

CHPATER- I

FRAMEWORK OF THE STUDY

Mankind across the globe are experiencing erratic climatic conditions and declining environmental quality. Our planet earth is made of three basic physical constituents, namely- water, air and soil. All these constituents come under stress by various socio-economic activities of mankind in the name of development. It is true that mankind have moved forward due to these socio-economic activities. But, all these human activities left behind an irreparable ravaged ecosystem. Different factors are attributed to the degraded environmental condition of the earth. Among the different factors, the twin factors of soaring human population and their increasing demand over the natural resources is largely responsible for the deteriorating environmental condition. People are experiencing the dire consequences of environmental degradation like ozone depletion, climate change, depletion of natural resources, loss of biodiversity, rapid extinction of wild flora and fauna, depletion of vegetal coverage. The existence of living beings become threaten.

Human being has been gifted with intelligence by Almighty. But, greediness of mankind becomes a curse. This greediness blinded human being with accumulating wealth and fails to think about the terrible consequences. Mostly, people ignore and fail to recognise the holistic way of development in harmony with environment. Whatever industrial development pursuit, trails of degraded environmental conditions are left behind? Truly, the successfulness of an industry is closely associated with the declining environmental conditions. The

most unfortunate thing is the ignorance on the part of the developers or planners about the dire consequences of environmental degradation.

Realising this fact, efforts are on across the globe for the protection of our planet earth. Our India does not lag behind the rest of the world, concerning environmental protection. As early as 1894, India has its own forest policy with subsequent revisions in 1952 and 1988. The environmental concern of India got a boost with the speech of Smt. Indira Gandhi at the Stockholm, Human Environment conference of the United Nations in 1972. Later on, Rajiv Gandhi during his tenure as prime minister of India made a proposal for Planet Protection Fund.

Our country shows concern for the environment with the creation of Department of Environment, forest, Wildlife in 1985 under the Ministry of Environment. The department took the pivotal role in planning, promotion and co-ordination of the environmental activities. Some of the environmental activities taken up by the department are protection of coastal water, mangroves, coral reefs and wetlands environment, environmental approval of development projects, eco-regeneration and development, assessment survey and development, assessment survey and conservation of biotic and a-biotic resources; environmental research, education, awareness and information; pollution control and monitoring, checking of destruction of forests, restricting diversion of forest lands to non-forestry uses, developing a national forest policy, developing social farm forestry schemes and protecting & preserving wild life.

However, Ministry of Environment and Forest serve as the nodal agency for the implementation of India's policies and programmes

concerning environmental activities. The Ministry is mainly guided by the principle of Sustainable Development. Besides, Natural Conservation Strategy and Policy Statement on Environment and Development (1992), Policy Statement on Abatement of Pollution(1992), National Forest Policy(1988) and National Environment Policy(2006) are the supplementary guiding principles for the Ministry. The Ministry mainly focussed on the objectives: conservation and survey of flora , fauna, forests and wildlife, prevention and abatement of pollution, afforestation, regeneration of barren lands, environmental protection and looking after the welfare of animals. Various acts, rules and regulations are enforced for the effective implementation of the policies and programmes. Our country has made multi-lateral cooperation with other countries through the United Nations Environment Programmes(UNEP), South Asia Co-operative Environment Programme(SACEP), International Centre for Integrated Mountain Development (ICIMOD) and United Nations Conference on Environment and Development (UNCED), South Asian Association for Regional Co-operation (SAARC), Economic and Social Council for Asia and Pacific (ESCAP), Global Environment Facility (GEF) and Commission on Sustainable Development (CSD) for environmental protection activities.

The need for the implementation of informational and educational programmes for the protection of environment has been emphasized through a policy Statement of the government of India (1992). Sharing of environmental information through a decentralised network system is being continued since 1982. The Ministry made

periodical publications for Environ-news (monthly newsletter) and Paryavaran Abstract(trimonthly magazine).

Internationally, UNO is the leading global body working for environmental concerns. Programmes of UNO namely United Nations environmental programme (UNEP) and United Nations congress for environment & development (UNCED) coordination through nations are carried out concerning planning, promotion , conservation and protection of environment. The United Nations Conference on Sustainable Development(Rio+20 summit) was held on June 21,2012 at Rio de Janeiro. Then, Prime Minister, Manmohan Singh emphasized the urgent need for a global action to address the issue of depleting biodiversity across the globe. Besides, he asserted the need of an ecological and economic space for sustainable growth for all.

The international communities are well aware and are seized of the global environmental and ecological problems and various efforts have been initiated to control global warming and halt probable climatic change. There are several organization, government agencies, intergovernmental agencies, non-government organization (NGO) that have undertaken various action plans and projects to study the relationships between man and environment, interactions between man and nature, the environmental problems resulting there from and remedial measures therefore.

It is heartening to note that none international co-operations are forthcoming for the amelioration of the environmental and ecological problems. Efforts are being made to control Ozone depletion and

greenhouse effects at global level. The simulation of Montreal protocol in sept., 1987 under the leadership of UNO's UNEP, the international conference on 'depletion of Ozone layer, in London, held from march 5 to 7, 1989, wherein government officials, scientists and industrialists of 180 countries participated, earth summits in Rio De Janeiro (June 3 to 14, 1992) and New York (June 23 to 27, 1997) are a few examples of international community's efforts to protect environment, but, unfortunately all exercises have gone without remarkable impact in term of satisfactory up gradation of the environmental conditions.

Therefore, we can mention that there has lot of effort to be made at international and national level. Normally media always pay attention and support these kinds of cause and concerns. Indian media also support policies, programmes, approaches adopted by government to improve the quality of environment. Medha Pateker, Sundar Lal Bahuguna, Rajendra Singh, Vandana Shiva, F.C. Mehta, Sunita Rao, R.K. Pachaur and other individuals, NGO's, trying for environmental protection have supported by the media. Media provide sufficient coverage to environmental news i.e. World Environment Day (June, 5) programmes, plantation, awareness programmes, etc.

Newspapers, Magazines and other print media provide regular materials on the issue and give proper coverage. Many articles, news, features, comments etc. can be identified in these publications. Radio is also pay a great attention to the issue. A number of Radio programmes i.e. features, weekly diary, play, discussions, speeches etc. regularly broadcast into air. Environment received a regular space on T.V. screen also. Infotainment channels and news channels also focusing on these

issues. Many of our folk dancers, singers, and musicians and other folk performers (artists) accepted it as a major social problem and create scripts, programmes, songs, slogans on environmental issues.

As we know that awareness is deeply influenced by the mass media, but, the level of perception varies into different social and living conditions i.e. age, sex, location of habitat (Rural or Urban), Economic status etc. Education, Sanitation and health facilities deeply affect the way of thinking and movement/action of people.

Besides, being use of other modern mass media, there is enough scope to use traditional media as an effective mass medium. Acquaintance, personal contact, common language, Intelligibility, credibility and Acceptance are some of the attributes of traditional media in people; 'flexibility repeatability, reach' are other important factors of its effectiveness.

Media is a powerful agent of social change. It has a great impact on human behaviour and their way of thinking. Information is now flowing fast to the people through various media. 'The media are known to be playing an effective role not only in informing the people but also in influencing their thinking and shaping their attitudes. In India as part of sovereign national system, the media are used to serve the people and the nation according to new visions and rational goals, policies and targets by the architects of the nation, the media managers and experts. Since independence, Indian media reflects their responsibility to the national issues i.e. health, education, population control, secularism, national security, terrorism and environmental protection etc.

1.2 The Environment

The term environment has been defined by many scholars in their way—

According to C.C. Park—“Environment refers to the sum total of conditions which surround man at a given point in space and time which is the sum of all social, economical, biological, physical or chemical factors which constitutes the surrounding of man , who is both creator and moulder of his environment.”

