Water legislation in the Mediterranean countries

Moigne G. le

Etat de l'agriculture en Méditerranée : Ressources en eau : développement et gestion dans les pays méditerranéens

Bari : CIHEAM
Cahiers Options Méditerranéennes; n. 1(1)

1993
pages 242-255

WATER LEGISLATION IN THE MEDITERRANEAN COUNTRIES

G. LE MOIGNE (*)

I. INTRODUCTION TO WATER LEGISLATION

Since all human activities, economic, social, cultural and even religious, use water, legal and institutional aspects related to water are everywhere and have always been quite important.

Sound understanding comes out from a keen study of the diversified legal and institutional arrangements which have been experienced all around the world. Observation must not be limited to a few recent years of comparison; we also need to know the performance of alternative solutions over many years of changing conditions. For one test of good water legislation and institutions is their ability to adapt successfully over time. Legal and institutional variations are an opportunity to learn from it in order to derive some predictions of how new adaptations might perform in other geographical or historical contexts.

Observations, experience as well as scientific theory can help to suggest legal and institutional frameworks which will suit different specific conditions.

But the only real test, of course, will ever be to try very carefully!

A. The Hydrological Cycle

Most of human economic and social require water. For health and life itself, water is a vital need for everyone, everywhere. That is the reason why early human settlements began and can any time develop where surface or ground water is more or less regularly available.

(*) Senior Adviser , Agricultural and Rural Development Department - The World Bank - USA

Since the end of the 17th century, the natural circulation of water has been interpreted in scientific terms by the British and the French as the hydrological cycle within river basins bounded by watersheds.

Through its own territory, water may restlessly change its volume of flow and its quality substantially. These features have two main consequences:

- First, the availability of water is subject to uncertainty through variations of quantity and quality, which can be natural or man-made.
- Secondly, through these variations, the different uses of water intervene in the natural river basin regime and have direct or indirect effects--called externalities-- on each other over long distances and sometimes during a long period of time for ground water.

Where effects are strongly local and short term, they are like other problems that have to be dealt within a community. Through their legislation and institutions which reflects their own identity, communities try to come to terms with what they perceive as their water environment and feel as their responsibility. But the long distance and/or the long-term quantity or quality effects are often difficult to handle because they cross various institutional boundaries and different periods of time.

Because in the hydrological cycle water resources regimes are forever moving and varying under the influence of interrelated natural and human actions, there can be no ownership of flowing surface or ground water: water has to managed as a genuinely common asset. Public institutions necessarily have a role in the management of water resources which cannot be avoided or abandoned, that of the custodian, organizer, and referee of limited rights for particular purposes by legislature and administrative processes, often subject still to restraints in the courts of the constitution. The quantity and quality management of water resources has long been and will continue to be, in all communities, a matter of public governance.

B. Water Legislation

In all countries, water legislation draws on old standing traditions, local customs and rules of conduct. Water legislation is not an end in itself: it is one of the various instruments of giving effect to the water policies which it should reflect. Accordingly, legislation which is not preceded by, or does not explicitly involve, the adoption of certain policies, is unlikely to be effective. The policies may be adopted before the legislation and may even originate with another governmental body. To these two factors, namely, "policies" and "legislation", there should be added a third one: a water development plant for each country including, if necessary, specific planning for some river basins or ground water aquifers.

In all countries water legislation has been passed on a piece meal basis to deal with certain hazards, community conflicts or specific uses through the following stages:

a) legislation oriented towards certain hazards deriving from the existence of use of water or water run-off (regulations on flood control, natural run-off of rain-water, construction of wells, ...);
b) legislation oriented towards particular uses of water (laws on the supply of potable water, irrigation, river navigation, energy, industry, fish breeding, ...);
c) legislation oriented towards multiple uses of water and conservation of water as a resource, such legislation being concerned primarily with water and the coordination of its uses and secondarily with the particular uses themselves;
d) legislation oriented towards the joint management of various natural resources, which takes into account and regulates the interdependence of water and other natural resources (soils, forest, etc. ...);
e) legislation oriented towards the environment and dealing with water and other natural resources;

Most Mediterranean countries are at stage (b) moving towards stage (c).

As far as functional or intersectoral integration is concerned, stress must be laid on the need to harmonize water legislation with the legislation in other closely related or overlapping sectors of activity ad with a country's overall policy.

