

Executive summary

Media report on water-related crises daily. Droughts around the Mediterranean basin are leading to restrictions on the use of drinking water, therefore weakening an economy already threatened by fire hazards. Repeated flooding in northern France brings about evacuations and considerable restoration costs.

Hence, we felt it necessary to identify the various risks (economic, security, legal, health, ecological, etc.) the people have to face, in order to anticipate as well as possible the necessary changes. It is also a question of bolstering a cultural change in our behavior in terms of water use, in the view to moving towards a fair sobriety, and combining preservation with needs satisfaction.

To this end, France may rely on a form of governance scheme that includes the various players in the water sector, with a nesting doll like approach to ensure that the different geographical scales of the water cycle are considered. This governance aims to restore quantitative and qualitative checks and balances at sub-basin level, by encouraging the emergence of actions to be taken at a local level. However, the length and complexity of some of these initiatives, and the persisting high level of local tension, show how difficult it is to achieve a consensual governance in this area. This is reflected in the high level of litigation surrounding emerging projects, adding to long periods of uncertainty where positions become even more tense, and highlighting the need for robust project impact studies.

To set up a fair decision process on a presently non-consensual issue, a better understanding of the available of the induced phenomena is most welcome. Many databases do exist, but some of them need to be inter-linked or completed. This is about having a better understanding of the available resource and of their cycle and being able to monitor consumption for all uses (agricultural, drinking water, but also the various industrial uses). Robust assessments of the ecological impact of emerging projects would become possible as well.

Since what's scarce is expensive, the water resources scarcity also raises questions about the value to be placed on water use. In France, water is regarded a "common good", hence we are not to deregulate the water market, but to look at all the counter-cyclical financial measures that can be put in place. It involves promoting cultural change towards a more water-efficient society, making collective choices between different uses of water, and avoiding certain excessively consumptive behaviors.

The final chapter of the book addresses the issue of the water distribution network and the local domestic consumption. In fact, the antique network has many leaks, creating a very significant waste when providing water for drinking, washing and watering, or any other private use.

In other word, three water qualities come to the fore: drinking water, washing water and grey water, the latter being dumped into the wastewater system. And rainwater, which is more than enough in quantity, could become the renewable resource for private households.