in a prescribed manner and and coordinate their activities in such a way that group goals can be achieved. It is a means employed by the group to achieve social order.

Definition of Social Control

1. Social control is the way in which social order coheres (joins together) and maintains itself, how it operates as a whole as a changing equilibrium (balance). **Maclever**
2. Social control is the sum of those methods by which a society tries to influence human behaviour to maintain a given order. **Mannheim**
3. Social control refers to the patterns of pressure which a society exerts to main tain order and established rules. **Ogburn & Nimkoff**
4. Social control is a collective term for those processes planned or unplanned for which individuals are tought, persuaded or compelled to conform to be usages and life values of groups. **Henry W. Littlefield**
5. The aim of social control is to bring about conformity, solidarity and continuity of a particular group of a society. **Kimpbell N.**
6. Social control is the system of measures, suggestions, persuasion, restrain and coercion by whatever means including physical force by which society brings into conformity to the approved pattern of behaviour, a subgroup or by which a group moulds into conformity its members. **Gillin & Gillin**

Means or Types of Social Control

It depends largely upon the cultural and social setting. They may be institution/non-institution, symbolic and cohesive, laws, belief, ceremony, education etc. are the means deliberately chosen to achieve desirable social control. Social control is classified in to two categories formal and informal.

Informal means of social control

Informal control includes belief, social suggestions, ideologies, customs, folkways, mores, religion, art and literature, public opinion etc. These are deep rooted people's practice. No specific punishment would be given to the violators of informal control. Informal control is more effective in primary social groups such as family, neighborhood, tribe, rural community etc.

- I. Belief:** Belief in religion controls the behaviour to a great extent. Beliefs are the acceptance of a proposition as true is an important means of social control. Belief system has deeply influenced man's behaviour. It has provided the sanction to the social norms and conditioned the growth of culture. It has worked as a means of informal social control. Some of the beliefs hold a significant place in the social system. Belief in the existence of the unseen power has been with man from the primitive age. The feeling of fear made him believe that he is being watched. This seems to be the spirit behind the prayer and meditation. The raising of hands in supplication, the kneeling before the symbol of faith or such other practices and ceremonials are indicative of it. The belief in the theory of incarnation is motivated by the faith in the continuity of life. Birth and death as the endless scheme of things came to be accepted as the change from one body to another. It motivated man's belief in goodness. Wrongful actions, he felt, were bound to have bad consequences. He, therefore avoided these as best as he could. The belief in the theory of Karma, for this has been accepted fundamental in all the Indian religious systems. The belief in the immortality of soul has largely motivated religious thinking and practices.
- II. Social suggestions:** Suggestions are implanting of ideas and feelings in the people. Suggestions are indirect communication of ideas, feelings and other psychological states from person to person. We suggest the younger generations many ideas like giving the examples of great men, celebration of anniversaries of great people etc.

- III. Ideologies:** The communication of ideologies like Ghandhiism, capitalism, communism etc by which the social behaviour of the individuals is controlled. Social determination of thinking is ideology. Social thinking has always been influenced by ideology. Our social thinking has remained influenced by Varnashrama Dharma, Punarjanam and Dhamma. Politically, unity of the country has been the ideology. In ancient texts, this land is described as devanirmitam sthanam – the land fashioned by the gods themselves. One of the commonest prayers requires one “to recall and worship the image of his mother country as the land of seven sacred rivers, the Ganga, Yamuna, Godavari, Sraswati, Narmada, Sindhu and Kaveri, which between them covers its entire area.
- IV. Customs:** The socially accredited ways of acting are the customs of society (MacIver & Page). Customs represent a kind of informal social control. It regulates man’s entire action- his dressing, eating, speaking, working, celebrating festivals etc. all are controlled by customs. Man learns customs from his very childhood and continuously obeys them. Customs are rarely opposed by people. These are more influential and dominant in the primitive society than in the modern society. Customs and habits are closely related. Custom is a social phenomenon and socially recognized. Habit is an individual phenomenon and learns individually.
- V. Folkways:** ‘Folk’ means people and ‘ways’ refers to their behavioural habits. The word means literally ‘the ways of the folk’. Folkways refer to the repetitive petty acts of the people. These are, according to F.B. Renter and C.W. Hart, “simple habits of action common to the members of the group; they are the ways of folk that are somewhat standardized and have some degree of traditional sanction for their persistence”. These in the interest of communal life and uniformity are accepted binding. Disregard shown to these brings forth disapprobation.
- VI. Mores:** Mores are the pattern of behaviour considered essential by society. Mores are positive actions that ought to be done. The difference between folkways and mores is largely a matter of degree to which they are enforced. Folkways may be violated without punishment but if the more are violated, the individual or group may be divided or disturbed and even punished. Mores, of course, are much more compulsive than folkways. They are not norms but rather guide for behaviour.

- VII. Religion:** It includes those customs, rituals, prohibitions, standard of conduct and roles primarily concerned with or justified in terms of the supernatural and the sacred. Religion is powerful agency of social control. It controls man's relations to the forces of his physical and social environment. The extent to which religion controls the behaviour of men depends upon the degree to which its adherents accept its teachings.
- VIII. Art and literature:** It is a method of sublimation and redirection of the instinct of an individual. It is a combination of religion, morality, ideal and so many things. Art is an indirect and inadvertent manner which trains the child or an individual for either way of life. A purposeful classical dance as art and religious epics like bible, Ramayana etc.
- IX. Humour and Satire:** It often relives tense situations. Humour is also used to establish a position and gain favourable response. It control by supporting the sanctioned values of society. Satire employs wit and scam as indirect criticism of actions felt to be vicious and socially harmful. Satire exposes by ridicule the falsity and danger of behaviour which may accept as normal. Cartoons, comics etc as a part of humour and satires as indirect criticism of actions harmful to help in maintaining the social values.
- X. Public opinion:** In villages people know each other even otherwise the fear of public criticism and the need of recognition by individuals makes to control his behaviour.

Formal means of social control

- I. Law:** Laws act as controls which formally define rights and obligations in society. Law is a body of rules given by legally authorized bodies and enforced by authorized agencies like police, judiciary etc. Complex situations demands formed rules to control behaviour of the people. It is for all practical purposes, as observed by Professor Holland "a general rule of external action enforced by a sovereign political authority". It is the general condition prescribed by the State, and the members of body politic are expected to follow it in given conditions. It is uniform and is meant for all. Any disregard shown to it is bound to invite penalty. But as pointed out by Pollock it "existed before the state had any adequate means of compelling its observance and indeed before there was any regular process of enforcement at all". Another branch of law is the Constitutional law, that is the

law as provided in the Constitution. The law of the Constitution determines the authority of the organs of the Governments in an appropriate manner.

- II. Education:** Education prepares the child for social living by removing his wrong attitudes and learning discipline, honesty and what is right or wrong. It is a great vehicle of social control. After the family, it is the class room, the peer group and the leaders which exercise influence on a child by our ancients. The differences between-Dvija and Ekaja emphasised the importance of education in the social structure of the ancient society. Education inculcates moral, intellectual and social values in individuals. It imparts a sense of continuity. It links one to one's heritage and sets a perspective before him. It gives the social vision of uniformity to the individual and fits him for social role.
- III. Coercion (force):** Force as a means of social control is as ancient as the society itself. In varying degree, it has been used by all societies. Some societies even now resort to force against the deviants. Our society has not given it a high recognition. Traditionally, our political ethics is based on nonviolence or least violence. Physical coercion like imprisonment or death penalty (through law) and non-violent coercion like strike boycott or non cooperation (between individuals and groups) are means of social control.

Role of social control in society or Need of social control

There are certain norms of behaviour set by the society for its maintenance and development. The members of the society are expected to follow these norms. However, some individuals violate these norms and create danger to the existence of the society. These persons need to be controlled in the interest of the society. The social forces or controls which regulate the behaviour of the members come under the social control. Thus, social control is necessary for the stability and growth of society. The role of social control in the society involves:

- I. To maintain the old order:** The old members of the family enforce their ideas on the children. Marriages are settled by the elder members of the family and they influence the behaviour of other members of the family.
- II. To establish the social unity:** Without social control the social unity is a dream. The families and society are united because social control regulates behaviour through established norms.

- III. To regulate or control individual behaviour:** No two persons are alike and even the children of same parents are not having same attitudes. If an individual is left free to behave in the society it would be reduced to a jungle. Social control protects the social interests by regulating the individuals' behaviour.
- IV. To provide social sanction:** Social control provides social sanction through customs, folkways, mores etc.
- V. To check cultural maladjustment:** Society is subject to change and individual tries to adjust to the changing society during this process he or she is likely to develop some habits which may not be right or he may become slave of passions e.g. visiting bars, night clubs etc. Social control helps to stop this mal adjustment.

Rural Leadership

The main purpose of identification, development and utilization of rural leadership is to make available large number of teachers to teach the farming community. It is impossible for any country to provide enough number of extension workers to carry information to each and every doorstep in the farm community. A local leader who acquired the knowledge of improved practice extends the same to neighbours, friends and relatives. In any society or in every group in a community there are few individuals who can influence other in the group and make decisions on behalf of others. They are the local leaders. Most of the time, the extension worker is an outsider to the villagers. The people and their socio-cultural patterns prevalent in that area may be new to him. Hence the local leaders form the vital link between the extension worker and the farmers. Common man has much faith in local leaders.

Good extension work results from joint efforts of the technically trained extension staff and the local leaders of a village. Hence it is essential to identify and develop rural leadership that will facilitate and enhance effective working relationship with the rural people.

Definition of Leader

1. Leader is a person who is clearly distinguished from other individuals in power, status, vision and such traits of character as intelligence, integrity, courage, wisdom and judgment. **Chitamber, 1973**
2. Leader is a person who has been spontaneously considered or chosen as being influential in a specific situation. **Dahama and Bhatnagar, 1985**
3. Leader is any individual whose behaviour stimulates action in some group. A leader would be an individual in a group who in some situations has the right to influence and stimulate the behaviour of other members. Leaders are persons who are selected by the people because of their special interests or fitness to work on some phase of the local programmes. **Garg, 1951**

Definition of Leadership

1. Leadership is defined as an activity in which effort is made to influence people to cooperate in achieving a goal viewed by the group as desirable. **Rogers and Olmsted**
2. Leadership is defined as the role and status of one or more individuals in the structure and functioning of group organizations, which enable these groups to meet a need or purpose that can be achieved only through the co-operation of the members of the group.
Hepple
3. Leadership is generally defined as influence, the art of process of influencing people so that they will strive willingly towards the achievement of group goals.
Koontz & O'Donnel, 1988
4. Leadership is the ability to secure desirable actions from a group or followers voluntarily without the use of coercion. **Alford & Opines**
5. Leadership is not making friends and influencing people, i.e., salesmanship it is the lifting of man's visions to higher sights, the raising of man's personality beyond its normal limitations. **Peter Drucker**
6. Leadership is a process of influence on a group in a particular situation at a given point of time, and in a specific set of circumstances that stimulates people to strive willingly to attain organisational objectives and satisfaction with the type of leadership provided.
Jame J.Cribbin
7. Leadership is the initiation of acts which result in a consistent pattern of group interaction directed towards the solution of a mutual problem. **Hemphill, J.K.**

Types of leadership/Styles of Leadership

The total pattern of leaders' actions as perceived by their followers is called leadership style. It represents the leaders' philosophy, skills and attitudes in practice. Leadership styles refer to a leader's behaviour. The behavioural pattern that a leader adopts in influencing his/her followers is called style of leadership. It describes how a leader has relationship with his/her group.

Autocratic or authoritarian leadership: Autocratic leadership is based upon close supervision, clear-cut direction and commanding order of the superior. It facilitates quick decisions, prompt action and unity of direction. It depends on a lesser degree of delegation. But too much use of

authority might result in strikes and disputes. Autocratic leader operates as if he/she cannot trust people; he/she thinks his/her subordinates are never doing what they should do: that the employee is paid to work and, therefore, must work. If he/she is benevolent autocrat he/she may tend to view employees as children and encourage them to come to him/her with all their problems, no matter what is the nature or the magnitude of the problem. An autocratic leader is one who likes to run the show himself. He takes all decision himself without consulting the followers. He gives orders and insists in implicit obedience. Subordinates are expected to do what he dictates. Thus, under this style all decision making power is vested with the leader. He holds out threats of punishment on the assumption that people are lazy and will avoid work and shirk responsibility.

Participative or democratic leadership: Participative or democratic leaders decentralize authority. It is characterized by consultation with the subordinates and their participation in the formulation of plans and policies. He/she encourages participation in decision-making. Democratic leaders' shares with the group members decision making and the planning of activities. The participation of all is encouraged. He/she works to develop a feeling of responsibility on the part of every member of the group. He/she attempts to understand the position and feelings of the employee. If He/she criticizes, He/she does so in terms of results expected; rather than on the basis of personalities. A democratic leader makes decision in consultation with his/her followers. He/she decentralizes authority and allows the group to share his/her power. Instead of taking unilateral discussions, he/she allows the group to discuss the problem at length and express their opinions freely.

Free-rein or laissez-faire leadership: Free-rein leaders avoid power and responsibility. The laissez-faire or non-interfering type of leader passes on the responsibility for decision-making to his/her subordinates and takes a minimum of initiative in administration. He/she gives no direction and allows the group to establish its own goals and work out its own problems. A free-rein leader gives complete freedom to his/her followers to establish their own goals and policies. He/she does not lead and avoids power. He/she lets the group to operate on its own. Laissez-faire leader believes that if you leave workers alone the work will be done. He/she seems to have no confidence in himself/herself. If at all possible he/she puts off decision making. He/she tends

to withdraw from the work group. He/she is often a rationaliser. The results of his/her leadership are:

- Low morale and low productivity within the work group.
- Employees are restless and lack the incentive for team work.
- Employees come to regard security as the greatest incentive.
- Another leader, often an informal leader arises.
- Problems of administration, supervision and co-ordination are multiplied.

Roles of leader in a Group

Groups are dependent on leaders. A leader is not only a member of group and also is the focal point of activity of his group. He plays an important role in group's activity. The important roles of the leader are as follows:

- I. **Group initiator:** the most important role of leader is that he should take initiative to get the group in to action
- II. **Group spokesman:** if the group is to have outside relations it must be able to speak as a unit and leader is its voice. Leader has the responsibility of speaking for the group and representing the interests of the group
- III. **Group harmonizer:** in all groups uniformities and differences are formed. A leader should be able to resolve differences peacefully. The role of the group harmonizer is to promote harmony in the group in line with basic purpose of the group
- IV. **Group planner:** generally it is assumed that the person chosen for leadership know a little bit more about the problems which the group is facing and the possible solutions. So the leader has to plan the way by which the group can satisfy its needs. The leader has to plan for the group and with the group
- V. **Group executive:** the leader is one who takes important role in conducting business of the group and he is responsible for seeing that the business of the organization is carried on according to democratic principles. It is the job of the leader that individuals of group accept responsibility of their part of activities in any plan of action adopted by the group
- VI. **Group educator or teacher:** in most of the groups the leader will have more training and experience. So the leader can teach according to the level of understanding of the members of the group so that they can understand his views. In this capacity his chief

function is to develop and train other leaders so that group is not dependent completely on him.

