

## Mass Media and Eco-awareness of Bangladesh

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### Abstract

Awareness edifice and dissemination plays deep-seated role from general public, local farmers, scientists, policy makers, planners and politician in the government. On the subject of the environment and development inconsistency, environmental wakefulness in the developing countries like Bangladesh is one of the current topics. Environmental awareness helps social groups and individuals to acquire familiarity and sensitivity about the total environment and its allied problems. As the general people of Bangladesh explores information of nature, environment and biodiversity through television, newspaper and radio -mass media can take part in a vital role to enlarge the apprehension about the challenges, problems, eco-friendly technologies, laws and policies and even development aspects of environment among them.

### Keywords

*Environment, awareness, mass media, development.*

### Introduction

Polluted environment endangers the human race by threatening its survival on the planet earth. Boundaries of any country cannot limit environmental problems particularly but its impact is global one. This large scale environmental degradation has caused a global concern about the conservation and protection of the earth's environment. Over the last twenty years, Bangladesh has accelerated economic growth in order to meet the demands of fast growing population with limited space and natural resources since her independence in 1971. Now, the country has attained a consistent growth in different sectors such as industrialization, infrastructure development, health care, food productivity, tourism, social safety net etc. Such sector centered development merely embraced protection of natural resources and environmentally sound management practices in the development history of the country. Historical trends of environmental movement in Bangladesh was initiated by the national commitment of the country at Stockholm Conventions in 1972 which preceded the formulation of first Water Pollution Control Ordinance in 1973 followed by Environment Pollution Control Ordinance in 1977(Reza & Dilruba, 2016). In 1985, Department of Pollution Control Ordinance was established which subsequently renamed and structured as Department of Environment (DOE). The idea of environmental protection through national efforts was first recognized and declared with the adoption of the Environmental Policy 1992. Since the beginning of such interventions very few of the Environment Policy directives and guidelines have been translated into action. Till to date, Bangladesh Environment Conservation Act (ECA) 1995 serves as the only legal basis for Environment Conservation Rules (1997) that specifically deals with conservation and improvement of research studies have noted that the implementation of such policy initiatives and legislative

measures have been hindered due to some institutional and functional limitations (Khan, and Belal 1999, Hanchett, 1997). Bangladesh has been grappled with a series of environmental deterioration by means of deforestation, destruction of wetlands and inland fisheries, surface and groundwater pollution, soil nutrient depletion, coastal salinity intrusion, natural calamities like floods, cyclones, tidal surges and tornadoes have resulted in severe socio-economic and environmental damage (MoEF,1992) by a combination of natural/anthropogenic factors. Our country is making some efforts to resolve some of these environmental issues. Efforts are being made for inculcating environmental awareness among the masses. It is a system which can make the human being mindful and knowledgeable about environment and environmental problems. No efforts so far adequate to face these challenges without identifying the underlying causes nationally and addressing them locally.

We know mass media is a prime mover of development and powerful organization. The watchdog of a society, mass media can play vital role to identify the causes and consequences of environmental problems, observe implementation ways and make people aware as it is an important instrument to erect a progressive, democratic and developed society. In order to make govt. environmental laws, policies, strategies, institutional capacities more effective towards sustainable environmental development, the current situation calls for participation of mass media. The objective of this study is to connect the role of mass media in eco-awareness or environmental awareness among the people through integration of environmental concerns into all the socio-economic development practices in Bangladesh.

### **Methodology of the Study**

It's a thought basis study. Data has been collected primarily from secondary sources. Secondary data has been collected by studying and reviewing the different journals, periodicals, articles, textbooks, newspapers and websites. Besides, the information of this paper covers informal conversation with experts (Atique Rahman, Prof. Anu Muhammad, Prof. Golam Rahman, and Prof. M M Akash) who comprehend the pros and cons of link between mass media and environmental awareness.

### **Environmental Issues and Challenges of Bangladesh**

In order to understand the salient and subtle features of the existing environmental management practices of Bangladesh, it is necessary to have an overview of some of the major environmental issues and challenges of the country.

