Chapter - 1

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Mass media have been playing a decisive role with their 'New Technological Avatars'. Media revolution has made this era a mega media era. Now communication is the basic currency of human dealings. Effective communication is essential for a meaningful development. Mass media create general awareness and facilitate development of appropriate attitudes among people. The main objective of mass media is overall human development. An important factor in the process of development, mass media not only serve as the media of information but also act as agents of social change and pass on new ideas. It has been found that where the exposure of media is maximum, there has been speedier change and growth. Social scientists agree that development of material and spiritual quality of human life comprises one of mankind's noble goals. Mass media, especially radio, excelled in motivating the people by highlighting development process through different programmes.

It was a challenging task to convey development messages when the whole country was under the grip of illiteracy. Illiterates are unable to read and even they can't grasp any scripted message as it is. There are differences between illiterates and formally educated persons. Many researchers focused on the grasping efficiency of educationally qualified persons and illiterates. They highlighted that grasping efficiency of educationally qualified persons is better than illiterates. After Independence, governments planned to prepare constructive strategies to increase the literacy rate. They had to create awareness among the people on the importance of education. At this juncture, administrators have used the radio to convey developmental messages for both illiterates and educationally qualified persons (Keval J. Kumar, 2010).
In India, the villages are the major focus of contact between media and the government. Rural communication in a country like India is necessary and vital in achieving the national goal set. Governments may announce developmental programmes and policies for the welfare of the people, but information about such programmes and policies should be given in detail to them before their implementation.

Announcing development programmes and neglecting the various stages of implementation is a common phenomenon in India. Enthusiasm seen in announcing developmental programmes should continue till the end of the implementation process. More importantly, people’s participation is decisive in the completion of any development efforts. Administrators have to convey development information to motivate the people to take part in the developmental process. Such motivation would be possible through effective communication through different channels. This becomes obvious when we consider the fact that nearly 75% of the country’s population lives in more than six lakhs villages of the country. In this context it becomes imperative to use print and broadcast media effectively in order not only to communicate relevant messages but also to motivate people to participate in the process of development.

The real role of communication is to communicate and facilitate acceptance of innovations and assisting in the mobilization of people through transformation of attitudes and values. Communication technology has widespread physical, structural and cultural implications for a given society. Communication must become an integral part of any development programme. Almost all the governments in developing countries want higher levels of living for their people; a goal that can be attained effectively only through massive programmes of directive change, generally known as development programmes.

Development is a type of social system that produces higher per capita income and improves standards of living through modernized production
methods and improved social organizations. The objective of any rural development programme must be the provision of food, clothing, shelter, and education and health services for everyone, under conditions, which provide for universal human dignity.

Majority of the rural population depends upon farming; therefore, in order to abolish poverty farming activities must be efficient. They have to produce a surplus so that the rural economy can be diversified by the development of alternative sources of production and employment. Rural industries must be established to process crops and to provide many of their domestic and agricultural goods. Schools, dispensaries, sports facilities and others, need to be established and supported in the rural areas to improve the lives of all who dwell there. This kind of diversification of rural economy is an essential part of the struggle for human development and human dignity.

Rural development must be a description of the whole strategy of growth - the approach to development and the programme through which all the policies are seen, judged and given priority. The goals of rural development should not be considered simply as agricultural and economic growth in the narrow sense but as balanced social and economic development, with emphasis on the equitable distribution as well as the creation of benefits. Rural development calls for a massive and multi-pronged effort, not only to boost production but also to create and spread employment and to root out the fundamental causes of poverty, disease, ignorance and injustice.

Rural development means an improvement in the lives of the majority of rural people - better diet and housing, more satisfying work and security, enhanced feelings of personal worth and increased decision-making power over personal and community life. To ensure genuine rural development, rural people must not only control their own development programmes but also participate in wielding national political and economic power to protect their interests.
Therefore, the development strategy should be such through which the development of the rural population and the rural areas is directed towards a total development of the people and their environment through concerted actions. Development does not start with goods, it starts with people and their education, organization and discipline, without these three, all resources remain latent, and untapped potential. Here lies the central problem of development. If the primary causes of poverty are deficiencies in these three respects, then the alleviation of poverty depends primarily on the removal of these deficiencies. People are the primary and ultimate source of any wealth whatsoever. If they are left out, then nothing can ever yield real fruit.

1.1 Communication

Man has another fundamental need beyond the physical requirements of food and shelter i.e. the need to communicate with others. This urge for communication is primeval and in contemporary civilization, it is a necessity for survival. Simply defined, communication is the art of transmitting information, ideas and attitudes from one person to another. The word communication comes from the Latin verb, communicare, which means to make common, to share, to impart, and to transmit. Through communication, people control one another’s behavior and unite themselves into groups. Therefore communication is a means for breaking down the barriers in the way of human interaction and, as such, these are the means to achieve understanding (S.C.Sharma, 1987).

Some of the social scientists have tried to discuss the concept of communication on the basis of available definitions. Nilson (1957) has classified definitions of communication into two main categories; first, those which limit the process of communication to the persons, who in the ‘stimulus - response situation’ deliberately transmit stimuli to evoke a response. In this situation, the communicator acts as a transmission agent in giving a command or in some way attempting to alter the behavior of the receiver. In the other category, he puts
those definitions which include unintentional communication. Newcomb (1955) states that a person who allows rubbish to accumulate in his backyard, communicates something about himself whether he intends it or not.

Communication, as defined by The Oxford English Dictionary, tends to conform to Matson's monologic and dialogic concepts. But Columbia Encyclopedia considers communication to be the transfer of information.

According to Stevens (1950) and Schramm (1970) communication is the discriminatory response of an organism to a stimulus - communication, which occurs when some environmental disturbances (the stimulus) impinge on the organism and the organism does something about it. If the stimulus has been ignored by the organism, there has been no communication. The test is the differential reaction of some sort. The message that gets no response is not a communication at all.

Charles Morris (1946), the famous semanticist, has defined communication as follows: "The term communication when widely used covers any instance of the establishment of commonage, that is, the making common of some property of a number of things". In this sense, a radiator communicates its heat to the surrounding bodies and whatever medium serves this process of making common is a means of communication.

Lundberg (1939) defines communication keeping in view the use of signs and symbols. He has used communication to designate interaction by means of signs and symbols. The symbols may be gestural, pictorial, plastic or verbal or any other which would serve as stimuli to behavior. Communication is, therefore, a subcategory under interaction, namely the form of interaction which takes place through symbols.

Cooley (1924) has defined the concept of communication in a comprehensive way. According to him communication means the mechanism
through which all human relation come to exist and develop all the symbols of the mind, together with the means of conveying through space and preserving them in time. This is a broad concept of communication and one which is of demonstrable relevance to the sociological understanding.

Edward Sapir (1930, 1935) classified communication into ‘explicit’ and ‘implicit’ types. Explicit communication is concerned mainly with the use of language to gain a common understanding among the people. Implicit communication is the unconscious assimilation by a person of the ideas, beliefs and values of his culture and the way in which they influence his behavior and attitudes.

Thus it is concluded that communication is based on a relationship; and this relationship may exist between two persons, or between one person and many, between a collective society and an individual and between society and a group.

1.2 Types of Communication

One important aspect of communication is that it does not take place in isolation. Communication occurs when at least two elements of a system are present. We often think of communication as an interaction between two people. However, we participate in several communication contexts or levels of communication. The major forms of communication are:

- Intrapersonal communication
- Interpersonal communication
- Group communication
- Mass communication
- Non-verbal communication
The number of persons involved in the process of communication distinguishes these levels. These different forms of communication also differ in the degree of proximity or closeness among the participants in the communication process—both at physical and emotional levels. Another differentiating feature is the nature of the feedback, which could be immediate or delayed.

1.2.1 Intrapersonal Communication

This is the most basic of the communication contexts or levels. It occurs when an individual sends and receives messages internally. We spend most of our time thinking. And our thought process is nothing but intrapersonal communication where one person is sending messages and the same person receives them. Intrapersonal communication involves our intellect as well as our physical and emotional sensations. The way we communicate with ourselves reflects the various aspects the self—physical, emotional, intellectual and social. It also reflects our habits, roles, attitudes, beliefs, and values. Intrapersonal communication is not just a level of communication; it is in fact the very basis of all communication.

1.2.2 Interpersonal Communication

This is the universal form of communication that takes place between two individuals. Since it is person-to-person contact, it includes everyday exchange that may be formal or informal and can take place anywhere by means of words, sounds, facial expression, gestures and postures. In interpersonal communication there is face-to-face interaction between two persons, that is, both are sending and receiving messages. This is an ideal and effective communication situation because we can get immediate feedback. We can clarify and emphasize many points through the expressions, gestures, and voices. In interpersonal communication, therefore, it is possible to influence the other person and persuade him or her to accept one's point of view. Since there is proximity between sender and receiver,
interpersonal communication has emotional appeal too. It can motivate, encourage, and coordinate work more effectively than any other form of communication.

1.2.3 Group Communication

Group communication is an extension of interpersonal communication where more than two individuals are involved in exchange of ideas, skills, and interests. A group is a number of people with a common goal who interact with one another to accomplish their goals, recognize one another's existence and see themselves as part of the group. Groups provide an opportunity for people to come together to discuss and exchange views of common interest.

