# Environmental Movement in Bangladesh: A New Dimension of Environment

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**Abstract:** Movement for the conservation and protection of the environment has gained widespread popularity in Bangladesh. The people of Bangladesh are experiencing the catastrophic consequences of environmental degradation at a regular basis, and this has mobilized a degree of mass support for the movement. Within this atmosphere of growing concerns about environmental degradation and resultant impacts on people's life and livelihood, environmental movements have slowly but persistently taking roots in Bangladesh. Some relatively proactive and visible areas of environmental movement in this country include the following: public protests against river encroachment, destruction of flora and fauna, and various other forms of pollution; campaign for banning the use of polythene and two-stroke motor engines; inappropriate flood and draining planning; eco-friendly agriculture; and revisions, reforms and formulations of relevant policies and regulatory instruments. This study is conceived and conducted in the above backdrop. Through an extensive review of literatures, this article attempts to shed light on the environmental movement of Bangladesh in the last thirty years. The paper attempts to examine the nature and operational features of the mainstream environmental movement and tries to focus its contribution to the environmental development of Bangladesh. The paper also alludes that environmental movement has a great potential to serve as a tool for voicing people's concerns towards improving the condition of environment in Bangladesh.

**Key Words:** *Environment, Movement, Advocacy Groups, Administrative Action, Policy, Law* 

### 1. Introduction

Evidently, Non-governmental organizations (NGOs), civil society, the public media are well concerned with environmental movement and they act as advocacy groups. In Bangladesh, the advocacy groups are working for establishing human rights and for the sake of justice and equity on environment. BELA (Bangladesh Environment Lawyers Association), Proshika, Nejera Kori, BAPA (Bangladesh Paribesh Andolon), UBINIG, FEJB (Forum of Environment Journalists of Bangladesh), SEHD (Society for Environment and Human Development), CFSD (Center for Sustainable Development), BCAS (Bangladesh Center for Advanced Studies), BLAST (Bangladesh Legal aid and Service Trust), ESDO(Environment and Social Development Organization), Waste Concern, Uttaran, People's Voice, Prism, Civil society and media(print and electronic) are very vocal against all activities which degrade environment including river encroachment and pollution, filling of water bodies, land grabbing, cutting hills and forest exhaustion through their advocacy campaign. They play a unique role in this environmental movement. They try to influence public opinion and societal attitudes to bring about positive changes in environmental policies of government, community and institution. Thus, movement leads to positive change to specific policy or program agenda through the identification of issues, doing research and publication, taking of a position, mobilization of the people, application of strategies and influence the policy making process on behalf of the effected people.

### 1.1 The "Save Buriganga" Movement

"Save Buriganga" is an ongoing campaign. The campaign has gradually become a popular countrywide slogan as an initiative to save the river from encroachment. It is perceived that the Buriganga is likely to be physically and biologically dead with unlimited water pollution and become a moribund. A survey conducted by DoE (Department of Environment) in 1998 showed that at least 244 establishments were built on the riverbank. The owners of these establishments include political leaders, Members of Parliament, armed forces personnel and businessman (Salam, 1998). According to DoE, each day 15,800 cubic liters of wastes from Hazaribagh tannery factories, 3,500 cubic liters of wastes from industrial areas and 2,700 cubic liters of wastes from other sources are being thrown into the Buriganga (Salam, 1998). Hazaribagh is the fifth most polluted area in the world.<sup>1</sup> At present, over 22,000 cubic meters of raw and liquid wastes from Hazaribagh tannery factories are being thrown in to the river.<sup>2</sup>

Encroachment and pollution of the Buriganga are likely to cause serious environmental threats, which have turned into a veritable cesspool of pollution. The pollution has reached such a state that the river water is now more or less pitch black. Thousands of tons of toxic waste from tanneries and other industries together with untreated sewage intrude into the Buriganga every day. The river has lost much of its volume in recent years. When the DoE identified and tried to demolish the encroachers, the illegal encroachers gave statements to the newspaper and claimed that they are the real owners of the establishments. To recover from such a situation, BAPA started its movement titled "Save Buriganga" on 5<sup>th</sup> August, 2000. Twenty-five organizations and educational institutions and hundreds of enthusiastic individuals attended the meeting on 18th June, 2000. The people near Buriganga supported the movement. They demanded that the river should be saved. BELA served a legal notice (4098/1999) to different government agencies for their inaction in protecting the Buriganga from illegal encroachment and pollution. PARASH, CEN (Coalition of Environmental NGOs), BCAS, FEJB, BLAST, BELA and the Daily Star jointly organized a seminar held at Dhaka on 31<sup>st</sup> January, 1999. The discussants urged the government to save the Buriganga. The news got coverage in all national dailies and TV channels (Mahjabeen, 2000). The print media including The Daily Bhorer Kagoj, The Daily Star, The Daily Protham Alo, and Ittefaq played a vital role in raising awareness about river

<sup>&</sup>lt;sup>1</sup> The Daily Prothom Alo, 17-02-14

<sup>&</sup>lt;sup>2</sup> The Daily Star, 05-06-13

as well as the environment protection. BAPA, Nagorik Uddog, Jatiya Nadi Rakkha Andolon and Save the Environment have taken a leading role in protecting the river from pollution. Amongst them, BAPA was the main organization that organized rallies, human chains, workshops and seminars. It also conducted a task force report including some recommendations in January, 2003. The Bangladesh Inland Water Transport Authority (BIWTA) identified illegal structures built on both sides of Buriganga River and demolished about a hundred of them in May 2001. But the demolition operation was halted allegedly under influence of illegal occupants who are influential and well-linked with politics (Gain, 1998:199). As public opinion grew against the encroachment of the river, the government immediately decided to demolish the illegal encroachment by launching the "Save Buriganga".

### 1.2 Anti-FAP - 20 Movement

After the devastating floods of 1987 and 1988, the government of Bangladesh realized that it needs to undertake a sustainable and long-term comprehensive review of flood policy and flood protection initiatives. Donor countries and multilateral agencies agreed with the formulation of the largest water related development projects in Bangladesh. Flood Action Plan (FAP) was brought about to abate the effect of floods and disaster in Bangladesh and to make progress gradually in water resource. The FAP studies were conducted by foreign and domestic expert professionals and consultants. The FAP comprised phased programs of flood control activities, which were supported by surveys, special studies and pilot project. It had 26 components. Like many other projects, the FAP - 20 got more attention from media as it raised controversies for its environmental aspect. The project aimed at testing the scheme of controlling water inflow and outflow through a series of watertight compartments in Tangail area 1999). The FAP-20 was a project (Mahfuzullah, under the compartmentalization pilot project which had profoundly affected the entire area.

