Main recommendations

The expert group’s work resulted in a precise diagnostic report that makes it possible to identify various policy options that could stimulate the development of the Lake. The expert group has thus formulated a series of recommendations. Its main recommendations relate to strategic orientations for the LCBC and/or its Member States:

1. Adopt a new communication strategy for the lake: instead of sowing confusion by speaking in terms of a crisis and relying on arguments that lack solid grounds, highlight the Lake’s potential to meet food and employment challenges;

2. Develop a strategic review of various development options for the Lake (and the basin): a prospective review in the form of a Strategic Environmental Assessment (SEA) concerning the ability to respond to future challenges (food, employment) created by water management in the basin would enable the review of a possible inter-basin transfer to move forward;

3. Draw up a Lake development plan built around a vision of Lake development shared by Member States and local populations;

4. Adapt public policies to the Lake’s specific characteristics (environmental and population mobility, cross-border location) to implement regulations, public service development, developments, and technical support for productive activities;

5. Prioritize support for family farming through plurality within farms and multifunctionality of tenures, as these are the practices that are best suited to making optimal use of natural resources impacted by high variability;

6. Secure land tenure: support the clarification of rules governing land access, in order to prevent conflicts linked to the increasing pressure on resources and promote the necessary intensification;

7. Facilitate the standardisation of regulations at a regional level in West and Central Africa to promote cross-border trade, particularly with respect to regulations on animal health and agricultural safety, livestock, and fishing products;

8. Better integrate homeland and cross-border security issues into the LCBC’s functions, particularly when it comes to managing information on natural resources and conflict prevention;

9. Make the Lake secure from pollution risks: protect the Lake from current or potential pollution by classifying it as a highly vulnerable environmental area and banning: (1) the use of hazardous plant protective agents, (2) all oil activities, including oil exploration in the Lake;

10. Develop participatory approaches to better integrate local populations and civil society organizations into cross-border environmental management and Lake development planning.

The expert group also highlighted the importance of actions related to information and research that contribute to development, with these two specific recommendations:

11. Reactivate or implement observation systems to remedy data deficits in a variety of areas: river and lake hydrology, hydrogeology, demography, biodiversity, etc.

12. The LCBC could play a major role in accelerating local research and development by implementing a competitive fund for research applied to development in partnership with beneficiaries (national technical services, local residents, local mayors, customary powers, etc.).

What is an expert group review?

Objective
Ensuring that scientific knowledge are available for decision makers, to inform policymaking and public debate on today’s major challenges related to the development of countries of the South.

Method
- a North-South parity and multidisciplinary college of a dozen experts
- a collegial review of published and grey literature
- a synthesis report made accessible
- conclusions and recommendations for decision makers

Expert group reviews are driven by the Expertise Department of IRD.
A multifunctional space stimulated by urban demand

The systems of production, perfected endogeneously and relying on seasonal flood recession, enable the optimal use of fertile environments for fishing, livestock farming, and agriculture. These systems are based on pluriactivity within families and multifunctionality of spaces (alternately flooding and drying the same parcels of land [terroirs]), thereby allowing fishing, livestock farming, and agricultural activities to take place successively. Until now, the growing human pressure on resources has been regulated by customary systems, which has prevented serious conflicts from erupting. Strong demand from urban markets, in particular the markets in N'Djamena and Maiduguri—regional cities with populations of around 1 million people each—has stimulated these systems of production. As a result, Lake Chad makes a significant contribution to the food security and the urban food supply of the hinterlands, which extend over a radius of 300 km with an estimated population of 13 million people in 2013.

