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9. ABSTRACT

This report presents conclusions and recommendations drawn from a study of water use laws and the status of local water user organizations in the Indus Basin in Pakistan. The water laws of Pakistan, static for many years, needs to be changed to support development of local water user associations. Present laws and regulations, as well as operation of the water delivery system, do not encourage creation of cooperative efforts among water users at the farm level. Specific new legislation needs to be adopted. The needed local associations would allow farmers to be directly involved in local decision-making, allow improved water delivery, solve disputes between users, offer opportunities for increasing labor-intensive agriculture and, in general, constitute a legal contact point between the government and water users. The Tribunal of Waters, in Valencia, Spain, is an excellent model of a local water control organization of the kind that could provide effective water control and management in Pakistan. Included in this report are 28 recommendations, including guidelines for developing and institutionalizing the concept of water users associations in Pakistan.

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CONCLUSIONS AND RECOMMENDATIONS

In summary, the water laws of Pakistan have remained in a static state for a number of years. Law, like the society for which it is adopted to guide social conduct, should be dynamic and unconstraining. Unfortunately, there is no process in Pakistan nor in most other nations for a systematic review on the adequacy of the law. This report is an attempt to take one particular aspect of the law and examine it against the existing conditions and changing times.

The legal analyses of the status of local water user organizations in Pakistan and selected countries has led the authors to the following conclusions.

1. Pakistan has no formalized pattern of local association or organization concentrating upon water use and conservation.

2. The laws and regulations for water use as well as the design and operation of the water delivery system do not encourage creation of cooperative efforts among water users at the farm level. Three major reasons exist that compel the majority of water users to merely function in the system: a) the rigidity in rotation of canal water delivery, yet unpredictability in water delivery to the farmer; b) noninvolvement of the farmer in the decision-making process of canal delivery, subsequently leading to an inability to influence control over one of the most vital elements in agricultural production, or to adopt a planting and harvesting schedule in which the plant water requirements are timed to coincide with predicted water availability; and c) legal sanctions against water trading and selling inhibit the users from freely maximizing the supply within the watercourse area.

3. The Government of Pakistan has accorded high priority to the development of some structural type of local water user organization.

4. No insurmountable constraints are detectable in either legislative or customary water laws of Pakistan. In fact, research into old irrigation systems of other Islamic nations, and in particular the Moslem influence upon the irrigation communities of the once Moorish controlled portions of Spain, clearly indicate an established pattern of water user collaboration to control and manage the resource.

5. Several general laws of Pakistan can serve as the legal foundation for implementing the concept of water user associations; however, it is recommended that specific legislation be adopted to sanction their formation and provide adequate legal authority.

6. The formation of local water users associations would provide the institutional framework for improving irrigation efficiency and increasing agricultural production by:

a) getting farmers directly involved in the local decision-making process;
b) managing water delivered to the watercourse, thus improving timing and conveyance throughout the chak;
c) solving some problems of small farmers and resolving disputes between users;
d) serving as a vehicle and forum for disseminating information and assistance on improved water use and agricultural practices and technologies;
e) constituting a legal contact point between the government and water users; and
f) offering opportunities for increasing labor intensive agriculture.

7. A range of organizational schemes exist that serve to illustrate users involvement and programs in local water control and management and from which basic models can be developed acceptable to the needs of the Pakistani farmers and consistent with the policies and programs of the government.

8. The scheme of water user associations:

a) must be an endogenous entity structured and tailored to coincide with the religious, social, political, economic and legal systems of Pakistan;
b) should commence with a simple, nonsophisticated organizational arrangement having the attributes of flexibility and completeness to allow evolution and maturation as intra-watercourse demands and development take place; and
c) can be designed for hierarchical evolution to achieve inter-watercourse collaboration in water management, and undertake development or improvement programs of a greater magnitude or complexity than the "first level" entities.

9. Based upon an examination of local water organizations in five countries, it is concluded that effective water control and management is facilitated by having an expeditious institution for equitably resolving disputes (e.g. the Tribunal of Waters, Valencia, Spain).

10. The success of any agrarian program with objectives of enhancing the quality of rural life and meeting national food production requirements depends upon a strong water policy to increase delivery and application efficiency, encourage conjunctive use of surface and groundwaters and activate structured collaboration of local water users in improved water management. Such objectives and policies require an awareness of policy-makers and government officials of the conditions and constraints to change of the water users. Conversely, the image of government officials and personnel in relation to the water users must be improved by their demonstrating an appreciation and understanding of the problem.

Reexamining the basic proposition of improving on-farm water management in the Indus Basin, the following recommendations are offered to develop and institutionalize the concept of water users associations in Pakistan:

1. The institutionalization of water users associations requires a simultaneous effort at both the macro and micro levels. It is recommended that a government agency be established or designated at the macro level with responsibility for developing and administering programs designed to assist the farmers, such as watercourse rehabilitation, land leveling, insuring dissemination of vital information on water availability and delivery schedules, improved practices and technologies and with authority to negotiate and contract with water users associations for implementation of such programs. The entity, in addition, should be the liaison between the micro level efforts of the associations and other provincial and national agencies with responsibilities and programs in water and related resources.

2. Induce the establishment of associations through governmental incentive programs, as opposed to penalty or enforcement techniques.

3. Permit a wide degree of variations in organizational scope of authority so as not to restrict or constrain future development (i.e., allow the organization to start from an embryo and mature as the needs arise).

4. Draft a charter stating policy and purpose of organization.

5. Include in the objectives the goal of improving efficiency in water delivery and use from ground and surface waters and prevention of excessive return flow.

6. Formulate rules and regulations for operation and maintenance of association works.

7. Allow the association to levy assessments for the operation and maintenance of the system as well as providing a portion of these assessments for a capital improvement fund, and empower the association to collect water charges such that individual and collective (community) responsibility can materialize, and perhaps even eliminate the propensity for corrupt practices.

8. Failure to pay assessments or for other material infractions should result in the loss or suspension of the right to receive water and voting privileges.

