

Communication and Technology: A Tool For Better Living

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ABSTRACT:

The term third world is generally used to describe developing countries of Asia, Africa and Latin America. Most of the third world countries are underdeveloped. Underdeveloped countries have less industrial base and a low Human Development Index in comparison to developed countries.

Usually development is the embracing of new technologies, renovation from agriculture to industrial based economy, and improvement in standard of living. The role of communication in socio-economic and cultural development at national and international levels has been recognized over the past two decades. The key role of communication is to help people change their behaviour. With the help of technology media begins to identify and deal with development issues on a continued basis. Communication and technology can create public discussion and help governments and people to achieve pre-determined goals.

The objective of this study is to collect and present the historical evolution of communication and technology and its effect on development.

This study follows Qualitative survey as the method of research. Further different available literature

and books were referred for the analysis. Convenient random sampling technique is used for the selection of the literature, reviewed.

It is evident from the study that communication has a potential to confer status, to enforce social norms, to help fates and could affect attitudes.

Communication technology can help directly and indirectly to change attitudes and valued practices.

The study recommends that the institutional support like cooperatives, agricultural banks etc. at the village level are needed for rural development.

One of the major difficulty to improve the conditions of the poor farmers is the middleman, who exploit both producers and the consumers. A major policy to get rid of these middlemen has to be made so that producer will get better price and the consumers will get the finished products at lower rate.

INTRODUCTION:

One of the most important elements of development is communication. Development is the use of technical knowledge to get specific objectives. Economic development is the process by which a nation can improve the economic, political and social well-being of its people. Economic development provides high standard of life, lower rate of mortality, less illiteracy and increased productivity. The impact of media as means of communication is very immense in opinion moulding, propagandising and globalizing. Media can play a vital role in development communication aimed at the underdeveloped population which needs to participate in the overall development process that ensures its own uplift from conditions of degradation and poverty. Media has potential to provide freedom from poverty and illiteracy by providing freedom of speech, political participation and social cooperation.

This research article is based on Daniel Lerner's book *The Passing of Traditional Society: Modernizing the Middle East* published in 1958. Communication plays a key role in the promotion of development without which, we cannot bring change in society. Nowadays media plays a vital role in providing information to our society, especially electronic media which is a major source of providing instant information.

Development is a term and a process as well; to achieve certain objectives. It is mainly to attain self-reliance. Simply development is not only involved in the transfer of technology but also the communication of ideas, knowledge and skills to make the successful adoption of innovations possible. Having money is not development but efforts aiming to reach self-reliance are development. Although it is a fact that no society could claim of having complete self-reliance. Development is rather a synonym for planning and a force to endeavor industrialization.

Development is the act or instance of developing; the process of being developed, a state of growth or advancement; a full growth state; having a relatively high level of industrialization and standard of living in a society. (Webster dictionary)

“A widely participatory process of social change is society, intended to bring about both social and material advancement (including greater equality, freedom and other valued qualities) for majority of the people through gaining greater control over the environment”, Evert M. Rogers (Rogers,1975)

Development is a broad term that encompasses many meanings and connotations. It runs through all the activities of a government and its people. Many a times it proved as a test for the success and failure of a government. In the present geo economic scenario most of the world is considered as under-developed. A sizeable portion of the globe is developed or even less so highly developed. In this context some of the terms are used interchangeably, either consciously or unconsciously; change, growth, progress and

modernization. “A change refers to a state of movement in a given situation either of the time or at two or more different points in time” (Sinha,1998)

The concept of development has been shifting from economic emphasis towards being more humanitarian. Development is a change towards patterns of society that all better realization of human values that allow a society greater control over its environment and over its own political destiny, and that enables its individuals to gain increased control over them.

