

Legislation on water users' organizations

A comparative analysis

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for the

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and the

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FOREWORD

The organized participation of water users in the management of water resources is nothing new. Indeed, it is an ancient phenomenon, as institutions are known whose origins go back to the earliest civilizations. What is new, however, is the range and scope of authority and responsibilities of the late twentieth century's water users' organizations including, in particular, irrigation water users' organizations.

Since the mid-1980s, driven largely by financial pressures, there has been an upsurge in efforts by governments around the world to transfer management of irrigation systems from government agencies to farmer organizations or other non-governmental entities. This has occurred both in more and less developed countries, and in countries with more and less liberalized economies. Whether the transfer includes all or part of management functions, full or only partial authority, an entire irrigation system (or tubewell command) or part only of a system, such as distributary canal commands, organizations of irrigation water users have been increasingly assuming a pivotal role in the relocation of responsibility and authority for irrigation management from government agencies to non-governmental organizations.

A robust regulatory framework for the corporate governance of water users' organizations, and for resource management by them, is a fundamental ingredient to irrigation management transfer policies. The former will provide the configuration for healthy functioning of water users' organizations, while the latter will concern itself with the way organizations obtain and manage the water and land resources they need to operate.

The present publication offers a comparative analysis of the contemporary legislation of a vast variety of countries, providing the needed regulatory framework for water users' organizations to function and grow. In some ways, it follows on from an older publication of more limited geographical scope, styled "Irrigation Users' Organizations in the Legislation and Administration of Certain Latin American Countries", also published by FAO in the Legislative Studies series (No. 24, 1983). It also complements the FAO publication "Transfer of irrigation management services – Guidelines", featuring in the Irrigation and Drainage series (No. 58, 1999).

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I. INTRODUCTION

Many countries around the world are currently moving to devolve a range of water management tasks from state agencies to participatory, autonomous, financially self-supporting water user organizations. The trend is particularly noticeable in the irrigation sector. The realisation that state agencies can not afford to effectively operate and maintain irrigation schemes has led to responsibilities being transferred to farmer-run water users' organizations, a process commonly known as 'Irrigation Management Transfer'.¹

The water user organization (WUO) is not a new concept, however. In a number of countries legislation regulating the establishment and operation of WUOs has been on the statute books for hundreds of years.² Indeed, they are often so well established that their role is barely noticed within the societies that they serve, simply and efficiently undertaking the tasks for which they were created.

Apart from the operation and maintenance of irrigation systems, such tasks can include the management of polders and land drainage schemes, the maintenance of dykes and flood-defence structures, the removal and treatment of waste-water, the supply of water for domestic consumption and other uses, and the management of groundwater resources, usually in cases where an aquifer is under stress due to over-pumping. In addition, WUOs are increasingly becoming involved in water resource management and conservation.

WUOs go by a wide variety of names. Equal variety is to be found regarding their size: some are responsible for water management activities on a few dozen hectares of land, others on many thousands.³ At first sight, long-

¹ This approach has also been followed in many of the former socialist states of Eastern Europe and Central Asia where, following the land reform process, WUOs have been established to take responsibility for irrigation and drainage systems previously operated by the now-dismantled collectivised farms.

² For example, the formal regulations for the operation and maintenance of the Benacher and Faitenar irrigation canals irrigators in Valencia, Spain were drawn up on 29 May 1435 (cited in Ostrom, E. *Governing the Commons* (1990)). These rules codified earlier customary rules that dated from many hundreds of years earlier. The statutory basis of the Dutch *Waterschappe* or 'Water Boards' dates back to the twelfth century.

³ In Germany, for example, some WUOs are responsible for water management activities on only around 50 hectares of land, while others are responsible for up to 200,000 hectares of land.

established North American and West European WUOs providing irrigation water to prosperous commercial farmers may appear to have little in common with WUOs set up to allow small-scale farmers in developing countries to operate recently constructed irrigation schemes.

Despite these outward differences, the basic principles on which WUOs operate, as well as the legal rules that underpin those principles, are surprisingly similar. For example, WUOs:

- are governed or controlled in a participatory and democratic manner by those who benefit from, and pay, for the services that they supply;
- undertake a discrete task related to water management;
- operate on a non-commercial, or 'non-profit', basis;⁴
- are self-funding; and
- due to the public service nature of the tasks that they perform, are usually subject to some form of regulatory oversight by the state.

Furthermore WUOs are generally regulated by specific legislation, in the form of laws and codes backed up as necessary by subsidiary legislation (in the form of regulations, decrees and so forth), that generally provides for them to be established as a special type of legal entity. Much of this legislation is relatively recent, even in those countries that have a long WUO tradition.⁵ The simple fact of its existence suggests that legislation has played, and continues to play, an important role in the establishment and operation of WUOs. After all, leaving aside political gimmickry, countries seldom enact legislation unless it is necessary. So what might be the contribution of legislation to the WUO sector?

Legal certainty, for a start. Legislation enables WUOs to have independent legal personality and thus to enter into legal relationships with their participants as well as with third parties. The content of such relationships

⁴ On closer examination, the term 'non-profit' is something of a misnomer. While the primary task of WUOs is to provide a service to their participants, as opposed to making (and distributing) a profit for investors or shareholders, they should never the less seek to make a 'profit', in the sense of a surplus of income over expenditure, as otherwise they will quickly become bankrupt. The key issue is that any surplus is retained within the organization.

⁵ WUOs in Germany are regulated on the basis of a 1991 law that replaced legislation enacted in 1937 which, in turn, replaced legislation dating back to the nineteenth century, while in Spain WUOs are now regulated under the 2001 Water Law (Royal Legislative Decree No.1 of 2001, consolidating the amendments to the 1985 Water Act).

can be expressed in the form of legal rules and reciprocal obligations, breach of which can be adjudicated by the courts, and enforced as necessary. As will be shown in this paper, specific legislation can also enable legal rules to be tailored to meet the specific needs of WUOs (and their participants). The importance of legal rules in the context of WUOs should not be underestimated. After all, like most co-operative institutions, WUOs are subject to a basic internal contradiction: every WUO is established on the premise that the interests of its participants are best served through mutual co-operation. But at the same time, those participants may often be in competition with each other, often for the same scarce resource. The more participants a WUO has, or the more competition there is for the use of a resource, the greater the likelihood of conflict. The existence of legal rules relating to WUOs can help to prevent or reduce conflict. Perhaps most importantly, though, specific legislation creates an appropriate enabling legal environment, the legal 'space', that WUOs need in order to be able function effectively.⁶

Curiously, while a great deal of literature has been published on other aspects of both Irrigation Management Transfer ('IMT') in general and WUO establishment and operation in particular, relatively little has been published on the topic of WUO legislation.⁷ This apparent omission is all the more surprising given the current trend towards community-based common property resource management within the natural resources sector. WUOs are also community based, and they co-operatively manage common property resources in the form of both water and the infrastructure needed for its management. As such, the WUO concept, with its proven track record and developed legislative tradition, has much to offer to other natural resource sub-sectors, such as forestry and fisheries, as they start developing suitable legal frameworks to enable sustainable community based co-management.

The aim of this study is to present a preliminary comparative analysis of legislation – codes, laws, decrees and regulations – that governs the establishment and operation of WUOs. It is based on analysis of a series of

⁶ Lindsay, J. *Designing Legal Space For Community-Based Management*, paper presented at an International Workshop On Community-Based Natural Resource Management, held at The World Bank Washington, D.C. May 10-14, 1998.

⁷ Solanes, M. *Irrigation Users' Organizations in the Legislation and Administration of Certain Latin American Countries* (1983), Rome, FAO Legislative Study No. 24, FAO, Rome and Salman, S. *The Legal Framework for Water Users' Associations – A Comparative Study* (1997) The World Bank, Washington D.C. are notable exceptions.

'legislative profiles' of WUO legislation⁸ prepared by the Food and Agriculture Organization of the United Nations (FAO) as well as legislative texts from a number of countries around the world.⁹ Examples considered are from both the common law and civil law traditions, and while every effort has been taken to include as broad a geographic coverage as possible, it is recognised that there are relatively few examples from the continent of Africa.¹⁰ In part this is for the practical reason that few examples are available in the FAO legislative database, FAOLEX. Whether this in turn is because few African countries actually have WUO legislation is an issue that deserves further investigation.

This study takes a thematic approach to comparative analysis: rather than simply describing each country's legislation, it examines the different ways in which such legislation approaches similar issues. It is set out in sixteen parts, beginning with this introduction. Part two examines the different names conferred on WUOs in legislation, while part three considers the purposes for which WUOs may be established. The legal status of WUOs can have important implications for the manner in which they are established and operate, and this issue is considered in part four, along with the source of WUO legislation. The related issues of a WUO's 'governing document' and 'internal rules' are considered in part five.

All of the WUOs considered in this study operate on a participatory and democratic basis. Identifying actual or potential participants is the subject of part six, while the variety of procedures for WUO establishment is considered in part seven. Part eight examines the institutional arrangements within WUOs while part nine focuses on provisions conferring substantive rights and duties on WUO participants. Part ten considers legislative provisions on the sources of WUO income and financing. One of the main regulatory oversight tasks is ensuring the correct financial management of such income, which is discussed in part eleven, while part twelve examines the substantive rights typically conferred by the legislation on WUOs. In part thirteen, legislative approaches to WUO dissolution and re-organization are

⁸ Legislative profiles were prepared by the FAO Development Law Service in respect of a number of countries for the FAO "International E-mail Conference on Irrigation Management Transfer" 3 September-29 October 2001. The countries in question are listed at Annex A. They are available at URL www.fao.org/landandwater/aglw/waterinstitutions/toconf.htm

⁹ A list of primary legislative sources is contained at Annex B.

¹⁰ Specifically Morocco, Tunisia, South Africa and Uganda.

considered, while part fourteen describes the issue of WUO 'federations'. Part fifteen draws some preliminary conclusions about the legislation considered and presents recommendations for further study.

Finally, a note about citations and references. For the sake of simplicity, references to countries listed in Annex A are based on the WUO legislative profiles described above, except where reference is made to a specific article or section. Likewise, references to the legislation of the countries listed in Annex B refer to the specific legislative text listed in that annex, except again where a specific article or section is cited.

II. WHAT'S IN A NAME?

Although the term 'water user association' is commonly found in the IMT literature, it is used in the legislation of relatively few countries - usually in cases where the concept is relatively new. Thus it is used in the recently enacted legislation of Albania, Armenia, Bulgaria, Nepal, Romania,¹¹ South Africa and Uganda. The Moroccan legislation provides for the establishment of 'Agricultural Water Users' Associations' (*Associations des usagers des eaux agricoles*), while in that of the Kyrgyz Republic they are 'Unions (Associations) of Water Users'. The name "water user association" does not appear in older legislation examined here, and it may well be that the use of this term in legislation results from the influence of the IMT literature.¹²

In fact, a surprising diversity of names for WUOs is to be found in legislation around the world. For example, both Andhra Pradesh State in India and Punjab Province in Pakistan use the generic term 'Farmers Organization'. In some Latin America countries, such as Colombia and Peru, the term 'Users' Organization' (*Organizaciones de usuarios*) is widely employed. Costa Rica, meanwhile uses various terms: the Water Law refers to 'Users' Societies' (*Sociedades de usuarios*), but the 1999 Regulations use both 'Users' Organizations' (*Organizaciones de usuarios*) and 'Users' Associations' (*Asociaciones de usuarios*). In El Salvador the term 'Irrigation Association' (*Asociación de regantes*) is used in the case of WUOs located outside 'Irrigation

¹¹ The precise Romanian term used is in fact *Asociațiile Utilizatorilor de Apa pentru Irigații* or 'Irrigation water user association'.

¹² The IMT literature, and the consequent use of the term 'water user association' by development agencies such as the World Bank, certainly played a major role in the reform process of Albania, Armenia and the Kyrgyz Republic as well as in Turkey where draft WUO legislation has recently been approved by the Government.

and Drainage Districts' (*Distrito de riego y avenamiento*) which are a different form of WUO.

Sometimes different terms appear to be used interchangeably in the same legislation. Thus in Mexico, the Law on National Waters uses the term 'Users' Association' (*asociación de usuarios*) while the regulations made under that law use interchangeably the terms 'Water Users' Organizations,' 'Water Users' Societies' and 'Users' Associations.' In Bolivia the regulation for the use and exploitation of water for irrigation uses interchangeably the terms 'Irrigation Organizations' (*Organizaciones de regantes*) and 'Users' Association' (*Asociación de usuarios*).¹³

Spanish legislation uses the term 'Users Community' (*Comunidad de Usuarios*). Article 81 of the Water Law states that if the main use of the water is for irrigation, such WUOs must be called 'Irrigation Communities' (*Comunidades de Regantes*) while in other cases the name of the 'community' must be based on the main use made of the water. The WUO legislation of many of the states of the United States of America uses the term 'Irrigation District' and 'Water District'. For example all 17 Western States have specific legislation providing for the establishment of 'Irrigation Districts'.¹⁴ Furthermore in California, the Water Code provides for the establishment and operation of a range of other forms of WUO apart from Irrigation Districts. (See Box A)

Box A. California – a plethora of Districts

WUOs that can be established under the California Water Code include:

- Irrigation Districts
- County Water Districts
- California Water Districts
- Water Storage Districts
- Reclamation Districts
- County Waterworks Districts
- Water Replenishment Districts

¹³ Similarly in Chile a variety of names are used for different types of WUOs. The generic term used in the law is Users' Organizations (*Organizaciones de usuarios*). The types of associations are: 'Water Communities' (*Comunidades de aguas*), 'Canal Users' Associations' (*Asociaciones de canalistas*), 'Drainage Communities' (*Comunidades de obras de drenaje*) and 'Boards of Control' (*Junta de vigilancia*).

¹⁴ Goldard, W. *Water Law* (1989).

- Levee Districts
- Municipal Water Districts
- Water Conservation Districts
- Community Service Districts
- Water Management Districts
- Flood Control Districts
- Floodwater Conservation Districts.

As their names suggest such organizations, which are known as 'special districts' undertake a range of water management tasks but all are controlled by those who benefit from, and pay for, the services they provide.

Since the establishment in 1887 of California's first special district, the Turlock Irrigation District, the concept has spread beyond the water sector. Other tasks performed by special districts (established pursuant to legislation other than the California Water Code) include garbage collection, electricity supply, the operation of libraries, fire protection and park maintenance.

The term 'Irrigation District' is also used in the legislation of Saskatchewan Province in Canada.

However, the names used in legislation can be slightly misleading as regards the actual tasks performed by WUOs.¹⁵ For example in England, a major task of many 'Internal Drainage Boards', each of which is responsible for a particular 'Drainage District', is in fact the provision of irrigation water.¹⁶

The Georgian legislation uses the generic term 'Amelioration Association' although such bodies may undertake both irrigation and drainage¹⁷ while in Germany although the law requires each individual 'Water and Land Association' (*Wasserundbodenverband*) to include this term in its name, the name must also describe its primary task.¹⁸ Other names used in West European legislation include the French 'Syndical Association' (*Association*

¹⁵ And as will be seen below, the principal differences between California Water Districts and Irrigation Districts relate not to their tasks but to their relationship with their members/participants.

¹⁶ Indeed, irrigation is necessary in part because land drainage techniques have become so efficient in removing moisture from the soil. As is common practice in a number of American states, irrigation water is supplied through the drainage canals.

¹⁷ And indeed the legislation specifies that they may be 'Water User Associations' or 'Drainage User Associations.'

¹⁸ For example 'XYZ Irrigation Water and Land Association' or 'ABC Drinking Water Supply Water and Land Association'.

Syndicale), the Dutch 'Water Board' (*Water Schappe*) and the Italian 'Consortium' (*Consorzio*).

Apart from requiring a reference to the primary tasks undertaken by the WUO, as in the case of Germany, the legislation often requires each WUO to include in its name the place where it operates. But this is not the case everywhere: in the Kyrgyz Republic, for example, it is not uncommon to find WUOs named after local dignitaries or the ancestor of one of the founders.¹⁹

So in conclusion, what's in a name? From a conceptual perspective the answer is probably not a lot. All of the examples considered in this paper are WUOs in the sense described in the introduction. The different names used reflect local preferences and practices, both current and historical.

However, on an individual (national) basis the term used in legislation may specify the actual legal status of the WUO, an issue that is considered in more detail below. Thus the fact that WUOs in Germany are '*Verbänder*' indicates that they are established under public law and are thus to be distinguished from private law 'associations' established under the Civil Code.²⁰ Similarly, in a number of states in the Western United States, including California, 'Water Districts' and 'Irrigation Districts', established under public law, are to be found located alongside private law 'Water Companies', 'Ditch Companies' and 'Mutual Water Companies' which undertake essentially the same tasks.²¹ Differences in legal status can, as will be seen below, have important implications for the establishment and

¹⁹ Usually the legislation allows the participants to choose the name of their WUO. However, in Punjab Province, Pakistan the name of each WUO is selected not by the WUO participants but by the Chief Executive of the relevant Water Board or the Superintending Engineer of the area.

²⁰ The subtlety of this distinction is lost on the English language. The translation for both legal forms is 'Association'. In part this may be because in certain common law jurisdictions, including England and Wales, the law does not provide for the establishment of 'associations' with independent legal personality. Such bodies are technically called 'unincorporated associations'. Non-government organizations that include the word 'association' in their name, such as the 'Football Association', are actually established as limited companies or trusts. This may be another reason why the term 'association' has not been used in the WUO legislation of common law countries as historically such entities could not have had independent legal personality.

²¹ Such entities are private companies, that are regulated primarily by company legislation.

operation of WUOs and the name used in the legislation can be an important clue in determining what that status is.

III. THE PERMITTED TASKS OF WUOs

WUO legislation invariably sets out the purposes for which a WUO may be established and describes the range of tasks that it may lawfully undertake. Most of the WUO legislation reviewed in the preparation of this study conceives of WUOs that have irrigation activities as their primary task. For example, in Mexico the Water Law indicates that the functions of a WUO are to deliver irrigation water and to operate and maintain such irrigation canals as have been transferred to it.²²

A similar approach is taken in the legislation of Punjab Province in Pakistan. The tasks of WUOs are to manage water distribution systems, to deliver irrigation water and to operate and maintain canals and infrastructure. In typical common law style, the law contains a 'mopping up' clause that indicates that WUOs may also perform any duty, function or responsibility which is incidental or implied in their main duties, functions and responsibilities.

In the Peruvian legislation the tasks of WUOs are stated to be irrigation, drainage and other agricultural purposes, while in Romania, where WUOs generally operate pressurized pump irrigation systems, the law describes their task as being to manage irrigation within 'hydraulic units' which are defined as the 'area of land capable of receiving water for irrigation from one water delivery source'.²³

The Albanian legislation describes the task of WUOs as being to 'undertake the operation and maintenance of irrigation systems that have been transferred to them'. However, the definition of 'irrigation systems' also includes field drainage systems. Similarly in El Salvador the purpose of WUOs are irrigation and drainage, while in Mendoza Province, Argentina, the tasks are irrigation, drainage and groundwater use.

²² In addition the legislation provides that WUOs may construct their own infrastructure or participate in government-financed construction projects.

²³ Article 3(1) Government Emergency Ordinance No. 147 dated October 7th, 1999, concerning the Irrigation Water Users' Associations as approved by Law No. 573 dated 22 October for the approval of the Government Emergency Ordinance No. 147/1999 concerning the Water Users' Associations.

In Andhra Pradesh, the law spells out the objectives of WUOs, as well as those of farmers' organizations in general. These are to promote and secure distribution of water among users, to provide adequate maintenance of the irrigation system, to ensure efficient and economical utilisation of water to optimise agricultural production, to protect the environment and to ensure an 'ecological balance'.

In South Africa, irrigation, drainage, subterranean water use are listed in the Water Act as the main activities of WUOs, but alone among the legislation considered, the act also goes to include specific reference to livestock watering. While the precise tasks are to be specified in governing document of each WUO, the model governing document annexed to the Act lists a number of ancillary tasks. These include the regulation of the flow of any watercourse, the construction, purchase, operation and maintenance of water-works necessary for drainage and irrigation and the supervision and regulation of the distribution of water resources according to the relevant water use.

In Turkey, the draft law currently under preparation focuses on the use of water, but distinguishes between two types of use, namely use for irrigation in agricultural areas and use for domestic water supply in 'tourist areas'. This is similar to the approach taken by the Tunisian legislation which provides that 'Public Interest Associations' (*Associations d'intérêt collectif*) may undertake irrigation, drainage, potable water supply and sanitation activities.

On the other hand, Uganda's Water Statute foresees the establishment of WUOs that have drinking water supply as their principal - or only - task. The law provides that a 'set of individuals or households' may jointly establish a 'Water User Group' to collectively plan and manage a 'point source water supply' in their local area and to collect revenue to cover the costs of this. Each Water User Group is controlled by a 'Water and Sanitation Committee' that is also responsible for sanitation and hygiene in the area. In cases where a single water supply system is established by and serves more than one Water User Group, the relevant Water and Sanitation Committees are required to establish a 'Water User Association' that is made up of an agreed number of representatives from each committee and which is tasked with the management of the system. However, the legislation goes on to provide that local authorities may organise the formation of Water User Groups and Associations within their jurisdiction.

In Spain the specific tasks of WUOs are not specified as such in the Water Law, although certain tasks are envisaged. The key issue is that 'User

Communities' must be established in certain circumstances (which are considered in more detail below). Usually this is for the extraction and use of water, but article 82 (2) of the Water Law provides that public institutions, corporations and individuals that need to discharge waste water may create a User Community in order to 'carry out studies on sewerage system, sewerage works, water treatment and other common elements that allow discharging of effluents in the most appropriate place, and in the best technical and economic conditions, taking into account environmental protection.' Indeed the state river basin administration may impose the establishment of this type of community if it is necessary.

Box B – The permitted activities of German Water and Land Associations

Article 2 of the Federal Water and Land Association Law of 1991 lists the types of tasks that can be carried out by associations. These tasks include:

- a) the expansion of watercourses, including restoration and maintenance which respects the natural environment;
- b) the construction and maintenance of facilities in and along watercourses;
- c) the construction and maintenance of rural roads and streets;
- d) the construction, acquisition, operation and maintenance as well as the removal of communal facilities used for agricultural purposes;
- e) sea defence and flood protection, including necessary measures on the land near dykes;
- f) the amelioration of agricultural and other land, including the management of the soil water and soil air table;
- g) the construction, procurement, operation, maintenance and disposal of irrigation facilities as well as facilities for irrigation and drainage;
- h) technical measures to manage groundwater and surface watercourses;
- i) disposal of waste water;
- j) disposal of waste arising in connection with tasks carried out by association;
- k) procurement and provision of water;
- l) establishment, maintenance and care of land, facilities and watercourses in order to conserve the balance of nature and the soil and in order to cultivate the landscape;
- m) promotion of co-operation between agriculture and water management and further development of water, soil and nature conservation; and the
- n) promotion and supervision of any one of the aforementioned activities.

The German legislation permits WUOs to undertake a broad range of tasks relating to the use and management of water.²⁴ These are listed in Box B.²⁵ With the exception of those that are compulsorily established, each WUO is free to decide which of these tasks it will carry out. The decision whether or not to carry out a particular activity will depend largely on the willingness of the organization's participants to finance it.

The French legislation also enables WUOs to undertake a wide range of tasks, some fifteen in all, relating to the construction and operation of works, including works relating to irrigation and drainage. Many of these tasks have been added by amendment since the law was originally enacted in 1865. These include the construction and maintenance of works²⁶: to prevent water pollution (added in 1959); to recharge aquifers (added in 1964); and to protect land against the sea, rivers, torrents, navigable and non-navigable rivers as well as forest fires, erosion, avalanches, rock and boulder falls, land slides and volcanic eruptions (added in 1985).

Of all the WUOs considered in this paper, the Dutch organizations have probably the longest continuous history. While their focus is very much on water management, their role too has also developed to encompass a wide range of other activities. According to the current legislation they have three main responsibilities:

- water quantity, which includes the management of water levels
- water quality, which includes the prevention of water pollution and includes the issuing of waste water permits and licences, and
- water control, which includes the protection against flooding by means of dunes, dykes, canals, dams and locks

In addition, the legislation also permits them to take responsibility for the maintenance of rural roads and inland waterways.