9. Draft bylaws for administrative functioning of the association.

10. Provide the association with jurisdiction over main and minor watercourses within the command area.

11. Prohibit associations from becoming involved in politics.

12. Establish internal organs of the association to permit greatest amount of farmer participation in decision making (an assembly of users), a managing body (executive organ) and body to resolve disputes quasi-juridical in nature. Ensure equitable representation of all members through graduated voting rights, rights which would extend not only to the operating landowners but also tenants.

13. Provide for obligations, rights, and liabilities of association members.

14. Create the recognition of the right of each member to a share of his water and provide for the enforcement of such right consistent with the Islamic concept of equitable apportionment.

15. Provide means of enforcing charter provisions and rotating directorship.

16. Technically assist the association in delivering water to the shareholders in due time, place, and amount when water is needed by the plants.

17. Keep use of water by the association consistent with the ability of the Irrigation Department to deliver water, although it may be necessary to modify the customary practices of water use within the watercourse, i.e., shifting within the types of warabundi = pakki, kachi, rosewari, nakka by nakka, or reverse warabundi.

18. Defray or minimize, through cost sharing, the initial and subsequest costs of improving the delivery and use system.

19. Induce and/or assist cultivators in the installation of turnouts or gates at the nakka in place of the present practice of removing the dirt. The organization should provide a ditch rider who is the only employee (or his organizationally designated assistant) who can open and close the nakkas.

20. Consider, and where possible, induce the conjunctive use of ground and surface waters (e.g. give the association the authority to realign major and minor watercourses but within the constraint of water delivery through the mogha and tubewells where they exist).

21. Assist the members through financial and educational means (which in turn requires a training program for extension-type personnel) to learn of, provide for, and implement improved farming and irrigation practices.

22. Extension and training efforts must be directed not only to water users, but also the water purveyors.

23. Provide for an integrated hierarchical organization among user associations to accomplish various magnitudes of development.

24. Establish at the federation level, an independent juridical body, consisting of association presidents, to resolve water disputes within the federation command area.

25. Develop a line of communication to the provincial and national governments either through a hierarchy of associations or a new or existing governmental agency particularly concerned with rural affairs.

26. Permit the divisional canal officer and other irrigation specialists as impartial technical advisors to the association with no voting power.

27. Strengthen the authority in the Canal and Drainage Acts that presently exist regarding the rights and responsibilities of divisional canal officers to inspect delivery systems at the farm levels, i.e., from the mogha onward.

28. Examine the impact of land tenure practices and regulations upon proposed program of improved water management.

CHAPTER I

INTRODUCTION

ZAMINDAR SHOT DEAD

A young Zamindar was yesterday shot dead in Nemon Goth, Madir, by a rival group over the theft of irrigation water.

Morning Star
Karachi, 4 July 1975

A. Importance of Water Laws and Institutions

Water is a basic natural resource. Without its presence and proper control over the distribution and use, progressive civilization is not possible. Indeed, there is evidence that, where regulatory controls have been efficient, civilization has grown; but where these controls have been ineffective, civilizations have declined and often disappeared.[1]

Water laws are the expression of basic policy and substantive provisions dealing with the use of water and the development of water resources; they are the basis for establishing the administrative rules and regulations. The underlying philosophy of each particular system of water law has a direct connection to the surrounding physical factors of its origin. Where water is plentiful, regulation is aimed at ameliorating the harmful effects of water (floods, desalinization, etc.), but, where water is scarce, regulation is aimed at ensuring an adequate supply, for example, by providing that water is not owned by one individual but, rather, collectively so that all may use what is available.[2]

Pakistan is in an arid region. This general condition, coupled with the vexation of having a general shortage of water or a shortage in one area while there is a surplus in some areas within the region, indicates a need for governmental regulation.[3] Since water must be managed to ensure the most beneficial use, any governmental program must be flexible and able to plan for present and future needs.

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[1]Caponera, Dante A., "Evolution and Concepts of Water Legislation," Annales Juris Aquarum, Proceedings of the International Association for Water Law (September 2, 1968). See for an excellent discussion on the history of water law.

[2]A converse situation exists in a few highly developed countries where the underlying philosophy was oriented toward private enterprise rather than social welfare. For example, in the arid Western U.S.A., a system of private water rights developed which gave a priority of use to the first users and subsequently transformed most unappropriated water to private use at the exclusion of the public, except for personal and domestic needs.

[3]Policy Aspects of Irrigation, An Organizational-Economic Report to the Land and Water Use Seminar of the Near East, September 25-30, 1967, FAO Report 1 (1967).

Control and management go beyond the bounds of law, and with the evolution of the law is machinery which carries it out. The governmental and nongovernmental organizations and associations play a companion role in water development. A sound law without implementing machinery is good theory only. An examination of countries with progressive water policies and integrated resources programs, such as England, Taiwan, Germany, Australia, and the U.S.A., finds a synthesis of the laws and institutions at various levels of government on down to the individual water user.

But, the system of water law and organizational structure in any society did not just happen. It has evolved. And anyone who undertakes to suggest reform must be aware of the roles of custom and tradition in a nation, since these commonly are accorded a greater significance by the general population than a governmental edict. Revision of the laws in Pakistan may be desirable, but local rules and customs must be observed; for it is better to have no law than a law which is not obeyed, a condition leading to disrespect for government.

Water law in Pakistan has a rich and interesting history. Hosting one of the oldest hydraulic civilizations and currently one of the largest irrigated areas in the world, this nation can trace its sources of water laws to the ancient customs and practices of the Indus civilization that surrounded Mohenjo-Daro and Harrapa through the contributions of the Aryans and Greeks and more influentially to the Arabs, who spread Islam into the subcontinent during the eighth century with the Umayyad invasions.[4] Modern water management at the governmental levels was markedly influenced by the British.

The exact origins of water resource development on this subcontinent are lost in legend. Large-scale cultivation was carried on by the early Indus civilization (2200-1300 BC), and it appears that the rulers of ancient Bengal had evolved sophisticated techniques of overflow irrigation in the Lower Ganges Valley more than 3000 years ago. These techniques have found their way into southern India, where water is diverted from the main river or stream and where long delivery canals may be observed.[5] Too, there is some evidence that sizable irrigational reservoirs existed in northern and western India as early as two hundred years before the coming of Christ.[6] Buddha is said to have settled a conflict between two city states over their rights to use the waters of a river.[7]

Islamic water law purports to ensure to all members of the Moslem community the availability of water. All waters are deemed to be the

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[4]See Radosevich, G. E., Water Laws and Institutions in Pakistan, Colorado State University, 1975.