- VII. **Group symbol or symbol of group ideas:** all social groups have implicit (internal) or explicit (external) norms or ideals. As a rule persons accepted as leaders are those who have adopted these norms or ideals and live by them. The leader must make the members feel that they need ideals and depend upon them for accomplishing what they desire to do, the leader should be not be self interested
- VIII. **Group supervisor:** the leader also acts as supervisor. A good leader supervises the work of his peers and subordinates. Professional leaders such as Extension Officers, in addition to serving as leaders of social groups also devote a portion of their time to working with lay leaders and group organizations like youth clubs, cooperatives etc.

Different methods of selection of both professional and lay leaders

Selection of Professional Leaders:

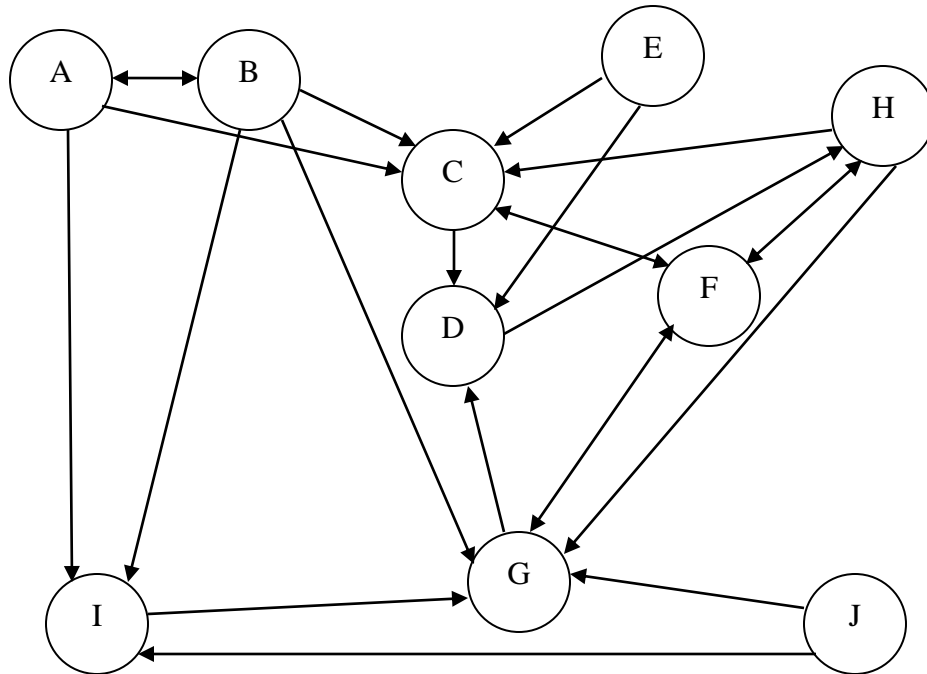
- I. **Interview:** The time-honored and most widely used method of selecting persons for position of professional leadership. It is based primarily upon an interview and an evaluation of past academic and occupational records of the individual. A large amount of information concerning a person can be acquired through an interview. The chief difficulty with the interview is that one can observe and evaluate the applicant only as he answers questions during a brief period of time. In industry and management there has been an attempt of supplement the interview by subjecting applicants to a battery of tests. These tests measure ability, aptitudes, attitudes and interests and both the academic training and practical experience. The use of a battery of tests along with an interview provides a better basis for selection than using the interview alone.
- II. **Performance Tests:** These have been used in certain situations as a part of the basis for selection of professional leaders. One type of these is the 'Leaderless group tests' in which seven or eight persons are given a common task to perform and it is left up to the persons involved to determine which person have become the leader. Another type of test is to appoint an individual as a leader and then observe how well he directs the activities of the members of the group. The big advantage of these performance tests is that one can observe the potential leader in a real life situation in which he is functioning as the leader of a group.

Selection of lay leaders:

I. **Sociometry:** This measure of social distance was adopted by J.L. Moreno and Helen H. Jennings to measure the degree of attraction and repulsion between individuals within a small group. The method is also known as sociometry. Helen Jennings, herself has defined sociometry as “means of presenting simple graphically the entire structure of relations existing at a given time among members of a given group”. To take an illustration, suppose it is desired to measure the degree of attraction and rejection among 10 students of the class, the following method would be adopted. Each student would be asked to select three names in order of preference and number them as 1, 2 and 3. Thus, there are as many choosers as the member from which the choice is to be made. The number of persons to be chosen by each is of course limited to three. When the preferences have been known they can be arranged either in the form of matrix table or socio gram. The illustration of matrix is given in the figure:

		CHOOSES										
		A	B	C	D	E	F	G	H	I	J	
C H O O S E R	A		2	1						3		
	B	3		2				1				
	C	3			1		2					
	D			1		2			3			
	E			2	3				1			
	F			1				3	2			
	G				1		2			3		
	H			1			2	3				
	I	3	2					1				
	J			2				3		1		
	First Choice	--		4	2	--	--	2	1	1	--	Total=10
	Second Choice	--	2	3	--	1	3	--	1	--	--	Total=10
	Third Choice	3	--	--	1	--	--	3	1	2	--	Total=10
	Total	3	2	7	3	1	3	5	3	3	0	Total=30

In order to make relationship clear, the matrix may be presented in the form of suitable diagram. In the diagram, the students are shown by circles and attention has been shown in the forms of arrows.



Sociogram Showing Choices

From the analysis of the matrix or the graph the following types of relationship can be generalized:

Mutual choice: In such a case two persons may show preference to each other. The intensity of this performance may be same or it may be different. Thus C and D have given each other first preference. In case of A and B the choice is mutual but the order of preference is different.

Triangular or quadrangular choice: In the above diagram we see that C has no choice for B directly but C has chosen A and A has chosen B and thus B and C are mutually linked the relationship in quadrangular. It may be pointed out here that direct relationship is real and stronger but as the member of intermediary links increases, the power of union is reduced.

Clique: This is similar to triangular and quadrangular relationships. Such a relationship is said to be existed when three or more persons show mutual choices to each other. The difference between a triangular and clique relationship is that were as in the former case the persons are not

directly connected, in the later case they show mutual choice for each other are therefore more closely connected.

Choice star: These are the persons who are chosen by most of the people. They are very popular figures and may usually be called the leaders of group. The most popular star in the diagram is C getting as many as seven choices. Next comes to G with five preferences. H and I are other popular stars.

Secondary choice star: They are sometimes called Aristotle leaders. In case of D in the above example is very typical. Directly he/she has received only three choices and as such cannot be said to be very popular but a keener study will show that he/she has been given first preference by C and G who are themselves two most popular stars. Thus although D is not directly very popular, he/she can indirectly be very powerful. Such a star may be said to be secondary choice star.

Totally isolate: I is typical case of this nature. He/she has not been chosen by anyone. Such persons are very stranded and friendless and may create a problem in social gatherings. They are mostly lonely and cut off and hold no significant place in the society.

The sociometry thus discloses a number of relationships in the society. A careful study through sociometric methods may prove very useful in disclosing inter-relationships in the society, the pattern of acceptances and rejections and the study of leadership in a particular community. Besides mutual preference opinions about rejection or abhorrence may also be elicited. Various types of indices measuring social interrelation have also been formulated among them.

- II. **Election:** Another method widely used in selecting leaders, consists simply of the members of the group electing a leader through voting or any other method. The extension worker can guide or assist the local people in electing the right person for the right job by explaining to the group, the functions of leader in relation to particular problem and outlining the qualifications of a good leader for the given purpose. Election can also be used for selecting persons to receive leadership training who later become the actual leaders.

- III. **Discussion Method:** Through discussions (on any subject) the person with sound knowledge and ability is soon recognized and a mere talker easily spotted. Discussion gives encouragement and assurance to the potential leader to express himself, and over a period of time may make him more confident in accepting some position of leadership and he emerges as a valuable leader.
- IV. **Workshop Method:** In this method a large group is broken in to smaller groups and the responsibility of the program and decision-making rests upon the smaller units. Leadership emerges in each small group. Over a period of time, the extension worker can spot certain leaders who come to the fore (front) in taking responsibilities. The extension worker or professional leader in the workshop has the position of consultant, observer, discussion group leader etc.
- V. **Group Observer:** The extension worker should watch (observe) a community or group in action and then he will be able to spot potential leaders. He may observe the community in any type of situation. For obtaining the best results, the group should not be aware of that the extension worker is observing them.

Rogers who designated the local leaders as opinion leaders mentions the following two methods to locate these leaders in mass public.

- VI. **Key informants:** In a community key informants or persons with important information about their community like teachers, VLWs etc may be asked by the extension worker to indicate opinion leaders in that area based on their indications he will select the leader. Key informant method is cost saving and time saving when compared to the sociometric method and other methods.
- VII. **Self-designating technique:** This consists of asking a respondent a series of questions to determine the degree to which he perceives himself to be an opinion leader based on the analysis of the answers obtained, the extension workers selects a leader.

Lay leaders are otherwise called as local leaders or informal leaders or volunteer leaders. Professional leaders are otherwise called as formal leaders.

Educational Psychology

Psychology has its origin from two Greek words psyche (soul) and logos (a rational course or a study). Thus, literally it means study of science of soul. But soul is an abstract thing. In modern society, the word psychology is taken to mean 'science of mind'. Most contemporary psychologist agrees on a definition of psychology as the 'science of the behaviour of the organism'. Although human behavior seems to follow certain general trends, individuals respond differently to elements in specific situations. An individual's behavior consists not only of his observable acts but also of his reactions to inner states and different factors of influence. The factors that influence and individual's behavior include his education, personal factors, situational factors and environmental factors such as persons around him, objects he confronts with situations and conditions in which he lives. So psychologists who are interested in studying human behavior will not only study different aspects of behavior but also what are the similarities and differences among human reactions and what causes such behaviour.

Definition of Psychology

- | | |
|---|--------------------------------|
| 1. Psychology is the science that studies the responses which living individuals make to their environment. | Murthy |
| 2. Psychology is the scientific study of the behaviour of an individual. | Daniel |
| 3. Psychology is the science of mental activity of an organism. | Guilford |
| 4. Psychology is the science of human behaviour and experience. | Cruze |
| 5. It is the scientific enquiry of the behaviour of the individual. | Dashiell |
| 6. It is the science of human behaviour. | Kilgard |
| 7. It is science of behaviour and adjustment. | Murphy |
| 8. It is the scientific study of the activities of the individual in relation to his environment. | Woodworth & Marquis |
| 9. It is the study of human behaviour and human relationships. | Crow & Crow |
| 10. It concerns itself with the scientific investigation of behaviour. | N. L. Munn |

Scope of Psychology

- I. The application of psychology has a very wider area in the study of human behavior as follows:
- II. To identify the nature and characteristics of learner
- III. The nature of learning process
- IV. The principles of teaching and learning process
- V. The human growth and development
- VI. The techniques employed in teaching
- VII. Identification of personality traits
- VIII. Development and adjustment of psychological traits
- IX. Scientific measurement and evaluation of psychological traits

Importance of Psychology in Agricultural Extension

The study of psychology as the science of human behavior helps in identifying

- I. The abilities of individual
- II. The needs of individual and techniques to be employed to motivate them
- III. The hereditary and environmental factors that affect the behavior
- IV. The levels of achievement motivation of the individuals
- V. The factors that result in individual, intellectual differences and reasons for people becoming problem men
- VI. The factors that lead to differential perceptions
- VII. The causes of retarded learning
- VIII. The causes of emotions and frustration in human beings
- IX. The causes of forgetting and how to improve memory
- X. The levels of knowledge, attitudes possessed by the individuals
- XI. The different psychological traits possessed by individuals. By the application of different tests and help in evaluation of the behavior of the individual

Educational Psychology

When we say that education plays a vital role in human behavior it is imperative (essential) to study the mode of such role the education plays. The desirable changes in behaviour that represent basic features of education are:

Knowledge: it is the intimate acquaintance with fact

Skill: The ability to do a particular thing

Attitude: the positive or negative feeling one has towards any psychological object

Educational psychology deals with the behaviour of human beings in educational situations. This means that educational psychology is concerned with the study of human behaviour or human personality, its growth, development guidance under the social process of education.

Definitions of Educational Psychology

1. Educational Psychology is the branch of psychology that describes and explains the learning experiences of an individual and the progress in his educational development from birth to old age. **Crow and Crow**
2. Educational psychology is the study of the psychological aspects of educational situation. **Trow**
3. Educational psychology is that branch of psychology which deals with teaching and learning. **Skinner**
4. Educational psychology is the science of education. **Peel**
5. It is the idea of applying the knowledge of mental processes of students to the art of education. **Pestalozzi**

Scope of Educational psychology

- I. Educational psychology is no longer limited to the education of school children but it has extended its scope from the nursery schools to the colleges and universities.
- II. Adult education occupies a considerable portion of its syllabus.
- III. Teachers education now-a-days is considered more fundamental and of accurate necessity in the psychology of education.
- IV. Educating the adult in the 'democratic ways of life' is of paramount important in our national life.
- V. Educational psychology deals with the behaviour of human beings in educational situations. Its main concern is to identify various psychological factors affecting teaching and learning process. It describes and explains the learning according to scientifically determined principles and facts concerning human behaviour. Educational psychology addresses the questions-"why do some individual learn more than others" and "what can be done to improve that learning." Therefore, its subject matter is

revolved around teaching and learning process and educational psychologists attempt to discover:

- VI. The extent to which the factors of heredity and environment contribute to learning.
- VII. The nature of the learning process.
- VIII. The educational significance of individual differences in rate and limit of learning.
- IX. The inner change that occur during learning.
- X. The relation of teaching procedures to leaning outcomes.
- XI. The most effective techniques for evaluating progress in learning.
- XII. The relative effect upon an individual of formal learning as compared with incidental or informal learning experiences.
- XIII. To value the scientific attitude towards education.
- XIV. The psychological impact upon learner's attitude of sociological conditions.
- XV. Agricultural extension is education and its main purpose is to change the behaviour of farmers. Therefore, knowledge of educational psychology is useful to extension agent for understanding the factors affecting the teaching and learning process.

Importance of Educational Psychology in Agricultural Extension

The importance of educational psychology in agricultural extension is immense as both disciplines deal with human behaviour in educational environment. Following are the some of the reasons which explain the importance of educational psychology in agricultural extension.

- I. Educational psychology helps the extension agent to know the learner, his interest, attitudes, aptitude, level of aspiration, intelligence, interests, individual behaviour in group, etc. which plays a major role in one's learning.
- II. Its main concern is on teaching and learning. This helps in formulating training programmes for improving the knowledge and skill of extension agent and farmers. It also helps in selection of teaching methods and aids for organising effective learning situations and suggests technique of learning as well as teaching.
- III. It helps in imparting better education by organising the subject matter of learning experience, preparation of different text books, development of assessment patterns, etc for heterogeneous learners.

