

http://www.iowater.org/iowater/our-projects-news-and-update/article/a-guidebook-on-transboundary

A guidebook on transboundary aquifer management

- IOWater - Our projects : news and update -

Date de mise en ligne : jeudi 11 février 2010

OIEau

Copyright © OIEau Page 1/3

A guidebook on transboundary aquifer management

(The News N° 17 - February 2010)

Groundwater accounts for 98 to 99% of the total volume of freshwater on Earth. It runs in aquifer systems which can extend over tens, hundreds or even thousands of kilometers.

More than half of the population in the world currently depends on groundwater.

On a worldwide scale, 65% of the abstracted groundwater is used to meet the needs for agriculture, 25% for domestic uses, and 10% for industry, mining and energy activities. However, this distribution varies from one area to another: in many developed countries, groundwater represents a significant resource used for drinking water, as in Europe where it covers 70% of the needs. In arid areas, it also represents the main drin - king water resource, as in Saudi Arabia and Libya, in Yemen, Pakistan and Chad, in India or in Algeria and in Niger.

This strategic resource, necessary for socio - economic development, must require special attention and its sustainable management must be a target to aim for.

This is even more the case when the aquifers are transboundary.

The management of transboundary water resources shared by various sovereign States remains indeed a delicate problem. Nowadays, many efforts have already been made with regard to the management of transboundary surface water, which allowed, on the one hand, the establishment of Transboundary River Basin Organizations and, on the other hand, launching thoughts and experience sharing, as carried out within INBO. On the contrary, relatively few actions related to transboundary aquifers have been yet carried out, except for those implemented in a restricted number of projects for some large aquifers.

And yet, to date more than 270 transboundary aquifers worldwide have been assessed by the ISARM program of UNESCO/IHP.

These aquifer systems undergo increasing pressures, linked to the development of human activities, agriculture in particular, and to climate change.

In most arid and semi-arid zones, these groundwater resources are "fossil", i.e. nonrenewable or hardly renewable. **Their rational use is indeed crucial.**

To avoid the degradation of these aquifers and not to deprive future generations of an heritage to which they have the right to claim, and also to prevent conflicts between States over the shared exploitation of these resources, it is of great importance to establish lasting dialogue and collaboration between all interested parties.

This requires the definition of common objectives and adapted strategies, but also, more specifically, the establishment of management bodies with transboundary responsibilities. Good knowledge of the characteristics and functioning of the aquifer systems is also imperative, without it, no sound decision can be made. This was acknowledged in the United Nations General Assembly Resolution of December 2008.

In order to contribute to the suitable management of transboundary aquifers, the French Development Agency with its partners, BRGM, UNESCO, IOWater and the Water Academy, launched a methodological study which aims at drafting an operational guide book for the management of shared groundwater, intended for the political and administrative authorities concerned.

This guidebook will especially highlight the problems linked to the management of these resources, will give a progress report on the state of the art and ongoing practices, will present examples of transboundary aquifers on several continents and the stakes they represent, and will suggest recommendations to set effective management of transboun - dary groundwater. The draft gui debook was presented at the INBO General Assembly which took place

Copyright © OIEau Page 2/3

A guidebook on transboundary aquifer management

in Dakar from 20 to 23 January 2010.

AFD - French Development Agency frouink@afd.fr www.afd.fr
UNESCO a.aureli@unesco.org - r.stephan@unesco.org www.unesco.org
BRGM d.pennequin@brgm.fr - h.machard@brgm.fr www.brgm.fr
IOWater dg@oieau.fr - c.noel@oieau.fr www.iowater.org
Water Academy academie@oieau.fr - rama.martina@aesn.fr www.academie-eau.org

[/IMG/images/aquifere.jpg]

Copyright © OIEau Page 3/3