“Development ultimately is not a matter of technology or gross national product, but the attainment of new knowledge and skills, the growth of a new consciousness, the expansion of human mind, the uplifting of the human spirit, the infusion of human confidence”(Kleinjans,1975)

Another expert in the field Everett M. Rogers said, “Development is 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 through their gaining greater control over their environment”. (Rogers,1983)

Development is used as modernization, westernization and Europeanization in the developing countries, under the old development paradigm, development stresses economic growth through industrialization and urbanization. In the 1970s many scholars emphasized that the reconsideration of development goals and stressed on:

- Equality in distribution of economic benefits, information, resources, wealth etc.
- Self-reliance and independence in development with an emphasis upon the potential of local resources.

- Popular participation of the self-development planning and execution, usually accompanied by the decentralization of certain activities to village level.
- Integration of tradition with modern systems, so that modernization is a syncretisation of old and new ideas with the exact mixture somewhat different in each locale. (Rogers,1969)

The term change, growth, progress modernization and westernization are used interchangeably. Change might be positive or negative depending on the situation but there cannot be change without development. Development stands for all that is good, positive and favorable, it vouch safes for all pluses and no minus, although the same cannot be said for change. Another term that is used interchangeably with development is ‘‘growth’’. An interring example in this regard might be of a tree that grows in size but has not developed the capacity to bear fruits, can a growth in the size and physique of a man reflect his development of the qualities of head and heart? Can a growth in the structure of an organization indicate improvement in its efficiency and productivity? The obvious answer to all these questions would be ‘‘no’’. Nevertheless, if growth is through conscious and deliberate planning and executed efforts, it will assume the qualities of development.

Development is variably termed as an objective, a programmer, a movement and a process. In the light of careful consideration, development can be a combination of all of these or any one or two of these factors. Whatever may be the approach but a common sense would hold ‘development’ first as a goal and secondly as an objective to be accomplished. But a systematic and planned approach is needed to change this term development into a ‘process’. So as the development is a process, a movement, from state of dissatisfaction to a state of satisfaction, it is dynamic and not static.

Development is also increasingly used for ‘national development’, especially in the developing societies. The yardstick for this kind of development is based on individual perception for each country. Many scholars believe that ‘economic development’ accelerates the pace of development of a society. Development encompasses economic, social, cultural, educational and political aspect of a society. Douglas Daetz in his article titled “ Development planning: A Systems Approach” stressed that development goals arise from specific development issues, from what people judge to be unsatisfactory in their situation either in terms of the live ability of situation itself, without regard to comparison with the situation of other people, or in contrast with the people . The perception of a situation, the judgement of what is unsatisfactory, and the development goals that are established depend on the values and experience the perceiver bring to the situation. (Daetz, 1974)

W.W. Rostow in his classic work “The Sages of Economic Growth” described the following five stages in the process of evolution of modern societies:

- First stage is traditional society, an agricultural based economy which is characterized by limited productivity associated with a subsistence type of economic activity.
- Second stage is pre conditions to take off in which agriculture becomes more mechanized and more output is achieved which is traded. Savings and investment grow gradually.
- In the third stage, the process begins; the second and third stage emphasize an increase in agricultural productivity to support leading sectors such as transport and economy , and overcoming limited factors and resistance to steady growth.
- Fourth stage is the drive to maturity in which industry becomes more diversified. This is seen as possible only

when between 10 percent of national income is reinvested in a regular and steady way.

- The fifth stage is the age of high level mass consumption. At this stage, the stress is not on structural change but on the self-generating system of consumer goods and services. (Rostow, 1960)

The concept of development has become a paradigm, which is expected to have a long lasting influence. Rostow analyses the development of various countries within the stages of growth context. Let us examine briefly the historical evaluation of development.

