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PROSPECTS OF SCIENCE COMMUNICATION IN INDIA- A COMMENTARY

Shaswati Das
M. Phil Student in Women Studies
Rabindra Bharati University, West Bengal, India
Email: *mailme.shaswatidas@gmail.com*

Abstract

The proponents of dominant paradigm wanted to promote social change in the Third World by promulgating the adoption of inventions of the West in technologically less advanced countries with the mass media working as a means to 'diffuse' modern scientific ways of knowing. Accordingly the centralized mass media systems in Africa and South Asia were organized to send developmental messages from supposedly know-it-all developmental experts in capital cities to supposedly ignorant peasants and slum dwellers who were perceived to need development. The source of development initiatives was at the top and the receivers waited at the bottom quietly, atomized and bewildered making 'a spiral of silence'. The communicator must consider the receiver's field of experience, need and must deliver the messages in the codes familiar to the receiver. This paper tries to look at the reasons and probable solutions behind not-so-encouraging condition of science communication in India.

***Key Words**: Communication, Signifier, Signified, Signs, Symbols, folk media, information-society.*

Communication in the common parlance is an exchange of facts, ideas, opinions, or emotions by two or more persons using verbal or non-verbal medium. It is the responsibility of the sender to select, encode and send the messages in such a way that will help generating feedback from the receivers. The message text contains signs and symbols. For Saussure, signs are made up of sounds and images, what he called signifiers, and the concepts these sounds and images convey

to mind, is called signified. The relation between signifier and signified is arbitrary, it is based on knowledge, historical experiences. Symbols are not completely arbitrary and they gather enough conventional space.

Scientific innovations are the engines of development and the communication of scientific facts to the People is of utmost importance to motivate and develop them. But people are generally apathetic to the trends and innovation in the fields of science and technology. They find it uninteresting as most of the information on Science & Technology is not made available in a user-friendly manner or format. The receiver cannot follow the communicator as familiar signs and symbols are not used. The popularity of science channels such as “Discovery” or “National Geographic Channel” proves that if stories on science and technology are packaged and presented intelligently and skillfully they can grab the attention of the common man. Now-a-days their programmes are even dubbed in few regional dialects to cater to the wider range of people.

Science communication can be an effective tool for promoting development communication in a developing country like India.All India Radio took some initiatives in this direction. AIR launched Intensive Agricultural District Programme (IADP), which aimed at providing a package of scientifically evolved and proven agricultural practices to farmers in selected districts of the country. AIR has played a significant part in bringing new technology in agriculture to the door steps of farmers by providing desirable support to various training and functional literacy programmes of the Ministry of Agriculture & Education. A novel experiment called “Radio Rural Forum” was jointly sponsored by the Ministry of Information and Broadcasting and UNESCO. All India Radio, Pune organized some listener groups comprising 15-20 people each in 150 villages of 5 districts of Maharashtra, viz. Nashik, Ahmednagar, Pune, North Satara and Kolhapur. The scheme was hailed as a tremendous success and gradually extended to the whole country. Further, another experiment called the “Charcha Mandal” for training the farmers was initiated and organized by the Ministry of Agriculture and it was also found to be a wonderful success as more than nineteen thousand Mandals were organized in quick time and qualitative interactions were enlisted. Farm School of AIR was one of the most innovative devices based on intensive training modules on specific agricultural and allied subjects. The listeners were registered for each of the specialized courses. After undergoing the listening, the participating farmers were made to sit through an examination to ensure the extent of knowledge transfer. The successful trainees were rewarded with suitable prize. Similarly, in other parts of the country,

development support communication was devised and conducted through the portrayal of situations in consonance with social realities. The dynamics of change in a society so captured for information dissemination led to the making of such programmes as 'Loha Singh' of All India Radio, Patna, among various others by different stations in the country, that passed into history as legends. It embarked on the new initiative to turn the hardcore agriculture programme into the **voice of farmers** i.e. 'Kisanvani' from 15th February, 2004.It is different from the conventional Farm and Home Programme of AIR in its approach and focus; the approach being narrowcasting and need-based, covering the specific agro-climatic zone and focussed on field-based activities. About 90% of the programmes are recorded in the field itself instead of the farmers and experts being invited to the studios. Kisanvani Programmes are being broadcast in all the major languages and dialects spoken in the coverage area of AIR.