Without taking into consideration the long-term socio-economic and environmental consequence, the main emphasis of the FAP was building huge infrastructure for controlling floods. People's participation was not active in that project. The process of public consultation was cut short by imposing project cycles imperatives (Mahfuzullah, 1999). A movement emerged against the FAP-20 that was jointly organized by the local people and local and national NGOs that included Development Association of Tangail (DAT), Unnavan Shohojogi Team (UST) and its local partner organization Gram Unnayan Parishad, Nejera Kori, UBINIG, ADAB (The Association of Development Agencies in Bangladesh) and CEN in Tangail. Local NGOs and women groups brought out processions and held demonstration against the project (Mahfuzullah, 1999). The first anti-FAP movement held a demonstration and submitted a memorandum to the deputy commissioner of Tangail in May, 1993. Another demonstration was held in May and November, 1995. NGOs and civil society groups opposed project through conducting research anti-environment the and consultation. BCAS published 'Rivers of Life', which influenced public opinion and policy dialogues significantly. The NGOs carried out a major advocacy campaign against the FAP- 20 on 27 November, 1995 through CEN and ADAB. They organized a peoples conference in which they demanded that all FAP related construction to be immediately stopped, all FAP affected people be compensated, an independent evaluation and a full audit be done, and an integrated water management program be designed (Gain, 1998). The conference was attended by the World Bank, UNDP, CPP consultants, university teachers, water experts, journalists, representatives of NGOs and people from the affected areas of the FAP projects. The Media played a momentous role in highlighting the peoples' concern of the FAP. Many meeting and conference organized by NGOs at national and international level was held to mobilize and demonstrate the FAP-20 to the opposition. The European Parliament recommended a moratorium on construction pending a full and independent review of the FAP (Mahfuzullah, 1999). BELA served a legal notice to Water Resource Ministry, Land Ministry and Bangladesh Water Development Board. In 1994 and 1995, BELA filed petition (WP NO. 24/1995, WP NO. 998/94

and 157/1994) in the High Court on behalf of the people of Tangail. The petition was dismissed by the court on the ground that BELA had no legal standing to file a case as none of the member of BELA had directly been affected by the FAP - 20. BELA was able to convince the Appellate division when the case was taken to division. It judged that BELA had sufficient interest to move a writ petition in the public interest though not personally aggrieved. In this process, legal basis for public interest litigation (PIL) was established. After long-term campaign and the result of court, UNDP withdrew their technical assistance to FAP. FAP related construction was finally stopped.

### **1.3 Movement for Banning Polythene**

In Bangladesh, the use of polythene bag started in 1982. In Bangladesh, the use of polythene bag started in 1982.<sup>3</sup> City dwellers use 6 million to 7.5 million polythenes every day.<sup>4</sup> Of this, only 20 per cent are collected and recycled. Every year 180 to 200 million polybags are abandoned. There are 1000 polythene factories in Bangladesh.<sup>5</sup> Among them, there are about 300 industries in Dhaka city. City dwellers use about six million polythenes every day, of which only 20 percent are collected and recycled. Polythene causes health hazards and affects soil quality and agriculture. The research wing of Philippines based International Rice Research Institute (IRRI) said in a bulletin that polythene is harmful to soil. When it comes to contact with soil, it kills a kind of bacteria, which is helpful for land fertility. The soil fertility is gradually decreasing due to the adverse affect of polythene. It also possesses a serious threat for human when burnt in open air by creating poisonous gas that causes lungs cancer. Polythene also creates water logging problem, which played a vital role during the floods of 1998. Korean institute of Health Research warned that workers at polythene factories are more exposed to cancer, skin disease and other

<sup>&</sup>lt;sup>3</sup> A study of ESDO, 2001

<sup>&</sup>lt;sup>4</sup> Bangladesh: Disaster Report, 2001

<sup>&</sup>lt;sup>5</sup> the Daily Jai Jai Din, 02-09-13

fatal health problems. ESDO is one pioneering organization that has been conducting campaign against polythene since 1989. It conducted studies to make people aware of environmental hazards related to the use of polythene. It organized several meetings and workshops. A workshop jointly organized by CFSD and ESDO on 25 September, 1994, stressed the need for creating awareness against the use of polybags. The print media, especially The Daily Star, The Sambad, and the Janakantha, motivated people through articles and writings and created awareness against polythene.

According to CFSD, 83.9 percent people were aware of the environmental hazards of poly bags. It conducted study of opinion poll on polythene. Open discussion was held in 1993 and a seminar in 1998, which was organized by ESDO. ESDO organized several meetings, seminars and tried to influence the government and policy makers to ban the production and use of poly bags. FEJB played a vibrant role in favor of its movement. Their well-time writing has made expedite movement. They also met Shajahan Siraj, the then Minister to Environment and Forestry, and provided several suggestions. Many professional organizations like Chittagong Chamber of Commerce and Industry (CCCI), Sabujmati Shasthay Sheba Kendra of Sabujbagh (Dhaka), European Union, and Rover scouts expressed concern about the huge production and uncontrolled use of poly bags. They also demanded a ban on the use of poly bags. Friends of the Earth (Bangladesh) and Environment Council in separate statement expressed their deep concern about the deferred decision of the government on banning production of poly bags. The Government decided to ban poly bags, but the cabinet meeting deferred the decision due to internal and external pressure. The government was compelled to defer the decision. Though the announcement of ban of poly bags was made in a short time period, its implementation took ample time in practice. ESDO, CFSD, FEJB and 56 other organizations and professional bodies made a move to impose ban on the use of the poly bags.

Finally, the ban on poly bags seemed firmly on course. The government decided to ban polythene from January 1, 2002.<sup>6</sup>

### 1.4 Movement for Banning "Dirty Dozen"

There is no doubt that the green revolution pesticides are generally used to increase the power of crop production in Bangladesh. Throughout the world, pesticides are banned. However, they are still used in Bangladesh. Parathion, BHC, Endrin, DDT, Aldrin, Lindane, Heptachlor, Chlordane, Dieldrin, Paraquat and Toxaphene are banned for agriculture and they are listed as Dirty Dozen. Excessive use of these pesticides can bring about several risks to the people as well as the environment. As the pesticides are used, 80 percent are applied for pest control in rice fields, 7 percent for vegetables, 2 percent for tea, and 11 percent for others (Islam, 2000). The rate of pesticides consumption in Bangladesh has increased gradually. The rate of use in Bangladesh is 0.03 kg per *hectare* compared to 0.3 kg in India, 0.4 kg in Sri Lanka and 0.8 kg in Indonesia (Karim, 2007). On the other hand, the rate of DDT use in Bangladesh is at an alarming rate, which is higher than the UK. Some pesticides can cause cancer, birth defects and behavioral change as these pesticides spread in crops, vegetables and dry fish. Many research findings show that 30 percent death of insects and fish eating birds are due to pesticide poisoning (Halim and Rahman, 2001). The pesticides used in Bangladesh are not analyzed for parity and quality (Gregows, 1998). Pesticide Act 1980, the Agricultural Pesticides Ordinance 1983 and the Pesticides Rules 1985 were designed to regulate the importation, formulation and distribution in order to prevent immediate and long term harm to the people, but neither the customs department nor Bangladesh Bureau of Statistics (BBS) had trained manpower to identify poisonous chemical which are often imported from foreign countries. They are not technically competent to do this job.

<sup>&</sup>lt;sup>6</sup> <u>http://www.sdnbd.org/sdi/news/pages/banned%20use%20of%20polythene.htm</u> Retrieved on 26-09-04

Besides, there is no restriction on the number of trade numbers and trade names coupled with serious lacking of monitoring systems. A massive media movement was launched against pesticides. The movement has created awareness among the people, the government and NGOs.

In 1993, DoE did the first study on pesticide use in Bangladesh. It conducted a study on surface water systems and foodstuff. The adverse effects of chemical pesticides have been Proshika's momentous concern for a long time. In 1993, Proshika also conducted a study on the situation of pesticides. Proshika mobilized the resource person and interest group and helped them to arrange an affective movement. To strengthen the movement, a coalition was comprised by CEN, CUP, BELA and Proshika. Several meetings, opinion sharing sessions, press-briefings, and workshops were organized to further facilitate the motion of the movement. They submitted memorandum to the Ministry of Heath, Ministry of Agriculture, Ministry of Food, Ministry of Environment and Forestry and the Ministry of Commerce in 1995. In the memorandum, they demanded banning the import of the dirty dozen, and also ban the sale and use of the pesticides. After long advocacy campaign, the Government canceled the registration of 11 different pesticides of dirty dozen.

