

10 Water resources challenges and the role of CIHEAM/IAM Bari

It is becoming increasingly obvious that continued rapid population growth and socio-economic changes are exerting increasing pressure on policy-makers and on the public at large to find viable and realistic water management strategies that can deal with the following four issues:

1. safeguarding water to meet basic needs for difficult uses;
2. minimising water loss;
3. re-using and allocating scarce water for desired socio-economic development;
4. protecting the environment from degradation and loss of productive capacity.

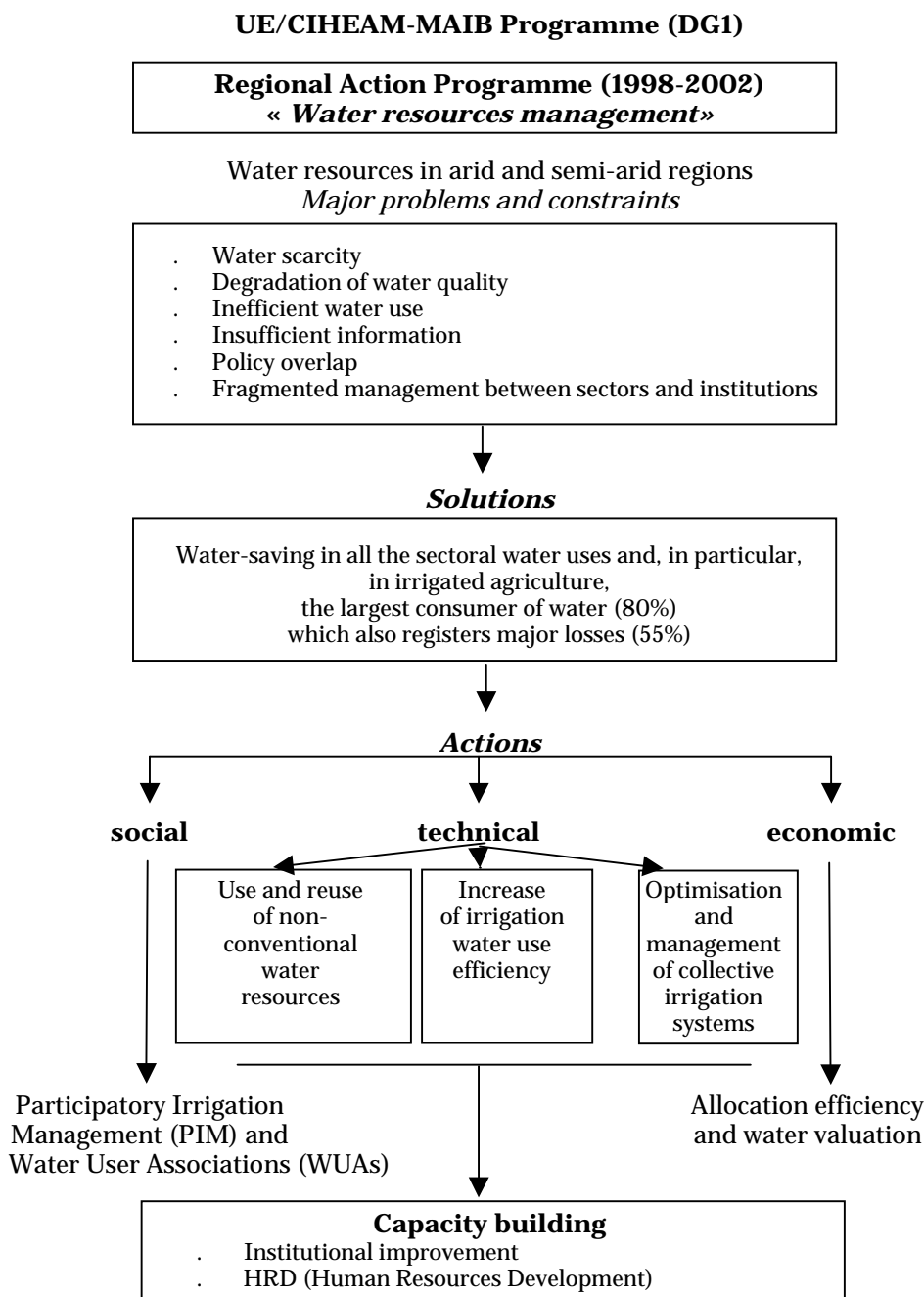
The common requirements in all practical responses to resolve all of these major issues must include larger investments, better institutions, more technology and expertise, and intensified cooperation.

Aware of the above-mentioned challenges and relying on past experiences and the knowledge accumulated in the water resources sector, the CIHEAM Mediterranean Agronomic Institute in Bari launched the 4-year Regional Action Programme on "Water resources management" in 1998, within the framework of the EU (DG I) Programme. This programme is geared mainly to the sustainable use of water resources in the irrigation sector and places emphasis on the following major issues:

- Non-conventional water resources practices and management for sustainable use;
- Water use efficiency;
- Design, management and optimisation through performance analysis of collective irrigation systems;
- Participatory Irrigation Management (PIM);
- Economic aspects of water mobilisation and use.

The objectives of the programme are to improve institutional capacities, to develop human resources strengthening regional cooperation, and to effect technology transfer and the sharing of experiences between the South and the North in the Mediterranean through training, action to promote research and measures to develop networks for the communication of scientific and technical information in the field of water resources and irrigation based on the concept of "Centres without Walls".

Graph 10.1 - EU/CIHEAM-MAI Bari Regional Action Programme (RAP)



The Regional Action Programme is being implemented with the collaboration of many important universities and scientific institutions in both Southern and Northern Mediterranean countries, a fact which emphasises the need for continued development of human potential, education and public understanding as an essential element of a major international effort. Particular importance is attached to capacity-building within national research institutions with a view to increasing the individual countries' ability to address issues of sustainable development while devoting adequate attention to environmental constraints. More emphasis is being placed on the socio-economic aspects of water resources management, and this is being carried out in close cooperation with other CIHEAM institutes and, in particular, with the institute in Montpellier (France).

The role of the Bari Institute in the development and promotion of new strategies and action for the sustainable management of water resources in the Mediterranean region confirms the importance of international cooperation. Combining the international experience of countries with different levels of development may also be mutually beneficial, since the developing countries can learn from the experience of the more developed countries, drawing lessons from their successes and failures, and the more developed countries have the opportunity to use their skills to further sustainable water resources development in developing countries.

In view of the interdisciplinary and inter-sectoral nature of water resource problems, it is essential that an adequate institutional framework for water resources management be established in each country and each region if the sustainable development of water resources is to be achieved. Water management can only be rational if the institutions responsible for that management are efficient.