**Water pollution:** In Bangladesh, quality of water is decreasing day by day due to the different factors. These factors include large and rapidly growing population; unplanned industrial pollution; improper use of synthetic fertilizer and pesticides in Agriculture; indiscriminate disposal of municipal, industrial and agricultural wastes enter into the inland water systems, poorly designed flood control, drainage and irrigation system, lack of adequate regulatory measures and institutional setup for proper monitoring and control etc. Recently, it has been observed that leather industries are trying to avoid the governmental decision of relocating the( Financial Express, March 21, 2017) plants from Hazaribag in Dhaka to Hemayetpur in Savar, thus ignoring legal directives of the country. At present, around 250 industries are discharging chemical pollutants into Buriganga and Sitalakka River.

**Land Encroachment and Forest Biodiversity:** Land is a scarce resource and forested areas have become vulnerable in Bangladesh. Out of 46,000 acres in Madhupur Sal forest, 7,800

acres have been given out to Commercial plantation, 25,000 acres has given into illegal possession (Reza, 2017). At hilly forest area, tobacco farming is increasing rather than the mainstream crops. About 10 national and international companies are involved in tobacco farming. In 2000, about 300 hectares land was used which has increased 4232 hectares in 2010(Reza, 2017). Now the farming area is about 10,000 hectares. On the other hand, shrimp farming has increased the rate of land encroachment more than double from 45,596 hectares in 2000 to 96,283 hectares in 2010 at Mangrove forest area (Reza, 2016). Commercial plantation and illegal possession in Sal forest and inappropriate jhumming, illegal logging, stone exploitation, brick fields, Bengali expansionism in Hill forest as well as apiculture, shrimp by catching and animals hunting in Mangrove forest area – all issues are raising a concern about conservation of forest biodiversity. In resulting, land encroachment by local elites or corporate grabbers in the name of agricultural development and industrialization, affects the totality of genetic potential, species and ecosystem stability, degrades the humus and topsoil, changes the food chain, decreases the capability of hydrological cycles and circulation of nutrients as well as the aesthetic value of forest in Bangladesh.

**Air Pollution:** For any industrialized country, incidences of air pollution are far more widespread in the urban areas than in the rural areas. In Bangladesh, the level of air pollution is highest in Dhaka followed by Chittagong and Khulna, the two other industrial cities. Incidence of air pollution is not an isolated event but is a continuous process as the sources of pollution operate throughout the year. The ambient air quality of Dhaka city with respect to CO, SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub> and PM<sub>10</sub> is given below:

Location	Pollutants concentration				
	CO (µg/m <sup>3</sup> )	NO <sub>x</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	PM <sub>10</sub> (µg/m <sup>3</sup> )	CO <sub>2</sub> (ppm)
Mohakhali	2519	376	trace	547.66	435
Farmgate	7730	752	trace	289.92	590
Mogbazar	5726	339	trace	383.53	475
Sonargaon	3435	75	trace	161.93	500
Science lab	5726	113	trace	169.64	500

(Source: Ahmed et al, 2010)

Industries	Average Noise level (dB)	Hospitals	Average (outdoor) Noise level(dB)	Traffic place	Average Noise level (dB)
1.ARM Knit Fabrics	93.73	1.Dhaka Medical College	73.57	1.Azimpur bus stand	102.22
2. SK Fashion limited	83.96	2.LabAid Hospital	68.94	2.Mohammadpur Bus stand	99.83
3.Abedin Garments	83.51	3. Popular Diagnostic Center	69.22	3.Shahbag Bus Stand	100.6
4. Agaco Fashion	87.16			4.Mohakhali Bus stations	100.5
Average (dB)	87.09	Average (dB)	70.58	Average (dB)	100.79

(Source: Reza. S, 2015)

**Noise Pollution:** The source of most outdoor noise worldwide is transportation systems, including motor vehicle noise, aircraft noise and rail noise. The average noise level of selected industries, hospitals and traffic places is respectively 87.09 dB, 70.58 dB, 100.79 dB which crosses the standard level( Reza, 2015). The noise level of traffic place was higher than hospital and traffic places because vehicle horns make more noise intensity. Present status of average level among various selected industries, hospitals and traffic places at Dhaka city.