### 1.5 Banning of Two - Stroke Engine Movement

In the early 90s, air pollution situation in Dhaka was most alarming; the main reason being vehicular emission. Two-stroke engine driven vehicles (auto-rickshaw, tempo and mini-truck) has been unabatedly polluting the city's air. According to the Bangladesh Road Transport Authority (BRTA), the two-stroke engine emits 13 times more smoke than a four-stroke engine of the same size. The two-stroke petrol engines are less fuel efficient. They release about 30 - 100 times more amount of unburned hydrocarbon and more carbon monoxide than the four-stroke engine, as they do not have proper lubricating system. Though DoE has set up laboratories to detect the degree of air pollution, it cannot perform duties properly. Apart from this, DoE has not yet succeeded in checking vehicles

even at one single point near the Parliament building. DoE has a program of organizing mobile courts every month in co-operation with the BRTA, Dhaka Metropolitan Police (DMP) and Dhaka Metropolitan Magistracy (DMM). Due to the lack of co-ordination among these institutes, it does not function in practice.

Air pollution causes irritation, headache, fatigue, asthma, heart disease, high blood pressure and cancer. The media played a vital role in building awareness about the air pollution among the people and the policy markers. In April 1998, DoE and the World Bank sponsored a workshop on vehicular air pollution control in Dhaka. Several recommendations arose from the workshop such as banning two-stroke engine vehicles within five years and also banning new license on two-stroke engines. The International Development Association (IDA), the World Bank's concessionary leading arm, had announced the approval of US \$177 million credit to help Bangladesh solve its air pollution in Dhaka. The World Bank helped to take an initiative to introduce big buses in the city and withdrew vehicles with two-stroke engines. The Premium Bus Services were an outcome of this initiative. The FEJB organized a two-day global workshop of Environmental Journalists on "Curbing Air Pollution: Role of the Media" in Dhaka on March 2000, stressing for creating awareness and taking action-oriented policies to curb air pollution. The global workshop gave an opportunity to discuss the urban air pollution of Asia. BELA and BLAST filed a writ petition against two-stroke engine vehicles. BELA served a legal notice to Rupali Bank for giving loan sanction to import two-stroke engine vehicles from India. BELA also mentioned that the Bank has violated the government's decision about environment protection. Following High Court directions given in writ petitions 300 of 1995 and 1694 of 2000, filed by BELA and BLAST, the government finally implemented ban on the two-stroke engines on the city roads after 31 December, 2002.

### 1.6 Movement for Protect the Osmani Uddyan

Open spaces are known to be the lung of a city (Nishat et al., 2001). The capital has already been transformed into a suffocating mega-city. The open spaces are considered as the only air refinery of the city. Despite the objection of the MoEF (Ministry of Environment and Forest), the government took a decision of cutting down 11,000 trees in the Osmani Uddyan for building an international conference center for hosting the NAM summit in 2001. The print media mainly The Daily Star, The Daily Sambad, The Daily Inkilab and The Daily Prothom Alo took an initiative to create awareness among the people, civil society and the government. A committee was formed in the first week of May 1999, named "Movement to protect 11,000 trees" at Osmani Uddayan. Professor Sirajul Islam Chowdhury was its convener. The committee firstly mobilized people with a leaflet in which the committee urged to move to resist the attempt to fell the trees. They stressed to come forward to protest the decision and arranged a rally on 18 May, 1999. Several hundred people including academicians, newspaper editors. politicians. writers, doctors, environmentalists and school children attended the rally. Earlier, the committee addressed a press conference to urge people to join their program. The members of the committee organized a human chain program where hundreds of people carried banners and posters unit with slogans urging people for protecting the Uddyan. The conveners threatened to launch a greater movement if the government failed to change its decisions (Mahfuzullah, 1999). They also took some initiatives such as signature campaign, exchange of opinion with citizens, road march, cultural program that clarified their position in the movement and made their movement strong. At the same time a public opinion survey conducted by CFSD showed that 90% of the city dwellers were against the decision of cutting the trees at Osmani Uddvan. The Sylhet Bibhag Unnavan Parishad brought out a procession in the city. Ten student organizations including Bangladesh Chatra Union and Bangladesh Chatra Samaj among others, expressed their deep dissatisfaction in a statement. This was a remarkable event where the environmental NGOs did not come forward to protest the government's decision first.Poet Shamsur Rahman, late Professor Muzaffar Ahmed, Professor Nazrul Islam, Khushi Kabir of

Nijera Kori, Professor Abdullah Abu Sayed of Bishwa Sahitya Kendra, Dr. Atiq Rahman and Dr. Saleemul Haq of BCAS, Syeda Rizwana Hasan of BELA, Quamrul Islam Chowdhury, and Baktiar Rana and Shehabuddin Ahmed of FEJB meet the then minister for Public Works Mosharrf Hossain at his office. They suggested that the center would be constructed in another site. The UK based Bangladeshis formed a committee for urging the government to change its decision about the Uddyan. They mobilized Green Peace International and Friends of Earth for using their influence over the government to save the trees. Besides, the citizen committee organized meeting with citizens of the city on 18 June, 1999, and another meeting of a cross-section of people at National Press Club on 27 July, 1999. From these initiatives, they demanded the government should respect the public demand and they would take the issue to donor agencies to influence the government to give up the plan. Environment conscious citizens of Dhaka rallied and moved the movement to strengthen and put a pressure on the Government. The Government finally bowed down to the public demand. The government was compelled to decide to spare the Osmani Uddyan.

### 1.7 Movement for Promoting Eco-friendly Agriculture

Extensive and inappropriate use of chemical fertilizers and pesticides are the main reason behind decreased fertility. The functional capacities of the soil have deteriorated day after day. Agricultural scientists have blamed unplanned use of agrochemicals (fertilizers and pesticides) as one of the principal reasons behind loss of soil fertility in the country.<sup>7</sup> Since 1960, HYV (High Yielding Varieties) methods have been introduced in Bangladesh, and this has lead to increased production. However, more intensification of cropping with HYV exploits soil nutrients and diminishes the crop production. Increased use of fertilizer, water, pesticide and other cash inputs have increased the cost of production and farmers are

<sup>&</sup>lt;sup>7</sup> The Daily Ittefaq, 06-04-99, the Financial Express 06-01-99

gradually dependent on market. In the vicious circle of HYV, the farmers are losing money, soil fertility and also the rate of high production. The print media, especially The Daily Ittefaq, The Daily Janakantha, The Daily Star and The Financial Express, played a significant role in creating awareness among the common people. Some NGOs of Bangladesh criticized the adoption of green revolution policy with detrimental effects on the soil fertility and water resources. They have been at the forefront of promoting sustainable ecological agriculture practices. It is characterized by high productivity, environmentally friendliness, less investment and farmer's self reliance. The NGOs undertook a number of pilot projects with local farmers to develop sustainable agricultural practices. They used organic fertilizer, compost, bio-fertilizers and bio-pesticides and they collected data from the project. The technical taskforce on Agriculture (1997), that recommended production of 25 million metric tons of gains by 2002, also observed that the soil in Bangladesh was getting degraded over time due to adoption of HYV technology, increase in the rice-rice rotation cropping intensity, removal of crop residues and animal excreta to meet the pressing storage of fuel, imbalanced use of inorganic fertilizer, decline in the use of organic manure and bad farm management (Mahfuzullah, 2001). UBINIG started to work on ecological agriculture practice from 1986. In 1990, it conducted a study on chemical agriculture. UBINIG led the new agricultural movement or Nayakrishi Andolon which emerged as a protest of the farmers against chemical agriculture practices. UBINIG claimed that by mid 1997 there were almost 20,000 farmers directly involved in the Nayakrishi Andolon in Tangail, Sherpur, Cox's Bazar, Noakhali and Pabna (Gain, 1998). Proshika started this alternative strategy in 1976. It undertook a long-term action research program to develop the ecological agriculture practice. Soil of ecological farms and conventional farms in different areas of Bangladesh had been compared by a study jointly conducted by the Natural Resource Institute (NRI), the Institute of Arable Crops and Research (IACR) and the Department of Soil Science, University of Dhaka.

