

## ***Comments on Lake Khanka Brief***

The brief describes a lake basin that is of considerable biodiversity importance. The description of the flora and fauna is detailed and thorough for both the Russian and the Chinese parts of the basin. It is commendable to see such an even balance in the information collected for both countries. Detailed water quality information is presented and the text provides an adequate summary of the trends and issues in these data. The issues include moderate eutrophication, high COD levels and some heavy metals on the Russian side. The issues in the basin are also clearly described including loss of wetlands from agricultural reclamation, soil erosion, and the loss of rare animals and plants. All these biophysical resources and issues in both the lake itself and its surrounding catchment are described in considerable detail.

The facts of the management environment, i.e. the organizations delegated by government, are described for both countries although in much less detail than was the biophysical environment. A list of proposed management actions, including closure of polluting factories, moving a large farm that is presently in the middle of a protection area, etc is provided but it is not clear whether these are part of an approved Action Plan(s) or are the wish list of the authors. In fact it is not discussed whether there are agreed management plans for each side of the lake and its basin or not. There are clearly a plethora of institutions involved in the management on each side and their ability to coordinate their actions is not discussed. It is clear, by implication, that there is no agreed transboundary management agreement (or at least its presence is never discussed until a statement in the 'lessons learned' section that a sustainable development plan is desirable).

The section on stakeholder involvement is difficult to read but appears to describe a joint scientific project between the two countries wherein stakeholder groups were consulted. But their involvement in the larger picture of lake management is not analysed. The Diagnostic Analysis for the UNEP executed project is referred to towards the end of the paper but there is no clear statement of what this project's objectives are or its timeline.

The impression gained from the management discussion in the Brief is that each government is working independently to resolve issues arising in their portion of the lake and its catchment, and that there is no joint action at this stage to manage the lake. There appear to be good relationships between the scientific communities in the two countries (maybe the even-handed treatment of the issues described in this paper illustrates that) and that may lay the foundations for transboundary cooperation. However, this possibility, or any other form of international cooperation, is not discussed.

The brief is very clear on the issues being faced by the countries in managing the lake, the environmental status of the lake and the current administrative arrangements. However, it would definitely improve the brief if the document could be extended to include an analytic description of the shortcomings of the present management regime. This should include:

- fragmentation of responsibility
- lack of transboundary cooperation and harmonization
- absence of an agreed set of objectives
- limited stakeholder involvement

The benefits and costs of a transboundary and cross-sectoral approach should be discussed even though it might be too soon to implement it.