Communication in a group, small or big, serves many goals including collective decision-making, self-expression, increasing one's effect, elevating one's status and relaxation. Group communication is considered effective as it provides an opportunity for direct interaction among the members of the group; it helps in bringing about changes in attitudes and beliefs. Group communication has limitations too, as group interaction is time consuming and often inefficient, especially in an emergency. Besides, imbalances in status, skills and goals, may distort the process and the outcome sharply.

Groups have been classified as small groups and large groups. A small group comprises of three to seven members. Small groups are informal and less structured. Larger groups adopt formal rules to maintain order. There is more chance for individual participation in small groups. Also small groups are easy to manage and are more efficient in accomplishing tasks and making decisions. Most researchers define a small group as having at least three and no more than twelve or fifteen members.
1.2.4 Mass Communication

Outside the realm of interpersonal communication exists another form of communication, which involves communication with mass audiences and hence the name mass communication; and the channels through which this kind of communication takes place are referred to as mass media. Both mass communication and mass media are generally considered synonymous for the sake of convenience.

Mass communication is unique and different from interpersonal communication. Any mechanical device that multiplies messages and takes it to a large number of people simultaneously is called mass communication. The media through which messages are being transmitted include radio, TV, newspapers, magazines, films, records, tape recorders, video cassette recorders, etc and require large organizations and electronic devices to put across the message.

The invention of paper and printing, and later newspapers, were the first steps towards mass communication. But it was only through the telegraph, invented by Samuel F. B. Morse in 1835, that messages could be sent to long distances using a code. The next step was to send messages through human voice. Alexander Graham Bell in 1876 succeeded in using wires to send the human voice across long distances. However, it was the invention of the radio by Marconi in 1901 which made sending of human voices over long distances possible. In 1947 the invention of the transistor made radio the most popular medium for sending voice messages. Today television, which can send voice as well as pictures, is found almost everywhere. This was invented by Baird in 1920.

The first medium used to communicate with a large number of people was the newspaper. Then came a truly mass medium, the radio invented by Marconi. Newspapers had limitations like the time factor. News had to be collected, compiled, edited and printed in advance and then sent for people to read them. All these took plenty of time.
The simplest definition of mass communication is "public communication transmitted electronically or mechanically." In this way messages are transmitted or sent to large, perhaps millions or billions of people spread across the world.

Mass Communication is a means of disseminating information or message to large, anonymous, and scattered heterogeneous masses of receivers who may be far removed from the message sources through the use of sophisticated equipment. In other words, communication is the sending of message through a mass medium to a large number of people.

Mass Communication represents the creation and sending of a homogeneous message to a large heterogeneous audience through the media. Mass communication studies the uses and effects of the media by many as opposed to the study of human interaction as in other communication contexts.

Stanley Baran (2002) defines Mass Communication as the process of creating shared meaning between the mass media and their audience. Also, John Bitner (1989) defines Mass Communication as messages communicated through a mass medium to a large number of people. One needs to underscore the underlying fact that what is common in every definition of mass communication anywhere in the world is that it is communicated through a mass medium. In other words, for any message to be regarded as being mass communicated, it must be disseminated through a mass medium like Radio, Television, Newspaper and Magazine.

Mass Communication can also be defined as a device by which a group of people working together transmits information to a large heterogeneous and anonymous audience simultaneously. It is a process by which information originates from the source to the receiver, having been thoroughly filtered and transmitted through a channel (Sambe, 2005).
It is clear from the definition that mass communication is a special kind of communication in which the nature of the audience and the feedback is different from that of interpersonal communication.

1.2.5 Non-Verbal Communication

Verbal media can be used to communication almost any thought, feeling or idea, but the non-verbal media has comparatively very limited range. Especially, it communicates feelings of likings and disliking and reinforces the feelings expressed through verbal media. Occasionally, it contradicts those feelings, which are expressed verbally by the communicator.

Non-verbal communication plays an important role in any communication situation. It often plays a supplementary role to the verbal content delivered orally. Some other times, nonverbal symbols communicate on their own.

1.3 The Mass Media

Communication can be defined as ‘social interaction through messages’. Messages are formally coded, symbolic or representational events of some shared significance in a culture, produced for the purpose of evoking significance (Gerbner, 1958). The distinction between the communication approaches to the study of behavior and culture rests on the extent to which messages are germane to the processes of studies concerned with the production, content transmission, perception and the use of messages central to the approach. A communication approach can be distinguished from others in that it makes nature and role of the messages in life and society its central organizing concern.

The media of the communication are the means of the vehicles, capable of assuming forms that have characteristic of messages. Gould and Kolb (1964) have defined mass-media as all the impersonal means of communication by which visual or auditory messages or both are transmitted directly to audiences.
Included among the mass-media are the television, the radio, the motion pictures, newspapers, magazines and books.

Klapper (1949) has defined the mass-media of communication as a process in which a mechanism of impersonal reproduction intervenes between the speaker and the audience. By this criterion, the radio, the screen, books and other media of impersonal communication would be classified as mass-media.

According to Wiebe (1952) there are two essential characteristics of media: (1) their product is easily available in a physical sense to the most of public, including a sizable number of a people in all major subgroups; and (2) their cost is so small to the individuals that they are generally easily available to them. This criterion emphasizes the size of the audience and appears to exclude not only personal communications but also more expensive and less readily available communication products, such as books and educational films.

Sherif and Sherif (1956) are of the opinion that mass media must reach millions of people simultaneously or within very brief periods.

Wirth (1948) emphasized the point that the mass media of communication transcend the peculiar interests and preoccupations of the social and segmental organized groups and direct their appeal to the masses.

The most comprehensive attempt to explain the essential characteristics of mass communication has been made by Wright (1959). It involves distinctive operating conditions, primary among which are the nature of the audience, of the communication experience and of the communicator. First, mass communication is directed towards a relatively large, heterogeneous and anonymous audience; Second, mass communication may be characterized as public, rapid and transient; third, the communicator in mass media usually works through a complex corporate organization embodying an extensive division of labor and an accompanying degree of expenses.
Conceptually, the mass media are technological agencies and corporate organizations, engaged in the creation, selection, processing and distribution of messages that are produced at speed and in quantities possible only with mass production methods. Mass media, therefore, are the broadest common currencies of public interaction in a society.

Thus the mass media are organized means of reaching large numbers of diverse kinds of people quickly and efficiently. The mass media may be said to include the print media of newspapers, magazines and books, broadcast media of the radio and the television and the movies.

1.4 Types of Media

1.4.1 Print Media

The print media is an industry which gathers and publishes news in the form of newspapers, magazines and other printed publications. The majority of print media are local with the exception of magazines which can have an international distribution. Print media depend on advertising for the generation of revenue and they achieve this by selling advertising space. There are several types of print media.

Newspapers

A newspaper is usually divided into different segments. Newspapers are the most popular and easily recognizable form of print media. Newspapers can be published daily or weekly and cover local and international news stories. A newspaper is usually divided into different segments, news, opinions, advertisements, announcements, sports news, cartoons and television listings. A newspaper is a useful means for the dissemination of information, which is why it has remained popular despite the advancement in technology which gives people the option of reading their news online. The most important story is usually featured on the front page, under a headline with a byline stating the name of the
reporter who wrote the story. Different types of newspapers cater to different readers. The newspapers with the most circulation usually generate the most revenue because advertisers are willing to advertise in them since they know they will get more value for their money.

Newspapers are printed and published for providing information of public interest, advertisements and views. These publications are usually issued daily, weekly or at other regular intervals. Newspapers were first published in countries like Germany, Italy and the Netherlands in the 17th century. Later it spread to countries all over the world. Today in India, a large number of newspapers in various languages reach millions of people every morning.

Newspaper will undoubtedly survive with some further reduction of market share. Few changes in literacy or other factors related to potential increases in readership. Major development could be that newspaper could be customized, and people will get to read only the things, which interests them. This way the readers will exercise a lot of control on the contents of the newspaper. But only few people will get access to such electronic newspaper.

Magazines

A magazine is a publication which is published on a set schedule: weekly, fortnightly, monthly or quarterly. A magazine is usually funded by advertisers, outright purchase at magazine stands, from vendors and other distribution outlets, and through subscription by readers. Magazines usually have a niche audience since they focus on a specific interest; a magazine focusing on horses would target those who have interests in horses, and magazines focusing on housekeeping or women's health usually target women of a certain demographic. Magazines can be available in specific regions or cities, in the whole nation or even internationally.
Today, we have magazines for every topic under the sun like, beauty and fashion, business and commerce, art and craft, education and career, health and grooming, photography, automobiles, electronics, science and technology, etc. Magazines do play an important role in information, education, and offer variety of subjects for entertainment of its specific target readership.

Newsletters

A newsletter is a publication which usually deals with one topic which its subscribers find useful and which is distributed on a regular basis. Clubs, societies, churches, businesses and associations regularly produce newsletters to provide information to their members, employees and customers. Some newsletters are used as a means for making money because they are sold directly to subscribers.

1.4.2 Electronic Media

Radio

Early use of radio was for sending telegraphic messages using Morse code between ships and land. The earliest users included the Japanese Navy scouting the Russian fleet during the Battle of Tsushima in 1905. One of the most memorable uses of marine telegraphy was during the sinking of the RMS Titanic in 1912, including communications between operators on the sinking ship and nearby vessels, and communications to shore stations listing the survivors.