- IV. Educational psychology helps in acquainting learner with the mechanism of heredity and environment.
- V. It also deals with the problem-solving which is very important for extension agent to develop problem-solving skills amongst farmers.
- VI. It helps extension agent to find causes of prejudices, the habit of sticking to old practices of farming and ways of doing things, the doubts and lack of confidence and factors affecting motivation.
- VII. It also helps them to know the emotions and feelings of farmers, how farmers learn new practices.

Behaviour

Behaviour is the range of actions and mannerisms made by individuals, organisms, systems, or artificial entities in conjunction with themselves or their environment which includes the other systems or organisms around as well as the physical environment. It is the response of the system or organism to various stimuli or inputs, whether internal or external, conscious or subconscious, overt or covert, and voluntary or involuntary. The meaning a psychologist derives from behavior is largely determined by his or her theoretical framework. Behaviorists, such as John B. Watson, are famous for seeing behavior as the be all and end all of psychology. Behaviorism considers behavior to be the only objective phenomenon of psychology and thus the only reliable information on which to base predictions of future behaviors. Behaviorism developed in the late 19th century as a response to the theories of introspection and psychoanalysis, which relied on the observation of internal states of mind and emotions to understand one's conscious experience.

There are three main domains of behaviour. These domains are cognitive (thinking), affective (emotion/feeling), and psychomotor (physical/kinesthetic). Each domain has a taxonomy associated with it. Taxonomy is simply a word for a classification. Benjamin Bloom (1948) developed classifications of intellectual behaviour and learning in order to identify and measure progressively sophisticated learning. College faculties are hired because of their discipline expertise and are sometimes unfamiliar with important pedagogical theories that contribute to effective learning. Bloom's taxonomy is especially important in higher education where outcomes need to address the student ability to use information, not just recall and regurgitate concepts. Lower levels of learning are easier to assess but do not adequately display what the student can DO with the knowledge. Refer to the next page for a diagram of Bloom's increasing levels of complex learning. However, learning is not a purely cognitive function; learning occurs differently when it entails performing a skill or re-evaluating behavior. Three domains of learning are recognized:

Cognitive Domain

The cognitive domain involves knowledge and the development of intellectual skills (Bloom, 1956). This includes the recall or recognition of specific facts, procedural patterns, and concepts

that serve in the development of intellectual abilities and skills. There are six major categories of cognitive and processes, starting from the simplest to the most complex i.e. knowledge, comprehension, application, analysis, synthesis and evaluation (see the table below for an in-depth coverage of each category): According to various researchers there are six levels of cognitive complexity: knowledge, comprehension, application, analysis, synthesis, evaluation. In the chart below, note the hierarchical arrangement, this means that higher levels subsume ability in lower levels. The higher the level, the presumably more complex mental operation is required. Higher levels are not necessarily more desirable than lower levels, because one cannot achieve the higher levels without an ability to use the lower levels. As one moves up into higher levels, however, the more applicable the skills are to those needed in daily life.

Level	Description	Action Verbs Describing Learning Outcomes	
Evaluation	Requires the formation of judgments and decisions about the value of methods, ideas, people, and products. Must be able to state the bases for judgments (e.g., external criteria or principles used to reach conclusions.) Sample question: Evaluate the quality or worth of a value as applied to pharmacy.	Appraise Compare Contrast Criticize Defend	Judge Justify Support Validate
Synthesis	Requires production of something unique or original. At this level, one is expected to solve unfamiliar problems in unique way, or combine parts to form a unique or novel solution. Sample question: Integrate data from several sources (e.g., various readings and observations at the service site).	Categorize Compile Compose Create Design	Devise Formulate Predict Produce
Analysis	Identification of logical errors (e.g., point out contradictions, erroneous inference) or differentiate among facts, opinions, assumptions, hypotheses, conclusions. One is expected to draw relations among ideas and to compare and contrast. Sample question: Deduce a client's beliefs regarding preventive health actions.	Break down Deduce Diagram Differentiate Distinguish Illustrate	Infer Outline Point out Relate Separate out Subdivide
Application	Use previously acquired information in a setting other than the one in which it was learned. Because problems at this level are	Change Compute Demonstrate	Organize Prepare Relate

	presented in a different and applied way, one cannot rely on content or context to solve the problem. Sample question: Organize your observations at a site to demonstrate a particular value.	Develop Modify Operate	Solve Transfer Use
Comprehension	Some degree of understanding is required in order to change the form of communication, translate, restate what has been read or heard, see connections or relationships among parts of a communication (interpretation), draw conclusions, see consequences from information (inference). Sample Question: Explain pharmaceutical care.	Convert Defend Discriminate Distinguish Estimate Explain	Extend Generalize Infer Paraphrase Predict Summarize
Knowledge	Remember or recall information such as facts, terminology, problem-solving strategies, rules etc. Sample question: Define pharmaceutical care.	Define Describe Identify Label List Match	Name Outline Recall Recite Select State

Bloom's Revised Taxonomy

Lorin Anderson, a former student of Bloom, and David Krathwohl revisited the cognitive domain in the mid-nineties and made some changes, with perhaps the three most prominent ones being (Anderson, Krathwohl, Airasian, Cruikshank, Mayer, Pintrich, Raths, Wittrock, 2000):

- changing the names in the six categories from noun to verb forms
- rearranging them as shown in the chart below
- creating a processes and levels of knowledge matrix

The chart shown below compares the original taxonomy with the revised one:

Original Domain		New Domain
Evaluation		Creating
Synthesis		Evaluating
Analysis		Analyzing
Application		Applying
Comprehension		Understanding
Knowledge		Remembering

This new taxonomy reflects a more active form of thinking and is perhaps more accurate. The new version of Bloom's Taxonomy, with examples and keywords is shown below:

Category	Examples, key words (verbs), and technologies for learning (activities)
<p>Remembering: Recall or retrieve previous learned information.</p>	<p>Examples: Recite a policy. Quote prices from memory to a customer. Recite the safety rules.</p> <p>Key Words: defines, describes, identifies, knows, labels, lists, matches, names, outlines, recalls, recognizes, reproduces, selects, states</p> <p>Technologies: book marking, flash cards, rote learning based on repetition, reading</p>
<p>Understanding: Comprehending the meaning, translation, interpolation, and interpretation of instructions and problems. State a problem in one's own words.</p>	<p>Examples: Rewrite the principles of test writing. Explain in one's own words the steps for performing a complex task. Translate an equation into a computer spreadsheet.</p> <p>Key Words: comprehends, converts, defends, distinguishes, estimates, explains, extends, generalizes, gives an example, infers, interprets, paraphrases, predicts, rewrites, summarizes, translates</p> <p>Technologies: create an analogy, participating in cooperative learning, taking notes, storytelling, Internet search</p>
<p>Applying: Use a concept in a new situation or unprompted use of an abstraction. Applies what was learned in the classroom into novel situations in the work place.</p>	<p>Examples: Use a manual to calculate an employee's vacation time. Apply laws of statistics to evaluate the reliability of a written test.</p> <p>Key Words: applies, changes, computes, constructs, demonstrates, discovers, manipulates, modifies, operates, predicts, prepares, produces, relates, shows, solves, uses</p> <p>Technologies: collaborative learning, create a process, blog, practice</p>
<p>Analyzing: Separates material or concepts into component parts so that its organizational structure may be understood. Distinguishes between facts and inferences.</p>	<p>Examples: Troubleshoot a piece of equipment by using logical deduction. Recognize logical fallacies in reasoning. Gathers information from a department and selects the required tasks for training.</p> <p>Key Words: analyzes, breaks down, compares, contrasts, diagrams, deconstructs, differentiates, discriminates, distinguishes, identifies, illustrates, infers, outlines, relates, selects, separates</p> <p>Technologies: Fishbowls, debating, questioning what happened, run a test</p>
<p>Evaluating: Make judgments about the value of ideas or</p>	<p>Examples: Select the most effective solution. Hire the most qualified candidate. Explain and justify a new budget.</p>

materials.	<p>Key Words: appraises, compares, concludes, contrasts, criticizes, critiques, defends, describes, discriminates, evaluates, explains, interprets, justifies, relates, summarizes, supports</p> <p>Technologies: survey, blogging</p>
<p>Creating: Builds a structure or pattern from diverse elements. Put parts together to form a whole, with emphasis on creating a new meaning or structure.</p>	<p>Examples: Write a company operations or process manual. Design a machine to perform a specific task. Integrates training from several sources to solve a problem. Revises and process to improve the outcome.</p> <p>Key Words: categorizes, combines, compiles, composes, creates, devises, designs, explains, generates, modifies, organizes, plans, rearranges, reconstructs, relates, reorganizes, revises, rewrites, summarizes, tells, writes</p> <p>Technologies: Create a new model, write an essay, network with others</p>

Cognitive Processes and Levels of Knowledge Matrix

Bloom's Revised Taxonomy not only improved the usability of it by using action words, but added a cognitive and knowledge matrix. While Bloom's original cognitive taxonomy did mention three levels of knowledge or products that could be processed, they were not discussed very much and remained one-dimensional:

- **Factual** - The basic elements students must know to be acquainted with a discipline or solve problems.
- **Conceptual** – The interrelationships among the basic elements within a larger structure that enable them to function together.
- **Procedural** - How to do something, methods of inquiry, and criteria for using skills, algorithms, techniques, and methods.

In Krathwohl and Anderson's revised version, the authors combine the cognitive processes with the above three levels of knowledge to form a matrix. In addition, they added another level of knowledge - metacognition:

- **Metacognitive** – Knowledge of cognition in general, as well as awareness and knowledge of one's own cognition.

When the cognitive and knowledge dimensions are arranged in a matrix, as shown below, it makes a nice performance aid for creating performance objectives:

The Cognitive Dimension

The Knowledge Dimension	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual						
Conceptual						
Procedural						
Metacognitive						

However, others have identified five contents or artifacts (Clark, Chopeta, 2004; Clark, Mayer, 2007):

- **Facts** - Specific and unique data or instance.
- **Concepts** - A class of items, words, or ideas that are known by a common name, includes multiple specific examples, shares common features. There are two types of concepts: concrete and abstract.
- **Processes** - A flow of events or activities that describe how things work rather than how to do things. There are normally two types: business processes that describe work flows and technical processes that describe how things work in equipment or nature. They may be thought of as the big picture, of how something works.
- **Procedures** - A series of step-by-step actions and decisions that result in the achievement of a task. There are two types of actions: linear and branched.
- **Principles** - Guidelines, rules, and parameters that govern. It includes not only what should be done, but also what should not be done. Principles allow one to make predictions and draw implications. Given an effect, one can infer the cause of a phenomena. Principles are the basic building blocks of causal models or theoretical models (theories).

Thus, the new matrix would look similar to this:

The Cognitive Dimension

The Knowledge Dimension	Remember	Understand	Apply	Analyze	Evaluate	Create
Facts						
Concepts						
Processes						
Procedures						
Principles						
Metacognitive						

An example matrix that has been filled in might look something like this:

The Knowledge Dimension	Remember	Understand	Apply	Analyze	Evaluate	Create
Facts	list	para-phrase	classify	outline	rank	categorize
Concepts	recall	explains	show	contrast	criticize	modify
Processes	outline	estimate	produce	diagram	defend	design
Procedures	reproduce	give an example	relate	identify	critique	plan
Principles	state	converts	solve	differentiates	conclude	revise
Metacognitive	proper use	interpret	discover	infer	predict	actualize

Affective Domain

Like the cognitive domain, the affective domain is hierarchical with higher levels being more complex and depending upon mastery of the lower levels. With movement to more complexity, one becomes more involved, committed, and self-reliant. Note the parallel between external and internal motivation. As one moves from being externally to internally motivated, one moves to higher levels. Affective outcomes tend to be the hardest to articulate initially and often appear difficult to assess at first glance. However, cognitive outcomes often represent the outcomes most closely related to deeper thinking and life-long learning, as well as the outcomes we value most. Affective domain defining behaviors that correspond to attitudes and values. It includes the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations and attitudes. The five major categories are listed from the simplest behavior to the most complex:

Level	Description	Action Verbs Describing Learning Outcomes
characterization	All behavior displayed is consistent with one's value system. Values are integrated into a pervasive philosophy that never allows expressions that are out of character with those values. Evaluation at this level involves the extent to which one has developed a consistent philosophy of life (e.g., exhibits respect for the worth and dignity of human beings in all situations).	Avoid Exhibit Manage Resist Revise Display Internalize Require Resolve
Organization	Commitment to a set of values. This level involves: (1) forming a reason why one values certain things and not others, and (2) making	Abstract Balance Compare Formulate Select Systemize

	appropriate choices between things that are and are not valued. One is expected to organize likes and preferences into a value system and then to decide which ones will be dominant.	Decide Define	Theorize
Valuing	Display behavior consistent with a single belief or attitude in situations where one is neither forced nor asked to comply. One is expected to demonstrate a preference or display a high degree of certainty and conviction.	Act Argue Convince Debate Display	Express Help Organize Prefer
Responding	One is required to comply with given expectations by attending or reacting to certain stimuli. One is expected to obey, participate, or respond willingly when asked or directed to do something.	Applaud Comply Discuss Follow Obey	Participate Play Practice Volunteer
Receiving	One is expected to be aware of or to passively attend to certain stimuli or phenomena. Simply listening and being attentive are the expectations.	Attend Be aware Control Discern Hear	Listen Look Notice Share

Psychomotor Domain

Psychomotor domain involves physical skills or tasks classification. It includes physical movement, coordination, and use of the motor-skill areas. Development of these skills requires practice and is measured in terms of speed, precision, distance, procedures, or techniques in execution. Thus, psychomotor skills range from manual tasks, such as digging a ditch or washing a car, to more complex tasks, such as operating a complex piece of machinery or dancing. Check out the psychomotor table on the following page. This domain is given primarily for information. Other courses within the curriculum stress this various levels of psychomotor performance (e.g., experimental skills, laboratory, agricultural practices etc). Psychomotor behaviors are performed actions that are neuromuscular in nature and demand certain levels of physical dexterity.

Level	Description	Action Verbs Describing Learning Outcomes
Naturalization	High level of proficiency is necessary. The behavior is performed with the least expenditure of energy, becomes routine, automatic and spontaneous.	Automatically Spontaneously Effortlessly With ease Naturally With perfection Professionally With poise Routinely
Articulation	Requires the display of coordination of a	Confidence Smoothness

	series of related acts by establishing the appropriate sequence and performing the acts accurately, with control as well as with speed and timing.	Coordination Harmony Integration Proportion	Speed Stability Timing
Precision	Requires performance of some action independent of either written instructions or a visual model. One is expected to reproduce an action with control and to reduce errors to a minimum.	Accurately Errorlessly Independently	Proficiently With balance With control
Manipulation	Performance of an action with written or verbal directions but without a visual model or direct observation. The action may be performed crudely or without neuromuscular coordination at this stage. Notice that the action verbs are the same as those for the imitation stage. The difference is that these actions are performed with the aid of written and verbal instruction, not visual demonstration.	Align Balance Follow Grasp Hold	Place Repeat Rest (on) Step (here)
Imitation	The learner observes and then imitates an action. These behaviors may be crude and imperfect. The expectation that the individual is able to watch and then repeat an action.	Align Balance Follow Grasp Hold	Place Repeat Rest (on) Step (here)

Personality

Personality can be termed as the combination of qualities – mental, physical, and moral that sets one part from others. Having a strong personality is the key to success. This is also a key determinant of good leadership. A good personality enables one to establish self control and self direction to discover the reality of freedom of choice. A person with a positive attitude can direct his thoughts, control his emotions and regulate his attitude. The word Personality originated from the Latin word Personare which used to mean the voice of an actor speaking through a mask. Later it came to be applied to the actors themselves. After putting on the mask, audience expected the person to perform a role in a particular manner. It did not, however, mean that the person enacting the given role necessarily possessed those qualities. For a layperson, personality generally refers to the physical or external appearance of an individual. For example, when we find someone ‘good-looking’, we often assume that the person also has a charming personality. This notion of personality is based on superficial impressions, which may not be correct. When psychologists talk of personality, they mean a dynamic concept describing the growth and development of a person’s whole psychological system. Rather than looking at parts of the person, personality looks at some aggregate whole that is greater than the sum of the parts. In psychological terms, personality refers to our characteristic ways of responding to individuals and situations.