According to Harishchandra Sharma—“Natural environment include water air and land and the inter-relationship that exists, among and between water, air and land, human beings, other living creatures, plant, micro-organisms, and property.

According to Goudie-“Environment is the representative of physical components of the earth where in man is the important factor influencing his environment.

In the words of German scientist Fittings—“The totality of milieu factors of an organism is environment.”

According to A.G. Tansley—“All the effective conditions in which organism lives are called as Environment.”

According to Tripathi and Virle—“Environment is that set of surroundings which surround man from all sides and influence over the life and activities. This surrounding includes all the external facts, objects, situations.”

Types of environment

As we know, the environment is both physical and biological concept; therefore, it encompasses both the non-living (abiotic) and living (biotic) components of our planet earth. Thus, 'Based on basic structure, the environment may be divided into two basic types—(I) physical or abiotic environment and biotic environment.

Based on physical characteristics and state, abiotic or physical environment is sub-divided into three broad categories viz., (I) Solid, (ii) Liquid and (iii) Gas, which represent the lithosphere (solid earth,) the hydrosphere (water component) and the atmosphere respectively.

On the basis of these, we can divide physical environment into three sub-divisions—

(i)Lithospheric environment.

(ii)Atmospheric environment.

(iii)Hydrospheric environment.

On different spatial scales we can divide these into smaller categories e.g. mountain or hilly environment, plateau environment, plain environment, lake environment, river environment, maritime environment, glacier environment, desert environment, coastal environment etc.

The biotic component of the environment consists of plants and animals; plants have also called as 'flora' and animals as 'Fauna'. Man has included into fauna as an important factor. Therefore, we can divide the biotic environment into—floral environment and faunal

environment. All the organisms work to derive matter from the physical environment for their sustenance and development.

It may be pointed out that out of all these organisms, man is the most skilled and civilized; therefore, his social organization is systematic and able to survive. As an organism of environment, man has three aspects—Physical, social and economic. These aspects have their own characteristics and functions in biotic environment. Physical man is the part of the biological community or organisms and consumes basic elements of the physical environment viz. habitat, air, water as food and releases wastes into ecosystem. Social man is a primary agent of transforming natural or biotic environment. He establishes social institutions, develops social organizations, formulates rules and regulations; develop principles, policies and system to safeguard his existence, interests and social welfare. Man as 'economic man' derives and utilizes resources from the physical and biotic environment with his skills and technologies. We can term these categories as physical, social and economic functions of the man.

The physical environment may also be viewed in terms of climatic conditions providing certain suites of habitat for the biological communities' viz. tropical environment, temperate environment, polar environment etc. These may further divided into smaller but specific divisions. Physical/biotic and biotic environments fused together from 'biome environment' like tundra, temperate and tropical biome that is further subdivided into second and third order biomes.

Man and Environment

Economic function of the man have influenced natural or physical environment. The economic function of man becomes more significant than his other functions as it is more concerned with the functioning of ecosystem. Thus, the interaction of man through his economic function and hence as an environmental process, with natural environment and resultant human response to the environment is the fundamental concern of environmental studies, environmental thinking and environmental approaches.

If we dealt in historical perspectives, economic aspect or function does not necessarily involve change in the working of the ecosystems so long as the exploitative functions are in harmony with the natural environment. But when these exceed the critical limit, the equilibrium of the environment/ecosystem is disturbed and several and ecological problems crop up which become detrimental not only to man himself but to whole population of all kind of species in a given ecosystem.

As we early discussed, man is the important part of the nature or environment. In his various capacities, man plays different roles in the natural environmental system. As a 'biological or physical man' man is a natural organisms and part of a given eco-system. As a 'Social man' he is responsible to create institutions, habitat and cultural environment. As an 'economic man' his functionary role is crucial for natural environment because economic activities of the man are responsible for environmental changes. However, as a 'technological man' man is a transformer and destroyer of the natural environment' major cause for environmental degradation.

If we look at historical progression of man-environment relationships, it become clear that natural relationship between natural environment and physical or primitive man of pre-historic period has changed to hostile relationship between technological man and the present environment. This substantial change and shift in the nature and magnitude of man's interactions with the natural environment has responsible to develop numerous environmental problems of numerous consequences because the changes effected by man in the environment have become un-adjustable by the inbuilt self-regulatory mechanism of the natural environment or ecosystem.

Pollution

Environmental pollution means lowering of environmental quality at local scale caused exclusively by human activities. Pollution has treated in different way by different streams. For natural scientists and environmental geographer it is a physical problem, for sociologists it is social problem, economists have seen it as an economic problems and many other branches of knowledge and thinkers have their own opinion about pollution.

There is lot of efforts have been made to define it. Some of them are mentioned as—

(1) “According to the report of the restoring the quality of our Environment, president's science advisory committee, Washington, USA, pollution may be defined as “Unfavourable alteration of our surroundings wholly or largely as a by product of man's actions

through direct or indirect effects of changes in energy patterns, radiation levels, chemical and physical constitution and the abundance of organisms.”

(2) According to, A.M., Dixon (1972) pollution includes “all those activities conscious or unconscious of human beings and their domestic cattle and the result thereof, which detract in any way...in the long-term or short-term, from enjoyment of his environment and his ability to derive full benefit there from.”

(3) Pollution has viewed as “the release of substances and energy as waste products of human activities which result in changes, usually harmful, within the natural environment.” *Natural Environment Research Council (NERC) 1976.*

(4) “Residuals, or wastes, are generated in all stages of production and consumption of goods or services. Residuals become pollutants or an environmental problem of some kind and in some degree when they have harmful effects in the atmosphere, the oceans or the terrestrial environment. Harmful effects are effects that are harmful to man, or to animals, plants or inanimate objects or conditions that are important to man. Their importance to man may be biological, economic, religious, moral, aesthetic or intellectual.”

Massachusetts Institute of Technology (MIT) 1970

(5) Pollution is defined as “The presence at large of substances, or energy patterns which have been involuntarily produced, have outlived their purpose, have escaped by accident, or have unforeseen effects, in quantities which harm his (man’s) health or do offend him.”

(6) R.F. Desmans (1975) has defined pollution as “the accumulation of substances, or forms of energy, in the environment, in the quantities, or at rates of flow, which exceed the capacity of ecosystems to either neutralize or disperse them to harmless levels. Pollutants are not necessarily harmful in themselves.”

Based on these definitions we can say that pollution is a condition of damaging or deteriorating natural process, cycle and phenomenon by including harmful quantities of substance into it. These substances have named as pollutants, which are responsible for pollution. According to N. Lee and C. Wood, there is three criterions for defining pollution. These are—(i) The waste materials resulting from human activities and disposal of wastes, (ii) Damages caused by disposed wastes whether directly or indirectly and (iii) The circumstances where the effect of damage is met by third parties.

Sources of Pollution—The pollutants as described earlier, have produced by both natural and anthropogenic processes and therefore the sources of pollution on this basis have divided in two categories viz. (i) Natural Sources of pollution and (ii) Anthropogenic source of pollution.

Natural Source of pollution includes pollutants such as volcanic ashes and dusts from volcanic eruptions (Volcanic dust layers in the atmosphere reduce air temperature); undesirable substances brought to surface because of fracture and faults caused by seismic events; floodwater in low-lying areas causes diseases etc.

Anthropogenic source of pollution is varied and is the main culprit of environmental pollution because the nature takes care of natural

pollutants because of inbuilt mechanism of absorbing any change brought in the nature by natural processes.

