

EDITORIAL

In the arid, semi-arid, and dry sub-humid areas of the Mediterranean, natural environment is affected by a dynamics that has been dramatically accentuating during the last decades. This is especially due to a rapidly increasing demographic growth, to socio-economic changes, to the concomitant transformations of the ways natural resources are used, and to regional interactions of global climatic changes.

The Mediterranean both links and separates different economic and political systems. The various environmental issues common to each shore are shared concerns that constitute a bridge for the scientific co-operation of European, Arab and African countries. Moreover, research capacities around the basin are considerable and could join forces to deal with major environmental questions. Such outstanding features make the Mediterranean region a unique place to undertake integrated research on impacts related to various changes.

With this aim, the countries of the Mediterranean region have been undertaking huge efforts for several years, regarding the protection, restoration and remediation of degraded environments as well as regarding the creation of structures or programmes of scientific research dedicated to environmental protection.

As an example of national structure, we can mention in Tunisia the Institute of Arid Regions (IAR) of Medenine and at the regional Mediterranean scale, the RICAMARE programme of the MEDIAS network.

The Institute of Arid Regions (IAR) of Medenine (Tunisia) was created within the scope of Law n°76/6 dated 7th January 1976. Its mission consists in distributing the results of scientific studies bearing on the process of environmental dynamics in general and the desertification phenomenon in arid, semi-arid and dry sub-humid regions. This institute owes its specificity to its cross-disciplinary approach of the issue, through the creation of a network of scientific connections and the implementation of common initiatives.

IAR main objectives are as follows:

- undertaking studies necessary to develop farming, to protect natural resources and to fight against desertification;
- training specialised technicians and researchers;
- participating in the technical popularisation and management of the farming sector;
- performing studies on development projects at various scales;
- leading and co-ordinating the activities of several institutes concerned by arid areas.

IAR gathers a team of more than 300 participants of different professions, belonging to various structures:

- laboratory for Research on Desert and Fight against Desertification;
- laboratory for Remote Sensing and Geographic Information;
- laboratory of Rangelands and spontaneous vegetation in arid and desert areas;
- laboratory of Breeding and rural society;
- laboratory of Economics and rural society;
- department of Popularisation and development projects;
- department of Information and documentation on arid areas;
- training Department.

IAR headquarters are located in El Fje (22.5 km from Medenine); they include fully equipped laboratories, classrooms and conference rooms. IAR also runs four regional stations (Gabes, Kebili, Tataouine, Bengardane), as well as a network of more than 30 experimental stations distributed all over southern Tunisia.

Regarding the inventory and monitoring of environmental transformations and changes, IAR launched at the beginning of the 80's several research programmes that enabled to perform many studies and decision-helping thematic maps.

Since 1998, the "*Integrated Observatory of Arid and Desert Areas*" programme, led by IAR's "Laboratory for Remote Sensing and Geographic Information" allows to share reflections on the stakes of environmental dynamics, fight against desertification and sustainable development in Tunisian arid areas. It is also a place to collect, exchange, enhance and promote environmental information for the benefits of the great majority.

Lastly, the programme aims at supplying the decision-makers and relevant authorities with decision and arbitration tools for a sustainable development.

This mainly involves:

- observing and analysing information on the dynamics of arid environments and desertification, improving the understanding of the phenomenon and identifying and predicting the consequences of the dynamics recorded, in view of taking suitable actions;
- undertaking studies on domains ill known or still ignored, such as early warning, or the local knowledge on the mitigation of drought-induced effects; and developing software and design tools that favour the exchange and distribution of environmental information regarding arid areas;
- materialising the results obtained from research, through innovative practices in the field of training and circulating scientific knowledge, particularly for the authorities in charge of development and the future generations. Another aim is to develop technological capacities, autonomous training and capacities for environmental analysis thanks to the latest information and communication technologies;
- positioning IAR within the activities of the National Plan of Action to Combat Desertification (PAN/LCD), and Tunisia within a topical niche at the sub-regional (Maghreb, Mediterranean area), regional (P.A.R, P.A.M, RICAMARE) and world (UNCCD, LUCC, Global Change) levels.

IAR is playing a more and more important part; its ambitions now reach the rest of the countries affected by phenomena of global changes and desertification in the Mediterranean region, in the Maghreb and in Africa. As such, it is supported by several international institutions (such as OSS, the United Nations University, the Academy of Science of the Third World, among others).

This concern for an international co-operation can be shown by the involvement of IAR in the MEDIAS network as from its creation.

IAR's director, Professor H. Khatteli, actually belongs to the Steering Committee of RICAMARE. IAR is part of the "Anchor Stations" network created by this programme.

IAR has rightfully deserved its place within the RICAMARE programme. This was only too natural, in view of its studies on environments that are particularly sensitive to changes – either natural or human-induced ones -, of its cross-disciplinary attitude, and of its will to train new generations of researchers and to distribute the results of the studies led.

The regional network for research in the Mediterranean basin (*RICAMARE*) was designed in order to develop a regional collaboration regarding research on global change between scientists both from European and non-European countries all around the Mediterranean basin, according to the recommendations of this workshop. This network tries to bring together people and institutions interested in such studies, from the European Union and the other countries of the region, particularly from the southern and eastern shores of the Mediterranean, but also from other countries where this type of research is led.

Developing such co-operative studies implies a three-step approach: gathering “confirmed” scientists in order to define in detail a schedule of research; making it known and implemented by a wide community of scientists and decision-makers; training young scientists who will be able to play a major part in the associated research programmes.

Within this scope, IAR hosted the workshop entitled “Land use and cover – Water resources”, held in Medenine from 20th to 21st April 2001 and co-ordinated by Professor J. Puigdefabregas.

This RICAMARE workshop, dedicated to a subject which is actually complex but also vital for the present and future populations of the Mediterranean basin, was highly successful. As expected, it will be a breeding ground for future fruitful collaborations between all those who took part in it, from either shore of the Mediterranean - Europe or Africa. Among them, IAR holds a unique place thanks to its experience, know-how, field involvement and access to various information sources.

The publication of this workshop proceedings in issues 13 and 13bis of the MEDIAS Newsletter gives us, Dr Mohamed Talbi (National Organiser of this scientific meeting) and myself (General Director of IAR), the opportunity to thank all the participants in the Medenine workshop for the quality of their contributions and their support in building co-operation bridges between both shores of the Mediterranean.

We also wish to thank Professor **J. PuigdeFabregas**, Estacion Experimental de Zonas Aridas de Almeria (Spain) as well as **G. Bégni**, Deputy Manager of MEDIAS-France and Acting Secretary to the START/MEDCOM structure, for choosing Tunisia to welcome this meeting. Most articles presented in the current "MEDIAS Newsletter" were redacted on that occasion. ◆

Pr. KHATELLI Houcine

General Director of IAR

Dr. TALBI Mohamed

National Organiser of the Workshop

Contact:

Pr. KHATELLI Houcine, General Director

Co-ordinator of the "Desert study and fight against desertification" Programme

E-mail: houcine.khatelli@IAR.rnrt.tn

Dr. TALBI Mohamed, Director of the Laboratory for Remote Sensing and Geographic Information

Co-ordinator of the "Integrated Observatory of Arid and Desert Areas" Programme

E-mail: Mohamed.Talbi@IAR.rnrt.tn

Institut des Régions Arides - Route de Jorf km 22 - 4119 Medenine (Tunisia)