Radio was used to pass on orders and communications between armies and navies on both sides in World War I. Germany used radio communications for diplomatic messages once it discovered that its submarine cables had been tapped by the British. The United States passed on President Woodrow Wilson's Fourteen Points to Germany via radio during the war. Broadcasting began from San Jose, California in 1909, and became feasible in the 1920s, with the widespread introduction of radio receivers, particularly in Europe and the United States.
Besides broadcasting, point-to-point broadcasting, including telephone messages and relays of radio programs, became widespread in the 1920s and 1930s. Another use of radio in the pre-war years was the development of detection and locating of aircraft and ships by the use of radar (Radio Detection and Ranging).

Today, radio takes many forms, including wireless networks and mobile communications of all types, as well as radio broadcasting. Before the advent of television, commercial radio broadcasts included not only news and music, but dramas, comedies, variety shows, and many other forms of entertainment (the era from 1930 to the mid-1950s is commonly called radio's "Golden Age"). Radio was unique among methods of dramatic presentation in that it used only sound. From mere curiosity and technical experiments radio became a truly powerful and popular medium of mass communication. After it was developed in the west we had radio by the 1920s and the first formal radio station was started in Bombay.

Radio's future is a mystery. It is not easy to predict the future of radio. The future of radio would depend on changing regulatory scenarios, technological developments and change of listener's appeal. Radio's current localization and specialized programming will continue. Technologically, radio transmission will improve greatly. FM will continue to grow faster and bigger.

Television

Television (TV) is a widely used telecommunication medium for transmitting and receiving moving images, either monochromatic ("black and white") or color, usually accompanied by sound. "Television" may also refer specifically to a television set, television programming or television transmission. The word is derived from mixed Latin and Greek roots, meaning "far sight".

Commercially available since the late 1930s, the television set has become common in homes, business and institutions, particularly as a source of entertainment and news. Since the 1970s the availability of video cassettes,
laserdiscs, DVDs and now Blu-ray Discs, have resulted in the television set frequently being used for viewing recorded as well as broadcast material.

Although other forms such as closed-circuit television (CCTV) are in use, the most common usage of the medium is for broadcast television, which was modeled on the existing radio broadcasting systems developed in the 1920s, and uses high-powered radio-frequency transmitters to broadcast the television signal to individual TV receivers. Broadcast TV is typically disseminated via radio transmissions on designated channels in the 54–890 megahertz frequency band.

Signals are now often transmitted with stereo and/or surround sound in many countries. Until the 2000s broadcast TV programs were generally recorded and transmitted as an analog signal, but in recent years public and commercial broadcasters have been progressively introducing digital television broadcasting technology.

A standard television set comprises multiple internal electronic circuits, including those for receiving and decoding broadcast signals. A visual display device which lacks a tuner is properly called a monitor, rather than a television. A television system may use different technical standards such as digital television (DTV) and high-definition television (HDTV). Television systems are also used for surveillance, industrial process control, and guiding of weapons, in places where direct observation is difficult or dangerous. Amateur television (ham TV or ATV) is also used for experimentation, pleasure and public service events by amateur radio operators. Ham TV stations were on the air in many cities before commercial TV stations came on the air.

In India, television started in 1959 on an experimental basis and the first television station was set up in Delhi. The beginnings were modest and slow but television was popular and became available in color in 1982. Today Doordarshan has one of the largest television networks. From early 1990s satellite television also came to India and later Direct to Home (DTH) television.
Film

A film, also called a movie or motion picture, is a story conveyed with moving images. It is produced by recording photographic images with cameras, or by creating images using animation techniques or visual effects. The process of filmmaking has developed into an art form and industry.

Films are cultural artifacts created by specific cultures, which reflect those cultures, and, in turn, affect them. Film is considered to be an important art form, a source of popular entertainment and a powerful method for educating or indoctrinating citizens. The visual elements of cinema give motion pictures a universal power of communication. Some films have become popular worldwide attractions by using dubbing or subtitles that translate the dialogue.

Films are made up of a series of individual images called frames. When these images are shown rapidly in succession, a viewer has the illusion that motion is occurring. The viewer cannot see the flickering between frames due to an effect known as persistence of vision, whereby the eye retains a visual image for a fraction of a second after the source has been removed. Viewers perceive motion due to a psychological effect called beta movement.

The origin of the name "film" comes from the fact that photographic film (also called film stock) has historically been the primary medium for recording and displaying motion pictures. Many other terms exist for an individual motion picture, including picture, picture show, moving picture, photo-play and flick. A common name for film in the United States is movie, while in Europe the term cinema or film is preferred. Additional terms for the field in general include the big screen, the silver screen, the cinema and the movies.

The pictures or photographs taken using a camera may be called 'still photographs' because they are permanent and do not move. The logical development from still photography was what we call 'motion pictures' or
'movies'. In this technology, a series of still photographs on films were projected in rapid succession onto a screen. The camera used for this was called a movie camera. The motion picture machines used to project the films into moving images and later talking pictures were developed by Thomas Alva Edison in the USA and the Lumiere brothers in France. In fact the Lumiere brothers came to India and showed moving pictures in Bombay. Just as in Hollywood in America, India also developed the art and technology of motion pictures. First they were silent and then the talkies came in 1927. The first Indian motion picture was Raja Harischandra by Dada Saheb Phalke and the first talkie was Alam Ara. Today films are an integral part of our lives. Films brought in the cult of stars. In India the early films were based on mythology and later social issues were also taken up which continues even today.

1.4.3 New Media

Development and widespread use of computers and information technology have resulted in the emergence of what is called 'new media'. It includes computers, information technology, communication networks and digital media. This has led to another process in mass communication called 'convergence'. Convergence means coming together of many forms of media and other formats like printed text, photographs, films, recorded music or radio, television etc. Though it is hard to separate old media from new media the World Wide Web or internet has changed the way in which we communicate.

Internet

The Internet is a global system of interconnected computer networks that use the standard Internet Protocol Suite (TCP/IP) to serve billions of users worldwide. It is a network of networks that consists of millions of private, public, academic, business, and government networks of local to global scope that are linked by a broad array of electronic and optical networking technologies. The Internet carries a vast array of information resources and services, most notably
the inter-linked hypertext documents of the World Wide Web (WWW) and the infrastructure to support electronic mail.

Most traditional communications media, such as telephone and television services, are reshaped or redefined using the technologies of the Internet, giving rise to services such as Voice over Internet Protocol (VoIP) and IPTV. Newspaper publishing has been reshaped into Web sites, blogging, and web feeds. The Internet has enabled or accelerated the creation of new forms of human interactions through instant messaging, Internet forums, and social networking sites.

The origins of the Internet reach back to research in the 1960s, both commissioned by the United States government to develop projects of its military agencies to build robust, fault-tolerant, and distributed computer networks as well as private research. The commercialization of an international network in the mid 1990s resulted in the following popularization of countless applications in virtually every aspect of modern human life. As of 2009, an estimated quarter of Earth's population uses the services of the Internet.

The Internet has no centralized governance in either technological implementation or policies for access and usage; each constituent network sets its own standards. Only the overreaching definitions of the two principal name spaces in the Internet, the Internet Protocol address space and the Domain Name System, are directed by a maintainer organization, the Internet Corporation for Assigned Names and Numbers (ICANN). The technical underpinning and standardization of the core protocols (IPv4 and IPv6) is an activity of the Internet Engineering Task Force (IETF), a non-profit organization of loosely affiliated international participants that anyone may associate with by contributing technical expertise.
Wireless Communication

In the origin of mass communication two inventions were mentioned. The first was the efforts of Samuel Morse in sending messages using a code in 1835. Later on the international Morse Code was developed in 1851. Until, recently we had the electric telegraph of Morse to send messages across the continents. In course of time messages could be sent without using any wires or cables. The cell phone that we use today is a fine example of wireless communication.

1.4.4 Photography

In photography, images are produced using light. Photography was developed in the 19th century by two people from France, Nicephore Niepce and Louis - Jacques-Mande Daguerre. Till a few years back we were taking black and white photographs. Later color photographs could be taken using an emulsion. Newspapers, magazines and advertisements used photography. By the end of the 20th century photographers began using the digital technology, making photography easier and the cameras user friendly. Even cell phones today have such digital cameras.

1.4.5 Traditional Media

Traditional media are a part of our country's rich heritage. They have a base of strong oral tradition. They belong to our own land and are strongly rooted in our culture. They are as varied and diverse as our culture itself. Life in India is deeply influenced by agriculture and religion. So also are the seasons. From very ancient days we have been having fairs and festivals celebrated with spontaneous songs and dances. These songs and dances are traditional forms of media which inform, educate and entertain people. The advent of faster forms of media has affected traditional media. However the performers or communicators and the audience in traditional media are known to each other unlike in radio or television. The environment in which the performances take place is natural,
known and friendly. The messages are also simple; the content known and the
language and idioms are familiar. Unlike other modern media, people never get
tired of them. There are several forms of traditional media in our country. They
are known by different names in different regions. Some traditional media are
storytelling, folk songs, street theatre and puppetry. Some forms of traditional
media like traditional songs and mythological stories are written down as proper
text. But different forms of folk media are generally spontaneous or are made on
the spot.

1.5 Development

The concept of development has changed significantly overtime and even
today, there are a number of different schools of thought. The concept and
approach to development has gone through many changes. Development has been
described as a generic term meaning growth, evolution, and stage of inducement
of progress (Metha, 1981).

