LENTIC AQUATIC ECOSYSTEMS

Maria LEICHTFRIED & Fritz SCHIEMER¹

¹⁾ Univ. Vienna, Limnological Dept., A – 1090 Vienna, Austria

ABSTRACT

The latitudinal distribution of 1500 very large lakes have been studied: Most of these lakes are in the temperate climatic zone $(40 - 55^{\circ} \text{ lat.})$ and the least in the subtropics $(15 - 25^{\circ} \text{ lat.})$. Lake density is again higher in the tropics $(0 - 15^{\circ} \text{ lat.})$. The origins of the lake basins are also different across climatic zones. 60 % of the lake basins are of glacial origin and second are permafrost lakes in the temperate zone, where else riverine lakes are with 40 % dominating in the tropics. Second are coastal lakes.

Lakes and reservoirs are used in very different ways in the tropics. Consequently, the arising problems are also manifold:

- pollution
- eutrophication
- fisheries

The ecosystem approach is supposed to be the most appropriate model for solving the problems and to open ways for the multifunctional usage of lakes and reservoirs. But the knowledge of interdependencies in ecosystems is necessary to build functional models e.g. of primary production in lakes and reservoirs.Described are the Sri Lankan reservoirs Tissawewa and Parakrama Samudra.

The European Union is financing an international project (FISHSTRAT) for studying trophic interactions using the ecosystem approach and socio-economic consequencies. Of main interest are fish, fishery and aquaculture.

6 countries are working together in this project with UK as coordinator. The countries are (in alphabetical order): Austria, France, Philippines, Sri Lanka, and Thailand.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

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