### Outline of Environmental Policies and Frameworks of Bangladesh

The government has adopted a number of policies where environment and development issues have been addressed. Such as, Environment Policy (1992), the Forest Policy (1994), the Water Policy (1998), Energy Policy (1995). Besides these policies, the National Conservation Strategy (NCS) and especially the National Environmental Management Action Plan, 1995 (NEMAP) have been formulated to provide action plans to respond to environmental issues and promote sustainable development. The National Environment Policy (NEP), 1992 embraces fifteen different sectors including agriculture, industry, health & sanitation, energy and fuel, water development, flood control and irrigation, land, forest, wildlife and bio-diversity, fisheries and livestock, food, coastal and marine environment, transport and communication, housing and urbanization, population, education and public awareness, science, technology and research, legal framework and institutional arrangements with a view to cover overall environmental issues of the country. However, some goals, objectives and targets need to be assigned for each of these sectors. Then the necessary guideline/action plan should be stated for each sector in order to develop strategies to achieve these goals and targets in the environment policy of Bangladesh.

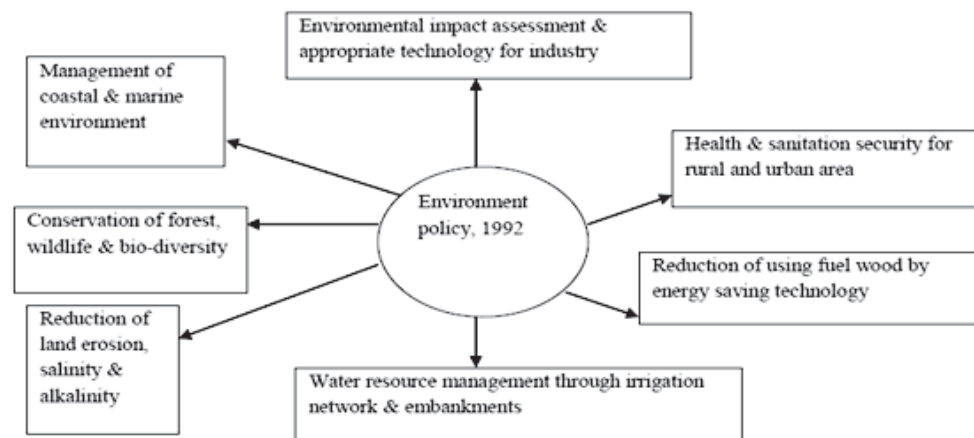


Figure 1: Different Sectors of Environment Policy, 1992 (Source: Author)

The National Forestry Policy (1994) has been formulated in the light of National Forestry Master Plan. The policy provides scope for bringing about 20% of the country's land under the forestation programs of the govt. and private sector by the year 2015 through the coordinated efforts of GO-NGOs and active participation of the people. The National Water Policy, 1999 was enacted to ensure efficient and equitable management of water resource, proper harnessing and development of surface and ground water, availability of water to all concerned and institutional capacity building for water resource management. The National

Energy Policy, 1996 provides for utilization of energy for sustainable economic growth, supply to different zones of the country, development of the indigenous energy sources and environmentally sounds sustainable energy development programs. The policy highlights the importance of protecting the environment by Environment Impact Assessment for any new energy development project. These policies call for both precautionary and cross sectorial approach to minimize impact from other sectors like industry, transportation, urbanization, flood control etc.

The Bangladesh govt. has introduced different techniques to protect the environmental elements in Bangladesh. The govt. has enacted National Environment Management Action Plan and National Biodiversity Conservation Strategy; their main aims are to maintain environmental balance; protection of the country against natural disasters and undertaken environmentally sustainable development projects.

The ecosystem approach is an essential system in Bangladesh where it integrates the management of land, water and living resources that promotes conservation and sustainable use in equitable way. Some principles are management of land, water and living resources are a matter of societal choice; management should be decentralized; ecosystem managers should consider the actual as well as appropriate spatial and temporal scales; consideration of actual and potential impacts and It needs to seek appropriate balance and integration between biodiversity conservation and environmental sustainability.