The concept of development gained currency after World War II. Simplistic
attempts have been made to measure development exclusively with indicators
such as gross per capita income. In this perspective the term economic
development and economic growth were used interchangeably. The societies with
sustained growth of GNP or per capita income were considered as development.
This was basically an economic criteria used by economists for the transformation
of developing countries.

Development was believed to be achieved through mass production, capital
investment and more savings. The surplus output was expected to result in
increased profit which, from the classical economist's point of view, was saved
over time to raise capital needed for future investment and expansion of the
economy (Dian Hunt, 1989).
The idea of measuring development exclusively with indicators of gross per capita income was long ago considered by Simon Kosnetz as a fallacious concealing realities (Kosnetz, 1972). Indeed, increased GNP brought many of the social and economic problems such as inequality and unemployment in most of the developing countries. As GNP increased so did poverty, inequality and underdevelopment (Griffin, 1981, 1985). Rather, in many developing countries, rapid economic growth has further aggravated the problems of poverty, unemployment, and inequality (Aziz, 1977). Thus, the economic growth in the 1950s and 1960s did not automatically lead to the wider, normatively defined goal of development.

During 1970s, a new concept of development emerged, where development was conceived as a state of human well being rather than as the state of the national income. This concern was expressed in "Cocoyoc Declaration" adopted by the participants at a seminar organized by the United Nations Council on Trade and Development (UNCTD) and the United Nations Environment Programme (UNEP) in Cocoyoc, Mexico in 1974. The declaration states:

"Our first concern is to redefine the whole purpose of development. This should not be to develop things but to develop man. Human beings have basic needs: food, shelter, clothing, health, and education. Any process of growth that does not lead to their fulfillment or, even worse, disrupts them is a travesty of the idea of development (Cocoyoc Declaration, quoted in Ghai, 1977)".

The general concern of this approach was the dethronement of the GNP, and the promotion of direct attacks on widespread poverty, inequality and unemployment. This ‘man-centered’ development was associated with increasing concern about the non-economic aspect of development. Development is conceived and measured not only in economic terms but also in terms of social well being, political structure and the quality of the entire environment. Development thus defined as ‘growth plus change’. The strategic framework to
Development here consists of two central and mutually reinforcing elements: economic growth and investment in people. One without the other is not enough – as highlighted by World Development Report (WDR) 1990. It has been emphasized that apart from the ‘economic problem’ of producing goods and services, we have the ‘social problem’ of using those resources in such a way as to improve the welfare effect of economic activity (Drewniowski, 1971).

Development, thus, is not merely defined in terms of economic growth (GNP/GDP) but is seen essential as social development, with emphasis on equitable distribution, freedom of expression and qualitative aspects of life. Relatively less concern with the quantity of production or output, material needs or monetary gains and more concern with the general quality of human life and the natural environment thus characterized the new concept of development. The World Bank Development Report of 1982 states:

“GNP does not measure items that are important to welfare in most societies, such as the distribution of income and wealth, employment status, job security and opportunities for advancement, availability of health and education services” (World Bank, 1982).

Seers (1979) identified a number of objectives for development in the poorest countries. These are:

- That family income should be adequate to provide a subsistence package of food, shelter, clothing and footwear.
- That a job should be available to all family heads.
- That access to education should be increased and literacy ratios raised.
- That the populace should be given an opportunity in government and
- That national independence should be achieved in the sense that the views of other governments do not largely predetermine one's own government's decisions.
These new objectives of development have necessarily evolved into various new approaches and strategies. The redistribution with growth strategies - meeting the basic needs and people's participation approach - received currency in the development literature. (Chenery and others, 1974; Streeten and others 1981; and Hulme and Turner, 1990). Since a large proportion of the total population of the developing countries live in rural areas, high priority was given to the development of the rural sector.

Development is essentially maximizing the production of goods and services available in a country. Lack of it is defined as underdevelopment. Going by the international encyclopedia development may be described as “purposive changes undertaken in a society to achieve what may be regarded generally as a different (improved) state of social and economic affairs.” The notion of development is basic to development communication.

The concept of development in itself is a complex one. Neher (2003) associates the concept with a cluster of terms such as modernization. He cites early development paradigms that viewed development as the abandonment of traditional ways and the adoption of modern practices as exemplified by the west.

Rostow (1963) portrays development in the form of traditional Asian and African societies struggling to mimic western culture. Amin (1994) thinks that the essential part of a world system that their integration into this system forged their special structure which henceforth has nothing in common with what prevailed before their integration into the modern world.

Development communication scholars of the 60's, like Rogers and Shoemaker (1971) defined development as “a type of social change in which new ideas are introduced into a social system in order to produce higher per capita income and levels of living through more modern production methods and improved social organization. Development is modernization at the social systems level.”
Dissanayake (1981) defines development as the process of social change which has as its goal the improvement in the quality of life of all or the majority of the people without doing violence to the natural and cultural environment in which they exist and which seeks to involve the generality of the people as closely as possible in this enterprise, making them the masters of their own destiny.

Deborah Eade defines it as "Development is about women and men becoming empowered to bring about positive changes in their lives; about personal growth together with public action; about both the process and the outcome of challenging poverty, oppression, and discrimination; and about the realization of human potential through social and economic justice. Above all, it is about the process of transforming lives, and transforming societies."

(Quoted in Om Gupta, 2006)

In fact "Development is neither a simple, nor straightforward linear process. It is a multi-dimensional exercise that seeks to transform society by addressing the entire complex of interwoven strands, living impulses, which are part of an organic whole" (Haqqani, 2003).

1.6 Rural Development

The increasing disillusionment with the modernization approach to Third World development in the 1960s, and in the early 1970s, has changed the concerns of the development economists in the mid-1970s, to rural development. Much of the literature analyzing the social consequences of the past development programmes emphasized the fact that such modernization approaches tended to lead to increasing inequality in the country in general and in the rural sector in particular and contributed to increasing mass poverty in many rural societies in the Third World (Griffin, 1979).

There has been a speedy acceptance of the concept of 'rural development' over the past few decades. It is enshrined as a policy aim in many developing
countries national plans during the 1980s. Indeed, it has become one of the key phrases in policy making in the 1990s. Yet among those engaged in the subject, there appears to be little consensus on what the rural development phase includes. Writers have traced literally dozens of different uses of ‘rural development’. These different uses or interpretations or definitions may simply reflect functional differences or policy approaches particularly concerning the achievability of rural development. Thus they relate to key issues and policy initiatives. In order to provide a broad and well-defined concept of rural development, it is necessary to analyze these interpretations of rural development.

A widely used definition of rural development is that of Jasma and others (1981) who defines rural development as “an overall improvement in the economic and social well-being of rural residents and in the institutional and physical environment in which they live” (quoted in Shortall, 1994).

One of the most comprehensive definitions of rural development is that offered by Buller and Wright (1990) who describes it as an ongoing and essential interventionist process of qualitative, quantitative and/or distributional change leading to some degree of betterment of rural groups of people. Rural development is thus defined as improving living standards of the masses of the low-income population residing in rural areas.

Copp (1972) has defined rural development as a process aimed at improving the well being and self-realization of people living outside the urbanized areas through collective efforts.

These definitions clearly show rural development as an overall improvement in the economic and social well being of rural residents. Thus, a vast corpus of literature, especially the modernization approach to rural development, equates rural development with agricultural development. In the modernization approach, the prime objective has been to increase the agricultural output. The operational goal of rural development included improved agricultural
productivity, and thus higher income. This is because the main occupation of the rural masses is agriculture. Mosher (1969) recognizes the interdependence of agriculture growth and rural growth. According to him, the increased welfare of rural people depends on achieving agriculture growth. The modernizing approach advocates that in poor countries, where most of the people live on or near the land arduous and more prosperous life only when the agricultural output is grown. The whole idea behind the rural development was to produce more agricultural commodities in order to feed the people both in rural and urban areas; to provide raw materials to industry at home and to export agricultural products to finance capital goods from developed countries to provide resources for human welfare and development.

1.7 Development Communication

Sociologists, psychologists, economists and communication experts are of the opinion that the proper use of communication can foster the pace and process of development. In general terms, communication means interaction between two individuals or within a group or a community or a nation. The foundation of communication is based upon four principal elements; communication source, a message, a channel or medium and a receiver or audience. But in development communication it becomes the process of affecting or influencing behavior of individuals or groups towards certain desired goals and objectives, necessarily for the benefit of the entire society. Thus, the receiver is expected to show the behavior desired by the source of communication.

Development communication is an organized effort to use communication process and media to bring social and economic improvement of an individual, society or nation (generally in developing countries). It identifies what mass media can do directly or indirectly to improve the quality of life to both urban and rural masses. This describes an approach to communication which provides communities with information they can use in bettering their lives, which aims at
making public programmes and policies real, meaningful and sustainable. Such information must be applied in some way as part of community development but it must also address information needs which communities themselves identified. The outcome of this approach, in short, is to make a difference in the quality of life of communities.

Development Communication can be simply defined when communication is used to promote social development. Systematically applying the processes, strategies and principles of communication to bring out positive social changes is called development communication.