[5]Willocks, "Lectures on the Ancient System of Irrigation in Bengal and its Application to Modern Problems" (1930).

[6]Adhya, Early Indian Economics: Studies in the Economic Life of Northern and Western India, 200 B.C. - A.D. 300, 39 (1966).

[7]Wittfogel, C., Oriental Despotism (1963), citing Jatakam, V:219, as supportive.

common entitlement of all the community and are subject to public administration.[8] Severe penalties were prescribed for unauthorized use or for causing harm to reservoirs.[9] The law also provided for collective enterprise in the construction and maintenance of canals.[10] This all derives from a religious grounding which linked water with the very creation of man.[11]

The modern role of government in water use in India appears in the latter half of the nineteenth century with the direct involvement of the British in canal construction and water administration.[12] Without any experience in the field of irrigation engineering, the British quickly examined the situation in the subcontinent and sent missions to Italy, France and Spain to examine practices that might be adaptable in India. Their contributions to irrigation water conveyance includes a vast network of canals, barrages and weirs and a system of law and administration.[13] The basic legal and organizational framework as well as delivery systems, however, was molded to combat the ever present threat of famine in the subcontinent.[14]

Beginning with the Northern India Canal and Drainage Act of 1873 and the Bombay Act of 1879, public ownership of surface waters and governmental control of their use, development and distribution were explicitly established. Many of the provisions on water use were codifications of existing practices. The Northern India Canal and Drainage Act, which, with amendments, still applies to the original area of jurisdiction, both in India and Pakistan, states:

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[8]Caponera, Supra, footnote, p. 10.

[9]Teclaff, L., Abstraction and Use of Water: A Comparison of Legal Regimes (1972).

[10]Daumas, M., ed., A History of Technological Invention, Crown Publishing, Inc., N.Y., 1969, pp. 336+.

[11]Caponera, D., Water Laws in Moslem Countries, (1954). He states that the Prophet Mohammad declared the gift of water entailed a religious obligation deriving out of the very nature of water out of which "every living creature was created." No one can refuse the surplus water without sinning against Allah and against man.

[12]For an excellent account of canal development and management, see Buckley, R.S., The Irrigation Works of India, E. and F.N. Spon., London 1905, and Michael, A. A., The Indus Rivers, Yale University Press, New Haven, 1967.

[13]It has not been determined to what extent the British consciously incorporated Islamic principles of equitable apportionment and common property status of water into the Canal and Drainage Act and design of delivery and administration systems. Their observations in Europe as related by C.C.F. Moncrieff, Irrigation in Southern Europe, London, 1961, indicate possibly a revitalization of early irrigation practices introduced into Spain by the Moors in the 9th century.

[14]Bhatia, B. M., Famines in India, 2nd Ed., Bombay Press, 1967.

> The State Government is entitled to use and control of public purposes the waters of all rivers and streams flowing in natural channels, and of all lakes and other collections of stream water.[15]

B. Modernizing Water Legislation and Organizational Structures

Many governments are now faced with the problem of a plurality of laws dealing with water allocation, utilization, delivery and removal, and control of water quality. These laws are scattered in a variety of sources and texts, often conflict with each other, and are known only to the administrators of a particular sector. This situation calls for a continuous review of existing water legislation in order to update it at regular intervals. This implies a basic water code with broad principles, which do not change continuously, and regulations interpreting and applying these broad principles which can deal with changing circumstances.

Of equal importance is the matter of how the laws are implemented, by whom and who is affected. Again, many countries face a proliferation of agencies at the national and subnational government levels, charged with carrying out specific functions of water development or control or oriented to a particular sector of the economy. The problems associated with macro-structure organization have been and will continue to be the focus of attention of developed and developing nations alike.

However, a situation that exists in most every agricultural country, that is ignored or considered insignificant to the major efforts of improved water management, is the micro-structure organization or water user association. Normally, technical solutions are offered to solve the problems of water users. Often, they do result in immediate and substantial benefits to him, provided he can afford the capital investment or is subsidized. But he must continually depend upon technical solutions, and as an individual has not really achieved the benefits of social interaction and cooperation in the utilization of his scarce resources, whether they are natural or acquired.

An alternative to a purely technical solution, and one which has attained substantial success and sophistication in many countries,[16] is the formation of water users associations. The terms water user associations or water user organization are used here to refer to any of the patterns of farmer to farmer or farmer to governmental agency entities designed to facilitate water delivery, application and removal. Where the term "water user association" as applied in a country refers to a specific organization distinct from others it will be noted. These entities of various forms have enabled the farmer to optimize his efficiencies of water use by adding flexibility to his application scheduling, sharing costs of an improved delivery system, and preventing unnecessary water removal problems. As with the water law, though, not just any structural pattern should be adopted. There are a wide variety of associations with

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[15]Northern India Canal and Drainage Act, Act No. VIII of 1873, Preamble.
[16]e.g., U.S.A., Taiwan, Spain and Argentina.

varying degrees of success. It is important that the organization be structured from within the existing legal, social, economic and cultural framework, and not be a simple adoption of an association that has been successful elsewhere.

The impetus and guidance for local water user associations may be either part of the water law or special legislation. The rule of innovation applies to drafting the law as well as to the organizational structure of the association, for as Montesquieu, the 18th Century French scholar said, "Civil and political laws must be so fitted to the country for which they were enacted that it is a real coincidence if those of one nation apply to another."[17]

C. Sub-Project Objectives and Purpose of Report

Pakistan has been working on the technical and economic problems of irrigated agriculture, almost from its birth in 1947. Many bilateral agencies' studies and country assistance programs have centered attention upon the pressing problems of salinity, waterlogging, groundwater development, and improved agricultural practices. Storage for agriculture and power production has been implemented with several large dams and barrages.

