

Investment Analysis Of Environment Pollution In Educational Institutions

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Abstract: Environment pollution has become one of the biggest concerns for the educational institutions in Bangladesh. Thinking not yet starts that environmental pollution has a connection with educational institutions which requires investment. Educational institutions are paying huge amount of money in order to clean the academic atmosphere. Due to unawareness and unconsciousness, the environment of the institutions campus continuously polluting in many ways. This paper provides an outline of how different environmental pollution occurred in the educational institutions, costs to minimize that pollution and finding some ways to improve it.

Key words: Environment, pollution, institutions, investment, atmosphere, unawareness, costs

INTRODUCTION

There is no pollution-free educational institution. Every institution faces the same pollution just in different scales. Considering this, we observed the environmental pollutions in different institutions in different level, such as, schools, colleges, and universities of Dhaka city. Educational institutions have been polluted in many ways which severely damages the academic atmosphere. Design and maintenance proceedings have large impact on air, water, and soil productivity in the institution. There are many frequently used poisonous items such as cleaning products, painting wall, disposal of medical first aid items, broken ceramics, markers and plastic items etc. If we use substitutes or dispose properly these items, it may reduce pollution to some extent that also saves our investment as well. There are different reasons for environmental pollution in the educational institutions. Researchers found that the authority of the institutions tries to keep their environment free from dirty and pollution and that initiative relates with costs. Here we have identified some issues which may cause pollution in educational institutions.

- Those issues are mentioned below:
- The trash created in cafeterias
- Chemicals used for removing mosquito and keeping washroom with good smell
- Occasional dumping of garbage
- Properly unused bins to keep the trash
- Making washrooms dirty and unhygienic
- Floor cleaning (before mopping)
- Throwing the wastage here and there
- Painting walls and other infrastructure etc.

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We have found the link between the environment pollution and costs that occur to reduce pollution. Authority can reduce those costs through raising awareness among the teachers, students and officials of the institutions so they can make their environment a better place for all.

OBJECTIVE OF THE STUDY

Education is the backbone of the nation where educational institutions are the heart because they create the future scholars and leaders for the betterment of the country. But in the real life because of awareness and feelings institutions are not maintaining the healthy environment. However, the overall objective of this study was to explain the possible ways of environmental pollution happened in the educational institutions; and to identify that how investment is related to minimize the pollution, and to explain some policy recommendation.

METHODOLOGY

Research has been conducted based on face to face questionnaire and observation. We choose five (05) of educational institution as a sample in Dhaka city. We have visited the institutions, observed the scenario, and collected the data through face-to-face discussion. We talked with the cleaning supervisors or in-charge of educational institutions to find out the amount of investment already invested to keeping free from the environmental pollution or cleaning the atmosphere. As there is no accurate information available, we just observed some research papers. The sample frame of this study consists of the cleaning supervisors, cleaner; cook (chef) of cafeteria and employees of different educational institutions. We had to spend total 15 days to collect the data from different institutions.

TRASH/GARBAGE:

Waste control is one of the biggest challenges that educational institutions have to face in achieving maintenance purpose. We have talked to the cleaners of different educational institutions regarding every day's garbage and wastage. They inform that there are almost three dustbins in each floor i.e paper bins, plastic bins and bins for food wastages. Every day around six garbage bins are filled with garbage in each institute. Besides that, around four hundred to six hundred teachers and staffs are working each institute. Each official have waste basket in their desk. Every day, on an average more than twenty

kilogram waste has been generated by each educational institute. If we consider twenty kilogram garbage generated in one day by one institute, then how much trash has been created in a year by more than fifty thousand educational institutions in Bangladesh? Now question is that where they do actually throw that garbage? What is the condition of the institute environment? It is found that not a single institution authority think that they are damaging environment and it costs money. We cannot eliminate the existence of garbage from our institution but with elegant initiatives like encouraging everyone on campus to think in a different way about the materials they use, we can reduce it to some extent.

Causes of Pollution:

Like all other places an educational institution is also a place of huge gathering. Everyday a large number of students, Teachers, and staff come and stay in the campus. During that time, they use canteen, toilet (washroom), campus ground, classrooms, and also the whole campus arena randomly. They make noises, threw wastes. Water is used in a huge amount. Somehow the used and rest of the particles are spread their effects. This is how the environment of an institution is polluted.

LAND POLLUTION:

- Throwing dust (tea, coffee, and food packet, bottle) which does not mix in to soil and make pollution.
- Playground is full of garbage, likely, tea, coffee pot, food (biriani) packet etc.
- Using chemical for removing mosquito creates pollution
- Using fertilizer in the soil creates land pollution
- Dust management system is not up to standard. Cleaner take cafeterias trashes to corner of the institution. This makes soil pollution. The fertility slowly diminishes, making land unsuitable for agriculture or tree plantation.
- Soil losing its quality through broken ceramics and polythine, plastic tea cup, and plastic food packet.



Picture: Open dumping wastages inside the university campus, Dhaka

WATER POLLUTION:

- Using insecticide in university pond, fish food and also for poultry dust, ponds water is being polluted.
- Student throw dust here and there and during monsoon time these dust go in to the water through rain.