Proshika setup a demonstration farm and provided formal and non-formal training and technical and financial support to its group and staff members as well as to other NGOs. Proshika claimed that 98,000 rural poor, both men and women, are practicing ecological agriculture (Ahmed, 1998). Proshika conducted workshop and seminars to develop ecological agriculture practice by using communication media (research, bulletins and leaflets) at different levels of newspapers. A NGO network was formed and they started lobbying with the administration. They discussed with the then Agricultural Minister and the secretary about the ecological agriculture practice. They were able to convince the administration that chemical agriculture practices are harmful to people, environment and country. They presented a study of comparative analysis on chemical and ecological agriculture practices. The Ministry of Agriculture accepted the concept of ecological practice as a result of these movements.

# **1.8 Movement for the Adverse Effects of Khulna – Jessore Drainage Rehabilitation Project (KJDRP)**

The KJDRP was regularly in the local Daily newspapers headlines for severe water logging. To combat the water logging problem created by wrong structural water management measures, the local people tried different ways, but their efforts failed. Many people were compelled to migrate to different places. The entire area in the south-west of the Khulna – Jessore highway involving 100,600 hectares in 8 *thanas*, which is an inhabitation of one million people, was affected due to water logging. The government had paid attention to the problem. Funded by the ADB (Asian Development bank), the government of Bangladesh took an initiative to get rid of the water logging problem and the Department of Agriculture Extension, Department of Fisheries and Bangladesh Water Development Board implemented the KJDRP project.

The project that was supposed to aim at an integrated attack on the bad water has already faced potential criticism mainly because it recommended for further embankments and structural solution, according to sources (Nandy and Moral, 1998). Uttaran, a Sathkhira based NGO, and Proshika carried out a study on the project separately. Critics argued that the KJDRP could not solve the problems because the attempt to solve the problem was through structural approach. The KJDRP had been proposed by local NGOs, ADAB, and CEN along with Proshika. They found that the project was prepared without considering local people. The feasibility study did not consider any aspects of implementation area and any assessment of its possible consequences. It was perceived that the entire environment and geographic information system for EIA and Social Impact Assessment (SIA) were not considered. The NGOs had sent a memorandum to the ADB in Manila, where the NGOs demanded that the project should be redesigned in consultation with them and the local people, and a full report should be made publicly for further implementation. The ADB took it seriously and decided to raise it as an advocacy issue in the 30<sup>th</sup> annual general meeting of ADB in Japan. ADB postponed funding until EIA and SIA of the project was done. As an impact of the memorandum and consultation, ADB had paid attention to the adverse effects of the KJDRP project raised by the NGOs.

# 2. Assessment of the Nature and Operational Features of the Mainstream Environmental Movement

The environmental issues could not attract proper attention of the policy makers of Bangladesh till now. With the passage of time, academics, politicians, individual groups, NGOs and the government officials are showing growing interest in environment. The civil society, NGOs, professional organizations, community based organization, journalists and media are devoted to protect environment and have launched campaign to create awareness regarding environmental degradation among the policy makers and the public. They propagate and disseminate the environmental movement. These movements can bring changes in society, environment and make a difference between the past and the present. From the above analysis of the mainstream movement, sets of characteristics of environmental movements have been identified:

2.1 Operational characteristics

2.2 Philosophical characteristics

**2.1** *Operational characteristics* – The nature of environmental movement depends on the operational features. It includes movement's method, structure, and procedure. Movements for environment have taken different forms at different environment. There are some efforts to note the operational characteristics, on which advocacy should be based. These are:

**2.1.1 People–centered movement** - It consists of public welfare, interests, values, rights and beliefs. These movements have allowed the voiceless access to administration and formal justice system. It has truly sensitized the people-centered advocacy in Bangladesh.

**2.1.2 Democracy based movement** - It strengthens democratic process and uses democratic ways like lobbying, public meeting, demonstration, collective bargaining, writing in newspaper, talk-show, panel discussion, placing memorandum, rally and legal action. It does not take any destructive action; if it takes then it will not be an advocacy campaign.<sup>8</sup>

**2.1.3 A Way of social change -** In the context of Bangladesh, it is well established that the contribution of NGOs' advocacy in environmental movement have new dimension to seek way of social change. For example, people are aware about environment, they raise their voice for saving the Buriganga, banning polythene and two stroke engines, promoting ecological agriculture. To analyze the advocacy initiatives, we have seen that all movements have added new dimensions of social change to the

<sup>&</sup>lt;sup>8</sup> See more in Dahar (2007)

people's life and their successful initiatives make them able to influence national policies.

**2.1.4 NGO-based movement** - From the above analysis of several advocacy campaigns in Bangladesh, it is found that all advocacy campaigns have been undertaken by the NGOs. BELA, BRAC, Proshika, UBINIG, CFSD, BAPA, BCAS, FEJB, POROSH, Care, CARITAS, Prodipan, EDA and CEN (Coalition of Environmental NGOs) have been making valuable contribution to environmental conservation. There is noted presence and difference of the involvement of the environmental and non-environmental NGOs in these campaigns.

**2.1.5 Research-oriented movement** - Though there is absence of need oriented coordinated research, campaign for banning the Dirty Dozen, campaign for banning Polythene, Anti FAP-20 movement, and Save the Buriganga-all of these campaigns have been mobilized and organized with proper study. UBINIG and Proshika conducted a study on current pesticides situation. ESDO led a comprehensive study on the adverse effect of polythene. BAPA conducted research on 'Save the Buriganga River'.

**2.1.6 Dhaka-based movement** - Many movements like campaign to protect the Osmani Uddayan, campaign for banning polythene, campaign for banning two-stroke engine, Save Buriganga river – all were Dhaka based movements. The issues were raised by the advocacy groups form the capital city to draw attention of the government, media and the civil society easily. In addition, these campaigns got preference from both the electronic and print media.

**2.1.7 Non-partisan character**- It is found that advocacy groups are not involved with party politics; they harmonize with public interest, values and beliefs. A notable aspect of Bangladesh environment movement is its non-partisan character.

**2.1.8 Ascendancy of media** - The media, specifically, the print and electronic media have played strong role in creating awareness among people, the policy makers, and the civil society. Media's initiative have

already brought about some encouraging positive results such as campaign against using polythene bags, the creation of Ministry of Forestry and Environment, stopping fish culture in WASA's polluted lagoon, pollution free air, banning two-stroke engine vehicles, transferring the Hazaribagh tannery, save the Osmani Uddayan and save Uttara – Baridhara – Gulshan lakes. FEJB was the first organization who detected that Bangladesh faced a severe arsenic contamination of ground water in 61 out of its 64 districts. Almost all movements were able to get the support of the media. Several newspapers like Daily Star, Independent, *Ittefaq, Protham Alo* and *Bhorer kagoj* are playing an important role in creating awareness about environmental degradation through their written features.

**2.1.9 Application of legal method -** From 1994, application of legal method has been used in protecting the environment. BELA is the first organization in Bangladesh to provide legal-assistance and services to individuals and organization involved in protecting the environment. Public interest litigation (PIL)<sup>9</sup> was established in Bangladesh in 1995. BELA and BLAST filed a writ petition against vehicles with two-stroke engine, to transfer the Hazaribagh tannery to a suitable location, against Uttara- Gulshan-Baridhara lake fill-up and against illegal encroachment on Buriganga River.