The experience of All India Radio shows that the diffusion of knowledge, skills and innovations among the target beneficiaries may not be effective unless the programmes are produced according to the needs and expectations of them and are presented in their familiar way. From the very beginning Doordarshan also has allotted a lot of its time for telecasting various programmes to provide media support to socio-economic development activities of the country. Agriculture programme, programmes for rural development, women, children, family welfare, adult education, youth, civic sense and public awareness, science & technology, special programmes during natural calamities like flood, earth quake, epidemics etc. are some of important programmes for socio-economic development of the country. DD News channel provides news and current affairs programmes on the development taking place in different parts of the country and in various fields. In order to manage these development programmes more efficiently Doordarshan has created two separate wings namely Development Communication Division, and Narrowcasting. Development Communication Division concentrates on health and sanitation and other development issues; while Narrowcasting deals with agriculture and allied subjects. The programmes are formulated by the experts of Agriculture, Horticulture, Veterinary Sciences, Fisheries etc. and all aspects of Agriculture, Horticulture, Veterinary Science, Fisheries etc are covered on day-to-day basis, highlighting the different technology of each crop, various schemes, success stories of farmers, weather, market prices etc. Evaluative/impact study on these development programmes especially on the programmes of DCD and Narrowcasting is

conducted on regular basis to ascertain the programme impact and make it more effective and useful. In short, Doordarshan allots a sizable chunk of its telecast time for development programmes and makes all efforts to make the programme need based, effective and useful for the audience.

Though the governmental organizations like National Council for Science & Technology Communication (NCSTC) under the Ministry of Science and Technology and non-governmental organizations like INDIAN SCIENCE COMMUNICATION SOCIETY are working to popularize science among the people and there are several science publications, television and radio programmes, science conferences, seminars, exhibitions etc. but people's participation and awareness is not very encouraging.National Council of *Science* Museums (the apex body of science museums/centres in India) has established the Science City, the largest science centre in the sub-continent in Kolkata to promote and enhance public understanding of the culture of science and technology and it organizes exhibitions, seminars, popular lectures, science camps and various other programmes to popularize science and technology in cities, urban and rural areas for the benefit of students and for the people at large. People must be encouraged in every possible manner to attend these programs.

As Indian society functions to a large extent in the traditional mode where its GDP is mainly decided by agricultural production and the level of mass education is relatively low and the reach of the mass media is limited. In this scenario traditional media can be more effective to foster scientific temperament among the masses, especially in rural areas than modern mass media Local fares, puppet shows, street theatre, folk songs and ballads can be used to support science communication. Almost every village has its relevant music, dance or theatre and as the matters are presented in familiar format and colloquial dialects, they have a personal appeal and are beneficial for persuasive communication. One important observation of International commission for the study of communication problems, also popularly known Mac bride Commission, was: Even when modern media have penetrated isolated areas, the older forms maintain their validity, particularly when used to influence attitudes, instigate action and promote change. Extensive experience shown that traditional forms of communication can be effective in dispelling the superstitions, archaic perceptions and unscientific beliefs that people have inherited as part of traditions and which are difficult to modify. Practitioners of the traditional

media use a subtle form of persuasion by presenting the required message in locally popular artistic forms. This cannot be rivalled by any other means of communication.

Various governmental and non-governmental organizations can tap these traditional media for communication and mass media should also come forward as its primary responsibility is to educate and inform the people. Public understanding of science and technology is a major element in promoting national prosperity, raising quality of public and private decision making and in enriching the life of an individual. With science and technology having become an inseparable part of our daily life, the creation of scientific awareness among the masses has become all the more important now than ever before. Presentation of science and technology in the mass media be it broadcast or print media, is not sufficient in this “information age”. India is trying to emerge as an ‘information society’ with its increasing telecommunication-density and its success as a global provider of software and IT-enabled service along with the government’s initiatives to use ICT in all spheres of life. Information society involves creating, processing, distributing and consuming of information as a prime means of livelihood and the social order using the same mass production process here for information as it was earlier associated with common economic production. Communication of scientific ideas and spreading awareness is crucial in the transition of Indian society into an information-conscious society. Science communication alike any other communication can be successful if the communicator uses popular signs and symbols and the receiver can identify him/her with the diffused knowledge and can act/react accordingly.

References:

1. COMMUNICATION THEORIES AND MODELS- Dr. Andal N.
2. DESINGING MESSAGES FOR DEVELOPMENT COMMUNICATION- Bella modi
3. ***allindiaradio****.gov.in/NR/rdonlyres/...EB8B.../Kisinvani_Books.pdf*
4. *pib.nic.in/release/release.asp?relid=29917*
5. www.ddindia.gov.in/About+DD/Some+New+Initiative
6. www.iscos.org/ijsc/Vol1-No1/rp2.htm
7. *www.satishserial.com/issn0972-9348/finaljournal09.pdf*
8. www.satishserial.com/issn0972-9348/finaljournal05.pdf