### **Mass Media and Environmental Awareness Programs of Bangladesh**

According to Wilber Straum, mass media, the great multipliers, are a nation's best hope for filling in some of its informational lags and keeping its timetables for national development. Therefore, a developing country needs to look hard and carefully at the use it is making of these tools of modern communication. There are two types of media in Bangladesh— print media and electronic media. Print media can be daily, weekly, monthly, quarterly etc. Daily papers publish nationally or from division, district or sub-district level. Electronic media means television or radio. Bangladesh Betar and Bangladesh Television are national mass media. There are about 31 satellite television channels in our country. Television channels telecast program on agriculture and environmental development or degradation, water quality, tree plantation, soil and air health management etc. Here some programs titles are given below:

<b>Channel</b>	<b>Title of program</b>
BTV	Mati o manus,
Channel I	Prokiti o jibon, ridoye mati o manus
Bangla Vision	Shamol bangla
ATN Bangla	Matir subas
ATN News	Prokiti pat
GTV	Shabuj bangla
Ekattor	Pran-prokiti
RTV	Krishi o krishti
Deepto TV	Deepto krishi
NTV	Adventure man
Massranga TV	Poribesh songbad

Bangladesh Betar telecasts many programs on environmental awareness and agriculture. Some lists of the programs are given below:

Center of Betar ( Radio)	Title of program
Dhaka	Sonali fasal, krishi samachar
Chittagong	Krishi khamar
Khulna	Chasabad
Rangpur	Khete khamare
Rajshahi	Krishi samachar
Sylhet	Shamol sylhet
Rangamati	Khamar bari
Barishal	Krishi kotha
Coxs Bazar	Sonali prantor
Thakurgaon	Kishan mati desh

Daily or weekly or monthly newspapers or magazines have started to publish different articles on environment. It helps to introduce environmental innovation for sustainability. A list of newspapers and their environment and agricultural publication are given below:

Name of Newspapers	Pages name
Daily ittefaq	Ridoye mati o manusher krishi
Daily prothom alo	Khet khamar
Daily jugantor	Krishi kotha
Daily nayadiganta	chasabad
Daily amar desh	chasbas
Daily janakantha	Bichitro bonoshodhi
Daily samakal	donodhanno
Daily ajker kagos	Jibon sutro
Daily songbad	Somvabona
Daily Star	Environment

It is known to all that, listeners like to listen more than watch from mass media as selectivity. Basically, listeners enjoy glamour world program more than development program. So, it is essential to air drama, songs while it can accelerate the agriculture and environmental development news. For example, we can remember Asian pop singer chris vilonker who just sings environmental song. His songs play a vital role of environmental conservation in Philippines. Setting assessment is essential regarding the functionalities of mass media. Mass media airs social, economic, environmental, cultural analyses and their advantages or disadvantages, which are assessment functionalities of media. It's a watchdog of a society which provides health advices, news of stock market, and advertisement of new products which influences the peoples living status. It is important to mention that, Bangladeshi mass media telecast very surface news on environmental management and agriculture which cannot touch mass people. It's urgent to inform people about the problems, challenges, different aspects of impact on environment.

## Role of Mass Media in Enhancing Eco-awareness of Bangladesh

**Radio:** Radio is an ancient media and it is the part of cultural landscape around the world. Radio can telecast different dramas and advertisements about environmental awareness to educate people. Through such programs mass people can be informed about eco-friendly technology, innovation of agricultural tools, new pattern of rice, impacts of fertilizers & pesticides, integrated pest management etc.

**Television:** This medium can aware general people by informing agricultural budget, environmental budget, water management budget, forest and wildlife management budget etc. It can educate people by broadcasting information of importance of mushroom cultivation, negative impacts of commercial cultivation, tobacco farming, aware people about environmental laws and policies, water policies, forest policies, agricultural policies as well as disaster management etc.

**Newspapers:** Through newspapers, people can access essential information. Newspapers easily create awareness among the people by asserting special features on environmental pollution, air pollution, water connects, quality and security, land encroachment, commercial cultivation induced climate change, riverbank erosion, wildlife management, food security and adulteration, eco-tourism etc.

**Film:** By using this, it is possible to aware people about the contemporary environmental issues and problems. But their functions still not enough in Bangladesh although mobile film unit under the ministry of information exhibits awareness program on environment and agriculture at rural areas in Bangladesh. Some of the environmental films are – the tree of life, rango, swimming with killer whales, star wars etc.