Definition of Personality

Several psychologists tried to define the term personality earlier, but failed to indicate what personality means. It was only during early 20th century, when several psychologists explained the concept of personality. By **personality** it is now generally meant that it is the organization and integration of a large number of **human traits**. Some of the definitions are as follows:

1. A man’s personality is the total picture of his organized behavior, especially as it can be characterized by his fellow men in a consistent way. **Dennell, 1937**
2. Personality is the sum total of an individual’s behavior in social situations. Behaviour include not only overt acts but inward feelings produced by social situation.

Trainer, 1957

3. Personality is the total configuration of individual characteristics and modes of behaviours that shape one's adjustment to his environment, especially traits that influence his getting along with others and himself. **Hilgard, 1962**
4. Personality is defined as the sum total of individual traits in which a person expresses him or herself differently. **Maynard, 1976**
5. Personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to his environment. **Allport, 1930**
6. Personality is a dynamic organisation, inside the person, of psychophysical systems that create a person's characteristic patterns of behaviour, thoughts, and feelings. **Carver and Scheier, 2000**
7. Personality is the sum total of ways in which individual reacts to and interacts with others. It is most often described in terms of measurable traits that a person exhibits. **Robbins, 2001**
8. Personality can be defined as a dynamic and organised set of characteristics possessed by a person that uniquely influences his or her cognitions, motivations, and behaviours in various situations. **Ryckman, 2004**

The definition given by Hilgard is most comprehensive and explains different dimensions of personality in terms of traits and the adjustment of individual to his environment.

Types of Personality

There are **three** types of personality – **C.J.Jung**

- I. **Extrovert:** Extrovert types are socially adaptable and interested in, friendly to people. They go to the extent of sacrificing for friends, adjust themselves with any situation. They make quick decision and execute the plan of action rapidly. They are fluent in speech, free from worries, not easily embraced, usually conservative, friendly, like to work with others, neglect of ailments and personal belongings.
- II. **Introvert:** Introvert types are socially shy and retiring, interested in their own feelings and reactions, They are better at writing than speaking, enjoying being alone, have independent judgment, different from public or social functions, think of ideals reserved, fond of books, lack in flexibility.

III. **Ambivert:** Ambivert types are placed in between extroverts and introverts. Their behaviour is balanced. Their psychic energy is partially directed inwards and partly outwards. They are interested in their own thoughts and emotions and also in other persons and their actions. Most of us belong to ambivert type.

S. No.	Extrovert	Introvert
1.	Extrovert type are socially adaptable (adjust to any situation) and interested in people, they go to the extent of scarifying themselves for others	They are socially shy and remain interested in their own feelings and reactions
2.	They make quick decisions and execute the plan of action rapidly	Slow in taking decisions and executing the plan of action
3.	They are fluent in speech	Not fluent in speech
4.	Free from worries	Not like that
5.	Not easily embarrassed	Easily embarrassed
6.	Usually conservative (do not change)	Not conservative
7.	Interested in athletics	Not interested
8.	Friendly	Not friendly
9.	Like to work with others	Don't like to work with others
10.	Neglectful of aliments and personal belongings	Not like that
11.	Better at speaking than writing	Better at writing than speaking
12.	Enjoy to be with others	Enjoy being alone
13.	Take decisions with the help of others	They have independent judgment
14.	Attend public or social functions	Different from public or social functions
15.	Usually not like that	Strong of ideals
16.	Not reserved	Reserved
17.	Not fond of books	Fond of books
18.	Flexible	Not flexible

Traits/Characteristics of Personality

1. The personality is something unique and specific. The two individuals, not even twins are alike in behaviour.
2. Personality exhibits self-consciousness as one of its characteristics.
3. Personality is through and through social. It is only in relation to others that we are usually judged.
4. Personality is not static, it is dynamic and ever in the process of change and modification.
5. Every personality is the product of heredity and environment.
6. Every personality is the end product of process of learning and acquisition.

7. Personality is always striving for goals. Our life and behaviour is positive and create for ever seeking new ends and goals to meet our needs.
8. Personality should not be equated with one's character. Character is an ethnic concept. It represents a moral estimate of the individual.

According to B. C. Rai, the following five types of personality traits can be identified among rural people:

1. Physical traits: It includes physique, the up-keep, the voice and certain other factors of the physique of the individuals. Eg. A man with good physique can be used to perform though activities like ploughing.
2. Mental traits: It can be divided into three aspects: knowing, feeling and willing. The mental makeup is guided by three features i.e. intelligence, temperament and determination and character. Eg. A man with good knowledge can be used for works involving technicalities like proper mixing of different fertilizers and herbicides.
3. Emotional traits: Endocrine glands influence the emotional traits of our personality. Emotions are responsible for our attitudes towards other people. It is a result of our emotions that we get pleased with certain person while with other we get annoyed. Eg. Persons with positive emotions can be used to represent their comments in the meetings with other official.
4. Sociability: Man is influenced by the atmosphere in which he lives. Sociability i.e. getting on freely with other people is of utmost importance in extension work. Eg. A sociable man can be taken to influence another people.
5. Determination and character: A man with strong determination and character is able to achieve a thing than one with lesser determination. Eg. Person with strong will power can be used where some inputs have to be got from a distant place.

Advantage of Personality

1. Knowledge about the traits of personality helps the extension worker to perform his/her work effectively.
2. Individuals with positive emotions can be asked to speak in public meetings.
3. Individuals with traits of empathy, sympathy, generosity can be can be engaged in trustworthy works, seed distribution etc.

4. Extension worker can easily approach extrovert and sociable individuals.
5. Personality helps to know the unconscious behaviour of individuals.

Disadvantage of Personality

1. If an individual is identified to be an introvert personality, then he/she will be to some extent neglected during public meetings.
2. Lack of predictability.
3. Sometimes some individuals who are actually selfish may be identified as trustworthy.
4. Some individuals who were previously selfish and dishonest might have changed to be honest and generous but even then he/she will not be trusted upon.
5. By case of history method if parents are good and generous, then it continuous for their children also, but it does not apply to all situations.

Factors influencing the Personality

The following five factors of personality are contributing to the formation and development of human personality:

- 1. Biological factors:** The foremost determinant of personality is the biological factor, in which are included heredity, the brain and the physical stature. Psychologists and geneticists argue strongly that heredity plays an important role in one's personality. The importance of heredity varies from one personality trait to another. For example, heredity plays a more important role in determining a person's temperament than determining the values and ideals.

Another factor which influences the personality is the brain of the individual. Perhaps, physical stature of an individual is the most outstanding influence on the personality of an individual. For example, the fact that a person is short or tall, fat or skinny, good looking or not, will influence others and in turn will affect the person himself. According to Mangal (2007), Persons who are very intelligent can make better adjustment in home, school and society than those who are less intelligent. Sex difference is a factor which plays a vital role in the development of personality of individual. Boys are generally more assertive and vigorous. They prefer adventures. Girls are quieter and more injured by personal, emotional and social problems. Development of personality is also influenced by the nature of nervous system.

- 2. Situational factors:** also influence the human personality. The effect of environment on personality is quite strong. Knowledge skill and language are acquired by a person and can be termed as learned modifications of behavior. These learned modifications cannot be passed on to the children. The children in turn must acquire them through their personal effort, experience and the interaction with the environment. Many a times the actions of the person are determined more by the situation, rather than his behavior. Therefore, the situation may potentially have a very big impact on the actions and expressions.
- 3. Physical Environment:** Environmental factors play a vital role in the development of personality. According to Louw (1997) it is emphasized that the personality of the individual develops in a social environment. It is in the social environment, that he/she comes to have moral ideas, social attitudes and interests. This enables him/her to develop a social self. The important aspects of the environment are as follows: Physical environment includes the influence of climatic conditions of a particular area or country on man and his living.
- 4. Social factors:** When an individual interacts with other persons in his/her group give and take relationship takes place and it affects the personality of the individual. Social factors of personality are responsible for formation of personality, when an individual has group experience and contacts with other personality of an individual is influenced by others. It may be good or bad but depends on the association in which he/she keeps. In society every person plays a specific role and status. For example: in our society younger are expected to be respectful for elders. Many other social factors like family, environment, group life, media with which an individual interact in his/her society daily life mold their personalities. We can say that whatever comes in contact with an individual's social life affects personality of that individual and develop good or bad personality.
- 5. Cultural factors:** The cultural environment refers to certain cultural traditions, ideals, and values etc., which are accepted in a particular society. All these factors leave a permanent impression on the child's personality. Both material as well as non-material culture affects personality of an individual. An individual living in his/her culture adopts the traits consciously or unconsciously and acts accordingly. Culture of any society determines the behaviours and personality of an individual and he/she is expected to act according to the culture. A person follows all the social norms of a culture which results in the formation of good personality while non-conformity to the cultural rules develops abnormal or bad

personality. So, the culture in which an individual seeks satisfaction adjusts him/her and develops personality.

Role of Personality in Agricultural Extension:

- I. The extension worker should get into deep study of knowing the capacities, types and traits of the personalities of his clients (farmers) with whom he has to work in order to plan and educate them. This also helps the extension worker to select a suitable farmer for a certain purpose
- II. The study of personality of the people enables extension worker to judge and follow the method of guiding, by selecting suitable teaching method. This enables the extension worker to properly plan the programmes to advise the farmers for desirable changes in rural communities
- III. By studying the personality of farmers, extension agent can understand the values and value systems of its clients and can precede his/her work accordingly.
- IV. The study of personality of a particular farmer, the extension agent can get a clear idea about his/her various traits such as sociability. If a person found with this trait, then he/she can be used as a key communicator to promote developmental activities in a particular village. Similarly, farmers with traits of empathy, sympathy, generosity can be engaged in trustworthy works like seed distribution etc.

Motivation

Motivation is the process of initiating a conscious and purposeful action. Motive means an urge (drive or force) or combination of urges, to induce conscious or purposeful action. Motivation is a goal directed and need satisfying behavior. It explains why people do the things they do. It influences a person to do a thing in a certain way. Motive is something (a need or desire) that causes a person to act. The concept of motivation focuses on explaining what “moves” behaviour. In fact, the term motivation is derived from the Latin word ‘movere’, referring to movement of activity. Most of our everyday explanation of behaviour is given in terms of motives. Why do you come to the school or college? There may be any number of reasons for this behaviour, such as you want to learn or to make friends, you need a diploma or degree to get a good job, you want to make your parents happy, and so on. Some combination of these reasons and/or others would explain why you choose to go in for higher education. Motives also help in making predictions about behaviour. A person will work hard in school, in sports, in business, in music, and in many other situations, if s/he has a very strong need for achievement. Hence, motives are the general states that enable us to make predictions about behaviour in many different situations. In other words, motivation is one of the determinants of behaviour. Instincts, drives, needs, goals, and incentives come under the broad cluster of motivation. People are often motivated by external incentives as well as internal needs. Example: If a person is hungry, he or she may choose to eat a salad rather than a cheeseburger because he or she wants to be slimmer.

Definitions:

1. Motivation is a word that is part of the popular culture as few other psychological concepts are. **Maehr and Meyer**
2. Motivation is a ‘driving force’ through which people strive to achieve their goals and fulfill a need or uphold a value. The important words here are ‘needs’, ‘values’ and ‘goals’ and these are the building blocks of motivation that lead to actions:
 - Needs are basic requirements for survival and may be physical or psychological; for example, hunger, thirst, love or friendship.

- Values are the things that we consider to be most important; for example, family, health or wealth.
- Goals are the outcomes that we are working towards.

Mullins

3. Motivation may be defined as goal seeking or goal directed behavior or activity. Behavior is a function of the person, which is interaction within a situation.
4. Motivation is also defined as a stage of the organism in which bodily energy is mobilized and selectively directed towards parts of the environment.

Types of Motivation

Motivation can be divided into two different categories known as intrinsic (internal or inherent) motivation and extrinsic (external) motivation:

1) Intrinsic motivation: Intrinsic motivation is the self-desire to seek out new things and new challenges, to analyze one's capacity, to observe and to gain knowledge. It is driven by an interest or enjoyment in the task itself, and exists within the individual rather than relying on external pressures or a desire for consideration. The phenomenon of intrinsic motivation was first acknowledged within experimental studies of animal behavior. In these studies, it was evident that the organisms would engage in playful and curiosity driven behaviors in the absence of reward. Intrinsic motivation is a natural motivational tendency and is a critical element in cognitive, social, and physical development. The two necessary elements for intrinsic motivation are self-determination and an increase in perceived competence. We do things because we enjoy doing them. For example, we exercise because it feels good to exercise.

2) Extrinsic motivation: Extrinsic motivation refers to the performance of an activity in order to attain a desired outcome and it is the opposite of intrinsic motivation. Extrinsic motivation comes from influences outside of the individual. In extrinsic motivation, the harder question to answer is where do people get the motivation to carry out and continue to push with persistence. Usually extrinsic motivation is used to attain outcomes that a person wouldn't get from intrinsic motivation. Common extrinsic motivations are rewards (for example money or grades) for showing the desired behavior, and the threat of punishment following misbehavior. Competition is an extrinsic motivator because it encourages the performer to win and to beat others, not simply to enjoy the intrinsic rewards of the activity. A cheering crowd and the desire to win a trophy are also extrinsic incentives. We do things because of the tangible rewards, e.g. good

grades, money, etc. For example, we exercise because we want to lose weight. We should be highly motivated if we get paid to do what we love, right? This is not necessarily true because extrinsic motivation can sometimes undermine intrinsic motivation. In one study, children who really enjoyed drawing were either promised or not promised a reward for their drawing. It was found that children who were promised a reward were less likely to draw again later.

