

POVERTY ALLEVIATION, FOOD SECURITY AND ENVIRONMENTAL SUSTAINABILITY: THE CONTRIBUTION OF PARTICIPATORY DEVELOPMENT COMMUNICATION

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The concept of sustainable development has occupied a central place in every aspect of human life today. It is a multidimensional and multidisciplinary concept covering almost all spheres of human activity. Sustainable development has become the concern of economists, ecologists, administrators, lawyers, communication experts, environmentalists, human right activists, feminists, scientists and NGOs. In other words, it has become everybody's cup of tea. Since the present study aims at studying the role of communication in sustainable development without identifying the various implications of the concept, therefore, an attempt has been made in this research paper to discuss the various implications of sustainable development.

'While planning for communication strategy for social sustainable development, we need to take into consideration the aspects of diversity. Multimedia approach to communication is the suitable answer. Different forms of media such as traditional media, internet, group communication channels, educational institutions, literature etc. have to be used systematically to disseminate information and to conscientise people on specific aspects of biodiversity and for maintaining sustainable development.'

The world commission on environment and Development (WCED, 1987) defined sustainable development as the 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'

It is observed that sustainable development is a coin which consists of two obligations on its two sides. One side is the alleviation of poverty and

the other, the protection of environment. Sustainable development is very much linked with the involvement and active participation of people. It is a holistic concept that can be on the global, national, local and individual scales. Communication is an intervening variable without which the materialisation of different goals of sustainable development is not possible. Therefore, communication has the key role in facilitating the participation of people relating to sustainable development.

Conceptual Framework

There are a myriad of theories and models of communication, but there are only a few theories and models that deal with the questions of development. Therefore, it is useful to discuss the relevant models and theories in the context of the present study as follows. Development media theory deals with the task of media in developing countries. It emphasises positive uses of the media in national development and for the autonomy and society. To a certain extent, elements of this theory favour democratic and grassroots involvements, thus promoting participative communication models (Mcquail, 1987). One aspect of the media is the acceptance of economic development by itself and often the correlated nation building as an overriding objective. To this end, certain freedoms of the media and of journalists are subordinated to their responsibility of helping in this purpose. Collective ends rather than individual freedoms are emphasised. With the failure of the dominant paradigm of development, and its communication approach in bringing about the expected change, there took place thinking about an alternative paradigm of development, which led to the emergence of the concept of another development and subsequently a more specific one, sustainable development. With regard to communication also, a major shift has taken place from top-down authoritative model of communication to a two way horizontal and participatory model of communication.

Significance of This Study

There have been many studies carried out on development and communication, media and development, environment and media, environment and communication and communication, rural development and communication media, traditional folk media and development

and participatory development communication. Though sustainable development is the latest and present trend of development, so far however, proper attention has not been paid to this area from communication point of view. Therefore, it is felt worthwhile to study the role of communication for sustainable rural development.

Research Questions

Keeping in mind the broad objectives of the study, the following research questions are formulated.

- a. What are the implications of sustainable development?
- b. What is the role and importance of participatory development communication in protecting biodiversity in general and poverty alleviation in particular?
- c. How far participatory development communication is successful in creating awareness relating to biodiversity protection, food security and poverty alleviation programmes initiated by the government?
- d. What are the sources of information to people, and their media habits?

Objectives of This Study

Sustainable development being the latest and the present trend of development, the broad aim of the study is to analyse the role of participatory development communication for sustainable development and to recommend a suitable communication strategy for sustainable development. Below are some of the important objectives earmarked for this study.

- a. To identify the implications of sustainable development.
- b. To know policies and programmes by Indian government towards conserving biodiversity for development sustainability.
- c. To study and analyse the role of participatory development communication for the protection of biodiversity in Koraput district of Odisha.

Methodology

This study is based on both primary and secondary data. **The secondary data** was collected from books, reports, journals, magazines, newspapers, government records and seminar papers. **The primary data** was collected

on two broad areas through administering a well-structured interview schedule.