The legislation reviewed so far in this section conceives of a single legal form of WUO that may undertake a wide range of tasks. By contrast, in Italy the law provides for the establishment of different types of WUO, depending on

²⁴ Section 2 of the German Federal Law on Water and Soil Associations, 1991.

²⁵ However, this list is not exhaustive. As will be seen below, the law is a Federal Law and each state (*Land*) can, through its own laws, expand the list of tasks that can be carried out by WUOs within its jurisdiction.

²⁶ In the sense of both physical structures and activities.

the tasks to be performed. The first type, 'Land Reclamation Consortia' (*Consorti di bonifica*), undertake major irrigation and drainage activities. The second, 'Land Improvement Consortia' (*Consorti di miglioramento fondiario*) undertake land improvement tasks while the third type 'Voluntary Irrigation Consortia' (*Consorti volontari di irrigazione*) undertake irrigation tasks.²⁷

It is the California legislation, however, that provides for the greatest variety of forms of WUO, as demonstrated in Box A. The permitted tasks of these WUOs include irrigation water supply, drinking water supply, waste water removal and treatment, flood defence/levee maintenance, land reclamation and water conservation. Indeed, there is a degree of overlap between the tasks that different types of WUO may undertake. The reason why one particular form of WUO is chosen over another can relate to the different rules regulating the internal functioning of the different WUO forms as well as the scope of their permitted activities.²⁸

Why so many different forms of WUO? Ostrom explains that the home-rule tradition and the particular legislative practices of the State of California help to reduce the costs of transforming existing rule systems. Thus it is relatively easy for a group of individuals to introduce new organic legislation authorizing a new type of special district.²⁹

Whether through amendments to existing forms of WUO (as in France and Germany,) or through the creation of new forms of WUO, (as in California,) the WUO legislation reviewed is changing to reflect new and expanded roles regarding land and water management. A recent study noted that there is a general trend for American WUOs to play an increased role in water resource management and conservation³⁰ while the references to

²⁷ This type of WUO has now largely fallen from use.

²⁸ For example, both 'California Water Districts' and 'Irrigation Districts' commonly operate irrigation systems in order to provide water to agricultural land owners. However, as will be seen below, the legal rules relating to participation and financing are quite different.

²⁹ Ostrom, *op cit* at page 139.

³⁰ In the USA participatory water management bodies – districts and mutuals - have 'undertaken a more comprehensive water management role involving local initiatives in water conservation, water quality, environmental concerns involving water management, recreational uses, expansion of water service to new kinds of customers.' Irrigation Enterprise Management Practice Study US Bureau of Reclamation Project + E1.D4.4 20 December 1996

conservation in the recently enacted German legislation were a distinct development from the previous law.

One question that frequently arises during the elaboration and development of policy and legislation relating to agriculture-sector WUOs is whether their tasks should be limited to aspects of land and water management or expanded to include other agriculture sector support activities, for example the supply of seeds and other inputs, marketing, wholesaling and processing. In favour of an expanded role, it is argued that in the context of many WUOs, water is only one of various services or inputs that farmers need. Such additional activities may also provide additional sources of funding for WUOs and cross-subsidize their water management activities.

The answer to this particular policy question is probably that what is being proposed is no longer really a WUO but an agricultural cooperative. In fact, in the legislation reviewed in this paper, only the WUOs of Sri Lanka are legally permitted to undertake such commercial activities. Elsewhere, the core tasks of WUOs are limited to aspects of land and water management. Of course, different considerations may apply in each case, but there are several possible reasons for limiting the scope of WUO tasks in this way. First of all, other activities can usually be arranged on an individual basis by farmers and provided by the private sector. The very nature of land and water management tasks is such that a community-based approach is necessary. Secondly, whatever altruistic reasons lie behind them, the supply of inputs and agricultural marketing activities are essentially commercial activities. Apart from the fact that individual WUO members may wish to make their own private arrangements, such activities inherently involve a high degree of commercial risk. Given that the vast majority of new business ventures fail, and leaving aside the fact that WUOs operate on a non-profit basis, their very existence might be jeopardised as a result of unsuccessful commercial ventures. Furthermore, successfully operating a WUO is no small task. Adding of additional responsibilities will hardly facilitate effective WUO operation. Indeed, as WUOs generally operate with the absolute minimum number of employees, staff should not have the spare time to undertake new ventures. If additional staff are needed, this implies additional costs and it is difficult to see how profits from related activities could actually be made to cross-subsidize a WUO's core tasks. Finally, one reason for the success of WUOs is their single purpose nature. As a WUO generally has only one core task, for example the supply of drinking water, it is relatively easy to judge whether or not it is fulfilling that task effectively.

Adding a range of other perhaps un-related tasks might make that assessment more difficult.

Having said that, examples do exist of legislation that permits WUOs to undertake secondary tasks in order to raise additional income. For example in California, Irrigation Districts³¹ may, in accordance with the Water Code, raise money from electricity generation (sometimes they also generate electricity in one part of the scheme to power pumps elsewhere) as well as through leasing out land that they own.³² However in both cases, the activities and the reasons why they can exploit such resources are closely tied to their primary water management tasks.³³

IV. THE SOURCE OF WUO LEGISLATION AND THE LEGAL STATUS OF WUOs

Two closely related questions concern the source of WUO legislation and the legal status of WUOs.

(a) The source of WUO legislation

The first question is what is the main source of WUO legislation? Put another way, where are the main legislative provisions that regulate the establishment and operation of WUOs? To some extent, of course, this will depend on a country's particular legislative practices and traditions.³⁴ Nevertheless, some common trends can be detected.

³¹ But not California Water Districts.

³² They are also entitled to construct, maintain and operate recreational facilities in connection with any dams, reservoirs or other works they own or control and to charge for the use of such facilities.

³³ For example, American WUOs only own land that is necessary for them to fulfil their primary tasks. They do not speculate in land acquisition. And Irrigation Districts that generate hydro-power electricity locate the generators on the canals that they operate.

³⁴ Even within the common law tradition the practice and degree of codification differs from jurisdiction to jurisdiction.

In several jurisdictions, such as Mexico and Spain, provisions on WUOs are contained in a chapter in the principal water law³⁵, while those of the State of California are, subject to one exception, contained in its Water Code. In such cases, the degree of detail to be found in the water law or water code will vary in accordance with national practice. For example, it is not uncommon to find relatively brief provisions on WUOs in a Water Code, with more detail contained in regulations issued pursuant to that law or code.³⁶ By contrast, the California Water Code contains rather detailed provisions on the establishment and operation of the WUOs, of the type (and in the level of detail) that in Spain are included in the regulations issued pursuant to the Water Law.³⁷ The California exception relates to 'Water Companies' that supply water for irrigation and 'Mutual Water Companies Formed in Connection with Sub-divided Lands' which, as types of company, are established by and regulated in accordance with provisions in the California Corporations Code.³⁸

Another source of WUO legislation is sectoral legislation that goes beyond the regulation of WUOs themselves to include, for example, irrigation and drainage (Albania), land drainage and flood defence (England and Wales) and land improvement/amelioration (Georgia and Italy).³⁹

Finally in a number of countries, including Germany, Romania, Bulgaria and the Kyrgyz Republic the relevant legislative provisions are contained in a specific WUO law. Indeed a more extreme variation on this approach is found in those cases where an individual WUO is established on the basis of

³⁵ This is also the approach taken by South Africa's recently enacted comprehensive National Water Act. As regards Mexico the provisions on WUOs in the water law are actually relatively brief. Mexican WUOs are established as private law associations (see discussion below).

³⁶ For example, this is the approach taken in Spain and South Africa.

³⁷ Public Domain Water Regulations that elaborate the Spanish Water Act 29/1985, 2 August 1985, amended in 1999 and eventually consolidated by Royal Legislative Decree No. 1 of 2001.

³⁸ Corporations Code, Section 14302, 'Corporations for Specific Purposes'.

³⁹ In Punjab Province, Pakistan, the legal basis for WUOs is contained in the Punjab Irrigation and Drainage Authority Act, 1997 (No. XI of 1997) while the main legislative provisions on WUOs are contained in regulations, the Punjab Irrigation and Drainage Authority (Pilot Farmers Organizations) Rules, 1999, 1 January 1999 and the Farmers Organizations - Conduct of Business Regulations, 1999, 1 January 1999, both of which were issued pursuant to the Act.

a specific law (such the Middle Level Act in England and Wales⁴⁰) or regulated on the basis specific legal provisions within a water law, (such as references to individual WUOs in the California Water Code.⁴¹) This kind of situation usually arises in connection with a specific land improvement scheme, where legislation is needed, for example, to acquire the necessary rights on behalf of the state to begin construction and the WUO is created at the same time, perhaps to take account of specific requirements.

Further variety is to be found concerning the source of WUO legislation in federal states. In this connection, Germany is unusual in that the WUO law is a Federal law of national application.⁴² In the other federal states considered, the WUO legislation is enacted at state level (for example California, Punjab Province in Pakistan, Andhra Pradesh in India, Victoria in Australia, Mendoza Province in Argentina and Saskatchewan Province in Canada).⁴³ And even within a unitary state, such as Italy, regional devolution initiatives can also lead to regional variations in respect of laws.⁴⁴

Leaving aside these specific cases, the question arises, does the source of WUO legislation make any practical difference? The answer is, probably not. There can be advantages in including provisions on WUOs as a chapter in a water code or principal water law, as this means that the main items of water legislation are contained in one integrated text. On the other hand, if the provisions on WUOs are rather detailed, as they may well need to be, then the WUO chapter may be disproportionately long, and/or the whole text may become rather bulky. As described above, a solution in such circumstances is to include only brief details on WUOs in the code or law, leaving the details to regulations. The appropriateness of such an approach may in turn depend on the length of a country's WUO tradition and common perceptions as to the normative value of regulations. Experience in

⁴⁰ This Act conferred statutory authority on the 'Middle Level Commissioners' a WUO that is responsible for land drainage on the 'Middle Level', an area of around 70,000 hectares in the East of England most of which lies below sea level.

⁴¹ Numerous specific references to individual water districts are to be found in the California Water Code.

⁴² However, apart from varying the tasks that WUOs may undertake, as mentioned above, individual *Lander* (states) are free to amend the basic text and/or add new provisions as they deem necessary.

⁴³ Similarly, the Land Drainage Act applies only to England and Wales and not to the other countries (Scotland and Northern Ireland) that form the United Kingdom.

⁴⁴ For example the *Consorzii* of the Veneto Region are regulated by different legislation to those of Puglia.

the former socialist countries of Eastern Europe and Central Asia, where WUOs are a new concept, suggests that water users are distrustful of 'mere' regulations, whatever their theoretical normative value, as they can be easily changed by governments.

Thus, where the WUOs are being introduced for the first time, a specific WUO law or clear provisions on WUOs in a wider sectoral law may demonstrate a stronger political commitment to the WUO concept. Practically speaking, it may be easier for water users to be able to refer to a specific law rather than a detailed water law or water code. On a conceptual level, provisions that regulate WUOs will tend to be more permissive in form than the normative and prescriptive provisions on water management found in a typical water code or water law.⁴⁵ Ultimately, however, the issue is likely to be determined by a country's specific legislative needs at any given time rather than any specific practical or theoretical rule.

What is evident, though, is that a sufficient amount of clear legislation is necessary for the successful establishment and operation of WUOs. Attempts to establish WUOs in the absence of clear and specific primary legislation have generally been unsuccessful, particularly in cases where the introduction of WUOs is part of a new policy initiative. The simple point is that WUOs are complex structures subject to the inherent conflict between collective endeavour and individual benefit described in Part One. However, it must not be forgotten that apart from setting out the legal 'rules' for WUO establishment and operation, a key role of the law is to act as a statement of policy. If the law on WUOs is itself unclear, ambiguous or simply absent, then what kind of policy message is sent out to farmers and other water users?

In Turkey, where WUOs have been established on the basis of local government legislation,⁴⁶ the lack of clear WUO legislation is seen by the Government as constraining the development of the sector. Similarly, in neighbouring Armenia it is now generally accepted that one of the reasons why attempts to establish WUOs as 'Water User Consumer Co-operatives'

⁴⁵ This will be the case particularly in jurisdictions where WUO establishment is entirely voluntary. On the other hand a water law or code will generally apply to all uses of water within that jurisdiction.

⁴⁶ Law 'On Municipalities' No. 1580 of 1930. Articles 133 to 148 of this law allow village and provincial administrations to establish 'associations' to take over responsibility for various tasks and duties.

on the basis of generic co-operative legislation, were generally unsuccessful was due to the absence of clear and specific WUO legislation.⁴⁷

(b) The legal status of WUOs

It is usually hard for WUOs to operate without legal personality, but such WUOs can and do exist, usually on a small-scale customary or informal basis and in circumstances where their relationship with their members does not include monetary transactions.⁴⁸ Bolivian legislation, for example, permits the Government to recognise WUOs created on the basis of customary norms as *de facto* 'Irrigation Organizations'. The Government keeps a special register of such organizations.

All of the other legislation reviewed, however, provides for WUOs to be established with independent legal personality. As formal 'legal persons' they are able to enter into contracts, hold bank accounts, employ staff and to take and defend legal proceedings in their own names. In some jurisdictions such rights are implicitly acquired once a WUO obtains legal personality. Elsewhere, as in Saskatchewan Province in Canada, the scope of the legal rights and duties of WUOs are set out in some detail. Section 13 of the Irrigation Act of 1996 states:

For the purpose of fulfilling its objects and purposes, an irrigation district may:

- (a) enter into any agreements with the Corporation or any person, agency, government or organization for any purpose related to:
 - (i) the exercise of the powers of the irrigation district; or
 - (ii) the carrying out of any of the irrigation district's objects and purposes;
- (b) provide irrigation services to its district consumers and other persons in the irrigation district;

⁴⁷ Similarly in the Kyrgyz Republic the previous legal framework for WUOs, which was based on a passing reference in the Water Law and a Government Resolution was widely seen to be an inadequate for the establishment of WUOs, a crucial issue in an arid climate where irrigation is essential for arable agriculture.

⁴⁸ For example, in the mountains of Albania small un-registered WUOs were functioning in the late 1990s. Usually the operation of such WUOs was a relatively simple matter. Typically, a single earth canal flowed from the water source. WUO members jointly cleaned the canal each spring and then in turn broke the canal walls to water their plots.

- (c) subject to the other provisions of this Act and to *The Water Corporation Act*, construct, acquire, establish, maintain and operate irrigation works, water control works and water supply works in the irrigation district;
- (d) acquire electrical or other power required to maintain and operate its irrigation works, water control works and water supply works in the irrigation district;
- (e) subject to section 17, establish and collect water service charges;
- (f) acquire any moneys or property that is necessary for or related to its objects and purposes;
- (g) dispose of any of its property that it no longer requires in any manner and on those terms that it considers appropriate;
- (h) manage, improve, cultivate and maintain any agricultural land that it owns or leases;
- (i) employ any staff that it considers necessary and determine the salary, duties and conditions of employment of its staff;
- (j) generally do and authorize the doing of any things that it considers incidental or conducive to exercising its powers or furthering its objects and purposes.

An equally important effect of an independent legal personality is that participants in a WUO are not themselves responsible for its liabilities.⁴⁹ Some WUO laws, such as that of South Africa, state this explicitly: the liability of participants is limited to the amount of unpaid charges and interest thereon owed to the WUO.

All of the legislation reviewed in the course of preparing this study provides for WUOs to operate on a 'non-profit' basis, in that their primary aim is not to make and distribute profits. The legislation usually provides that any surplus of income over expenditure must be retained within the organization, rather than being distributed among participants. In some countries, such as Albania and Morocco, the legislation states this explicitly. Elsewhere it is implicit because there is no mechanism for surpluses to be distributed.

There is, however, a clear divergence of approach concerning the legal status of WUOs, as to whether they are established under 'public law' or 'private

⁴⁹ An exception would be in a case where WUO members had for example guaranteed the liabilities of the WUO.

law'. Put another way, are WUOs bodies of public law (sometimes called 'public corporations' or 'statutory corporations') or bodies of private law? A closely related matter is the legislative source of their legal personality. At first glance this looks like a dry legal question of little significance, but, as will be seen below, it can have a crucial practical impact both on how WUOs are established, and how they operate.

Before continuing, it is necessary to briefly consider the difference between 'public law' and 'private law'. While different terms are used from jurisdiction to jurisdiction, in essence private (or civil) law regulates the conduct of private citizens. Contracts, for example, are generally regulated under private law, which also provides the legislative frameworks for the establishment of the various different types of legal person that permit citizens to arrange their commercial activities (such as companies and co-operatives) and their non-commercial activities (such as clubs, associations and non-government organizations).⁵⁰ Such bodies are private in the sense that they are controlled by private actors who can decide, for example, who to admit as a member or, provided any necessary permits are obtained, what tasks the organization is to undertake.⁵¹

Public law (sometimes known as administrative law) by contrast, regulates the activities of the state, of state bodies, including ministries and other state agencies, and of other bodies that undertake quasi-state functions of a public or public interest nature. While practice varies from country to country, examples of the latter include chambers of commerce, hospitals, professional associations that undertake a regulatory function, compulsory pension funds, universities and, of course, WUOs.⁵² The decisions of bodies regulated by

⁵⁰ Different rules and restrictions evidently apply in each

⁵¹ For example, a private company is broadly speaking free to re-focus its attention from one area of commercial activity to a completely separate one. In practice, a company may need to alter the 'objectives clause' in its internal governing document to include the activity. For some activities regulatory permits may also be needed to enable the company to actually engage in the new tasks, but under private law the company is free to alter its governing document and to apply for such permits. Similarly, a private club, such as an opera appreciation society, for example, is free on the basis of a decision of its members to re-focus its primary interest. The opera appreciation society could decide to focus on the music of Verdi – or rap music.

⁵² This list is not intended to be comprehensive. Indeed within the same jurisdiction public law bodies may be found alongside private law bodies undertaking the same functions. In Germany, for examples, both hospitals and universities can be established under public law or private law.

public law are usually subject to review by the courts, usually by specialist administrative law tribunals.⁵³

Typical characteristics of public law bodies are that they:

- are created by means of a decision of the government or a government official such as a minister or prefect;
- have independent legal personality;
- confer specific legal rights and duties on their participants;
- are generally democratically structured;
- undertake specified tasks in the public interest, and may be granted special powers or privileges;
- usually use public resources; and
- are subject to specific government supervision to ensure that they fulfil their tasks properly.⁵⁴

When WUOs are established as bodies of public law, they are a kind of legal hybrid.⁵⁵ Under the democratic control of their own participants they are functionally separate to the state. The Saskatchewan legislation makes this very clear. Section 9 simply states: 'An irrigation district is not an agent of the Crown'.⁵⁶

On the other hand, as public service providers, WUOs are usually subject to public law as regards the manner in which they function, and also to a degree of regulatory oversight by the state, an issue that is considered in more detail below. It is important, however, to emphasize that oversight means just that. WUOs are free, within the bounds of the law, to make their own decisions

⁵³ For example the *Conseil D'Etat* in France and the *Tribunali Amministrativi Regionali (TAR)* in Italy. It is important to note that while an administrative law court can review and even quash an unlawful decision it cannot usually substitute its own decision.

⁵⁴ Maurer, Hartmutt, *Allgemeines Verwaltungsrecht*, C.H. Beck 1999, page 577 (translation: Petra Siegers).

⁵⁵ For example in the United States, courts in different states have defined irrigation districts as: (i) quasi-governmental organizations;(ii) state agencies; (iii) public agencies in which the public have an interest; (iv) for some purposes, political sub-divisions of the state; or (v) an arm of government that exercises some government functions. At the same time, other courts have frequently held that, strictly speaking, irrigation districts are not municipal corporations or political subdivisions of the state. *Corpus Juris Secundum*, Vol 94, 1956. Pages 265-66.

⁵⁶ Irrigation Act 1996.

and thus their own mistakes. A WUO regulator may disagree with a decision taken by a WUO. But unless that decision is actually unlawful s/he may not challenge it, let alone seek to substitute it with her/his own.

Sometimes, as in Germany for example, this public law status means that the legislation provides that WUO employees may be granted the status of civil servants. But this is unusual.⁵⁷ It is more common that public law WUOs are actually governed by private law in so far as their relationships with third parties are concerned, including their employees. Thus in California, while Irrigation Districts are bodies of public law, they have the practical status of private corporations with respect to ordinary contractual relationships. Their directors are on the same footing as private individuals, or the directors of private companies, and their purchasing decisions are not subject to public procurement rules. This approach is also followed in the draft WUO law that will shortly go to the Turkish parliament.

So, should WUOs be established under public law or private law? Both approaches are found among the laws considered in this study, with rather more WUOs being established under public law.⁵⁸ Indeed, it can in practice be difficult to identify the status of a WUO. In some cases the law itself makes the position clear. For example, in the Spanish Water Law explicitly states that WUOs are established as bodies of public law. Similar statements can be found in the recent Bulgarian and Georgian legislation as well as in the WUO legislation of the Argentine province of Mendoza. Elsewhere the precise legal status of the WUO is not specifically stated in the legislation and must be inferred.⁵⁹

As a general principle, a WUO is likely to be a body of public law where it is established on the basis of the WUO legislation itself,⁶⁰ and acquires its legal personality on the basis of a decision made by an official or official body of government (as opposed to entry in a register or approval by a court.) Thus

⁵⁷ Even in Germany this is unusual. Most German WUO staff are employed under private law.

⁵⁸ In Italy the legal status of a WUO depends on the form the WUO is established. The *Consorzi di bonifica*, or 'land reclamation associations' are bodies of public law while the *Consorzi di miglioramento fondiario* or 'land improvement associations' are bodies of private law although the latter can acquire the status of bodies of public law if the extent of their jurisdiction or the importance of the activities they carry out so warrant.

⁵⁹ This too is not always so easy. The Indonesian law states that WUOs 'have a distinct social connotation'. It is unclear what this implies in terms of legal status.

⁶⁰ As a legal person *sui generis*.

for example, WUOs in Punjab Province, Pakistan, are established on the basis of a government decision and are bodies of public law, as are those in South Africa, which gain legal personality on the basis of a decision of the Minister responsible for water resources.

In Nepal, the legislation simply provides that 'User Associations' are corporate bodies, with perpetual succession, and a similar approach is taken in India. It appears that in both cases, the associations are public law bodies. This approach is generally taken in the Western European countries considered, such as France, the Netherlands, Germany and the United Kingdom, where WUOs are established under public law, even though this is not actually specified in the relevant legislation. Similarly the various 'districts' provided for in North American legislation are public law bodies.

Elsewhere, the legislation indicates, either expressly or implicitly, that WUOs are established on the basis of private law, although they may be subject to a specific legal regime contained in the relevant irrigation legislation. Examples include the Albanian 'Water User Associations', which are established in accordance with the Civil Code and the Law on Irrigation and Drainage, and the Estonian 'Land and Water Associations', which were established on the basis of the Amelioration law and the Law on Associations. In Mexico, WUOs are constituted as private law non-profit associations that operate profit-making ventures.⁶¹ Similarly, in Colombia WUOs must register with the Ministry of Agriculture following their establishment under private law on the basis of other legislation. In Costa Rica, WUOs acquire the legal status of a co-operative, which is usually a private law form, by registering with the Government.⁶² In some cases, however, it is hard to tell. For example, although WUOs in Romania are established in accordance with specific WUO legislation,⁶³ they acquire legal personality through registration in the register of non-commercial organizations and are thus actually bodies of private law.

⁶¹ Implementing regulation of the Law on National Waters (*Reglamento de la Ley de Aguas Nacionales*), 11 January 1994.

⁶² Law 276, Water Law (*Ley N° 276 – Ley de Aguas*), 27 August 1942. Agreement 2.217 – Regulation of Irrigation Services (*Acuerdo N° 2.217 - Reglamento de servicios de riego*) 26 July 1999 and Agreement 2.173 – Regulation of Irrigation Services (*Acuerdo N° 2.173 - Reglamento de servicios de riego*) 19 April 1999.

