

Role of Information Communication Technology (ICT) in Rural Development

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Abstract

There are several facets to the way people groups are identified: Linguistic, cultural, social, economic, geographic, religious, and political factors can each be part of what gives formation to the peoples of the earth. From the viewpoint of evangelism, a "people group" is the largest possible group within which the gospel can spread as a discipline or church planting movement without encountering barriers of understanding or acceptance.

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1. Introduction

The spread of education and general awareness on one hand and the revolutionary changes in communication and information Technologies on the other have made media the most potent means of mass education and mass mobilization in our time. Media is now being increasingly viewed as the most effective and sought after means of communication. In fact media now influences all works of our life personal, social and professional.

Rural Development is the need of the hour for a country like India, which is on the threshold of being a big world power with the capacity to influencing the course of events on our planet. However, this is a dream which we can realize only when we are a country with no internal dissensions and strife, a country with a fair economic system and a cohesive social order. In fact the essence of development lies not in a regimented system where none dares to disagree but in an all-inclusive dispensation in which everyone plays an equal role. The quest for rural development must lead us in the direction of empowering those sections of society who are in the need of being empowered. This is the real meaning of democracy and this is the area in which media can and media must play an important role.

To understand what role media can play in rural development we have to understand media scenario in all its dimensions, we have to understand scope, reach and impact of media on society as well as the functions it is supposed to perform. We also have to understand how media influences social change in a developing society. But before this, it will be worth to see how information technology has changed the face of media as well as the society which media caters to.

The speed of technological developments in the fields of communication has no doubt changed the face of media and society in the past two to three decades. These developments are so fast that the social scientists and researchers are finding it difficult to assess, assimilate, understand and interpret their impact on different communities and social groups. The diffusion of new information technologies are making such inroads into the Indian society that their multiple applications are giving birth to more and more cynicism. Media is a helpless victim of this phenomenon.

After the conversion of the whole world into a global village the new information technologies which have brought the video, the sound, the graphics and the text together at a great speed and skill, are basically aiming at creating an information society which, in the very near future, will widen the gap between the information rich and the information poor countries. "The unequal pace of technological development between the urban and rural areas, where the urban areas are both the producers and beneficiaries of technology, has increased inequalities between urban centres and rural periphery. Today's technology is itself class oriented, tending to increase divisions between social groups. The gap between the information-rich and information-poor has widened. The Indian media is therefore, living in a situation where it does not know where to go. To survive it has to follow the lead being given by the IT revolution. To live up to its tradition it has to show commitment for those sections of society who are now becoming information starved.

For centuries our society has been depending upon the traditional means of communication, interpersonal communication processes and word of mouth. Human relationships in closed Indian society used to develop in a natural, healthy and productive social environment. But in the early nineties the satellite and cable TVs have created a new type of society (so far, mainly in the urban areas) by bombarding our households with alien messages.

The new information technology is creating a pseudo-environment, in which the users tend to believe that by acquiring it, they have acquired everything, including wisdom, thought and logic. Most of the receivers fail to understand that what they do get are information packages, consciously or unconsciously designed for creating an atmosphere of artificial intelligence. The receivers also develop a tendency to absorb the information, which is easy to understand. In a way the television is taking conversation out of the family, the computers are responsible for taking human relationships away from the society. A society which has been bound together by inter-personal and group communication is sure to feel uncomfortable with the new information culture. However, very few are able to view this as a problem in the process of our development.

As we know our media is now entirely information technology driven. As we can see information technology has a very dynamic relationship with society and culture,. We see the scenario for media in the world dominated by the influence of information technology. No doubt this technology brings a revolution in the modes of communication by making it more diverse, intra and interactive and mentally provocative. But the fear is that diversity will lead to regimentation and segmentation, which may further lead to stagnation, loneliness, disintegration, insecurity and isolation. All these are major psychological issues in relation to development. That is why it can pose a threat to the individual and group identities and local cultures in case of a plural society like ours.

Yet despite all the changes brought about by information technology on the social scene as well as in media remains a dominant factor with its capacity to appeal to the minds of people. Yet we often witness a tendency to take a very narrow view of media and limit our vision by our media use and our media habits. The whole range, scope and use of media has to be appreciated if its application in solving the problems our society faces from time to time. The whole range and dimension of media has to be understood if we want to know how media can play a role in promoting the culture of development.

In the wake of increasing commercialization, media's role in expressing public thoughts is shrinking and more constraints and barriers are developing in the way of free and fair interaction between the media and the public. Media and information systems in the developing countries are being governed by dominant concepts of the West. The developing countries can meet the challenge only through developing alternative concepts of media programming, which have roots in their own social and cultural settings. This demands a great amount of will to experiment on the part of the entire gamut of media industry.