- a. Participatory development communication and poverty alleviation programmes.
- b. Environmental awareness and media habits among the people of Nandpur and Pottangi.

For the study of the role of environmental communication to see the success or failure of the poverty alleviation programmes, two rural, tribal and environmentally affected villages named Nandpur and Pottangi are selected for this study. In these villages, information was collected from target beneficiaries of different developmental schemes initiated by the Indian government. The respondents were both beneficiaries and non-beneficiaries of these schemes and data was collected via an interview schedule. Separate schedules were used to cover different subjects such as MNERGA, IRDP, TRYSEM, DWCRA, as well as a subject related to environmental awareness. For target beneficiaries of such programmes, questions were asked in the local languages. With regard to environmental awareness, questions were asked in odia and the local language for the convenience of the respondents.

The Variables Studied were in Terms of

- i. Participatory development communication and poverty alleviation programmes,
- ii. The awareness about the scheme,
- iii. Sources of information about the schemes,
- iv. Sources of motivation to avail the scheme,
- v. Improvement in the financial condition after availing the schemes,
- vi. Reasons for not availing the schemes in case of non-beneficiaries and the general impression of the respondents about the schemes.

Participatory Communication Strategy for Development Sustainability

Participatory communication is a basic instinct of man. It is the fact of life of not only human beings, but also of animals, birds and other living beings. Communication maintains and animates life. It is also the

expression of social activity and civilisation. It leads people from instincts to inspiration through various processes and systems of enquiry, command and control. Environmental communication integrates knowledge, organisations and power, and runs a thread linking the earliest memory of man to his noblest aspiration through constant thriving for a better life. As the world has advanced, the task of communication has become ever more complex and subtle to liberate mankind from want, oppression and fear, and to write it in community and communion, solidarity and understanding. Mass communication comprise the institutions and technology by which specialised groups employ technological devices (press, radio, films, etc.) to disseminate symbolic content to large, heterogeneous and widely dispersed audiences.

Various important objectives of sustainable development; eradicating poverty; protecting the environment; reducing the consumption of non-renewable resources and increasing the use of renewable resources; conserving biological diversity; controlling various types of pollution; land degradation and deforestation; waste management using appropriate technologies land reforms; population control and stabilisation; upholding basic human rights; social welfare and woman's uplift; promoting intra-generational and intergenerational equity; and participation of people from individual, local levels to global level, offer different communication channels an important role to play in protecting biodiversity. However, communication alone is not sufficient to meet these objectives, it is a crucial element in facilitating the fulfilment of these objectives.

Participatory Development Communication Strategy for Biodiversity Preservation and Sustainable Development

Strategies that include communication for sustainable rural development as a significant aspect of agricultural and rural development are sorely needed. Efforts in this direction are being made, but governments have yet to recognise the full potential of this factor in promoting public awareness and information on agricultural innovations, as well as on the planning and development of small business, employment opportunities and basic news about health, education and other factors of concern to rural populations, particularly those seeking to improve their livelihoods and thereby enhance the quality of lives. Rural development is often discussed together with agricultural development and agricultural extension. In fact "agricultural

extension" is often termed "rural extension" in the literature. In contrast, rural development includes but nonetheless expands beyond the confines of agriculture, and furthermore requires and also involves developments other than agriculture. Accordingly, government should consider the establishment of a communication policy that while supporting agricultural extension for rural development, also assumes the role of a "rural extension" service aimed as well as diffusing non-agricultural information and advice to people in rural areas.

A communication policy would aim to systematically promote rural communication activities, especially interactive radio, but also other successful media such as tape recorder and video instructional programmes. Computers and the internet may not yet be accessible to rural communities but they serve the communication intermediaries and agricultural extension agents who provide information to rural populations. Other devices such as cell phones hold considerable promise for the transfer and exchange of practical information.

