

Concept Note (Ramiro Martínez – MENBO)

Planning of drought in a context of water scarcity: experiences in the southeast Spanish basins and of MENBO

Workshop on DROUGHT MANAGEMENT in Tunis on April 30, 2018

According to the theme proposed by the Organization, the presentation is laid out according to the following general index, tackling the questions below:

- Basics concepts: Drought and Scarcity
- Drought Management Policy and Planning
- Special plans against drought
- The Júcar River Basin - Special Drought Plan case (including Context, Legal framework, Contents, Indicators System and Measures in the Drought Plan)
- Wrapping up with a summary of the international state of play, and main conclusions.

We start by going through the conceptual definitions of scarcity and drought, highlighting the fundamental aspects that differentiate one from another, and that are involved in their management and planning: natural or anthropogenic character, indicators for their perception and temporary aspects that define them.

We then review the main international accepted concepts regarding planning and drought management issues, highlighting, first of all, those that should be the main objectives to achieve:

- 1) Proactive mitigation and planning measures as key elements of effective national drought policy.
- 2) National, regional and global collaboration among observation networks.
- 3) Financial strategies into drought preparedness plan (insurances).
- 4) Establishment of a safety and emergency relief network at diverse governance level.
- 5) Coordination of user-oriented drought programs.

Below we expose the main basic contents a drought management plan must include:

- Drought characterization and diagnose.
- Indicator system in situations of prolonged drought and occasional water scarcity.
- Measures and actions to develop during the different phases of drought and water scarcity.
- Drought follow-up and post-drought reports. Assessment of socioeconomic and environmental impacts.
- Reference framework for supply emergency plans.

We analyse in detail the special drought management plan of the Júcar River Basin district (Spain), which can be a reference of outstanding importance since it is one of the first formulated within that scope in the international scene.

The analysis is carried out with the version of the plan recently subject to information and public participation (December 2017) which reshuffles the previous plan existing since 2007 (in

that year the Commission adopted its Communication to the European Parliament and the Council - addressing the challenge of water scarcity and droughts in the European Union. COM/2007/0414, in which Spain – and, in particular, the Júcar Hydrological Planning Office – was one of the main authors).

First of all, we tackle the main aspects of the Júcar Basin district: area, population, available resources, distribution of demands and uses, etc., in order to expose the existing conditions for a better comprehension of the formulated plan.

Then, a brief review of the existing legislative framework within which this Special Plan is framed, is set out.

We also present the main contents of the Plan: System of Indicators, Definition of Scenarios and, above all, we tackle the Programs of Measures foreseen in the Plan, that address measures such as modifications in the sharing of the available resources, softening of the royalties and tariffs system, temporal reduction of the environmental objectives, extraordinary access to new sources of water resources, follow- up programs and emergency and recovery plans.

Finally, we report about some similar initiatives existing in the nearest international scene (Mediterranean) and point out the main characteristics of this field for future similar plans: Similar experiences in the United States, Australia, Israel, etc., most recent initiatives in Asia, Caribbean, South America, etc., the most active international organizations: UN, FAO, WMO, WB, the Maghrebian System of Early Warning to Drought (Algeria, Morocco, Tunisia). 2006, the Sahara and Sahel Observatory (OSS), and the particularities of the Mediterranean area in this sense.

We wrap up by analysing a series of general conclusions, addressing the following issues:

- need to count on this kind of plans in the areas most vulnerable to droughts
- need to count on strong systems of ongoing data collection in order to achieve a correct definition and follow-up of the scenarios
- need to count on reliable data on demands and uses
- the prevalence of agricultural uses in the Mediterranean
- the scarcity as the main hydro-climatic characteristic (with the impacts that it imposes)
- the need to underpin the whole system with a robust and effective governance system of water resources that allow:
 - To define a clear system of competences
 - A correct administrative coordination
 - The guarantee of the participation of all involved actors
 - A well defined economic and financial regime to operate with