

Survey on Agriculture and Lakes



Background

In the run-up to the 11th Living Lakes Conference, Global Nature Fund asked the partner organisations of the Living Lakes network to fill in a questionnaire on the role and impacts of agriculture on the ecosystem in their lake regions.

The Survey was divided into four parts:

- I. Basic Information about the Lake, the Catchments and the Socio-Economic Role of Agriculture
- II. Agricultural Activities and the Environment
- III. Agricultural Practices and Regulations
- IV. Assistance Required to Balance Lake Protection and Agriculture in the Future

Purpose and benefits:

- To provide an overview of agricultural impacts on lakes.
- Publication of all results on the GNF webpage www.globalnature.org/knowledge pool.
- To promote the information exchange between stakeholders within and from different lake areas.
- To identify measures and actions required to promote the balance between agriculture and lake protection.

Response:

Living Lakes partners from 21 lakes and wetlands responded (Figures: size of lake; size of catchments)

- 1. Lake Baikal, Russia; 31,500 sg. km; 590,000 sg. km
- 2. Lake Balaton, Hungary; 594 sq. km; 5,775 sq. km
- 3. Lake Biwa, Japan; 674 sg. km; 3,174 sg. km
- 4. Lake Chapala, Mexico; 7,355 sq. km; 53,591 sq. km
- 5. Lake Constance, Germany, Switzerland, Austria; 571 sq. km; 11,000 sq. km
- 6. Dead Sea, Israel, Jordan, Palestine; 600 sq. km; 42,000 sq. km
- 7. Lake Jempang, Indonesia; 110 sq. km; 8,100 sq. km
- Lago Enriquillo (160 280 sq. km ; 3,800 sq. km) Lac Azuéi (112 sq. km; 1,200 sq. km), Dominican Republic Haiti
- 9. Laguna Fuquene, Colombia; 31 sq. km; 1,752 sq. km
- 10. Mar Chiquita, Argentina; 5,000 sq. km; 38,000 sq. km
- 11. Milicz Ponds, Poland; 77 sq. km; 5,534 sq. km
- 12. Mono Lake, USA ; 200 sq. km; 1,800 sq. km
- 13. Nestos Lakes, Greece; 125 sq. km; 800 sq. km
- 14. Paliastomi Lake, Georgia; 18.2 sq. km; 450 sq. km
- 15. Lake Poyang, China; 4,070 sq. km; 162,200 sq. km
- 16. St. Lucia, South Africa; 600 sq. km; Estimated: 10,000 sq. km
- 17. Lake Taal, Philippines; 24 sg. km; 35 sg. km
- 18. Lake Trasimeno, Italy; 125 sg. km; 264 sg. km
- 19. Uvs Nur, Mongolia; 3,350 sq. km; No information
- 20. Lake Võrtsjärv, Estonia; 270 sq. km; 3,374 sq. km
- 21. Lake Wular, India: 189 sq. km: 350 sq. km

Major Results

Part I: Basic Information and Socio-Economic Structure

How do you assess and rate the present socio-economic structure of agriculture in your lake and its catchment?



Key results: In 50 % of the Living Lake regions the agricultural sector plays an important role for employment. In most Living Lakes regions subsistence agriculture is predominant while the role of export of agricultural products is rather insignificant.

Part II: Agricultural Activities and Environment

Please assess man-made problems at the lake as a result of agricultural activities.

Problems from Agricultural Activities in Lake Regions



<u>Kev results</u>: Since agriculture is the world's largest water consumer and a major polluter of water resources, unsustainable agricultural practices threaten most Living Lakes causing major problems such as soil degradation (61 % - big problem), water withdrawal (52%), eutrophication (50 %), water pollution through pesticides (38 %) and drainage & land reclamation (33 %).