Media Scenario

Media Scenario basically comprises T.V. reach, Radio reach, Newspapers, advertising and other print media forms attempts at social marketing and Net newspapers or cyber journalism. Various forms of traditional media which are integrated into one social system. These forms are not merely entertainment based. They are essential means of education on various aspects of life. They also form part of larger media scenario. Yet independent news media—print, electronic or even cyber remains the most important media for its capacity to scrutinize public affairs without fear or favor and hold us accountable to our jobs and responsibilities. Its good health and right attitude is therefore, very important to all of us in the all-important task of national integration the importance of independent news media cannot be over-emphasized.

We can understand the media reach in Indian scenario by having an idea of the total number of newspapers, journals and periodicals as well as the number of radio stations, TV channels, satellite links and media-related websites. In the recent years there has been a steady trend towards what we can describe as micro media – the media of small newspapers, limited circulation journals and community radio.

Basic formulations

- It is difficult to delineate the total range and impact of this vast organized and at times unorganized media scenario.
- No section of India population is in fact totally media starved.
- Going by the modern idiom of information haves and information have-nots, the only thing you can perhaps question is the type and quality of information the vast sections of India's population get.
- Indian press, which was in the forefront of Indian's struggle for freedom from the British and has evolved with the evolution of Indian consciousness and entry of India in the modern world, therefore, still cares more for tradition, historicity and content.

India's national radio network All India Radio has 100 regional stations. There are over 200 local broadcasting radio stations, all governments owned (AIR), throughout India. Though a lot many private channels have come in the field of TV the national network Doordarshan is still the biggest telecaster with its three regular channels with terrestrial rights

Let us try to see what sort of a media community all these media forms create in our country

- India has 70 million homes with TV, of which 25 million homes have cable & satellite penetration.
- The installed base of PCs in Indian home however around 3-4 million.
- Cable TV subscribers - 30.08 million in 2000 increased by about 79% to 53.88 million by 2005 according to a study.
- According to an Indian readership survey, the press reaches about 33% of India's population, while TV reaches 47%.
- India had 5.5 million internet users at 2010 beginning.

According to RNI- (Press highlights)

- The largest number of periodicals & newspapers---are brought out in Hindi (39,685) followed by English (34,175).
- The total number of registered newspapers has risen from 49,145 as on Dec 31, 2000 to 73,860 as on December 31, 2010.

But to know how best media can help promote the climate of development, especially in rural areas we must know how our changing society is influenced by media.

As we know the change is brought about more through a process of internalization of certain ideas than by any modification in the external environment. In simple words, one's idea perceived and corrected by learning through interaction or any other process are more responsible for change in individual and group behavior than concrete structures that may be built around an individual or group. The media seeks to consolidate the process of internalization.

Since media has the power to expose an individual or group of individuals to new ideas, its potential as a change agent is perhaps the strongest. Since mass media has overwhelming reach, its potential as a change agent is perceived to have a multiple effect.

Social change is a by-product of man's efforts to control his external environment. In modifying his environment man sets up a double process of social change.

There is an intimate connection between our behalf and our institutions, our valuations and our social relationships. Certainly all-cultural change involves social change because the two are closely interwoven. Most of the Developing countries are emerging from colonial background. The old socio-economic structures are giving way to new ones. The media, which is the mirror of society, has to relate itself to these changes. The media has to guide the course of action in the developing societies, apply correctives where needed and also mould itself to the changing realities of the time.

A media person is a historian in a hurry, but even in his hurry he should not, if he is true to his profession, give up the historical sense, forget the historical perspective. He has to combine many disciplines and in recording and interpreting what is happening to the society around him, he has to be a sociologist also.

Media can perform various functions in promoting consciousness for development and reaching the unreached. Broadly Media can help contribute in three spheres which will in turns make our society cohesive and better organized.

The three areas are

- (a) Economic (b) Social (c) Political

We are one of the few countries in the developing world where right to information has been granted to people. Media has been in the forefront of the campaign for the right to information. The right to information gives a real teeth to democracy which will provide a sense of security and power to the beleaguered sections of society and give them confidence in the system.

ICT can become the voice of the voiceless and in reaching the unreached in number of ways-

- Communication Technologies for mass development like E-Sewa (which is already being implemented in few states for a common man to get medical certificates, Government authentication from district authorities, filing of FIRs through SMS and E-mails.
- All the Thanas and Village Pradhans can be connected so that the voice of the poor can reach the top authorities,
- MEDIA can monitor the use and also the misuse of such ICT facilities
- Krashak E-Clinics and HELPLINE have already been started by ICAR and is being spread to cover the pan India for all their agri-queries.
- Digital Kiosks at Bank's ATM and Post Offices where it can be useful for better spread and reach can be of practical ways of reaching the unreached.
- Most of the times, poor and unreached societies are not aware about the government help programs and policies, hence ICT can develop the interesting programs using their traditional methods of entertainment of folk dances, nautanki, street plays, puppetry shows etc. - in some of the states already such society awareness programs are in practice.