The wide range of branches of knowledge that are involved as regards the topics dealt with, is attributable to the very nature of water legislation and institutions and to the effectiveness of their role as instruments in the implementation of water policy. While the drafting of laws is a task for legal experts, the drafting of water laws is a task for experts with a specialized knowledge in various subjects working with the aid of specialists in related disciplines, for example, hydrologists, hydro-geologists, meteorologists, engineers, economists, administrators, sociologists and the like. This inter-disciplinary character of water legislation and institutions is widely recognized. Therefore, there is a critical world shortage of not only legal experts but also economists and administrators possessing the kind of education, training and experience referred to.

Although water resource management cannot be the responsibility of only governments, national governments must define and implement a legal and institutional frameworks balanced to meet the contradictory objectives of flexibility on one hand and simplicity and stability on the other. This framework must be flexible enough to adapt to diversified geographical and climatic features as well as to changing economic and social uses, yet both simple enough to be easily understood and effectively implemented and stable enough to be reliable and long-lasting.

II. WATER LEGISLATION IN THE MEDITERRANEAN COUNTRIES

Before entering upon the study of the various legal water laws in Mediterranean countries, it is necessary to have a general view of the customs and practices governing land ownership, water ownership and use in various regions, always taking into account the effect on the evolution thereof of the legal doctrines and rites prevailing in each area. These established customs and uses form the basis of water legislation which, although complex because of their cautious and detailed provisions, have been respected even during the most anarchistc period of troubled life in arid zones.

As regards local customs, the geography has exerted a profound influence upon all aspects of human activity connected with the search for, and the distribution of water. In the final analysis, all water policies attempt to balance resources and requirements. One point should be borne in mind: in general, the scarcer the water, the more complicated and

elaborate the regulations are. Where water is plentiful, control is relaxed and a strict distribution patten is no longer followed.

Although religious precepts have maintained their influence, practical needs have profoundly affected the various rules and regulations concerning the ownership and use of water in arid zones on the basis of local geographic features.

A. Principles Governing Main Earlier or Original Legal Systems.

Four legal families have to be considered: ancient China, the Hebrew and Moslem worlds, Roman law and its derivatives, common and civil law.

A.1 The first regime in time which appears to be of special relevance is the Chinese. Chinese civilization emerged around the Yellow River, and represents the largest and most ancient irrigation civilization in the world.

Chinese water law has been concerned mainly with surface water; some basis philosophical and legal principles underlying it are a useful source of inspiration. Two concepts emerge in China's complex legal history: the high price placed on flexibility, and that placed on equity. Flexibility is at the heart of Chinese legal through, based on belief in a close interconnection between the human social order and the natural cosmic order. Harmony and unity, which were felt to prevail throughout all creation, were considered to be in close relationship with all aspects of human behavior. Social order was based not on laws but on rites, rules of conduct, or customs, which prescribed behavior in harmony with the natural order of things. Whenever private interests conflicted, it was the duty of everyone to find, as far as possible, a solution which would take into account the interests of all parties and avoid creating a winner and a loser.

Recourse to justice would be made only after all possibilities of conciliation or transaction at the family, village or guild level had failed. It was important not to act in such a way as to have the other party lose face, so that the door would be left open for the possibility of re-establishing harmony and order between the parties, which has been shaken by legal proceedings.

A.2 Another ancient civilization, the Hebraic, is an important guide in water legal regime probably because it grew up in a semi-arid environment where water is scarce. The basic principles of early Jewish law are contained in the Bible and other Talmudic texts. Legal doctrines and opinions are contained in the *Talmud*, a code written between the IV and the III Century B.C., which includes a few references to water which are the development of the basic principles contained in the *Torah*, or revelation of biblical texts. The existence of public wells and the right for every traveller to use them is recognized. It is possible that the rules for protected areas (the Moslem *harim*) applied to rivers and wells. Domestic and irrigation water was subject to an order of priorities. In the case of several irrigators receiving water form a common water resource, the one closest to the conduit filled his cistern first, and the other irrigators did so in turn. The laws of Babylon, which influenced the *Talmud*, consider the criterion of the ease with which the respective owner may use the water. The order of priority and the importance given to the position of the user in terms of proximity and ease of access to the common water resource are pertinent to the present study.