Lake Chad in a few figures

<table>
<thead>
<tr>
<th>Variable</th>
<th>Period</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average annual surface of the Lake</td>
<td>1991-2013</td>
<td>7,000–11,000 km²</td>
</tr>
<tr>
<td>Maximum surface area of the Lake during flooding</td>
<td>1991-2013</td>
<td>14,800 km²</td>
</tr>
<tr>
<td>Minimum surface area of the Lake during water recession</td>
<td>1991-2013</td>
<td>3,000 km²</td>
</tr>
<tr>
<td>Average drawdown-range of the Lake’s surface area</td>
<td>2000-2010</td>
<td>5,200 km²</td>
</tr>
<tr>
<td>Inflows from the Chari to the Lake</td>
<td>2000-2009</td>
<td>21.2 km³/year</td>
</tr>
<tr>
<td>Withdrawals for irrigation purposes in the Lake watershed</td>
<td>Around 2010</td>
<td>1.8 km³/year</td>
</tr>
<tr>
<td>Corn production of the Lake and its immediate surroundings</td>
<td>Around 2010</td>
<td>600,000–900,000 metric tons/year</td>
</tr>
<tr>
<td>Fish production</td>
<td>Around 2010</td>
<td>50,000–100,000 metric tons/year</td>
</tr>
<tr>
<td>Population of the Lake and its immediate surroundings</td>
<td>2013</td>
<td>2 million inhabitants</td>
</tr>
<tr>
<td>Population of the Lake’s area of influence (radius of 300 km)</td>
<td>2013</td>
<td>13 million inhabitants</td>
</tr>
<tr>
<td>Population growth rate of the Lake and its immediate surroundings</td>
<td>1970-2010</td>
<td>3.2% per year</td>
</tr>
</tbody>
</table>

Key questions submitted to the expert group

1. Is Lake Chad disappearing?
2. Is population mobility a viable solution to environmental variability?
3. What is the Lake’s contribution to regional food security?
4. What forms of governance are suited to Lake Chad?

Lake Chad today: an oasis with an uncertain future

Lake Chad’s current prosperity depends on a delicate balance between societies and environments. Public policies should take this into account in order to build on achievements and remove major limitations without neglecting the expertise and endogenous innovations that local populations have developed in this unique environment. Thanks to its natural and human potential, the Lake could make a significant contribution to regional food security and employment. At the Lake Chad basin scale, the progress made in terms of development is helping to alleviate human pressure on the Lake’s natural resources, but the demographic densification taking place on its shores is likely to exacerbate tensions.

Complex governance at the basin scale

Governing Lake Chad involves significant challenges. Since the 1990s, there have been several major conflicts between riparian countries, making the Lake the site of border tensions. Regional cooperation through the Lake Chad Basin Commission (LCBC) has become one of the main tools for managing this cross-border space and the natural resources of the basin, though the organisation has faced considerable difficulties that reflect the crises experienced by its Member States. During the 1970s and 1980s, some of these countries undertook large-scale agricultural projects which ultimately ended in failure, resulting in the relatively low level of public investment in Lake Chad that was seen until recent decades.

In late 2010, in a context favourable to climatic and economic planning, the renewal of public agricultural policies in response to growing food demand showed that progress had been made with respect to managing natural resources at the regional level. The Water Charter that was adopted in 2012 under the auspices of the LCBC has the potential to make a further contribution to this effort. Additionally, the inter-basin transfer from Ubangi to Lake Chad is a major project that is receiving considerable attention. A study has concluded that the project is technically feasible, though the costs will be high. However, the persisting vagueness of certain aspects of the reasoning behind the transfer is contributing to uncertainty about Lake Chad’s future.

More precise knowledge is needed to build a shared vision of the Lake’s future and adopt a strategy that meets future challenges for sustainable development. This strategy entails making simultaneous progress in the areas of economic growth, environmental sustainability, and social equity. In the Lake Chad basin, these specific issues result in two core challenges: feeding rapidly growing local and regional populations and providing employment opportunities to the large youth population, as the path to development through rural urbanisation provides no future for this segment of the population. Lake Chad has the potential to contribute to this strategy.

Ideating possible outcomes for the future of Lake Chad

Export of goods to Nigeria (Doro Lelewa port, Niger)