**2.1.10 Participation by non-resident Bangladeshis (NRB)** -The non-resident Bangladeshis organized themselves as Bangladesh Environment Network (BEN). BEN is working with BAPA. NRB not only helps in the economic development but also in environmental movements.

<sup>&</sup>lt;sup>9</sup> It is commonly accepted that the communities depending on natural resources are, by and large, powerless and cannot gain access to the court of law or any other legal avenue. Advocacy during the last one and a half decades has taken the form of public interest litigation by persons, belonging to the middle class, approaching courts on behalf of the voiceless. See more in Joshi (eds.), 1997.

**2.1.11 Organized and continuing activities -** All activities are organized and have sequence of momentous to conduct a successful movement. Every movement is continuing an activity which leads a strong and effective advocacy campaign. Firstly, NGOs and other professional organization conduct a study on a specific issue. And then they try to mobilize the affected people. If needed, they make network with other NGOs, professional organizations, civil society and media. Then they try to influence the policy makers.

**2.1.12 Active and creative movement strategies** – There are different means used in the environmental movements, for example, meeting, workshops, seminars, conference, dialogues with various stakeholders and citizens, media (both electronic and print media), rally, agitation program or sit in program, leaflets, posters, legal actions etc

2.1.13 Issue-based movements - Many movements are brought about on specific issues. For example, campaign to protect the Osmani Uddyan proved successful in persuading the government to change its decision. Campaign for FAP-20 and another movement for banning polythene – all are issue -based movements that served as another forerunner of the environmental movement. There were specific issue-based movements outside Dhaka as well. For example, campaign against the adverse effects of KJDPR, save Cox's Bazar, and movement against adverse environmental consequence of shrimp cultivation in Khulna district. The objectives of these movements were very clear and well defined. The campaign to protect the Osmani Uddyan emphasized that if a conference hall is built in the Uddayan, the citizens would lose recreation facilities and open spaces and pollution free air. Camping for Anti-FAP-20 also had a clear objective of protecting the people of Tangail form adverse effects of embankments. The movement objective of banning polythene was that polythene is seriously harmful to environment and causes water-logging problem to rivers, lake and drain and creates soil and water pollution.

2.1.14 Participation of mass people - Participation of people in environment movement is comparatively new in Bangladesh. Though

people's apathy in participation is a problem for voluntary civic groups, people's participation in campaign to protect the Osmani Uddayan, campaign for FAP-20 and Save Buriganga were encouraging. In the case of campaign to protect the Osmani Uddayan, there was an involvement of a cross-section of people, including professors, journalists, students, youth, NGOs, political leaders, media, authors from home and aboard, poet and environment conscious non-resident Bangladeshis. In case of FAP-20, many local and national NGOs and local people were against the project. For Save Buriganga, BAPA was working for the movement. It sustained its activities by involving a large number of professionals and young volunteers.

**2.1.15 Involvement of Donor and IFAs -** We have seen involvement of donors, development partners and IFAs in the environmental movements. In the campaign for the banning of two-stroke engine, World Bank was attached. In the campaign of arsenic contamination, UNDP and UNICEF were actively involved in mitigating the problem. Particularly, their funding assistances have accelerated the campaign.

**2.2** *Philosophical Characteristics* – Philosophical characteristics includes the kind of people involved, their ideology and skills, the role of NGOs and the theoretical aspect of advocacy campaigns. All are discussed from a philosophical perspective.

**2.2.1 Ideology of the actors -** The nature of advocacy campaigns depends on the ideology of actors. Their understanding of the environment indicates their ideology. The two schools of thought analyze the mind-set of environmentalists. The nature centered environmentalists view the rural poor as destroyers of nature and even try to protect forests from them. The people-centered environmentalists acknowledge that the rural poor do not have any hostile attitude with nature. Rather, they protect the environment for their survival.

In Bangladesh most of the environmental campaigns are accomplished by advocacy groups. They forcefully assert that urban, commercial and industrial interests are responsible for the depletion of forest resources and not poor people, who are actually the victims of such depletion. They think that wrong government policies, programs, package of international institutions and the lack of people's participation in environment management, absence of sustainable development are responsible for poor environmental governance.

**2.2.2 Middle-class centered movement**- All movements are middle-class based urban movements. Membership is drawn almost from the middle classes, teachers, journalists and development workers are involved. They find geographic or cultural linkages with the idea or issue. They are supported by media campaign. Middle class think that rural people are not destroyers, but they are dependent on environment. The role of middle class is also related to the ideological stand one takes.

2.2.3 Skill in advocacy - There are many young lawyers, who are active in environmental movement. Syeda Rizwana Hasan of BELA is a renowned lawyer and provides legal assistance and services to individuals and organizations involved in protecting the environment. She got national environment award in 2007 for creating environmental awareness. She also achieved Goldman environmental prize in 2009 as chief executive of BELA. Late Md. Muzzaffer Ahmad was simultaneously leading BAPA, Transparency International of Bangladesh and Shujan. He was a rare intellectual who combined intellect with public purpose. He was often called the "conscience of the nation". Syed Abdullah Abu Sayeed, architect Iqbal Habib, ex-secretary of MoEF Mihir Biswas, Dr. Abdul Matin, and Professor Mahbuba Nasreen of Dhaka University are members of BAPA and they are well-known for their profession. Dr. Atiq Rahman is a climate expert and also is a researcher. Serajul Islam Chowdhury, a university teacher, was the convener of the campaign of Save Osmani Uddayan. Dr. Shahariar Hossain of ESDO is expert in environment management. Philip Gain of SEHD is expert in forest and adivashi issue. They have always emphasized on and advocated for people-oriented policy making.

**2.2.4 Role of NGOs -** In the campaign for banning Dirty Dozen and Advocacy for promoting Ecological Agriculture, the concerned NGOs acted as innovator. In the campaign for banning polythene, campaign for banning two-stroke engine, campaign against arsenic contamination and Save Buriganga, NGOs acted as watchdog. In case of protect the Osmani Uddayan, Anti-FAP-20 movement and campaign against the adverse effect of KJDRP, concerned NGOs acted as catalyst. In fact, in all of these movements NGOs were considered as civic actors.

# 3. Contribution of the Environmental Movement to Environmental Development

From an analysis of the above key environmental movement, one may note some new dimension to environmental development in Bangladesh.

# 3.1 Administrative action of the existing condition

The government has taken several appropriate decisions prompted by environmental movement. Many reforms have taken place in the existing polluted environmental condition. The government has been compelled to take administrative decision in many environmental aspects that brought about some encouraging signs. Under section 7 of Environment conservation Act "if it appears to the Director General (DG) of DoE that any act or omission is causing harm to the ecosystem then he may determine the compensation and direct the person to pay it. DoE uses this section 7 of Conservation Act and takes administrative action against polluters.

