

Foreword

Water resources in the Mediterranean region are limited, scarce and difficult to predict from year to year. The average in the region for annual water availability per capita is 2700 m³ compared to 7000 m³ worldwide, with more than 28% of the available water resources developed compared with 8% worldwide. With limited and scarce water resources and demand rising due to population growth and improving standard of living, water management problems are tremendous even without drought events, due to the imbalance between availability and demand. The area being mainly agricultural has a high water demand and its economy is increasingly dependent on the rapidly increasing tourism. Drought, being a normal recurrent feature of every climate, combined with water scarcity has dramatic effects on the economy and the environment of the Mediterranean countries, on the people themselves and the population's well being. Drought events affect rain-fed agriculture as well as water supplies for irrigation and domestic water and delay economic development in addition to adverse environmental and social impacts.

Drought events in the Mediterranean region have been frequent after 1970. Societies tend to react to a drought when it is upon them, by responding to immediate needs and by providing what are often costly remedies attending to balance competing interests. In many cases, this may not be an adequate response in the long term nor contribute to lessen future drought impacts. There is a need to understand drought management consequences in order to improve on the existing management policies.

Mediterranean Drought Preparedness and Mitigation Planning (MEDROPLAN) is a project funded by the European Commission within the framework of the Euro-Mediterranean Regional Programme for Local Water Management. The Project is coordinated by the Mediterranean Agronomic Institute of Zaragoza-International Centre for Advanced Mediterranean Agronomic Studies (IAMZ-CIHEAM). The objectives of the MEDROPLAN project are to provide guidelines for drought preparedness plans and the framework for the setting up of a drought preparedness network for the Mediterranean countries. These guidelines will be elaborated following a common methodology for the analysis of drought management in the Mediterranean. The guidelines will be specifically formulated to address the physical, socio-economic and environmental issues of the Mediterranean countries. The guidelines will incorporate the scientific background and knowledge on droughts, the meteorological, agricultural and hydrological drought aspects, their onset and end, their frequency of occurrence, the water resources availability and water demand in relation to the climate, the water shortage observed and the impacts of water shortage caused by droughts in the six partner countries (Cyprus, Greece, Italy, Morocco, Spain and Tunisia). The project will also enable the strengthening of the institutional capacities and training of the partner countries, the exchange of information and transfer of know-how and technology and the raising of the awareness and mobilization and the promotion of commitment of the population.

The data, know-how, technology and experience on drought and drought mitigation measures are scattered and perhaps inadequate. By joining forces in a project like the one presently proposed, the problems shall be faced in a collective, systematic, scientific and complete manner. All Mediterranean countries shall have the methodology and the guidelines to prepare their drought mitigation management plans, which shall be incorporated in their water resource management plans and their economic, environmental and social policies.

This publication compiles the results of the first stage of the project: the analysis of the institutions and organizations relevant to drought and water scarcity management, with special emphasis on municipal and irrigation water supply (project's Work Package 1). The document is organized with a general introductory section that outlines the methodology for the analysis followed up by the country reports. Each country report includes a description of their organizations and institutions and the explicit linkages and hierarchical relations among them. Second, the reports document the institutional experience on the application of the existing drought preparedness and management plans. In addition, the document describes the data collection systems in the country, specifying the institutions responsible, the type of reporting and accessibility, and the primary uses of the data.

This information was presented in a workshop in Zaragoza, 15-17 March 2004. The workshop

included the participation of sixty invited people representing all sectors of the water management. In particular, regional representatives, water managers, water engineers, agriculturalists, environmentalists, water users and economists, in addition to the MEDROPLAN partner teams from Cyprus, Greece, Italy, Morocco, Spain and Tunisia, and representatives from CIHEAM and the International Center for Agricultural Research in the Dry Areas (ICARDA).

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Editors