The term "Development Communication" was first coined in 1972 by Nora C. Quebral, who defines the field as "the art and science of human communication linked to a society's planned transformation from a state of poverty to one of dynamic socio-economic growth that makes for greater equity and the larger unfolding of individual potential". During the period of World War II, the term "Development Communication" was first introduced.

F. Rosario Braid is of the opinion that development communication is "an element of the management process in the overall planning and implementation of development programs."

Development Communication is, in a broad sense is thus, "the identification and utilization of appropriate expertise in the development process that will assist in the increasing participation of intended beneficiaries at the grassroots level."

Development Communication can also be defined as the integration of strategic communication in development projects. Strategic communication is a powerful tool that can improve the chances of success of development projects. It strives for behavior change and not just information dissemination, education or awareness-raising.
All development requires some kind of behavior change on the part of stakeholders. Research shows that changing knowledge and attitudes does not necessarily translate into behavior change. In order to effect behavior change, it is necessary to understand why people do what they do and understand the barriers to change or adopting new practices. It is not enough to raise awareness of the "benefits", it is critical to understand people's barriers or the "costs" they perceive such a change would entail. Well-conceived, professionally implemented communication programs that are tied directly to reform efforts or development project objectives that bring understanding of local, political, social and cultural realities to bear in the design of development programs can make the difference between a project's success and failure (Baishakhi Nag, 2011).

1.8 Evolution of Development Communication

Development and communication are two terms heavily loaded with different conceptions and a richness of uses and functions shaped by their various theoretical underpinnings. Such richness often leads to ambiguities and a lack of clarity that affects the field of development communication. The wide range of interpretations of key terminology and the rapid evolution of some concepts have led to inconsistencies in the way basic terms are understood and used. What we have here, in fact, is more of an approach than a discipline. As far as its definitions are concerned, they usually consist of general statements. Thus, the communication media, in the context of development, are generally used to support development initiatives by the dissemination of messages that encourage the public to support development-oriented projects. Although development strategies in developing countries diverge widely, the usual pattern for broadcasting and the press has been predominantly the same: informing the population about projects, illustrating the advantages of these projects, and recommending that they be supported. A typical example of such a strategy is situated in the area of family planning, where communication means such as
posters, pamphlets, radio, and television attempt to persuade the public to accept birth control methods. Similar strategies are used in campaigns regarding health and nutrition, agricultural projects, education, and so on.

The concept of development communication arose within the framework of the contribution that communication and the media made to development in the countries of the Third World. The field emerged in the late 1950's amid high hopes that radio and television could be put to use in the world's most disadvantaged countries to bring about dramatic progress. Early communication theorists like Wilbur Schramm and Daniel Lerner based their high expectations upon the apparent success of World War II propaganda, to which academia and Hollywood had contributed. Also with World War II came dozens of new, very poor, countries, left by their former colonial overseers with little infrastructure, education, or political stability. It was widely accepted that mass media could bring education, essential skills, social unity, and a desire to "modernize." Walt Rostow theorized that society's progress through specific stages of development on their way to modernity, what he termed "the age of high mass consumption." Lerner suggested that exposure to western media would create "empathy" for modern culture, and a desire to move from traditional to modern ways. Early development communications, especially that sponsored by the U.S. government, was also seen as a means of "winning hearts and minds" over to a capitalist way of life.

These early approaches made a number of erroneous assumptions, and have been largely forsaken in contemporary approaches to development. Obstacles to development were naively seen as rooted in developing countries, not as products of international relationships. Modernization was presumed to equate to westernization, and to be a necessary prerequisite to meeting human needs. Development was seen as a top-down process, whereby centralized mass media could bring about widespread change. Producers of development media
often failed to ask if the audience can receive the message (television penetration in developing countries is minimal and radio penetration in the early days of development communication was light), understand the message (a problem in countries with dozens of languages and dialects), act upon the message (with the necessary tools or other forms of structural support), and want to act upon the message. And because it was based upon a propaganda model, development communication efforts were often seen as propaganda and distrusted. Projects embodying these philosophies have enjoyed little success.

In the 1970s and 1980s, a new paradigm of development communication emerged which better recognized the process of deliberate underdevelopment as a function of colonialism, the great diversity of the cultures involved, the differences between elite versus popular goals for social change, the considerable political and ideological constraints to change, and the endless varieties of ways different cultures communicate. But in some instances mass media technologies, including television, have been "magic multipliers" of development benefits. Educational television has been used effectively to supplement the work of teachers in classrooms in the teaching of literacy and other skills, but only in well designed programs which are integrated with other educational efforts. Consumer video equipment and VCRs have been used to supplement communication efforts in some small projects. Some developing countries have demonstrated success in using satellite television to provide useful information to portions of their populations out of reach of terrestrial broadcasting.

In 1975 and 1976, an experimental satellite communications project called SITE (Satellite Instructional Television Experiment) was used to bring informational television programs to rural India. Some changes in beliefs and behaviors did occur, but there is little indication that satellite television was the best means to that end. The project did lead to Indian development of its own satellite network. China has also embarked on an ambitious program of satellite
use for development, claiming substantial success in rural education. When television has succeeded as an educational tool in developing countries, it is only when very specific viewing conditions are met.

Several types of organizations work with local governments to develop communication projects. The United Nations provides multi-lateral aid to governments. Non-profit non-governmental organizations (NGO) conduct development projects worldwide by using U.N.O., government, or private funding. And government agencies, such as the U.S. Agency for International Development (USAID) provide assistance to developing countries, but with political strings attached. There are three common types of development campaigns: Persuasion, changing what people do; Education, changing social values; and informing, empowering people to change by increasing knowledge. This third approach is now perceived as the most useful.

Instead of attempting to modernize people, contemporary efforts attempt to reduce inequality by targeting the poorest segments of society, involving people in their own development, giving them independence from central authority, and employing "small" and "appropriate" technologies. The emphasis has shifted from economic growth to meeting basic needs. In this new view of development, communication becomes an important catalyst for change, but not its cause. Local folk media, for example, is employed to reduce media's bias toward literacy and provide information in a traditional, familiar form.

Development journalism provides people with information on change in their society, and works at the local level to advocate change. Where mass media is now employed in developing societies, community newspapers and radio prove far more accessible and useful than television. The rapid spread of entertainment television in the developing world is proving to be more a disruption to traditional social structures than an agent of progress. One emerging genre of television does show promise for contributing to development. The telenovela,
pioneered in Brazil, has demonstrated some success in disseminating "pro-social" messages. Such programs are now being evaluated in many countries for their effectiveness in contributing to population control, health education, and other development goals (Vineet Kaul, 2011).

Development Communication is communication with a social conscience. It takes humans into account. Development communication is primarily associated with rural problems, but is also concerned with urban problems. It has two primary roles: a transforming role, as it seeks social change in the direction of higher quality of values of society. In playing its roles, development communication seeks to create an atmosphere for change, as well as providing innovations through which society may change (Rajesh Kumar, 2011).

1.9 Indian Perspective of Development Communication

India is in the midst of the sixth development decade. The five development decades have witnessed various development philosophies and experiments in development communication. During the first development decade the stress was on national development through social growth. The models of community development and Panchayat Raj were essential in participatory communication. At that time most of the international development communities were adopting the Dominant Paradigm. In the second development decade, India switched over to the Dominant Paradigm and the stress was on modernization through industrialization. In the 1970s and also currently, the two development models of participatory communication and basic needs models-formally labeled as New Paradigm and Basic Minimum Needs Model by the international development community are operating in the Indian society.

The three parameters relevant to the development process in India have been political leadership, development administration and the rural/urban masses. The role of these three depends on the function and responsibility assigned to each in viable terms. The characteristics of the masses and the media
status in the country at a given time have been significantly relevant to the
development and change process. At this point it will be relevant to mention the
current Indian masses profile and the media profile.

The reality of traditional Indian society is fatalism, which may be
characterized as contentment - a passive acceptance of things as they are;
individual dependency-an attitude of looking to others, both for instructions and
provision of goods and services rather than self - reliance or initiative; the
existence of what UNESCO called exploitative linkages - patterns of social
relations in which the masses are regularly exploited by the local elites; ignorance
about modern innovations, including facts about birth control, local health
hazards and economic opportunities and participation in the social hierarchy
which fosters dependency on local leaders.

There is a low rate of literacy, mass poverty and large scale unemployment
and pressure of population growth. The majority of the urban population migrates
from surrounding rural areas and creates slum pockets in the urban areas. There is
greater disparity between the quality of life of haves and the have - not's.

A majority of the people have low exposure to the mass media. The various
mass media channels do not have wide physical reach to the masses. A majority of
the masses don't have access to these channels because of low purchasing power.
The existing media used for development purposes are radio, films, T.V. and
print. Satellite communication and use of folk media for development
communication is being widely experimented and used specifically for rural
population in areas where TV reaches but owing to economic and infrastructural
reasons access is denied to the people. Interpersonal channels are used for
motivating people for development and change. The content of the media too is
urban oriented. The current effort is to give regional and local character to some of
the T.V. channels because of the disparity in development needs of different
regions. The cable T.V. since 90s is changing the electronic media scenario &
giving access to international news and views. Radio too has been diversified with the introduction of F.M. Channel in number of metropolitan towns and cities.

The Indian experience of development has been highly idiosyncratic by deliberate choice of government. To intercept the spiral of discontent, the government has relied on mass media and government agents. The researchers indicate that these are least effective means of communication but perhaps the best available in the social structure of rural and urban communities.