Anthropogenic sources of pollution include (i) industrial source, (ii) urban source, (iii) agricultural source, (iv) Population source etc. Most of the pollutants come from industrial and urban sectors. The industrial source contributes a host of pollutants (nitrogen oxides, sulphur dioxide, carbon monoxides, hydrocarbon as methane and numerous toxic gases), solid pollutants, dissolved and suspended solids, waste water having numeric chemical ingredients, heat etc. Urban sources of pollution contribute sewage water, solid waste, gaseous exhausts, liquid effluents, pollutants coming out of chimneys of factories located within the urban centers etc. Agricultural source of pollution includes the pollutants related to chemical fertilizers, pesticides and insecticides. Human population is the most important source of pollution because all forms of anthropogenic pollution are the (reaction of human activities. On an average, the increase in the population of a nation has positively correlated with pollution. The ever-increasing population in the developing countries is posing as much the problems of pollution as in the developed countries through industrial growth and urban expansion. Poverty and underdevelopment are yet other sources of pollution.

Types of Pollution—The Classification of environmental pollution is a difficult task because the pollutants and the media through which the pollutants are transported and diffused are well interconnected and interrelated. Thus all types of pollution, identified so far, are arbitrary in character In spite of the drawback of arbitrariness in the typology of

pollutions they have classified in a number of ways on various grounds. Some important classifications elaborated as below—

(A) On the basis of Nature of Pollution—

(1) Physical Pollution

(2) Social Pollution

(1) Physical Pollution—Physical Pollution means lowering of the quality of physical components of the environment such as land, air and water. Thus physical pollution is further divided into (a) Land Pollution, (b) Water Pollution, (c) Air Pollution.

(2) Social Pollution—Social Pollution means degradation of human communities due to a variety of factors and through number of processes. Social pollution is further divided into—(a) Economic pollution based on economic poverty and underdevelopment (b) Religious Pollution, (c) Political Pollution, (d) Ethnic Pollution, (e) Crimes.

(B) On the basis of medium of pollution—

Pollution is divided on the basis of media through which pollutants are transported and diffused into three categories—(a) Land Pollution, (b) Water Pollution, (c) Air Pollution.

(C) On the basis of area and source of Pollution—

Pollution is divided on the basis of area affected by pollution and source of major pollutants into—(a) Urban Pollution, (b) Rural Pollution, (c) Industrial Pollution, (d) Agricultural Pollution.

(D) On the basis of location of Pollution—

Pollution is divided into two major types on the basis of location—(a) Point Pollution, (b) Non-Point Pollution.

However, the above described categories are logical and well separated. The effects of pollution can be discussed as follows.

Effects Of Pollution:

Exposure of human beings of noise of level high than recommended level causes a number of adverse effects ranging from mild annoyance to permanent hearing loss. The effects of noise pollution on humans are generally of four types viz.—

(i)General effects—Of noise pollution on humans include speech interference, annoyance; sleep interference and related after-effects and problems.

(ii)Auditory effects—include the damages done to hearing mechanism in humans due to various types of noise.

(iii)Psychological effects—High-level noise causes many behavioural changes among humans as well as animals.

(iv)Physiological changes—Annoyance, irritation, anxiety, strains and stresses caused by noise pollution may cause change in hormone content of blood which in turn may introduce changes in human bodies.

1.3 Media

Every human accepts that greediness of human being is the main cause behind environmental damaging. Every day, all over the world men are making decisions, which are responsible for the changing in the earth's environment. Unfortunately, every decision of human kind deteriorating the quality of environment. It is true that individual decisions are into confirming too much of damage but after bunching or social acceptance these decisions are widely effect the environment. As we know, decisions are making with the help of images of the world.

People bare their decisions not so much on the world as it is but rather on the world, as they perceive it. The image of the world to the mind of people is based upon the communication or massages provided by the media.

Media is a powerful organ of modern society. It has a great influence over mind of people. People perceive the things, which media provide them to perceive. Media is a means of effecting or conveying something. A channel or system of communication, information, or entertainment. The term media used both in singular and plural. The singular media and its plural media seem to have originated in the field of advertising over 50 yrs ago; they are apparently still so used without stigma in that specialized field. In most other applications media has used as a plural of medium. The great popularity of the word in references to the agencies of mass communication is leading to the formation of a mass noun, constructed as a singular. According to Webster's dictionary—"means of disseminating information,

entertainment, etc., such as books, news papers, radio, television, motion pictures and magazines.

Oxford dictionary defined media as—“Television, radio, and newspapers as the means to mass communication.

Denis McQuail in his book *McQuail's Mass Communication Theory(2010)* included 'Print Media: the book & the library, Print Media: the newspaper, Other Print Media; these includes plays, songs, tracts, serial stories, poems, pamphlets, comics, reports prospectuses, maps, posters, music, handbills, wall newspapers....periodical (weekly or monthly) magazines, Film, Radio & Television, Recorded Music, New Media, ICT, Personal Video Recorded, CD-ROM, Compact Disc, DVD etc, The Internet, into mass media.

In this study, the term media used as a plural of medium or short form of mass media, which have included the print (newspapers, magazines, posters, banners, handbills etc.), Radio, Television, Cinema, Internet or Folk media (dances, music and other performing & population folk forms) in its frame. Television, Radio, Newspapers, Magazines, Internet, Folk Songs, Exhibitions, Public Gatherings, Seminars, Slogans, and Events have covered as a mass media.

'Media have the tools and technologies that facilitate dissemination of information and entertainment to a large number of people'. These tools mediate the message. Media is a powerful cross-cultural, cross-national institution effectively influencing people. We can divide the media into different categories. These are—

- (i) Mass Media
- (ii) New Media
- (iii) Traditional Media

Mass Media

Cinema, Radio, Television, Terrestrial, Cable, Satellite etc., and the printing press (Produce-news Paper, Books, Magazine and other printed materials) recognized are mass media. According to Wilbur Schramm—‘A mass medium is essentially a working group organized round some device for circulating the same message, at about the same time, to large number of people. As generally interpreted that the mass media are press, cinema, radio & television, but books, magazines, pamphlets, direct mail literature, posters, telephones, cellular, internet, songs, drama, instrumental presentations, sculpture paintings, public gatherings, exhibitions etc., are also considered as mass media.

The organ of the mass media is technological means of transmitting messages to large number of people. They are very expensive media and they have to be run by institutions i.e. government or well financed commercial bodies. They require a group of people to organize and administer, to produce, distribute and constantly maintain in working order that whole setup of studio, a transmitting centre, or a publishing house. Yet, another feature of the mass media is that they have founded on the idea of mass production and mass distribution—the marks of an industrial society.

New Media

After the development of recent technologies established meaning of media have extended. New media are such as Pagers, Cellular and Satellite Phones, Computer, Electronic mail and above all Internet are also included into list. They called new media because of their specialty to communicate interpersonal level as well as mass level. These media are new generation media based on modern digital and chip-based technology. ICT (Information & Communication Technology), when it used anywhere, generally means Internet. Internet is the miracle of later 20th century empowered in 80^s and spreaded worldwide in last decade, is a medium of modern civilization.

It is often called network of networks. Internet is a computer networking. This networking is divided into three types—LAN, MAN & WAN. Local area network (LAN), is used for office or a single place i.e. shopping complex, university or other administrative offices etc., Metropolitan area network (MAN) is used for inter-office or medium range area and wide area network for global networking.

Information technology have shows great impact over mass media scene. Besides, it has great impact on socio-cultural and economic affairs worldwide—‘It is becoming an important factor in the mane growth theory beside labour and capital. Information communication technologies (ICT) are important. They have been both evolutionary and revolutionary, giving connectivity both in personal and professional life of people. The present scenario is that all technologies are integrated and converged and that provides holistic information connectivity. The social and economic repercussions of the advances in

ICT are so great that the term ‘Information revolution’ is probably justifiable. The new ICT model has made many old paradigms and theories of communication obsolete. The update model is technology networking and technology convergence.