**3.1.1 Actions taken by DoE for river save against industrial pollution**-DoE fined a factory at Narayanganj TK. 26 lakh for Shitalakhya River pollution.<sup>10</sup> DoE fined Sunman Textile limited at Kadam Rasul,

<sup>&</sup>lt;sup>10</sup> The Daily Star, The Daily Noa Diganto, 22-07-10

Shitakundu taka for 16 lakh for polluting sea with liquid chemical waste.<sup>11</sup> DoE fined a dyeing industry at Gazipur TK. 30 lakh for polluting Turag River.<sup>12</sup> DoE fined two industrial units at Gazipur TK. 29.50 lakh for not setting up ETP (Effluent Treatment Plant).<sup>13</sup>Two factories fined for pollution TK. 52 lakh for discharging untreated liquid waste in Shitalakhya River.<sup>14</sup> Two textile mills fined for 36 lakh for river pollution.<sup>15</sup> Three paper mills at Rupgangj are fined for TK. 88 lakh for polluting the water of Shitalakhya River.<sup>16</sup> 185 industrial units are fined for TK. 35 crore for River pollution at Dhaka, Narayanganj, Gazipur and Munshigangj districts for not setting up ETP.<sup>17</sup> AKH industry at Savar was fined for TK. 20 lakh for polluting Shitalakhya River.<sup>19</sup> A textile mill at Futullah is fined for polluting Shitalakhya River.<sup>20</sup> An industrial unit is fined for river pollution for TK. 30 lakh and with taking clearance certificate from DoE.<sup>21</sup>

**3.1.2 Actions taken against industrial units for environmental pollution -** The DoE sealed an under construction dyeing factory at Mirpur residential area in the city for environmental pollution.<sup>22</sup> It fined three factories 11.40 lakh for polluting environment.<sup>23</sup> DoE in drive at Chittagong Export processing Zone fined two industries around TK. 33 lakh for water pollution.<sup>24</sup> Shympur re-rolling mill fined TK. 10.28 lakh

<sup>&</sup>lt;sup>11</sup> The Daily Star, 02-08-10

<sup>&</sup>lt;sup>12</sup> The Kaler Khanto,06-09-10

<sup>&</sup>lt;sup>13</sup> The Prothom Alo, the Daily Star, 29-09-10

<sup>&</sup>lt;sup>14</sup> The Daily Star, 01-10-10

<sup>&</sup>lt;sup>15</sup> The Daily Star, 01-11-10

 $<sup>^{\</sup>rm 16}$  The Daily Star , the Daily Jonokantho, the Daily Juganthor, 09-05-12

<sup>&</sup>lt;sup>17</sup> The Kaler Khanto, 09-05-12

<sup>&</sup>lt;sup>18</sup> The Kaler Khanto, 17-05-12

<sup>&</sup>lt;sup>19</sup> The Daily Star, the Juganthor, 04-06-12

<sup>&</sup>lt;sup>20</sup> The Ittefaq, 06-06-12

<sup>&</sup>lt;sup>21</sup> The Kaler Khanto, 06-06-12

<sup>&</sup>lt;sup>22</sup> The Daily Star, 05-08-10

<sup>&</sup>lt;sup>23</sup> The Daily Star, 11-08-10

<sup>&</sup>lt;sup>24</sup> The Daily star, 04-10-10

for releasing toxic fumes.<sup>25</sup> DoE fined NASA group TK. 16.23 lakh for polluting Gulshan Lake.<sup>26</sup>City garment factory fined over TK. 16 lakh for pollution.<sup>27</sup> Four constructions company fined TK. 4.25 lakh for pollution.<sup>28</sup> Textile mill sealed and fined TK. 2.24 crore for pollution.<sup>29</sup> Two shipping companies fined TK. 11 lakh for polluting environment.<sup>30</sup>

**3.1.3 Action taken by DoE for violating law-** DoE fined a factory for air pollution. It fined for10.28 lakh TK. for having released toxic fumes to environment posing serious hazards to public health.<sup>31</sup>Brick Kiln owner fined 8.28 lakh for damaging croplands by setting up the brick kilns without permission of the DoE.<sup>32</sup> DoE fined a dyeing factory and housing project in Narayanganj and Savar and collected money TK 37 lakh for violating environmental law.<sup>33</sup> Two shipping companies are fined for 11 lakh.<sup>34</sup> A dying factory at Kaliakuore is fined for 26 lakh TK.<sup>35</sup> Another dying factory at Futullah is fined for 8 lakh TK.<sup>36</sup> A dying factory at Gazipur<sup>37</sup> is fined for 26 lakh taka. Three brick kilns are fined for TK 15 lakh.<sup>38</sup> Textile mill sealed and fined TK. 2.24 crore for pollution.<sup>39</sup> NASA group is fined for 16 lakh TK. for polluting Gulshan Lake.<sup>40</sup> ACI salt

<sup>&</sup>lt;sup>25</sup> The Daily Star, 02-11-10

<sup>&</sup>lt;sup>26</sup> The Juganthor, 12-11-10

<sup>&</sup>lt;sup>27</sup> The Daily Star, 13-11-10

<sup>&</sup>lt;sup>28</sup> The Daily Star, 14-11-10

<sup>&</sup>lt;sup>29</sup> The Daily Star, 30-11-10

<sup>&</sup>lt;sup>30</sup> The Independent, 08-05-12

<sup>&</sup>lt;sup>31</sup> The Daily Star, 03.11.10

<sup>&</sup>lt;sup>32</sup> The Daily Star, 09.11.10

<sup>&</sup>lt;sup>33</sup> The Daily Star, 21.05.12

<sup>&</sup>lt;sup>34</sup> The Independent 08.05.12

<sup>&</sup>lt;sup>35</sup> The Jai Jai din, 21.06.12

<sup>&</sup>lt;sup>36</sup> The Prothom Alo, 14.06.12

<sup>&</sup>lt;sup>37</sup> The Jugantor, 20.06.12

<sup>&</sup>lt;sup>38</sup> The Daily Star, 23.12.12

<sup>&</sup>lt;sup>39</sup> The Daily Star, 30.12.12

<sup>&</sup>lt;sup>40</sup> The Daily Star, 12.11.10

factory is fined for 10 lakh TK. for environmental pollution.<sup>41</sup> There is a list of drive action<sup>42</sup> (January 2011- April 2012) by DoE. 349 industrial units are accused for violating environmental law. These are the following:

Illegal brick kilns (93), Dying industries (89), Washing industries (14), Real states Company (11), Chemical industry (08), Polythene Industry (11), Hill cutting (11),

Poultry field (05). Some of the actions are given below:

| Programs                | 2002-2006 | 2007-2008 | 2009-May2012 |
|-------------------------|-----------|-----------|--------------|
| Industrial<br>Pollution | 94        | 83        | 98           |
| Brick Kilns             | 12        | 7         | 60           |
| Hill cutting            | 14        | 40        | 161          |
| Polythene               | 16        | 22        | 184          |
| Others                  | 4         | 6         | 167          |
| Total                   | 142       | 158       | 670          |

Table-1: Filed cases in the environmental court (2002-12)

Source: the Daily Shamakal, 05-06-13, the Daily Star, 05-06-13, and report publication from DoE, 05.06.12

Table-2: Drive against ban polythene

| Program 2002-2006 | 2007-2008 | 2009- 2012(May) |
|-------------------|-----------|-----------------|
|-------------------|-----------|-----------------|

<sup>&</sup>lt;sup>41</sup> The Ittefaq, 07.06.12

<sup>&</sup>lt;sup>42</sup> The Sambad, 05.052012

| Number of<br>Mobile court | 211 days       | 163 days      | 477 days        |
|---------------------------|----------------|---------------|-----------------|
| forfeited<br>polythene    | 28.11 tons     | 20.56 tons    | 148.5 tons      |
| Collected fine            | 13.30 lakh TK. | 7.71 lakh TK. | 110.30 lakh TK. |

Source: the Daily Shamakal, 05-06-13, the Daily Star, 05-06-13, and report publication from DoE, 05.06.12

Table-3: Drive against ban polythene (2010, July-2014, April)

| Program                | 2010(July)-2014(April) |
|------------------------|------------------------|
| Number of Mobile court | 642 days               |
| forfeited polythene    | 267 tons               |
| Collected fine         | 04 crore TK.           |
| Shut down              | 62                     |

