

CHAPTER: 11

11. CONCLUSION

The present dissertation reflects the wetland wealth of the district Maldah and the present status of its wetland biodiversity in the region. This district is the house of numerous large natural and few artificial fresh water bodies with good biodiversity. From the floristic exploration as much as 351 flowering and 6 pteridophytes has been recognized. Except these two major groups other major floristic groups like algae, fungi and bryophytes are also quite rich in all those wetlands. Among the collected specimens, several species recognized under are endemic, exotic and RET categories. Some interesting wild plants like *Oryza nivara*, *Oryza rufipogon* and *Rosa involucrata* are still available in these areas but the population structures these plants drastically decreasing due to several causes. Plants like *Dopatrium junceum*, *Coix aquatica* and *Rotala mexicana* are quite rare plants in the district. 43.46% of the wetland flora of India is wildly growing here. Detailed phenological study including flowering and fruiting calendars as the primary data has been determined for 220 wild wetland species. 70 species were studied to understand their seedling establishment and their reproductive potentiality have been determined.

The community structure, through the phytosociological investigation, the community structure has been understood for the vegetation of these wetlands. The diversity, richness and concentration of dominance for the species of each wetland are moderate and quite satisfactory. The wetlands are also house for numerous economically important plants and those have very good socio-economic impact. The wetlands are also used by local people in various ways like agriculture, irrigation, fishing etc. for commercial benefit. Several natural and anthropological threats are also recognized these gradually minimize the extension of wetlands and also make them unhealthy and unfavorable for the existing biota.

The present dissertation is the first time report that reflects the actual status and biodiversity of wetlands of Maldah. All the data were directly collected from the field for each of the selected 16 wetlands. The data extracted out from this work will be used as primary data for the proper delineation, classification and management programme of district's wetland for the policy makers. During field works, it is found that Govt. offices have no proper maps, land marks and detailed information about the wetlands of the district and only enlistment of few important wetlands has been prepared by them.

The wetlands like Rasik beel (Coochbehar), Ahiron beel (Murshidabad) and Santragachhi (Hoogly) are enlisted under the national conservation project. But it is unexpected that no any wetland from Maldah district has been selected for any such conservation project though these are very rich in floral and faunal, especially avifaunal diversity. It is noteworthy that European small countries have declared numerous Ramsar wetlands starting from 5 hector areas whereas a large country like India declared only 25 Ramsar Sites till date.

The wetlands like *Gabgachi-chatral beel complex* (approx. 2400 ha), wetlands of Tangan vallyay (*Belatuli* and *Madhaipur beel*), *Sanak beel*, *Hazar Takia beel*, *Boalia beel*, *Barbilla beel*, *Nayagram beel* and *Sagardighi* are the potential ramsar sites for their diversified biota. Due to the lack of any proper conservation strategy, these areas are exploited unscientifically leading to their gradual destruction. The wetlands like *Gold bold beel*, *Singsar beel* and *Sonaiguri beel* are almost filled up with eroded soil and people of surrounding villages used as it cultivated land throughout the year. Several such wetlands of the district are now at the verge of extinction or these will be extinct within next few decades. The wetlands of Maldah need immediate national and international recognition and nursing, for their existence. Government should initiate various national and international projects and makes proper conservation strategies along with the remote sensing technology for mapping with view to conserve the wetlands and wetland biodiversity. If proper initiatives are not taken immediately, it is quite possible that most of the wetlands of this area will lose their wilderness in the near future.