Technological advancements vis-a-vis development of new media technologies created six communication revolutions: In writing, printing, broadcasting, films telecommunications computer, e-technologies and quantum computing, Nano- technology and fuel cell technology of 2000 decade (the last one yet to be revolutionized). These technologies introduced at different decades of the centuries revolutionized communication because of advancement in technologies over a period;and that expanded their different functional forms and supporting technologies. It further changed their program contents and functions tuning to the audience demand.

Traditional Media

Traditional media can be identified as the media of the common mass, which developed by rituals and social beliefs. The wider spectrum of traditional media have included all kind of arts, music sculpture, folk lore, balled, festivals, public gathering, stage performances, drama etc. Due to its association with people and the culture traditional media are considered as the effective tool of social communication and entertainment. While mass media are good in quickly transmitting social and developmental messages, the traditional media can supplement these effects by having comparatively a better impact on

the motivational, behavioural or attitudinal aspects of the rural or illiterate people.

1.4 Media and Environment

Today, environmental issues have drawn attention of all kind of media as environmental degradation, pollution and related problem have assumed global dimension and are even threaten the very existence and survival of mankind. Ever-increasing environmental problems such as green house effect, depletion in ozone layer, rapid decrease in global greenery, heavy loss in bio-diversity, increase in slums & solid waste, recycling of plastic and many more other problems have cautioned the media attention.

With the passage of time, as natural man converted into ‘economic man’, the process of agricultural extension, urbanization, industrialization, increase in settlement pattern etc have created necessity to evaluate man-environment relationship. Later on, it became required to manage things with environmental perspective. Pollution checking and reducing programmes, environmental assessment programmes, concept of environmental management became necessary in changing global circumstances. These issues always get high attention in media. As a watchdog of society it is required that media should cover these kinds of issues.

There is a concise pattern of environmental communication and environmental journalism. Besides, writing on nature and man-nature relationship has great historical accounts. From their roots of knowledge scholars written over environmental phenomenon. There is a lot of example have mentioned in our great epics and books.

Philosophers, writers and thinkers always discussed about man-environment relationship and various environmental elements.

While the practice of environmental writing in west has a rich history, that date back at least as far as from renaissance. Great travellers i.e. Marco Polo, Christopher Columbus expressed explorative narrations about environmental phenomenon. But ancient Roman literature has also remarkable descriptions over environment. Homer, great Roman poet wrote on environment 'about 900 B.C. in his famous Illiod & Odessay epics. Plato (427 B.C. to 347 B.C.) discussed about effects of Mediterranean Sea on surrounding residents. The tradition of Christopher Columbus followed by prominent nature write-ins like Ralph Ealdo, Womerson and Henry David Thoreau in the late 19th century, John Burroughs and John Muir in the early 20th century and Aldo Leopold in 1940s.

Infact, modern mass media have treated environmental issues as a social problem. Environmental pieces have been covered to fulfil variety aspect of content. Though environmental elements necessarily linked with human survival, therefore, degradation, pollution, planning, management, preventive and precautionary measures to environment received attention of all kinds of media i e traditional to modern mass media.

'In the developing countries like India where rapid transformation is taking place media plays an important role. Surveillance of the environment relates to information or 'news' about what's happening in the society. Role of media is of great importance in the field of environmental issues where the process needs to be accelerated quickly

and effectively to keep pace with the fast changing scenario. Newspapers play an important role in raising the environmental issues due to its functional roles, via information, education and to create stage for discussions and debates of various events or issues including environmental awareness. It plays a key role in promoting awareness and for understanding the problems of vital environmental issues all over the world. As the watchdog of the society, newspapers have to educate the people and keep him informed on various aspects of environmental degradation. It can awaken the people effectively. Media can educate people through articles and editorials as well as environment news items.

Nature Writing

Nature writing is the genre with the longest history in environmental communication. In his book, *Incomparable Land. A Guide to American Nature writing*, Thomas J. Lyon attempts to use a 'taxonomy of nature writing' in order to define the genre. The literature of nature can be divided into three dimensions -natural history information, personal responses to nature and philosophical interpretation of nature. In the writing of the natural history information, writers tend to go with natural facts, while in personal responses the writing based on writer's experiences, observations about environment in philosophical interpretation content would same but interpretation is based more abstract and scholarly. Nature writing has a lot of variety in term of content and is helped environmental journalism to develop his area and tendency.

Environmental Advocacy

Environmental advocacy is presenting information on nature and environmental issues that is decidedly opinionated and encourages its audience to adopt more environmentally sensitive attitudes, often more biocentrism worldviews. Environmental advocacy can be present in any of the aforementioned genres of communication. It is currently debated whether environmental journalism should employ techniques of environmental advocacy. It has the ability to influence policy making process on environmental issues. It helps in protecting both people and environment. Either through sensitization or portests, environmental advocacy makes some significant contribution for the protection and conservation of enviornment.

1. 5 Review Of Literature

The review of allied literatures remains a basic activity any researcher need to undertake at the onset of research. Because, this activity helps the researcher in showing the path to be taken and give proper direction in the initial stage of research. The researcher has got the required exposure of the previous researches while going through the published or unpublished literatures (like books, thesis, articles, committee reports etc).Thus, the researcher got the knowledge about the delimitation of the previous researches. Helps the researcher in setting the base for the new study and giving directions towards proper sources and methods. But, it is quite hard to access to published as well as

unpublished literatures. Therefore, the researcher has made the best effort to review the related literatures.

Availability of ample literatures and research studies in the form of journals, thesis, articles, books etc. compel the researcher to study only the related literatures. The review of selected literatures has been organized under the following headings.

Mass Communication Research

The issues about effects and effectiveness of mass communication have attracted the attention of the social scientists from the very beginning. Communication is a fundamental pre-requisite of all living beings. This urge for communication is primeval and in contemporary civilisation, it is a necessity for survival. Communication is key element to get information, knowledge be aware and to achieve participation. It is needed not only in the process of development but also in the process of empowerment.

According to V.S. Gupta, “Communication not only means to communicate or pass on information- it also means community participation.” The role of the mass media in development activity was very clearly implied in the dominant paradigm of the development. But most of the models of development communication were developed in the context of the western countries. The First World War can be considered to be a watershed in mass communication theory and research.

Harold Lasswell (1927) came up with an innovative conceptualisation of mass media effects. His model of communication was strongly influenced by Freudian Theory and was in direct contradiction to liberation philosophy (Davis & Baran: 1981).

Denis McQuail (1969) identified three main stages in the history of mass communication research. The initial phase started from the turn of 20th century to the outbreak of the Second World War. During this phase, mass media were attributed with considerable power to shape opinion and beliefs.

In the second phase, from 1940s to early 1960s mass media were believed to be largely important to initiate opinion and attitude change, although they could relay certain forms of information and reinforce existing beliefs. And in the current stage, the question of media effects is one where new thinking and new evidences are accumulating regarding the influences of mass communication. The second stage extending from about 1940 to the early 1960s is strongly shaped by growth of mass communication in United States and the application of empirical method to specific questions about the effects and effectiveness of mass communication.

The classical studies of how voters' makeup the mind was conducted by Lazarsfield (1944) in 1940 US presidential elections. These investigations indicate that only limited change has occurred during the campaign. This works also provide an incomplete picture of the total effects of the mass communication because they concentrated only on effects which occur during the campaign itself, (McQuail).

The earliest studies of Presidential elections in 1940 and 1948 conducted by Lazarsfield (1944) and Berelson (1954) respectively and the programme of research on the use of films for training of American servicemen undertaken by Carl Hovland (1949) concluded that the exposures to mass media primarily press, radio, film or television were unlikely to be major contributors to direct change of individual opinions attitudes or behaviour or to be a direct cause of crime, aggression or other disapproved social phenomenon. There is indeed overwhelming evidence that the measured net changes in attitudes or opinion as a result of persuasive material presented on radio, film, television or the press are likely to be small.