Colorado State University has been conducting research through the USAID funded, on-farm water management project since 1968 to analyze agricultural practices and particular problems. One of the sub-projects carried out by the University concerns the effects of water laws and institutions upon the water user and his resulting efficiencies and what can be done to remove identified constraints or enhance the function of the law in relationship to other solutions. Four objectives of the legal sub-project have been pursued:

1. Description of the water laws, both legislative and customary or Islamic, and the water institutions of the country. Preliminary research indicated very little has been done in the way of describing Pakistan's water laws. Further, it was considered essential to an understanding of the nonphysical influences over water control. Since water is a provincial matter, not a local subject, the study exceeded the normal boundaries of farm and immediate delivery system.

2. Analysis of the water laws and institutional framework identifying constraints or facilitators to implement improved water management practices by the agricultural water user. Although the manner of water allocation and distribution under the law is of major importance, of equal concern are the provisions for or against farmer water user associations and other cooperative arrangements which might enable the water user to gain the flexibilities of cooperation.

[17]Quoted by Dante Caponera in "Evolution and Concepts of Water Legislation," Supra, p. 12.

3. A description of local water organizational alternatives in countries having similar characteristics to this arid nation.

4. An assessment of existing laws in Pakistan that could be used as a legislative base and vehicle for development and implementation of water user associations.

5. Preparation of a water user association development and implementation scheme and possible organizational relationship between the macro and micro levels of administration and water utilization.

The first two objectives are the subject of a companion publication entitled, Water Laws and Institutions in Pakistan.[18] Therein is a discussion of such topics as ownership of water and water rights; legislation on beneficial uses of water, harmful effects of water and water quality control; groundwater law; government water administration at the national, provincial, local and international level; water rates; Islamic and customary water law; implementation and enforcement of water laws and constraints to improved water management.

Objectives three, four and five are the subject of this report. The purpose of this specific study on water user associations is to provide information and recommendations that will promote the optimum utilization of USAID support for an improved water management program consistent with the host country's effort to improve rural living standards and production.

Current national developments in Pakistan provide a favorable opportunity to lend assistance and expertise on the general subject simultaneously with the Mission's interest and the availability of the Consortium for International Development, USAID sponsored, program of water resources management in Asia.

Since February, 1972, the Government of Pakistan has placed a strong emphasis on a program of rural development. On February 22, Pakistan's Prime Minister, Zulfikar Ali Bhutto, announced in the Pakistan Times,

> The objective of the integrated rural development is to improve quality of life for rural masses. There should be a balanced growth of economic and noneconomic rural life. The aims should be to make the rural people more efficient in agricultural production, to raise their social status, to enable them to play a legitimate role as a self-reliant citizen in a democratic society. This can be done mainly through increasing productivity and improving employment opportunities.[19]

Listed as the number one priority as a means of meeting this objective is the formation of farmer organizations and institutions. As a prelude to modernizing the water laws and local organizations, this report examines a spectrum of alternative local arrangements and their legislative base in an effort to provide the necessary insight into existing choices.

[18] Radosevich, G. E. Water Laws and Institutions in Pakistan, Colorado State University, 1975 (publication in process).
[19] Pakistan Times, February 22, 1972.

CHAPTER II

SPECTRUM OF WATER USER ORGANIZATIONS

A. The Spectrum

Irrigation, by necessity, requires a considerable degree of coordination and cooperation by the multitude of individuals directly involved with water diversion, conveyance, application and removal, and the infrastructure associated with crop production and marketing. To facilitate the attainment of these objectives, water users in nearly every agrarian society have developed some form of organizational relationship to gain economics of scale, control, continuity and predictability of operation. A wide array of identifiable organizational patterns have evolved at various levels of administration and operation. The design, function and degree of formalization of the entities depends upon their purpose and scope of authority.

The potential and need for improving water use efficiency in irrigated agriculture of Pakistan transcends several levels of social and governmental involvement. For that reason the spectrum of associations described will be given a legal classification of three categories indicative of both their status in the country of use and their relationship to a possible hierarchy consistent with conditions in Pakistan. The three categories are:

1. Private organizations--irrigation companies, communities and associations.

2. Quasi-public organizations--farmer cooperatives and some water user associations.

3. Public organizations--irrigation districts.

The private organizations are those "grass root" entities formed by local water users along a logical but confined irrigation system. These organizations normally are nonprofit and assess their membership for operation, maintenance and replacement costs. The common denominator between the members is usually the sharing of a water delivery channel or watercourse. Their impetus to cooperation is generally to improve the conveyance and timing of water to their farms. Initially the association may undertake a single purpose, i.e. watercourse rehabilitation, or improved timing of delivery. As the cooperation matures, a number of related functions will be assumed.

Often the incentive to organize is external to the water users, i.e. governmental programs. However, the most successful private organizations are formed by voluntary agreement of the members and the internal operation designed to enable every member to participate in major decisions of the association. Government is not a member but may be called upon for technical assistance.

This is the basic unit of cooperation and in intensive agricultural areas often provides the backbone of national or regional efforts to improve water use. It is the first level of organization that should be undertaken in Pakistan.

Quasi-public organizations developed to involve the water users in larger projects or a range of activities other than just water utilization. It is a more formalized entity, normally complying with specific legislative provisions on organization and operation. The entity, although consisting of voluntary membership, has acquired a certain public standing and responsibility.

In the U.S.A., several private companies may collectively pursue a water project of mutual benefit. This federation (called a Water Users Association) will contract with the government and construction firms to complete the project and may remain associated to operate and maintain the systems.

Another common form of quasi-public entity is the farmer cooperatives, of which Pakistan has a great number registered. In Turkey, the cooperative undertakes specific activities in water resources management.

The potential of this category for Pakistan is first in the form of an alternative to private water user associations should the agricultural cooperatives broaden their scope of operation. Second, future needs may require the flexibility of private associations to federate into a higher level organization in pursuit of a common benefit. For example, if the farmers receiving water from one mogha (canal to watercourse outlet) are organized as an irrigation association, two or more associations along the canal may find it of mutual benefit to cooperate in certain aspects of water acquisition (tubewells) or management (inter-watercourse control).

The third category is the public organization. Its functions are normally related not only to water users' needs but the general welfare of all people in the jurisdiction regarding the use and conservation of water and soil. Often the entity is organized to manage and operate a large scale water delivery or conservation project, and contract on behalf of the members for construction and repayment.

