

ENVIRONMENTAL SECURITY AND SUSTAINABLE DEVELOPMENT IN. BANGLADESH: LESSONS LEARNED FROM KITA KYUSHU ECO TOWN PROJECT

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Abstract

This paper focuses on how strategies and policies adopted by the Kita-Kyushu Eco-Town project of Japan, the plan of a big industrial city, can be applied to Bangladesh in order to protect the country against environmental threats and ensure sustainable development to establish eco-friendly cities. It gives an account of the multi-pronged approach to the issues of environmental security by analysing threats emanating from environmental pollution in the context of applying the Kita-Kyushu Environmental protection project as a model for Bangladesh. The strategies adopted by Kita-Kyushu were to limit the use of ozone depleting substances (ODS) and to initiate resource recycling measures through a combination of legislation for mitigating environmental threats and challenges to ensure national security and market forces and at the same time to assist industries to overcome their difficulties in order to create an eco-town. As big cities of Bangladesh like Dhaka, Chittagong, Khulna etc. are facing ever more acute pollution of the environment; necessary steps must be taken by following the model of Kita-Kyushu Eco-Town Plan to promote Bangladesh's environmental security interests and to ensure sustainable development as a whole.

Keywords: *Environmental Security, Sustainable Development, National Security, Environmental Pollution, Eco-Town*

INTRODUCTION

The concept of security has been changing from traditional military thinking to a non-military one by including the environmental dimension in security agenda. Environmental degradation as non-military threats has been advocated by Norman Myers, Richard Ullman and Michael Renner and Jessica Tuchman Mathews. It can be considered as an addition to the momentum in the process of rethinking of the current concept of security. The version of environmental security, which informs this study, seeks to understand better the dynamics of the relationship between environmental protection or management and social stability and to identify the freedom from threats to human health and social instability due to environmental degradation. It refers to responses to environmental threats or risks and demands the relative public safety from environmental dangers caused by natural or human processes due to ignorance, accident, mismanagement or design and originating within or across national borders. This paper focuses on the environmental security in which social systems interact with ecological systems in sustainable ways, all individuals have fair and reasonable access to environmental goods, and mechanisms exist to address environmental crises. Environmental security is the cycling of

natural resources to products, to wastes, to natural resources in ways that promote social stability as is the case of the Kita-Kyushu Eco-Town Project.

Bangladesh has been facing environmental challenges ranging from pollution and rapid population growth to increasing water, energy and food scarcity. To what extent these issues will shape the national security agenda of Bangladesh is the main question to be identified. This paper argues that environmental difficulties are likely to be the primary cause of major security problems in the future which in turn might lead to both internal and external tensions and disputes. Moreover Bangladesh suffers from many tensions that originate from ecological problems such as environmental degradation and pollution. That is why Bangladesh has to protect its environment by following environmental protection measures that are in practice elsewhere. At the national level Bangladesh should follow a successful model such as the Kita-Kyushu Eco-Town project in Western Japan in controlling its environmental pollution. So the main question of this paper is how to apply the Kita-Kyushu environmental protection model, specifically its eco-town project, in Bangladesh's big and polluted cities to protect the environment while simultaneously attaining to sustainable development, strengthening market forces and reducing environmental security threats that emanate from environmental degradation and pollution and promoting its own national interests.

RESEARCH METHODOLOGY

This study employed qualitative research techniques as its research methodology. However, some findings are presented in quantitative form. A descriptive and exploratory case study approach was utilized for this policy study because the researcher had little control over the events and the focus was on contemporary phenomena (Yin, 1994). The questions were generally of a "how, what or why" nature. This work is based on both primary and secondary documents. Field surveys were conducted both at the national and local levels in Bangladesh and in Japan between August and December 2009. At the central level, 91 persons were interviewed from government, donor agencies, academia, media and civil society in Dhaka and in Kita-Kyushu. Kita-Kyushu Eco-town project was studied and its people and stakeholders were interviewed. Officials, stakeholders and common people of Dhaka and Chittagong in Bangladesh were also interviewed. The donor agencies in Bangladesh and government officials as well as stakeholders of the development projects have been selected for the field survey in Bangladesh to observe the impact of the projects on environment and sustainable development. The study was conducted on the basis of primary as well as secondary data. Primary data were collected through a structured interview using both closed and open-ended questions. Secondary data were gathered from various published documents (i.e., articles, books, study reports, etc.) and from the internet. In addition concerned people (three from each of the project offices) were interviewed in order to find out the stakeholders' perceptions regarding environmental security and sustainable development and the effectiveness of the programmes run by the environmental foreign aid. Stakeholders were selected on the basis of random sampling.