Klapper (1960) suggested that people exposed themselves to messages selectively. There was a tendency for individuals to expose themselves relatively more to those items of communication that were consonant with their beliefs, ideas, values, etc. Regardless to exposure to communication, an individual's perception of a certain event, issue, person or place could be influenced by his/her latent beliefs, attitudes, wants need or other factors. Thus, two individuals exposed to the same message could go away with diametrically different perceptions about it. Research showed that even recall of information was influenced by factors such as an individual's needs, wants, moods, perceptions and so on. However, Klapper (1960) argued that "Mass Communication ordinarily does not serve as a necessary and sufficient cause of audience effects, but rather function among and through a nexus of mediating influences." Although, research had not shown the different media to be without effects, but it had established the primacy of other social facts and showed the power of the media to be located within the

existing structure of social relationships and systems of culture and belief.

Rogers and Shoemaker (1971) led to the realisation of the facts that social structures and social institutions intervene powerfully in the process of media effects. But a number of social scientists express their doubt about it (Lang & Lang, 1959; Key 1961 and Halloran 1964). They paid more attention to people in their social context, rather than at their attitudes and opinions. They took account the uses and motives of the audience members as mediating and effect. They looked at the structure of belief and opinion and social behaviour rather than individual cases. They also took more notice of the content whose effects are being studied.

On the other hand, the profounder of the 'theory of mass society' have examined the question of media effects on culture and society (Mills 1956; Kornhauser 1960, and Shils 1957). In their view, mass media encourage and make viable a rootless, alienated form of social organisation in which we are increasingly within the control of powerful and distant institutions. The Marxist accounted the effects of mass media as a powerful ideological weapon for holding the mass of people in voluntary submission to capitalism (Marcuse, 1964; Miliband, 1969; Carey 1969). They argue that the mass media are both the force for integration and for dispersion and individualisation of society. It suggests that mass media do have important consequences for individuals, for institutions, for society and culture.

The diffusion of innovation theory has important theoretical links with communication effects research. The emphasis was on communication effects: the ability of media messages and opinion leaders to create knowledge of new practices and ideas and persuade the target to adopt the exogenously introduced innovations. There was disagreement on the question on whether ideas were independently developed in different cultures, or whether an idea was invented in one culture and borrowed by or diffused in another. Evidence indicated that in most cultures there was a predominance of borrowed or diffused elements over those that developed from within a particular culture (Linton, 1936, Kroeber 1944). The diffusion of innovations research established the importance of communication in the modernisation process at the local level. In the dominant paradigm, communication was visualised as the important link through which exogenous ideas entered the local communities.

Daniel learner's *The Passing of The Traditional Society* (1958) points out that the mass media both an index and agent of modernisation. In Learner's model, there was a close reciprocal relationship between literacy and mass media exposure. The literate developed the media which in turn accelerated the spread of literacy.

The research in the field of mass communication has gained momentum in developing countries in the decade of 50s and 60s. Dube (1958) studied the importance of communication in community development programme in India.

Wilbur Schramm (1964) emphasised on the role of communication in process of social; change by saying that the development of mass media is one of the requisites for and signs of a modernising society. “Communication is not something that has a life of its own, it is something people do. It is the fundamental process of society, the way that people relate to each other” (Schramm , pp.11). Even in the case of modern industrial societies, “with the ever increasing case of mechanical communication and physical travel and increasingly effective organisation of specialisation and discipline, there tends to be paradoxically an increasing reliance upon direct world- of-mouth communication.”

L.W. Pye(1963) has analysed the importance of communication in political development process. From his perspective, “Communication in developing nations performed a key function in structuring the political process. Based on case studies, he argued that the influence of communication on political structure differed in urban and rural areas.”

Iswar Modi (1985) studied the inter-relationship between leisure, mass media and social structure in an empirical situation of Rajasthan. He provided of comprehensive description of traditional forms, folk motifs and cultural roots of leisure and the new challenges from the electronic revolution of the mass media and it’s encroachment on leisure, cultural and social structure. His work was based on an empirical study of a village Garhi Maamur in Alwar District of Rajasthan and the urban community in Jaipur of Rajasthan. His major finding was that there exist a clear concomitant between the social structure and the structure of leisure of a society and change in either of the two influences each

other. Thus, Modi establishes that social structure influence the nature and form of leisure and the leisure itself helps in generating newer structure, social norms and culture.

K B Mathur (1994) in his study on communication for development and social change, viewed traditional folk media as culture and community based media. He observed that traditional folk media existed even before the advent of the modern mass media. It was through the utilisation of these media that some of the dynamic religious movements spread for the wide.

Nevertheless, mass media can play an important role in generating the awareness and shaping the public opinion in the case of the developed societies as well as in the case of a developing society like India. In case of vulnerable disease like AIDS/ HIV mass media can play a vital role.

Communication Research In India

Communication research in India started in the later part. In the beginning, it was confined to rural areas only. Some of the studies conducted in this area is as follows.

S C Dube (1964) conducted a survey on the perception of emergency after the Chinese attack. He observed that 83.3% of the respondents were aware of the Chinese aggression. The information reaching the elite through the mass media is relayed to the common village people through the traditional channel.

Lakshamana Rao (1963) studied the role played by the communication in the economic, social and political development of a community (Communication and Development: A Study of Two Indian Villages). He selected two villages in India for his study: Kothooru, a village on the verge of modernization, and Pathooru, a village isolated and steeped in traditional customs and beliefs. He found that communication was a prime mover in the development process.

Damle (1966) enquired into diffusion of modern ideas and kinds of knowledge in seven villages. The study elicited information regarding the awareness of people about the national political scene, national politics, world political structure, modern ideas regarding cast and religion and the impact of new ideas of recreation, movies, sports, radio, newspaper lectures, political propaganda etc.

C. R. Prasad Rao and K. Ranga Rao (1976) who has studied the human communication channels in three villages of Andhra Pradesh reported one of the important findings that the knowledge imparted through broadcasting was significantly retained by the respondent even 30 days after the broadcast.

Since the establishment of Indian institute of mass communication (IIMC) in New Delhi in 1965 by the government of India, various types of researches have been undertaken on various dimensions of communication. Since August 1, 1975 through the Satellite Instructional Television Experiment (SITE) development programmes were shown in 2,379 villages of six states. A team of social scientists was employed by SITE to test the efficiency of television in improving

agricultural practices and population control in promoting national integration, in upgrading and expanding education and in promoting better health and hygiene for a better life in rural areas (Gupta 1985).

“During SITE both women and children were treated as separate social categories for measuring the impact or effect of TV viewing on them. After the completion of SITE, social impact survey on adult, it became evident that the difference between men and women were so significant in a variety of areas that Separate analysis for men and women would be essential (Agrawal et al., 1977). Results of the study were significant in two respects. It indicated that women’s participation in TV viewing was significantly smaller than men but those women who viewed TV gained more than men in areas like family planning, health and nutrition. Another significant finding of the study was that illiterate women, more than literate women gained knowledge from TV viewing in the same areas thereby indicating that literacy was no barrier for learning from TV.”

In fact, very little work has been done in the field of social communication prior to 1990’s. Since 1990 onwards the trend has been shifted to national television network i. e. Doordarshan and more specifically to successful launch of the Polar Satellite Launch Vehicle (PSLV D2) on Oct. 15, 1994 marks an important milestone in India’s space programme.

Mahajan (1988) in a study of patterns of television viewing among girls in Meerut city found that television viewing increased knowledge

about other countries and promotes the general feeling of universal brotherhood.