The Gandhian plan of rural reconstruction was the meta-model of Indian development. It emphasized three dimensions: socio-economic development of localized need; village participation for self-development and self-reliance; and rural industrialization. The Etawah experiment in 1948-52; assessed the first two dimensions and the lessons learned from these experiments emphasized on awareness, motivation and achievement.

Community development programmes were initiated in 1952, where village was focus of development. The political leadership of the country envisioned community development (CD) programmes as physical and social reconstruction of the community by developing relationship between groups and individuals that enabled them to create and maintain facilities and agencies for common welfare. These programmes emphasized people’s support and participation as integral part of development effort by contributing in kind labor and cash. It became an exercise in transplanting ideology of the progressive and developed environment to less development and fatalistic rural setting.

For the first time, the “extension approach” was adopted for development communication and block development infrastructure was utilized for development administration. The National Five Year Development Plans articulated the rationale, objectives of the specific “development plans” over a period of time. Community development programmes operated in the first five year plan (1951-56). It was the adoptive administrative phase of it. The
development communication model advocated top-down dependency on government though the attempt was to base the development programmes on the felt needs of the people. During the plan, the assigned role of communication was to develop interpersonal and media channels technologically and to develop suitable development information to inform, educate, motivate people for development participation.

Today, the masses are much more aware of development needs and projects, and are discontented because their demands have not been met. The masses are also much more knowledgeable about the development bureaucracy than they used to be. They seem to have a much improved notion of which channels of communication ought to be useful to them.

The development imagery and reality in Indian context is presented in two contexts: the socio economic development and communication perspective. The framework for development imagery is one's own perceived needs and resources, the communication perspective is of one’s own and that of others. The different groups of people have certain preconceived notions of development, aspirations and expectations –from themselves as well as from those who are planning development for them. The planners too have certain preconceived notions of development aspirations for its people and expectations from the people themselves to deliver goods. Every nation has certain images of development as its target to do development. The nations have an organizing principle for what development should be. Therefore, the development imagery may differ among nations. The development perspective of various groups will vary because of the opportunity gaps among the groups to form a relevant development image.

The framework for development imagery is perceived needs and resources-this is reality. A certain ideology of development is projected through national development plans through communication channels both mass media and interpersonal to the people within the nations and internationally. This is the
ideological image of development. Both government and the masses have certain ideological image of development. The mixed image of development apprises people of development goals, practices and achievements being taken up in reality and how such reality is short of or in alignment with the development ideology.

The communication channels of a country play a significant role in creating the development image of a country. An analysis of the communication channels and its exposure reflects its development imagery. The ideological images are spontaneous as well as construed images of what planners and masses aspire for. Whereas, the mixed image and reality are reinforced by situation analysis to a greater extent and ideology as the baseline. Both national and international relations are affected by two sets of dominant development images: images of the policy makers, development functionaries and images of the masses. Whereas the reality is influenced by the social, political and cultural variables is a unified socio-economic process.

The socio-economic development and communication perspective in India present an ideological development imagery which has certain logical weaknesses which sets in motion the paradoxical situations and limitations in development process which produces counterproductive effects. This is development reality. In Indian the development imagery of political leadership, policy makers, development bureaucracy and masses in general and ideology and reality of communication infrastructure are present.

In the Indian development context, the Gandhian meta-model development has been the ideal. It suggests that development is social transformation - a fundamental transformation of values and motives and resurrection of man's ethical and spiritual potential. It emphasized that development is not industrialization but rural reconstruction defined in social transformation - a fundamental transformation of values and motives and resurrection of man's ethical and spiritual potential. In later development decades,
the conceptual and ideological slipperiness of development is evident because of the ideology of the political leadership of the country and the promise of delivering quick development to the masses. The development communication strategies were geared to that ideal by the development administration. The result was a switching back and forth between various development models to achieve the best results. But the current development situation and strategies present a different scenario. At present, the planners’ emphasis is on three development models: the basic minimum needs (BMN) model, participatory model and technological model (Burnett Pearce and Uma Narula, 1984).

India is surging ahead in 21st century with a technological model for development by creating technological optimism in the double binds and dilemmas: the dependency dilemma and the distrust dilemma.

The development functionaries are committed to provide for the masses material welfare and eliciting active participation from the masses. The dependency dilemma is created when the acts necessary to provide something, say, safe drinking water, are themselves seen as increasing passivity and producing learned dependency. The distrust dilemma is formed by the combination of the self as having limited authority of the masses demanding more than agents can provide, their choices are limited which distrust them. Public assessment of development bureaucracy efficacy is low. There is corruption, low efficacy in development delivery system, inadequate monitoring and evaluation of development effort and lack of redress channel for public grievances.

Narula and Dhawan (1982) in their research with development bureaucracy (DB) in India indicated that they felt somewhat betrayed by the masses and at cross purposes with other government agencies. But instead of participating in development, the masses criticized the government for not doing enough. They observed that people will be self-reliant in development only when they are able to define their own problems and cooperate with development functionaries. The
development functionaries create blockages for development information and benefits because of corruption and indifference to public welfare. Moreover, they disapprove of public participation because of their own trained incapacity to value the conventional wisdom and accumulated experience of the country. The technological phenomena suggest the application and assimilation of science and technology in the life styles of people at the grass root level in rural and urban areas. In reality the scientific ambience is lacking at the grass root levels. It is being realized fast in India that progress in science and technology; its acceptance and applicability for development is necessary (Rajesh Kumar, 2011).

1.10 Role of Media in Development

It is important at this point to clarify the meaning of “development communication” for the term has a wide variety of connotations. Development communication is more than agricultural extension or rural communication. It doesn’t restrict itself merely to the development of rural areas, nor is it concerned with agricultural development alone. It is oriented towards development whether it be in rural or urban areas, or in areas such as agriculture, family planning, or nutrition (Gupta, 1985).

Theory and research suggests that mass communication can act as a positive agent of social change for some people while impeding and obstructing change for others (Johnson, 2000). There are many who dispute the role played by the mass media in bringing about social change (Gupta, 1995; Rodrigues, 2010; Vilanilam, 2005). Gupta (1995) asserts that radio and television are the best sources for creating awareness and interest among the audience regarding a new message or idea “but when it comes to adoption of the idea, interpersonal sources such as extension agents, friends, neighbors, family members are the most effective” (Gupta, 1989).

In the 1960s, communication scholars and media experts were quite sure that television and the other media of mass communication would help national
development. The media were considered the prime motivators of development. Eminent communication scholars such as Daniel Lerner, Wilbur Schramm and Everett M. Rogers, who based their theories of development and media efficacy on the important work of Walter Rostow, namely, *The Stages of Economic Growth*, stressed that the economic and technological development achieved by the Western nations were the result of increased media use (Vilanilam, 2005).

However, since the 1970s the dominant paradigms of development have been challenged by different disciplines (Gupta, 1995; Vilanilam, 2005). It has been realized that distribution of goods and services along with economic and political opportunities among the majority is a pre-requisite for development. An information revolution ushered into a largely private society without appropriate changes in the social structure will not benefit the large majority of the people (Vilanilam, 2005). Everett M. Rogers and many other theorists criticized the dominant paradigm of development (as cited in Rodrigues, 2010) and broadened its definition from one that centered on materialistic economic growth to other social values such as social advancement. The concept of development in the 1970s was expanded as a widely participatory process of social change in a society, intended to bring about both social and material advancement, including greater equality, freedom, and other valued qualities, for the majority of the people by giving them greater control over their environment.

Similarly, the new concept of development communication that began to emerge dealt with the promotion of social change leading to improvement in people’s quality of living, by encouraging better health, higher literacy and higher production of goods through more effective communication (Rodrigues, 2010).

There was also a tendency in communication theory and practice to regard the television audience as passive beings molded and manipulated by those who create the media messages (Johnson, 2000). Many development communication campaigns suffered on this count. However, it is increasingly being realized that
for such messages to be effective, people must be involved at all stages - planning, production, and presentation. The need for localization of development communication has been emphasized by many researchers and commentators (Joshi, 1985; Page and Crawley, 2001; Singhal and Rogers, 2001; Verghese, 1978).

The role of media in development communication is decisive. Media circulate knowledge that will inform people of significant events, opportunities, dangers and changes in their community, country and the world. They provide a forum where issues affecting the national or community life can be aired. They teach those ideas, skills and attitudes that people need to achieve a better life. They create and maintain a base of consensus that is needed for the stability of the state.

After all, when we speak of development, our frame of reference cannot but include the development of people. As an infant grows through childhood and adulthood to old age, he or she passes through various vicissitudes of life and this development process is not only marked by physical growth or decay, but by socio-emotional bonds and linkages besides mental maturity. No doubt, the survival need is the uppermost in complex human need structure that embraces within its fold, social emotional, psychological and cultural accomplishments that a person aspires for his or her life. This brings into focus the role of perceptions, aspirations, motivations and commitment of people who in an organized manner constitute a society, for development purposes. Development is arrived at by transforming men and societies to a new material and moral social order and as a cultural process, its thrust should be on (i) the environment in which people live; (ii) social relations which men foster for their existence and continuity; (iii) production and consumption of goods and services for a viable living and sustenance; and (iv) on the well being of people so as to make happiness and progress compatible with each other. In this process of development, various human interests emerge as people are drawn in, in with varied motivations, and in
order to fulfill these interests, they bank upon different technologies which they evolve. In this competitive development endeavor, people because of their contributive justice also call for their distributive justice. In short, in the concept of development, man and his interests and man and his justice should match and be compatible with the needs, aspiration and motivations of people. They are dynamic and changing, as such, the development efforts should also be competing, matching and dynamic (Metha, 1984).