Two features distinguish the public organization from the other two categories. First is that it may be imposed upon a particular area if a percentage of landowners (usually 2/3) support its creation. Second, the entity may be financed by user charges, taxes, bonds, or government grants and loans. The ability to levy a tax, either ad valorem, per acre or direct assessments based upon benefits received, insures the public welfare can be pursued.

A variety of public organizations exist but the most common in irrigated agriculture are irrigation, drainage, flood control, soil and water conservation and conservancy districts. The latter two are super districts often organized over an entire watershed area with multiple-purpose objectives.

This category of organizations may not be immediately required in Pakistan, and perhaps with appropriate cooperation and water users associations, may not even be desirable. However, it is recommended that a newly adopted scheme of organization be sufficiently flexible to mature into joint participation by water users and government without a restructuring.

The author's approach to the following portion of this report is to go beyond the context of irrigation in Pakistan and examine a range of organizational possibilities that have significance to ultimately developing a pattern of associations for Pakistan. The organizational structures of five countries were selected to provide a spectrum of associations at the water user level. These five countries include the United States, Republic of Taiwan, Turkey, Spain and Argentina. In summary fashion each sovereign has the following to offer in approaching the local water use problems in Pakistan.

The United States is a nation prolific with laws and structural entities. Although a relatively new country by historical and development standards, it has had the advantage of immigrant inputs from all walks of life and cultural patterns, an abundance of natural resources, in particular land and water, a limited population and the opportunity to examine the practices and problems of modern and ancient civilizations. Consequently, activities were quickly compartmentalized, and needed control translated into law and organizations formed. So it was with agricultural crop production and the interdependent role of water resources.

Concentrating upon the water user and the means by which he and his neighbors could maximize their own resources to improve their use of usufructory rights in water, we find a full spectrum of independent-oriented water user entities. They range from corporate farmer to irrigation companies and cooperatives to ad hoc or federated water user associations and irrigation districts. The variety that co-exists demonstrates the element of flexibility in the legal structure which permits entity formation, depending upon function and desired end results. The nature of formation and evolution illustrates a pattern of development according to needs and capabilities.

Water user associations of Taiwan signify the ultimate hierarchical arrangement and line of authority. Successful agricultural production under intensive farming in a densely populated country is one of the notable characteristics of Taiwan. The legal basis and definition of operation for Taiwan's irrigation associations provide an exceptionally good model to be analyzed by Pakistan. In addition to focusing upon the immediate water management problems of the farmer, the quasi-public status of the association serves as a media between the government and the farmers for planning, construction and operation of desired water programs.

Perhaps the most important feature of the irrigation association is various plateaus of farmer involvement. This same scheme has excellent potential in Pakistan to allow economics of scale for larger local water projects or delivery practices, i.e., combining or extending the rotation

among watercourses fed from the same minor canal. Also, the framework for planned water user maintenance and operation is inherent in this system.

The water laws of Taiwan included illustrate the legal basis for developing the organizational structures.

Turkey is examined for its recent approach to developing "Soil and Water Resources Development Cooperatives or TOPSU Cooperatives." The cooperatives have a broad legislative base (see "Proposed Law for Soil and Water Resources Development Cooperatives) with the objective of sharing project costs by the farmers who will receive the benefits. The plan calls for farmer initiative and action. The law sets up the requirements for the cooperatives, and through government agencies, workshops and extension activities, farmers are made aware of the program. It is particularly relevant to Pakistan for three reasons: 1) both are Islamic nations, 2) Pakistan has a well established cooperative system for other purposes, including the Shadab Projects, thus the farmers are accustomed to the concept, and 3) both nations have a large rural and uneducated population existing under arid and semi-arid agricultural growth conditions.

History and culture play such an important role in the development direction of a nation, and, to say the least, Spain's agricultural sector centuries ago to the present has been influenced by Islamic principles adapted and modified to meet geo-climatic and socio-economic conditions. The Moorish invasion into the Iberian Penninsula in the eighth century brought with it Moslem law, tradition, irrigation practices and exotic plant varieties. A highly sophisticated and efficient irrigation system developed around many of these principles. Once before, in the mid-1800's, the British sent missions to examine the water delivery and use practices of Spain and other European and North African countries as a prelude to their assistance in canal design and construction in the Indus.

A reexamination of the irrigation system of Valencia, Spain, provides an excellent case study for Pakistan. Three particularly relevant features on the Valencia system are noted, primarily for the influence of the Moors upon their origin. They are: 1) The Comunidades de Regantes (Community of Irrigators); 2) The Tribunal de las Aguas (Tribunal of Waters); and 3) Water use efficiency achieved through the combination and integration of delivery and application practices and management. These three aspects are discussed later in detail.

Argentina offers a useful variation to the operation of water users' associations that have their roots in the Spanish system. The main difference between the irrigation communities of the two countries occurs in the voting process. In Valencia, Spain, the landowners have a voting privilege directly related to the landholding. In Mendoza Province, Argentina, each landowner has a minimum vote while the number of votes per area regresses to prevent domination by large landowners.

These organizations and/or laws of each of the five nations are discussed in detail in the following pages. In several cases, excellent descriptions have been prepared by others, and rather than paraphrase their fine works, extracts have been made and credit noted.

B. Local Water Organizations of the United States

The history of irrigation and irrigation institutions in the United States covers a relatively short period of time when compared to the systems of Asia and the sub-continent, Middle East and even southern Europe. But the impact of a mixed society, abundance of natural resources and liberal ability of expression led to the development of highly structured and diversified irrigation systems throughout the country. The infusion of practices brought by farmers of another country, coupled with collective settlement in various locations throughout the States, contributed to the creation of distinct patterns of institutions and use practices.[1]

As time passed, many of the distinctive features were amalgamated into general systems according to hydrologic interrelationship, geo-climatic conditions or political boundaries. For this reason, the irrigation organizations of the United States, primarily the arid and semi-arid western states, developed consistent with water policies and legislation prescribing the substantive system of water ownership, use and allocation. The basic premise of the law adopted by most of the arid western states is that water is public or state property and will be allocated by the state to users in the form of real property rights upon the application for a water right of specific source and point of diversion, stated quantity and location and type of use. The applications would be granted a priority date according to their date of filing or date of application of water to beneficial use. Thus, when the supply is not sufficient to meet the needs of all users, exercise of the right to divert would be curtailed in inverse order. Individuals as well as water organizations could apply for a water right. A company acquiring water rights, assured its membership of their individual shares of water if available. If the water right was not used, or misused, it could be lost. In some states the water rights were appurtenant to the lands irrigated.