A.3 Due to special regional geoclimatic conditions, Moslem law is one of the legal regimes which has dealt the most with water. Many legal principles in Moslem law are similar to those in Talmudic law. According to Moslem water law water is considered to be a public good and cannot be individually appropriated. For example, wells belong either to an entire tribe or to an individual whose ancestors dug it; however, appropriation of a well does not give ownership rights to the water itself but it only gives exclusive or priority rights of use.

According to the tradition of the Prophet, there is an absolute right of thirst and even the owner of a well cannot abuse the water. The use of water is subject to a strict order of priority. Stock watering in a desert area is high in the order. In Moslem water law the notion of alternative source for water supply has an important bearing.

Moslem law establishes a close relation between surface and ground water and land use through the concept of *harim* or 'forbidden area': For example, in order to prevent new wells from depleting the aquifer, all schools have adopted the principle that the ownership of wells entails ownership of a certain amount of adjacent land - the *harim*, in fact. These fundamentals of Moslem water law entail established customs and uses which have been respected even during the most anarchistc periods. Customs governing water ownership are

dominate by the fact that in deserts water constitutes the main object of real property. As water becomes scarcer, the land proportionately becomes an accessory to it, contrary to the case in European legislation.

Codified Moslem law in the Mejelle Code (Ottoman Civil Code) is the basic source of law in Moslem countries. According to the Mejelle Code, ground water belongs to the community; the definition of water as a non-saleable, publicly-owned commodity applies to water in wells dug by unknown persons.

As everywhere modern trends in water law in Moslem countries aim at institutionalizing the concept of community of interest. This concept constitutes the traditional basis not only of Moslem but also of many present-day traditional societies with regard to both customary and codified water law. In Iran, The *Water Nationalization Act* specifies control measures to prevent the depletion of aquifers. The utilization of ground water by wells or *ghanats* is subject to government authorization and holders of ground water use permits are required to report the amount of water used. In Jordan, the Natural Resources Authority is responsible for the control, exploration and exploitation of ground water. In Algeria, Morocco and Tunisia surface and ground water resources are part of the public domain in their code des eaux.

From the Moslem experience, the following points are worth consideration: water is a highly regulated resource; control of the community (tribe, village, state) is far-reaching; attention is paid to the protection of water and water works; water uses are always ranked according to a precise order of priority; the notion of alternative source is well developed; a close relation is established between water and land use; the role of customs and traditions is of paramount importance. Moslem law regards all countries where a majority of Moslems live as one land. It is the abode of Islam (dar al-islam). There is no record in Islamic history of any international water dispute prior to this century, so that Moslem law has little or no provision concerning such disputes. No-Moslem countries are regarded as the abode of war (dar-al-harb). However, where water is concerned, Islamic law speaks of man and mankind, and not of Moslems. Water rights therefore extend to all human beings.

A.4 Roman Law is very important in the Mediterranean countries because its influence has dominated most of the area during the early past centuries. The importance of Roman law is also that it is the origin of the two major legal systems which have spread all over the

world: the Common Law and the Civil Code systems, and as such became the cradle of early principles of water legal regimes. Under these systems, ground water is either considered a part of the land and hence can be appropriated by the owner of the land, or as a commodity susceptible to ownership. In Common Law countries, a distinction is usually made between under ground streams which were treated in the same way as surface water which were never subject to private ownership, and other forms of ground water which are susceptible to exclusive ownership rights to the benefit of the landlord of the overlying land.

Roman law, as applied to water resources and to ground water in particular was bound to favor, at the international level, the development of the sovereign rights of states over their resources. It is logical that states, having full control of territory and land, would affirm full sovereignty over underlying resources. Such a principle would have produced many disputes in private law if both the courts in Common Law countries and the legislative bodies in Civil Code countries had not refined it in order to temper the principle of ownership or exclusive rights of use. Although surface water use rights are, under the riparian doctrine, limited by the theory of natural flow and the notion of reasonable use, these limitations do not affect the exclusive right of the landowner over ground water beneath his land nor on the flowing ground water once it has been extracted.

Under the French Civil Code, the right of ownership that a landlord enjoyed over springs located on his land was defined very early. A landowner could fully use the spring water of his land, but in doing so he might not harmfully affect the lands of his neighbors. The basic law of 1898 on the legal regime of water resources limited this ownership right whenever the spring waters were vital to the population of a nearby community.