ICT is the name given to innovations in the means of communication by which a message or information can be monitored at a much faster pace over a wider area in much greater detail. The current scenario of ICT is built around –

- Computers
- Satellite Communication
- Optic Fibers

IT communication or transmission is one hundred percent received in the same format at the other end when it is pure digital that means there is no loss in color, quality of picture, sound or video files in transmission and this is termed as without any transmission losses.

The emergence of IT has made significant impact on the following sectors –

Education

- **Online education** – Many universities and educational institutions all over the globe now offer their courses online and even without going actually over to that place, one can get the world class education at his or her comfort and convenience at home itself.
- **Virtual Classrooms** – Eminent academicians and professionals are available online and run virtual classrooms at specific time and anyone can logon at these virtual classrooms from their computers from all corners of the world.
- Interactive multimedia based educational CDs have been developed using the latest digitization techniques and gadgets are available in the market.
- Books, magazines, journals are available online.
- Online tutorials are available on almost all the subjects.

E-Commerce

- **Internet Banking** – This has revolutionized the business and the concept of fast money transfer has really generated huge volumes of business
- **Online shopping** – One can buy books, magazines (www.amazon.com), music albums, CDs, paintings, furniture, household items, automobiles etc. and practically everything under the sun through internet without going out of room just a click away through computers.
- B2B i.e. Business to Business and B2C i.e. Business to Customer transaction is direct, easy and saves a lot of time thus generates greater volumes of business across the continents.

Communication

- Communication across the globe is faster, cheap and easier.
- Internet telephony has revolutionized the communication process.
- Video conferencing, web based chatting, transfer of information is fast, direct and easy.
- Reporting from outdoors has been fast and instant from journalistic point of view.
- Lot of shows, event, sports and even war reporting is transmitted directly and live.
- Mobile phones are the latest application of all modes of communication, direct marketing, internet, tracking etc.

Satellite Photography

- Aviation people with the help of satellite photography now can study weather reports and the correct weather prediction is possible.
- Aerial survey is easy with the help of satellite monitoring for GIS applications and mapping for surveying projects.
- Recently launched satellite by India is being used for rural development, river linking projects.
- Now-a-days, satellites are also being used for gathering information about enemy deployment, its location and movement of heavy armaments etc.

Satellite Transmission

- Satellite transmission is used for education in a big way – EDUSAT – launched by IGNOU.
- PSLV-C7 (Polar Satellite Launch Vehicle) launched on 10th Jan 2007 is carrying four satellites – Indian Remote Sensing Satellite CARTOSAT-2, Space Recovery Equipment (SRE-1), Indonesia's LAPAN-TUBSAT and Argentina's nanosatellite PEHUENSAT-1.
- CARTOSAT-2 is carrying a state-of-the-art panchromatic camera, data from it will find application in urban planning, village and road development, and river linking project.
- The images and data beamed by satellite has large international market – approx. between \$300-\$500 million.

Technologies of the future

- Cyber Forensic
- Bio-informatics
- Genetic Engineering
- Bio-Technology
- Nano Technology
- Krillion Photography
- Digital Image Analysis (Satellite Photography)

Medical Science

- Online medical advice and consultancy services are available from top medical experts of the world to every corner.
- Even surgical operations are being performed with the help of latest IT applications and medical computer controlled machines.
- Robotized clinics & artificial intelligence based medical equipments and hi-tech gadgets are the emergence of latest in the IT.

Infotainment

- Online music / CDs / movies are available.
- Live chat with celebrities.
- Live shows and interviews etc. can be participated & viewed.

Agriculture

- Forecast of weather reports / seasons / rainfall has benefited agricultural scientists and farmers
- Technical information about various fertilizers, pesticides, agricultural processes, and related machineries is easily available on Internet
- Digital 3D animation & modeling of DNA structure of products helps to generate hybrids
- Helps farmers to select low time and high yield products

Advertising & Publishing

- Computer based digital offset machine has made the printing and publishing much faster, of unmatched quality and computer based graphics software has given the advertising business a boom with very rapid growth rate all over the world.
- Printing has been developed into a hi-tech computer controlled process with large volume of outputs in very short time with the elimination of some of the intermediate steps.
- Web publishing has become a trend for all the important global newspapers and news channels are also having their website with instant up-to-date information.

Media info dissemination

- As media has become technology blended, so the use of IT based gadgets are improving the faster dissemination of news and information in print, electronic or cyber media.
- Live shows and events can be transmitted instantly all over the globe.

