

Wetlands of Dhaka Metro Area: A Study from Social, Economic and Institutional Perspectives

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UGC - 10301

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One of the most important ecosystems of earth is wetland. It provides enormous services to the human being and the environment. But a significant amount of wetland has already been lost along with agricultural and industrial revolutions. Changing social, economic and political contexts of the regions often have devastating impact on the wetland. All over the world, scientist and professional are now become aware of the adverse impact of loss of wetland and thus come up with strategies and policies to save remaining wetlands of this blue planet.

Like many other cities, Dhaka as one the most fast growing mega city of the world is also expanding by exploiting its natural resources and paying little attention to her ecological and social values. The recent trend of development in Dhaka has become an alarming threat for her remaining wetlands which has a close association with the life, livelihood of her people and natural setting of the city. The private land developers has filled out large tract of wetlands in the fringe areas of Dhaka despite of enactment of various environmental acts and policies and significantly deviated from the policies stated in the structure plan of the city. In this backdrop, this research designed from a realization that policy makers, environmentalist and inhabitants of Dhaka are all aware and concerned about the loss of wetland in the city and its adverse impact but there is absence of comprehensive research work which can give a clear perspective regarding the process, trend and context of loss of wetland in Dhaka Metro Area. The issue of loss of wetland is the outcome of interaction on number of forces. A clear understanding of these forces is a prerequisite to undertake programs to save remaining wetlands of Dhaka. This study primarily focused on three broad objectives: (i) To study the nature and process of loss of wetland in Dhaka Metro Area and associated consequences; (ii) To understand the social and economic forces related with the conversion of wetland; (iii) To assess the role of institutions and planning practice in Dhaka Metro regarding the conservation of wetland.

Several research works has documented the loss of wetland in different parts of the city up to the year 2001. This research calculated the loss of wetland in Dhaka Metro Area over the period 1989-1999-2005. Findings portray the alarming

pace of destruction of wetland in spatial and quantitative terms since 1989. The rate of loss of wetland during the 1999-2005 period is 1922 hectare/year, whereas during the 1989-1999 period; loss was 502.5 hectare/year. If this trend of loss continues before the year 2035 all temporary wetlands of Dhaka will disappear. Dhaka Metropolitan Development Plan (DMDP 1995-2015) has designated flood flow zones where the change of natural topography is restricted. The status of wetland has also been documented in three study areas located in restricted flood flow zones of Dhaka. The contribution of these flood plains in drainage system of Dhaka has been cited in many research works. An elaborate discussion focusing the impact of loss of wetland on flood scenario is included here. It is often argued that Dhaka does not have any other option to accommodate her growing population other than encroachment of the peripheral wetlands. The demand of virgin land to meet housing demand has been studied here. Findings of the study reveal that available highlands of Dhaka Metro area are sufficient enough to accommodate growing population if utilized in a planned and efficient manner.

Number of social and economic forces are active in the field those have significant association with the process of wetland conversion. Data obtained from the micro level study focuses on the local context and provides a comprehensive idea about the demographic, socio-cultural and economic background of the wetland owners. It exposes the activity of private land developers in the study areas. The lucrative economic benefit of the developers and buyers has been identified as one of the major force towards loss of wetland. This research tried to apprehend the view of local people regarding the loss of wetland. It is interesting to find that local owners are willing to protect their wetlands from the developers. The local wetland owners possess a strong belongingness with the land. This research assessed the prospective role of the community towards conservation of wetland.

The current trend of loss of wetland and exploitation of local people by the developers clearly indicates the failure of institutions to protect wetland. This research carried out a thorough assessment of prevailing planning and legal tools for wetland management. The role of different agencies both government and non government involved with wetland management is discussed here. Especially the interaction among different institutions, local people and developers has been critically analyzed. It is evident from the findings that very little effort has been given to increase awareness of the local people and to ensure their access to institutions involved with protection of wetland. The poor performance of government organizations emphasizes the issue of political will and commitment of government towards conservation. However, the role played by the NGOs/civic organizations are appreciated by the experts. This study delivers the essence that it is necessary to ensure dialogue and coordination among different agencies and stakeholders involved with wetland. Wetland protection programs must include

active participation of local people and requires a holistic management strategy involving (i) Local people; (ii) Local government body; (iii) Central Government; and (iv) Civic organizations. Growth management tool like taxation policy can be used to control growth especially for speculative motive. Findings from the study reveals that available highland of Dhaka required to be brought under efficient infrastructure planning to be more attractive for development.

In conclusion, the research provided some generic and specific recommendation regarding planning approach and role of different organization towards conservation of wetland. Considering the socio-political context of Bangladesh, the intervention of recommended policies is categorized into short term and long term basis.

Wetland management program for a mega city like Dhaka involves numerous issues and problems and thus recommendation of policies is a difficult job. A brief outline of the recommended policies is presented here. Wetland management program requires extensive knowledge in various fields. The present research was conducted from a city planning perspective and provides a general guideline for efficient protection and management of wetland of Dhaka Metro Area.