Communication is mainly of interpersonal type, and occurs in a group rather at mass societal level. Such a communication sensitizes people and encourages their participation in development initiatives. As such, communication in development has to be designed and implemented in accordance with the ideological framework of development followed by a nation-state (Mehta, 1987).

Juan Diaz Bordenave (1973) pointed out the following important functions of communication in the development process:

- Articulation of the problem at the local level and its presentation to the outside agencies via linkage or by direct contact.
- Internal flow of the search for solutions and decisions taken with the intermediary service/extension agency.
- Delivery of help (solutions to the local community).
- Articulation of the problem by the development functionaries and its presentation to the solution centers.
- Internal flow of research and decision-making within the solution center.
- Communication of solutions to the intermediary agency and/or the local community.

According to Thayer (1968) the basic functions of communication fall under broad categories:
❖ The information function
❖ Command and instructive function
❖ Influence and persuasive function
❖ Integrative function.

It has to be admitted that information is basic to all the other applied functions of communication, because communication is not going to occur unless someone is acquiring and consuming some information. It is the necessity for transfer of information (technology), which is an important ingredient in the process of communication in rural development. The command and instructive functions of communication are more noticeable in formal organizations due to hierarchy. The persons at the upper level of hierarchy are privileged and obligated to command certain tasks related to the behavior of their subordinates.

According to Berlo (1960), a person can and will accept a communication as authoritative only when four conditions are simultaneously obtained. He can understand the communication at the time of his decision; he believes that it is not inconsistent with the purpose of organization, compatible with his personal interest as a whole and is able mentally and physically to comply with it. The influence or persuasive function is also important because the extension agent is not to transfer information but also to persuade the receiver for its adoption. The purpose of influencing in some way would be to alter the receiver’s general beliefs, understandings, values etc. in some desired way to make him ready for accepting change. Another important function of communication at the interpersonal level is that of self-integration.

The ways in which we communicate with others and are communicated with by them determine how to relate ourselves and how we come to relate people, things, events, conditions, ideas etc to each other. Communication behaviors prescribed for different rituals, ceremonies in social structures also serve
the purpose of integration. It can also be stated that the main function of communication is to change or guide other people’s behavior.

1.11 Experiments in Development Communication

1.11.1 Chhatera Experiment

Chhatera development journalism experiment in India implemented between the 1960s and 1970s. The editor of the Hindustan Times introduced this experiment as an attempt to highlight the daily struggles against poverty and underdevelopment encounters by a real impoverished community in Chhatera. In early 1969, the Hindustan Times started a regular fortnightly column entitled ‘Our Village Chhatera’. The inaugural column appeared on February 23, 1969, as the cover-story in the Sunday magazine section of the Hindustan Times. Soon, the village was turned into a news event when it was reported that one villager died owing to the collapse of an old swing bridge; officials, extension workers, social workers, and private companies visited the village. A new bridge was built, a bus service was started, the branch of a national bank opened, loans provided by the bank for the purchase of buffaloes, tractors, and fertilizers, and for the digging of wells and tubewells.

The Department of Atomic Energy installed community television sets in 80 villages besides Chhatera to test a biweekly farmers’ programme, Krishi Darshan. The paper published fortnightly series of reports on development efforts in this small community with the aim of providing urban readers with a window on the reality of poverty and underdevelopment. Reflecting on the project itself, Verghese (2009) provides three key perspectives regarding development journalism, which might impact the role of community media in health communication within developing world contexts. First is that development journalism requires much effort from practitioners to develop a faithful readership/listenership. Urban audiences, advertisers, and corporate owners may even question the relevance of some of the articles and content. Second is that
people assuming the existential satisfaction of empowerment due to the ability of
development journalism to connect their community to the outside world - the
other, urban and privileged world. Thirdly, development journalism is a form of
education for journalists in that it increases their knowledge of a development
issue and also sharpens their analytical capabilities, enabling them to take, what
Verghese (2009) describes as “more holistic view” of real life.

In 1972, this experiment in development journalism was extended to
Chhatera’s two neighboring villages, Majra and Barota. Majra’s Harijan weaving
community was urged to form a cooperative and to improve their product
designs; they were assisted in exporting their products. In Barota, the Hindustan
Times worked with the Yuvak kalian Sabha to assist the village in starting a
nursery school, a first aid class, a reading room and a mobile library. Besides, a
newspaper and magazine agency was established. The overseas edition of the
Hindustan Times Weekly carried the column on the rural experiments in
development journalism. (Keval J Kumar, 2010)

In another experiment, a researcher started a rural newspaper,
Gramyavani in 1993 in Deulpadi, a village in Ganjam district (Orissa) to give
information to the rural people. The fortnightly newspaper reaching eight villages
of the Panchayat continued for 16 months. A major objective of the experiment
was to provide development information to the people. The contents of the
newspaper included agriculture, health, forestry and animal husbandry. The
newspaper brought awareness among the villagers exposed to the newspaper.

1.11.2 Identify Backward Villages Experiment

Twenty-five years ago, the national Kannada daily Udayavani began an
experiment in development journalism. The 'Identify Backward Villages
Experiment' announced its objectives in an advertisement dated 2 January 1981:
"Udayavani has taken up a novel scheme to identify a backward village
(Kugrama) for studying the impact of numerous Central and State government
sponsored schemes since Independence. Readers' involvement is of paramount importance. They are encouraged to identify two backward villages, one in their Taluka and one in the District. To help you, a proforma listing the ten basic infrastructural facilities has been provided. These have been identified based on Government of India census report." Playing a catalytic role, Udayavani brought the experiment to a fruitful end in April 1984.

This experiment is well documented in a slender volume titled 'The Eighteenth Elephant' by the project coordinator Ishwar Daitota and a media scholar B.P. Sanjay. Ishwar Daitota would tell the villagers of the backward villages that mere publication of stories in Udayavani would not solve their problems. He made it clear that Udayavani would not go beyond basic reporting of their problems and that only they should take the initiative in solving them. He was keen on telling them the fable of the eighteenth elephant.

Development journalism is the eighteenth elephant. It can only play the role of a catalyst. Udayavani's catalytic role helped the backward villages to develop themselves. The newspaper made a comprehensive assessment of the development project. The authors write: "Three years is too short a period to gauge the long term implications of how development works can be initiated, sustained and in some cases abandoned. Transportation, medical facilities and educational needs had been identified as the major problems in all the villages."

'The Eighteenth Elephant', published in 1990, is an essential read for all development journalists. The three annexures comprise reports by Sachidananda Murthy, Ishwar Daitota and Mike Ehrhardt. A quote from Mike Ehrhardt tells us what Udayavani's development journalism is all about: "Their method for assisting local development efforts never went beyond the newspaper's means or purpose. No elaborate funding drive, no adopt-a-child program, no scathing editorial, just basic news reporting. It was this disposable tabloid that Udayavani offered to the villages of Kannada as their eighteenth elephant." May development
journalists continue to ride on the back of the eighteenth elephant? During the experiment, the Udayavani programme was successful in getting basic amenities to the villages. However, Daitota and Sanjay (1990) noted that the activities among the villagers and government officials dropped sharply once Udayavani had withdrawn from the project area.

1.11.3 SITE Experiment

India was one of the first developing countries to experiment with satellite television when in 1975-76 it launched the Satellite Instructional Television Experiment (SITE). Evaluations of SITE showed that its operational management, spearheaded by officials of the Space Application Center (SAC), was commendable. The hardware of satellites, earth stations, uplinks and downlinks, work wonderfully. On a given day, more than 80 percent of the television sets worked to deliver television pictures to 2,400 villages.

The four hour telecast beamed everyday from earth stations at Delhi and Ahmadabad concentrated on programmes on education, agriculture, health and family planning. These were planned and produced by AIR at Production Centers set up in Delhi, Hyderabad and Cuttack, with the help of committees which included Central and State Government representatives and experts from universities, teacher training colleges, and social workers.

With respect to software, however, SITE was a somewhat humbling experience. The key lesson learned was that engaging television programs produced in local languages and that were relevant to the needs and aspirations of rural people were needed (Mody, 1979). Further, to be effective, these programs needed to be integrated with local audience activities. However, barring notable exceptions like the Kheda Communication Project, such locally based, engaging programs were rarely seen on Doordarshan.
When the Indian National Satellite (INSAT) became operational in the 1980s, the Indian Government, through its various Ministries and Rural Development Programs, installed community television sets in several thousand Indian villages. However, no infrastructure was created to locally support the television messages. While the strength of SITE was its detailed operational management producers and the committed leadership of SAC officials, the agencies in charge during the INSAT period-state Governments, Doordarshan, and the Ministry of Rural Development-failed in systems management. Responsibilities were not clearly delineated and, thanks to bureaucratic restrictions and watertight compartments among implementing agencies, the mission of using satellite television to address rural needs was all but run into the ground by the 1990s. Community television died an untimely death, much like the radio farm forums of previous decades.