For reaching the final agricultural and basic needs of information users in rural areas today, radio is the most powerful and cost-effective medium.

However, other traditional and modern communication methods are equally valuable, depending on the situation and availability such as face-to-face exchanges (via demonstrations and village meetings); one-way print media (such as newspapers, newsletters, magazines, journals, posters); one-way telecommunication media (including non-interactive radio, television, satellite, computer, cassette, video and loud-speakers mounted on cars); and two-way media: (telephone, including teleconferencing, and interactive (internet) computer).

Information and communication technologies (ICTs) have proved to be important for internet users and for the intermediate users who work with the poor. Pilot experiences show that various media are valuable for assisting agricultural producers with information and advice as to agricultural innovations, market prices, pest infestations and weather alerts.

ICTs also serve non-farming rural people with information and advice regarding business opportunities relating to food processing, wholesale outlets and other income-generating opportunities. In the case of non-agricultural rural development interests, a communication for rural development policy would aim to promote diffusion of information about non-agricultural micro-enterprise development, small business planning,

nutrition, health and generally serve to provide useful, other than agriculture information.

By its very nature as mass media, communication for rural development can provide useful information to all segments of rural populations. However, it would serve as a first effort towards advancement of "rural extension" services and activities aimed at rural development concerns beyond those of agriculture. Thus, extension and communication activities would be expected to work in tandem, allied in the common cause of supporting income-generating activities, both agricultural and non-agricultural.

Biodiversity Conservation and Sustainable Development in Koraput District

The researcher has selected Koraput district as his case study, keeping in mind the two important aspects of sustainable development. Being a tribal-dominated district, Koraput is facing two fundamental problems, biodiversity depletion and poverty. Conservation of biodiversity is an indispensable component of sustainable development. The human survival and well-being depends upon the entire life-sustaining system. The biosphere constitutes a vital life support system for man. Its existence in a healthy and functional state is essential for the existence of human race. It is the complex collection of innumerable organisms (including seas, forests and sky birds) and it is the biodiversity that makes our lives both pleasant and possible. Scientists believe that the total number of species on earth is between 10 million and 80 million. We have been able to enlist only 1.4 million species so far. Nature has taken more than 600 million years to develop this exceedingly complex spectrum of life on this planet. The existence of human race depends on the health and well-being of other life forms in the biosphere. We are losing these accumulated heritages of millions of years at a very fast rate. An estimated 7.5 million hectares of tropical forests are cut down each year in developing countries and this pace is increasing. Humans are causing the extinction of perhaps one species an hour.

The erosion of biodiversity has serious repercussions on the health of the eco-systems on which we all depend, causing wide spread impoverishment as rural populations lose their sources of livelihood, food and medicines since three fourths of the worlds populations still uses plants and animals for medicinal purposes, and eroding the genetic base of agriculture. Preservation of biodiversity is essential for a successful food security and breeding

programme. If we ignore plant genetic erosion, it may lead to losing sources of resistance to pests, diseases and climatic stress, leading eventually to crop failure and famine. In fact, human survival itself is in danger due to biodiversity loss. Recognising the need of conserving biodiversity, the Convention of Biological Diversity was signed at the Earth Summit in June 1992. By 2015, the CBD has been ratified by over 160 countries. The Biological Diversity Convention is fundamentally based on promoting the sustainable use of the components of biological diversity at a rate that does not lead to the long-term decline of biological diversity, thereby meeting its potential to meet the needs of present and future generations. Thus, the conservation of biological diversity is an important implication of sustainable development for communication. Various communication media have a potential role to play in conserving biological diversity. The conservation of biological diversity is not possible unless the people are aware of the importance of conserving biological diversity. Therefore, in creating awareness about sustainable development, various channels of communication are of crucial importance.

