

PULICAT DEVELOPMENT AUTHORITY – NEED OF THE HOUR

KANNAN VAITHIANATHAN

Wetlands are one of the most threatened habitats of the world. Wetlands of India, estimated to be 58.2 million hectares and the countries diverse eco-climatic regimes resulted in a variety of wetland systems ranging from high altitude cold desert wetlands to hot and humid wetlands in coastal zones with its diverse flora and fauna. Wetlands in India are increasingly facing several anthropogenic pressures and the loss of wetlands in India will have much greater impacts on human.

The Ramsar Convention is an international environmental treaty with the mission of conservation and wise use of wetlands through local, regional and national action and international cooperation, as a contribution toward achieving sustainable development throughout the world. The signing of the Convention on Wetlands on 2nd February 1971 is now observed as World Wetlands Day with the aim to raise public awareness of wetland values and benefits. After India became the signatory of Ramsar Convention the Chilika Lake, Orissa and the Keoladeo National Park, Rajasthan was the first two wetlands designated as International Importance by Ramsar Convention. At present there are 27 designated Ramsar sites in India covering an area of 1,056,871 ha, which needs to be further revised and to include many wetlands of conservation importance from India.

There are several legislations framed for the conservation of wetlands in India. However, the National Wetland Conservation Programme (NWCP) of Government of India needs a special mention here, which was commissioned in close collaboration with concerned State Government during the year 1985/86. The aim of the

scheme is conservation and wise use of wetlands in the country so as to prevent their further degradation. Until then, all over India, there are about 115 wetlands identified under this programme however, there are no steps taken to include the ecologically important and India's second largest Lake Pulicat in the NWCP.

In our east coast of India, three large lakes are situated, viz. the Pulicat Lake, the Kolleru Lake and the Chilika Lake – each of them is unique and rich in biodiversity. The Pulicat Lake is the second largest lake (720 sq km). The lake has three openings (Durgarajapatnam, Rayadurg and Pazhaverkadu) from the Bay of Bengal which play a vital role in its flora and fauna including fisheries. Pulicat is valued right from the 6th century and its importance for waterbirds is widely recognized. It is also identified as a potential Important Bird Area and as one of the coastal flyways (Central Asian & East Asian-Australasian) used by a number of pelagic and coastal migrants, linking Point Calimere in Tamil Nadu with Chilika in Orissa.

The Pulicat Lake is under serious pressure due to siltation, closure of sea-mouth, discharge of waste water, industrial effluents, invasive species expansion, encroachment (real estate) causing shrinkage of the lake area, surface run-off water brings in the wash of fertilizers and insecticides used in adjoining agricultural fields affect the flora and fauna which are in imminent danger of damage besides anthropogenic pressures. In 2010, the Global Nature Fund declared the Pulicat Lake as threatened lake of the year.

Due to dynamic and influence of both natural and manmade activities on the wetlands it is therefore a need to frequently monitor and regular update of the status of the wetlands is significant in view of the accelerating

* PG Research Department of Zoology & Wildlife Biology, AVC College (Autonomous), Mannampandal - 609 305, Mayiladuthurai, Tamil Nadu, India.

Email: kannan.vaithianathan@gmail.com

pressure on these resources due to developmental activities and population pressure. To enforce effective management plans and to promote sustainable measures is limited in a normal administration set up. Therefore, an exclusive administrative authority like the Chilika Development Authority (CDA) is need of the hour to scientifically manage this threatened ecosystem. There is an extensive published information available on the status of changes occurred over the period. The suggested recommendations have not been taken as serious attention in the conservation of this ecosystem. All the recommendations given through various studies are in literary form, practically there is no measure taken so far.



Photo 1. Bar-headed Goose at Pulicat Lake

In 1990's the endangerment was observed at the Chilika Lake ecosystem, being the first largest brackish water lake and an unique ecosystem of India, the Chilika Development Authority was formed with a set of objectives in 1991 by the Forests & Environment Department of Government of Orissa to preserve its ecology and conservation under multi-dimensional and multi-disciplinary developmental activity. Unlike the Chilika which falls within the limits of its state geography, the Pulicat Lake spread over two states (Andhra Pradesh & Tamil Nadu). A major portion of the lake is in Andhra Pradesh (70%) and the remaining (30%) in Tamil Nadu. Therefore, the respective state governments should have a collaborative effort in setting up of an authority in the similar lines of Chilika Development Authority as Pulicat Development Authority (PDA) to its conservation and an adaptive ecological plan with a long-term vision. □



Photo 2. Eurasian Spoonbill at Pulicat Lake

References

1. Scott DA. *A Directory of Asian Wetlands*, The World Conservation Union, Gland, Switzerland, (1989) p. 477-478
2. Foote L., Pandey, S. & Krogman NT. Processes of wetland loss in India, *Environmental Conservation* **23**: 45-54, (1996) <https://doi.org/10.1017/S0376892900038248>
3. Kannan V. & Pandiyan J. Pulicat – threatened lake of the year 2010, *Current Science* **99**: 1496-1497 (2010)
4. Sarkar J. Ramsar Convention and India, *Current Science* **101**: 1266-1268 (2011)