

Study on Significance and Conservation of the Wet Lands

Dr.D. Vijaya Kumar

Principal & Professor,
Kodada Institute of Technology and Science for Women,
Kodada, Telangana.

Prof.M.Uma Devi

Professor, Department of Commerce and Management Studies.
Andhra University, Visakhapatnam, Andhra Pradesh

Abstract: *Wetlands are highly variable and dynamic. Wetlands are areas where water covers the soil all years for varying periods of times during year. They are water bodies that also include land, they are fresh water, brackish as well as saline, inland or coastal, seasonal or permanent, natural or manmade. They prolonged presence of water creates conditions that favour the growth of specially adapted plants (Hydrophytes) and promotes the development of characteristic wetland (hydric) soils.*

Key words: *fresh water, saline, Hydrophytes, hydric soils, coastal.*

1. Introduction

Wetlands are area of the world's most important environmental assets, containing a disproportionately high member of plant and animal species compared to other areas of the world. India's wetland occur in the cold arid zone of Ladakh. The wet humid climate of Imphal, the warm arid zone of Rajasthan, tropical monsoonic central India and the wet humid zone of the southern peninsula.

Most of the wetlands are linked directly (or) indirectly with the major river systems such as Ganga, Brahmaputra, Narmada, Godavari, Krishna and Cauveri. Wetlands occur naturally on every continent the main wetland types are swamp, marsh, bog, and open, sub types include

mangrove forest, flood plain, Mire, varnahpod, sink, and many others. Many in peat lands are wetlands, the water in wetlands is either freshwater, brackish (or) salt water. Wetlands can be tidal (unindated by tydes), montidal the largest wetlands involves the Amazon river basin, the west suburian plain, the pantanai in south America, and the Sunder bang in the gaga – Brahmaputra delta.

The Un Millennium Ecosystem Assessment determined that Environmental degradation is more plainment within wetland systems than any other ecosystem on earth. Constructed wetland are used to treat Municipal and Industrial waste water as well as storm water runoff. They may also play a role in water sensitive urban design.

Wetlands vary widely because of regional and local difference in soils, topography, climate hydrology, water chemistry, vegetation and other factors – including human disturbance. Indeed, wetland are found from the tundra to the tropics and on every continent except Antarctica. Two general categories of wetlands are recognized. Coastal (or) tidal wetland and inland or noontides wetlands.

2. Need of the study

Coastal tidal wetlands in the United States, as that name suggests, are found along the along the Atlantic, Pacific, Alaskan and Gulf coasts. They are closely linked to our nation's estuaries where sea water mixes with fresh water to form an

environment of varying salinities the salt water and the fluctuating water lands (due to tidal action) combine to create a rather difficult environment for most plants. Consequently many shallow coastal areas are un-vegetated mud flats or sand flats some plants, however, have successfully adapted to this environment. Certain grasses and grass like plants that adapt to the saline conditions from the tidal salt marshes that are found along the Atlantic, Gulf, and Pacific Coasts.

Mangrove swamps and salt loving shrubs or stress, are common in tropical climates, such as in Southern Florida and Puerto Rico. Some tidal fresh water wetlands form beyond the upper edges of tidal salt marshes where the influence of salt water ends. Inland / Non tidal wetlands are most common on flood plains along rivers and streams (riparian wetlands), in isolated depressions surrounded by dry land (for example, playas, begins and pot holes) along the merging of lakes and ponds, and in other low lying areas.

Where the ground water intercepts the soil surface (or) where precipitation sufficiently saturates the soil (vernal pools and bogs). Inland wetlands include marshes and wet marshes and wet meadows dominated by herbaceous plants, swamps dominated by shrubs and wooded swamps dominated by trees. Certain types of inland wetlands are common to particular regions of the country.

Many of these wetlands are seasonal (they are dry one or more seasons every year and particularly in the arid and semi arid west may be wet only periodically. The quantity of water present and the timing of its presence in part determine the functions of as wet land and its role in the environment. Even wetlands that appear dry at times for significant parts of the year – such as vernal pools – often provide critical habitat for wildlife adapted to breeding exclusively by these areas.

Wet lands are considered to have unique ecological features which provide numerous products and services to humanly. Ecosystem goods provided by the wetlands mainly include –

water for irrigation, freshing, non timber forest products, water supply and recreation.

The major services include carbon sequestration, flood control, ground water recharge, nutrient removal toxics retention and biodiversity maintenance.

3. Conclusion

Wetlands are important in supporting species diversity. Because wetlands provide an environment where photosynthesis can occur and where the recycling of nutrients can take place. They play a significant role in the support of food chains.

In India lakes, rivers and other fresh water bodies support food chains. Wetlands are vital for human survival, they are among the world's most productive environments, cradles of biological diversity that provide the water and productivity upon which countless species of plants and animals depend for survival.

Wetland conservation is aimed at protecting and preserving areas where water exists at The earth's surface, such as swamps, marshes and bogs, fisheries also an extremely important source of protein and in many wetland. A swamp is a wetland permanently saturated with water and dominated by trees. Many wetlands, particularly those near cities, have been polluted by human activities, water ways often carry toxic loads of nutrients, heavy metals, pesticides and contaminants from proving activities that involved linkage plants, chemical factories, refreshes and industries.

The world's remaining wetlands are under threat due to water drainage, pollution, unsustainable use, invasive species, disrupted flows from dams and sediment dumping from deforestation and soil erosion upstream. Wetlands are critical to human and plant life since the advent of industrialization and urbanization the wetlands came under severe threat due to increased anthropogenic pressures. As per an estimate, India has lost 38 percent of its wet lands



between 1991 and 2001 alone. Wetlands in India account for 4.7% of the total geographical area of the country, these wetlands provide numerous ecosystem goods and services, but are under stress. Reasons for wetland loss in India are urbanization, land use changes and pollution. There is no proper regulating framework for conservation of wetlands in India. Future research should focus an institutional factors influencing their condition.

References:-

- [1]. Ahmad N. 1980 some aspects of Economic resources of Sunderbangmaingrove forests of Bangladesh p.p. 50-51. In: P.Soepadmo (ed) Mangrove environment.
- [2]. Chopra R. 1985 the state of India's Environment, Ambassador Press, New Delhi.
- [3]. Kumar A. 1999 Sustainable utilization of water resource in water shed perspective – A case study in Alaminsa water shed, Hazarabagh, Bihar, Journal of the Indian society of Remote Sensing 27: 13-22.
- [4]. Employment News Weekly, Vol XLIV No: 46 pages 40; New Delhi 15-21 Feb, 2020
- [5]. <http://wetlandsanbi.org>. Org working for wetlands.
- [6]. Water issue brief : using wetlands sustainably 2010.
- [7]. Status and trends of wetlands in the conterminous United States 1998 to 2004 vs Fish and Wild life service (Dec. 2005) pp 1-116.