Factors for the Motivation or motivated behavior are:

1. Environmental conditions
2. Internal urge
3. Incentive awards

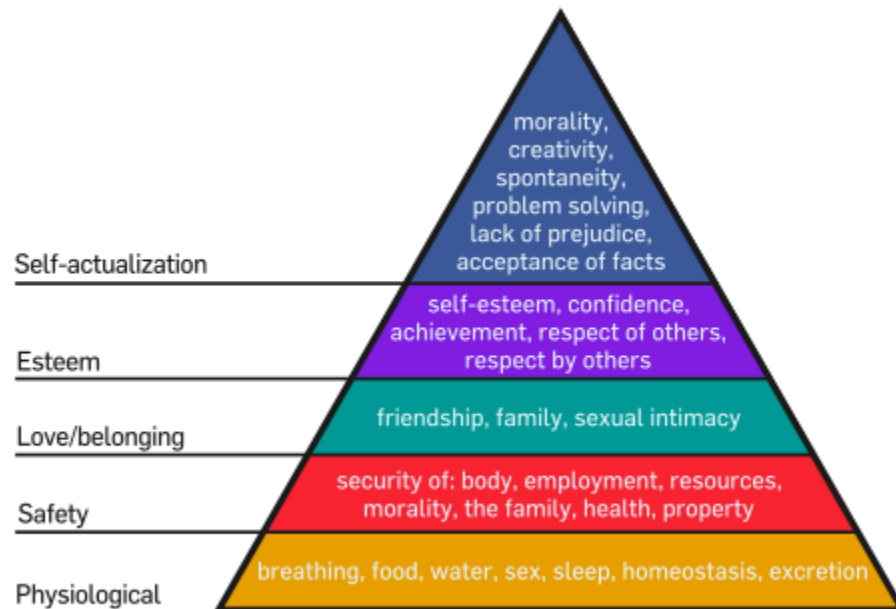
Theories of Motivation

A. Abraham Maslow :

Abraham Maslow, a psychologist, came up with a model of motivation. The model suggests that we are motivated to satisfy our needs in a “bottom-up” manner. We first satisfy our physiological needs such as water and food. When these needs are satisfied, we move up to the second level, which is our need to be safe, and so on. Only after the needs at the lower 4 levels are met can we strive for self-actualization, which is a state of self-fulfillment. According to the famous psychologist Abraham Maslow (1954), the needs in order of importance to individuals i.e. the fulfillment of needs starts from the first order and if first order needs are fulfilled the individual thinks of second order and so on as given below:

1. **Physiological needs:** These are called first order needs. These needs are necessary for survival of the individual e.g. food, clothing, shelter etc. these are most important, if these needs are fulfilled then only the individual steps in to second order needs
2. **Safety needs:** These are second order needs. These needs are for the security of the individual from physical, physiological, economic and social viewpoints e.g. protection from danger, threatening etc
3. **Social needs:** These are third order needs. Man is a social animal and has an inherent desire to be with others in some form e.g. friendship, company etc. These are also called response needs.
4. **Esteem needs:** These are fourth order needs. The individual likes to get appreciation and recognition from others in the society e.g. power, status, prestige etc

5. **Self-actualization:** These are called last order or fifth order or highest order needs. It is self-realization and knowing self or the ultimate purpose of human being e.g. what is human being, how he should live, what is his purpose of living etc.



Maslow's Classification of Needs According to order of importance or hierarchy

B. Frederick Herzberg

Frederick Herzberg proposed a two-factor theory of motivation based on his research with job satisfaction. His theory is also referred to as the motivation-hygiene theory. The motivation piece of his theory states that people are motivated towards behaviors that offer growth and personal satisfaction. Hygiene refers to physical and emotional comforts. Herzberg believed that people are motivated to avoid deprivation. For example, people work to avoid being fired or losing pay. You may notice that his two-factor theory sounds familiar to the intrinsic versus extrinsic model. Motivation would be considered intrinsic while hygiene corresponds to extrinsic motivation.

Another important piece of this theory is that motivation can give positive satisfaction but if not met, it won't necessarily create dissatisfaction. On the other hand, hygiene factors won't motivate a person to action but if they aren't met, they will cause dissatisfaction. In other words, people who get great benefits at their job won't necessarily be motivated to work harder. If they don't have any benefits, however, they will be unhappy or dissatisfied. In terms of motivation,

people may have higher satisfaction at their jobs if they feel competent and are given appropriately challenging tasks. If they aren't given growth opportunities, it doesn't mean they will have a decrease in job satisfaction.

C. Douglas McGregor

Douglas McGregor proposed "Theory X" and "Theory Y" to explain motivation in the workplace. His Theory X was that people avoid work because they don't like it. (is that profound or what?) People who meet the criteria for theory x are not ambitious, they want to do the minimum of work required, and they only complete tasks for job security. On the other hand, "Theory Y" refers to people who are creative and want responsibility. These people are usually ambitious and gain satisfaction from work.

McGregor believed that if the motives behind work were understood, managers could meet workers on their level and use the correct strategies to motivate each type. For example, if you are a theory x worker, then you won't be motivated to try harder if the reward was a promotion. To you, a promotion would mean more responsibility and more work that you didn't want to do. Therefore, I would need to use tactics such as performance reviews that you would need to score highly on to keep your job.

D. Clayton Alderfer

Clayton Alderfer expanded on Maslow's theory and categorized needs into three categories; existence, relatedness, and growth (ERG). Alderfer's existence need refers to physical needs such as food, water, shelter, etc. Relatedness needs are the need to have relationships with other people. Growth needs refer to the need to develop to one's full potential. You will see that these are very similar to the needs in Maslow's hierarchy. Contrary to Maslow's theory, however, Alderfer believed that needs are not met in any order but simultaneously to different degrees. Some people place more priority on "higher needs" than "lower needs," e.g. someone spends more time studying and meeting their growth needs than they spend eating or sleeping.

A final point on the ERG theory is the idea of frustration-regression. If a higher order need such as growth is not being met, an individual will regress to an easier need and focus more energy on meeting that need. Alderfer's model also accounts for how people's needs change over time based on their environment and perceptions of experience.

E. David McClelland

David McClelland proposed the theory that people not only have needs, but they develop more needs as they mature. His theory, the acquired needs theory, consisted of three specific needs; achievement, affiliation, and power. Achievement is the need to master tasks and be successful. Affiliation is the need to form positive relationships. And lastly, power is the need to be in control or have authority over others.

McClelland hypothesized that our experiences, particularly our early experiences as children, determined which of these three needs would develop and to what degree. Therefore, I as an adult have a need to control others (power) then power and control were things that were reinforced as a child or something happened that made me want to control others.

F. Victor Vroom

Victor Vroom was responsible for the expectancy theory. This theory states that if an individual believes he or she can do something then he or she is more likely to accomplish it. Thoughts and effort are vital to this theory because if someone does not think they are able to do a task, he or she is not likely to put forth much effort. Therefore, motivation is decreased. Failure does not motivate a person to try harder. Successes, even if they are small, motivate people to improve.

G. Stacy Adams

Stacy Adams' theory, equity theory, is based on comparisons and equality. She believed that people were motivated if they felt they were receiving compensation that was equal to what others received. A common plot of high school depictions on television is the situation in which one student is discriminated to the point that he or she always receives low scores no matter what homework is turned in. In this plot, no one believes the student so he or she switches homework with a fellow classmate known for getting high grades. In the end, the student still gets a low grade and the A student does well despite the fact that they switched homework.

This is an example of how inequality would result in a decrease of motivation for both students. The "A" student would not feel validated for his or her effort and the other student would possibly quit. According to Stacy's theory, if there is inequality or "inequity" then individuals will increase or decrease their effort, they may contest the inequality and request fairness, or they may even quit entirely.

H. F. Skinner

Skinner believed that people are motivated by rewards. Skinner's theory, operant conditioning, concerns reinforcement and punishment. Reinforcement is a stimulus that is given immediately after a behavior that will increase the likelihood that the target behaviour will be repeated. Punishment is a stimulus that is given immediately after a behaviour that will decrease the likelihood that the target behaviour will be repeated. Reinforcement and Punishment are also further divided into two types, positive and negative. Positive is something that is added while negative means something has been taken away. These types are outlined in the following table:

	Reinforcement	Punishment
Positive	Something is added to increase the likelihood a behaviour will occur	Something is added to decrease the likelihood a behaviour will occur
Negative	Something (usually unpleasant) is taken away to increase the likelihood a behaviour will occur	Something (usually pleasant) is taken away to decrease the likelihood a behaviour will occur

An example of a powerful negative reinforcer is a screaming child. The sound is so annoying that many adults will give the child anything he or she wants in order to get the screaming to stop. The child will stop screaming (take away the piercing sound) when the adult gives him or her candy (increase likelihood that behaviour occurs.) Therefore, the child used negative reinforcement to motivate the adult to action, e.g. giving candy. Unfortunately, the parent used positive reinforcement by giving in to the child which will motivate the child will have more tantrums in the future!

I. Steven Reiss

Steven Reiss believed that motivation was dependant on an individual's desires. Reiss identified sixteen desires that he believed affected behavior, power, independence, curiosity, acceptance, order, saving, honor, idealism, social contact, family, status, vengeance, romance, eating, physical exercise, and tranquility. Like Clayton Alderfer, Reiss stated these desires are very individualized. People have these desires in different combinations and in different amounts, i.e. people place a higher priority on some desires versus other desires. Reiss believed that motivation problems resulted from not taking these individualized desires into account.

J. Michael Apter

Michael Apter developed the reversal theory of motivation. The reversal theory is separated into four domains:

- Means/Ends: a person may be either motivated because he or she wants to achieve a goal or because he or she enjoys doing the activity.
- Conforming/Rebellious: this domain concerns rules. Either a person is motivated to follow the rules, or he or she wants to be free of any restrictions.
- Mastery/Sympathy: In this domain, the person is motivated by power and control or through compassion.
- Autic/Alloic (Self/Other): This means a person is motivated in self-interests or by the interest of others.

An interesting point of Apter's theory is that motivation changes and fluctuates. A person may go through a "rebellious stage" and then switch to being motivated to follow the rules. Another example is a person who is sometimes compassionate towards a pan handler and sometimes very rude towards a pan handler.

K. Albert Bandura

Albert Bandura coined the term "self-efficacy" to describe motivation. Self-efficacy is a person's belief in his or her ability and capability to solve a problem in any future situation. For example, if a person believes he or she is a brilliant scientist and can complete any scientific experiment, s/he has a high self-efficacy in science because he or she believes in his or her competency to perform a future experiment. Whether it is true that he or she is brilliant in science or not doesn't really matter, it only matters what he or she believes. Bandura stated that self-efficacy influenced motivation of a person's goals, actions, and successes (or failures) in life. For example, if your self-efficacy in an area is much lower than your ability, you will not be motivated to challenge yourself or improve. If your self-efficacy in an area is much higher than your ability, you may be motivated at first but then will set goals that are too high and fail which also leads to a decrease in motivation. The ideal self-efficacy is slightly above a person's ability: high enough to be challenging while still being realistic.

Another important contribution from Bandura is his theory of social learning. He stated that people will repeat behaviors that they see others do if they also see a reward given. Thus, people are motivated to copy others actions because they believe they will be rewarded also.

Factors affecting Motivation

Pupils' educational motivation may be different from pupil to pupil, depending on the age or even the mood of the child. Children cannot truly understand why learning local history is important. An important task is then to figure out how a child's motivation can be raised. Unfortunately, there is no universal method to do this, since each child has its own personality that must be taken into account. Elementary school programs are focused on new knowledge acquisition and learning process in general. By the end of elementary school, learning interest is decreasing due to a range of psychological factors, one of them being inability to find practical appliance of theoretical knowledge (Eccles et al., 1998).

1. **Self-efficacy and competence perceptions:** First of all the role of self-efficacy in the regulation of motivation should be defined. Perceptions of self-efficacy refer to students' beliefs about their ability to successfully accomplish tasks they are given, and have been related to students' successful engagement and persistence in tasks (Bandura, 1993; Schunk, 1994). Students' judgments about how likely it is to successfully accomplish tasks must be based on their perceptions of task requirements. When people expect to do well, they tend to try hard, persist, and perform better (Pintrich & Schunk, 2002). Students who believe they can and will do well are much more likely to be motivated in terms of effort, persistence, and behavior than students who believe they are less able to succeed (Bandura, 1997; Eccles et al., 1998; Pintrich & Schunk, 2002). Competition is another important possibility. By setting a specific goal that can be achieved in a limited period of time, by one class or by a group within a class, teachers can put the pupils' competition spirit to work
2. **Attributions and control beliefs:** The basic construct refers to beliefs about the causes of success and failure, and how much perceived control one needs to affect outcomes or to control one's behavior (Skinner, 1996; Weiner, 1986). Students must believe that their efforts will lead to success. This assurance enables them to manage their activities and emotions. Students who believe they are in control of their own learning and behavior are more likely to do well and perform at high levels than students who do not feel in control (Pintrich & Schunk, 2002; Skinner, Zimmer-Gembeck & Connell, 1998)
3. **Higher level of interest:** High levels of both personal and situational interest are associated with more cognitive engagement, more learning, and higher levels of achievement (Eccles et

al., 1998; Hidi, 1990; Pintrich & Schunk, 2002; Schiefele, Krapp & Winteler, 1992). Students' interest refers to the intrinsic pleasure students draw from completing the activity (Schiefele, 1991; Viau, 1999). Students can only judge if the task is interesting or not, or a task's utility in terms of their understanding of task purposes.

4. **Classroom environment:** Linnenbrink and Pintrich (2001) distinguish between the objective qualities of a classroom environment that might impact on motivation and students' subjective perceptions of those same environmental conditions. They note that stronger links have been found between achievement and students' perceptions of classrooms than between achievement and objectively defined classroom qualities. Thus, it appears that teachers can influence learning processes and outcomes by structuring learning environments. They must however attend to how students perceive those environments to achieve the intended effects.
5. **Home Situation:** Home situations affect pupils' motivation in the classroom. If children come from homes where they are loved and encouraged, they will approach classroom work with eagerness and with a willingness to learn. If the pupils do not have a positive home environment, they attend school with a disadvantage and a lack of motivation because of physical or emotional problems.
6. **Teaching approach:** Learning can be more enjoyable and be tailored to a larger degree when the pupils become part of the learning process. Students can be motivated when teachers help them to see what they are learning in a different context. If the pupils are currently learning about a historical figure or event, then it could be motivating to read novels or short stories that take place in the same time period. As long as the historical scenes are accurate, fiction stories can draw students into the historical setting and make the era come alive. When students connect better with what they are learning, motivation often increases.
7. **Interactive activities:** Using interactive activities can be motivating factors for positive classroom participation. Also, the use of puzzles, games, special speakers and visiting museums may motivate pupils to go beyond the official and predefined teaching routine and take steps to learn more about the subject than what is taught in school.

8. **Higher levels of value:** Task value refers to students' opinion about the utility, or how interesting they find a task given the goals that are being pursued (Pintrich & Schrauben, 1992; Viau, 1999). Clearly students' perceptions of task value are predicated on their interpretation of tasks. Pupils must understand how important it is to do well on the task. Parents and teachers need to provide support to the pupils' understanding of value. Higher value of oncoming result increases sense of responsibility and overall interest in the task.
9. **Goals and goal orientation:** Setting goals is a key point in the learning process. Encouraging students to set goals in the classroom can also provide motivation. Goal content approaches (Ford, 1992; Wentzel, 2000) assume that there are multiple goals that students can pursue in a classroom.