Thus, the early western water rights acquired considerable value as development and diversions took place. The philosophy of the prior appropriation doctrine was constantly encouraged into use in the late 1800's to 1950's with federal policies and programs designed to settle the West and reclaim lands to agriculture.

In order to fully capitalize on the constitutional and legislative pronouncements related to water and land and, for many farmers, to bring crop production above subsistence levels, it was recognized that cooperation and association were imperative. State and federal government could help but the primary initiative rested with the water users.

Consequently, a spectrum of organizational arrangements in irrigated agriculture emerged. The categories are consistent with the classification referred to in Part A: 1) private organizations--commercial and voluntary

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[1]See Kinney, C. S., A Treatise on Law of Irrigation, Bender-Mass Co., San Francisco, 1912, Vol. 1, Part II for excellent history of irrigation.

irrigation companies and voluntary associations; 2) quasi-private organizations--water users associations and cooperatives; and 3) public organizations--irrigation and other special districts. All three categories are discussed below. The geographic importance of these organizations is expressed in Figure 1. The 17 western states have placed great reliance upon organized water user cooperation.

Private organizations are basically three types: 1) commercial companies, 2) incorporated mutual companies and 3) unincorporated mutuals (includes voluntary associations). Of the total 7,940 irrigation organizations in the United States (of which 7,927 are in the 17 western states, commercial companies make up 2.7 percent, incorporated mutuals number 32.6 percent and unincorporated mutuals total 53.7 percent. The remaining 11 percent of organizations consist of irrigation districts (9.1 percent) and U.S. Bureau of Reclamation, U.S. Bureau of Indian Affairs and state and local government projects.[2]

It is interesting to note that although the unincorporated mutuals consist of over 53 percent of the total organizations and the more sophisticated incorporated mutual only 32.6 percent, the former organizations only serve 11 percent of the total irrigated acreage (20,594,962 acres) while the latter serves a little over 34 percent and irrigation districts serve 47 percent of the acreage.

1. Private Organizations

Commercial Irrigation Companies

The so-called commercial irrigation company was a phenomenon of the western United States in the 1870s and 1880s. These companies were formed with private capital, usually capital raised by selling bonds to persons far away or even in other countries[3] for the purpose of: 1) construction or development of facilities; 2) forming private contracting companies for the sale of water; or 3) providing public utilities.

These companies were speculative ventures, the hope being that the promised availability of water would bring to the sparsely settled West people who would use the water in enough volume to produce income for repayment.[4] However, because farms take time to become profitable, the investments generally did not prosper and new forms of organizations were used to open up the land. These other forms did not depend on immediate profits but rather were subsidized by the federal government[5] or were nonprofit associations of farmers who worked together for their own benefit.[6]

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[2]Statistical information is from 1969 Census of Agriculture: Irrigation, Vol. IV., U.S. Dept. of Commerce, Washington, D.C. 1973.

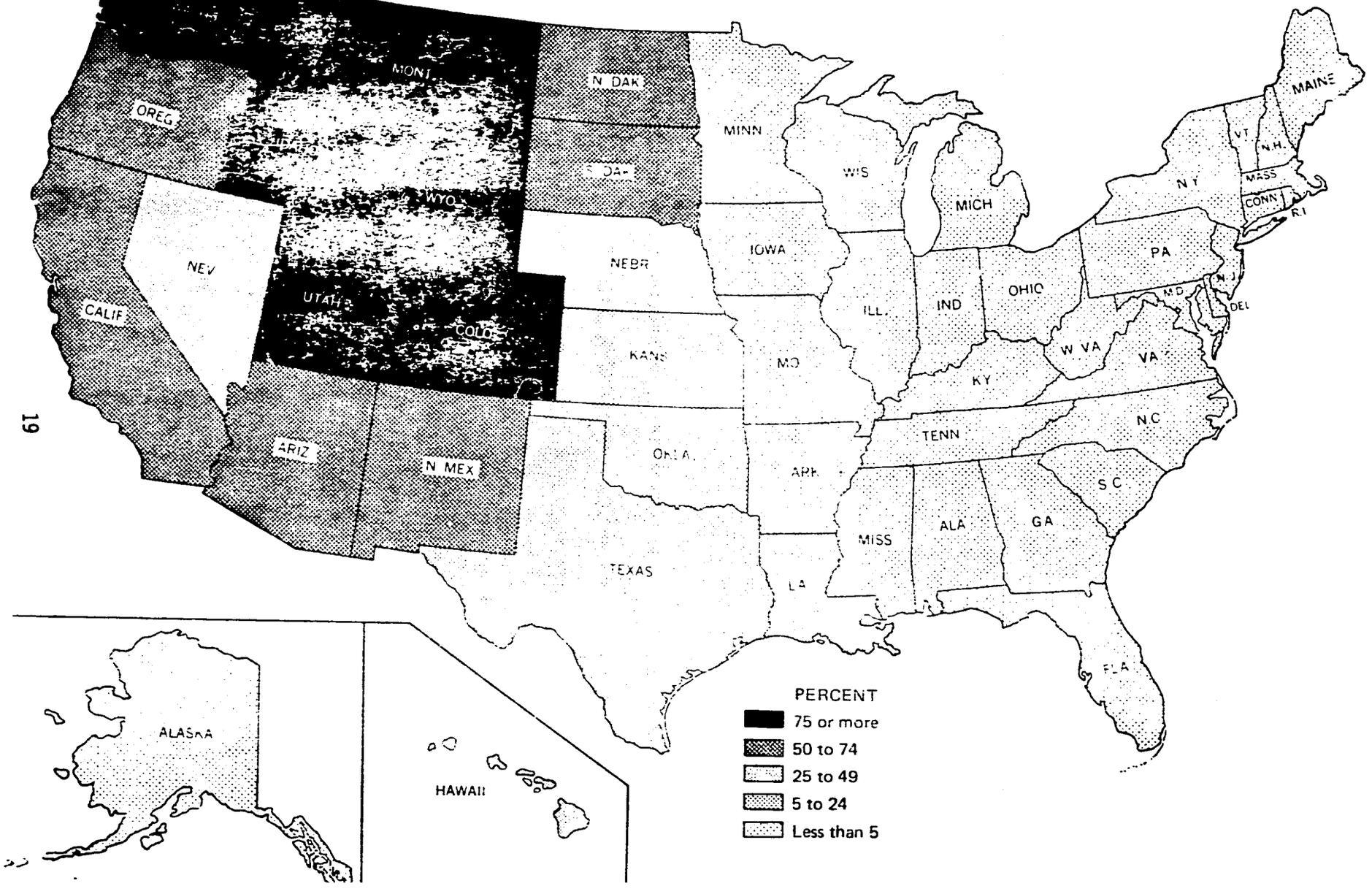
[3]Thomas, The Development of Institutions Under Irrigation, With Special Reference to Early Utah Conditions, 208 (1920), cited in Clark, Waters and Water Rights, Vol. I, 143-145 (1969).