- If cleaning management do not clean water tank in regular basis then it makes water pollution.



Picture: Open Drainage, connected with University Lake, Mymensingh



Picture: University Lake Side Condition, Dhaka

AIR POLLUTION:

- In lack of proper ventilation dust comes from outside into the classroom and moved everywhere.
- The harm of using the chemical for removing the mosquito such as dizziness, difficulty in breathing, headaches, diarrhea, joint pain, and shakiness. This is newly started activity in this institution. Which make serious environment pollution in this university



Picture: University Lemon Lime Cafeteria open kitchen

SOUND POLLUTION:

- Using drum and sound system in the occasion in the campus create sound pollution
- Because of high volume horn by student's transports such as bus, cars make sound pollution.
- Using of generator create giant sound.

INVESTMENT ANALYSIS OF ENVIRONMENT POLLUTION:

It is not possible to terminate pollution permanently. We can control it or we can minimize it. But measures should be taken for that and that causes cost. The cost depends on two way factors. One is to cover continuing pollution because of random existence of students, staffs, and faculty members in the respective places. A group of people is always working to keep the respective places to make the environment friendly. Another way is be ready for future use or balance of continuous process. Also, there may be occasion or function in the campus and that also requires attention in this matter. So these overall circumstances a cost that must be maintained to keep the environment safe and sound.

ASSOCIATED COSTS FOR MEASUREMENT REQUIRED**INVESTMENT:**

- Cleaning washroom, tissue paper, washroom spray, naphthalene, glass cleaner, and others
- Floor cleaning and mopping instruments
- Cleaner's payment
- Utility bills
- Campus ground cleaning

REGULAR INVESTMENT REQUIRED IN THE INSTITUTION TO MAKE THE GOOD ATMOSPHERE:

It is found that some of the institutes invest money to keep their environment clean

Institutions	Monthly cost (In BDT.)	Yearly cost (In BDT.)
Institution 1: one campus	1, 000, 000	12 X 1, 000, 000 = 12, 000, 000
Institution 2: Twenty campus	1, 068, 000	12 X 1, 068, 000 = 12, 816, 000
Institution 3: Five campus	204, 000	12 X 204000 = 2, 448, 000
Institution 4: one campus	65, 400	12 X 65400 = 784, 800
Institution 5: one campus	59, 000	12 X 59, 000 = 708, 000
Total Cost		28, 756, 800.00

We have calculated the regular cost of reducing environment pollution of five institutions in Uttara, Dhaka area. There are over 50, 000 educational institutions in Bangladesh. The average regular cost of reducing environment pollution of five Institutions is $28,756,800/5 = 5,751,360$ TK (around). So, what about the rest of the institutions? It means the cost will reach in billions of taka per year. We just calculate the **tangible** cost but what about

the **intangible** one. What about the environment that are damaged?

PREVENTIVE MEASURE TO CONTROL THAT POLLUTION:

We can be the part of saving our environment. That can be such way that we would be aware so that no pollution can be caused by us. Indirect way is to encourage, influence and sometimes to teach what we should do and how we should react with our environment. Creating awareness through postering, seminar, workshop etc. about the environmental pollution occurs in the educational institutions.

TO CONTROL THE POLLUTION WE MAY THINK:

- Waste could be diverted from the trash to organics composting and container/paper recycling collection programs.
- Waste could be managed via organics composting programs that accept food waste, liquids, and non-recyclable paper.
- Our act must be matched with our realization. We should learn how to utilize our resources like water. In toilet, as well as in canteen there must be instruction.
- It should be kept in our sense that where are the bins and why they are in respective places and how to use them.
- Reward or encourage the people to act not against environment.
- Teamwork should be formed to help people remembering and encouraging of keeping a pollution free campus.
- Hazardous side should be discussed among the students in the classroom session as well as training for the cleaning or related other staffs.

CONCLUSION

A sound and safe environment represent the uprightness of an institution. It affects the culture of the place also. The entire environment enforces the behavior of the faculties, staffs, and students of the institutions. When the change is harmful we have to pay the compensation which we call cost. We know why cost is compulsory. This can be the result of defects or measures to control the upcoming defects. It would be easy when we all can take part in this cost program and contribute individually. So before disturbing the environment we need to think about the investment will go from our fund.

WORK CITED:

- [1] CHRONOLOGICAL DEVELOPMENT OF SWM IN DHAKA - Dhaka North ... (n.d.). Retrieved March 8, 2016, from <<http://www.dncc.gov.bd/departments-with-function/department-s/solid-waste/solid-waste-2.html>>
- [2] Environmental Noise Pollution in Educational Institutes of ... (n.d.). Retrieved April 16, 2016, from
- [3] <https://globaljournals.org/GJSFR_Volume12/1-Environmental-Noise-Pollution-in-Edu.pdf>

- [4] Helping schools reduce pollution. (2009). Retrieved April 02, 2016, from <<https://www.pca.state.mn.us/living-green/helping-schools-reduce-pollution>>
- [5] Ramya R, Rajesh Gopinath and Satish K - IJSER. (n.d.). Retrieved March 15, 2016, from <<http://www.ijser.org/researchpaper/Water-Pollution-arising-from-Laboratory-facilities-of-Educational.pdf>>