The Industrial Revolution

The term industrial Revolution, like similar historical concepts, is more convenient because history requires division into periods for understanding and because there were sufficient innovations at the turn of 18th and 19th centuries to justify the choice of this as one of the periods. The term is vague, however, because the Industrial Revolution has no clearly defined beginning or end. Moreover, it is misleading if it carries the implication of a once for all change from a 'pre-industrial to a post-industrial' society. The Industrial Revolution had been well prepared in a rising speed of industrial, commercial, and technological activity from about AD 1000 and led into a continuing acceleration of the process of industrialization that is still proceeding in our time. The term industrial revolution must thus be employed with some care. It is used below to describe an extraordinary quickening in the rate of growth and change, and more particularly, to describe the first 150 years of this period of time, as it will be convenient to pursue the developments of the 20th century separately. (Daetz, 1974)

The industrial revolution in this sense, has been a worldwide phenomenon, at least so far it has occurred in all parts of the world, of which there are few exceptions. Beyond any doubt it accrued first in Britain, and its effects spread only gradually to continental

Europe and North America. Britain by the early 18th century came to possess the combination of social needs and social resources that provided the necessary conditions of commercially successful innovation and a social system capable of sustaining and institutionalizing the process of rapid technological change once they had started. The industrial revolution, in modern history, is the process of change from agricultural handicraft economy to one dominated by industry and machine manufacture. This process began in England in the 18th century and from there spread to other parts of the world. Although used earlier by Fresnel Writers, the term industrial revolution was first popularized by the English economic historian Arnold Toynbee (1852-83) to describe England's economic development from 1760 to 1840. Since then the term has been more broadly applied.

The main features involved in the Industrial Revolution were technological, socio-economic and cultural. The technological changes included:

- 1) The use of new basic material iron and steel;
- 2) The use of new energy resources, including fuels and motive power such as coal, the steam engine, electricity, petroleum and the internal combustion engine
- 3) The invention of new machines such as the Spinning Jenny and the Power Loom that permitted increased productive with a smaller expenditure of human energy ;
- 4) A new organization of work known as factory system, which entailed increased division of labor and specialization of function;
- 5) Important developments in transportation and communication, including the steam locomotive, steamship, automobile, airplane, telegraph, and radio; and
- 6) The increased application of science to industry. (Ibid)

These technological changes made possible a tremendously increased use of natural resources and the mass production of manufactured goods. There were also many new developments in non-industrial spheres including:

1. Agricultural improvements that made the provision of food for a larger non-agricultural population possible.
2. Economic changes that resulted in wider distribution of wealth, the decline of land as a source of wealth in the face of rising industrial production, and increased international trade.
3. Political changes reflecting the shift in economic power, as well as new state policies corresponding to the needs of an industrialized society.
4. Sweeping social changes, including the growth of cities, the development of working class movements, and the emergence of new patterns of authority.
5. Cultural transformations of a broad order.

In the period 1760 to 1830 the industrial revolution was largely confined to Britain. The British had trained labors and better manufacturing techniques. This monopoly could not last forever, especially due to the fact that some British realized profitable industrial opportunities abroad, while continental European industrialists sought to procure British know how to their countries. Two Englishmen William and John Cockerill brought the industrial revolution to Belgium by developing machine shops at Liege, and Belgium became the first country in continental Europe to be transformed economically. Like its English ancestor, the Belgium industrial revolution, that was centered on iron, coal and textiles. France was more slowly and less thoroughly industrialized than either Britain or Belgium. While Britain was establishing its industrial leadership, France was immersed in its revolution, and the immersion in political situation discouraged

large investment in industrial power, but despite great growth under the second empire, it remained behind Britain.

Other European countries lagged far behind their bourgeoisie, lacked the wealth, power, and opportunities of their British, French and Belgian counterparts. Political conditions of the other nations also hindered industrial expansion. Germany, for instance, despite vast resources of coal and iron, did not begin its industrial expansion until national unity was achieved in 1870. Once begun, Germany's industrial production grew so rapidly that by the turn of the century that nation was out producing Britain in steel and had become the world leader in the chemical industries. The rise of US industrial power in the 19th and 20th centuries also far outstripped European efforts. Japan also joined the industrial revolution with striking success. The mid-20th century witnessed the spread of the industrial revolution to non-industrialized areas such as China and India.