Source: the Daily Star, 05-06-14

Table-4: Control black emission from transportations

| Program                | 2002-2006     | 2007-2008      | 2009-May<br>2012 |
|------------------------|---------------|----------------|------------------|
| Number of<br>Transport | 255           | 108            | 262              |
| Collected fine         | 0.85 lakh TK. | 11.19 lakh TK. | 4.34 lakh TK.    |

Source: the Daily Shamakal, 05-06-13, the Daily Star, 05-06-13, and report publication from DoE, 05.06.12

| Program             | 2002-2006 | 2007-2008 | 2009-May<br>2012 |
|---------------------|-----------|-----------|------------------|
| Number of polluters | -         | _         | 52               |
| Collected money     | _         | _         | 82.25 lakh TK.   |

Table-5: Action taken for noise pollution

Source: Publication from DoE, 05-06-12

Table-6: Action taken for water pollution (2000-2012)

| Program       | 2002-2006 | 2007-2008 | 2009-May2012 |
|---------------|-----------|-----------|--------------|
| Establish ETP | 116       | 121       | 303          |

Source: Publication from DoE, 05-06-12

Table-7: Number of served notices (2000-2012)

| Program        | 2002-2006 | 2007-2008 | 2009-May2012 |
|----------------|-----------|-----------|--------------|
| Served notices | 2873      | 5872      | 15552        |

Source: Publication from DoE, 05-06-12

Table-8: Collected fine through enforcement programs (2002-2012)

| Program   | 2002-2006 | 2007-2008 | 2009- May2012   |
|---|-----------|-----------|-----------------|
| Number of<br>industrial units<br>who gave fined | _         | _         | 699 crore TK.   |
| Fixed fined                                     | _         | _         | 73.52 crore TK. |

| Collected money | - | _ | 45.66 crore TK. |
|-----------------|---|---|-----------------|
|-----------------|---|---|-----------------|

Source: Publication from DoE, 05-06-12

Table-9: Collected fine through enforcement programs (2009-2014)

| Program                        | 2010(July) - 2014(April) |
|--------------------------------|--------------------------|
| Number of industrial units who | 1788                     |
| gave fined                     |                          |
| Collected fine                 | 107 crore TK.            |

Source: The Daily Star, 05-06-14

# 3.2 Broad based awareness rising

People are now more aware of the environmental degradation than they were in the past. The NGOs, civil society, professional organization and media have taken leading role in creating the awareness among the people through training, research, publication, leaflets, bulletins, procession, meeting, rally, etc.

# **3.3 Prompting new environment policies**

The all environmental movements have been played planned, organized and continual communicating role to convince the policy makers to change and commit themselves to make new policy or policy reform and implementation. At the national level, the government has undertaken some environment policy, act, rules and action programs as stated below:

**3.3.1 Environmental litigation -** It is a new phenomenon in Bangladesh. It has resulted from a long process of advocacy movement by some actors notably BELA. The Government also has been convinced to establish it.

Article 102 of the Constitution provides for public interest litigation where the court can order action on the application of any person aggrieved.

**3.3.2 Legislation for hill cutting** – The government has taken initiative to impose legislative sanctions for miscreants of the destruction of the hills under the law started from 1995 and later amended in 2000. Nobody can cut or raze hills, *tilla* without prior permission; otherwise according to law he or she will be punished 10 years imprisonment or 10-lakh taka (\$15, 4000) monetary punishment or both.

**3.3.3 Legislation for polythene -** According to 6A of the Environment Conservation Act 1995, manufacture, import, marketing, sale, stock, distribution and use of polythene are banned. According to Environment Conservation Act (Amendment)-2002, it incorporates provisions for the imposition of a fine worth of TK. 10 millions and ten years in the prison if anyone is found guilty of violating the law. If anyone is found marketing, distributing or stock polythene, he or she will be fined with TK. 10 thousand and six months in the prison. According to section17 of the Environment Conservation Act 1995 and section 2 of the Environment Court Act 2000, a DoE inspector or any other person authorized by the director general of DoE can act an inspector to file cases against violators of the law.

**3.3.4 Control of pollution from brick Kilns -** A Brickfield policy has been formulated keeping in view the effective implementation of brickburning Act 1989(Amended in 1992 and 2001) and conservation of the environment simultaneously to meet the demand of bricks in the country. The use of wood has been restricted by law. The government has also made it compulsory that the minimum height of chimney of brick kilns should be 120 ft.

**3.3.5 Conditions for the ship - breaking industries -** A petition (writ petition no. 2911 of 2003) was moved before the High Court Division by

BELA seeking relief against violation of legal provisions on the environment of and a labor protection in ship breaking operation in Shitakundu, Chittagong. The High Court in 17 March, 2009 and 11 May, 2011 came up with a judgment and directions to the concerned authority to make mandatory to take clearance certificate (NOC) from DoE to import scrap ship breaking units, establishing training institutions for workers, making working favorable environment for workers. DoE also gave 56 preconditions to the owners of ship breaking yards. The conditions include not recruiting worker below 16 years of age, training for the workers, recruitment of full-time a marine engineer, ensuring strong safety system for workers and safe management of harmful wastes.

**3.3.6 Declaration of ecologically critical area (ECA) -** Voice raised from BAPA and other environmental organizations for declaration ECA, Bangladesh Government took an initiative considering the increased degradation of biodiversity in natural ecosystem to declare 8 of the degraded ecosystems as Ecologically Critical Area (ECA) under the Environment Conservation Act, clause 5, sub-clause 1, 1995 (revised 2010) in 1999. The declared 12 ECAs are presented here (Table-10). Table-10: Declared 12 ECAs in Bangladesh

| Tuble 10. Deelarea 12 Eleris in Bang |                                     |
|--------------------------------------|-------------------------------------|
| 1. Cox's Bazar-Teknaf Sea Beach:     | 2. Saint Martin Island: Cox's Bazar |
| Cox's Bazar                          | Cox's Bazar                         |
| 3. Sonadia Island: Cox's Bazar       | 4. Hakaluki Haor: Moulavibazar,     |
|                                      | Sylhet                              |
| 5. Tanguar Haor: Sunamganj           | 6. Marzat Baor: Jhinedaha           |
| 7. Sundarban (10 km. Landward        | 8. Gulshan-Baridhara Lake: Dhaka    |
| periphery): Bagerhat, Shatkhira,     |                                     |
| Khulna                               |                                     |
| 9. Buriganga River(around Dhaka      | 10. Balu River(around Dhaka city)   |
| city)                                |                                     |
| 11. Turag River(around Dhaka         | 12. Shitalakhya River(around        |
| city)                                | Dhaka city)                         |

Source: Rahman (2013:95)

**3.3.7 27 Recommendations of National Environment Committee approved -** 27 recommendations were approved in the meeting with the Prime Minister in the chair on 16th September, 2009 to save the rivers of Dhaka. Recommendations include the shifting of tannery factories from Hazaribagh to Savar within 28 February, 2010, eviction of illegal occupants from the rivers banks, dredging of rivers, construction of 220 km. roads along the river banks, efficient management of solid wastes, establishment of ETP by the industries etc. The recommendations would be collaboratively implemented by Finance, Land, Home, MoEF, DoE, Commerce, Bangladesh Bank, BWITA, FBCCI, BEPZA, BKME, BTME and tanners association will implement the directions.

