

## **Living with the Flood --Face the challenge of Tomorrow**

### **Education on the Boat -Hope for Tomorrow**

**Thematic area:** Greening education - Promoting Environmental Education and Networking

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#### **ABSTRACT:**

Bangladesh is one of the poorest and most densely populated country of South Asia just 10 meters above the sea level is in the front lines of climate change, only river erosion seizes nearly 26,000 acres of land each year, within the next 40 years, Bangladesh will have to accept 20 million climate refugees. To face the up coming challenge some innovative thinking has come forward to promote basic education and human needs of those impoverished regions by using the natural event of these regions 'Water' and 'Boat' simultaneously, to build up a scheme called "Education on the Boat".

#### **1. INTRODUCTION:**

Bangladesh is one of the world's poorest countries with 40 percent of the 160 million population surviving on less than a dollar a day as well as the most densely populated countries in world and on the front line of climate change. Ten million people were affected by 2007 flooding and 17 percent of the country could disappear over the next 40 years, which resulting 20 million climate refugees because of climate change. Therefore, millions of people living in the river basins are deprived from basic human rights and facilities-mainly education, health service, power supply, telecommunication and lack of infrastructural communication. This is a very common phenomenon of flooding Bangladesh. It creates a massive impact on the total literacy rate of Bangladesh; The literacy rate (lowest 38% among developing countries) is very frustrating and government has been struggling for ensuring basic education to all by different means since achieving the independence. So to overcome these situations local solutions are mostly needed from the local people.

In such despair "*Shidhulai Swanirvar Sangstha*" a local non-profit organization has come forward with a fascinating and innovative ideas to full fill the basic human demands of the inhabitants of North-Eastern region of Bangladesh. Near about 1600 square kilometers areas of the districts of Natore, Pabna, and Sirajganj are fully wetlands locally known as



*“Cholon Beel”*. It is inundated by water 8 to 9 months a year; the inhabitants of this area are completely depended at the mercy of the environment for survival. The only way these people can move around and communication in the wet season is by boat. The sort dry season allows only one crop and the people have turned to fishing as their only source of income naturally with such meager resources to be tapped, the people live well below the property line. Moreover, as communication in this reason is poor at the best, infrastructural benefits is almost non-existence. The children suffer the most with limited access to education. This has been the way of life for generations. In 2002 *“Shidhulai Swanirvar*



*Sangstha”* came forward with an amazing idea to educate the children of the impoverished are—by using the natural events of these regions *“Water and Boat”* simultaneously to build up a scheme called *“Education on the Boat”*. It is really an astonishing effort to promote education in all perspective by considering economic, climatic, and environmental adversities. Not only education it also provides training on sustainable agriculture, healthcare, adaptation strategies for climate change, human rights, organic farming, benefits of biodiversity, waste management, computer education ,Internet access, among other topics, which is quite astonished in the contest of Bangladesh specially in such an environmentally and ecologically backward region. *‘Shidhulai Swanirvar Sangstha’* providing all the services fully free of cost and voluntary measures. This is really significance.

## **2. PHILOSOPHY OF INNOVATION:**

*‘Shidhula’i* believes that the rivers are not to be a barrier to development and information. *‘Shidhula’i* took the challenge that the ecosystem of Bangladesh poses and found an innovative way to deliver information and education to residents. They can be communication channels. *‘Shidhulai’* has a strong sense of the need to lift people out of poverty first and believes that everyone has a right to free education, and to information that helps improve sustainability. Education is the pre-requisite condition of social, economic, cultural and overall development of any country of the world.

Therefore, the first motto of *‘Shidhulai’* was to promote education in these area on this concept “if the children cannot come to the school because of poor communication or environments, then the school should go to them”. *‘Shidhulai’* has transformed the regions waterways into pathways for education, information and technology. *‘Shidhula’i* has

converted boats into schools, libraries, healthcare and trainings centers to the isolated waterside communities. *Shidhulai's* two major objectives are to promote literacy, especially among girls and women, and to educate villagers about environmental issues so that they can reverse the damage to the waterways on which they depend for their livelihoods.

### 3. TECHNOLOGICAL DEVELOPMENT:



The water vessels are traditional wooden "country" boats, are all built in the region, using locally available materials. The boats are especially designed to adjust to any equipment configuration as well as to protect the electronic equipment from inclement weather, even during the height of the monsoon. All boats are equipped with a computer and lights that run on solar power panel . The boats are also outfitted with multi-layered waterproof roofs and there are side's windows that are opened for ventilation. A metal truss takes the weight of the roof, so pillars, allowing the accommodation to be made spacious, do not obstruct the interior and comfortable. The vessels are flat-bottomed so they can navigate very shallow water enabling them to reach even the most difficult locations. The boats provide maximum flexibility and can reach villagers that, for logistical, social, or cultural reasons, could not access a permanent institution.