Almost all the interviewees were aware of the actual outcome of the environmental problems and they have proposed for creating Eco-Town Project to protect environmental security and ensure sustainable development. This process confirms that the 'nature and scope' of environmental problems tend to get intensified in both the developing countries like Bangladesh and in a

developed country like Japan. So a developing country like Bangladesh should learn lessons from Japan to build up Eco-Towns in the country. There was also criticism among the interviewees about the rhetoric of global and local agenda to take actions against threats emanating from the environmental problems to ensure sustainable development.

Kita-Kyushu Eco-Town as a Model for Bangladesh

The Kita-Kyushu Eco-Town project can also be applied to a developing country like Bangladesh. They are very useful for Bangladesh to protect its environment and make eco-town plan for its polluted city by following the environmental protection measures and eco-town plan of Kita-Kyushu. Since the Kita-Kyushu Eco-Town Project is contributing to ensure environmental security of Japan, the replication of such project can be helpful for Bangladesh to promote its environmental security as a whole. The Eco-town plan ensures environmental security that is freedom from threats to human health and social instability due to environmental degradation. The plan suggests that Bangladesh should follow Japanese responses to environmental threats/risks and relative public safety from environmental dangers caused by natural or human processes due to ignorance, accident, mismanagement or design and originating within or across national borders.

The condition of environmental security is one in which Japanese social systems interact with ecological systems in sustainable ways, all Japanese have fair and reasonable access to environmental goods, and mechanisms exist to address environmental crises. This promotes environmental security through the cycling of natural resources to products, to wastes, to natural resources in ways that promote social stability in Kita-Kyushu and other areas of Japan. Concerns about the insecurity individuals and groups (from small communities to humankind) experience in Bangladesh due to environmental change such as water scarcity, air and water pollution, global warming, and so on can be reduced by following the model of Kita-Kyushu Eco-Town Plan in Bangladesh's big polluted cities. Bangladesh should learn lessons from the Japanese experience of Kita-Kyushu Eco-Town Project in ensuring its environmental security to promote national interests and stability. In detail the measures to be taken are:

Initiative of citizens

The initiative of Bangladeshi citizens is the determining factor for environmental protection and Eco-town activity. Without having the support and cooperation of citizens, the money and efforts paid by governments would not be very efficient. The Eco-Town Project shows that the movement for environmental protection in Kita-Kyushu in the 1960s was initiated by citizens who turned it to a successful scheme. For Bangladesh, the first goal of local governments and NGOs who have to be directed to inducing the goal and motivating citizens to initiate environmental protection activities on their own and create eco-towns in their respective cities like Dhaka or Chittagong. Hence, next lesson for environmental protections arises. It is the education of citizens with regard to environmental issues.

Education

People would not initiate and support environmental issues without being aware of the seriousness of the problem. Therefore, the government and NGOs of Bangladesh should take responsibility for giving people education and knowledge about environmental issues. Knowledge about the environment should be made available as part of formal education for children as has been done in the Kita-Kyushu environmental project.

Cooperation of citizens and other institutions.

In Bangladesh environmental pollution is not yet framed as an environmental justice issue because Bangladesh's economic and social elite dominated activism against environmental pollution. When it comes to environmental activism, this kind of top-down approach is not unusual. In general Bangladesh's environmental measures have focused on lobbying, consciousness-raising, and environmental education, rather than grass-root mobilization. Thus, it is learned from the experience of Kita-Kyushu city that the activities of citizens and private companies and local governments have to be coordinated rather than implementing a top-down approach. Also it is very important that their activities are streamlined. Cooperation among people of Bangladesh and streamlining of their activities are needed especially in big industrial cities aimed at the grass-root mobilization that must be directed towards achieving same environmental goals.

Developing eco-friendly technology

Promoting the use of technology that will benefit the environment is essential for Bangladesh. Eco-Technology has been used to recycle not only wastes but also other products for daily use in the Kita-Kyushu Eco-Town Project. Familiar projects such as cans, metals, plastics and papers can also be recycled in Bangladesh as they are in the Kita-Kyushu project. Some products made from recycled materials in Kita-Kyushu such as Biodegradable Plastics, Eco-friendly Plastics, Eco-friendly Steel Products, Eco-cement, Recycling system for Concrete, Recycling Aluminium Cans, can also be made possible and such techniques can be applied to Bangladeshi industries by using eco-technology if proper measure is taken in this regard.

Making reasonable regulation

Bangladesh should take efforts, especially to enact various rules, laws and regulations congenial to United Nations Environmental Program (UNEP) and implement international conventions to overcome pollution and to promote international environmental cooperation including the implementation of the charter of UN Conference on Environment and Development held in Rio de Janeiro. It should also win international recognition by protecting its environment properly following the model of Kita-Kyushu. With the Earth Summit in Rio and the Kyoto Protocol in Japan, the 1990s have been a significant decade in reshaping conventional development thinking into sustainable development. This new trend guides us to clean up existing industries and develop new ones with minimum environmental impacts. In the process, development of recycling systems, waste exchange and industrial ecology will replace the linear industrial processes with a more circulatory structure.