**3.3.8 12 Instructions of the High Court to save four rivers (Buriganga River, Balu River, Turag River and Shitalakhya River) of Dhaka -** The High Court decreed for the eviction of the illegal occupants from the banks of the four rivers of Dhaka within six months in June 2009. The instructions include eviction of the occupants, destruction of unauthorized establishments, construction of walkways along the banks, plantation of trees, dredging etc. Finance, Land, Home Ministry, MoEF, DoE, District Commissioners (D.C) of Dhaka, Gazipur, Narayanganj and Munshigangj, DCC, BWITA and Land Survey office are dictated to implement the instructions.

**3.3.9 Directions from the High Court to stop dumping waste in the Buriganga River, Dhaka -** In 2010Human Rights and Peace for Bangladesh served a legal notice to save the water of Buriganga River in the High Court. The High court in 1 June, 2011 came up with a judgment and gave some directions to the concerned authority. All sewerage lines which are connected with Buriganga and waste treatment lines from industries have to obstruct to discharge liquid wastes in the rivers within one year.

**3.3.10 Forest Act (Amendment), 2010-** This act adds the number of forests and amalgamates 24 clauses related the act. It prohibits leasing forest land. It incorporates provisions for the imposition of three years in the prison if anyone is found guilty of harming forest. If one cuts trees, he or she will be penalized for TK. 50 thousand.

**3.3.11 Bangladesh Water Act, 2013-** The parliament passed this bill on 29<sup>th</sup> April, 2013. It was framed by the Water Resource Ministry for the implementation of National water Policy, 1999. The act dictates the executive committee to protect water reservoirs. The act instructs authorities to declare areas (where necessary and applicable) water-critical zones.

**3.3.12 Draft approval of Biodiversity Act, 2013 -** This was approved by the cabinet on 10<sup>th</sup> June, 2013. It incorporates provisions for the imposition of a fine worth of TK. 1 million and five years in the prison if anyone is found guilty of harming biodiversity. The penalty can be increased depending on the volume of the loss incurred on biodiversity. A national supervisory committee will be formed for the enforcement of the act. The national committee would be aided by an expert panel and local bodies.

**3.3.13 National River Protection Commission Bill, 2013 -** This bill was passed in the parliament on 14<sup>th</sup> July, 2013 and the President approved it on 22th July. The bill aims at protecting the rivers from encroachment, industrial pollution and land grabbers. It also clearly dictates the recovery of the navigability of our rivers.

**3.3.14 Formulation of NEMAP-** The advocacy groups work for making people-oriented policy and implementing it in favor of the people. The result of their advocacy is the formulation of NEMAP. It is the first action plan that has been formulated by grass root people and inherited from Stockholm Conference. NEMAP is a nexus between environment and development to promote sustainable development and revise the current

trends of environmental degradation through consultations and participation process.

### 3.4 Co-operation and networking

Several organizations such as NGOs, civil society, professional organization, researchers, journalists and media can form network on any issue any time. To make their campaign stronger and effective, they co-operate with each other and influence environmental policies of the country. There are networks such as Coalition of Environmental NGOs (CEN), Environment for All (EFA), ICBEN (International Conference on Bangladesh Environment) for environment, FEJB for environmental journalism, BCAS for scientific research, Association of Development Agencies of Bangladesh for development, and BELA for environmental legal action.

Environment degradation of Bangladesh is a serious problem which requires immediate attention. Another important issue is that the people are not aware about environment and have no capability to focus their demands to the power center. Furthermore, people do not know how to organize a movement in a planned way and influence the government for policy reform. They also do not know where they will go and fight in an organized manner. From 1980s, movement for environment has become very favorable in developed countries. Bangladesh started its journey from 1990s. The environmental movements have been added a new dimension to environmental development in Bangladesh. The movements of air pollution in Dhaka, banning polythene, encroachment of the Buriganga, and air pollution by two-stroke engine, water issue and water bodies, water resources management, arsenic mitigation and tree plantation, wetlands, river pollution, industrial pollution, air pollution, land grabbing, toxic waste disposal, social forestry, forest and adivashi issue, shrimp cultivation, sustainable agriculture issues are few to mention.

In case of banning polythene, simultaneously we did not find it a very important part of the process to mobilize not just the affected people, but a larger mobilization- urban centers, the middle class people, the local people who have not been affected by the polythene directly, the people who will not really fall in the middle class but are geographically or culturally linked that area, like-minded groups, intellectuals, academics, researchers. A micro-macro linkage was not found to organize the movement. If we discuss about the campaign for banning polythene, then we see that the movement did not achieve success properly. ESDO, CFSD, FEJB, print media and other professional organization tried to influence the government to ban the production and use of the polythene. Though then government decided to ban it from January 1, 2002, the ban was not implemented. The people are habituated to use polythene. The government in different times (2002-2014) did not take action about it. Sometimes, DoE and the concerned authority take drives in the markets as falsely demonstrative drive and they fine some for violating the law. So, only getting the order of banning polythene is not the success of environmental groups, but the use of polythene all over country has not stopped and it is still in use. The movement is partly successful to convince the government about the harmful effects of polythene and they got the decision of banning it. But it is not capable to convince the government to implement the decision. In this perspective, the anti-polythene movement has not been successful completely yet.

In the case of "Save Buriganga River", the advocacy groups mainly BAPA and BELA have fought with traditional advocacy initiatives and legal method for long time, still the river Buriganga is still polluted, encroached and grabbed. Industrial pollution from Hazaribagh and other industrial waste have been mixed with the water of the Buriganga River. The District administration, land offices, BIWTA and the Dhaka city corporation do their jobs without coordination. Still, the directions of the High Court and the decisions taken by the Prime Minister have been not implemented in this regard. There are some constraints for effective implementation of government decision like the local political leader, local influential businessmen, corruption, nexus between politicians and polluters, and lack of regulatory and institutional capacity, and nonpunitive approach of laws. "Save Buriganga" movement is going on for many years, but the government still has not taken particular initiatives to save it. So, we can say that the Save the Buriganga movement has been incomplete.

We cannot say that there is no effect of environmental movement in Bangladesh. If the movement of "Save Buriganga River" would not fight, the Buriganga would be dying soon. We did not get it to see. The pressure from the movements knocks the sense of government. The people have come to know what the government does and what they are doing. The people are better aware about environment today than before. Though their participation is not satisfactory, public opinion about environment has been growing steadily. People now complain against polluters to the local offices, police station, and they file cases in the court, if needed. The advocacy groups have gained place in the court, the court listens to their arguments. There are many community-based organizations that are vocal for local environment and media raises sensitive issues before the people, civil society and the policy makers. Many voluntary and professional organizations also raise voice for environment movement.

### 4. Conclusion

The finding of the study shows that movements are still in a nascent stage especially as compared to the developed country experiences. The political leaders and business groups have mutually cozy relations that make both groups financially benefitted. This nexus results in some of the worst environmentally detrimental practices, and it also poses a major challenge to environmental movements. The other key challenges faced by the environmental groups in their efforts include the following: slow pace of implementation procedure in advocacy issues (environmental policies and laws) taken by government; inadequate trained and skilled advocacy professionals; inadequate local community mobilization; insufficient fund and logistics; threats and pressure from powerful vested interest group (including the above noted business-politics nexus); and inadequate functional coordination. Despite these constraints, overall however environmental movements in Bangladesh have achieved some limited but notable successes in the following areas: relevant policy revisions and reformulation; and addressing selected environmental degradation and pollution issues and cases (notably, Save the Buriganga, Banning Polythene, Hill-cutting, Ship-breaking enterprises, Selected river pollution control measures, Support to governmental efforts in law enforcement and other remedial action). The limited achievements now need to be further strengthened and consolidated. Environmental movement has a great potential to serve as a tool for voicing people's concerns and opinion towards improving the condition of environment and society in Bangladesh.

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