⁶³ Emergency Ordinance 147 on Irrigation Water Users Associations, 7 October, 1999.

The question then arises, what difference does it make whether WUOs are established under public law or private law? This question can be answered on both a conceptual level and a practical level.

On a conceptual level, the establishment and operation of a private law legal person is essentially a private affair, like a private club, a company, a non-government organization (NGO) or for that matter a co-operative. The members of such a body are broadly free to determine how it operates: for example, the members of a club can determine who may and may not be a club member, either in individual cases or by establishing membership criteria. The same is true for an NGO and a co-operative. If any members want to leave and set up a new club or NGO or cooperative of their own, then usually they can. There is no need to control how many such bodies are established or where they operate. Equally, as already described, a private law entity, whether club, company, NGO or cooperative, is basically free to determine the scope and range of its activities.

This kind of private arrangement might be best suited to a group of neighbouring land owners who pool resources to build their own private irrigation canal or drainage ditch to serve their own (private) interests. However, as the size of an irrigation or drainage scheme grows, its continued operation (and thus the operation of the responsible WUO) may become a matter of public rather than private interest. If public money is involved, then almost by definition the continued operation of the scheme and the proper functioning of the WUO is a matter of public interest. All beneficiaries need to have an explicit legal right to participate in the WUO which can no longer be run along the lines of a private club. But how can the state (or the law) dictate to a private law entity who its members are to be?

Similarly, it is usually important to ensure that a WUO focuses on its core water management task rather than diversifying into other areas. The design of most items of infrastructure operated by WUOs, such as irrigation and drainage schemes, water distribution networks and so forth, mean that it is impractical, or even impossible, to have two separate organizations operating different parts of the same infrastructure. Some limits are therefore necessary regarding the establishment and/or restructuring of WUOs. Again though, if a WUO is a private law body how can the state dictate how it is to be established, dissolved or re-structured? Oversight will also be necessary in the public interest in addition to clear legal provisions to promote certainty as the internal functioning of the organization is no longer a purely private matter to be left to the participants. In these circumstances, it can be argued

that on a conceptual level it is simply legally wrong for a body that accomplishes public interest tasks to remain as a sort of private club, even if specific statutory rules apply to it.

On a practical level, the creation of WUOs as bodies of public law can make it easier to confer a range of benefits and advantages on them through legislation. These include:

- the right to compel compulsory participation in the WUO;
- tax benefits;
- authority to levy and collect compulsory charges and assessments;
- special enforcement measures;
- rights to water;
- rights to acquire ownership or use rights over state owned infrastructure (and associated land); and
- powers to gain access to and to acquire privately owned land.

These issues are considered in more detail in Part 12 below. These kinds of benefits, coupled with the problems of trying to use private law forms, perhaps explain why in countries with a long tradition both of WUOs and WUO law, the legislation invariably provides for them to be established as bodies of public law.⁶⁴

On the other hand, as already mentioned, private law WUOs in the form of mutual ditch and irrigation companies have existed for many years in the United States, alongside the public law Districts. These companies are privately owned water stock companies, and, subject to the approval of their shareholders, they have the right to set water rates and deliver water as they see fit to their shareholders.⁶⁵ The majority of mutual ditch and irrigation

⁶⁴ Indeed, for a long time in Germany the Water and Land Associations were established under private law, until the practical difficulties of using private law became such that new legislation was needed.

⁶⁵ The California Corporations Code permits 'Water Companies' established to supply water for irrigation to provide in their governing documents that water is only to be supplied to share holders and that such shares are to be 'appurtenant' to a specified land plot. Such provisions are mandatory in the case of Water Companies that are established to supply water for domestic purposes. On the sale of such a land plot the stock must also be transferred to the new owner. California Corporations Code Section 14302, Part 7, Chapter 1, §14300-14302.

companies appear to have been voluntarily formed through grass-roots efforts to assume management of irrigation systems that were built by US and European-financed land development companies in the nineteenth century. Mutual companies were most frequently formed by farmers themselves when land development companies left the business of delivering water to irrigated land once the land had been sold to individual farmers.⁶⁶

Where the establishment of WUOs is part of an Irrigation Management Transfer programme, the use of private legal forms might be considered helpful in emphasizing the independence of WUOs from the state or the state irrigation body. In the former socialist countries of Eastern Europe and Central Asia, the concept of the body of public law is often unfamiliar. For example it simply did not exist in the former Soviet legal system. Consequently people are familiar with private legal entities and state entities and nothing else. To the extent that WUOs established under public law would be perceived as 'state' entities, this might cause confusion as to their role and purpose and hinder their chances of successfully operating. It is probably for this reason that in many cases in the transition countries WUOs have been established on a private law basis, albeit with a specific regulatory regime. Thus they become a special form of private law legal person. For legal purists this approach may be not be strictly legally correct, but in a time of increased regulation of economic enterprises and an increased role for the private sector in the provision of public services, this probably represents an appropriate solution. However, the situation is fluid, and apart from the already mentioned example of Bulgaria, Georgia has recently amended its Amelioration Law to convert its Amelioration Associations to bodies of public law.

Specific disadvantages of establishing WUOs under private law include the fact that it can be difficult for WUOs to obtain tax benefits and other advantages open to public law bodies, including rights to compulsorily acquire land and to use simpler more direct enforcement procedures. Another potential danger arises when the legislation that confers legal personality on WUOs is of general application. As described further in Box C, amendments to such legislation may not always take account of the particular needs of WUOs.

⁶⁶ USBR *op cit.*

Box C – Legal personality problems in Estonia and Albania

In Estonia 'Land and Water Associations' were established to operate land drainage schemes in accordance with the 1994 Amelioration Law, but obtained their legal personality on the basis of the Law on Associations. The replacement of that law with a new Law on Non-Government Organizations meant that all Land and Water Associations had to re-register at some inconvenience and expense. In Albania, the situation is potentially more serious. Although regulated under the Irrigation and Drainage Law, Water User Associations receive their legal personality as associations created under provisions in the Civil Code. On the proposal of the Ministry of Justice, a new Law on Non Government Organizations has now been enacted. The position of the Ministry is that all Water User Associations must all re-register as non-government organizations even though the provisions of the new law contradict the provisions of the Irrigation and Drainage Law in a number of areas including the scope of their permitted activities, regulatory oversight and as regards permitted 'economic activity'. This development has the potential to throw the whole legal basis of present and future Water User Associations into doubt.

So what conclusions can be reached? Again, much will depend on each country's individual circumstances and legal traditions. However, it is a fact that in the countries with longer WUO traditions, WUOs are established as bodies of public law and as mentioned above, this legal form can confer specific benefits on WUOs. Having all the relevant provisions on WUO establishment and operation in one law should result in a clearer legal framework, which should also mean that the framework can adapt as necessary to the specific needs of WUOs in particular, and the water sector in general.

V. GOVERNING DOCUMENTS AND OPERATING RULES

Most, but not all, of the WUOs considered in this study have an internal 'governing document', variously described in the legislation as a 'constitution', 'charter', 'regulation', 'a set of by-laws' and 'statute'. None of these expressions are terms of art and the use of one word or another in a specific national context will depend on national practice. Therefore the term 'governing document' is used throughout this study. Usually, an individual WUO gains legal personality through the approval or registration of the governing document, but, this is not always the case: in some jurisdictions, such as England and Wales, there is no separate governing document as the

rules relating to the internal operation of WUOs are set out in the legislation and apply to all such organizations.⁶⁷.

But in all of the cases considered, including England and Wales, the legislation confers the necessary powers on WUOs to make their own internal 'operating rules'. Such rules can address such issues as voting procedures, water management practices and so forth. Again a variety of terms are used in the legislation for what are described in this study as 'operating rules', including 'rules', 'by-laws' and 'regulations'.

In cases where a WUO is required to have a governing document it is common for the legislation to specify its minimum contents. Thus in Germany article 6 the Federal Water and Land Association Law states that the governing document must as a minimum contain provisions on:

- The name and seat of the Association;
- The task and undertaking, referring to the plans provided such plans have been drawn up under § 5 paragraph 2,
- Association territory
- Membership and membership directory
- Limit of land ownership to be accepted by the association members and any obligations otherwise incumbent upon them,
- Principles underlying the assessment of contributions
- Formation and tasks of association organs
- Association inspection
- Amendments to the by-laws
- Announcements by the Association.

In practice, however, the actual contents of the governing document will go somewhat beyond the bare minimum provisions prescribed in the legislation. After all, the governing document forms the 'constitution' of each WUO and must set out its basic rules of operation.

In a number of countries the legislation also includes a model governing document, often as an Annex or Appendix. The role of model documents in this context raises an interesting question. On one hand a model document is

⁶⁷ Provisions on the expenses and proceedings of Internal Drainage Boards are set out in Part II, Schedule 1 of the Land Drainage Act 1991. A similar approach is found in Punjab Province, Pakistan where the internal rules of WUOs are also set out in regulations, see foot note 25 above.

certainly useful for those involved in the establishment of a WUO: in practice few people are likely to have either the ability or the inclination to draft such a document from scratch⁶⁸ and an 'approved' model can be a useful tool. On the other hand, when the approved document becomes the only accepted version, such a 'one size fits all' approach can prevent individual WUO participants from being able to design an organization adapted to their own specific needs. There is no clear answer here. On the one hand no-one would seriously argue that English WUOs have not operated successfully over the years notwithstanding the fact that they all follow the same internal model. But this is perhaps because they are all roughly similar in size and function and in any event and in any event English WUOs have existed in their current form for many years. On the other hand it is arguable that problems can arise when the model governing document becomes effectively the only model that can be used, as it may not accord with local needs. This proposition is supported by the variety that is to be found in the governing documents of WUOs, particularly as regards internal institutional arrangements, that are established on the basis of legislation that permits a degree of flexibility.

VI. IDENTIFICATION OF WUO PARTICIPANTS

In order to be able to operate successfully each WUO needs to be able to clearly identify its beneficiaries or participants.⁶⁹ They, after all, will both pay for its activities and determine how those activities are undertaken. A number of questions arise. First of all, what is the precise nature of the legal relationship between a WUO and its participants? Second, how are the participants themselves identified? Third, is their participation compulsory or voluntary? The legislation answers these questions in a number of different ways.

(a) The relationship between WUOs and their participants

The legislation takes two main approaches regarding the relationship between WUOs and their participants. In many cases, the relationship is one of membership: the participants are members of the WUO. This approach is commonly found in Latin America, Asia and Western Europe and in the

⁶⁸ And many practicing lawyers rely to a lesser or greater extent on either their own precedents or published precedents in undertaking any form of drafting exercise.

⁶⁹ Indeed this is a key requirement for any community based collective property management institution. See Ostrom *op cit.*

former socialist states of Eastern Europe and Central Asia. A variation on the membership approach is found in the American West in the case of Water or Ditch Companies where the participants are share or stock holders.⁷⁰

In the second approach, the owners or users of land⁷¹ within the operation area of the WUO are given legal rights to elect, and stand for election to, the WUO's management board.⁷² Sometimes they are also given the right to approve the setting of tariffs. However, they are not formally 'members' of the WUO. This approach is found in the legislation of the United States, the Netherlands, and England and Wales.⁷³

What are the legal and practical effects of the two different approaches? The non-membership model appears at first sight to give the participants less of say in how the WUO is run. In cases where participation in the WUO is through membership, meetings of the WUO's 'general assembly' give participants a chance to debate a much wider range of matters than tariff setting and electing the WUO management board. These might include approving the draft budget, approving changes to the WUO's governing document (see further below), approving a management or water distribution plan and taking decisions on the expulsion or sanctioning of WUO members.

Another apparent advantage of participation through membership is that it can confer a package of rights and duties on WUO members. Of course, the legislation (or governing document) could also confer rights and duties (including rights to a share of irrigation water, to participate in elections, and so forth) on the participants in a non-member organization. But an advantage of the membership approach is that the package of rights can potentially be removed by way of sanction. As will be seen below, every WUO needs to be able to make internal rules that apply to its participants and to punish breaches of those rules. As such, in cases where WUO

⁷⁰ Shareholders are often considered by legislation to be the 'members' of a company. This approach does not appear to have been successfully replicated in any other country. Attempts to set up WUOs as companies in Bulgaria failed: rich farmers took over the irrigation companies leading to riots and civil unrest in some regions.

⁷¹ And as will be seen not all land owners/users may be so eligible.

⁷² The internal institutional organization of WUOs is considered in Part Eight below.

⁷³ This approach is also used in respect of the Drainage Boards created in the Albanian Irrigation and Drainage Law. The beneficiaries of the Board's flood defence and land drainage activities will have the right to elect representatives to the boards.

participation is not compulsory, expulsion - which is commonly provided for in legislation - is the ultimate internal sanction. At a stroke, the wrongdoer is deprived of the whole package of rights, including the right to services provided by the WUO at the preferential rates available only to members.

Furthermore, from a psychological perspective, it might be argued that the membership approach supports the process of institution building, in that membership might confer a greater sense of 'ownership' on participants. On the other hand, if participation is to be compulsory, a matter considered below, WUO membership may be less constitutionally acceptable in some legal systems than conferring fee-raising and rule-making powers on a local self-managed body.

In broad terms, under either approach the WUO is ultimately controlled by its participants, whether or not they are actually members.

(b) The identification of participants

Irrespective of the form of participation, the next question is how the WUO participants are to be identified. Several approaches are taken in the legislation.

Sometimes participants are identified by reference to their use of water. A good example is Spain, where the law states that:

Those water users that benefit from one water intake or water concession must create a water users community.⁷⁴

The Indonesian legislation takes a similar approach except that it refers to the users of a tertiary irrigation system⁷⁵ rather than a water source. It states that WUO members may include rice (paddy) field owners, agricultural workers, fish-pond owners who obtain water from irrigation systems, Village Administration members who possess land, associations that cultivate rice

⁷⁴ Article 73 of the Water Law.

⁷⁵ While practice can vary regarding this nomenclature, a primary canal generally conveys water from a natural source such as a river to feed a number of secondary canals. These in turn feed tertiary canals or systems of canals from which water is conveyed to the fields, sometimes by a series of earthen field canals. 'Tertiary' canals and systems are often those that are transferred to WUOs under IMT. But there can be cases where WUOs operate small primary canals and on particularly complex schemes, fourth and fifth level canals may exist.

(paddy) fields or operate fishponds and all other irrigation water users in the area under the WUO's jurisdiction. Sometimes, as in El Salvador, participation is restricted to water users served by a particular water source who also hold a water right.⁷⁶

Another approach is to define the participants by reference to their relationship with land which can potentially receive services from the WUO. Thus the Albanian legislation confers legal rights to participate in a WUO on those who own or use land within that WUO's 'irrigation service area'. This is 'a defined geographical area in which irrigation water can be provided by an Association to an irrigation system'.⁷⁷ Similarly in Colombia, WUO membership relates to the ownership or use of land within Land Development Districts (*Distritos de adecuación de tierras*) save that all landowners, tenants and holders of any entitlement to the use of land within such a district automatically become members of the relevant WUO.

Regarding WUOs which undertake irrigation and drainage, it is important in the case of leased land to determine whether the WUO participant is to be the land owner or the land user. This can actually be quite a difficult policy issue. On one hand, a tenant who is farming - and thus irrigating or draining the land - will most directly and immediately benefit from the WUO's activities and should arguably have the legal right to participate in the WUO. On the other hand, such a tenant may have no more than a short-term interest in the land and thus the WUO. For such a participant a decision to defer necessary maintenance work may make perfect economic sense. In contrast, the successful operation of the WUO will tend to increase the value of the owner's land and thus it can be argued that the owner, rather than the tenant, has a greater interest in ensuring the successful performance of the WUO.

Whatever their respective merits, both approaches can be found in the legislation. In the Philippines the right to participate is confined to land users.⁷⁸ In Andhra Pradesh State, in India, while the law states that all 'landholders' (whether owners or tenants) in the designated WUO 'command area' may be participants in a WUO, where the tenant is the land user then

⁷⁶ A further qualification is that the land of such persons must not be inside an Irrigation and Drainage District (*Distrito de Riego y Avenamiento*).

⁷⁷ Article 2, Law on Irrigation and Drainage, 1999.

⁷⁸ Those who till the soil.

she/he alone is eligible for membership. On the other hand in Bulgaria tenants only have a legal right to WUO membership if they hold a lease of more than three years. Otherwise they may only acquire membership on the approval of the landowner.

In California the legal form of a WUO determines its participants. Thus 'registered voters', in other words residents, are entitled to participate in an Irrigation District, while participation in a California Water District is restricted to the owners of land within that district.⁷⁹

In England, participation in a WUO depends on land classification. Every 'occupier' of land classified as 'agricultural land' within a 'Drainage District', is a WUO participant. As such they must pay drainage fees but they may also stand for office and vote in elections to the WUO's management board.⁸⁰ An occupier may be the owner, a tenant or some other user.⁸¹ On the other hand, the occupiers of non-agricultural land within a Drainage District have no direct legal rights to participate in the functioning of the WUO, but nor do they pay drainage fees directly either. This is because every occupier of non-agricultural land must pay a local tax, called the 'community charge', to their local authority (municipality). Agricultural land, however, is not subject to the community charge. As regards non-agricultural land within a Drainage District the community charge includes an element to cover the drainage costs of the relevant WUO which are passed on to it by the local authority. Each local authority is in turn entitled to be represented on the WUO's management board, thereby maintaining, albeit somewhat indirectly, the principle of beneficiary representation.

The provisions of the German law are also broad enough to include towns and cities. The Federal Association Law recognises five kinds of WUO participant. These are:

- owners of plots of land and installations, leaseholders and owners of mines;

⁷⁹ This rule is specifically dis-applied to some irrigation districts though. In the sense used here, the term participate includes participation in the establishment as well as the operation of a WUO.

⁸⁰ Sometimes, such as the case of the Middle Level Commission which was established on the basis of specific legislation, only large land owners, those owning more than 500 hectares, are entitled to vote.

⁸¹ If the land is un-used then the owner is deemed to be the 'occupier'.

- persons for whom the association carries out tasks which such persons would otherwise have the duty to carry out themselves;
- other bodies under public law;
- other natural or non-natural private persons, subject to the permission of the supervisory authority; and
- constructors of traffic installations not included in the first bullet point.⁸²

It is important to note that participation in a WUO is defined primarily through ownership of a plot of land or an 'installation'. It is only in exceptional cases that German WUOs are entitled to accept non land-owning private persons as members. Examples include cases where WUOs are involved in the supply of water to towns and villages and the treatment and disposal of waste water.⁸³

The French legislation expressly provides for WUO membership by state actors. Thus in respect of the land assets of a *département*, the prefect can become a WUO member; in the case of the land assets of a commune or public establishments, the mayor or establishment administrator may do so; and the Minister of Finance can become a WUO member in respect of state assets.

One aspect of membership is the question of succession. This can be an important issue. After all, if land ownership confers the right to WUO membership, a member with outstanding liabilities could purport to sell his/her land to a close relative who could claim membership of the WUO but, all else being equal, could refuse to pay the liabilities of the previous owner. This would mean that the WUO would have to continue to provide services the 'new' member. The legislation of a number of countries addresses this issue. For example, the Moroccan legislation provides that a purchaser of land is by law automatically a member of the WUO, and responsible to discharge the liabilities of the previous owner, as is the successor on the death of a member.

⁸² Article 4, German Federal Law on Water and Soil Associations, 1991.

⁸³ The Braunschweig Water and Land Association provides an interesting case. The members of the association are the City of Braunschweig and a number of nearby farmers. The Association treats the city's wastewater which is then used to irrigate the farmers' land.

This kind of provision, whereby a new land owner can only participate in a WUO once the previous owner's debts have been discharged, is likely to be less effective in cases where membership is either not compulsory or simply not really necessary (for example in cases where irrigation is supplementary). And if membership is not compulsory, an issue considered in the next section then what restrictions, if any, are there on leaving the WUO? The Armenian legislation provides that a WUO's governing document can prevent a member from leaving the WUO until the end of the irrigation season so, at the very least, not to disturb the WUO's budgetary projections and planning for that year.

(c) Compulsory or voluntary participation

In the case of non-membership forms of WUO, participation by beneficiaries is normally compulsory, to the extent that the law specifies their rights to participate in elections, as well as their obligation to pay fees and charges for services provided by the WUO. As regards membership forms-WUOs, both compulsory and voluntary approaches to participation can be found in the legislation. Examples of jurisdictions where the legislation provides for compulsory WUO membership include Andhra Pradesh, in India, and Nepal. In Mendoza Province in Argentina all holders of rights to the use of public water delivered by the same distribution system must become members of the WUO. This is similar to the approach in Spain. Membership is automatic in Bolivia for all users of the same irrigation system while the provisions in the Colombian legislation on compulsory membership have already been mentioned.

The French legislation provides for two categories of WUO, those which are 'free' and those which are 'authorised'. Free WUOs are established on an entirely voluntary basis without the participation of the state, while authorised WUOs are established on the basis of a decision of the prefect, on the initiative of the interested land owners or a mayor, the prefect or a sub-prefect. Authorised WUOs have a number of benefits including the right to require compulsory membership⁸⁴ and to recover taxes and membership fees through execution by the prefect.

In Germany, membership of a WUO is compulsory only if its tasks are undertaken in the 'public interest' - otherwise it is voluntary. The fact that

⁸⁴ A person may only contest his/her membership or the proper establishment of the WUO within a period of one month from the date of the relevant decision.

membership of a WUO is defined primarily through land-ownership has been the key point in resolving the potential constitutional conflict that would otherwise have arisen from compulsory WUO membership.⁸⁵

Although the German legislation has been quite an influential model for the development of WUO legislation in the former socialist countries of Eastern Europe and Central Asia, the legislation in none of these countries provides for compulsory membership. This is largely because memories of forced collectivisation under socialism are still fresh, and it has generally been considered that the element of coercion implicit in a compulsory approach to membership would impede the introduction of the WUO concept as it would actually discourage participation.⁸⁶ The voluntary approach is also found in other countries where WUO legislation has recently been introduced including South Africa, Pakistan (Punjab Province) and Costa Rica.

As alluded to in the previous section, the voluntary approach to membership is not, however, without problems. First of all, a WUO may not be viable without a minimum level of participation. But even if this threshold can be reached, there remains the question of 'free-riders': non members who directly or indirectly benefit from a WUO's activity. This is particularly true where land drainage is concerned: if the water table is lowered by the WUO,

⁸⁵ In the past, a number of private individuals contested compulsory membership in public corporations as being unconstitutional on the grounds that article 2, paragraph 1 of the German Constitution guarantees its citizens the right to personal freedom and liberty and to their own private sphere that is free of interference by the State. One implication of this constitutional guarantee is that the German State cannot force its citizens to join associations of any kind, be it political parties, religious affiliations or other societies. The Constitutional Court resolved this conflict by deciding that, contrary to the cases of membership of political parties or religious affiliations, the determining factor for membership of Water and Land Associations is the ownership status of the land, and not the personal status of any private individual. It is consequently not the person but the land that is a member of each association. Furthermore, the Constitutional Court ruled that compulsory membership is only allowed in very restricted cases, namely when a public corporation is carrying out tasks in the public interest. Maurer, H *op cit.* (Translation: Petra Siegers) Interestingly, irrigation is no longer seen to be a public interest activity as a result of the agricultural surpluses within the European Union. Examples of public interest Water and Land Associations include those involved in dyke management and flood defence.

⁸⁶ Thus the voluntary approach is found in the WUO legislation of Albania, Bulgaria, Romania, Estonia, Armenia, Georgia and the Kyrgyz Republic.

the land of neighbouring members and non-members will benefit equally.⁸⁷ Similarly in the case of an irrigation WUO, non-members may directly benefit from irrigation activities on land plots adjacent to their own, even if they do not choose to irrigate themselves. In any event the existence of a functioning WUO may actually increase the value of their land.⁸⁸ Another potential problem is that non-members may refuse to allow water to flow through canals that cross their land, or to give access to their land for the purpose of cleaning and maintaining adjacent canals. As described in Part 12 below, a common legislative response in this kind of situation is to permit WUOs to charge non-members at a higher rate in respect of the services that they provide. This may have the effect of encouraging membership in cases where the WUO provides an essential service. However, it cannot guarantee high levels of participation, even in places where the services provided by the WUO are essential.