An outstanding feature of the industrial revolution has been the advancement in power technology. Communications were equally transformed in the 19th century. The steam engine helped to mechanize and thus to speed the processes of papermaking and printing. In the latter case the acceleration was achieved by the introduction of high speed rotary press and the Linotype machine for casting type and setting it in justified lines that is with even right hand margins. Printing indeed had to undergo a technological revolution comparable to the 15th century invention of moveable type to be able to supply the greatly increasing market for the printed world. (Wimmer & Dominick , n.d.) Another important process that was to make a vital contribution to modern printing was discovered and developed in the 19th century: photography. The first photograph was taken in 1826 by the French physicist J.N.Niepce, using a powder plate coated with a form of bitumen that hardened on exposure. His partner L.J. M. Daguerre and the Englishman W.H. Fox Talbot adopted silver compounds to give light sensitivity and the technique developed rapidly in the middle decades of the century. (Media Asia, 1997) By the 1890s George

Eastman in the United States was manufacturing cameras and celluloid photographic film for a popular market, and the first experiments with the cinema were beginning to attract attention. (Ibid)

Telegraph and telephones were the great inventions in the history of communication technology and both run from electricity. The electric telegraph was invented by the British inventors, William Cooke and Sir Charles Wheatstone. Almost simultaneously, the American inventor Samuel F.B Morse devised the signaling code, named after his name Morse code which was subsequently adopted all over the world. Into the next quarter of the century all the continents of the world were linked telegraphically by transoceanic cables, and the main political and commercial centers were brought into instantaneous communication. The telegraph system also played an important part in the opening up of the American west by providing rapid aid in maintenance of law and order. The telegraph was followed by the telephone, invented by Alexander Graham Bell in 1876. Telephone was adopted quickly for short range verbal communication in the cities of America and at a somewhat more leisurely pace in those of Europe. About the same time, theoretical work on the electromagnetic properties of light and other radiation was beginning to produce astonishing experimental results, and the possibilities of wireless telegraphy began to be explored. By the end of the century, Guglielmo Marconi had transmitted messages over many miles in Britain and was preparing the apparatus with which he made the first transatlantic radio communication on December 12, 1901. The world was being drawn inexorably into a closer community by the spread of instantaneous communication. (Defleur & Rokech, 1988)

In communications, the dominant lines of development continue to be those that were established before or during world-war II. In particular, the rapid growth of television sources with their immense influence as media of mass communication has been built on foundations laid in 1920s

and 1930s, while the universal adoption of radar on ships and airplanes has followed the invention of a device to give early warning of aerial attack. But in certain features the development of communication in the space age has produced important innovations. First, the transistor, so significant for computers and control engineering, has also made a large contribution to communication technology. Second, the establishment of space satellites, considered being a remote theoretical possibility in 1940s, and they have played a dramatic part in telephone and television communication as well as in relaying metrological pictures and data. Third, the development of magnetic tape as means of recording sound and more recently, vision has provided a highly flexible and useful mode of communication. Fourth, new printing techniques have developed. In phototypesetting a photographic image is substituted for the conventional metal type. In xerography, a dry copying process, an ink powder is attracted to the image to be copied by static electricity and then fused by heating. Fifth, new optical devices such as zoom lenses have increased the power of cameras and promoted corresponding improvements in the quality of film available to the cinema and television. Sixth, new physical techniques such as those that produced the lesser (light amplification by stimulated emission of radiation) are making available an immensely powerful means of communication over long distances, although these are still in their experimental stages. The laser also acquired significance as an important addition to surgical techniques and as an instrument of space weaponry. The seventh and final communication innovation is the use of electromagnetic waves other than light to explore the structure of the universe the means of radio telescope and its derivative the x-ray telescope. This technique was pioneered after World War II and has since become a vital instrument of satellite control and space research. Radio telescopes have also been directed towards the Sun's closest neighbours in

space with a hope to get information about any other intelligent species if present in the universe. (Ibid)