**Internet:** Due to the revolution of information technology, it shows as an effective mass media. Its popularity is increasing day by day. Specially, young generations are very much interested in internet. Bangladesh telecommunication regulatory commission, ministry of science & technology, ministry of information & technology can make some environment and agriculture related apps which can resolve environmental curiosity of young people of Bangladesh.

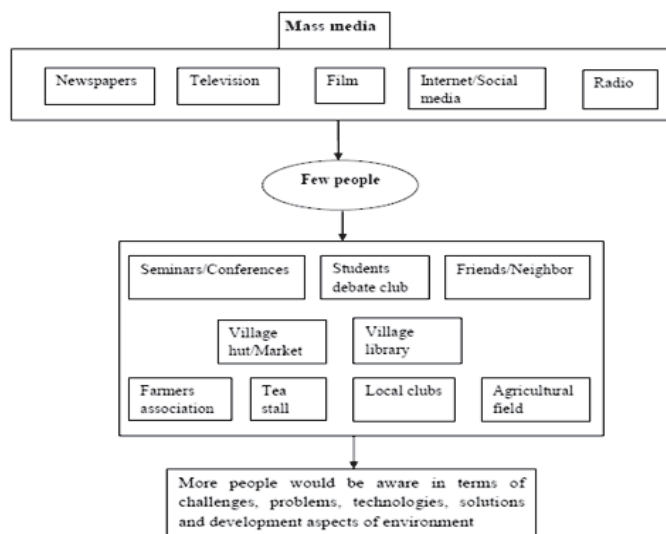


Figure 2: Environmental Awareness Dissemination Model (source: Author)



Mass media can increase wakefulness in the middle of the people by emphasizing some environmental issues, techniques, challenges which are given below:

**Importance of Bio-fertilizers:** Mass media can investigate the artificial syndicate or price hiking of chemical fertilizers. Newspapers can inform the people about the environmental and economic importance of bio-fertilizers. Such as the ingredients of bio-fertilizers can be water hyacinths, cow dung, products of wood, vegetable materials, stool of livestock's, weeds of big tree etc. Joshef Jenkins, an American farmer, in his book, "the humanure handbook" shows the importance of eco-toilet while human faces can be an useful bio-fertilizers through 3 to 6 months by using proper heat and temperature.

**Concept of Seeds, Fertilizers, Pesticides and Agricultural Instruments:** Mass media can provide information how to use pesticides, fertilizers, seeds in a proper way on land, land conservation and development. Mass media can inform people that inimical pesticides kill either beneficial or harmful pests which are essential for pollination or crop production. Every year, Rural Development Academy (RDA) and Bangladesh Academy for Rural Development (BARD) makes some new agricultural & eco-friendly instruments to save land, pests and crops. To disseminate this information among the farmers and urban, media can play key role regarding this case.

**Experiences from Developed Countries in Environmental Management:** We know the innovation of green house and the crop management in Korea. Cultivation of floating vegetables is increasing in Vietnam day by day. The common environment development philosophy in Japan is decentralization & pollution control agreement. Local government in Japan is liable on sewage collection, treatment, material recycling, disposal and sanitation. Mass media can instruct mass people in such a way that, in Bangladesh, rural people are deprived of their basic environmental services, Paurashava, Union Parishad can arrange seminar or workshop in rural area to create environmental awareness. Besides, In Bangladesh, different companies such as BEXIMCO or SQUARE limited, they can negotiate with City Corporation. It can be that different industries will follow the city corporation rules and regulations on several environment friendly practices such as, limiting disposal of accumulated wastes in nearby water body, use of less harmful chemicals, boosting production without harming public and environmental health and paying compensation to the environmentally affected people. There are about 40% Roof-top gardening in Japan. By observing that, people of Dhaka, Rajshahi, Khulna has started this gardening.

**Information on Climate Change:** Climate change is considered as one of the most serious threats to the world's environment with its potential negative aspects on human health, food security, biodiversity, water, damage to infrastructure and financial property, negatively impacts on lives and livelihoods, also affected agricultural sector (Haque, 2006). In Bangladesh, 60 percent of the country is already flood prone. Sea level rise will have a significant impact on the low-lying coastal systems and islands. Mass media can inform mass people about the climatic seasons, climatic parameters such as maximum & minimum temperature, humidity, maximum & minimum rainfall and their impacts on biodiversity and wildlife, river ecosystem, agro ecology, cropland and water sectors etc.