Can any conclusions be drawn about the different approaches? It seems that national custom and experience may play as important a role in providing answers to this question as purely legal considerations. For example, although the Mexican legislation provides that WUO membership is voluntary, in practice membership levels are extremely high. Certainly, it would appear that compulsory membership is more accepted in those countries which have a longer WUO tradition. On the other hand, given that successful WUOs function on the basis of the support of their members, trying to use the law to force people to join WUOs would probably be counter-productive in the short term.

VII. WUO ESTABLISHMENT

Closely related to the question of compulsory membership is the question of compulsory establishment. Are WUOs established (1) on a voluntary basis by their participants, or (2) can they be established compulsorily by the state and, if so, (2a) is this at the state's discretion or (2b) automatically, under

⁸⁷ This has been a particular problem for the Land and Water Associations in Estonia.

⁸⁸ Just as the value of a house on a surfaced or made-up road with nearby water, sewerage, electricity and telephone connections will be higher than one that does not have such access to facilities, irrespective of whether the current owner drives a car or uses those facilities.

circumstances defined by the law? To address the last question first: as already mentioned, the Spanish Water Law requires the establishment of a WUO in any case where two or more water users take water from the same source. There is no discretion in the matter, either on the part of the water users themselves or the relevant basin administration.⁸⁹ In Nepal and Peru the establishment of WUOs is also mandatory in certain circumstances. In Nepal the beneficiaries of every irrigation project are required to establish a WUO. Similarly in Peru in each section or sub-section of an Irrigation District (*Distrito de Riego*) the water users are required to organize WUOs for that District.

In a number of countries a decision whether or not to establish a WUO is taken by the state. In Andhra Pradesh State in India, such a decision is taken by the relevant Ministry which must first delineate part of the command area of an irrigation scheme to be a 'water users' service area'. Furthermore, the Ministry may form a new organization by separating part of the 'service area' from an existing organization.⁹⁰ Similarly, in Punjab Province in Pakistan the State Government is also given a broad discretion in the matter, and may establish WUOs and assign them functions as it deems fit.

Sometimes the legislation provides for WUOs to be established at the instigation of either a government body or future participants. For example, in South Africa the Ministry of Water Affairs and Forestry may establish a WUO on its own initiative or at the request of an 'interested person'. However, no indication is given in the Water Act as to the circumstances in which the Ministry should exercise its power to establish a compulsory

⁸⁹ There is however a discretion in respect of the waste water communities. In accordance with article 80, the river basin administration may order the establishment of a water users community 'for the conjunctive usage of ground water and surface watercourses, when it is recommendable for the water management within an area'.

⁹⁰ The Ministry may also, at its discretion, increase, diminish or alter the boundaries of the area of operation of an organization. If any difficulty arises as to the constitution or reconstitution of any WUO (or other farmers' organizations), the Ministry is required to do anything necessary to remove the difficulty.

UO.⁹¹ By contrast, the German legislation provides that WUOs can only be established on a compulsory basis where this is, in the opinion of the WUO regulator (the identity of which is discussed below), in the 'public interest'.⁹² In all other cases, they are established in a voluntary manner by their future

⁹¹ In South Africa even in cases where the Ministry receives a proposal from an interested person to establish a WUO, the establishment process is tightly controlled by the Ministry, which establishes the WUO, gives it a name, determines its area of operation and approves its governing document. An 'interested person', presents a proposal to the Ministry containing information about the WUA to be established, including, among others, name, purpose, statute and list of members. The law provides that the Ministry may assist the 'interested person' in developing the proposal. Next, the Ministry publishes a notice in the Government's official Gazette regarding the proposed establishment of the WUA and calling for written comments. Finally, after having considered any comments received, the Ministry, by notice in the Gazette, establishes the WUO. While the Ministry is bound to take account of comments received on the proposal to establish the WUO, the final decision is taken by the Ministry.

⁹² The three ways in which a WUO can be established are:

- by means of a unanimous decision of the parties involved and the approval of the WUO regulator;
- by means of a majority decision of the parties involved, the approval of the WUO regulator and an official decree by the WUO regulator issuing an order of compulsory membership upon the dissenting parties; or
- by a state government (*ex officio*).

The power of a government to establish WUOs *ex officio* is very limited and can only be exercised where this is in the public interest. Examples of cases where the establishment of a WUO is considered to be in the public interest include those cases where its tasks are to:

- regulate aquatic discharges, to provide flood protection or to maintain non-navigable water-courses, so long as these measures can be performed by an association;
- remove drainage water, so long as the water constitutes a danger to the proper water management which cannot be managed expediently by other methods; and
- carry out operations necessary for the protection of the environment or nature or the cultivation of the natural landscape.

members.⁹³ And in Costa Rica WUO establishment is voluntary unless otherwise required by the Government in which case the conditions under which the Government may request the establishment of a WUO are indicated in the law.⁹⁴

In cases where the decision to establish a WUO is taken on a voluntary basis by the future participants themselves, the procedure to be followed is usually described in the legislation.⁹⁵ Sometimes, as in the cases of Romania and California, this is done in primary legislation. Elsewhere, as in the cases of France and Albania, the establishment procedure is set out in secondary legislation: a decree in the case of France, and ministerial regulations in the case of Albania. In some examples such as Mexico, however, the WUO legislation is silent regarding the establishment procedure. This is because the actual legal basis for the acquisition by WUOs of legal personality - and thus the establishment procedure - is contained in other legislation.⁹⁶

Where the establishment procedure is set out in WUO legislation, a four stage process is typically prescribed. In the first phase preparatory steps are taken, which may include the identification of potential participants as well as the area of operation of the WUO. For example, the Romanian legislation calls for the establishment of an 'initiation committee', composed of several potential members of the WUO. The committee must call a preliminary

⁹³ Where WUOs are created either by majority decision or *ex officio* by the supervisory authority, it is necessary to ensure that persons who do not consent to becoming members of the association and yet who directly or indirectly benefit from the services of the association, pay for the services provided by the association. However, as already explained above, compulsory membership in WUOs is restricted to special cases, and is only permitted where the task carried out by the WUO constitutes a service in the public interest and at the same time benefits the individual being forced into membership. If the task does not constitute a service in the public interest but still benefits a non-consenting individual, it is not possible to force the individual to join the WUO. German law also contains no provisions for recovering the cost of providing a service to an individual if the person has explicitly refused the service.

⁹⁴ These relate to the number of users of the same water resource, to the size of the resource or to the particular circumstances of the case.

⁹⁵ Sometimes even voluntary establishment is less 'voluntary' than it first appears. For example, in the United States the Federal Bureau of Land Reclamation which is responsible for the operation of a number of major irrigation schemes simply may not, in accordance with Federal law, enter into contracts with individuals for the supply of irrigation water. Therefore if a group of farmers wish to obtain water from the Bureau they must first establish a WUO.

⁹⁶ Namely the Law on Civil Associations.

meeting to which all potential members are invited. At that meeting, decisions are taken on the proposed delimitation of the territory of the WUO, on the individuals to be responsible for drafting the WUO governing document and for taking the necessary steps for the establishment of the WUO. A similar procedure is foreseen by the Bulgarian legislation.

In California the process of establishing an Irrigation District is initiated by petition.⁹⁷ Such a petition must be supported by a majority of land owners or at least 500 land owners who hold title to not less than 20 percent of the value of the land to be included within the proposed district. The petition is presented to the 'Board of Supervisors' of the relevant county government, which determines whether or not to allow the process to go forward.

The next stage is to obtain technical approval for the establishment of the WUO from a state body, which is usually the WUO regulator discussed in Part 12 below. For example, to remain with California, a copy of the petition is also sent to the California Department of Water Resources which must report as soon as possible or at least within 90 days (unless an extension is formally requested) on the application. The Department of Water Resources may report that there is insufficient water or that the use of the water is not feasible for some other reason. Following such a report the county board of supervisors must dismiss the application unless three quarters of the land owners issue a new petition or the board of supervisors makes any amendments to the proposed district in accordance with the recommendations of the Department of Water Resources.

Another reason for requiring technical approval is that it is generally impractical for more than one WUO to be responsible for the operation and maintenance of a single item of infrastructure.⁹⁸ Alone among the legislation reviewed, the Georgian legislation makes this explicit by specifying that in the event that there is more than one application for a WUO on the same land area, the successful application will be that with a higher level of support.⁹⁹

Once technical approval has been obtained, the next stage is for the potential participants to formally decide whether or not to establish the WUO. In

⁹⁷ The procedures for establishing other forms of California WUOs are similar.

⁹⁸ Other than in cases where a Federation of WUOs is established, as discussed in part twelve below.

⁹⁹ Specifically that application must have more than 51 percent the support of more than 51 percent of the land 'possessors'.

Romania this is done by a 'foundation meeting' that is called by the initiation committee and to which all potential WUO members are invited. The draft governing document is considered, amended as necessary and approved following which the formal decision to establish the WUO is taken. Another task of the Foundation Meeting is to elect the members of the internal bodies of the WUO. This approach (whereby the decision whether or not to establish a WUO is determined by a 'Foundation Meeting,') is commonly found in the legislation on WUOs that operate on a membership basis.

In cases where the legislation does not provide for WUOs to have members, the decision whether or not to establish the WUO is typically taken on the basis of a local election. In California, once the petition to establish an Irrigation District has been approved by the county Board of Supervisors, the final decision on whether or not to establish an Irrigation District lies with the potential participants in accordance with an election on the proposition that is organised by the local 'Agency Formation Commission'. The legislation specifies the minimum contents of the ballot: an Irrigation District is created if a majority of the votes cast are 'Irrigation District – Yes.'

By way of contrast, in Romania a higher threshold of support must be achieved to establish a WUO. A decision to establish a Romanian WUO must be approved at a 'Foundation Meeting' by a simple majority vote of the potential WUO members, provided they own or use more than half of the land within the jurisdiction of the proposed WUO. A similar approach is taken in the Bulgarian legislation.¹⁰⁰

The Moroccan WUO legislation requires the presence at the foundation meeting of at least two thirds of the participants of the proposed WUO.¹⁰¹ If

¹⁰⁰ In the state of Arkansas the 1957 Regional Water Distribution Act has become the legislation of choice for the establishment of water districts to provide irrigation water in place of the Irrigation and Watershed Improvement District Act of 1949 which was originally enacted for that purpose. The reason is that the newer Act, which was originally designed for the establishment of water districts to supply water for drinking and industrial purposes, requires the support of only 100 landowners whereas the older legislation requires the support of a majority of land owners to establish that form of district. Looney, L.W. 'Enhancing the role of Water Districts in Groundwater Management and Surface Water Utilization in Arkansas,' (1995) 48 *Arkansas Law Review*, 643.

¹⁰¹ This is the case where the initiative to establish the WUO comes from the state. Alternatively the establishment process can be started by the users (irrespective of whether or not they are also owners) of two thirds of the land area that will be served by the proposed WUO.

that level of participation cannot be reached, a second meeting is called. If the second meeting is also in-quate a third meeting can be called which has authority to approve the establishment of the WUO provided this is approved by at least half of the potential participants who between them represent (in the sense of using or owning) at least half of the land area that will be served by the proposed WUO.

Various other permutations are to be found in the legislation regarding the level of support necessary to establish a WUO. In France the level of support necessary to establish an 'authorised' WUO¹⁰² depends on the type of activities that it will undertake. For a WUO that will undertake activities relating to *inter alia* flood defence, the prevention of water pollution, the re-charge of aquifers, the cleaning, deepening and rehabilitation of canals and non-navigable water courses, including irrigation and drainage canals, the approval of the owners, users or persons responsible for either two thirds of the land area that will benefit from the proposed WUO's activity is needed, or of two thirds of the potential participants provided they own, use or are responsible for at least half of the relevant land area.¹⁰³

For a WUO that will undertake activities relating to *inter alia* the treatment of water in towns, suburbs, districts, villages and hamlets and the maintenance of rights of way the approval of three quarters of the potential participants is needed providing they own, use or are responsible for at least two thirds of the land area that will benefit from the proposed WUO's activity. Alternatively the approval of two thirds potential participants will suffice providing they own, use or are responsible for three quarters of the relevant land area.

An even higher level of agreement is needed in Germany: in cases where WUOs do not undertake tasks that are in the public interest, unanimity is required.

Ensuring a high level of support for the establishment of a WUO will tend to increase its chances of success, especially when a voluntary approach is taken to membership. This situation was faced in the 1990s by the Estonian 'Land and Water Associations' which could be established by as few as five people to operate quite large land drainage schemes, but which had no

¹⁰² As already mentioned, all of the potential participants must agree to participate in a voluntary WUO.

¹⁰³ Meaning the land area for which the WUO will have responsibilities.

powers to force compulsory membership. A weak agricultural sector combined with a high level of absentee landowners meant that it was often hard to attract a sufficiently large number of participants to give the organizations the necessary critical mass to operate effectively.

Finally, once a decision to establish a WUO has been made, the necessary procedural steps must be taken to confer legal personality on the WUO. In Romania the newly elected officials of the proposed WUO submit all relevant documentation to the WUO regulator and, upon its final approval, apply for registration in the Register of Associations at the local District Court. A very similar approach is taken in the Bulgarian law, save that as Bulgarian WUOs are established under public law the final step in the process is for the Government to approve the governing document thus conferring legal personality.

The process of establishing WUOs invariably entails certain costs, such as the costs of organising and holding meetings. Who should bear such costs? Sometimes the legislation makes provision for this. In South Africa, the Water Act states that the costs of the establishment procedure can be charged to the WUO, once it has been established, or to the person proposing its establishment. Similarly the Armenian WUO law provides that the members of the foundation committee can recover their reasonable costs from the newly established WUO.

What preliminary conclusions can be drawn about the establishment procedure for WUOs? Generally speaking, it appears that establishment by the state of compulsory WUOs is more prevalent in the countries with a longer WUO tradition, although much will depend on local customs and practices and the relationship between water users and the state. Given that the basic premise of the WUO concept is that WUOs operate on a participatory basis, it could be argued that compulsory or forced establishment violates that concept at the outset. Again, each case must be considered separately and in this regard compulsory establishment may be more suitable in cases where the immediate need for the organization is less ostensibly urgent. Farmers who witness their crops dying due to a lack of irrigation water may be more willing to participate in supporting the establishment of a WUO than those who know that the ground beneath their crops is water logged, or that there is a flood risk, but who can psychologically and practically delay taking action.

What is noteworthy is the level of detail commonly found in the legislation regarding the voluntary establishment of WUOs. This, it is suggested, has two main objectives: firstly to ensure that there is a genuine local support for the establishment of each WUO, and second, to ensure that the establishment procedure is sufficiently open and transparent to prevent the effective capture of the WUO for the benefit of individual participants.

VIII. THE INTERNAL STRUCTURE OF WUOs

The next question is what does the legislation say about the internal structure – the internal institutional arrangements – of WUOs? In some cases the legislation largely leaves such issues to be addressed in the governing document of each WUO. In Mexico, for example, the National Water Law simply states that, in order to be granted water rights, WUOs must adopt a governing document that describes, among other matters, the internal organization of the WUO. The South African legislation takes a slightly different approach: the National Water Act says little about the internal institutional arrangements within WUOs but instead refers to a model governing document that is annexed as a Schedule to the Act.¹⁰⁴

Elsewhere the legislation describes the internal institutional arrangements in detail, sometimes by reference to provisions that must be reflected in the WUO's own governing document, otherwise by setting out the relevant provisions in the legislation itself.

On a substantive level, the main criteria for the internal institutional arrangements foreseen in the legislation depend on the nature of the relationship between WUOs and their participants, specifically whether or not the relationship is one of membership.

As regards WUOs that function on a membership basis, the legislation typically calls for the following type of internal institutional arrangement:

- a 'general assembly' or meeting of all WUO members, which is the sovereign body of the WUO;
- a 'management board' whose members are elected by the General Assembly and which is responsible to that body for supervising the day to day operation of the WUO; and

¹⁰⁴ It is not clear what the legal implications would be of failing to follow the model constitution. However, as already described the relevant ministry plays a prominent role in the establishment of South African WUOs and as such the ministry would be expected to follow the legislation.

- a 'chairperson' of the WUO who chairs the meetings of the management board and the general assembly and who is often the formal legal representative of the WUO.

A variety of different names are used for these various bodies in both the legislation and the governing documents. For example: according to the WUO legislation of Andhra Pradesh, India, the main body of each WUO is its 'General Body or Assembly' which in turn elects a 'Management Committee'.¹⁰⁵ In Costa Rica the 'General Assembly of Members' (*Asamblea General de Socios*), elects the 'Board of Directors' (*Junta Directiva*) composed of at least three members which is chaired by a 'Chairman' who is the legal representative of the WUO. In France the General Assembly elects a 'Syndicate' (*Syndicat*). In the Albanian legislation the management board is called an 'Administrative Council' while in Colombia and El Salvador it is called a 'Governing Board' (*Junta Directiva*). To avoid confusion the terms 'general assembly', 'management board' and 'chairperson' will be used in this study.

It is not uncommon for the legislation to require or permit WUOs to have additional internal institutions, including auditing/supervisory boards and dispute settlement panels. Indeed, a wide range of variations is to be found in the legislation: for example, the legislation of the Italian Region of Veneto (Venice) calls for a relatively complex institutional structure (see Box E).

In Germany, the legislation permits a degree of flexibility regarding internal institutional arrangements. It stipulates that WUOs must have two basic organs: the 'Assembly of Association Members' and the 'Chairman of the Assembly'.¹⁰⁶ In cases where the assembly is too large to be efficient, the governing document can contain provisions for the creation of an 'Assembly Committee', consisting of representatives elected by the members of the WUO. Instead of providing for the appointment of one individual as Chairman of the Assembly, the governing document can provide for the creation of a 'Management Board'. The law states that where the governing document provides for the direct appointment of a chairman, that person has the title 'Chairman of the Association'; where the governing document provides for the creation of a Management Board, the Chairman of the Management Board is at the same time designated Chairman of the WUO.

¹⁰⁵ In Punjab Province, Pakistan, each WUO has a 'General Body'.

¹⁰⁶ Section 46 of the German Federal Law on Water and Soil Associations, 1991.

In practice, however, German WUOs often have both a general assembly and a management board.¹⁰⁷

Box E – Institutional Arrangements within a Veneto Region Land Reclamation *Consorzio*

The General Assembly (*Assemblea generale*) is composed of all *Consorzio* members and meets to elect the General Board.

The General Board (*Consiglio*) is composed of thirty members elected by all *Consorzio* members in accordance with their voting rights, one representative from each local government in the area of operation of the *Consorzio* and one representative of the Regional government. The Board has a five-year mandate. It is responsible for approving the *Consorzio's* governing document and operating rules, subject to the approval of the Regional government.

The Management Board (*Giunta*) is composed of five members elected by the General Board, in addition to the Chairperson and vice chairperson of the *Consorzio*. The representative of the Regional Government is a member of the Management Board.

The Chairperson (*Presidente*) is elected by the General Board and is, at the same time, chairperson of the Management Board and of the *Consorzio*. The law spells out which other administrative functions are incompatible with this role.

The Board of Auditors (*Collegio dei revisori dei conti*) is composed of two members elected by the General Board and one member appointed by the Regional Government. The latter presides over the Board.

In the case of WUOs that do not function on a membership basis, there is usually no provision for a general assembly. Instead the participants directly elect a management board. Consequently, similar questions arise regarding the allocation of votes and decision making processes whether a WUO has members or not.

Furthermore, a range of variations are to be found in the legislation. For example in South Africa, WUOs have members but they do not have a general assembly. Instead, WUO members participate through standing and voting in elections to the management board in rather the same way that land owners participate in, for example, a non-membership California Irrigation District.

¹⁰⁷ The Albanian Irrigation and Drainage law follows a similar approach except that only very small WUOs, those with less than 30 members, can dispense with the need to have a Management Board. In such a case the tasks of the latter are performed by an elected Chairman.

(a) The general assembly

One of the main tasks of a WUO general assembly is to elect the management board, but it is usually not the only one. Others include approving the annual budget and accounts, investment and water management plans and hearing the annual reports of the Management Board. Sometimes, for example in the cases of Kyrgyz Republic and Germany, these tasks are actually specified in the legislation. Similarly, article 17 of the Romanian legislation provides that the general assembly of each WUO has the exclusive right to deal with the following matters:

- (a) amendments to the statutes;
- (b) approval of the accounts, annual report and proposed budget;
- (c) approval of the operation and maintenance plan;
- (d) approval of the cropping plan, the irrigation schedule and plan, and the operation and maintenance plans;
- (e) the level of fees, charges and penalties to be levied by the association;
- (f) the kind of sanctions to be imposed by the association upon members;
- (g) appointment and dismissal of the members of the management board and the chairperson;
- (h) amendments or alterations to the organizational structure of the association;
- (i) decisions on whether to remunerate the management board and the chairperson, and if so, the level of remuneration to be paid;
- (j) the creation of other paid posts;
- (k) the merger of the association with another association and its membership of a federation; and
- (l) the dissolution and liquidation of the association.

The legislation usually requires a WUO general assembly to meet at least once a year, although in some countries it must meet more frequently. For example in Punjab Province, Pakistan the law provides that general assemblies must meet at least twice a year, while in Peru the legislation requires the general assembly to meet at least three times a year in 'regular session' (not including extraordinary meetings).

WUO legislation typically also specifies the circumstances in which extraordinary meetings of the general assembly are to be called. For example in Albania such meetings may be called at the discretion of the management

board. However, the board must call a meeting on the written request of at least 20 percent of the members.

In some countries the level of participation necessary to render general assembly meetings quorate is addressed in the legislation. In Bulgaria, the law requires the presence of members holding more than half of the votes. Meanwhile, in Pakistan at least fifty percent of the members themselves must be physically present. Similarly the Armenian and French WUO laws both require at least half of the WUO's participants to be present: fifty percent plus one vote. In France the law goes on to provide that if this threshold cannot be met, the meeting is adjourned for fifteen days. The resumed meeting is deemed to be 'competent', in other words quorate, however many participants are present.

Elsewhere, in countries such as Peru the quoracy of meetings is left to be determined by each individual WUO in its governing document. However, in order to encourage participation, members who do not attend the general assembly are sanctioned by the local 'Water Authority' with a fine. Similarly in Spain and Argentina, not casting one's vote is sanctioned by a fine (up to three times the value of water fee per hectare).

While some general assembly meetings may suffer from having too few participants, others may find themselves with too many: in practical terms, meetings of more than around 100 people can be difficult and costly, both to hold and organise.¹⁰⁸ Given that WUOs may often have more than 100 members, how is this issue addressed in the legislation? In Spain WUO members are entitled to elect a 'General Board' which in turns elects a management board and similar provisions are found in the German legislation described above.

The Albanian, Romanian, Bulgarian and Kyrgyz legislation provide for the establishment of 'representative systems' whereby each WUO member is entitled to elect a representative to represent him or her at the meeting of the general assembly which becomes a meeting of representatives. A similar approach is used in Pakistan. Farmers from each watercourse or canal elect one representative to the general assembly. The legislation specifies that the

¹⁰⁸ Finding suitable premises can in itself be a challenge.

election of such representatives must be conducted under the authority of a government appointed Election Officer.¹⁰⁹

In the Netherlands, WUOs operate according to the principle of “pay, say and interest”. Only those persons with an interest in local water management ('stakeholders') pay for the activities of, and are represented in, the WUO. The greater an individual's 'interest' in a WUO's activities, the more that individual pays. The legislation lists the following categories of stakeholders:

- the owners and tenants of land;
- the owners of buildings;
- the users of buildings for commercial purposes; and
- the inhabitants of the area concerned.

Each category elects its own members to the general assembly. Similarly in the Region of Veneto in Italy WUO participants are divided in three categories according to the rate of contribution they pay. Each category has the right to be represented in the general assembly.

When this kind of representative approach is used, the practical distinction between membership and non-membership WUOs starts to blur. In the latter form, rather than electing a representative to the general assembly, participants have the right to directly elect the members of the management board who are, just like in the case of a membership form WUO, responsible for the day to day management of the organization. A key issue in both cases is how votes are allocated.