Under the Spanish Civil Code of 1889, all ground water resources accrued to the regime of the land above them. They were private if underlying private lands, and public under public lands (article 408). Water brought to the surface by artesian wells or galleries became the property of whoever developed it. This regime influenced ground water law in Latin-America and still is in force in many countries.

Virtually all of these basic, traditional, legal regimes have either been amended by court decisions and new legislative developments or abandoned. In the former case the evolution has produced many hybrid regimes. In the latter case they have been replaced by modern legislation and new institutional arrangements; for example, new comprehensive codifications, were passed in Algeria (1973), Tunisia (1975), Spain (1985).

III. MODERN LEGAL REGIMES FOR EFFECTIVE WATER RESOURCES MANAGEMENT

Under the impulse of economic and social development, increasing needs for water and the introduction of modern abstraction methods, the uncontrolled use of water and especially ground water, has compelled states to introduce new modern water legislation and regulation in order to replace private litigation, especially about ground water uses, and to improve water resources management, coping with water quantity and water quality issues.

Two main legislative methods exist in this respect:

One method, which has been followed by countries with a non-consolidated water legislation, has consisted in the promulgation of ground water laws aiming at solving this new problem as a unique and isolated one. Cyprus, France, and Turkey may be cited as examples. These legislations have tended toward the limitation of exclusive private ownership rights in favour of a form of central administrative control over ground-water uses, thereby creating a formal separation between ownership (nuda proprietas) and use rights. In certain cases, private-ownership rights have been suppressed altogether by the transfer of water resource from the private patrimonium to the community, or by its incorporation into the Public Domain (nationalization). In other cases only geographical limitations to the use of ground-water could be introduced because of vested interest.

The second and most recent method was preside over the promulgation of consolidated water resources laws which, either by vesting the over-all water resource in the community as in France, or by incorporating it into the Public domain as in Algeria, Tunisia, Spain, Israel for instance, have institutionalized central administrative control over water resources conservation development and use.

Irrespective of the legal technique used and whatever the political motivation, these tendencies are present in all modern systems of law.

Modern legal regimes of water resources have led to increased public control over water through the permit system. This is a basic feature of modern regimes, another being the declaration of special zones where the use of ground-water is subject to strict controls.

Thus, the permit system and the declaration of special zones have now spread over almost all parts of the world. The need for concessions are permits to use water resources is becoming the most frequent and with regard to ground water has gradually superseded the more traditional systems inspired by Roman Law. The need for modern water legislation or regulation is now felt everywhere and in most Mediterranean countries where the modern system has not yet been introduced, consideration is being given to the adoption of the permit system. In France any installation intended for extracting surface or ground-water for non-domestic purposes is subject to the supervision of the administration. Prior authorization for exploration is needed within the water resources protection districts of Italy. The same applies in Spain for private ground-water extraction (on public lands a concession is required). Special legislation applies in the Canary Islands, where all extraction requires authorization. In Turkey, almost all ground-water exploration operations require a permit. Once ground-water has been found, its use is authorized immediately, but is limited to beneficial use criteria. But there is not yet a permit system for surface water.

Israeli water legislation, the first to modernize concepts and criteria for water management has integrated ground and surface waters under the same legal system: ground-water exploration, abstraction and use is subject to the general requirements which apply to surface water, namely the obligation of obtaining administrative authorization (drilling license, water use permit and recharge license).

The permit system is also found in modern African legislation. The National Water Resources Commission Order of Ethiopia, for instance, holds broad powers which allow the imposition of any necessary licensing procedures.

The introduction of the permit system is a highly significant element for the present study. It shows the importance now attached to water resources management. It will gradually given states adopting this system a more exact picture of surface and ground-water use patterns. This is very important in one bears in mind that sound cooperation in the field of water resource management requires more exact technical data. National criteria for permits could also provide a model for the criteria to be followed at the international level for water resources management between states. Although the concept of equitable use remains fundamental in many modern legal systems, the weight assigned to the various criteria used to define what is equitable have changed considerably over time. To determine what is 'equitable', the importance to be given to the land ownership, or to the seniority of existing

water use rights, or to the type of use, is gradually yielding to the criteria of reasonable and beneficial use and in some instances to the optimum use criteria, at least in areas where the water supply/demand relationship is delicate. This of course leaves considerable room for speculation as to what is a 'reasonable', 'beneficial' or an 'optimum' use but it affords greater justification for the attempt to propose new solutions for conflicting claims on the water, and in promoting co-operation between the parties concerned.