IMPACT ON DEVELOPMENT:

The concept of rural development is related to agricultural development and integrated rural development. Agricultural development represents the technocratic output and productivity. Whoever has the capital and access to inputs is in a position to increase output. Agricultural development is essentially an activity which is concerned with occurrences in the agricultural sector. Village improvement programs concentrates on the infrastructural improvement such as better village roads, schools, health, electricity, drainage, drinking water etc. In other words for rural development social overheads are prominent. The rural development, covering village improvement is conceived of a multi sectorial activity which includes, beside village development agricultural development, rural industry establishment and improvement of social overhead facilities or infrastructure like roads, welfare services, improvement of nutrition, adult literacy, family planning etc.

Here the concentration is not economic progress but social progress of the poor masses in rural areas, whereas the primary objective of rural development is the enrichment of the material and social welfare of rural masses. The concept of ‘integrated rural development highlights the linkage among the multi sectorial activities that raise the incomes and employment of rural population. It reflects a unified approach which aims at integrating rural masses into economic, social political and cultural life of the society. (Lerner, 1976) Thus, ‘rural development’ and ‘integrated rural development’ are specifically concerned with raising the level of entire economic exchange of social life of the rural masses although the concept of ‘integrated rural development’ tries to suggest that in the absence of unification of various sectorial activities, the process of development may not become self-sustaining.

Rural Development is the improvement of the living standards of the people of low income population residing in rural areas and making the process of development self-sustaining. We should concentrate on planning and on improving larger proportions of subsistence population and this needs mobilization and allocation of resources in such a way as to achieve a desirable balance over time between the welfare and productive services available to the subsistence population. In mass participation, the resources shall be allocated to low income regions and classes and so that the productive and social services are actually able to reach the low income subsistence population. The process of imparting self-sustain requires the developing of appropriate motivations, skills and capabilities. There may be institutions at the local, regional and national level to ensure the effective use of existing resources for reaching targets groups and increasing the mobilization of additional financial resources. There shall be complete harmonization of rural relations between the landed gentry and landless agricultural laborers, between upper and lower class, between the rural educated and the rural illiterate between the landlord employer and the labors.

The change requires consideration of unit of planning and the choice of strategy, centralization versus decentralization in planning and administrative systems and national policies covering land tenure, marketing wages, commodity pricing, and farm and non-farm relations. (Bhatia, 1976)

The unit of planning and choice of strategy have different angles. Some say that a region with homogenous characteristics should be taken up as a unit of planning. Invariably one finds that ideal planning regions do not coincide with the present administrative demarcation in most of the status. Alternatively, a district recognized as unit of administration is suggested as a unit of planning by way of a simple solution. We must concentrate about a question that what has been the total impact of plan programs and special programs in a given area? As a strategy of planning, area planning with the focus on district planning could no doubt be

made to stay in any area of state. The family oriented approach has been preferred in implementation. After selection of a unit, development profile for a number of villages should be preferred mentioning what are all the infrastructural programs which are to be implemented. (Ibid) This kind of approach can be a guiding factor for making investment decisions for catering to the varying needs of forms and social services.

If the area planning is achieved, there should be demarcation of areas for purpose of planning at different levels. The corresponding resources and implementing mechanisms should also be provided to people. The state schemes can cover generation and distribution of power, needed medium irrigation projects, corporate bodies for investment, technical and professional education and research and training. The unit sector scheme include agricultural production, so its conservation, forest, fisheries, marketing, animal husbandry, roads, irrigation development and education. One of the pre requisites of unit planning is the allocation of more resources to low income regions and the poorer sections of the population. This needs the developing of a criterion for the separate allocation of the plan among the various units.