Importance of motivation in agricultural extension:

1. Society composes of individuals. Everyone is different from the other and the degree of difference is based on the relative importance each one of us assigns to the different motivating forces and to the various interests we have, which impel us to act as we do.
2. The job of the extension worker is to understand the basic wants or incentives of the people with whom he is working.
3. He should show the learner how to satisfy these basic wants by learning new things (i.e. by adopting new methods or practices).
4. The extension worker should find the personal goals of the learner and tie with his teaching goals.
5. When people are shown how learning a subject will enable them to gratify (satisfy) a desire or realize a need, they are being motivated to learn.
6. A great impetus (momentum or speed) is given to learning when the learner can see that what he learns will be of immediate value to him in making his own life more satisfying.
7. A desire or a want therefore, is the most definite and dynamic of motives, from the educational point of view.
8. It is possible for extension workers to motivate people to satisfy the four categories of basic needs of security, new experience, response and recognition through the increase of income, provision of new knowledge, skills etc, encouraging farmers to work in groups and awarding prizes, certificates etc to the winners in crop competitions respectively.

Intelligence

The concept of intelligence is very important in education but it is quite controversial and often misunderstood. Intelligence is a key construct employed to know how individuals differ from one another. It also provides an understanding of how people adapt their behaviour according to the environment in which they live. Intelligence is the ability of an individual to cope with his environment. It may be thought out as a composite of organisation or an organisation of activities to learn, to grasp broad and subtle facts especially abstract facts with alertness and accuracy to exercise mental control and to display flexibility in seeking the solutions of problems. Among the millions of species that exist on the earth, the human being is said to be superior and exclusive (separate) because of its reasoning of distinguishing between right and wrong. The ability to adopt to the environment with and to master situations, understanding, ability to command and capacity to carry on difficult tasks by learning and putting the past experience to the most beneficent use. This quality, which we describe as intelligence is found in different degrees in different human beings.

Definitions of Intelligence

Intelligence as a concept has been understood in different ways by different psychologists and consequently there stands a wide variety of definitions.

1. Intelligence is the ability of an individual to make good response from the stand point of truth or fact. **Thorndike, 1914**
2. Intelligence is a general capacity of an individual consciously to adjust his thinking to new requirements. **Stren, 1914**
3. An individual is intelligent in proportion as he is able to carry on abstract thinking. **Terman, 1921**
4. Intelligence is the capacity to learn and adjust to relatively new and changing conditions. **Wagnon, 1937**
5. Intelligence means intellect put to use. It is the use of intellectual abilities for handling a situation or accomplishing any task. **Woodworth and Marquis, 1948**

6. Intelligence is the aggregate or global capacity of an individual to act purposefully to think rationally, and to deal effectively with the environment. **David Wechsler, 1944**
7. Intelligence is the ability of an individual to adjust him to the conditions that arise in his Environment. **Brown**
8. Intelligence is the ability to adopt oneself to judge well, understand well, reason (think) well and act well. **Binet**
9. Intelligence is the organization of abilities to learn a group of facts with alertness and accuracy to exercise mental control and display flexibility in seeking the solution of problem. **Skinner**
10. Intelligence is the abilities demanded in the solution of problems which requires the comprehension and use of symbols. **Henry E. Garrett**

Types of intelligence

The concept of general intelligence is too broad to be of much practical value. For convenience, therefore, psychologists often distinguish three kinds or types of intelligence activity.

- I. Abstract intelligence or cognitive ability
- II. Concrete or mechanical intelligence or motor ability
- III. Social intelligence or social ability

- I. **Abstract intelligence or cognitive ability:** It is the ability to understand and deal with verbal and mathematical symbols. Out of three, this is the one that receive greatest weight. Professional people are high in abstract intelligence, eg., if a farmer knows about iron deficiency in sugarcane, if same mineral deficiency occurs in other crop, he can find it.
- II. **Concrete intelligence or motor ability:** It is the ability to understand and deal with things, objects, etc. and more concerned with the skills of individuals. Industrialists and building traders' are high in concrete intelligence, eg., a farmer who is having mechanical skill to perform spraying operation does fast and effectively than those with less mechanical skill.
- III. **Social intelligence or social ability:** It is the ability to understand and deal with persons, to apply psychological principles of human relationship. Salesman, politicians and leaders possess this intelligence. He makes friends easily and is tactful in understanding the human relationships, eg., a socially intelligent farmer who is Brahmin will not adopt poultry rearing which is not consistent with their value system.

Theories of Intelligence

There are different theories about intelligence, none of which agree with each other. Every approach to thinking comes up with its own different perspective and assumptions, often contradicting at least one earlier theory.

1. **Faculty theory:** It is the oldest theory regarding the nature of intelligence and flourished during 18th and 19th century. According to this theory, mind is made up of different faculties like reasoning, memory, discrimination, imagination, etc. These faculties are independent of each other and can be developed by vigorous training. Faculty Theory had been under criticism by experimental psychologists who disproved the existence of independent faculties in the brain.
2. **One factor/UNI factor theory:** It reduces all abilities to a single capacity of general intelligence or ‘common sense’. This would imply that they are all perfectly correlated, and would make no allowance for the unevenness of people i.e. abilities along different lines. Since it goes against the common observation that “an individual does possess different levels of different abilities and does not shine equally in all directions”—it has no ground to stand.
3. **Spearman’s two-factor theory:** It was developed in 1904 by an English Psychologist, Charles Spearman, who proposed that intellectual abilities were comprised of two factors: one general ability or common ability known as ‘G’ factor and the other a group of specific abilities known as ‘S’ factor. ‘G’ factor is universal inborn ability. Greater ‘G’ in an individual leads to greater success in life. ‘S’ factor is acquired from the environment. It varies from activity to activity in the same individual.
4. **Thorndike’s multifactor theory:** Thorndike believed that there was nothing like General Ability. Each mental activity requires an aggregate of different set of abilities. He distinguished the following four attributes of intelligence:
 - a) Level—refers to the level of difficulty of a task that can be solved.
 - b) Range—refers to a number of tasks at any given degree of difficulty.
 - c) Area—means the total number of situations at each level to which the individual is able to respond.
 - d) Speed—is the rapidity with which we can respond to the items.

5. **Thurstone's theory: Primary mental abilities/Group factor theory:** States that Intelligent Activities are not an expression of innumerable highly specific factors, as Thorndike claimed. Nor is it the expression primarily of a general factor that pervades all mental activities. It is the essence of intelligence, as Spearman held. Instead, the analysis of interpretation of Spearman and others led them to the conclusion that 'certain' mental operations have in common a 'primary' factor that gives them psychological and functional unity and that differentiates them from other mental operations. These mental operations then constitute a group. A second group of mental operation has its own unifying primary factor, and so on. In other words, there are a number of groups of mental abilities, each of which has its own primary factor, giving the group a functional unity and cohesiveness. Each of these primary factors is said to be relatively independent of the others. Thurstone has given the following six primary factors:

- i. The Number Factor (N)—Ability to do Numerical Calculations rapidly and accurately.
- ii. The Verbal Factor (V)—found in tests involving Verbal Comprehension.
- iii. The Space Factor (S)—Involved in any task in which the subject manipulates the imaginary object in space.
- iv. Memory (M)—Involving ability to memorize quickly.
- v. The Word Fluency Factor (W)—Involved whenever the subject is asked to think of isolated words at a rapid rate.
- vi. The Reasoning Factor (R)—found in tasks that require a subject to discover a rule or principle involved in a series or groups of letters.

Based on these factors Thurstone constructed a new test of intelligence known as "Test of Primary Mental Abilities (PMA)."

6. **Guilford's Model of Structure of Intellect:** Guilford (1967, 1985, 1988) proposed a three dimensional structure of intellect model. According to Guilford every intellectual task can be classified according to its (i.) content, (ii.) the mental operation involved and (3) the product resulting from the operation. He further classified content into five categories, namely, Visual, Auditory, Symbolic, Semantic and Behavioral. He classified operations into five categories, namely, Cognition, Memory retention, Memory recording, Divergent production, Convergent production and evaluation. He classified

products into six categories, namely, Units, Classes, Relations, Systems, Transformations and Implications.

7. **Vernon's Hierarchical Theory:** Vernon' description of different levels of intelligence may fill the gaps between two extreme theories, the two-factor theory of Spearman, which did not allow for the existence of group factors, and the multiple-factor theory of Thurstone, which did not allow a "g" factor. Intelligence can be described as comprising abilities at varying levels of generality:
 - i. The highest level: "g" (general intelligence) factor with the largest source of variance between individuals. (Spearman)
 - ii. The next level: major group factors such as verbal-numerical-educational (v.ed) and practical-mechanical-spatial-physical (k.m.) ability.
 - iii. The next level: minor group factors are divided from major group factors.
 - iv. The bottom level: "s" (specific) factor. (Spearman)

Beginning in 1969, Vernon became increasingly involved in studying the contributions of environmental and genetic factors to intellectual development. Vernon continued to analyze the effects of genes and the environment on both individual and group difference in intelligence. He concludes that individual differences in intelligence are approximately 60 percent attributable to genetic factors, and that there is some evidence implicating genes in racial group differences in average levels of mental ability.

8. **Cattell's Fluid and Crystallized Theory:** The fluid aspect of this theory says that intelligence is a basic capacity due to genetic potentiality. While this is affected by the past and new experiences, the crystallized theory is a capacity resultant of experiences, learning and environment.
9. **Gardner's Theory of Multiple intelligence:** Howard Gardner in his book "Frames of Mind, The Theory of Multiple Intelligence" (1983), puts forth a new and different view of human intellectual competencies. He argues boldly and cogently that we are all born with potential to develop a multiplicity of Intelligence, most of which have been overlooked in our testing society, and all of which can be drawn upon to make us competent individuals. The potential for musical accomplishments, bodily mastery and spatial reasoning, and the capacities to understand ourselves as well as others are, Gardner argues, "the multiple forms of intelligence that we must add to the conventional

—and typical tested—logical and linguistic skills long called I.Q.’’. The multiple intelligence theory is that people possess eight types of intelligence: linguistic, logical, spatial, musical, motor ability, interpersonal, intrapersonal and naturalistic intelligence.

10. **Sternberg’s triarchic theory:** Psychologist Robert Sternberg (1985) has constructed a three—pronged, or triarchic theory of intelligence. The Three types are:

- i. Analytical Intelligence: is what we generally think of as academic ability. It enables us to solve problems and to acquire new knowledge. Problem-solving skills include encoding information, combining and comparing pieces of information and generating a solution.
- ii. Creative Intelligence: is defined by the abilities to cope with novel situations and to profit from experience. The ability to quickly relate novel situations to familiar situations (that is, to perceive similarities and differences) fosters adaptation. Moreover, as a result of experience, we also become able to solve problems more rapidly.
- iii. Practical Intelligence: or “street smarts”, enable people to adapt to the demands of their environment. For example, keeping a job by adapting one’s behavior to the employer’s requirements is adaptive. But if the employer is making unreasonable demands, reshaping the environment (by changing the employer’s attitudes) or selecting an alternate environment (by finding a more suitable job) is also adaptive.

11. **Anderson’s Theory: Cognitive Development:** Anderson proposes that human cognitive architectures will have adapted optimally to the problems posed in their environment. Therefore, discovering the optimal solution to the problem posed by the environment, independent of the architecture, is equivalent to discovering the mechanism used by the architecture. A ‘Rational Analysis’, as it is called, takes into account the available information in the environment, the goals of the agent, some basic assumptions about computational cost (in terms of a ‘general’ architecture mechanism), and produces the optimal behavioral function. This function then of course can be tested empirically and assumptions modified if it proves inaccurate. A contrasting point of view to this is espoused by Simon, and is centered around the claim that, in a rational analysis, the assumptions about the architecture actually do most of the work.

12. **Eysenck's Structural Theory:** Eysenck discovered the neurological correlates of intelligence. He identified three correlates of intelligence i.e. reaction time, inspection time and average evoked potential. First two are observed behavior. Third behavior, is description of mental waves. Brighter individual progressively takes less time in responding. They show less variability in reaction time. Their inspection time is also less as compared to less intelligent. Average evoked potential is often measured by the wavelength in electroencephalogram and complexities of waveform. He found that the waves of intelligent individuals are complex.
13. **Ceci's Biological Theory:** Ceci (1990) proposes that there are multiple cognitive potentials. These multiple intelligence's are biologically based and place limits on mental processes. These are closely linked to the challenges and opportunities in the individual's environment. In his view, context is essential to the demonstration of cognitive abilities. By context, he means domain of knowledge and other factors such as personalities, motivation and education. Context can be mental, social or physical.
14. **Theory of Emotional Intelligence:** According to Goleman (1995), Emotional Intelligence consists of "abilities such as being able to motivate oneself and persist in the face of frustrations; to control impulse and delay gratification; to regulate one's moods and keep distress from swamping the ability to think; to empathize, and to hope" The main areas are: knowing one's emotions, managing emotions, motivating oneself, recognizing emotions in others, and handling relationships.

Factors affecting Intelligence

G.Brown a psychologist pointed out that, there are numerous factors which directly or indirectly affect the intelligence or abilities of the individual and which makeup the behaviour pattern of the individual.

- I. **Heredity and environment:** heredity provides the physical body to be developed with certain inherent capabilities while environment provides maturation and training of the organism. Newman concludes that the variations in I.Q. or intelligence were determined about 68 % by heredity and 32 % by environment. It means that 68 % of intelligence of the individual comes through heredity and 32 % by environment.

- II. **Age:** The intelligence is maximum at 20 years and remains relatively stable if health and other factors do not interfere, until around 70 years when it rapidly decreases due to decline in physical efficiency.
- III. **Health and physical development:** Health and physical development are directly related to mental activity. Physical and physiological defects result in sub-normal intelligence or less intelligence.
- IV. **Racial or cultural differences:** Research studies proved that a particular race, caste or cultural group has no influence over the intelligence but certain races which are socio-economically and culturally weak show marginal effect on intelligence. The 'bright' and the 'dull' can be found in any race, caste or cultural group and difference in intelligence are the result of environmental factors and influence.
- V. **Sex:** Not much difference is noticed as per the sex of the individual. According to Crow and Crow males are slightly superior than females in questions that involve mathematical material and scientific concepts or in performance of certain scientific tasks (work related to science) and girls excel that deal more directly with the humanities (languages, literature, philosophy, fine arts, history etc.).
- VI. **Social and economic conditions:** if these conditions are good then physical development and mental development will also be fairly good and intelligence will be better.
- VII. **Intelligence Quotient:** I.Q. rates the levels of intelligence of a person.

$$\text{I.Q.} = \frac{\text{Mental age of an individual (MA)}}{\text{Chronological age of an Individual (CA)}} \times 100$$

Teaching-Learning Process

Teaching is the process of providing situations in which learning takes place; in other words, arranging situations in which the things to be learnt are brought the attention of the learners, their interest is developed, desire aroused, conviction created, action promoted and satisfaction ensured.