A Brief Overview On Environmental Studies

The inter-relationship between Man and Nature taken into account in shape of books/literature from the early periods of civilization. In ancient epics, number of thoughts, observations, analysis and opinion had evaluated the concerned issue concisely as well as descriptively. In our India's Vedic and post-Vedic literature there are too many references have mentioned in shape of mantras, theories, stories, poems prose etc. Valmiki Ramayana, Abhigyan Shakuntalam, Meghdootam, Rigvedas, Arthashastra, Kadambari and many other books have different descriptions mentioning environmental aspects. But, due to limitations of the present study and lack of the resources researcher have gone through only literature of modern period, which began from 19th century onwards.

The realization of the impacts of men on the environmental processes began even in the beginning of the 19th century. G.P. Marsh's book 'MAN AND NATURE' (1864) may be taken as the pioneer work which demonstrates the effects of human activities upon environmental processes and caution the society against the magnitude of changes brought by man. R.L. Sherlock wrote a book 'Man as a geological agent' (1922) and published a research paper 'The influence of man as an agent in geographical change' (1923) on the concerned topic. Other important publications related to the environmental issues are 'Man's role in changing the face of the earth' edited by W.L. Thomas (1956),

'Man and the natural environment' by T. Wilkinson (1963), 'Man shapes the earth' by E.H. Broken (1970), 'Silent springs' by R.C. Carson (1962), 'Man and environment' by R. Arvill (1967), 'man impact on environment' by T.R. Detwyler (1971), 'Environmental management' by R.L. Tiwari, Savindra singh, R.P. Srivastava (1983), Perception of environment: Issues and challenges by P. Nag (1983) etc.

Besides lot of work, have been done in different branches of knowledge concerning environment. Environmental engineering, Environmental chemistry, environmental psychology, environmental biology, and so many other branches have started research in environment. However, above-mentioned works are mostly concerned with man-environment relationship and pay least attention on any kind of role of mass media. It may be because ecologists, geographers and biologists have done the most of the environmental works. Some work also did in sociology, economics, psychology, and other social sciences.

Environmental issues as a social problem highly concerned in media studies in western countries from last few decades.

Bookes (1974), examined 'Trends in environmental coverage in the times during the twenty year period of 1953-1973, under the same title, the study shown that media interest in environmental issues began to increase in the mid 1960s despite ups and downs, coverage remained high in the early 1970s.

In the book, 'The news construction of the environment,' published in 1990, A Hansen point out the approaches towards news coverage of environmental issues in European media.

While relatively few studies in Europe have examined long term trends in media coverage of environmental issues, generally, numerous studies have analysed the media career of specific environmental issues of focussed on the particular dimensions of environmental coverage i.e.risk information. These included studies of media reporting on forest decline (Diggleman, 1980 and 1988) numerous studies of media coverage on nuclear power accidents (Corner, Richardson and Fenton 1990, Corner & Richardson 1993. Nohrstedt, 1991 &Row, 2000).

In media studies as an independent discipline in India, some studies already taken with some focus on the environment issues.

Buggi and his colleagues have done an empirical study conducted among 2,525 members selected from 50 villages under upper Krishna irrigation project. Other studies are Sinha's 'The Role of mass media in social transformation of a farming community' and some programmes under various educational projects were forces on the issue.

Relevant Researches

Environmental issues are highly concerned as a topic of research is natural sciences i.e. Botany, geography, ecology, medical science, chemistry, geology, and social sciences, there is many of research have done in sociology and psychology, but if we concerned research in media studies, there is very few titles completed in the field. It may due

that as a comparatively new discipline media studies have focussed political issues like democracy, elections ,power sharing, empowerment issues social issues i.e. poverty, ethnic and racial conflicts, equality, population problems, health, education and riots and communalism etc.

It was the second sphere of 20th century, wherefrom media researches speeded in other disciplines. After, 1960s global political map has changed. Most of colonies became free and process of urbanization, industrialization, resource processing and utilization got boom. These vast efforts of construction have produced lot of problems, which later attract scholars to think about environmental issues. Uncontrolled industrialization, energy crisis, rapid growth in population and mis-consumption of resources were identified as a prime accused. In year 1972, UNO organized a conference on environment and sustainable development at Stockholm. Media also concerned this issue with great alert and environmental reporting/writing became as specialization in media practices. Too many media studies have started in shape of interpretative and investigative writing. But compact researches have started sensuously after 80s.

Institutions of media studies in Europe and USA has started research in concerned filed from 80s. Diggelman presented a paper titled- "Forest decline in Swiss mass media (1986-88); Everyday Journalism vs. Scientific information, at the XVth IAMCR conference in Yugoslavia. Dunwoody & Griffin completed a case study with the title 'Journalistic strategies for reporting long term environmental issues.

Dunwoody also conducted a survey of research in USA & Germany. 'Mass media coverage of Technological and environmental knowledge as an organized weapon,' by fan Brosius Kiplinger (1994), 'Predictions of the Public agenda from Television Coverage,' by Greenberg(1985), and 'A Staging Media Events to Achieve Legitimacy' are some of the researches completed as a part of media studies. There is a lot of researches conducted in Europe and in USA on the concerned issue.

Researchers like Susan Hoivik and Kurt Luger(2009) investigated through a pilot project from the Himalays "How traditional media can be employed in remote areas which lack modern media to raise awareness on environmental issues. Through their findings, they established that traditional media can be important in promoting environmental protectionwork. Further, they revealed that information on natural resource management issues has been successfully conveyed to isolated rural communities where literacy levels are low and modern mass media is lacking.

Xiaoquan Zhao (2009) studied on "Media use and global warming perceptions : A snapshot of the Reinforcing spirals."Xiaoquan used the reinforcing spirals model to investigate the mutual influence between individuals' media use and their global warming perceptions. The study revealed that newspaper reading and Web use mediated the effects of age, race and education on the perceived knowledge about global warming. The investigator further claimed that the perceived

knowledge and concern over global warming also predicted future information seeking about the Polar Regions. The finding further discloses that the independent effect of political ideology of perceived scientific agreement.

Ros Coward (2010) did a case study about the reporting of one of the highly endangered European species, the Iberian lynx, in the UK national press. His study reveals that news values determine which stories get into press. Besides, he established the role of individual journalists and environmental groups in getting coverage of the stories and his finding re-persistence, invention and manoeuvring lead to innovation into news values.

Ohkura (1995) conducted a study of Japanese newspaper about the coverage of environmental issues particularly on the controversy over the Ishaya Bay land reclamation project which began construction in 1989. His study revealed that media played a spectator's role and simply react to the events only. Further, various studies in different parts of the globe established that there was lack of coverage for the environmental issues in the media (Askari, 1995; Graham and Dziuban, 1996). About the nature of media coverage on environmental issues, many researchers come up with interestingly finding.

Media have the tendency to focus on the coverage of discrete, dramatic crises rather than ongoing phenomena (Schoenfeld et al.,

1979; Bendix and Liebler, 1991; Bowman, 1996) and sometimes misstatement or oversimplification(Sleeper, 1979; Carmody,1995).

Anderson(1997:121) expressed that most of the environmental news coverage is event-centred. Several researchers claimed that news media are preoccupied with dramatic events such as oil spills and pseudo –events(lesser extent) such as publicity stunts (Aderson,1991, Wilkins and Patterson, 1987; Sachsman,1976; Molotch and Lester,1974, Rubin and Sachs, 1973).

Wilkins and Patterson (1987)claimed coverage of environmental issues tends to have strong visual component and television news makes greater use of visual component.

Schlesinger(1987) found that television news broadcasts are based on the tight daily schedules and time acts as a major constraint as environmental issues tend to involve as lengthy processes. Researches across the globe reveals that the relationship between lack of media coverage and professional constraints.