There are several policies which can increase rural development, of these include land tenancy system, prices of agricultural commodities, wages, marketing, rate of interest and structure for providing support from institutions. Equity in ownership of income arising capital assets is one of the important ingredients of the national policy for rural development. The destruction of land is a major hindrance to rural development. The rural masses have been reduced to the condition of poverty despite their hard labor because they have no income earning assets of their own because the assets, on which they have been working for years, belong to others. The exploitation perpetrated by the system is open. The concentration of economic power is in the hands of the landed class and possesses a serious threat to speedy development of rural areas. In the abolition of tenancy and giving of ownership rights on the

tillers of the soil in mattering of enforcing a ceiling on land holdings, the traditional approach of depending on the established legal procedures does not offer the required support to the poor in land reform. Rural exploitation is continuing which needs an innovation in the socioeconomic objectives of development process. (Childers, 1976)

Rural development is not a matter of mere outlays of agriculture activities. More funds are needed for irrigation, for crop husbandry or other allied activities and a positive attitude of landlords. Higher income for producer in rural areas is possible with increased production and only higher wages can increase higher income. By providing the required technology, credits and other input, productivity on the farms can rise.

Suggestions & Recommendations

- The prices offered for the products grown by the subsistence farmer are very low. Small farmers and agricultural laborers depend for the food grains on the market. Therefore only the rich farmers get benefit from the high farm prices. It is needed that small farmers and landless laborers should be independent of the level of food grains prices. It is only when the income fall short of the rise in prices, it would act against the interest of landless labors and small farmers.
- The class conflict is reflected in the role of the middleman who exploits both the purchasers and consumers. For example the cotton price given to the producer of the cotton and price given by the factories which purchase cotton for manufacturing textile products differ enormously. Prices should be fixed accordingly.
- While fixing the minimum prices, the variation in the cost of production from one region to another region differ from the Kharif to Rabi session. The averaging is supposed to take care of such activities. A radical change of policy is

needed for giving a price for the agricultural product which covers the cost of production under reasonable profit on the same lines as that of industry.

- There are nearly 70% agricultural laborers in Pakistan, most of who are landless and they entirely depend upon wage employment. The minimum wage is very low, although wage is fixed by the government, but in the absence of strict enforcement, which curtails the consumption of the poor. Until such time that enough purchasing power is put into the hands of rural poor, one cannot expect the revival of the rural economy based on the demand that would arise from the increased consumption of the rural poor. It is therefore needed that minimum wages with proper legislation be implemented.
- The institutional support like cooperatives, agricultural banks etc. at the village level are needed for rural development. The rural power structure is such as to deny the benefits of these funds providing institutions to rural poor. This structure has to be broken for ensuring equity as well as for enabling poor to get the ability for development. In this context radical reforms are needed in the composition of these institutions.
- One of the major difficulties to improve the conditions of the poor farmers in the middleman, who exploit both producers and the consumers. No clear cut policy is available so far in this regard, for example in case of cotton, the price given to the producers of cotton and prices given by factories which purchase cotton for manufacturing textile products differ enormously. The margin of difference is all pocketed by the middlemen. A major policy to get rid of these middlemen has to be made so that producer will get better price and the consumers will get the finished products at lower rate.

- The conflicts between urban and rural demands and between farm and non-farm relations are the major problem. For this reason the faster rate of development cannot be achieved which is causing various kinds of political tensions. Rural development cannot be made effectively if it is designed and administered by those who have no clear understanding of the problems and operated by those who have no interest in the future of villages and the rural poor. Both money and skill shall be allowed to small groups without political pressure. Those groups who have a living connection with land and landless people and have an emotional involvement in the betterment of rural masses can bring a change.

CONCLUSIONS:

Change occurs with the help of communication. Communication is a basic tool which can bring a change in attitude. Communication maintains and animates life. It is the vehicle of social activity and lends people from instinct to inspiration. Development process can be achieved through words, by creating target messages. As Suld and Tyson (1938) has given an interesting comment on development as a process.