### 4. TECHNIQUE OF Application:

#### *(i) Boat Schools System:*



Boat school is the combination of a school bus and schoolhouse. Boat school collects students from different riverside villages and finally docking at last destination the boat arranges onboard class. After the class the boat drops students at their places and then moves forward to pick other groups, again it arranges on board classes and after the class drops students in their villages, and moves forward for other groups. This is the way the boat school works throughout the day and arrange 3-4 classes. Each boat school consists of a classroom for 30 to 35 students These floating schools have sufficient facilities .Teacher students' ratios are adequate All the boats have solar panels to run computers and multimedia equipments which ensure a decent education. Teachers

are generally selected from the local communities. Because when the students back to the home, they can have good access to communicate with the respective teachers according to their needs. Special Emphasis is on educating the girls, as they are the most deprived in any backward third world society. School provides basic primary education up to grade IV. Government curriculum is followed at grade III and IV. So, that the graduates have access to government schools once they pass grade four. The impact of the integrated boat program has been exceptional. ‘*Shidhulai*’ introduces the first river-based environmental curriculum in the country that teaches how to protect the environment and conserve water. Since the program was launched in 2002, school enrollment in greater “Cholon Beel” has increased 25 percent, and the dropout rate has fallen by 30 percent. One of the most successful programs has been basic education for those who have never enrolled in school or do not have any chance to enter mainstream education because they are considered too old to be enrolled in primary school. The solar power enables boat school to provide late evening classes to the working children while they are free.



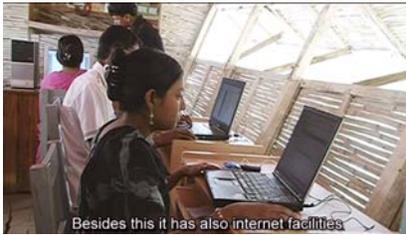
In “Cholon Beel” electricity is almost absent and the only means of light after sunset is the traditional oil lamp. Kerosene is being widely used for providing lighting to the poor families all along the rural areas, which is also polluting the environment. It is hard for children to study with the faint light of a kerosene lamp and often parents are unable to afford additional lamps for education. It also contributes to severe indoor air pollution, which brings health hazards, particularly to children. Moreover, always there is risk of fire. These floating schools have been Godsend, as the surplus energy from the solar panels provide free rechargeable lamp for the students to work at home. It also helps the students’ families to get some work done at night. Moreover, the boats are also used to deliver thousands of solar-powered lights to villagers.

***(ii) Education by Boat Library:***



Education is a continuous process and the only education can make significant changes to the people’s lives. Another new concept, “*Shidhulai Swanirvar Sangstha*” was introduced in this area is the Boat library. All boat schools have small library facility, but some boats have complete facilities of standing library, for example, 1,500 books, 3 to 4 computers with internet access and printer and mobile phones. People of all ages can have free access-Children,

youths, senior citizens, and particularly women learn computer skills and get information on agriculture, biodiversity, climate change, job opportunities, micro enterprise development and human rights. These libraries stay in every spot for two hours and thirty minutes.



It operates three days per week. Every body can borrow books from the library and even can keep these books at least seven days in their home. Users can receive three months free training courses on MS words, Excel & Power point. It has also internet facilities so, the users can e-mail and browsing and even they can check their examination result. The users pay nothing for the services. Previously in “Cholon Beel” these sorts of facilities were absent and it was beyond of thinking. Because as the contest of Bangladesh, the computer and internet users are as follows: Computer ownership per 100 people: 0.782 and Internet users per 1,000 people: 02 respectively. Therefore, these boat libraries have opened a new horizon to ensure service to these backward societies. In addition, late evening literacy classes are arranged on these boats for the parents.

### ***(iii) Adult Education:***

Education means improving the quality of life of every one. To raise the literacy rate;



another new concept introduced here is adult education program, which has had been very encouraging response from the local women. In Bangladesh, the age of first marriage for females is 13-15 years, these illiterate girls are more likely to become mothers during adolescence, and each currently married female has 0.78 births and is suffering from serious physical illness. About 22 percent of deaths in the age group 10-45 years are due to domestic violence, half of which are suicide. In a deeply conservative society such as Bangladesh, religious and cultural mores restrict women’s mobility but women make up almost 50 percent of the population of Bangladesh. And no way the country can move forward without empowering them. This means that women are often relegated to jobs with low economic returns. The unique approach of the boat project addresses the religious and cultural barriers that have prevented women from achieving social equality. Women now take full advantage of the boat school, library, and Internet facilities delivered right to their doorsteps which is amazing.