Soon after the conclusion of SITE in 1986, six terrestrial transmitters started beaming programmes to 40% of the SITE villages. The SITE Continuity Centers - Jaipur, Raipur, Gulbarga, Hyderabad, Sambalpur and Muzaffarpur - were designed to provide developmental support in liaison with the respective State Governments. The scheme envisaged that, as beneficiaries, the state departments should shoulder a major responsibility in the distribution system. But the State Governments were not equipped to take over the responsibility of installation and maintenance of the sets; so the sets were transferred to Doordarshan. The Panchayat Raj departments of Andhra Pradesh and Orissa have taken up the scheme, now termed the SITE continuity project.

### 1.11.4 Kheda Communication Project

Another pioneering experiment in using television for educational purposes in India was the Kheda Communication Project (KCP). Inspired by the lessons learned from SITE, KCP was a decentralized experiment in community based
television (Kalwachwala & Joshi, 1990). The site chosen for the experiment was Kheda district, an area near the SAC headquarters in Ahmadabad.

- The hardware consisted of one low-power transmitter located in Pij, about 50 kilometers south of Ahmadabad, which was connected to a local studio, the local Doordarshan station, and to a satellite earth station in Ahmadabad, so that it could broadcast either local television programs or national satellite television programs. Some 650 community television sets were provided to 400 villages and installed in public places where village audiences. Technicians periodically toured these villages to services and repair the television sets.

- Kheda district comprises some 1,000 villages with over three million inhabitants. In recent decades, it has become a major center for milk production in India, as part of the so-called “White Revolution”. They keep collaborated with extension agencies working in dairying, agriculture, and health services, and with local banks, cooperatives, and employment exchanges. Thus, the development infrastructure in Kheda district was tapped to facilitate the use of information transmitted by the television broadcasts.

- The project was independent of commercial interests, as it relied mainly on government funds for financial support. Managed by the Space Application Center, it enjoyed a great deal of political autonomy from the national government and the support of the state government.

- The project relied heavily on audience research by conducting need assessments of village audiences and by carrying out formative and summative evaluations of Kheda television programs.

- It promoted rural development and social change at the local level. Audience participation was aggressively encouraged at all levels. Villagers
were involved as actors, writers, and visualizes in the production of television programs dealing with such local issues as exploitation, caste discrimination, minimum wages, alcoholism, cooperatives, and local and national elections. Television serials, puppet shows, folk drama, and other popular local formats were used to address issues such as family planning, gender equality, and village sanitation. Chatur Mota (Wise elder) and Nari Tu Narayani (Women You Are Powerful), for instance, were two popular entertainment-education serials produced by KCP with the active participation of its audience members (Mody, 1991).

The Kheda Project represented a model of community-level, decentralized television broadcasting in India. It received the prestigious UNESCO prize in 1984 for rural communication effectiveness. However, the Indian Government did not replicate the KCP community-based television model in other parts of India. Instead, in 1985, when a high-powered transmitter was commissioned in Ahmadabad with a range that covered Kheda district, the government ordered that the Kheda transmitter be transferred to Chennai in order to facilitate a second entertainment channel for its urban residents.

1.11.5 The Jhabua Development Communication project (JDCP)

An innovative broadcasting experiment is presently underway in the rural, hilly hinterlands of Jhabua district in India’s Madhya Pradesh state (Space Application Center, 1996). Some 85 per cent of Jhabua’s population is tribal, and its literacy rate is 15 percent. While the district is rich in natural resources, Jhabua’s people are India’s poorest. Agriculture is primitive, infant mortality rates are high and transportation and communication facilities are poor.

The Jhabua Development Communication project (JDCP) was launched in the mid-1990s by the Development and Educational Communication Unit (DECU) of the Space Application Center (SAC) in Ahmadabad. The purpose of
JDCP is to experiment with the utilization of an interactive satellite based broadcasting network to support development and education in remote, rural areas of India. Some 150 direct-reception systems (a satellite dish, TV sets, VCRs, and other equipment) have been installed in several villages of Jhabua, which receive television broadcasts for two hours every evening from DECU’s Ahmadabad studio, uplinked through satellite. In addition, 12 taluk back terminals have been installed in each of the block headquarters of Jhabua district, through which village functionaries ask questions, provide feedback, and report on progress.

In the evening television broadcasts programmes on topics such as health, education, watershed management, agriculture, natural forestry, and local governance which are designed to be entertaining and educational. The programs are made with the active participation of the local people of Jhabua. In the afternoons, interactive training programs are conducted with a variety of village functionaries like teachers, anganwadi workers, hand pump mechanics, and local Panchayat members. Information flows in JDCP are thus both downward and upward, connecting the rural audience of Jhabua with media producers in Ahmadabad in an ongoing loop of feedback and feed forward.

To facilitate sustainability of the project, JDCP was implemented by DECU in cooperation with state government departments, local NGOs, and officials of the Jhabua Project conducted in 1988 showed that the poor people of Jhabua district had made significant knowledge gains in several life skills areas, enhancing the quality of their life and of the environment surrounding them (Kasturirangan, 1999).

1.12 Importance of Study

The present study is important, because communication media play a substantial role in developing rural resources and motivating the masses for adopting of new media technology. It has the potential to widen experiential
horizons, to focus attention, to raise aspirations and to create a climate for development. In addition to transferring technology, communication media like television and other communication media which have the potential to confer developmental status, to enforce social norms so as to help cultivating tastes and could also affect lightly presumed attitudes. The challenge is to accommodate stable resources and the power of communication skillfully for economic and social development. Development programmes can only realize their full potential if knowledge and technology are shared effectively, and if populations are motivated and committed to achieve success. Unless people themselves are the driving force of their own development, no amount of investment or provision of technology and inputs will bring about any lasting improvements in their living standards.

Communication is central to this task in many ways. For example, it enables planners, when identifying and formulating development programmes, to consult with people in order to take into account their needs, attitudes and traditional knowledge. Only with communication will the project beneficiaries become the principal actors to make development programmes successful. However, the role of communication in rural development has not studied in depth by many. In this context districts like Chikamagalur, Chitradurga, Davanagere and Shimoga of the present study has got importance.

The mass media have an important role in modern democratic society as the main channel of communication. The population relies on the news media as the main source of information and the basis on which they form their opinions and voting decisions. Any selection of messages in the mass media will thus have a profound effect on the entire society. Competition has become increasingly keen in the area of the mass media as they keep fighting for the attention of the readers, listeners, and TV-viewers. The life and death of each newspaper and TV station is at stake here when the income from advertising and sponsoring is proportional to
the number of readers or viewers. The printed media have problems competing with the electronic media as sources of news. In order to survive, they are increasingly turning to other strategies such as entertainment, titillation, scandal mongering, and spreading fear and spending fewer resources on serious researching of news. This is not only about the survival of the fittest of the news media; it is also about cultural selection and political selection.

The news media are the most important channels for the propagation of culture, ideas, and opinions. Most opinion formation takes place when people sit and watch news and debates on television. Analyzing the cultural selection in the electronic information society, we find that an important part of the selection lies in the choice between TV channels. Millions of lazy viewers sit in their comfortable armchairs with remote controls in their hands zapping between action films, revivalist preachers, and commercials for a new fragrance, hardly realizing that by choosing which cultural and political influences they expose themselves to, they also chose the cultural and political evolution of country.

It is very important to analyze which selection criteria are in effect here. The electronic media are first and foremost pacifying. It is a relaxation machine, and the viewer wants to be entertained. The faces on the screen are not chosen for their opinions but for their entertainment value. TV stations do not compete on ideologies but on sense impressions.

Media scientists have often discussed how much influence the media have on people's opinions in development. People tend to selectively read what they already agree with and to rationalize their preformed opinions in the face of contrary arguments. Experimental evidence seems to indicate that the mass media have little power to change people's opinions on issues for which they already have formed a strong opinion, but they have a profound influence when it comes to setting the agenda and priming people on new issues.
We live in the age where mass communication performs certain functions that are useful to us. It is through mass communication that millions of audience is exposed to a variety of messages each day. While many consumers of media are satisfied with any single channel of mass communication, there are others who seek exposure to more than one channel. There is increasing anxiety about the adverse effect of mass communication on society in general and individuals in particular.

In spite of limited reach, mass communication is so central to society that life seems inconceivable without mass media. They inform and shape our social life. Their influence is positive if they are able to fulfill the information and entertainment needs of the people in accordance with the existing norms, values and culture in society. Usually, the mass communication messages are positive like conveying messages for communal harmony, peace, anti-terrorism, anti-social evils, anti-drugs, etc.

The newspaper can influence the people to a large extent creating awareness and development. Broadcasting under government control can be use for the purpose of education, social change and development of the society. Films can bring forward unhealthy social issues of our society and promote peace and harmony within communities. Thus, these mass media can contribute immensely towards nation development and social awareness.

Media like television and cable television can sometimes have bad effect in our society. The audience of these media are watching everything being telecasted in hope of entertaining themselves, be it violence, vulgarity, etc. besides this, advertising also leaves images and impact on young minds. They give children a materialistic world, which desires unaffordable things. Also too much of television watching is creating health problems of obesity and diversion from studies, sleep and eating proper diet.
Mass communication does influence (and even reflect) social values and practices, but this influence is always in combination with a whole lot of other socio-cultural and economic and political factors. By themselves, the media have little power to influence, change and develop.

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