Many environmental reporters claimed that media are providing less time and effort to environmental reporting(Detjen et al. 2000). Besides, environmental beat is expected to be particularly difficult owing to rapid changes in environment.

Sachsman(2002) revealed that many newspapers were not having full-time reporters to cover environmental stories. Out of the 27

newspapers (circulation more than 30,000), only 23 newspapers had a reporter who are covering environmental issues on a regular basis and mostly were general assignment reporters but they cover environmental issues when the issue arise. Further, this study claimed that environmental reporters are struggling to balance their interest in environment and their training to be objective journalists. Interestingly, more than 98 per cent of these reporters claimed that they need to be objective, 40.8 per cent of them agreed to be advocates for environment and only 30.5 per cent of them want to work with community leaders to solve environmental problems. But, the study reveal that many reporters had little knowledge about the subject, particularly technical ones and they want to have additional training in environmental law and regulations, natural sciences, environment economics and health risk.

West et al., (2001) conducted a survey of the members of The Society of Environmental Journalists working in radio, television, print media, government and academic settings. They asked the journalists about the extent of the factors such as community misunderstanding, pressure from industry and environmental groups, scarcity of information and lack of editorial support which pose as challenges in covering environmental health issues. Half of the respondents claimed that community misunderstanding is as a serious challenge. While one-third of the respondent identified lack of editorial support as “serious challenge” and 37 per cent of the respondents agreed that pressure from industry as “serious

challenge”. Only 20 per cent of them claimed that pressure from environmental groups as “serious challenge”.

Saari et al., (1998) conducted a survey of Canada’s daily English-language newspapers and revealed that 105 of the said newspapers’ commitment to science journalism shows a general weakening and dilution of reporter allocation. The study claimed that 50 per cent of Canadian dailies didn’t allocate a science reporter and only 18 full-time science reporters were identified. Further, follow-up study was conducted for 45 journalists who cover science news. Half of them revealed that they covered science policy. Majority of them were lacking in science training. Besides, they identified time constraints and competing demands as impediments in their professional development.

Valenti (2002) made a survey of all the environmental journalists in New England and the Mountain West states since 2001. The survey revealed that 52 per cent of the newspapers in the Mountain West states and 51 per cent New England newspapers had at least one full-time environment writer. The findings shows that out of 10 local television stations about one was employed as full-time environmental correspondent. In the case of Mountain West, 31 per cent of environmental writers claimed that they spend about 67 per cent to 100 per cent time on environmental stories while 18 per cent of environmental writers revealed that they spend about 67 per cent to 100 per cent time on environmental stories. Further, the journalists claimed that issues such as time constraints or the size of the news

hole rather than interference by editors or advertisers as barriers to reporting.

If we deal with Indian perspective there is number of works have done in environmental studies. ‘Various reports and works were published in the early nineteenth century on the status and degradation of forest in various areas.

Rao, K. Jeevan and others studied the soil erosion and its impact on the environment. Moreover, our Indian researchers are not lagging behind with their counterparts in other parts of the world. Some of the researches made with interesting findings are as follows.

Raghavendar Mishra (2007) studied on the “Impact of Media on Environmental Perception.” His finding revealed that common mass have high perception about the environmental situation but they don’t want to take risk for their obligatory contribution towards the environment. He suggested converting the common perception of the people into conservation oriented habits. Further, he emphasized that environmental issues need to be part of regular mainstream media practices and suggested for an integrated media policy.

Silajit Guha(undated) studied on the coverage of environmental news by the three major English newspapers of India.His revealed that environmental news does not lead to a determined pattern and instead it is mostly sporadic. The newspapers published environmental news with a certain level of indifference to a host of

issues. Further, he revealed that the newspapers keep themselves distance away for the larger discourse of environment as a politico economic issue affecting almost everybody in one way or the other.

Vikram Kaushik(undated) did a study on the role of media in the formation of pro-environmental behaviour. His investigation established the significant role of television in comparison with radio for disseminating SWD information but his study revealed that there was lack of full exploitation for the potential of television. He put forward the reasons for the unexploitation of the full potential of television as absence of comprehensive media campaign, budget constrained and absence of message and programme coordination. Interestingly, Vijaya shahi,

Richa Pandey and Farida Ahmad(undated), conducted a study on” Environmental communication : Behaviour of undergraduate girls of Varanasi city.” They revealed that maximum girls used television and newspaper both as source of information. They established that environmental awareness is positively and significantly correlated to income, mother’s education , father’s education and number of educated members in the family. Further , they revealed that there is no significant correlation with age of students and family size.

Kavita, Chandra Kala Singh and Bimla Dhanda(undated), conducted a study on “ Impact of Media and parental knowledge on environmental awareness of children” in the rural areas of Hisar district of Haryana. Their study revealed that parental knowledge

and awareness of the children regarding environmental pollution was found to be highly significant. Further, the study established that there is no significant influence of media on the awareness of the children regarding environmental pollution.

Sekhar(1981) conducted a study on the role of the press in promoting environmental concern in India. He claimed that the Indian press takes limited role in creating mass awareness (concern) about environmental issues due to a number of reasons. In 1979-1980, a content analysis was conducted. The study revealed that large number of environmental items were news reports and ,mostly, the stories were reactive while very little evidence of investigative journalism was found. In India, environmental stories are not covered significantly as compared to politics , crimes or sports (Murthy,2000).

A. Suresh Kumar (undated), claimed that three types of environmental news are available in the media (a) Environmental disaster news, (b) News about environmental activists or group actions and (c) Environment-related scientific news.

Vilanilam(1993) said that scientific issues dealing with environment appear very scantily in newspapers in the inside pages or supplements.

A.Suresh kumar(undated) have given some reasons behind the scanty coverage are: (a) media's own aims and purpose, (b) the ownership and control of media, (c) media's perception of its audience,(d) the

environment issue's relation to other political and economical matters and (e) prejudice of the working media personnel.

Shourie (1995) claimed that lack of specialization is a “ running sore of Indian press-whether it is on defence or on power projects or on the size of dams or on the virtues or otherwise of atomic power, there are very few journalists who have worked at studying the subject in any detail.”

Kiwik, described that the children who are the citizen and the leader of the tomorrow must be taught about their environment problems and pollution and hazards facing the world today and also in future. Science fiction short stories and comic books are very close to the children hence the environment related topics must be the subjects of these books to make them aware about the environment. Cartoon and documentary films should be prepare on the subject, indoor as well as outdoor games on these topic can help’.

Semual studied the ‘role of NGO in the environmental as well as development campaigns. While Sharda Prasad enforced ‘The need of assigned roles of various mass media to develop the awareness in society about the environment. Shekhar discussed ‘the possible role that can be played by the Indian news papers for the Awakening the society.

1.6 Methodology

Methodology is the prime requirement for any scientific enquiry. It includes methods and techniques for the whole process of research work that comprises of collection, tabulation and analyzing the data with the ultimate task of interpretation. According to Pelto and Pelto (1978), “Methodology is the structure of procedures and transformational rules whereby the scientist shifts information up and down this ladder of abstraction in order to produce and organize increased knowledge”. Each method has its merits and demerits. The present study is descriptive research and follows survey method.

Objectives Of The Study

The present study is carried out with the following specific objectives:-

1. To identify environmental issues in media.
2. To survey the nature and extent of opinion concerning Environmental Awareness through media with the help of environmental awareness opinionnaire.
3. To identify the variation in opinion of various groups (residents of valleys districts of Manipur) on the basis of the chosen variables.
4. To identify the level of environmental perception through media in the selected area.
5. To compare the accesses of media in the study area.
6. To analyse the impact of media with given criteria.