IV. MODERN TRENDS IN WATER LEGISLATION IN THE MEDITERRANEAN COUNTRIES

As we paid above, the Mejelle Code regulated the use of water in all countries belonging to the Ottoman Empire, that is until 1911 in Libya and until 1922 in Somalia, Saudi Arabia, Jordan, Iraq, Syria, Lebanon and Turkey.

Turkey became a secular republic and , in 1926, promulgated a new Civil Code.

Some territories were placed under French or British mandate (Syria, Lebanon, Iraq, Trans-Jordan and Palestine); although the Mejelle Code continued and still continues, at least partially, to govern the use of water in these countries, special laws were promulgated to develop further a centralized water control. These, while recognizing the provisions of the Mejelle Code, the principles of the Shari'a and local customs, declared water to be State property and introduced a government permit as a prerequisite to every new water use (except for drinking and animal watering purposes). This legislation also created commissions for the registration of existing and new water rights.

Most of these territories later became independent. In some of them (Jordan, Iraq, etc.) new laws on water issued in addition to the provisions of the Mejelle Code still in force and to the laws enacted by the Trusteeship powers. These laws also provided for public ownership of all waters and for existing water rights to be surveyed and registered special committees set up for this purpose.

Other territories (Saudi Arabia, Yemen and Oman) became independent Moslem States. These countries, notably Saudi Arabia, declared the provisions of the Mejelle Code to be no longer in force and reestablished the sacred principles of the Shari'a. In this group of countries no new water law was enacted to modify the traditional principles of Moslem Customary Law.

Still in another group of states, the codification process followed a different pattern:

- Afghanistan, already independent before the fall of the Ottoman Empire, appears to have no written basic water law. However, there do exist special rules and regulations for water uses aside from local customs.

- Iran, with a long independent past, strated in the early 1900's, under the stress of technology and with a view to developing its agriculture, to promulgate a whole series of laws concerning water.

- Egypt practically ceased to be part of the Ottoman Empire in 1830, although theoretically it remained under Turkish sovereignty until 1922. Since time immemorial, Egypt has developed rules on the use of water. At the end of the 19th century, it codified numerous water regulations and brought the whole matter under municipal law. Here, too, all waters belong to the State and their distribution and use are controlled in great detail by an administrative organization responsible for regulating strict rotation use patterns.

In the majority of States which have since acquired independence, waters are still governed by the laws enacted during the colonial era. In this group of countries all waters as well belong to the State and any use thereof requires a government authorization or, in some States, the distribution of water and the rotation use patterns are controlled by a central administration.

However, a majority of States had come and remained under colonial dominion (essentially French North, West and Equatorial Africa and British East Africa). There, water legislation, although occasionally respectful of local traditions and customs, was largely imported or adapted from the metropolis and super-imposed over Moslem Customary Law. Basically, the public and private ownership doctrine of French continental Law and the riparian use right doctrine of the Common Law of England have since left their imprint which is still strong today.

The accession of these States to independence, technological development and increased demand for water have given a new impetus to the codification of water legislation. A comprehensive water act has been promulgated in Iran in 1968. Similar developments have reached various stages of progress in Afghanistan, Indonesia, Jordan, Libya, Saudi Arabia, Syria and Yemen. In these and in other countries (Bangladesh, Egypt,

Iraq, Lebanon, Pakistan and Tunisia), central water administrations have been created and entrusted with the overall control of water use.

Current tendencies are to treat water, legally as well, as one natural resource which constitutes an essential component of the National Wealth and to vest the control of its conservation, development and use with the central government for the benefit of the whole community. Such a tendency is necessarily based on a strengthened principle of Public Interest to which private water ownership rights, where they exist or where they happen to be substitued for private water use rights, constitute a basic constraint.

It therefore appears that modern tendencies in water legislation aim at institutionalizing, in one form or another, the concept of community of interest which concept, in fact, constitutes the traditional basis of ancient customs and rules of conduct.

Like in Hydrology, water legal regimes make a cycle over time!