Biodiversity & Sustainable Development: The Need for an Equilibrium Lifestyle through Participatory Development Communication

The environmental movements emerged as one of the most important social movements of the 21st century. Such movements are not only confined to the western rich nations but also developing and underdeveloped nations. Individual and family lifestyles have changed including behaviours such as recycling aluminium cans, increasing visits to national parks and purchasing environmental-friendly products. Producers of different brands products have responded positively by featuring green slogans in their advertising campaigns. More bio-degradable, compostable and recyclable materials are incorporated in packaging to meet consumer demand. Every individual influence is influenced by the environment. An individual can contribute to the degradation or up-gradation of the environment depending upon how one moulds one's lifestyle. For instance, by throwing garbage in streets, cutting trees, over-consuming or wasting water and fuel, one can contribute towards environmental degradation. On the other hand, by keeping surroundings neat and clean by planting trees and consciously using and minimising the use of resources, one can contribute to the up-gradation of environment. Thus,

individuals and their lifestyles have a responsible role to play in making sustainable development a reality.

Effective Strategy for Conservation of Biodiversity in Koraput District

Awareness Campaign

Awareness among the people of Koraput in particular and Odisha in general is one of the primary requirements for the success of any programme relating to sustainable development, whether it is a poverty alleviation programme, family planning programme or afforestation programme. People should be aware of it, its importance and its utility. Communication has a great role in creating awareness pertaining to various aspects of sustainable development.

Environmental Training and Education

For an effective penetration, environmental education has to be location specific. At the first level, special attention should be paid to school children and women. Formal and non-formal educational institutions, mass media, governmental and non-governmental organisations have a significant role as channels of communication in educating people about the dreadful consequences of environmental depletions.

Disseminating Technical Knowledge into Local Languages

For creating awareness among people and for their effective participation in various programmes aiming at sustainable development, technical knowledge and different aspects of international conventions have to be translated into local languages.

Conscientisation

For attaining the objectives of sustainable development, active involvement and commitment of every individual in relation to their decisions and acts is inevitable. To achieve this, people have to be actively

conscious. Conscientising people about their problems and also about environmental problems at national and global levels, their involvement and responsibilities, have crucial role for sustainable development.

Striving Attention of the National Government

Communication media, especially mass media have a constructive role to play by focusing government's attention on various problems by offering constructive suggestions and criticising the government whenever it seeks to push through unproductive decisions and harmful environmental projects.

Development Support Systems

Government has been initiating various programmes and projects aiming at poverty alleviation, employment generation, and conserving and protecting environment. For the effective implementation and good results of such programmes, target groups and beneficiaries have to be well-informed and thorough awareness has to be created about the programmes meant for them. Communication has a gap reducing role between benefit agents and beneficiaries.

Table 1: Media Habits (Newspaper Reading Habits Among the Respondents)

Nature of Population	Men	Women	Total
Rural	46	24	70
Urban	280	150	430
Total	326	174	500

Table 2: Radio Listening

Nature of Population	Rural	Urban	Total
Men	150(150)	97(150)	247(300)
Women	38(100)	59(100)	97(200)

Table 3: Film Viewing Habits of the Respondents

Nature of Population	Urban	Rural	Total
Men	149(150)	107(150)	256(300)
Women	98(100)	67(100)	165(200)
Total	237(250)	174(250)	421(500)

Table 4: Mode and Frequency of Viewing Films

Mode of Seeing	Daily	Weekly Twice	Weekly	Forth Nightly	Monthly	Quarterly or Yearly	Total
In Cinema Hall	0	50	252	69	52	20	423
On TV	50	67	140	180	36	24	497
Cassettes/CDs	46	78	120	174	32	20	470

Table 5: Magazine Reading Habits

Nature of Population	Urban	Rural	Total
Men	121(150)	24(150)	145(300)
Women	78(100)	23(100)	101(200)