Rationale Of The Study

Manipur is experiencing the heat of climate change. The southwestern parts of the state i.e. Jiribam, Churanchandpur, Bishenpur, Thoubal, Imphal(east&west), Chandel and some parts of Tamenlong and Chandel have experienced an increased in both minimum and maximum temperature in the past 100 years. Not only this, the decadal assesment of monthly rainfall also reveals an increased in the period of raining days during monsoon. Besides, northern districts of Manipur shows a considerable increased in precipitation. In addition to it ,relative humidity remains considerably high and reached above 80% at night during June to December when continuous raining do occur. In this crucial phase, it is imperative and significant enough to investigate about the coverage of media about environmental issues and the perception of the common people.

Methodological Framework

The present study has the empirical nature with a normative approach. Therefore, a qualitative conclusion is preferably made. For, analysis and interpretation, simple percentage method and tabular /graphical representations are employed. The framework adopted for the study includes various components, namely, universe of study, sampling unit, sampling technique, and sample size, tool for data collection, use of secondary data, variables or basis of the study.

UniverseOfThe Study

The Universe or Population of the present study include all the residents of the administratively divided four valley districts of Manipur;

- a) Residents of Imphal East District
- b) Residents of Imphal West District
- c) Residents of Thoudal District
- d) Residents of Bishnupur District

Sampling Unit

The sampling unit of the present study is divided into two parts:

- a) Common People (Residents of the study area).
- b) Journalits (working in Manipur)

Sampling Technique

Considering the requirement and purpose of the study, two sampling technique have been employed in the study.

- a) Random sampling technique for common people.
- b) Purposive sampling technique for journalits.

Sample Size

Sample size has a significant role in sampling. According to Parten, “an optimum sample in survey is one which fulfils the requirements of efficiency, representativeness, reliability and flexibility.”

a) Common people: Due to the limitations of time and resources, the present study has selected a major sample size of 500 by randomisation of respondents from the lists supplied by the district authorities. Only 400 schedules could return.

b) Journalits: A sample size of 100 has been kept for journalits based on the lists supplied by AMWJU(All Manipur Working Journalists

Union) and Manipur Diary 2012(publications of DIPR, government of Manipur) . Nearly, 86 respondents could return.

Datacollection

Primary Data Collection

Two sets of interview schedules have been structured for data collection.

(a) Common people: An interview schedule having both open-ended and close-ended structures have been administered to the respondents. As Manipuri/Meiteilon being the lingua franca of Manipur, the interview schedule is prepared in Meiteilon. The schedule was administered to the respondents of the four localities of the four valley districts namely Wanghkhei Khunou Soibam Leikai, Naoremthong Khumanthem Leikai, Wabagai Awang Leikai and Ngaikhong Khullen Awang Leikai.

(b) Journalists:In this case, an interview schedule having open-ended structure have been prepared in English language and administered to the respondents.

Secondary Data Collection

The researcher has employed various secondary sources for data collection. The employed secondary sources includes of broadcasted items (radio, television, and internet), both published and unpublished articles, newspapers, magazines, journals, and reports, governmental and non-governmental sources.

VariablesOfThe Study

The variables choosen for the study are as follows:

Demographic variable:

- a) Age
- b) Gender
- c) Education
- d) Residential status
- e) Employment status
- f) Annual income etc.

Media Availability variables:

Radio: Availability, listening preferences.

Television: Availability, viewing preferences.

Film : Availability, viewing preferences.

Internet: Availability, user pattern.

Newspaper: Availability, subscription preferences.

Magazine: Availability, subscription preferences.

Folk media: Participatory and passive.

Outdoor media: Interaction with slogan and pictures.

Mobile communication: Availability, user pattern. Etc.

Environmental Awareness variables:

Personality, eco-marks, energy saving habits etc.

Scope Of The Study

The present study will contribute towards media and environmental studies. Besides, it will serve as a source of reference for researchers, students, environmental activist etc. The study will help the government to frame programmes and policies for an efficient action plan. It explores the relationships among media reach, media access and environmental awareness level. Significantly, the study gives a glimpse of environmental issues and awareness level among the populace of peripheral state like Manipur. Further, the study left the scope for conducting comparative media study, specific media study, interventional and experimental study by the future researchers.

Limitations Of The Study

The current study is limited only to the four valley districts of Manipur. Both journalists and common people who are working or residing in the valley districts are selected as the sample for the study. Only environmental awareness is taken as the focus for investigation. None focus is being made on specific media and limited access to confidential data are prime limitations. Besides, limited knowledge and experience of the researcher is one of the challenges. Hesitations of the respondents are an undeniable limitation.

1.7 Operational Definitions

Media: The word “media” comes as the plural form of the Latin word “medium”. Media often relates with a group or collective things. Therefore, it has been used either with singular or plural verb. Basically, media refer to the means of mass communication that

revolutionized the communication system today. Therefore, media includes radio, television, cinema, mobile, newspapers, magazines etc. Media try to cater the information, education and entertainment needs of the people. It is a powerful instrument that influences the mind of the people. In the present study, media refers to those means of mass communication both electronic and print media besides folk media which is operating in the study area.

Role: Role refers to the function of a person or a thing in a particular situation. In the present study, role pertains to the part taken by the media to sensitize the people with those environmental issues that concern them. The role of media as a producer/carrier/distributor of the message has been analysed.

Environment: Etymologically, the term environment refers to the surroundings. Therefore, it encompasses both physical and social surroundings of the people. But, the major meaning of the term indicates the physical or natural environmental phenomenon and process. In this context, environment refers to the natural or physical environment of the study area.

Awareness: The term awareness refers to the knowledge of the people about a fact or situation. In the present study, awareness indicates to the environmental knowledge of the people of the study area. People gain knowledge of the environmental issues that concerns them through various media operating in the study area.

Valley Districts of Manipur: Manipur is a hillock state and the valley area lies at the central portion. Administratively, the state has been divided into nine districts. The hilly terrain occupies five districts

whereas the central plain area is concentrated with four valley districts namely Imphal East District, Imphal West District, Thoubal District and Bishnupur District. In the present study, the four valley districts are chosen as the areas of study.

Journalist: According to Pocket Oxford English Dictionary “A person who writes for newspapers or magazines or prepares news or features to be broadcast on radio or television”. In the present context, journalists refer to those persons who are the members of AMWJU (All Manipur Working Journalists’ Union and listed in Manipur Diary 2015 which is published by Department of Information and Public Relations, Government of Manipur).

Common People: Generally, common people refer to the ordinary citizens of a community or nation. In this context, it refers to the ordinary people of Manipur residing in the four valley districts of Manipur.

1.8 Organization Of The Study

The present study has been categorized into the following chapters:

Chapter 1: Framework Of The Study: The first chapter covers concept and types of environment, pollution, concept and types of media, media and environment, review of literature, methodology of the study, operational definitions and organization of the study.

Chapter 2: Media And Environment: In this chapter, media and environmental coverage has been given focussed. Discussions have been made over the current trend of media coverage of environmental

issues both in India and Manipur, nature writing, environmental journalism and environmental education.

Chapter 3: Locale Of The Study: This chapter entirely discusses about the area of study. It includes general description of Manipur, environmental pollution and media in Manipur.

Chapter 4: Socio-Economic Status And Mass Media User Profile Of The Respondents(common people): The chapter covers the socio-economic status and mass media user profiles of the common people who are residing in the valley districts of Manipur. Besides, the entire chapter is based on the processing of primary data collected through purposefully developed schedule.

Chapter 5: Role Of Media In Environmental Awareness(Journalists): This chapter five is completely based on the processing of primary data being collected from the journalists through the purposefully developed schedule.

Chapter 6: Summary Of The Findings, Conclusions and Suggestions: This last chapter mainly discusses with the summary of the findings, conclusions drawn from those findings and suggestions for the line of actions.