

## Chapter 6. Conclusions

- 1) Argentina is a federal country. Most responsibilities for the management of natural resources, including lakes and other freshwater resources, are with provinces.
- 2) In this connection, while some provinces have enacted environmental laws and set environmental standards, the nation of Argentina does not have an overall environmental law yet.
- 3) However, the Secretariat of Natural Resources and Sustainable Development has been strengthened and the law has also been gradually strengthened including the addition of environmental provisions in the national Constitution.
- 4) The responsibilities for water resources management, in terms of both quality and quantity, are now with the Secretariat.
- 5) The National Institute of Water and Natural Resources (INA) attached to the Secretariat has been engaged in researches for sustainable management of water resources, including contamination issues and monitoring.
- 6) The national water quality monitoring is not yet complete and there is still much to do to establish the monitoring system to get sufficient information of the water.
- 7) Typical problems Argentine lakes are facing are seen at the following lakes:
  - (a) San Roque Reservoir  
The water pollution there is quite serious.
  - (b) Some lakes of the Patagonian Andean area  
There are concerns about the potential or actual water contamination of some of the lakes in the Patagonian Andes such as Lake Lacar and Lake Nahuel Huapi.
  - (c) Salto Grande Reservoirs  
There are not only issues of contamination and ecosystem conservation but also issues associated with the bilateral management by Argentina and Uruguay.
  - (d) Rio Hondo Reservoir (Sali and Dulce Rivers)  
Sugar cane processing factories have contaminated the rivers and the rivers have in turn contaminated the reservoir. Many aspects of environmental conservation are concerned with the sustainable management of the reservoirs including conservation of it as an important habitat of migratory birds. This is a typical lake in the middle to north of the country where problems are caused by various activities including human population, industries, natural factors (often the subtropical climate), agriculture, oil exploitation, mining, etc.
- 8) The water quality analysis done by ILEC also supports the argument of the typical lake water pollution problems are seen in the above lakes. ILEC recognizes the pollution of San Roque Reservoir as particularly serious. In view of the intensive and very frequent

occurrence of blue green algae bloom, measures to halt the pollution and change of the uses of water, particularly for human consumption are now a matter of urgency and human lives.

- 9) While taking such urgent measures, long- and mid-term measures should also be taken. Of particular importance are institution building in the areas of environmental enactment and government agencies, and establishment of a national environmental monitoring system. Although Argentina has human resources of relatively high quality, expansion of their experiences overseas will further strengthen the institution of the country as a whole. In this connection, it is encouraging that with support from multilateral agencies, particularly of the Interamerican Development Bank, the Secretariat of Natural Resources and Sustainable Development has already initiated institution building for basin management. Such activities may be most effectively implemented in sufficient consideration of liberalization of the economy of the country.
- 10) In the area of lake environment conservation some activities to establish the concept of "sustainable management of lakes" in the country may also be considered.
- 11) Because of the relatively high levels of economic capacities and human resources of Argentina, Japanese development to the country has been limited. However, there is a possibility that Japan can support Argentina in the field of lake environment management with Technical Cooperation and official loans. In view of the past successes in Japan's Technical Cooperation to Argentina, such support may be best done with a Technical Cooperation (Development Studies, training in Japan or secondment of JICA Experts, particularly the first two) as a key element and, preferably, in connection with the economic liberalization.