[4]Id.

[5]See the sub-section in this section on subsidized programs under the Reclamation Act of 1902 for examples of this.

[6]See the sub-section in this section on voluntary associations and mutual irrigation companies.

FIGURE 1. Acres Irrigated on Farms Served by Irrigation Organizations as a Percent of Total Acres Irrigated on All Farms: 1969



Mutual Irrigation Companies

A mutual irrigation company may be defined as a private association[7] which is organized for the express purpose of furnishing water to the shareholders or members thereof at cost.[8] This company is not for hire to irrigate stockholders' lands and normally the corporation works may not be used to conserve, treat, or reclaim waters.[9]

Mutual irrigation companies developed independently in many western jurisdictions. They came into being naturally as diversions of water by individual farmers became increasingly difficult both physically and financially. The neighborhood cooperation seemed the only way to provide water so that everyone might propsper.

These companies usually control only their main canals with the lateral ditches frequently being incorporated under separate entities. Most companies incorporated formally, although a few continued to exist as informal arrangements. The mechanics of organization are the same as those for any private corporation[10] except that, if the stock is to be made appurtenant,[11] the articles of incorporation must so provide. Additionally, the stock certificate must describe the lands to which the shares are appurtenant, as well as any other special provisions such as the source of water or point of diversion which may be required.[12] See Appendix 1 for illustrative statutes and organization documents of private companies.

Mutual companies possess such powers as are conferred on them by statute and may engage only in such enterprises as are set forth in certificates of incorporation.[13] All other powers beyond those given are, by implication, excluded.[14]

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[7]They may or may not be incorporated. See section on Unincorporated Voluntary Associations.

[8]"At cost" means not for profit. See WEST'S ANN. CALIF. PUBLIC UTILITIES CODE § 2705.

[9]WEST'S ANN. PUBLIC UTILITIES CODE § 2725 (Supp. 1972); Combs v. Agricultural Ditch Co., 17 Colo. 146, 28 P.966 (1892).

[10]In some states these are organized under special statutes for nonprofit corporations. See UTAH CODE ANN. § 16.6.18 through 16.6.53 (Supp. 1971); WYO. STATS., § 17.122.1 through 17.122.14 (1957).

[11]In some areas stock is statutorily and judicially prohibited from being appurtenant. UTAH CODE ANN. § 73.1.10 (1953); Hatch v. Adams 7 U.2d 73, 318 P.2d 633 (1957).

[12]COLO. REV. STATS. § 31.14.1 (Supp. 1967); WYO. STATS. 17.188 (1969). See Wiley v. Decker, 11 Wyo. 496, 73 P. 210 (1903).

[13]Corporations are creatures of statutes. See COLO. REV. STATS. § 31.14.1 (Supp. 1967).

[14]Zion's Savings Bank and Trust Co. v. Tropic and East Fork Irrigation Co., 102 U.101, 126 P.2d 1053 (1942).

Generally speaking, a mutual company is distinguished from the normal corporation organized for profit by only two major features:[15]

1. Assets are limited primarily to water rights and canal systems and sometimes to canal systems alone.[16]

2. The corporation is not organized for profit but rather to distribute water to shareholders.[17]

In some jurisdictions public utilizites are covered by statute.[18] Where statutes are lacking, a company--which holds itself out generally to serve for compensation[19] those who may apply for water[20] within the area served by its irrigation system--is not a mere private corporation but is affected with a public interest and is subject to regulation and control as a public or quasi-public corporation.[21] Many commercial companies acquired public utility status as a result of servicing municipal needs.

A company may retain its private status if it is organized for the purposes of delivering water at cost to its stockholders and members or to those with whom it has fixed contractual obligations.[22] A water company which has become a public agency may not discontinue its service in whole or in part so as to regain its private status.[23] However, a private corporation may, with consent of the owners of the rights to receive water for private use, change the use to a public use so as to make the service and terms of delivery subject to regulation and control by public authorities.[24]

Factors to be taken into account in determining the public or private nature of a corporation include the following:[25]

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[15] Russell, Mutual Water Companies in California, 12 SOUTHERN CALIFORNIA LAW REVIEW 157-158 (1939).

[16] There are the usual small assets, such as office equipment, but this description is of the assets comprising the corporation primarily.

[17] Profits are reflected in extra water on a pro rata basis for shareholders.

[18] WEST'S ANN. PUBLIC UTILITIES CODE § 2701 (1956).

[19] Not necessarily for profit.

[20] Even supplying surplus water, left over after all shareholders had been taken care of, has been sufficient to create a public interest. Yucupa Water Co. No. 1 v. Public Utilities Commission, 9 Cal. 239, 357 P.2d 295 (1960).

[21] WEST'S ANN. PUBLIC UTILITIES CODE § 2701 (1956).