Table 6: Awareness About Environmental Issues

Issues	Urban		Rural		Total
	Male(150)	Female(100)	Male(150)	Female(100)	
Deforestation	143	97	80	35	355
Soil degradation	138	89	56	21	304
Air pollution	148	95	78	34	355
Water pollution	149	98	98	45	390
Renewable Energy	121	79	28	11	239
Biodiversity depletion	136	87	26	9	258
Vulnerable species	98	84	23	9	214

Table 7: Participation of People in Clean and Biodiversity Protection Programmes

Age	Urban		Rural		Total
	Male(150)	Female(100)	Male(150)	Female(100)	
Below 20	60	45	69	39	213
20-40 years	57	30	40	34	161
40-60	21	15	22	9	67
Above 60 years	8	2	6	4	20

The discussion mentioned above shows that though there are many definitions and multiple dimensions to sustainable development, these definitions and dimensions do not contradict but corroborate each other. Broadly, sustainable development can be described as poverty alleviation i.e. to enable present generation to meet their needs and environmental

protection and to also enable the future generations to meet their needs. In relation to environmental communication, it implies that communication has a vital role to play in creating awareness about the various poverty alleviation programmes initiated by the government, and thus, bridging the gap between the planner and the beneficiary. Environmental protection, and promotion and population control being the other broad dimensions of sustainable development, various communication channels have a responsible role to play in informing, educating and conscientising the people about various environmental issues and promotional programme, and sustainable use of natural resources, using renewable sources of energy, conservation of biological diversity, waste management, prevention and control of pollution, family planning, etc. Communication in general and various media of communication in particular have a responsible role to play in eradicating poverty. Sustainable development calls for a change in the quality of growth.

Biodiversity protection is another important area where participatory communication has a pivotal role to play. Population control and stabilisation is another important concern of sustainable development. While planning for communication strategy for social sustainable development, we need to take into consideration the aspects of diversity. Multimedia approach to communication is the suitable answer. Different forms of media such as traditional media, internet, group communication channels, educational institutions, literature etc. have to be used systematically to disseminate information and to conscientise people on specific aspects of biodiversity and for maintaining sustainable development.

Illustrative Suggestions

For Print and Electronic Media

- i. Environmental education through communication should be an integral part of our national education system.
- ii. Film being an important and influential medium is used effectively to disseminate educational information among the people for conserving biodiversity.
- iii. Social advertisements containing literature related to biodiversity and other developmental issues should be given priority.
- iv. Media has to be strong in its science and facts and is in need of an interpreter who could convert technical jargon into simple language

interestingly.

- v. Good practices by the tribal populations in particular, and public in general, should be documented more often by the print media.
- vi. Focus on environmental journalism has shifted from the larger role that it can play in the development of the society to just selling.
- vii. Internet reaches policy makers worldwide. Hence, it can be instrumental in bringing about a change.

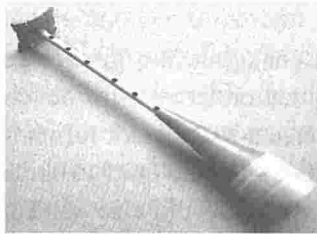
For Audiovisual and Broadcast Media

- i. Video programmes need to be short and to the point, so that unit can hold the viewers attention.
- ii. Audio-visual medium is only one of the tools and we should look for synergy with several other media and initiatives to achieve sustainable development.
- iii. Broadcast scenario is changing to a greater extent. Local and regional channels should be given preference for development programmes and these channels must have a special slot for its transmission.
- iv. Development film makers should start to think beyond recognition for their films and see how they could also contribute to make a difference to the communities they portray in their films.
- v. Video programmes produced from different development quarters need to have accountability, affordability and accessibility.
- vi. Outreach activities with videos such as film festivals would be successful if it provides information on the issue in discussion, inspires similar action from the audience, and integrates diverse information into one forum.
- vii. Most people in developing countries depend on western news channels for information. However, the western channels seem biased in their coverage of stories from developing nations. This needs to check on urgent and priority basis.

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