(b) Voting within WUOs

As regards the allocation of votes, two basic approaches can be detected in the WUO legislation reviewed. The first is voting equality, whereby each participant holds one vote. This approach, sometimes described as a 'one member, one vote', is found in a number of countries including Albania and Costa Rica. This approach probably works best when WUO participants have roughly equal interests in the WUO, for example similarly sized land plots.

The other approach is to allocate votes to each participant by reference to some form of objective criteria, such as the size of a person's land holding,

¹⁰⁹ This person is technically a member of the WUO. The legislation does not indicate how nominations to the ballot are to take place, simply that the eligible farmers must elect one of their number to the WUO.

the amount of water they use and so forth. A number of examples are described in more detail in Box F. The rationale for weighted voting rights is usually that those who make a greater financial contribution to WUO should have a greater say in how it operates.

In some of the former socialist countries of Eastern Europe and Central Asia, where WUOs are generally a new concept,¹¹⁰ the land and farm reform processes have created a wide variation in the size of farms. This has in turn raised questions relating to equity and control as regards WUOs. Within a single WUO it is not uncommon to find a situation where they may be, for example, one to three large farms of several hundred hectares¹¹¹ and twenty to a hundred small one-hectare farms. In such circumstances, if votes are allocated on a 'one member one vote' basis, large farm owners can be reluctant to join WUOs that will be dominated by the owners of small farms. Conversely, if votes are allocated simply by reference to the size of each participant's land holding, then the owners of one or two large farms could dominate the operation of the WUO. In such situations, there is no single 'correct' solution.

Box F - Votes for all

Argentina - Voting rights are allocated by reference to the extent of the land being irrigated (in any case, no more than 10 votes per person).

Chile – Voting rights are allocated to participants in proportion to the water rights they hold.

England and Wales – Votes are allocated for elections to Internal Drainage Boards on the basis of the 'assessable value' of the land (which is calculated by reference to the notional rental value of the land). The occupier of land with an assessable value of less than £50 is allocated one vote and then one additional vote is allocated for incremental increases in the assessable value of the land up to a limit of ten votes for land with an assessable value of more than £1,000.

Germany – Votes are allocated to each member in accordance with the 'benefit' gained by that member from the Water and Land Association's activities. In practice this is calculated by reference to the amount of fees each member is charged which is in turn calculated at a flat rate by reference to the size of their land holding.

¹¹⁰ Although in some countries such as Bulgaria, Estonia and Romania they existed in the period before 1945.

¹¹¹ Which are in one form or another the successors to former collectivised farms.

Peru – Votes are allocated on the basis of land area used at a rate of one vote per hectare up to a maximum of twenty votes.

South Africa – The Water Act provides that rules concerning the allocation of votes are to be specified in the governing document of the WUO. Criteria for voting rights proposed in the model governing document annexed to the Act are: one vote per water use entitlement, or a pro-rata number of votes in

proportion to the quantity of water authorized under a particular entitlement, or one vote for every five hectares that can be irrigated in terms of the member's entitlement, with a possible limit of 10 votes per member.

Spain – Votes in Water Communities are allocated by reference to the volume of water used.

The response of the Kyrgyz WUO legislation has been to leave the matter to be resolved by the participants in a proposed WUO during the process of elaborating and agreeing the governing document. Thus article 13(8) of the law says:

The Charter shall specify the number of votes each WUO member is to have when taking decisions at meetings of the General Assembly on the basis of one of the following principles:

- (a) each member is to have one vote irrespective of the size of their land plot within the WUO Service area; or that
- (b) each member is to be allocated with votes in proportion to the size of that member's land plot within the WUO Service area; or that
- (c) each member is to be allocated with votes in proportion to the amount of fees paid to the WUO during the previous year.

Of course, this approach means that a considerable amount of negotiation will be needed during the establishment phase. On the other hand, if potential participants cannot even agree on the allocation of votes within a WUO then it is probably not likely that they will be able to reach agreement on its operation whatever outside rule is imposed on them.

Interestingly, while the Kyrgyz legislation guarantees each member a minimum of one vote, the French legislation does not. Instead it provides that a WUO's governing document can specify the minimum interest, by reference to the size of the land area that is owned, used or managed, that each participant must hold in order to participate in the general assembly. Those who have an insufficient interest may pool their interests to have a vote.

Even if votes are allocated on a proportionate basis, it is common for the legislation to limit the amount of votes that any one participant can hold. Sometimes, as in the case of Spain, this is done by specifying a maximum number of votes allowed to an individual participant. Elsewhere this is done by reference to a percentage of the total number of votes: in Germany, for example, an individual participant may not hold more than 40 percent of the total number of votes. In the Kyrgyz Republic this figure is 25 percent while in Georgia it is 20 percent.

In some cases the legislation provides that the exercise of the right to vote is dependent on the WUO participant having paid all due charges. For example in Spain the right to vote is directly dependant on the regular payment of fees. Finally, while the right to vote in non-membership form WUOs will usually be by secret ballot, within membership WUOs the legislation may provide for this as an option.

(c) The management board

Whether or not there is a general assembly, the legislation almost invariably makes provision for WUOs to have a management board, which is responsible for policy development and the routine operation of the WUO.¹¹² In the case of WUOs with a general assembly, the decisions of the management board are effectively supervised by the general assembly, which remains the main sovereign or decision making body. In the cases of WUOs that do not have a General Assembly, the Management Board is itself the main decision-making body.¹¹³

It is relatively common for the legislation to describe the competences, composition and functioning of the management board in some detail.

For example article 16 of the draft Turkish Water User Organization Law describes the duties and powers of the management board as follows:

- (a) The register of members to the organization.
- (b) To perform the duties stated in the law, statute, regulations and related legislation and to use its powers to administer the organization.
- (c) To elect the deputy director for cases when the director is absent, with majority of votes among themselves,

¹¹² Subject of course to the exceptions in the German and Albanian legislation noted above.

¹¹³ Although it is of course accountable to its electors who may vote to replace it.

- (d) To prepare the budget, final account and related reports, to deliver the fee and fine tariffs to the approval of the council,
- (e) To apply the fine tariffs in accordance with their acts to those who act in contrary to the work subjects defined in Article 22 of this law, the provisions of the main statute, fee tariff and regulations published.
- (f) To make transfer between the payment titles.
- (g) To make negotiations before the concerning banks and establishments for the supply of foreign or local credit, which is decided to be used by the organization council.
- (h) To examine and approve the specifications of overbidding, underbidding, procurement and purchase decisions.
- (i) To employ the required personnel in accordance with the council decisions.
- (j) To sign agreements with the state institutions, in accordance with the council decisions, concerning the work subjects of the organization.
- (k) To prepare the draft regulations of the organization and, if required, draft amendments of the main statute and deliver to the approval of the organization council.

In some countries, the legislation specifies a maximum number of management board members: seven in El Salvador, nine in Punjab Province, Pakistan and Colombia. Elsewhere a minimum number is specified, three in Romania for example, while the Tunisian legislation prescribes a range: between three and nine members. The South African legislation, however, simply provides that details about the number of members of the management board and their terms of office must be indicated in the governing document of each WUO, although as already mentioned a model governing document is annexed to the act. As a practical matter this raises an interesting question of policy. The more management board members there are, the more unwieldy (and costly) its meetings will be. With too few members, trust in the management board may be diminished.

Sometimes the legislation reserves specific positions on the management to particular classes or categories of member. For example in Andhra Pradesh, India, the legislation provides that each 'Territorial Constituency', or area sub-unit, of a WUO is to elect one member of the management board. Similarly, in Punjab Province, Pakistan the legislation provides that specific 'seats' on the management board must be reserved for representatives of different sectors of the irrigation scheme that is managed by the WUO.

In California, Irrigation Districts generally contain five 'divisions,' each of which elects one management board member.

In practice, reserving seats on the management board in this way can ensure that the interests of participants who use different parts of the infrastructure or scheme managed by the WUO are taken into consideration. A potential risk, however, is that the management board will be permanently divided, with each member seeking to advance the interests of her/his area, rather than working together to a common purpose. The Armenian legislation therefore provides that this approach is optional.

In England, if the 'Drainage District' of a WUO (in other words the land area that it serves) includes non-agricultural land that is under the responsibility of a local authority (municipality) which must pay drainage fees to the WUO, that body is entitled to appoint a number of members of the management board in proportion to the size of its contribution.

Who is entitled to stand for election to a management board? The legislation generally restricts this right to WUO participants. Very often, it also provides that no one may stand for election if they owe outstanding charges to the WUO.

Other restrictions may exist. Unusually among the legislation reviewed, the English legislation sets out minimum property qualifications restricting which participants may stand for election.¹¹⁴ And of the legislation reviewed, only that of Nepal is gender sensitive to the extent that it requires that at least two of the nine members of the management board to be women.

In some countries provision is made for outside participation in the management board. For example, in Morocco the management board is

¹¹⁴ Section 4(1) of the Land Drainage Act 1991 states that: 'A person shall not be qualified to for election as a member of an internal drainage board unless he is-

- (a) both the owner and occupier of not less than four hectares of land in respect of which a drainage rate may be levied by the board and which is situated in the irrigation district for which he is a candidate for election; or
- (b) the occupier, whether under tenancies of year to year or otherwise, of not less than eight hectares of such land as aforesaid;
- (c) or the occupier of land which is of an assessable value of £30 or upwards and is situated in the electoral district for which he is a candidate for election; or
- (d) a person nominated as a candidate for election by the person (whether an individual or a body of persons) who is both the owner and occupier of land which is- (i) situated in the electoral district in question; and (ii) is either of not less than four hectares in extent or of an assessable value of £30 or upwards.'

composed of seven members, six of whom are elected by the general assembly and one of whom is a representative of the state administration. Interestingly, the law specifies that a task of this member - who has full rights of participation including the right to vote - is to ensure that the WUO correctly applies all relevant legislation, including the WUO legislation. Furthermore s/he is required by the law to inform the state administration of any irregularities in the functioning of the WUO, particularly as regards the misuse of state aids.

In France, if the state, a department, a commune, a chamber of commerce or any other public body provides financial support to a WUO (at the request of the latter), the donor is entitled to nominate members of the management board in proportion to the size of its contribution to the overall budget of the WUO.

What does the legislation say about the term of office of management board members? In Colombia the term of office is two years but may be renewed while in Costa Rica and Romania, elections take place every three years. Indeed, three years is a relatively common period in the legislation reviewed. Clearly it is necessary to strike a balance between continuity, experience and the need to democratically renew mandates. One means of promoting continuity is to provide for the regular rotation of members. Thus in Morocco the legislation provides that every year one third of the management board members must resign and stand for re-election.

Concerning the functioning of management boards, it is not uncommon for the legislation to require them to meet every month. This is, for example, the approach taken in both Costa Rica and Peru. The Albanian legislation takes a slightly different approach. Meetings of the management board must take place every month or more frequently if so specified in the governing document. Additional meetings may be called, as required by the chairperson or one third of the members of the management board members. On the other hand in Morocco the management board is required to meet a minimum of twice a year.

In the event that consensus cannot be reached, the legislation often provides that decision-making by management boards is to take place by simple majority vote, although the chairperson may be given a casting vote. This is the approach of the Albanian legislation, which also requires each WUO to specify in its governing document the number of members of the Administrative Council required to be present in order to render a meeting quorate. In Saskatchewan Province in Canada this figure is 50 percent and is

specified in the law. By contrast, in Peru the legislation provides that non-attendance at meetings of the management board is to be sanctioned with a fine.

It is also common for the legislation to specify the conditions for the removal of members of a management board. In Romania, for example, a WUO general assembly can remove members of the management board on the grounds of fraud, neglect of duty or other criminal behaviour. Following such a decision, the general assembly must also elect replacement management board members.

In practice, members of WUO management boards are generally unpaid, particularly in those countries with a long WUO tradition. For example, in Spain to serve as an official of a WUO is seen as a matter of honour, and similarly the long tradition of voluntary public service finds its expression in English WUOs. Nevertheless, although board members do not receive a salary, provision is sometimes made in the legislation for the payment of expenses or a sitting allowance to management board members. In some cases this is stated in the legislation, elsewhere it is implicit. To avoid the situation where such rules are circumvented by the board members being employed in another capacity by the WUO, the legislation often bars WUO employees from standing for election. The Armenian legislation provides an example of this.

By way of contrast, in the Netherlands the management board members are chosen from and appointed by the general assembly to serve a four year-term of office. They receive a salary from the WUO as their membership of the management board is a full-time commitment. Each member is responsible for a separate portfolio of tasks.

(d) The chairperson

Meetings of the management board (and, if there is one, the general assembly) need to have a chairperson. Often the same person fulfils both roles, and consequently the chairperson can have an important role in the operation of a WUO.

In broad terms, the legislation takes two main approaches to the election of the chairperson. In one approach, the chairperson is elected directly by the general assembly or, if the WUO has no general assembly, by the

participants.¹¹⁵ The other approach is for the chairperson to be elected by and from among the members of the management board. Examples of the first approach include the legislation of Albania, Bulgaria, Romania, the Netherlands and Spain. Examples of the second approach include the legislation of the Kyrgyz Republic, California, and England and Wales.

The first approach may be considered to promote the creation of a strong 'presidential' chairperson with a specific mandate from the WUO participants. Where the chairperson is elected by and from among the members of the management board this can promote the concept of collective responsibility. Which approach is best will probably depend as much on cultural considerations as much as anything else.

Apart from chairing the meetings of the management board and general assembly if there is one, the legislation of countries within the civil law tradition usually specifies that the chairperson is the WUO's legal representative. Examples include France,¹¹⁶ Chile and Costa Rica. In some countries the tasks of the chairman are set out in detail in the legislation. As a member of the management board, the chairperson usually does not receive a salary, but the legislation of some countries allows her/him to be paid a higher sitting allowance than the other members, California providing an example of this.

(e) Other institutions

Apart from a general assembly, management board and chairperson, the WUO legislation reviewed also provides for the creation of a variety of other positions and institutions.

For example, in Peru the general assembly of each WUO is required to nominate an 'Electoral Committee' (*Comité Electoral*) to manage internal elections. Voting rights are registered in the Electoral Register (*Padrón Electoral*) which is maintained and updated by the Electoral Committee. It is based on information contained in the 'Register of Users' which is kept and updated by the Local Water Authority, a state agency.

¹¹⁵ And obviously this is the approach taken in those cases where there is no management board.

¹¹⁶ The Chairman 'represents the association in justice against third parties in all matters concerning the legal personality of the WUO'. Article 40, Decree of 18 December 1927.

In Colombia, each WUO is required to have a 'Technical Committee' (*Comité Técnico*) composed of three members. The law specifies that if possible, at least one of the members of the Committee should have a higher education degree. The main task of the Technical Committee is to submit comments and to participate in decision making concerning land development projects on behalf of the WUO.

Given that most WUOs need to collect fees from their members and spend money to keep the organization operating, financial management is one of the most important tasks that must be undertaken. It is therefore common for WUO legislation to provide for the creation of internal oversight and auditing mechanisms.

In Argentina WUOs must have an 'Audit Commission' (*Comisión de Vigilancia*) made up of three members elected by the general assembly for a one year term that can be renewed. Similarly, in Bulgaria each WUO must have a 'Control Board' which is composed of at least three members elected for three years. It is responsible for auditing the activities of the management board and the WUO's chairperson. It also solves disputes among members, on request of the interested members.

In the Veneto Region of Italy the legislation requires each WUO to have a three member 'Board of Auditors' (*Collegio dei revisori dei conti*). Only two of these persons are, however, appointed by the WUO participants. The third is appointed by the Regional Government and acts as the board's chairperson.

In Mexico a WUO usually has an 'Oversight Commission' although there are no specific provisions in the law about the composition and function of this body. On the other hand in the Kyrgyz Republic the role of the 'Audit Commission' is described in some detail. Article 17 of the Law on Unions (Associations) of Water Users states:

1. The Audit Commission undertakes the supervision of the financial and economic activity of the WUA, the Council of the WUA and its Chairman.
2. The Audit Commission (which shall comprise no less than three members) shall be elected by the General Assembly from among the members of the WUA by direct ballot for a three year term. A member of the Council may not at the same time serve as a member of the Audit Commission.

3. The work order of the Audit Commission and its powers are regulated by the Rules of the Audit Commission which shall be approved by the General Assembly.
4. The Audit Commission shall audit the financial – economic activity of the WUA no less than one time in year and at the initiative of the Audit Commission, by the decision of the General Assembly or on the decision of no less than one third of total amount of members of the executive organ of the WUA.
5. The Council of WUA and the management shall provide documents regarding the financial – economic activity of WUA to the Audit Commission on its request.
6. The Audit Commission is responsible to the General Assembly.
7. Re-election of the Audit Commission can be conducted ahead of schedule on request of one fourth of total amount of members of the WUA and also on the request of the Council.
8. The Audit Commission on its own initiative or by the demand of one fifth of the members of the WUA has the right to engage independent auditors to audit the operation of the WUA.

Sometimes in place of an audit commission the legislation requires the appointment of a single auditor. In Colombia the general assembly is required to elect an auditor to monitor the financial management of the WUO.

Generally speaking, the question of whether or not the legislation requires WUO to have an audit commission or a supervisory board depends on whether the country in question lies within the civil law tradition or the common law tradition. In common law jurisdictions, such as Punjab Province, Pakistan, and England and Wales, the legislation simply requires each WUO to have its accounts professionally audited.

Disputes of one form or another within a WUO are virtually inevitable. Sometimes, as in the case of Tunisia, authority is conferred on the management board to resolve disputes among WUO members. The law states that if a solution cannot be found, disputes are to be referred to the ordinary courts.

Elsewhere, it is not uncommon for the legislation to create various forms of dispute-resolution mechanism. For example the Spanish legislation requires

each WUO to have a 'Jury' on which the necessary powers are conferred to summarily resolve disputes between WUO participants. Such a Jury is entitled to *inter alia* impose penalties on transgressors of the WUO's operating rules, and to award compensation in appropriate cases. The law requires the proceedings of each Jury to be held orally and in public, according to local custom, laws and regulations.

Based on the Spanish model, a system of juries was introduced in Albania under the first irrigation law enacted in 1991. In practice, this approach did not work and no juries were ever established by Albanian WUOs. Thus the recent legislation takes a more flexible and permissive approach: the governing document of each WUO can provide for disputes to be resolved by the general assembly, the management board or for the appointment of a special dispute-resolution panel appointed by the general assembly, the WUO regulator or an independent third party. A similar permissive and flexible approach is taken in the Kyrgyz law. As a result, some Kyrgyz WUOs have elected formal dispute resolution commissions while in others internal disputes are decided by a single elected 'water judge' or by the 'Grey Beards' (*Aksakals*): courts of elders which function on customary lines but which are recognised in formal law.

In Pakistan, the general assembly of each WUO is required to constitute a special three- or five-member board called the *Nebri Panchayat*, to solve disputes among WUO participants or other water users. Decisions of this body can be appealed to the 'Irrigation Tribunal' for the area. Similarly in Bolivia each WUO must have its own Administrative Tribunal (*Tribunal administrativo*) to resolve disputes among participants, although (as in the case of the Kyrgyz Republic) the law also allows for disputes to be resolved by such other relevant body as may be defined by the customary rules in effect.

Apart from internal elected institutions, it is also common for the legislation to contain provisions that enable WUOs to hire a paid manager or chief executive officer. This is essential if the (usually unpaid) chairperson and management board members are not to spend a disproportionate amount of time on routine WUO work. The legislation is usually permissive on this point (for example the German law simply says that a WUO may hire one or more managing directors). It is, after all, up to the participants in each WUO to decide what costs should be spent on staff salaries, as they will after all be responsible for paying them.

The task of hiring a manager is usually conferred on the management board. For example, in South Africa the legislation provides that the management board may appoint a 'Chief Executive Officer' and determine his mandate and functions while the Colombian legislation enables the management board to recruit and select a 'General Manager'.

In Tunisia there is no discretion. The law states that the management board of each WUO is assisted by a 'Managing Director' (Directeur) proposed by the state administration and who is entitled to participate in its meetings in an advisory role. A variation on this approach is provided by the Argentine legislation of Mendoza Province. Instead of being appointed, the 'Chief Executive Officer' (Inspector de Cauce) is elected alongside the management board every four years by all members with a simple majority vote. In this connection the role of the Chief Executive Officer is more like that of an 'executive' Chairperson.

WUO legislation sometimes refers to the hiring of other staff. This is generally more common in the case of WUOs established as public law bodies, as the right to hire staff is a normal legal right of a private law body. Details on the procedures for the hiring of other staff are not commonly spelt out in the legislation, the matter being determined by the management board or the employed manager. However, in Tunisia the law specifies that the 'Accounting Officer', responsible for the financial management of each WUO, is to be jointly nominated by the management board and the local Governor (*Gouverneur*). Furthermore, this person is required to submit the financial records of the WUO to the local Governor as well as to the management board. Finally, as already mentioned, alone among the legislation reviewed, the German law provides that WUO employees may be granted the status of civil servants.

IX. PROVISIONS CONFERRING SUBSTANTIVE LEGAL RIGHTS AND DUTIES ON PARTICIPANTS

WUOs are created to serve the interests of their participants. But what does the legislation say about the relationship between WUOs and those participants? What are the rights of the participants? And what are their duties?

Although these issues are common to all WUOs, there is a surprising degree of variety in the manner in which the legislation addresses them. In some countries the legislation leaves these matters to the governing document of

each individual WUO. For example, in Mexico the law simply states that the rights and duties of members are to be described in the governing document. It does not give any guidance as to what those rights and duties should actually amount to.

The English legislation goes a little further. It provides that occupiers of land within a 'Drainage District' who are required to pay a drainage rate to a WUO are entitled to vote in elections and, provided they meet the necessary property qualifications, they are entitled to stand for office. At the same time all such persons are required to comply with local operating rules issued by the WUO and to concede rights of access to its duly appointed officials. Apart from that the legislation says little about either rights or duties. The 'right' to benefit from land drainage activities is implicit rather than explicit.

Elsewhere, provisions on the rights and duties of WUO participants are set out more clearly in the legislation itself. This has been a particular feature of the approach taken in the legislation of the former socialist countries of Eastern Europe and Central Asia where, as mentioned, WUOs are generally a new concept and rights set out in legislation are perceived to be 'stronger' than those set out in the internal governing document. A variation on this approach is found in Albania, where the law itself says little about the rights and duties of WUO members. However, ministerial regulations specify minimum provisions to be included in WUO governing documents.

(a) Rights of WUO participants

One of the most important practical rights for participants in WUOs that operate irrigation systems is the right to a fair share of irrigation water. In Punjab Province, Pakistan, the law states that among other rights, WUO members have the right to an 'equitable share of water as per distribution criteria'. Similar provisions are contained in the laws of the Kyrgyz Republic and Romania.

Another very important right, which is also specified in the Pakistani law, is the right to elect representatives to the general assembly, to stand for election, to access all services provided by the WUO and to inspect all records held by the WUO.

In Peru the law sets out a clear list of the rights and duties of WUO participants. Among their rights, the law lists the right to speak and vote in meetings of the general assembly, the right to elect and be elected to the

WUO's internal institutions (in compliance any the restrictions set out in the law) and the right to inspect all documents held by the WUO.

In Tunisia the legislation specifies that each participant has the right to be elected to the governing bodies of the WUO, to submit proposals to the general assembly, to participate in and vote at the sessions of the general assembly. As already mentioned, however, in some countries (such as the Kyrgyz Republic) the law makes it clear that the right to stand for election to one of the governing bodies of a WUO is dependent on that participant not owing any outstanding fees to the WUO.

Another important right is the right to information about the operation of the organization. This kind of right can be essential to promote transparency and to guard against corruption. For example the Bulgarian legislation confers rights of access to WUO documents on participants of the WUO as well as the right to request information on issues that concern them. Similarly in Punjab Province, Pakistan the audited accounts of each WUO must be kept in a conspicuous place at the WUO's office and must be available for inspection by participants. Similar provisions are found in the WUO legislation of Saskatchewan Province in Canada.