Providing information

Providing consistent, accessible information about the environment to citizens and institutions concerned. Every citizen of Bangladesh should be made aware of environmental problems through free flow of information. A small group formed by the conscious citizens has the potential to start a positive approach before anything can gain momentum and become recognizable. The Bangladeshi government and renowned NGOs of Bangladesh can take effective steps in this regard.

Cleaning up, it is always good to get people that have experience in the field

Scientists are experimenting, making animal food from kitchen waste and trying to regulate chemical compounds for such animal food. At this point, Eco town recycles waste should not gain much profit. But officials in Kitakyushu are optimistic that the development of new environmental technologies will become a conversion of the former steel town development. In Bangladesh initiatives should be taken to recycle kitchen wastes, garbage, medical and chemical wastes to be recycled into fuel and other useful materials as above in the Kita-Kyushu project and less-profitable recycling industries should be established first time either by government or by the private sector that have the capability to establish such kind of industries. Moreover all industries in big cities of Bangladesh should be operated in environmental-friendly way. Thereby it would be possible for Bangladesh to create eco-towns in different polluted industrial cities like Dhaka, Khulna and Chittagong.

CONCLUSION

The field of environmental security studies is still largely an emerging one. There are ambiguities but this does not mean that we should not pay any attention to understanding environmental change and its relationship with national security and human survival. Emphasis also needs to shift away from focusing on conflict as an outcome of resource scarcity. The focus should be on the prevention of resource scarcity and pollution and increasing concerns about social disruptions and instability rather than about violent conflict as the principal sources of insecurity. This calls for the urgent need for mitigation against the causes, and management of, environmental insecurities arising from threats such as pollution, degradation and climate change. Environmental degradation, natural resource depletion, rapid population growth now pose threats to the prosperity of Bangladesh and have security implications as mentioned above for both present and future national interests. The National Security Strategy needs to consider environmental issues as a component of national security planning. Public-private partnerships including NGOs and civil society partnerships should be formed through cooperation and joint initiatives to promote environmental security and sustainable economic growth, as well as to expand global environmental business opportunities.

There does exist a range of national policy measures and regulations, as mentioned above, to address environmental issues. However, there is no integrating policy of the Bangladeshi government to establish the requirement for solutions to environmental problems to be systematically developed, evaluated, prioritized and credited towards national security interests. By having a small industrial base Bangladesh is in an advantageous position for getting a head

start in developing clean and sustainable industries. The wise approach is to learn from the industrialized countries and take proactive measures in planning and managing the industrial sector. This paper summarizes the status quo of industrial development in Bangladesh and categorizes the existing industries and different kinds of environmental security problems in Bangladesh. This study also analyzes the load of various pollutants, reviews the legal framework and makes policy recommendations in the light of lessons learned from the Kita-Kyushu Eco-Town Project that will help reduce the impacts of pollution on sustainable development and global environmental change on environmental security. Moreover, the policies as mentioned above should address the critical role of the private sector and civil society. Their activities need to be recognized to secure their participation. Without substantial changes in institutions and governance, economic policies, technology, knowledge and behaviour, the prospects for environmental protection remain bleak in Bangladesh.

Thus, it is obvious that the Kita-Kyushu Environmental Protection projects for the creation of an eco-town with recycling products and resources can be considered as a model for the polluted cities in Bangladesh attaining sustainable development as well as the protection of the people in these cities from environmental security threats that can cause conflicts or tensions within Bangladesh or across the borders. Kita-Kyushu Eco-town plan ensures environmental security that is the freedom from threats to human health and social instability due to environmental degradation. It shows appropriate responses of Kita-Kyushu town to environmental threats/risks and the relative public safety from environmental dangers caused by natural or human processes due to ignorance, accident, mismanagement or design and originating within or across national borders.

Although Bangladesh as a developing country does not have ample resources or much financial capability like Kita-Kyushu, it has to combat environmental threats in its polluted cities by making full utilization of its small range of resources and supporting efficient efforts of the people concerned. Bangladesh can also seek help from the Kita-Kyushu environmental project as this project has been giving financial support to developing countries. Bangladesh can send resource persons, who are experts in environmental issues, as participants to different environmental training programmes and workshops, undergoing in Kita-Kyushu, to learn lessons with regard to ensuring environmental protection and establishing eco-town. In this way the Kita-Kyushu model can be a good example for Bangladesh that should be applied to its polluted cities by recycling most of its resources to help attain sustainable development, strengthen market forces and ensure environmental security for its citizens as well as promote national interests as a whole.

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