Learning is a process by which a person becomes changed in his behavior through self activity. Learning is a process of progressive behaviour adaptation. It occupies a very important place in our life. Most of what we do or what we do not is influenced by what we learn and how we have learn it. Learning therefore provides a key for structure of one's personality and behaviour. Experience direct or indirect is found to play a dominant role in moulding and shaping the behaviour of the individual from the very beginning. In this way the term learning broadly speaking stands for all those changes and modifications in the behaviour of the individual which he undergoes from his birth till death.

Definitions of Learning

The term 'learning' has not been interpreted always in the same way by the different thinkers and psychologist as may be revealed through some of the following definitions:

1. Any activity can be called learning so far as it develop the individual (in any respect, good/bad) and makes him alter behaviour and experiences different from what would otherwise have been. **Woodworth, 1945**
2. Learning is the process by which behaviour (in the broad sense) is originated or changes through practice or training. **Kingslay & Garry, 1957**
3. Learning is the acquisition of new behaviour or the strengthening or weakening of old behaviour as the result of experience. **Henry P. Smith, 1962**
4. Learning is an episode in which a motivated individual attempts to adopt his behaviour so as to succeed in a situation which he perceives as requiring action to attain a goal. **Pressy, Robinson & Horrocks, 1967**
5. The term learning covers modification in behaviour to meet environmental requirements **Gardener Murphy, 1968**

6. Learning is the acquisition of habits, knowledge and attitudes. It involves new way of doing things and it operates on an individual attempting to overcome obstacles or to adjust to new situations. **Crow & Crow, 1973**
7. Learning is a process by which a person becomes changed in his behaviour through self-activity. **Leagans, 1961**
8. Learning is the process whereby knowledge is created through the transformation of experience. **Kolb, 1984**
9. Learning as the acquiring or improving the ability to perform a behavioural pattern through experience and practice. **Van den Ban & Hawkins, 1988**
10. Learning occurs when experience causes a relatively permanent change in an individual's knowledge or behaviour. **Woolfolk, 1995**

Learning Experience

It is the mental and /or physical reaction one makes through seeing, hearing or doing the things to be learned, through which one gains meanings and understandings of the material to be learned.

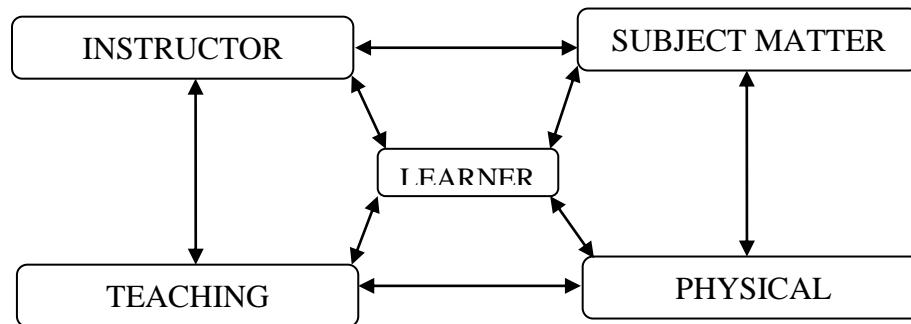
Learning is an **active** process on the part of the learner. Hence a learning experience is not attained by mere physical presence in a learning situation. The participant must give undivided attention to the instructor and deep thought to getting the facts understanding their meaning and to seeing their application to his needs and problems. Effective learning experiences therefore can best be had in effective learning situations provided by a skilful instructor who knows what he wants, who has the materials to accomplish his goals and the skills to use them effectively.

Learning Situation

It is a condition or environment in which all the elements necessary for promoting learning are present namely:

- I. Instructor
- II. Learner
- III. Subject matter
- IV. Teaching materials and equipments and
- V. Physical facilities

The following diagram is a symbolic representation of the reaction the learner makes to the other four elements and the way these five elements react to each other:



Elements of a Learning Situation

To have an effective learning situation these five major elements should satisfy the following conditions:

I. Instructor: Should

- a) Have clear objective
- b) Know the subject matter and have it well organized
- c) Be enthusiastic and interested in the subject
- d) Be able to communicate with learners
- e) Be democratic in his leadership
- f) Allow student participation, ask for it
- g) Be prepared, be prompt, be friendly, be courteous
- h) Use teaching plan
- i) Speak so that all can hear
- j) Set a good example of a good leader and teacher
- k) Be skillful in the use of teaching materials and equipment

II. Learner: Should

- a) Have need for information
- b) Be interested
- c) Be capable of learning
- d) Use of information gained

III. Subject matter or content: Should

- a) Be pertinent (related) to learner's needs
- b) Be applicable to real life situations
- c) Be taught at intellectual level of learners
- d) Be well organized – logically presented
- e) Be presented clearly
- f) Be challenging, satisfying and significant to the learners
- g) Fits into overall objectives

IV. Physical Facilities: Should

- a) Be free from outside distractions
- b) Have temperature as comfortable as possible
- c) Be well lighted
- d) Have adequate space for the group
- e) Have furniture comfortable and well arranged

V. Teaching Equipment: Should

- a) Meet the needs effectively
- b) Be readily available
- c) Be each item used skillfully

The nature of each element, their relationships to each other, their role in educational process must be thoroughly understood by the instructor and skill developed by him in handling them. Effective learning situations are created through the skillful use of appropriate teaching methods and techniques.

Teaching and Learning Process

Teaching is the process of arranging situations that stimulate and guide the learning activity towards the goals that specify desired changes in the behaviour of the people. Teaching consists of providing situations in which the important things to be learned are called to the attention of the learner, their interest developed, desires aroused and action promoted. It is the guidance of learning activity, it is helping learner and is work of a teacher who acts as catalyst. The aim of teaching is to bring about desirable learning in the learners.

Learning is the process by which an individual, through his own activity, changes his behaviour. It is self-active process resulting in changes in human behaviour that is in their knowledge, attitude and skill.

Teaching Methods

Teaching methods are the devices used to create situations in which communication can take place between the instructor and learner. Teaching methods or channels of communication are the tools in the hand of the extension worker in transferring the new ideas. The primary objective of extension teaching and learning is to help each individual; each family and each community achieve the highest level of living that is capable of economically, socially, aesthetically and morally by means of aided self help through education.

Important Principles of Teaching

- I. The student should clearly know the purpose of the course.
- II. The student must be in need of learning.
- III. The teacher must maintain friendly and informal atmosphere.
- IV. Favourite and appropriate physical condition must be maintained.
- V. The teacher should involve the learner's participation.
- VI. The teacher should use learner's experience.
- VII. The teacher should himself prepare well to take the class; teaching aids should be handy and be enthusiastic.
- VIII. The instruction method should be varied and appropriate.
- IX. The teacher must always be a learner and he should revise his/her teaching notes with the available knowledge on the subject. He/she should prepare the material for teaching and be keen enough to learn.

Characteristics of Effective Teaching

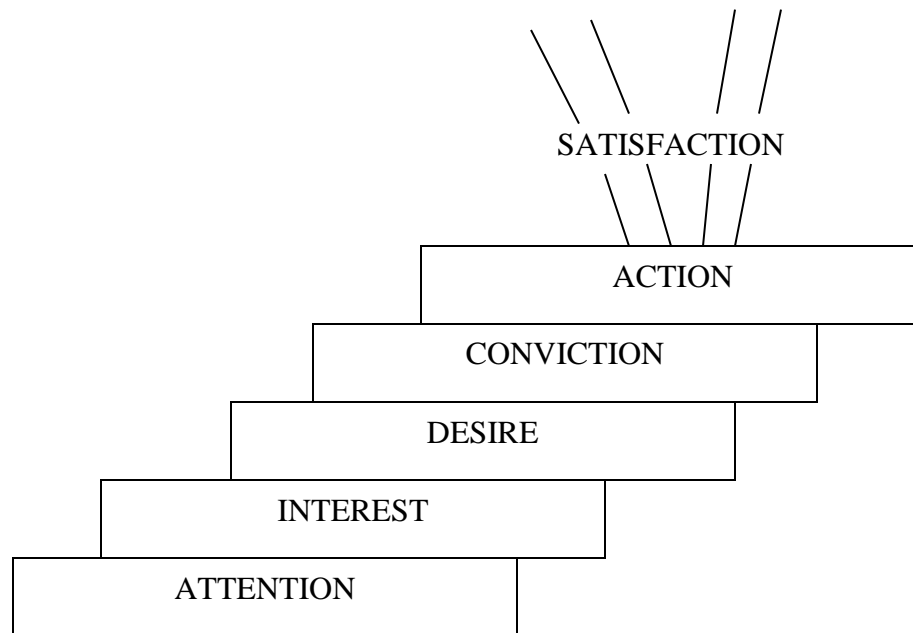
- I. Be interesting
- II. Develop thinking on the part of the learner
- III. Serve useful purpose
- IV. Promote wide participation
- V. Recognize individual differences
- VI. Provide practice for application of knowledge
- VII. Make use of a variety of teaching methods and aids

Essential Conditions of Effective Extension Teaching

- I. Extension teaching requires specific and clearly defined teaching objectives.
A teaching objective is simply the term used to describe the end products desired or the condition one is trying to achieve through extension teaching. Teaching objective contain four different aspects namely (a) Who- People to be taught (b) behaviour changed to be achieved (c) content or subject matter (d) life situation in which action has to take place. Objectives should meet the following criteria:
 - Be within limitations imposed by laws, resources etc.
 - Be significant to a relatively large number of potential participants
- II. Be attainable through educational process, within time, resources and mental, economical and social possibilities of learners.
- III. Specify the kind of behaviour change.
- IV. Extension teaching must accomplish certain kinds of educational changes in relation to the subject matter to be learned among these are: changes in knowledge, attitude and skill.
- V. Extension teaching requires learning situations that include all five major elements that is instructor, learner, content, physical facility, teaching equipment.
- VI. Extension teaching requires that learners have effective learning experiences.
- VII. Extension teaching requires usually a combination of teaching methods.
- VIII. Extension teaching requires careful evaluation of results.

Steps in Extension Teaching

There may be variations in terms of the procedure that must be followed. Depending upon the situation, there are, however, few steps that are considered as basic in effective extension teaching. According to Wilson, MC and Gallup, G. (1955) the six steps in effective extension teaching are:



STEPS IN EXTENSION TEACHING

- I. **Attention:** The first step in extension teaching is to make the people aware of the new ideas and practices. The people must first know that a new idea, practice or object exists. This is the starting point for change. Until the individual's attention have been focused on the change that is considered desired, there is no recognition of a problem to be solved or a want to be satisfied. Mass methods like Radio, Television, Exhibition etc. and personal contact by the Extension workers, contact through Local Leaders are important at this stage.
- II. **Interest:** Once the people have come to know of the new idea, the new step is to stimulate their interest. This may be done by furnishing them more information about the topic in a way they will be able to understand and use. It is necessary to present one idea at a time relevant to their needs. Personal contact by the extension worker,

- contact through local leaders, farm publications, radio, television etc. are important at this stage.
- III. **Desire:** It means un-freezing the existing behaviour and motivating the people for change. At this stage it is necessary to emphasize on the advantages of the new idea or practice. Visit to demonstrations, farm publications, personal contact by the extension worker, group discussion etc. are important at this stage.
 - IV. **Conviction:** It is a stage of strong persuasion so as to convince the people about the applicability of the new idea or practice in their own situation and that it would be beneficial for them. The people are furnished with adequate information about the idea and how it works. Field day or Field Visit, Slide Show, personal Contact by the Extension worker and Trainings are important at this stage.
 - V. **Action:** This is the stage of the idea or practice into operation. Small scale demonstration with supply of critical inputs may be set up in real life situation of the individuals who come forward. This provides the opportunity of direct experience on the part of the learners. At this stage it is necessary to collect evidence of change such as change in yield, income, employment etc. Demonstration, personal contact by the extension worker, supply of critical inputs and ensuring essential services are important at this stage.
 - VI. **Satisfaction:** To produce lasting change, the extension efforts should produce satisfying results. Satisfaction may come from high yield, more income, better health etc. Satisfaction reinforces learning and develops confidence, which generates motivation for further change. To sustain the changed behaviour, it is necessary to furnish new and relevant information about the practice on the continued basis till change in the practice itself is felt necessary. Use of mass media, local leaders and personal contact by the extension workers are important at this stage. Availability of critical inputs and essential services are also to be ensured.

The steps in Extension Teaching are to be synchronized with the innovation-decision process of the learners. No single extension teaching method will be the best in all the steps in extension teaching. The teacher must possess good knowledge of various

extension teaching methods and should be proficient in using them in various stages of teaching in suitable combinations effectively.

Desirable Qualities of a Good Teacher

A good teacher is one who

- I. Possesses a thorough knowledge of the subject matter,
- II. Is patient,
- III. Goes out of his way in helping to solve the problems,
- IV. Does not have favourites,
- V. Is fair and considerate,
- VI. Admits his mistakes,
- VII. Does not get angry when asked to explain again and again,
- VIII. Has the ability to explain difficult subjects in a simple manner,
- IX. Controls class with love rather than fear,
- X. Has a pleasant and sweet manner of presentation,
- XI. Possesses sense of humour,
- XII. Is cheerful,
- XIII. Encourages the learners,
- XIV. Is adaptable,
- XV. Is sincere,
- XVI. Takes interest in students and is friendly,
- XVII. Has clear objectives,
- XVIII. Has latest and authentic information,
- XIX. Has skill in guiding learning,
- XX. Plan carefully and rehearse before presentation,
- XXI. Make judicious use of teaching aids,
- XXII. Evaluate himself,
- XXIII. Have mastery over his subject matter and ability to select suitable teaching methods for presentation in the class and
- XXIV. Is democratic in behaviour

Factors affecting process of learning

Many factors assisted the process of learning. The main factors can be divided into following classes:

- a) Psychological factors
- b) Physiological factors
- c) Physical factors
- d) Social factors

a) Psychological factors

- I. **Generalization:** Whenever an individual; goes through many similar and comparable experiences he/she discerns the common element among them and on its basis formulates a general rule that has considerable influence on his/her future conduct.
- II. **Facilitation:** It is human nature that man finds it easy and convenient to learn activities that are simple and interesting.
- III. **Differentiation:** Where the human individual generalizes on the basis of common experiences and objects he/she distinguishes between dissimilar objects or compares them to such manner as to bring out the dissimilarity.
- IV. **Inhibition:** In this, some psychological elements prevents or inhibits the process of learning of some special kind or obstruct it.
- V. **Integration:** The integration helps to improve one's insight into the subject learnt.
- VI. **Expectancy:** In this the individual is prepared and anxious to face the results of learning. Anticipatory reactions prevent the individual from many attractions.

b) Physiological factors

- I. **Fatigue:** In a state of fatigue the individual's capacity to learn is considerably reduced and all that is learnt is also easily forgotten.
- II. **Drugs and intoxicants:** Intoxication has the worst kind of effect on learning and intoxicants are obstacles in learning. Some drugs help the process of learning because they improve the individuals' capacity to learn.
- III. **Diseases:** Disease, be it physical or mental, obstructs learning as it reduces the capacity to grasp and learn. On the other hand, health positively influences learning.
- IV. **Excited physical condition:** An excited body state arising out of emotion or some other cause hinders learning.