(b) Duties of WUO participants

The corollary of rights is duties. Again, duties are commonly spelt out in the governing documents of WUOs, but they may also be specified in the legislation. One of the main duties of WUO participants will usually be to promptly pay any fees that are due to the WUO.¹¹⁷ The Peruvian legislation requires participants to regularly pay their charges and assessments. This could relate to routine operation and maintenance charges or costs of construction. In Costa Rica all costs of the construction, operation, maintenance and expansion of the infrastructure used by the WUO must be paid by participants in proportion to the shares each holds.

Another commonly stipulated duty, found for example in the Kyrgyz law, is to use water efficiently and carefully. In some countries, such as Peru, WUO participants are required to participate in the meetings and support the activities of their respective organizations. In all cases, they are required to abide by the WUO's rules whether contained in the governing document and/or operating rules.

¹¹⁷ An issue considered in the next Part.

In practice a WUO will often need to be able to gain access to the land of participants to undertake inspections and construction and/or maintenance activities such as cleaning out canals. In Pakistan, participants have the obligation to allow inspection of their lands, crops and irrigation systems. Similarly in Bulgaria, participants' duties include allowing access over their land to WUO staff for the operation and maintenance of irrigation/drainage infrastructure and allowing the WUO to use, free of charge, irrigation and drainage infrastructure on their lands.

Statutory information obligations can be of two sorts. The legislation can impose a duty on participants to provide the WUO with all the information it might need for carrying out its activities (for example in Bulgaria). Similarly, in South Africa WUOs are required to compile an 'assessment roll', which must contain information on the charges that the WUO has decided to levy, for the information of participants.

Alternatively, the legislation can also impose a duty on WUO participants to maintain confidentiality regarding information about the WUO that may have commercial value. This is the case in Germany, for example.

Finally, the legislation typically requires participants to reimburse their WUO if they damage any of the equipment or infrastructure that it owns or uses. The Costa Rican legislation provides that participants who damage infrastructure owned by a WUO must pay for its repair. They can also be subject to a fine and to suspension of the supply of water until complete repayment of the damage has been made. The same applies if a participant constructs or alters infrastructure to improve his/her water supply.

Of course, it is all very well imposing duties on WUO participants. But what is to happen if they do not comply? This issue is examined in more detail below in Part 12 on the substantive rights of WUOs.

X. FINANCIAL PROVISIONS

Except in cases where WUOs are responsible for water management on a very small scale, and can operate solely on the basis of contributions in kind from participants, WUOs invariably need to secure funding in order to cover their costs. Such costs will include some, or all, of the following:

- the cost of obtaining a permit to abstract and use water and/or to drain water or to dispose of wastewater together with any

- water use and wastewater disposal charges payable pursuant to such permit;
- charges in respect of water supplied to the WUO on a contractual basis by a state agency (such as an irrigation agency) or some other bulk water supplier;
 - the WUO's own costs of operating and maintaining the infrastructure under its authority which may include staff salaries, office expenses (including the costs of rent, utilities and communication), operation costs including the costs of electricity if pumps are used, system maintenance including routine and annual maintenance, the maintenance of an emergency reserve fund, small replacement fund, transport expenses, purchase of equipment, social charges and taxes; and
 - investment costs for the construction, rehabilitation or reconstruction of infrastructure.

A key feature of WUOs is that they are usually self-funding, at least as far as operating costs are concerned, and this is invariably reflected in the legislation reviewed. Indeed in some cases this is stated explicitly: the WUO law of the Argentine province of Mendoza provides that WUOs are financially independent from the Provincial Government.

So what are the sources of WUO finance foreseen by the legislation? The main income is invariably from fees and charges to participants for services provided by the WUO (and which include the WUO's internal administrative costs). Other sources of finance can include borrowing, and such grants and or subsidies as may be available from time to time. Finally, a WUO may be entitled to income from assets or capital in its ownership and, in the case of California Irrigation Districts from power generation. Other possible source of income include fines from participants who have breached its operating rules (though no reasonable WUO would hope to rely on this) and in the case of membership WUOs, fees from non-members.

Finally, in some countries subsidies may be available. For example, the Colombian legislation states that apart from revenue from the collection of charges levied on participants for the services provided, WUOs may also

receive government subsidies, based on the annual budget submitted by each WUO.¹¹⁸

In Andhra Pradesh State in India the law provides that the resources of WUOs include: grants received from the Government as a share of the “water tax” collected in the area of operation of the WUO as well as funds that may be granted by the State or Central Government for the development of the area of operation, resources raised from any financing agency and income from the properties and assets attached to the irrigation system in its area of operation.

As already mentioned, whatever other sources of financing may be available, in the vast majority of cases the main part of the income of a WUO will derive from fees or charges paid by participants. What types of fee? Sometimes this is spelt out in law as in the case of the Albanian legislation, Article 19 of which provides:

The statute of each Association shall require members to promptly pay any fees levied by the Association in accordance with the statute including:

- (a) irrigation water supply charges;
- (b) drainage charges;
- (c) an annual membership fee; and
- (d) any other charges levied by the Association.

Having defined the different types of fees that are payable, the Albanian legislation leaves it entirely to individual WUOs to determine how the level of fees is determined. Elsewhere this matter is specified in the legislation. In Mendoza Province, Argentina the law provides that WUOs may set and collect 'water charges' on the basis of the following criteria: charges are to be set at a level that permits the financing of the operation and maintenance of canals as well as repayment of construction/rehabilitation and the activities of the WUO. In setting such fees, a WUO is required to balance the minimum possible charge with the most efficient possible distribution service. At the same time each WUO must ensure that water charges are fair and equitable so as to encourage the rational use of water.

¹¹⁸ For example both direct and indirect subsidies are currently also paid to Romanian WUOs although as Romania moves to join the European Union this approach will need to be reviewed so as not to contravene EU rules on state aid.

The legislation of Saskatchewan Province, Canada sets out a detailed procedure for setting 'water service charges'. Every fiscal year, before a date specified by the WUO regulator, each WUO must first prepare an estimate of its total costs for the following fiscal year. These must include:

- administrative costs;
- the costs of diverting, pumping, supplying, distributing and draining water, including any charges payable by it to the bulk water supplier in respect of water supplied;
- the costs of maintaining its irrigation works, water control works and water supply works;
- any amount that the WUO requires to recover any losses in the previous fiscal year;
- any amounts that the WUO is required to collect for the purposes of its irrigation replacement fund;
- the amount of any charges the WUO is required to pay to the state 'Irrigation Crop Diversification Corporation'¹¹⁹ or 'Saskatchewan Irrigation Projects Association'¹²⁰; and
- any other costs that are prescribed in regulations made pursuant to the WUO law.

Having prepared such an estimate each WUO is required to establish water service charges or a tariff of water service charges 'that is sufficient to cover

¹¹⁹ A statutory research body, established in accordance with Part IV of the Irrigation Act 1996, the tasks of which are *inter alia*:

- (a) to research and demonstrate to producers and WUOs profitable agronomic practices for irrigated crops;
- (b) to develop or assist in developing varieties of crops suitable for irrigated conditions;
- (c) to provide land, facilities and technical support to researchers to conduct research into irrigation technology, cropping systems and soil and water conservation measures under irrigation and to provide information respecting that research to district consumers, irrigation districts and the public.

It is governed by a management board, the majority whose members are WUO representatives.

¹²⁰ Another statutory body, this time regulated by Part VI of the Irrigation Act 1996, the members of which are WUOs and the tasks of which are:

- ‘(a) to co-ordinate, direct and participate in activities related to irrigation policy, irrigation program development, irrigation research and demonstration, economic development as it relates to irrigation and promotion of irrigation;
- (b) to promote greater co-operation between district consumers and irrigation districts;
- (c) to co-operate with ICDC, the minister and the Corporation in promoting and developing sustainable irrigation in Saskatchewan.’

its total costs in the fiscal year'. The law then specifies that in establishing its water service charges or tariff of water service charges, each WUO must take account of:

- (a) the costs of collecting water service charges;
- (b) an allowance for potential losses in collecting water service charges;
- (c) any revenues, other than water service charges, that the WUO is to receive in the fiscal year;
- (d) any amounts that the WUO chooses to allocate from surpluses in previous years; and
- (e) any other factors that are prescribed in the regulations made pursuant to the WUO law.

Before a water service charge, or tariff of water service charges can be applied, the law specifies that the Management Board must formally approve it. First, however, each WUO must submit to the WUO regulator: an estimate of its total costs for the fiscal year; its proposed water service charges or tariff of water service charges for the fiscal year; and any other information concerning its expenses, revenues or water service charges that the WUO regulator may require.

However, while in Saskatchewan the prior approval by the WUO regulator of the proposed charges is not necessary, in some countries, such as Mexico and Spain, the legislation requires this. And while in South Africa the law permits WUOs to assess charges on participants, these must be set in accordance with the pricing strategy for water use set by the Government.¹²¹

Having determined the overall level charges to be collected, the next question is how the amounts payable by individual participants are to be assessed. Again, a number of different approaches are to be found in the legislation. In the case of WUOs that supply water for irrigation it is not uncommon to require some or all of the charges to be levied by reference to the volume of water supplied. This is, for example, the approach taken by the Romanian legislation. Assuming the amount of water delivered can be measured, this appears to be an equitable approach. A farmer pays for the

¹²¹ Interestingly in South Africa the Government can also direct WUOs to recover any charges on water use set by the Government and allow them to retain a portion of all charges recovered. In this case, the WUO is jointly and severally liable to the State with the water users concerned.

water s/he receives. But what of the cases where a WUO provides a service that is less easy to measure, a common approach is to levy such charges on a uniform basis. For example in Lower-Saxony, in Germany, where WUOs may undertake a range of tasks including land drainage and flood defence, the law provides that the level of charges payable by each individual participant is to be calculated on the basis of the notional 'benefit' they receive from the services provided by the WUO. In practice this is usually assessed at a flat rate charged per hectare of land.

In some countries, however, the legislation provides that such charges are to be calculated by reference to the different individual benefit of each participant. In England and Wales, for example, drainage rates are calculated by each WUO by reference to its actual operating expenses. Individual rates for each participant are then assessed and applied by reference to the 'Assessable Value' of agricultural land. This is determined by the notional rental value of the land in accordance with specific criteria described in the law. The higher the Assessable Value of the land the greater the individual drainage rate payable by the occupier of the land will be.¹²²

This kind of differentiated approach is also applied by Irrigation Districts in California. Different 'classes' of land carry different assessment rates. The objective here is equity. Those using water on land with higher productivity can afford to pay higher charges or a flat rate for operation and maintenance and then a volumetric charge. Different categories are set by soil type (land quality) or by reference to the type of crop grown. For example, Irrigation Districts sometimes set assessed values on five different cropping situations: fruit land, potential fruit land, good agricultural land, fair agricultural land and poor agricultural land.¹²³

Other possible sources of revenue for WUOs will depend on the scope of their permitted activities. As described above, most WUOs, with the exception of those in Sri Lanka, are limited by law to undertake specific water management tasks, thus minimising the scope for raising funds from other activities.

Nevertheless, within this framework some countries' legislation leaves open sufficient legal 'space' for WUOs to earn income from additional sources.

¹²² Again in contrast to Germany where all rates are payable by the owner of the land on a flat per hectare basis irrespective of the notional value of the land.

¹²³ Irrigation Enterprise Management Practice Study – Annual Report 1997, *op cit.*

For example Nepalese WUOs are entitled by the law to earn income from revenue from the sale of trees planted along the canals and waterways that they operate and maintain. And as already mentioned, in the United States California Irrigation Districts are entitled to earn additional income from the use or management of the property they own in order to fulfil their water management activities, for example from rental income and hunting fees. A number of Irrigation Districts in California have invested in the construction and operation of micro-dams and small scale hydro-power electricity generators on their canals.

Setting charges is, of course, only part of the story: they must also be collected. The rights and powers conferred by the legislation on WUOs in this context are considered in Part 12 below. Failure to collect outstanding charges, or even a failure to collect them in a timely manner, can have a devastating financial impact. Particularly in the case of irrigation WUOs, the problem can be compounded by the fact that farmers may be unable to pay water charges until after the irrigation season is over and they have harvested their crops. What solutions does the legislation provide for this kind of problem?

One approach is to enable a WUO to require participants to pay a deposit in respect of the service to be provided. In California the law enables WUOs to specify a date by which applications for water during the following irrigation season are to be made and to require such applications to be accompanied by a cash deposit not exceeding the water charge for the water applied for.

Another solution may be for a WUO to borrow money by way of a loan or bank overdraft. The right of a WUO to borrow money will depend on the applicable legislation. In particular, if a WUO is a public law body the legislation will probably not only specify whether or not a WUO is entitled to borrow money but may even specify the purposes for which money can be borrowed, as in the case of Saskatchewan, described below.¹²⁴ This is because the powers of public law bodies are usually carefully defined and limited.

In some countries the right of a WUO to raise funds by way of a loan or bank overdraft is expressly permitted in the legislation. Elsewhere, it is

¹²⁴ For example the power of internal drainage boards to borrow to fund contributions payable to the Environment Agency was inadvertently removed when water legislation was consolidated in 1991.

implicit by a statement that a WUO has all the powers of a natural person of full capacity. In South Africa, the Water Act specifically permits WUOs to raise loans, including bank overdrafts. The legislation provides little further detail, but specifies that the procedure for raising loans must be addressed in the governing document of WUO. The model governing document annexed to the Act sets out a safeguard procedure which is designed to prevent abuses. All decisions on taking a loan must be made by the WUO management board at a meeting in which at least two thirds of its members must be present. Furthermore, the management board must give detailed notice of the proposed loan to all WUO participants at least 21 days before the date of the management board meeting at which the issue will be determined.¹²⁵

In the Canadian Province of Saskatchewan, the right of WUOs to borrow money is relatively restricted. The legislation provides that a WUO may 'borrow by way of temporary loans any moneys that it considers will be required to fund its activities in a fiscal year until its approved water service charges for the fiscal year have been collected'.¹²⁶ It goes on to state that all borrowings are to be from a specific class of lender, namely a chartered bank, a trust corporation or a credit union. Finally, it is interesting to note that the legislation specifically provides that the state (the Minister of Finance, and the Government of Saskatchewan) is not liable for the repayment of any loan raised by an irrigation district, including any outstanding interest.¹²⁷

In practice, the ability of a WUO to raise funds by way of a loan will depend on its ability to provide adequate security. In this connection the Saskatchewan legislation states that WUOs may provide any guarantee or security that they consider appropriate. In Germany, while the WUO legislation is silent on the issue, WUOs frequently raise money by bank loan or overdraft. What is curious is that the land that is served by the WUOs, and which belongs to individual WUO participants, is provided as collateral, even though it is not actually owned by the WUO. In other words the WUO can effectively impose a lien over the land of its participants in respect of its own borrowing. Whether or not such arrangements might be open to legal challenge is an interesting question that has never been brought before a

¹²⁵ Given that the model governing document is only a 'model' would happen if a WUO had a less rigorous procedure in its governing document is not addressed.

¹²⁶ Section 16(1) *op cit.*

¹²⁷ Thus re-emphasising the legal separation between WUOs and the state.

court.¹²⁸ By contrast, in Nepal where WUOs are also entitled to raise loans, the law requires them to actually deposit land ownership certificates by way of collateral.

In the United States, WUOs generally have the right, under state law, to raise revenue through the issue of bonds to fund new investment projects. For example WUOs in the State of Arkansas are entitled to issue tax exempt bonds (that is to say they are exempt from state, county and municipal taxes) in the form of negotiable coupon bonds which may mature at various times up to forty years from the date of issuance. The exact nature of such bonds is flexible: they may contain such terms, covenants and conditions, as the WUO management board determines. They may bear interest at rates authorized by the board, be payable where and how the board designates and be subject to a trust indenture entered with a bank or trust company. Furthermore, such bonds may be sold at a price determined by the management board.¹²⁹

The California legislation also permits WUOs to issue bonds that are secured against the land of their participants. A proposal to do this must be approved by a vote of the participants, and at least fifty percent of these must vote in favour because their land will be subject to the bond. A simpler and faster alternative is for a WUO to issue a 'certificate of participation' against the future income stream. These certificates bear interest and are effectively a charge on future income. However, as no burden is placed on land, a proposal to issue certificates of participation can be decided by a simple resolution of the management board and does not require the approval of the WUO participants.¹³⁰

Finally, in addition to raising funds through charges and borrowing another source of WUO finance may be government and other grants. For example the WUO legislation in England and Wales provides that WUOs may receive grants for specific land improvement activities. However, in England and Wales as in the other countries of the European Union there are strict limits

¹²⁸ It is understood that to date there have been no defaults by WUOs in respect of this kind of secured borrowing.

¹²⁹ Arkansas Code Ann. 14-116-402 (7) (B)-(E) cited in Looney, *op cit*, 643.

¹³⁰ However, although a vote is not necessary, the management board must first call a public meeting to permit participants to put their views regarding the proposal.

on how such grants can be made, so as to ensure compliance with EU legislation on state aids.¹³¹

Apart from describing and regulating the possible sources of WUO financing, in some countries the legislation specifies what is to happen to funds raised by a WUO. It is not uncommon for the legislation to require such money to be kept in a bank account, or - as in the case of Punjab Province, Pakistan - a 'special fund' for the use and disposition of its resources. Another variation, found in the legislation of Romania and the Kyrgyz Republic, is to require that any surplus income at the end of the financial year be invested in a special reserve fund. This is in part to ensure that WUOs are clearly shown to be 'non-profit' organizations, in that it becomes legally impossible for them to distribute any surplus income to the participants. Similarly, the Tunisian legislation requires each WUO to maintain a reserve fund as a special account into which surplus income is to be paid.

The legislation reviewed invariably requires WUOs to maintain proper accounts. For example, the legislation of Punjab Province, Pakistan requires each WUO to prepare, in accordance with the standards of the Pakistan Institute of Chartered Accountants, the following accounts:

- a) profits and loss accounts;
- b) the receipts and expenditure of the previous year; and
- c) a summary of the property and assets and liabilities giving such particulars as will disclose the general nature of the liabilities and assets and how the value of fixed assets has been arrived at.¹³²

Such accounts must be audited by commercial auditors within four months of the end the relevant financial year and, having been approved by the general assembly, they must be submitted to the WUO regulator, the identity and role of which is considered in the next Part. Finally, the legislation also requires each WUO to display a copy of its most recent accounts at its registered office for inspection by its participants.

¹³¹ See further *Community Guidelines For State Aid In The Agriculture Sector* (2000/C 28/02), as amended.

¹³² Regulation 20, The Punjab Irrigation and Drainage Authority (Pilot Farmers Organizations) Rules, 1999.

XI. REGULATORY OVERSIGHT

The public interest nature of WUOs means that most of the legislation provides for them to be subject to some form of regulatory oversight by a state regulator. However, apart from the role of the state in approving the establishment of WUOs (as described above,) the scope and nature of such oversight in the routine operation of WUOs varies greatly in the legislation reviewed.

Indeed, the question of regulatory oversight is invariably something of a delicate area when designing WUO legislation. As WUOs undertake public interest tasks, the state has a legitimate interest in ensuring their proper and lawful operation and that the rights of WUO participants are respected. After all, each WUO is likely to be in a quasi-monopoly position as regards the service it provides.

On the other hand, the WUO concept is predicated on the basis that WUOs are self-funding and controlled by their participants. The greater the state's regulatory 'oversight' powers, the greater is the risk that the WUO regulator will intrude upon the decision-making process of a WUO, and thus potentially diminish the role of its participants. Arguably, if the regulator's role is too intrusive, at a certain point a WUO will cease to operate as an autonomous body and will become a mere appendage of the regulator, perhaps a glorified fee collection mechanism.

Getting the balance right is a particularly important issue when WUOs are first introduced as part, for example, of a new government policy. Problems can arise if the state has no legal right to require information to be provided, let alone a right to audit the accounts of WUOs.¹³³ Given that WUOs will usually need to recover charges from participants, the latter may be reluctant to participate unless there is some form of state-backed regulatory oversight mechanism in place. Yet, particularly in cases where WUOs are a new concept, if the powers of the regulator are too extensive and too intrusive, participants may quite justifiably question the benefits of WUOs, if they fear that all decisions may be second-guessed by the regulator.

¹³³ This situation arose in Albania in the mid 1990s when it was realised that the first WUOs had been given too much independence. As a result, the Ministry of Agriculture and Food had no legal powers to review the accounts of WUAs. This problem was remedied by the Law on Irrigation and Drainage, 1999.

In contrast, in countries with a long and successful WUO tradition the supervisory role of the regulator can appear to be somewhat residual. It may be restricted to routine auditing activities, with power to step in and take action only if problems are detected. Germany provides a good example. The role of the regulator is limited to an auditing and residual legal supervisory function. Specifically, a decision of a WUO can only be challenged by the regulator in the courts if it is actually illegal. Elsewhere though, as may already be apparent, the state plays a more active role in overseeing the routine operation of WUOs.

Before examining the specific regulatory tasks conferred by the legislation on WUO regulators, the first question to be addressed is just who, or what, is the WUO regulator? The legislation provides a wide range of responses. These include: a regional government (as in the case of the Veneto Region in Italy), a ministry of water resources (such as the Dutch Ministry of Transport, Public Works and Water Management), a ministry of agriculture (the Ministry of Agriculture and Food in Albania), an agriculture sector agency (such as the Commissioner of Agrarian Services in Sri Lanka), a Prefect (in the case of France), an environment agency (the Environment Agency in England Wales) or a specific water or irrigation agency (such as the Punjab Irrigation and Drainage Authority or the Saskatchewan State Water Corporation). Generally speaking, the task of a WUO regulator is conferred on the state body responsible for water resources management in general, or the particular aspect of water management, such as irrigation, undertaken by the type of WUO that is subject to such regulatory oversight.

But even if a central government body (a ministry or department) has certain WUO oversight functions, it is not uncommon to find other regulatory responsibilities conferred on local state bodies or local representatives of the central state such as a prefect. Thus in Tunisia, both the Ministry of Agriculture and the Local Governor have a role in the regulation of WUOs (See Box G).

By way of contrast, in the German state of Lower Saxony the state's regulatory role has in practice been largely delegated to a third party. The Federal WUO law provides that the state governments are responsible for supervising WUOs and for determining which government authority in the state is to be endowed with the necessary regulatory powers. In Lower-Saxony, this power has been conferred on the *Lankreise*, or district authorities. However, these have in turn delegated the power of auditing WUOs to a non-government organization, the Federation of Water Users

for Bremen, Lower-Saxony, and Saxony-Anhalt (*Deutscher Bund der Verbandlichen Wasserwirtschaft Hannover, Wasserverbandstag Bremen, Niedersachsen, Sachsen-Anhalt*) whose members are the very WUOs that it is mandated to audit and regulate.

Box G – Tunisian WUOs and the state

In Tunisia WUOs are formally established by a decision of the Minister of Agriculture with the concurring advice of the relevant Groupement d'Intérêt Hydraulique or Hydraulic Interest Group (HIG). HIGs are administrative bodies entrusted with the preparation of studies for the implementation of waterworks as well as the monitoring of WUOs in their area of jurisdiction. However WUOs are also subject to the general supervision of the Local Gouverneur to whom they must each year submit their draft budget. The Local Gouverneur can adopt recommendations that must be discussed at the following meeting of the General Assembly. In case of malfunctioning of the WUO, the Local Gouverneur (with the advice of the relevant HIG) can summon a special meeting of the General Assembly to take the necessary steps to rectify the situation. If the steps taken are ineffective, the Local Gouverneur can suspend the Board of Directors and appoint a Managing Committee for a set period of time not to exceed six months, to manage the WUO until the General Assembly has elected a new Board of Directors.

However it is the Ministry of Agriculture on the advice of the relevant HIG that has the authority to dissolve a WUO.

Leaving aside the identity of the WUO regulator, the main regulatory tasks provided for in the legislation reviewed are mostly concerned with *corporate governance*¹³⁴, as follows.