Media can play a bigger role by:

- more and more rural reporting
- becoming the Voice of the Voiceless
- more coverage of rural development
- Thro' ICT, we can reach and educate everyone even living in the remotest corner with a positive attitude and will to reach the unreached.

Govt. can support the regional and small newspapers which are the more powerful means and tools of reaching the unreached society of the country in terms of advertisements and financial assistance so that media would like to cover more rural and interior areas.

Culture, Media and Rural Development

We can develop when there is unity in diversity in our society, there are a lot many diverse cultural streams. However, all of them have to be treated with care and respect. However, the biggest impediment in showing respect to diverse cultural streams is our largely misunderstood stress on mainstream. Mainstream has become a mind-set for most of mediapersons because subconsciously the media shares the misplaced apprehensions of the Establishment that diversity is a danger to the security of the country while the truth is on the other side.

In the past few years there has been a lot of discussion on culture as an integrating force. The discussion has left a lot of people confused. Media too has failed to grasp the essence of Indian cultural diversity with the result that at many times media reporting to cause differences and promote disharmony in society. It is therefore, necessary that before determining the role of media in national integration we should clearly spell out for media what we as a society understand by Indian culture. In this regard the following questions need to be answered:

- What is the real face of Indian culture in its totality? How to blend the old and new in our living culture so that we neither become orthodox while talking about our past values or become rootless while chasing the mirage of modernism.

- What is the relationship between mass communication and Indian culture and civilization? What was the form of mass communication in pre-industrial world? How was it directed and what was its value System?
- What is the role and responsibility of means of mass communication like newspapers T.V., radios and advertising in Today India? Is media discharging the responsibility as it should
- Society and media has a symbiotic relationship. Both are repentant on each other Soviet,
- Influences media as much as media as much as media influences society. What is the real and active forever of this relationship?
- What relationship you have with means of mass communication. Is it a one sided relationship in which you are a mere recipient? If not then what should you do to make it a two-way relationship, and how?

With technology increasingly defining our lives and with mobility of people, goods and services becoming easier, traditional cultures find themselves in a situation, where their environment is eroded and their relevance questioned. This environment naturally breeds a sense of insecurity and alienation. The important question is how can media contribute to preserving these cultures for the sake of promoting development by functioning in this environment.

To capture and express this diversity of our cultural heritage we need a much bigger media base than what we have at present. This will be possible not by the efforts of big media houses owning chain newspapers and venturing into small towns. It can be possible by taking mass media to masses and involving members of these cultural groups in media production. A lot many such efforts are under way either by individual initiative or by the initiative of genuine NGO workers. However, there is need to promote these efforts and for this we may need a re-look at our media policy. There is also a need to revise the government advertising policy to support these small initiatives. More over, there is need to organize workshops and training programmes to improve the skills of those who are producing small newspapers. But more than any policy initiative that we take it is necessary that we have a mindset that considers that small is beautiful. For national harmony and national integration small is not only beautiful, it is essential. It is necessary that our obsession with big and few must go.

From a P R executive to a bureaucrat to a political leader ask anyone about the press and only three-four big names come up. Media graduates prefer to hang around big metropolitan dailies rather than accept jobs in medium and small papers, where they can get better status and greater work opportunities. While talented journalists rot and frustrate without work in big dailies the middle and small newspapers are manned by pseudo professionals and non-professionals. Respective wage boards have institutionalised this anomaly. For those who think that major English dailies are all about our print media it should be rewarding to know that only four English dailies -The Times of India, The Hindustan Times, Indian Express and the Hindu-figure in the list of 20 top dailies of the country. Moreover, the big newspapers in English, Hindi and a few in regional languages comprise only 32.7% of the total circulation of all dailies.

The resources- starved small press comprises 33% of total circulation of all dailies. The small dailies no doubt have their problems at times they do not adhere to the high norms of professionalism- yet none can deny that collectively they are far more representative of our plural ethos than the big guns of metropolitan cities.

The range of small papers is really wide. How many of us know that we have newspapers in 77 folk languages and dialects, in this country besides 19 principal languages. We have newspapers. not only in Kashmiri, Konkani, Manipuri, Nepali, Sindhi and Sanskrit but also in Arabic, Chinese, French, Italian and Burmese. Then how many of us have heard of such Indian languages as Angika, Gangte, Kabur and Haruti. Little doubt through the small press we can discover our own country. But we tend to ignore it.

The government has taken a good initiative in the form of community radio. People have got a platform through which they can address issues like health, education, and public facilities pertaining to their area. The local people or the community can get attention of the regional, the national media through this platform. The government is giving funds and grants to help the cause.

It is time we should do something to sustain and nurture our diversity through the pluralism of press in the process of change. So ICT is very cost effective and best visual communication mode of all types of projects for the development of rural India.