- V. **Sex differences:** Learning is not influenced by sex differences, nevertheless men and women have facility in learning differ event work and activities because of their special physiological characteristics.
- VI. **Difference of age and maturity:** Before any particular activity can be acquired, it is necessary to attain to a particular level of maturity that can only come at a particular age level. Hence, age and maturity are important factors of learning.

c) Physical factors

Man lives and learns in physical environment. Hence, many physical factors also assume some importance for the learning process. For eg. Purity or impurity of air, high or low temperature, quantity, direction and nature of light, noise, amount or percentage of humidity, arrangement of sunlight and other atmospheric conditions influence learning.

d) Social factors

Man is a social animal. All his activities are influenced by his social conditions. The main social factors that have an influence upon learning are imitation, suggestion, sympathy, praise and blame, competition, co-operation etc.

Importance of learning in extension work

Importance of learning lies in the following aspects eg. From birth to death, every farmer goes on learning something about crop production

1. **It occurs irrespective of all the ages.** Eg. From childhood to old age, farmer learns continuously.
2. **It helps in acquiring habits.** Eg. When a farmer goes on talking up seed production then it becomes a habit to him which was learnt earlier.
3. **By learning, a person develops discretion about good or bad.** Eg. A farmer learns everything but adopts only desirable ones and forgets the undesirable things.
4. **Learning aids in developing interest and positive attitude.** Eg. Farmer learns about beneficial aspects of seed treatment from extension worker, he develops positive attitude towards that practice.
5. **Perfect learning helps in setting of goals and purpose.** Eg. Perfect learning about seed production aspects helps in setting a goal of some quantum of yield.

Perception

Perception is an active process, whereby sensory reactions are related to relevant past experiences of an individual when confronted with stimulus and more structured and meaningful picture is printed in the mind, which is finally perceived as the object. Our reaction to any situation is determined by the way we perceive it. Two different individuals may perceive the same object in two different ways. Therefore perception is very personal thing. Perception plays a pivotal role in our five senses: being able to touch, see, taste, smell, and hear. It is involved in proprioception, which is a set of senses that detect changes in body positions and movements. Also, perception plays a role in the cognitive processes that are required for the brain to process information, like recognizing the face of someone you know or detecting familiar scents.

Definition

1. Perception is the process of organizing and interpretation of sensory data in terms of one's previous experience and present needs. **Ruch**
2. Perception is the process by which impressions, opinions and feelings about an object are formed by means of a sensory operation. **Kuppu Swamy**
3. Perception is the process of assimilating experiences and relating them to previous experiences, attaching meaning or value to them and ordering them in to organized patterns of knowledge and feeling. **Mc David**

Stages in Perception

The different stages involved in perception are:

1. **Sensation:** It is meaningful awareness of object
2. **Attention:** perceptual readiness (the process of focusing upon certain phases or elements of experience and neglecting others)
3. **Understanding:** the meaning of object and what the object is
4. **Relating to past experience:** Relating the object to past experience and present needs for comprehensive usefulness of the object to give meaning
5. **Cognition:** Interpreting and perceiving the object

Types of Perception

1. Depth and Spatial Perception: This is the ability for a person to perceive distance. It is extremely important for one to discern distances in the real world, like the distance between me and another person and the space between objects. Included in depth/spatial perception is the ability to perceive moving objects, like vehicles driving on roads. Factors like first, second and third dimensions come into play in our understanding of depth perception. Spatial perception is possible due to certain cues in our environment that help us to understand the distance between multiple objects in space. These cues are of two types:

a) Monocular Cues: These are cues that can operate with the aid of only one eye. Some of them include linear perspective, which is how we can tell if objects are close or far away. Images of objects that are far away appear smaller to us. Aerial perspective is when objects nearer to us appear clearer than distant objects. Interposition is when one object obstructs our view of another so that the object in front appears nearer than the partially covered one. Gradient structure is when the regions of objects closer to the observer have a coarse texture with plenty of details, while the objects further away from us become finer and finer.

b) Binocular Cues: These are cues that can only work with the function of both eyes. The two binocular cues are retinal disparity and convergence/divergence. Retinal disparity occurs when the image of the object that falls on both retinas is different. This happens more often when objects are closer than further away. Convergence/divergence of the eyeballs takes place when the object moves nearer and nearer to our eyes so that our eyeballs converge and when the object moves away from us, the eyeballs diverge.

2. Movement Perception: We understand when objects are in movement because particular objects appear in different places at different times. This is a natural process that we learn since birth. It is only through this ability that an individual can understand the world around him or her and perceive dangers or threats in movement, which is key for survival. In a phenomenon called apparent motion, we perceive objects as moving when really they are stationary. It becomes an illusion then, as we perceive objects that are not moving to in fact be moving. An example of this is when we are moving fast on a bus or

a car and the trees, plants, and houses we pass by appear to be moving in the opposite direction. Obviously, those objects are not moving, but we perceive them as indeed in motion. Another cool example of this is movies we watch, or what used to be called “moving pictures.” The movement of the figures in films appears to be moving, but they really are not. What movies really are a real of film pictures moving very, very fast to produce a movement feeling known as stroboscopic motion or the phi phenomenon. It is the same case for moving-picture booklets, where the artists flips through the edges of a book and it gives the appearance of activity from the drawings.

3. Form Perception: This is the ability to recognize objects in a particular form within a certain environment. According to Gestalt psychologists, different laws govern how we perceive different patterns within space.

- The law of proximity holds that when we perceive a collection of objects, we will see objects close to each other as forming a group. This also affects how we view pictures and films. If you were to magnify pictures on a computer screen to a large depth, you would see pixels forming the picture together. When we look at one complete image, we don't see each individual pixel; rather we see it as one whole object based on the law of proximity.
- The law of similarity states that elements will be grouped perceptually if they are similar to each other. Color plays a big role in this grouping. Think again to the pixels that make up a photograph. Looking closely, the pixels in one area are all similar or closely related shades of the same color to make up that one element of the image.
- The law of figure-ground captures the idea that when we perceive a visual field, some objects take a prominent role (the figures) while others recede into the background. For example, if you were getting a picture taken of yourself near a lake with beautiful hills and mountains behind you, then you would be the central figure of the photo, while the water, mountains, sky, and other scenery would be the ground.
- The law of closure holds that when we capture objects that are not complete, we perceptually close them up so that we perceive shapes in a picture that are not actually there. A classic example of this is aligning three pac-man, incomplete circles into a pyramid and then using your perception to sense the triangle that they form, although no triangle is physically present in the picture.

Factors affecting Perception:

There are individual differences in perceptual abilities. Two people may perceive the same stimulus differently:

I	Characteristics of Stimulus	II	Characteristics of the Perceiver
A.	Nearness	A.	Previous experience
B.	Likeness	B.	Physical conditions
C.	Inclusiveness	C.	Social factors
D.	Closure	D.	Levels of knowledge
E.	Context		

Characteristics of Stimulus:

1. **Nearness:** The physical nearness or proximity of objects to each other makes for their perception as parts of pattern. Objects nearer to each other are grouped together E.g. A group of persons at a place or in a hall may be perceived together
2. **Similarity:** Similar objects found to be perceived as belonging together. In the figure below, it is usually perceived that there are three rows of minus signs and two rows of plus signs because of their similarity. But perceiving five columns is generally rare.

-	-	-	-	-
+	+	+	+	+
-	-	-	-	-
+	+	+	+	+
-	-	-	-	-

3. **Inclusiveness:** When all the parts of the objects are included can be perceived better
4. **Closure:** When parts of object are close and maintained equidistance the perception is clear. For example in the figure given below there is one dog not twenty black blotches.

Perception



Count the
blotches
20?
This is one dog
not
20 discrete blotches

Fig. Law of Closure

5. Context: The way the object as whole is perceived will influence the meaning of the part. For example the word 'mass' gives different meanings when used in sociology and physics.

Characteristics of the Perceiver:

1. **Previous experience:** If the perceiver is already exposed to the object than it is easy to perceive clearly
2. **Physical conditions of the individual:** some defects of the body interfere with the perception
3. **Social factors:** Cultural opportunities, social taboos, values, beliefs affect the individuals perception of an object.
4. **Levels of knowledge:** Sometimes lack of full knowledge will also lead to poor perception.

There are certain other factors that affect the individual's perception are as follows.

1. **Perceptual learning:** Based on past experiences or any special training that we get, every one of us learns to emphasize some sensory inputs and to ignore others. For example, a person who has got training in some occupation like artistry or other skilled jobs can perform better than other untrained people. Experience is the best teacher for such perceptual skills. For example, blind people identify the people by their voice or by sounds of their footsteps.
2. **Mental set:** This refers to how mentally prepared you are to receive some sensory input. Expecting specific stimuli keeps one prepared with fantastic attention and concentration. For example, if I am riding the one of the New York City subways, then I am more attentive to the rustling sound of the train approaching rather than the huge amount of noise that is coming from people playing music, children crying, and other nefarious sounds.

3. **Motives and needs:** Our motives and needs will definitely influence our perception. For example, a hungry person is motivated to recognise only the food items among other articles. His attention cannot be directed towards other things until his motive is satisfied.
4. **Cognitive styles:** People are said to differ in the ways they characteristically process the information. Every individual will have his or her own way of understanding the situation. It is said that the people who are flexible will have good attention and they are less affected by interfering influences and to be less dominated by internal needs and motives than or people at the constricted end.

Importance of Perception in Extension Work

1. **Faulty perception:** If it occurs with farmers about an object that will have serious implication in field. For example if a farmer think that both insecticides and fungicides are chemicals and can be used vice versa it is a faulty perception
2. **Differential perception:** If meaning of an object is not conceived properly it may lead to faulty adoption by the farmers.
3. When messages are distorted (not clear) (perceived either too much or too less than normal or improperly understood) than the implementation or adoption will also be faulty
4. If the farmers are to perceive the objects or messages properly and accurately the extension worker has to understand the qualities of stimulus and perceiver and then communicate the innovation
5. Perception of the individual mostly depends on his need to the message. Hence the extension worker should communicate only needy messages

Emotions

The word Emotion is originated from the Latin word 'emovere' in which 'e' means out and movere means to move. Emotion is a complex, subjective experience accompanied by biological and behavioral changes. Emotion involves feeling, thinking, and activation of the nervous system, physiological changes, and behavioral changes such as facial expressions. When we talk about emotion we mean psychological phenomena like fear, anger, grief, love, affection, pleasure etc. Emotion is a stirred up state of feeling that is the way it appears to the individual himself. Emotion is a disturbed muscular and glandular condition. That is the way it appears to the observer.

Definitions:

1. Emotion is a complex state of an individual in which certain ideas and feelings and usually motor experiences continues to produce a condition recognizable as stirred up state. **Wood worth**
2. An emotion is a feeling comprising physiological and behavioral (and possibly cognitive) reactions to internal and external events. **Sternberg, R.**
3. Emotion is a state of being moved and stirred up in one way or other. **Ruch**
4. Emotion is an effective experience that accompanies generalized inner adjustments and mental and psychologically stirred up states in individual that shows itself in his overt behaviour. **Crow and Crow**

Types of Emotions:

Broadly emotions can be classified in to two types as Positive emotions and negative emotions

1. **Positive Emotions:** These are aroused by situations, which help and promote the satisfaction of needs and realization of goals. E.g. joy, happiness, affection, love etc.
2. **Negative Emotions:** These are aroused by situations, which prevent the achievement of needs and realization of goals. E.g. anger, jealousy, fear, anxiety etc.

Effects of Emotions on Individual behaviour:

A. Psychological changes:

1. Excessive secretion of hormones from glands.
2. Reddening of the skin due to excessive pumping of blood into tissues.

3. Either dilation (widening) or contraction (narrowing) of eye pupils
4. Narrowing or widening of nostrils.
5. A great variety of responses can be produced by mouth, such as narrowing, widening, wide-open, tight lipped, twisted lips etc.
6. Changes in pitch raise or loudness of voice is also noticed.

B. Effects on Behavior:

1. Sudden fear causes speech defects
2. Prolonged emotions cause *stammering*
3. They interfere with effective perception
4. They affect learning
5. Prolonged fear in children results in delinquency (carelessness), timidity (nervousness) and stubbornness (inflexibility)
6. Negative emotions will interfere with physiological functions of body

Factors affecting Emotions

1. **Hereditary factors:** It has been seen that some similarities are found between the emotional development of parents as well as children. These are the hereditary factors.
2. **Maturation:** As the child develops mentally, he or she also gets emotionally matured. Psychologists say that the child's emotions depend upon the level of maturation of the child.
3. **Training:** John B. Watson, an American psychologist, has reported that children learn through conditioning. He did an experiment on a nine months-old baby, who was shown a rat and a loud sound was made in the background. Later, it has seen that the baby started crying by merely looking at the rat. Therefore, it was proved that young children's emotions are influenced by conditioning. Through experiments, it was also seen that children start getting scared of the things with which their mothers feels frightened when the parents expresses affection he or she also starts responding in the same manner.
4. **Health:** Children who have sound health can control their emotions in a better way while those who remain weak remain irritable, easily excitable and emotionally unstable.
5. **Intelligence:** Children who are intelligent are emotionally stable. Children with low intelligence quotient are low in stability as well.

6. **Family relation:** Relation of family members with each other and the way they express their emotions affects the emotional behaviour of the child. If the parents have stability in their behavior and express their feelings in a balanced manner, the children also follow in their footsteps. On the contrary, if the parents shout in anger or show violent behaviour, children also adopt the same behaviour. If you over pamper your children, there are chances for them turning undisciplined and obstinate. Parents who are not able to give time to their children or somehow don't show any affection, their children become submissive or introvert.
7. **Social environment:** Just like family, neighbourhood, school, society members exert influence on the emotional development of the child. If the environment of the society is emotionally charged the child will also become emotionally unstable. If people around are emotionally stable and have control over their emotions, they express their emotions in a socially approved way. If people have control over their emotions the child also imitates and follows the same pattern. He or she will learn better control over his or her emotion and will always try to confirm the socially approved way of expressing his or her emotions.
8. **Control over emotions:** To maintain physical and mental health, it is very necessary to have control over emotions. When the child is emotionally charged, body undergoes many changes like change in blood circulation, pulse rate, breathing, effect on digestive system, stretching of eyes, closing of fists, etc. When these emotional states are created in the body frequently and intensely, it affects the body badly. So it's very important to practice or exercise control over emotions and they should be expressed in a socially approved manner so that the person and the people around him or her can live in peace.

Importance of Emotions in Extension work:

1. The extension worker as a teacher can achieve greater success in his work by arousing positive emotions of the learner. These emotions aid in good learning
2. When individuals are emotionally excited (positively) they can do extraordinary things.
The extension worker should utilize this fact in extension work
3. Pleasant emotions help in accelerating good health
4. Strong emotions may help to break some other crude and undesirable emotions
5. Development of positive emotions aid in increasing creative abilities of learner

6. Emotions are strong motivating forces of action. The extension worker should arouse right type of positive emotions for preparing the farmers for action