(a) Approval of budgets and the level of charges

As mentioned above, in several countries the legislation requires the WUO regulator to approve WUO budgets and the level of charges to be levied. Thus in France, the budget of each WUO must be approved by the Prefect of the *Département* in which the WUO's principal office is located. In Spain, this task is performed by the relevant Provincial Government, through its General Department of Irrigation (*Departemento General de Irrigación*). Similarly,

¹³⁴ As distinct to the regulatory oversight and tasks having to do with *resource management*, such as, notably, the regulation of WUOs' entitlements (rights) to water. This aspect of regulatory oversight is touched upon in Part Twelve, (a).

in Colombia the National Institute for Land Development (*Instituto Nacional de Adecuación de Tierras, INAT*), approves the annual budget of each WUO and the level of charges to be levied on the WUO's participants.

(b) Approval of amendments to governing documents

Following on from the WUO regulator's role in the establishment of WUOs, it is also common for the legislation to require that amendments to governing documents be approved by the WUO regulator. This is only logical: if the WUO regulator has to approve the governing document at the outset, it makes no sense if this can subsequently be altered without its approval. Thus, for example, in El Salvador the legislation requires all proposed alterations to the governing document of a WUO to be first approved by the WUO regulator, which in that country is the Ministry of Agriculture and Livestock.

(c) Power to give directions

It is quite common to find that a residual power is conferred on the WUO regulator to give directions to WUOs regarding the manner in which they fulfil their tasks. Of course the extent and scope of such directions may vary from country to country and probably need to be seen alongside the other powers conferred on the state. The legislation of England and Wales, for example, confers broad powers on the WUO regulator to 'give such general or specific directions as it considers reasonable for the guidance of internal drainage boards with respect to the exercise and performance by those boards of their powers and duties'¹³⁵ in order to ensure the efficient working and maintenance of existing drainage works and the construction of new works.

Similarly in South Africa, where as already seen the WUO regulator plays a significant role in the establishment of WUOs, the legislation also confers powers on it to issue directives which are binding on WUOs regarding the exercise of any of their powers and the admission of new participants. The law specifies that such directives may only be made on prior notice and after the WUO has had an opportunity to make comments. Once issued, such directives must be published in the 'Official Gazette'. Furthermore, in circumstances considered in more detail below, the WUO regulator can take over a power or duty of a WUO, or appoint a person to do so.

¹³⁵ Section 7 Land Drainage Act, 1991.

In Punjab Province, Pakistan the legislation permits the WUO regulator to give directions to WUOs where this is necessary in the 'public interest'. However, the legislation appears to go even further in that it provides that WUOs are subject to the 'overall control' of the WUO regulator.

(d) Technical supervision

In the legislation reviewed, the power of the WUO regulator to undertake technical supervision of a WUO's activities often relates to state-owned infrastructure transferred to such a WUO. Indeed in the Mexican legislation, regulatory oversight powers appear to be confined to this kind of technical supervision. It provides that the WUO regulator is responsible for supervising the operation, maintenance and management of infrastructure that has been transferred in use to WUOs. The regulator may also provide technical assistance to WUOs in carrying out their activities.

Similarly powers are conferred on the WUO regulator by the new Albanian legislation regarding the technical supervision of infrastructure transferred either in use or in ownership to WUOs. The WUO regulator is entitled to routinely request a WUO for information and documentation concerning the operation and maintenance of infrastructure that has been transferred to it. Furthermore, and bearing in mind the fact that the WUO legislation is contained in a sectoral irrigation and drainage law, a duly authorised officer appointed by the WUO regulator may enter upon and inspect infrastructure transferred to a WUO and may require it to undertake specified works where this is necessary:

- (a) to ensure the proper maintenance of such infrastructure;
- (b) to prevent damage or harm to that infrastructure;
- (c) to prevent damage to state property or the property of third persons; or
- (d) in the public interest.

In Nepal the legislation requires the WUO regulator to establish 'Monitoring Committees' to supervise the functioning of irrigation systems transferred to WUOs.

(e) Legal and financial supervision

Most of the provisions on supervision seen in the legislation relate to legal and financial supervision in general and the performance of audits in

particular. The case of Germany has already been mentioned. In Spain, the legislation requires the WUO regulator to undertake an annual audit and also confers upon the regulator a general right to audit WUOs either on its own initiative or on the request of an aggrieved person. In California the legislation requires a special 'State Controller', to supervise the accounts of each WUO, while in both Albania and Bulgaria, responsibility for undertaking regular and *ad hoc* audits of WUOs is conferred on the WUO regulator.

It should be noted that a specific power to audit and provide financial oversight of WUOs will generally be necessary in those cases where WUOs are established as bodies of public law on the basis of specific WUO legislation. On the other hand, a WUO set up as a private law body on the basis of legislation of general application may be subject to other legislative provisions regarding financial supervision, perhaps by another state agency.

A WUO regulator is also commonly given the power to call for information. For example, in accordance with the legislation of Andhra Pradesh, India the WUO regulator may, on its own initiative or on the basis of an application from a third party, examine the records of any WUO to verify their correctness and compliance with applicable legislation. If those records show that any decision of the WUO should be modified, reversed or annulled, the regulator is given the power to make appropriate orders. Similar provisions are found in the legislation of Punjab Province, Pakistan.

In a number of countries the legislation requires WUOs to provide annual reports or returns to the WUO regulator. Typical provisions are found in the WUO legislation of the Canadian Province of Saskatchewan which requires each WUO, within 90 days of the end of its 'fiscal year' to:

- prepare an annual report for the WUO regulator, in a specified form, in respect of 'business and affairs and the business and the affairs of its irrigation replacement fund during the fiscal year'; and
- forward the annual report and its audited financial statements to the regulator.

Similar provisions are found in the legislation of numerous other countries including Albania, Armenia and Bulgaria. In practice this is the main legal mechanism whereby WUO regulators can oversee the financial performance of WUOs. Such powers alone, however, tell only part of the story. What

happens if the WUO regulator discovers evidence of malpractice within a WUO?

(f) Powers to intervene

Some of the most intrusive powers conferred on WUO regulators with regard to WUOs are those that allow the regulator to intervene in a WUO which is failing or where evidence of malpractice has been discovered. Such a situation might come to light as a result of a routine audit, a request for information by the WUO regulator or following notification by a WUO participant or a third party. Once more, the question arises as to the appropriate relationship between the state and WUOs. To what extent should WUOs be left to sort out their own problems internally? To what extent and with what powers should the WUO regulator be entitled to intervene? Again, a range of legislative approaches are to be found.

In Spain the WUO regulator can fine, suspend and dismiss WUO officials for offences relating to the discharge of their duties, and can, *ex officio* or on the petition of an interested party, order the production of registers and accounts. Finally, the WUO regulator may assume direct control of a WUO in cases where this is deemed necessary.

Similarly broad powers are conferred on the WUO regulator in Punjab Province, Pakistan. The regulator may on its own initiative, or following the application of an aggrieved person, suspend the operation of a WUO if it is satisfied that the WUO is acting 'against the public interest' a term which is not further expanded upon. Furthermore, the WUO regulator may proceed to dissolve a WUO in a number of specified circumstances considered in more detail in Part 13 below.

In certain specified circumstances relating to substantive misconduct, the legislation in Andhra Pradesh State in India enables the WUO regulator, acting either on its own initiative or on the basis of an application by a third party, to remove from office members of a WUO management board including the WUO chairperson. The regulator may also appoint an officer to oversee the implementation of decisions taken by WUOs.

Elsewhere, the right of the WUO regulator to intervene is more limited and envisages a greater role for WUO participants. In Nepal, for example, the legislation provides that one third of the participants in a WUO can submit an application to the WUO regulator alleging that the WUO has failed to

properly operate the irrigation system under its control. In such a case, the WUO regulator may dissolve the management board and call new elections.

According to the El Salvadorian legislation, the WUO regulator can participate in solving problems within a WUO only on the request of the management board, or with the approval of the general assembly. The Albanian legislation takes a graduated approach in response to concerns of excessive government interference. As already mentioned, Albanian WUOs are required to file an annual return together with a copy of their accounts with the WUO regulator. The latter is given the power to audit and inspect the records of a WUO at the request of a WUO participant or if following a review of the annual accounts there is *prima facie* evidence of financial malpractice or irregularities. If, during such an audit and inspection, the WUO regulator finds evidence of financial malpractice or that the WUO has not been operating legally, it may require the management board to call a meeting of the general assembly where the WUO regulator's findings can be presented to the WUO's participants. If, however, the management board fails to call such a meeting within 30 days, the regulator may order its suspension and may proceed to call a meeting of the general assembly itself. In such circumstances the WUO regulator may also appoint a temporary manager to run the WUO until such time as a new management board is appointed by the general assembly.

(g) Powers to order the dissolution of a WUO

Finally, the most far-reaching power conferred on a WUO regulator is the power to order the dissolution of a failed WUO. This subject is considered in Part 13 below.

XII. SUBSTANTIVE RIGHTS CONFERRED ON WUOs

The legislation reviewed commonly confers specific substantive rights on WUOs. These very often reflect a variety of policy objectives that may not themselves be apparent from the legislation. Sometimes they may seek to encourage the establishment and development of WUOs, sometimes they may be necessary to enable WUOs to fulfil their tasks, and sometimes they may reflect an underlying policy aim for the establishment of WUOs such as a desire to divest responsibility for the operation and maintenance of infrastructure from the state to WUOs.

(a) Rights to use water and infrastructure

One important right commonly conferred by the legislation on WUOs is the right to use water and state-owned hydraulic infrastructure. For example in Bolivia, WUOs are given priority regarding the grant of permits for the use of water for irrigation. The Mexican legislation provides that a water right concession is to be granted to a WUO if it is established to provide irrigation services to water users. Furthermore, irrigation infrastructure can also be transferred to such a WUO by way of concession.

This is in contrast to the Chilean legislation which provides that water rights are to be held by WUO participants rather than by WUOs. The legislation in the Philippines takes another approach: while WUOs may hold permits to use water, they are exempted from paying the filing fee that must otherwise accompany every application.

In South Africa the legislation provides that individual licences and authorisations for the abstraction and storage of water may be granted on condition that the license or authorisation holder becomes a member of a WUO.¹³⁶ Furthermore, the legislation provides that the relevant ministry may transfer any government irrigation infrastructure to WUOs and the Ministry of Finance may direct that no transfer duty or other taxes are to be payable.¹³⁷

In Armenia WUOs are entitled to a 25-year use right in respect of state and municipally owned irrigation systems. Similar provisions are found in the legislation of the Italian region of Veneto, which provides that WUOs may obtain use rights (but not ownership) over water management infrastructure built by the regional government. The Bulgarian legislation provides that WUOs may acquire, free of charge, either use or ownership rights in respect of state-owned irrigation facilities. The Kyrgyz and Albanian legislation entitles WUOs to acquire ownership rights regarding the infrastructure that they operate and maintain and, as in Bulgaria, this is done on a free of charge basis. This is in contrast to the situation in Colombia where the legislation provides that irrigation infrastructure and other assets located within the area

¹³⁶ It will be recalled that in South Africa WUOs are regulated pursuant to the Water Act.

¹³⁷ This can be an important concession. The process of transferring irrigation systems to WUOs in Georgia has been hindered by the high cost of notary fees as all transfer documents must in accordance with the applicable legislation be notarised.

of operation of a WUO only become the property of such a WUO once public investments have been recovered.

In Germany the Federal law is silent on the rights of WUOs to obtain water rights but it does provide that the state (*Land*) government may transfer ownership of infrastructure to WUOs, and to associations of WUOs. Finally, as well as being entitled to hold and use water rights, California Irrigation Districts also have the legal right to 'commence, maintain, intervene in, compromise and assume the costs' of any legal proceedings that affect the ownership or use of waters or water rights within the district used or useful for any purpose of the district or of benefit to any land.

(b) Rights of access to land for the purposes of operation, maintenance and construction

For any WUO that has ownership or use rights relating to irrigation, drainage or other water management infrastructure, it is essential to have sufficient rights of access to permit inspections and, as necessary, repairs. From a legal perspective, the ideal solution is to ensure that a strip of land alongside the transferred infrastructure is also transferred for this purpose. In practice this not always the case. While civil or land legislation may contain provisions on servitudes or easements that would eventually allow the necessary access, these may be cumbersome and costly to use. Consequently WUO legislation commonly confers on WUOs the right to enter land.

In this connection, from a legal perspective, the situation is relatively straightforward as regards WUOs that operate on a membership basis irrespective of whether or not they are established as private or public law bodies. The right of the WUO to access the land of its members for such purposes is simply part of the bundle of reciprocal rights and obligations of the WUO and its members. For example, in Bulgaria WUOs have rights of way over their members' land for the purpose of operating and maintaining irrigation/drainage infrastructure, and can be granted building rights for the construction of irrigation facilities on lands alienated by the state.

In the case of WUOs that do not have members, such bodies are usually established under public law and are granted the necessary rights of access. For example in England and Wales the legislation confers on a 'duly authorised officer' of a WUO the power to enter land for the purposes of inspection and carrying out works, such as the cleaning and maintenance of

drainage ditches. In practice, this kind of activity tends to cause the greatest friction between WUOs and land owners who resent the temporary loss of use of part of their land while the works are undertaken. However, the law is clear, the task is necessary and there is seldom recourse to the courts.

In respect of membership WUOs, the situation regarding non-members can be more complex, particularly in the case of WUOs that are not established under public law. After all, the right of one private person (the WUO) to access the land of another (the land owner) may conflict with the latter's constitutionally backed property rights. Thus in Romania WUOs can obtain a right of way on the basis of a court decision through the cumbersome and expensive procedures specified in the land code. It is only in emergency situations that they can lawfully enter the land of non-members without recourse to the courts.

From a conceptual perspective, the situation is generally more straightforward for WUOs established under public law. The public law nature of the WUO justifies the fact that special powers are conferred on them. Thus in Colombia the legislation confers rights of way on WUOs in respect of irrigation canals and facilities. In South Africa a WUO can appoint authorized persons to enter and inspect property for a number of purposes; for example to clean, repair, maintain, remove or demolish any government waterworks operated by the WUO. In both of these examples the WUOs in question are established under public law.

Evidently, however, a WUO cannot be given *carte blanche* to enter private land and to do what it wishes. Usually the legislation provides that the WUO must pay compensation for damage or disruption caused as a result of such activities. The same is true as regards rights to expropriate or compulsorily purchase land.

(c) Rights to expropriate land

A related issue concerns the right of a WUO to expropriate land in order to fulfil its tasks. Indeed the German legislation provides that if the use of land by a WUO on the basis of a right of access is such that the land owner can no longer reasonably be expected to use the land himself, the latter can call upon the WUO to expropriate the land. Again, such a right is more likely to be granted to a body of public law.

To return to the case of South Africa, the legislation confers a *prima facie* right on the relevant ministry responsible for its implementation¹³⁸ to expropriate land for a public purpose or in the public interest related to the use and management of water resources. However, the ministry may delegate such a right to WUOs in writing and subject to conditions, thus conferring the necessary powers on WUOs to expropriate land themselves.

The California legislation is even briefer on the point. As regards Irrigation Districts, it simply provides that they may exercise the 'right of eminent domain', the residual right of the state under American law to expropriate land, to take any property to carry out its purposes.¹³⁹

The Moroccan legislative provisions refer to a general power in other legislation. It provides where it is necessary in the 'public interest' a WUO may receive a suitable delegation from the state to expropriate the rights necessary for the accomplishment of its tasks. The source of the state's power to expropriate is not specified in the WUO legislation.

Elsewhere, such as in Germany, the right to expropriate land or other real estate rights is conferred directly on WUOs by the applicable WUO legislation. However the German legislation carefully regulates the scope of such activity. WUOs may only expropriate land that is necessary for them to fulfil their tasks that lies within their 'operating area'.¹⁴⁰ Furthermore, expropriation is only permitted in individual cases provided:

- it is necessary in the common interest of the WUO and the purpose of expropriation cannot be fulfilled by any other reasonable means;
- the WUO made a bona fide attempt to directly negotiate the purchase of the subject of expropriation at acceptable conditions which attempt was unsuccessful; and
- the WUO can show that the object of expropriation will be used for the intended purpose within an acceptable period.

¹³⁸ Currently the Ministry of Water Affairs and Forestry.

¹³⁹ §22456 California Water Code. It should be noted that a WUO exercising such a power would be required to pay fair market value for the land including severance damages. Furthermore, a WUO might be required to purchase the entire parcel of land if the remaining parcel or parcels are too small to be used for any reasonable purpose.

¹⁴⁰ Or adjacent 'embankment foreland'

The law also provides that a WUO may only expropriate the minimum area of land necessary to complete the specific task and if a WUO proposes to expropriate only a part of a plot of land, the owner can require the expropriation of the entire plot if the partial expropriation would mean that the remaining plot could no longer reasonably be used for construction or other economic purposes.

In all of the cases cited in this Part, the right to expropriate land is conferred on WUOs that are established under public law. Indeed, there are no cases in the legislation reviewed where such powers are conferred on WUOs established under private law. Does this matter? In practice, WUOs may seldom need to expropriate land, and as compensation is payable by the WUO in all of the cases mentioned, raising sufficient funds to expropriate land may be a difficult hurdle to cross. However, if a WUO needs to have permanent access to a specific parcel of land in order to construct or reconstruct a new structure to enable it to fulfil its tasks, the absence of the power to expropriate may significantly hinder its effectiveness.

(d) Rights to make and enforce rules

All of the legislation reviewed permits WUOs to make internal 'operating rules'. In the case of a WUO established under private law, those rules will usually only be applicable against participants. As private law WUOs are invariably established on a membership basis, it follows that their operating rules will only be applicable to their members. In the case of a WUO established under public law, such rules may be applicable against any person within a specified geographical area, usually the area of operation of the WUO, whatever their formal relationship with it.

For example in the Netherlands, WUOs are entitled to formulate and adopt **binding** operating rules (*keur*). Such operating rules may define rights of way, maintenance and operation issues, the issuance of wastewater permits and licenses, inspection, damages, and the imposition of fines and other measures.

Making rules, however, is only part of the equation. The need for bodies like WUOs to have the necessary powers to impose sanctions on those who

breach their rules is well recognised in both the literature¹⁴¹ and practice. Consequently the legislation reviewed invariably confers the necessary powers on WUOs to impose sanctions for the breach of their operating rules.

The most common breach of WUO operating rules is often the non-payment of fees and charges to the WUO, and the legislative provisions on the recovery of outstanding charges (as opposed to punishing miscreants for their delay in paying such charges) are considered in more detail below. The legislation sometimes also mentions damage to structures and property owned by a WUO. Other breaches relate to the operating rules themselves, which by their very nature are not specified in the legislation. These might include water theft and taking water out of turn in the case of irrigation WUOs, blocking access for inspections and works and so forth.

What types of sanction are foreseen? Typically the legislation provides that a WUO may fine a wrongdoer. In more serious cases a WUO may be entitled to temporarily suspend the provision of services to the wrongdoer. In the case of membership WUOs, the ultimate sanction is usually expulsion from the WUO, with the loss of rights and privileges that attach to membership including the right to water at a cheaper rate than payable by non-members.¹⁴² For example, the Albanian legislation leaves it to each WUO to determine its own operating rules and the level of sanctions applicable for breaches of those operating rules. However, the grounds on which a member can be expelled from a WUO are spelt out in the law. Thus a person may be expelled from a WUO on the following grounds in accordance with the governing document:

¹⁴¹ Ostrom found that in 'robust institutions monitoring and sanctioning are undertaken not by external authorities but by the participants themselves.' Ostrom *op cit*, page 94. Ostrom goes on to cite a number of authors who suggest that coercion is an essential condition to achieving quasi-voluntary compliance with rules.

¹⁴² See further paragraph e) below. In this connection it is interesting to note that in practice the deterrent effect of sanctions should directly relate to the importance of the service provided by the WUO. In an area where, for example, irrigation is supplemental then expulsion from a WUO or even the suspension of the supply of water may not matter too much to an individual. If irrigation is essential then theoretically this becomes a much more severe sanction. But then again this may also have drawbacks. First of all it may not be culturally acceptable to cut off the water supply if it means depriving a farmer of his/her income. And if the water supply is cut off and the crops fail, how will any outstanding debts be paid to the WUO?

- (a) systematic violation of the by-laws, internal rules and regulations of the Association;
- (b) unreasonable delay in paying charges and fees levied by the Association;
- (c) refusal to pay charges and fees levied by the Association; or
- (d) refusal to repair damage that they have caused to Association property.

In Albania the decision to expel a member is made by the management board. Elsewhere such decisions can only be made by the general assembly. For example, in Tunisia the legislation provides that a WUO management board may propose the expulsion of a member to the general assembly on a number of specified grounds which include: damaging or attempting to damage in any way the WUO or violating obligations toward the WUO. Pending a decision to expel a WUO member, the management board may, by a two-thirds majority vote, decide to suspend him/her. At the time of their exit from the WUO, expelled members remain liable for all outstanding debts to fellow members and third parties for a period of five years.¹⁴³

It is, however, important to note that in cases where WUOs are established on a membership basis under private law, their power to impose sanctions is usually limited to their members. This is because legislatures are, quite rightly, reluctant to confer powers on private organizations to impose sanctions on third party non-members who have no legal relationship with them. Thus the Romanian legislation provides that the General Assembly of each WUO can only impose fines and sanctions on its members. The governing document of each WUO can stipulate that charges due to the WUO are executable by law after notification to the member.

Similarly in Costa Rica, the legislation provides that in the case of non-payment of dues and assessments, WUOs can only impose fines on members, but they can suspend the supply of water to other defaulters until any debts have been paid up. However, apart from suspending the provision of services to non-members who break their rules, there is little else that private law WUOs can do, unless the activity in question also gives rise to a claim under civil, criminal or administrative law.¹⁴⁴

¹⁴³ Such liability also applies to those who voluntarily resign.

¹⁴⁴ Even if this is the case a WUO will be faced with the costs of initiating civil proceedings or a private prosecution or of persuading the police or other relevant authorities to begin criminal (or administrative) proceedings.

For WUOs established under public law, irrespective of whether or not they are constituted on a membership basis, the situation is generally simpler. The legislation that provides for their establishment can, and frequently does, confer on them the necessary powers to impose sanctions against both members and non-members who breach their operating rules. For example in Punjab Province, Pakistan, the law empowers WUOs to impose fines on persons who default on the payment of water charges or other dues to the WUO. Similarly, in Colombia WUOs can impose fines and sanctions on users and may rely on the national police for their recovery. However, in Argentina the authority to impose fines is seemingly subject to prior Government authorization. Defaulters on the payment of charges for the use of irrigation water can be fined up to 50 percent of the outstanding amount (in addition to payment of those arrears). Failure to comply can lead to the water supply being cut off.

The Dutch legislation sets out in detail the procedures for dealing with infractions of operating rules. Each WUO appoints inspection and control officers who have the power to draw up an official report (*proces-verbaal*) on the infringement or violation of its operating rules. They may also be competent to control compliance with central governmental and provincial regulations. Within four weeks of drawing up their official report, the officers can decide to settle the case with the violator(s) concerned. If they do not settle the case, it is up to the judicial authorities to initiate legal proceedings. In addition, the WUO may use administrative force (*bestuursdwang*), whereby after proper notice, the Executive Board (or in situations of emergency, the Chairman) can perform the necessary actions to halt infringements or violations and recoup the costs afterwards.

(e) Rights to recover costs

As already mentioned, the operating rule most often breached in practice involves non-payment by participants of charges due to a WUO.¹⁴⁵ Cutting off the water supply is one potential response, although in practice in the case of an irrigation WUO, if this causes a crop to perish it may make it even harder for the participant to pay outstanding charges. Sometimes, however, the legislation specifically envisages this. The legislation of Saskatchewan Province expressly enables a WUO to terminate irrigation services to, and suspend or cancel any water service agreement with, the participant in

¹⁴⁵ Non-payment may also amount to a breach of the actual or implied contract between the WUO and the participant in respect of services provided.

specified cases. In Germany, the right of a WUO to take direct enforcement measures, such as cutting off a participant's water supply in order to enforce the payment is not spelt out in the WUO legislation but derives from the public law status of WUOs. Under German law, if WUOs were established under private law, it would be necessary for them to start court proceedings against the member and wait for a court decision to be issued in their favour before they could resort to such enforcement measures.