**Awareness on Natural Disasters:** Bangladesh has been affected by natural disaster every year due to the geo-graphical location. Floods, tropical cyclones, storm surges and draughts are likely to become more frequent and severe in our country. Recently, earthquake has



created a new dimension. Flood disrupts the local economy by destroying occupancy, livestock's, and croplands of general people. Mass media can inform mass people about the government capacities on disaster management, institutional capability for disaster recovery programs, carrying capacity of cyclone centers, water related diseases during hazards, functionalities of local government regarding relief, what step people can take before, during and after the different disasters by studying an effective disaster management cycle.

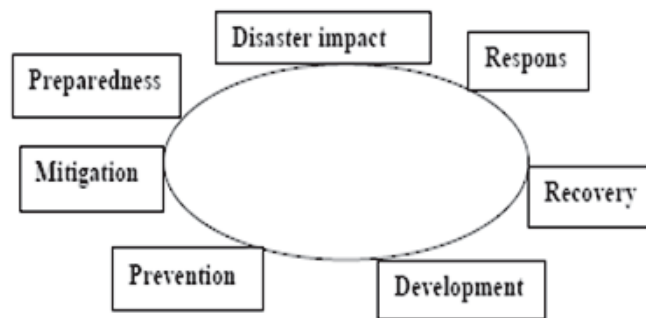


Figure 3: Disaster Management Cycle (Carter, N. 1992)

**Water Quality and Diseases:** Mass media can create awareness among mass people about the basic requirements of drinking water, effect of impurities present in water, water-borne diseases and responsible pathogens.

A range of activities will be included under each of these genres. However, in all settings serious attention will be given to the stages of the writing process: drafting, revising, editing, and presentation. Students will be expected to keep a reading/writing journal.

Water-borne diseases	pathogens
Viral diarrhoea	Rotavirus
Gastroenteritis	Enteric viruses
Poliomyelitis	Polivirus
Typhoid	Bacillus typhi
Shigellosis	Shigella spp.

(Source: Ahmed & Rahman, 2003)

**Commercial Cultivation in Forest:** Forest areas are not out of intensive cultivation because of land encroachment and growing population rather forest areas are going under the suppression of commercial cultivation because at Sal forest, native plant species like kumbi, koroï, banza, sheura, jalpai, amloki, bohera are being replaced by alien species like rubber, acacia, eucalyptus, pine apple, teak etc. Similarly at Hill forest, native plant species like telsur, garjan, koroï, chapalish, dhundal are being replaced by tobacco, sugarcane, cotton, turmeric, groundnut, maize, teak etc (Reza. S, 2016). Mass media can inform government officials and mass people that, through the supreme power of national, international companies and contracting firms, all alien species are disrupting the food chain, making forest soil more toxic, changing the occupancy of wild animals, degrading the genetic potentials that effects on the stability of the present status merely the forest ecosystem at both Sal and Hill forest. Newspapers can publish special feature to aware people.

## Conclusion

Environmental and social inclusion are impossible without economic development, on the other hand, economic development will not be sustainable without environmental consideration. We people are now enjoying the taste of lower middle income and by 2021 the government of Bangladesh envisaged to become middle income country. In this context, we need a creative and industrial workforce as well as proper and effective integrated approach to address economic growth and upcoming environment challenges together. Mass media can be a significant part of collective approach to inform government and aware mass people in terms of our technical capacity of environmental institution, environmental justice, climate change, land & river encroachment, alien species at forest, commercial cultivation induced food insecurity, exploration and management our natural resources with minimum environmental footprints at local, regional and national level. Environmental awareness through mass media will provide accepted wisdom for 21st Century workforce. We are passing on complicated environmental problems regarding the environment and development conflict. Mass media can endow with a solid understanding of these problems and the basic gear to overcome environment & development conflict through creating environmental awareness among the present and future generation. We believe environmentally literate workforce will make Bangladesh, environmentally sustainable, economically viable and socially acceptable to face real-world challenges.

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