“Development is an historical process through which human being choose and create their future within the context of their environment to achieve a humanist and creative society. It is concerned with the dignity of individual, a secure self-esteem and the establishment of institutions appropriate for the ends”. (Suld and Tyson, 1978)

Development is a multi-dimensional process in which the non-economic dimensions are at least as important as the economic dimensions. It entails the simultaneous achievement of a number of objectives, such as growth and equity. Social groups that are previously passive now insist a participating activity in the development process, and share equitably in the fruits of productivity.

“Development is a process whose goals are to realize the human potential for total societies and for the total human beings and whose success hinges up the satisfaction of those goals”. (Ibid)

Ismail Sabri, Director General, Institute of national Planning described development planning in these words: “Development planning is the scientific discipline that studies the mechanisms of mobilization and reallocation of resources in a developing country with a view of optimal attainment and pursuance of a global process of change tending to self-reliant, self-centered, basic need oriented and sustained development”. (Ibid)

Development emphasized economic growth through industrialization. Developing countries, like us, were advised by development planners to industrialize. To build infrastructures like; road, railways, power plants, ports, educational institutions, housing, steel mills, manufacturing industries etc., all of which require large capital and imported technologies.

The concept of ‘development’ has evolved since World War II into a dynamic one, for its basic meaning all development is human development, the focus of development is the human being and the quality of their life. Development is a whole and an integral value loaded, cultural process; it takes in the natural environment, social relations, production, consumption, welfare and education. The approach to development depends upon the local, cultural or natural situations, not on any outside model. In other words development springs from the heart of each society relying on its own strength and resources as far as possible.

Development Communication emerged as a field of mass communication studies during the post-world war II years when the countries of Asia, Africa, Latin America, were asserting their right to independence, self-reliance and non-alignment. At the same time, these countries were in hurry to find solutions to the most urgent needs of their masses, eradication of poverty, illiteracy and unemployment. Colonial rule had established massive

bureaucracies, skeleton communication, transport and communication, infrastructure through the help of means of communication.

The most influential work in the growth of development communication (through communication tools) as a field in its own right was; Lerner's *The Passing of Traditional Society*, subtitled "Modernizing the Middle East" (Lerner, 1958). This study was not the work of an individual but rather a part of a large project of the Bureau of Applied Social Research formally the office of Radio research at the Columbia University in New York City. The project was funded by the Voice of America.

Unlike Daniel Lerner, an ex-intelligence officer of the United States army during the World War II, Everett Rogers was an Iowa farm boy trained in the modern agriculture. He found his home community less than impressed with his stock of innovations in agriculture; outside his country he had marked influence in the field of agriculture extension through his text book on "Diffusion of Innovations". Rogers developed his concepts and theory of the diffusion of innovations from synthesis of diffusion research studies in developing countries as well. Rogers described an innovation as "an idea perceived as new by individuals". It really matters little as far as human behaviour is concerned, he added, whether or not an idea is 'objectively' new as measured by the amount of time elapsed since the first use or discovery. It is the newness of the idea to the individual that determines his reaction to it. An innovation is no more just an idea but also a practice for object perceived as new by individuals. Rogers used 'technology' as a synonym for 'innovation' and to urge the adaption of a 'convergence' model that stresses the intricacy of inter personal communication networks that are in operation during the process of diffusion. (Rogers, 1962) Thus with communication messages help to a change and social mind motivates to the change of culture, attitudes and ideas. Means of communication increase the rate of urbanization, literacy, economic and political participation. Means of communication have the potential to widen horizon, to

focus attention, to raise aspiration and to create a climate for development. Communication has a potential to confer status, to enforce social norms, to help fates and could affect attitudes. Communication technology can help directly and indirectly to change attitudes and valued practices. The developing societies use informal materials for technical development in communication.

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