Taking action in the civil courts to recover an outstanding debt is the usual legal solution, but it can be costly and time consuming. The legislative response to this problem is to confer special powers on WUOs regarding the recovery of outstanding monies. Such powers, however, tend to be conferred on WUOs that are established under public law.

In California, for example, the legislation provides that every assessment on land made by a WUO counts as a lien against that property. Unpaid assessments are published in a list of delinquencies and property. The land in question is then notionally 'sold' to the WUO. It may, however, be redeemed within five years from the date of such a 'sale', failing which the property may be sold on the open market by the WUO which is entitled to deduct the sums owed to it from the sale proceeds.

Another response is to give WUOs special enforcement powers, of a type that are typically held by a state agency. In England and Wales arrears of drainage rates may be recovered by a WUO in the same way that arrears for non-domestic rates (local taxes) can be recovered by a local authority. Thus they are entitled to rely on regulations issued by the relevant minister under the Local Government Finance Act 1988:

- (a) allowing a personal liability order to be made against an individual;
- (b) allowing the distress (seizure) and sale of goods;
- (c) allowing a non-payer to (eventually) be committed to prison;
- (d) allowing a bankruptcy petition to be presented against a non-payer; and
- (e) allowing the winding-up of a non-payer that is a legal person.

In addition, WUOs are entitled to use powers to require the provision of information and to enter property. Similar provisions are found in the legislation of the Canadian province of Saskatchewan which provides that:

water service charges are deemed to be taxes for the purposes of *The Tax Enforcement Act* and, in addition to any other remedy, the irrigation district may have for collecting water service charges, the irrigation district has all the rights and responsibilities for the collection of arrears of water service charges as are prescribed pursuant to that Act for a rural municipality and its officers for the collection of arrears of taxes.¹⁴⁶

Similar recovery powers are conferred on French WUOs which are granted priority after the payment of land taxes against the harvests, fruits and rents and revenues relating to the land that benefits from the WUO, and also the same enforcement powers as those held by the tax authorities.

(f) Rights to order participants to undertake works or to undertake such works and recover the costs from the participant

Legislation that provides for the establishment of public law WUOs often confers on such organizations the power to order participants to undertake specified works relating to the WUO's activities. Failing that, the WUO is entitled to undertake such works itself and to recover the costs from that participant.

The Spanish legislation provides a good example: a WUO is entitled to issue a costs order against a participant in respect of work that it has undertaken, and such costs orders are immediately executable under administrative procedures. Furthermore, if a WUO undertakes conservation, cleaning and repairing works, or water distribution activities for the benefit of one participant, the costs of such works or activities may burden the land of that participant as an obligation or lien. Again, this is done through the issue of a costs order which is immediately executable under administrative procedures and which binds the land or property in question, even if it is sold.¹⁴⁷

(g) Rights to charge non members at a differentiated rate

Clearly, the right to charge non-members at a differentiated (usually higher) rate is not relevant to WUOs that operate on a non-membership basis. Such rights are, however, commonly conferred on membership WUOs in cases

¹⁴⁶ Section 36(6), Irrigation Act, 1996.

¹⁴⁷ Fines or compensation orders imposed by a WUO's jury can be enforced in the same way.

where compulsory membership is not possible. In some countries the law places a limit on how much higher the rate should be, but elsewhere, such as Romania, it is up to each WUO to determine the limit. By way of contrast in Albania a WUO may charge non-members at a rate that is no higher than twice the rate charged to members.

Such provisions are included to provide financial incentives to encourage WUO membership.

(h) Tax exemptions

Finally, as already mentioned, in a number of countries WUOs are exempt from paying a variety of taxes, including profit tax, sales tax, value added tax and property tax. Such exemptions may result from their non-profit status and/or their public law status. This is an important issue: the additional burden not only of paying taxes but also, particularly in the case of value added and sales taxes, of calculating and accounting for them, can have serious adverse effects on the economic viability of WUOs.¹⁴⁸

Sometimes the WUO legislation itself includes such provisions. For example the Moroccan legislation provides that WUOs are 'exempt from all current or future taxes or levies of whatever nature relating to their establishment, their operation or the realisation of their objectives'. This is, however, somewhat unusual as such matters are usually regulated in tax legislation rather than WUO legislation. Attempts to include provisions in WUO legislation that expressly exempt WUOs from various types of tax liability are generally opposed by finance ministries.

XIII. DISSOLUTION, LIQUIDATION AND REORGANIZATION

The legislation reviewed generally provides for WUOs to be established for an indefinite period. Having said that, the sample governing document annexed to the Tunisian law proposes the establishment of a WUO that is to last for a defined period of 99 years. Nevertheless, there may be

¹⁴⁸ One advantage that California districts have is that they are non-taxable entities. For tax purposes, they are treated very much like a branch of the local government. This means that while they charge sales tax on the water they supply, they pay no taxes on property, and are exempt from paying taxes on vehicles and other taxable assets, including revenue derived from interest income on bank accounts and other financial instruments.

circumstances in which it is necessary to dissolve, liquidate or otherwise re-organise a WUO.

In some jurisdictions, such as Colombia and the State of Andhra Pradesh in India, the WUO legislation is silent on this matter. Elsewhere, as in the examples of Mexico, Costa Rica and El Salvador, the legislation simply requires each WUO to include provisions on dissolution in its governing document. This is presumably because such WUOs are established on the basis of other legislation that addresses this issue.

In many countries, however, the WUO legislation sets out both the circumstances under which WUOs may be dissolved or re-organised and the procedures to be followed. Usually this is in primary legislation, but sometimes, as in the case of Saskatchewan Province in Canada, the procedure is set out in regulations.

Under what circumstances is a WUO to be dissolved? In some cases legislation specifies the circumstances in which this must happen. For example, in Chile a WUO must be dissolved once the water rights of the participants have all been consolidated into the hands of a single land owner. A longer list of circumstances leading to mandatory WUO dissolution is specified in the Spanish legislation:

- On the expiry and non-renewal of the concession held by the WUO.
- On the caducity (*caducidad*) of the concession.
- On the unavoidable expropriation of the concession
- On the merger of the WUO with another WUO.
- On the basis of a decision of the river basin administration (the WUO regulator) as a result of a sanctioning procedure.
- When three-quarters or more of the WUO's former participants no longer qualify to participate in the WUO. In such cases the remaining participants may agree that the WUO should continue to operate, in which case they must modify the WUO's governing document and re-register it at the central register maintained by the WUO regulator.

- If three-quarters or more of the WUO's former participants cease to use water provided by the WUO. In such cases the remaining participants may agree that the WUO should continue to operate in which case they must modify the WUO's governing document and re-register it at the central register maintained by the WUO regulator.

Elsewhere the legislation confers a greater degree of discretion on the person or persons responsible for deciding whether or not a WUO is to be dissolved. For example, in Sri Lanka the WUO regulator may disestablish a WUO that has been inactive for a period of more than two years for reasons of 'public interest,' a term that is not further expanded upon.

This leads to the next question: who is to make such a decision? Apart from the case of Sri Lanka, the WUO regulator plays a leading role in a number of jurisdictions and can take a decision to dissolve a WUO.

In this context, arguably the most sweeping powers regarding WUO dissolution are to be found in the legislation of Punjab Province, Pakistan. This provides that the WUO regulator may dissolve a WUO if it fails to pay outstanding water charges. However, registration can be restored once these have been paid. Furthermore, the WUO regulator may, on its own initiative or following the application of an aggrieved person, start proceedings for the dissolution of a WUO on certain specified grounds which include: violations of relevant laws, 'patent misuse of power', gross neglect of duty, 'embezzlement of funds' and mismanagement or inefficiency as a result of which 'its continuance is not in the public interest.'¹⁴⁹ In such cases, the WUO regulator must call the management board for a hearing, and may suspend the operation of the WUO before a final decision is made.

Similarly in South Africa, the WUO regulator takes a leading role in WUO dissolution in accordance with a procedure specified in the legislation. The regulator must first publish notice in the official Gazette of his intention to disestablish a WUO, and having considered any comments received, may proceed to dissolve the WUO, again by notice in the Gazette. The grounds for dissolving a WUO, which are also set out in the law, can be classified as voluntary and involuntary.

¹⁴⁹ Rule 10(3), Punjab Irrigation and Drainage Authority (Pilot Farmers Organizations) Rules, 1999 – 1 January 1999.

Voluntary grounds include the transfer of the WUO's functions, by agreement, to another water management organization, or the occurrence of an event provided for in the governing document of the WUO. In this connection, the model governing document indicates that a special general meeting of all participants may pass a resolution approving the dissolution of the WUO with a two-thirds majority and a confirmation vote after four weeks.

Involuntary grounds appear to confer a considerable degree of discretion upon the WUO regulator to initiate the dissolution process, irrespective of the wishes of a WUO's participants. They include cases where:

1. disestablishment is in the 'best interest' of the WUO or of its members;
2. an investigation of the affairs or the financial position of the WUO shows that disestablishment is appropriate;
3. the WUO regulator has taken over a duty or power of the WUO as a result of dissension among the members of the management board;
4. the WUO is no longer active or effective.

As to the procedure to be followed, the legislation provides that the winding up of the affairs of a disestablished WUO should be provided for in each WUO's governing document. If it is not, however, the WUO regulator is required to appoint a liquidator to fulfil this task.

In other countries the legislation confers a greater role on WUO participants in determining whether or not their WUO is to be dissolved, although even in these cases, the WUO regulator usually still has a role to play.

For example, in Bulgaria the legislation does not specify any grounds for dissolution, but provides that a WUO can be dissolved by a vote of no less than two thirds of participants at a meeting of the general assembly. The same meeting must also appoint one or more liquidators, whose appointment must, however, be approved by the WUO regulator.

A similar approach is to be found in the German legislation, except that the grounds for dissolution are spelled out. The specified grounds are that: the WUO's tasks no longer exist, the WUO cannot expediently fulfil its tasks, or that the continued existence of the WUO is no longer required for some other reason. However, in Germany any decision to dissolve a WUO also requires the consent of the WUO regulator. In addition, the legislation

empowers the WUO regulator to demand the dissolution of a WUO if its membership drops to just one person, or for reasons of the 'public interest' (a term that is not further expanded upon.) If the general assembly of a WUO fails to respond to such a demand within a specified deadline, then the WUO regulator may proceed to dissolve it.

After the decision has been taken to dissolve a WUO, the law requires that the organization's affairs are "wound up," either by the management board or by liquidators appointed by decision of the general assembly. The WUO regulator has the power to dismiss the board and appoint one or more liquidators with the legal status of the board if required in the public interest. The law provides that until the winding up is concluded the, the regulations of the law and the provisions of the WUO's governing document continue to apply against the WUO's (former) participants as well as third parties, unless the winding-up process changes the circumstances. Finally, the legislation also specifies what should happen to the books and records of a liquidated WUO. Similar provisions regarding liquidation are to be found in other WUO legislation.

As regards WUO re-organization this invariably takes place through the modification of the governing document. Some of the legislation reviewed also provides for WUO re-organization in the form of a merger with another WUO or the splitting of an existing WUO into separate WUOs. The Bulgarian legislation provides a reasonably typical example. Any such decision requires the approval of the general assemblies of the affected WUOs as well as the approval of the WUO regulator.

XIV. FEDERATIONS OF WUOs

As briefly mentioned in Part Three, legislation in many countries makes provision for two or more WUOs to form a separate organization to undertake shared tasks of common relevance. Such tasks might include the operation of a main canal that supplies those WUOs with irrigation water (as in the case of Albania) or more general 'co-ordination' of the activity of WUOs (as in the case of Nepal where such co-ordination relates to operation, maintenance and water distribution in a defined area).

Like WUOs, such bodies invariably have independent legal personality. As in the case of WUOs, the legislation uses a variety of different names for them. In Spain WUOs that have common interests may create a 'General Water Users' Community' to provide for the defence of their rights and interests. In

Nepal the term 'Users' Co-ordination Association' is used, while in both in Armenia and Bulgaria, the legislation entitles WUOs to establish 'Unions' of WUOs. In California WUOs may establish a 'Water Authority'. Elsewhere the term 'Federation' is used. Examples include El Salvador, Romania and Albania while in the Argentine Province of Mendoza such organizations are called 'Associations'.¹⁵⁰ For the purposes of this part the word 'federation' will be used.

The level of detail found in the legislation varies. The Mexican legislation simply provides that WUOs may associate for the purpose of improving the quality of the services they provide. No further details are given as to how such entities are to be established or to operate.¹⁵¹ By way of contrast the legislation of Andhra Pradesh State in India, creates a relatively complex organizational hierarchy (see Box H).

Box H – Federations in Andhra Pradesh, India

The law establishes a multi-layered system, as follows. Farmers Organizations are WUOs established to operate the tertiary irrigation systems. They have been mentioned several times in the text.

Farmer Organizations can be members of 'Distributory Committees', at the secondary canal level. These are established on the initiative of the WUO regulator to co-ordinate the activities of their member Farmers Organizations. Specific tasks of a Distributory Committee include: the preparation of plans for the maintenance of distributor canals and medium-size drains within their area of operation, the regulation of the use of water among its member Farmer Organizations, the solving of disputes among member Farmer Organizations, the maintenance of a register of Farmer Organizations in its area of operation and an inventory of the irrigation infrastructure within its service area. Membership of a Distributory Committee is open to every Farmer Organization declared by the WUO regulator to be within the 'service area' of that committee. Each Distributory Committee has a 'General Body', which comprises the Presidents of each member Farmer Organization. The General Body elects a 'Managing Committee' composed of no more than five members and a President. Distributory Committees must abide by the decisions of the next layer of organization, the 'Project Committee'.

¹⁵⁰ Associations of WUOs (*Asociaciones de Inspecciones*).

¹⁵¹ In fact they are usually established as limited liability companies, and as such they are not precluded from undertaking commercial activities.

Project Committees are established at the level of each irrigation project on the initiative of the WUO regulator. Their main purpose is to co-ordinate the activity of Distributory Committees. Specific functions include approving an operational plan for the entire project area, approving a plan for the maintenance of the irrigation system within their area of operation, maintaining a list of Distributory Committees and Farmer Organizations in their area of operation, resolving disputes among Distributory Committees, maintaining accounts and having these audited annually.

Membership is open to all Distributory Committees in the area declared by the WUO regulator to be in the project area. Each Project Committee has a 'General Body' composed of the Presidents of all member Distributory Committees as well a 'Managing Committee', composed of no more than nine members, and a President elected by the members of the General Body from among themselves, in compliance with directions given by the WUO regulator. The term of office of the members and President of the Managing Committee are co-terminous with the term of the members of the General Bodies of the member Distributory Committees.

The legislation commonly provides for federations to be established as a specific type of legal person, a form of WUO. They generally operate on a non-profit basis just like their WUO participants, and their establishment procedure, whether by government decision or court registration, is usually similar to that of WUOs.

The establishment of Federations is usually voluntary. Sometimes a minimum number of members is needed: in El Salvador, for example, it is three. In Nepal the legislation permits federations the freedom to enact their own governing documents regulating their internal organization and functioning. But it is more common for the legislation to specify the internal institutional arrangements for federations just as it does for WUOs. In broad terms there are two basic approaches to the structure of federations. One approach, followed by Albania, Argentina and Armenia, calls for a relatively flat structure comprising a single management board to which each participating WUO is entitled to appoint a representative. In Argentina each federation is subject to internal supervision by a 'Board of Auditors' (*Sindicatura*) and similar provisions are found in the Albanian and Armenian legislation.

The other approach, found, for example, in the legislation of Bulgaria and El Salvador, resembles the typical structure of a membership WUO, with a general assembly made up of representatives from each member WUO, which in turn elects a Management Board. Like the Argentine Board of Auditors the Bulgarian legislation requires each federation to also have a Control Board.

The legislation of a number of the countries appears to make no mention of federations,¹⁵² but this does not necessarily mean that such entities do not exist there. For example, in Germany the ordinary WUO law is sufficiently flexible to permit what are effectively federations to be established as WUOs, the participants in such bodies being WUOs, rather than individual land owners.

Finally, a related type of body is the national 'umbrella organization' for WUOs. While such bodies are relatively common, they are seldom established on the basis of specific WUO legislation. Instead they are generally established as private non-profit associations in the same form as non-governmental organizations. Again Germany provides a good example, with its public law WUOs being members of a national private law association, the *Deutscher Bund der verbandlichen Wasserwirtschaft*. But this is not always the case. In Saskatchewan Province in Canada the 'umbrella organization' for WUOs is the Saskatchewan Irrigation Projects Association, which is itself a public law body established in accordance with specific sectoral legislation.¹⁵³

XV. CONCLUSION

As noted in the introduction, the WUO, as an organizational form, is a tried and trusted concept. Furthermore, not only is there a long and widespread tradition of specific WUO legislation but, as highlighted in this paper, such legislation is often relatively detailed.

A number of key themes emerge. First of all, it is clear that there is no single model for WUO legislation. Nevertheless, despite differences in terminology¹⁵⁴ and legal form, the basic approach taken by the legislation reviewed is remarkably similar. In the various countries considered, WUOs

¹⁵² For example in Pakistan, South Africa, Bolivia and France.

¹⁵³ See footnote 115 above.

¹⁵⁴ Including the names by which WUOs are described in the legislation.

are democratically controlled and funded by their participants through very similar internal structures. They operate on a non-profit basis and are required to focus on specific water management tasks. These fundamental similarities transcend geographical, economic and cultural divides, as well as the strikingly wide range of tasks undertaken by WUOs in different parts of the world. Put simply, WUOs that undertake drainage as their main task operate in a manner that is very similar to WUOs that undertake irrigation and this similarity is reflected in the legislation.

To some extent this may be a result of history: no law exists in a vacuum and in this connection the ongoing influence of European legal approaches, largely a legacy of colonialism, should not be under-estimated.¹⁵⁵ Yet at the same time WUOs, as evidenced by for example the Balinese *Subaks* that function on the basis of customary law, pre-date European legislation. Numerous other examples exist of informal and customary WUOs that have developed without the assistance of formal law. Strikingly, however, such WUOs tend to operate in much the same participatory manner as those foreseen in specific WUO legislation. Therefore, while the form of WUO legislation will certainly depend greatly on a country's history,¹⁵⁶ it is highly arguable that the basic content and approach is of generally universal application.

This may not be as grand a claim as it first appears. Given the very nature of water as a resource – fluid and not easily subject to private ownership or control – and the fact that all WUO activities relate not only to water but also to the land of their participants¹⁵⁷ then the legislation may simply reflect common sense. In other words, the only realistic and sustainable management approach is on a local, self-funding and participatory basis.

In this connection, a key feature of WUO legislation is the fact that, notwithstanding the level of detail it often contains, it is ultimately permissive. Most of the important practical legal rules, including the operating rules as well as those rules that determine the service to be provided and the level of charges, are determined at the level of the WUO, the level of the community. In the language of Legal Pluralism such rules

¹⁵⁵ An influence that may be perpetuated through technical assistance programmes.

¹⁵⁶ The most obvious example being the basic civil law/common law distinction.

¹⁵⁷ Whether landowners, occupiers or users.

would be characterized as 'local law'.¹⁵⁸ The key issue is that within the framework provided by national legislation, local law is given formal backing by the state. Legislative provisions that confer substantive rights on WUO participants and which impose procedural obligations on WUOs that promote democracy and transparency have as their main objective the protection of individual WUO participants rather than an attempt by the state to control how WUOs function. In other words the effect of such rules is to protect ordinary WUO participants from those richer or more powerful members of the community who might otherwise seek to influence the functioning of the WUO for their own benefit. After all local law, like customary law, is subject to socio-economic factors and as such it is not necessarily inherently equitable.

In this context, further investigation would be merited on the relationship between WUO legislation and the operating rules established by WUOs themselves, both in countries with a long tradition of WUO legislation as well those in which the WUO is a relatively new concept.

While there are clearly many similarities in the legislation, there are also many differences. At first sight, one important difference is the legal form of participation, namely whether it is on a membership basis or not. In practice, however, this difference does not appear to be particularly significant. It is true that the legislation often does not require non-membership WUOs to have a general assembly. Yet many of the other legal rules and principles (such as those that relate to the allocation of votes) apply equally to membership and non-membership WUOs. The key issue here is that WUOs that do not function on a membership basis can only be established under public law.

This question of legal status - whether a WUO is established under public or private law - is in fact the difference that probably has the greatest effect, not because it has much practical impact on the basic internal operation of a WUO, but rather because of its effect on the relationship between a WUO and third parties. In short, special powers and privileges can more easily be conferred on those WUOs that are established under public law. As seen in Part Twelve, the existence or otherwise of such powers and privileges can have a major impact on the ability of WUOs to fulfil their mandate. This is particularly true in the case of tax issues, as the existence or otherwise of a

¹⁵⁸ See for example Bruns, B.R & Meinzen Dick R.S.(eds) *Negotiating Water Rights* (2000) ITDG Publishing, London.

liability to pay and/or collect taxes can have a major impact on the economic viability (and thus the sustainability) of a WUO. As mentioned above, the problem here is that the relevant legal rules are invariably contained in national tax legislation rather than WUO legislation. A comparative study of the tax treatment of WUOs in different jurisdictions would be helpful in making the policy case for conferring tax exemptions on WUOs in those countries where they are, or will be, newly introduced.

Another area which reveals important differences of approach is that of regulatory oversight. All of the legislation reviewed provides for some form or other of regulatory oversight of WUO activity. The variations appear in the scope and form of such oversight and the degree to which the WUO regulator may influence a WUO's activity on a routine basis - for example through the power to approve decisions taken by a WUO or even to appoint or participate in the appointment of officers.

The next question that arises is how to evaluate the effectiveness of the WUO legislation described in this paper? This can be a difficult task, which can probably only be answered on a country by country basis by comparing the legislative provisions with the reality of WUO performance. As an area of future research, detailed country studies of both the legislation and its practical application would certainly take forward the process of analysing and understanding WUO legislation in a comparative context. By its nature, however, such research would need to be multi-disciplinary, combining a rigorous analysis of the legislation with a review of the economic, technical and institutional performance of WUOs in each selected country. After all, the existence of perfectly drafted legislation on the statute books is of little contribution if that legislation is not implemented in practice. Furthermore, although this paper describes legislation from some thirty jurisdictions, WUOs and WUO legislation exist in other countries in respect of which it has not been possible to obtain information. Again, further research would help to create a more complete picture of WUO legislation.

Finally, the WUO concept is well proven. With the probable effects of climate change including an increasing demand for water coupled with growing pressures on water quality as well as an increased risk of flooding, it is not hard to envisage an expanded role for WUOs. Ostrom describes the process whereby 'Water Replenishment Districts' were first established in California as a result of pressure on aquifers due to over-abstraction. Such bodies were granted a wide variety of powers to raise funds through a property tax - and to a lesser extent by a pump tax - to undertake measures

to replenish an aquifer. But as we have seen, as well as conserving scarce resources, WUOs can also work to protect land against flooding and water-logging. Here too, climate change may well lead to a greater role for WUOs, with an appropriate legislative response. Further research into and analysis of WUO legislation will therefore be both useful and timely.

Annex A

WUO LEGISLATIVE PROFILES¹⁵⁹

Argentina
Bolivia
Bulgaria
Chile
Colombia
Costa Rica
El Salvador
Indonesia
India, State of Andhra Pradesh
Italy including separate profiles for the provinces of Puglia and Veneto
Mexico
Morocco
Nepal
The Netherlands
Pakistan
Peru
The Philippines
Romania
South Africa
Sri Lanka
Tunisia

¹⁵⁹ Available at www.fao.org/landandwater/aglw/waterinstitutions/toconf.htm.

Annex B

LEGISLATIVE REFERENCES

Albania

Law on Irrigation and Drainage, 1999

Armenia

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Canada (Saskatchewan)

Irrigation Act, 1996

Estonia

Amelioration Law 1994

France

Law on Syndical Associations, 1865

Germany

Federal Water and Land Association Law, 1991

Kyrgyz Republic

Law on Unions (Associations) of Water Users, 2002

Spain

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Uganda

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