#### **(iv) Training on Sustainable Agriculture & Water protection:**



Sustainable farming technique is one of the ethos's of organization. Training boat brings scientist and agriculturists into the farming communities address their needs. Mobile Internet-Educational Units on Boats are equipped with internet-linked laptop, multimedia equipments and educational presentations. During the daytime the boat arrange onboard training programs for the farmers and at late evening educational programs are arranged on large sail-cloth so that many people can see from their own courtyards. The evening educational programs include web tutorials, animated drawings, documentaries and dramas along with information from the web displayed. Shidhulai launched a "Save the Rivers" education campaign to raise awareness of the critical role of rivers in everyday life. The curriculum teaches villagers how to protect the environment and conserve water. The

program educated farmers about environmentally friendly crop-production practices and methods of maintaining the ecological balance in the natural environment. This tutorial helps farmers to identify the beneficial insects and ensure safe use of Pesticides protecting water quality. The program also facilitated a conversation between scientists and farmers about effective agricultural practices. Technology, through email and video, has allowed these conversations to occur and to continue over time and distances. The content is adapted to the needs of different audiences—literate and illiterate men, women, and children. 'Shidhulai' also uses outside expertise who are prepared to give advice where needed.

#### **5. CONCLUSIONS:**

"Shidhulai Swanirvar Sangstha" provides practical advice and education that help villagers learn to help them. The proximity of the resources has motivated parents to send their children, particularly girls, to learn. It has generated considerable enthusiasm, interest, and local involvement. This replicable model demonstrates that information technology, ingenuity, when aligned and developed with community needs, and expertise, can help meet some of the most basic human needs and improve people's lives. At most 90,000 families have been directly benefited from the activities of the Boat schools, which

is significantly changing the total scenario of “Cholon Beel”. People, who have been living here, can now dream of a brighter future. Education on the boat concept is not a localized theory of Bangladesh and can be adapted for other countries also. Countries with populated wetlands are the prime locations for this model. Let us all come forward & work together to address the effects of global warming united. So, education on the boat is a new hope for tomorrow.

#### **6. INNOVATION OF THE PAPER (PROPOSAL):**

The proposed Paper” Living with the Flood–Face the challenge of Tomorrow” aims to assist the policy makers all over the world to find new forms of development techniques in adverse condition such as flooding in Bangladesh. This program reveals creative solutions to overcome poverty and climatic change by offering classes & training on boats.

A documentary film has already made on this issue title *“Living with the Flood –Face the challenge of Tomorrow”*

#### **7. RELEVANCE OF THE PAPER (PROPOSAL):**

This paper is fully developed on the climatic and environmental contest of Bangladesh one of the very low incoming under developing country of South-Asia. I hope that this attitude will help educators all over the world to take necessary actions to promote education and all sorts of basic human needs in any given situation as well as inspire educators all over the world to creatively reach out to many children and people not be discouraged by difficulties and adversities, as education is the mandatory clause for human development. As we know the social-economic and climatic condition of some parts of the world are quite smellier. Therefore, this paper would help to exchange the experience among these nations as well as find out some fruitful solution to over come the problem.

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## BIOGRAPHY OF MR. K.M.TAJ-BIUL HASAN:

K.M.Taj-Biul Hasan was born on 06 April 1965 in Bangladesh. He holds B.Sc.(Hon's) and M.Sc. degrees in Zoology from the University of Dhaka. After completing his Diploma in Photography & Film making; He joined Government service in October 1993 as an Educational Program Producer and continued his service till April 01 2011 .So, far he produced 160 Televisions programs & 28 Documentaries on Education, Human development and Environment issues. A good number of his Films got the International awards and appreciations. Mostly in 2007 and 2010, he was created a historic record by winning two times, the most prestigious & highest award on Educational film competition of the world **“The UNESCO Japan prize”** for his two documentaries – **“Education on the Boat–Hope for Tomorrow”** and **“The Light of Life”** respectively. He was trained in BBC (London), BFDC (Dhaka), CENDIT (New Delhi), CEMCA (New Delhi), Deutsch Welle Television Training Centre(Berlin), NIMC (Dhaka), STOU (Bangkok) and NHK (Tokyo) on Educational Filmmaking and Television Program Production. So far, Mr. Hasan presented papers in 28 International conferences around the world on **“Educational Filmmaking & Broadcasting”** since March 2013. He has also publications in the reputed journals. He made several professional visits in many countries of Asia, Europe and Africa.