[22] Id. § 2705 (Supp. 1972); J. M. Howell v. Corning Irrigation Co., 177 Cal. 513, 171 P.100 (1918); Allen v. Railroad Commission, 179 Cal. 68, 175 P.455, cert. den. 249 U.S. 601, 63 L.Ed. 797 (1918).

[23] Leavitt v. Lassen Irrigation Co., 157 Cal. 82, 106 P.404 (1909).

[24] Francioni v. Soledad Land and Water Co., 170 Cal. 221, 149 P. 161 (1915).

[25] Williamson v. Railroad Commission, 193 Cal. 22, 222 P.803 (1924).

1. What are the provisions of the articles of incorporation and bylaws and are they broad enough to permit public sale of water?[26]

2. To whom has water been sold, aside from shareholders, and in what quantities?

3. What has been the intent of the shareholders in selling to persons other than themselves?[27]

4. What amount of water has the corporation agreed to supply to its members and others?

5. What degree of acquiescence to public sale is evidenced by shareholders?

6. Has the corporation directly or indirectly used condemnation?[28]

7. Are there close financial director or other corporate relations with admitted public utilities?

8. Has there been a dedication to a public use by positive action of all or any part of the whole water rights?

Voluntary Associations

A third type of local water user organization is the voluntary association. These arrangements may be described as associations of persons, usually along the same water supply source, who organize for the purpose of better protecting their rights and the division of waters in the stream between respective owners. Such associations construct the necessary works for the diversion of water and transport it only to the lands of members of the association; such water is not for hire.[29] The principal difference between voluntary associations and mutual irrigation companies is that the

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[26]Merely providing in the bylaws or articles that a corporation will or will not be affected with a public interest will not of itself be decisive. Allen v. Railroad Commission, 179 Cal. 68, 175 P.466, cert. den. 249 U.S. 601, 63 L. Ed. 797 (1918).

[27]There are some situations which allow a mutual company to sell to outsiders. Among these are delivering to others in a bona fide water emergency for the duration of the emergency. Companies have also been allowed to deliver to lessees of their stock and to outside land leased by one of the company's stockholders. WEST'S ANN. PUBLIC UTILITIES CODE § 2705 (1972 Supp.).

[28]Using condemnation is in the nature of eminent domain and is affected with a public interest. Though the cases are not entirely in harmony [Nash v. Clark, 27 U. 158, 75 P.371, affirmed, 198 U.S. 361, 49 L.Ed. 1085 (1904)], there is a serious danger that such a use will result in public status and regulation, as seen in Lamb v. California Water and Telephone Co., 21 C.2d 33, 129 P.2d 371 (1942).

[29]"Not for hire" is used here to mean not for profit and limiting delivery to members only, except in very unusual circumstances.

latter are organized as a company or incorporated under law but the former are not.[30] This type of organization is suited to communities where irrigation problems are fairly simple or where culture and custom has played a large role in the irrigation community.

Voluntary water users associations are often organized with a considerable degree of local formality. Officers are elected and bylaws, rules, and regulations are adopted for governing the respective rights of the members and the general affairs of the association.[31] Although verbal agreements may be made between members, it is easy for misunderstandings to arise so it appears best to have a written agreement (which may be called the articles of agreement) signed by each member.[32] Though much formality may attend the organization, title to the water rights remains with the individual members and not in the association,[33] which is another distinction from the mutual irrigation company where water rights are usually held by the company or assigned to the company by the right owners.

By associating in this manner, water users became tenants in common[34] of all the waters owned or controlled by all the members of the association and also of diverting works, ditches, and canals for those waters. Each landowner of such an association is entitled to his distributive share of the water, according to his rights. Legal title to the water rights is not in the association--as is the case where there is a corporation--but rather in the individual members according to their respective shares.[35] Certificates may be issued by the association to these members evidencing the share of water to which each member is entitled.[36] But, whether the individual member's shares are represented by such a certificate or not, he has the right to sell or assign his interest--or any portion thereof--with or

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[30]Another difference is that legal title does not vest in the association as with mutual companies. See #23, supra.

[31]Suggestions as to what items might be covered in such articles may be found in UTAH CODE ANN. § 3.1.5 (1953). Also found are provisions for amending these articles and for establishing bylaws, as well as for delineating the powers of such an association. See UTAH CODE ANN. § 3.1.6 through 3.1.9 (1953). Also see supra for a discussion of organization. See Appendix 2.

[32]This formal signing of a document may well act as more of a deterrent to wrongdoing than a mere formal agreement.

[33]Note that this is not a corporation which has a life of its own but merely an association of persons who may leave it any time they wish. Since it has no life of its own, it requires no submission of rights to create a separate entity.

[34]A tenant in common is defined as one who presently possesses a joint interest in a thing, which interest is represented by the thing and not a distinct part of it.

[35]Shares would, of course, be based on the amount of water right that an individual brought to the association as his rights bore on the total rights of all members. See Smith v. North Canyon Water Co., 16 U.194, 52 P.283 (1898), Candelaria v. Vallejos, 13 N.M. 140, 81 P.589 (1905).

[36]Tangible, physical evidence of a water right may prove helpful in dealing with people not familiar with conceptual rights and mere entries in ledgers.

without the consent of the other members. The purchasor or assignee then succeeds to all the rights of the vendor.[37]

Perhaps the most interesting exogenous influence upon the structure of irrigation organizations in the United States is the community ditch associations (acequias) found in New Mexico, Texas and Arizona. These voluntary type associations can be traced back to Spanish and Moorish origin and diffused throughout the Southwest by the Spaniards in the 17th and 18th centuries.[38] The common denominator to all members of the acequia is their residence in the community or local area and the need to divert and distribute water to contiguous lands. Thus, as was customary in Spain and the Canary Islands, each village or group of farmers would construct its own common ditch.

Acceptance of the acequia became so popular in certain states that specific statutes were adopted.[39] The statutes set out the nature and procedure for elections, management, construction and control of the ditches. The ditches are the common property of those who construct them but other irrigators can use the ditch with the consent of the majority of owners and upon payment of an agreed upon carriage charge. Every owner of the acequia is required to contribute his quota of labor or monetary substitute to maintain and preserve the ditch, whether he uses it or not.[40] Although the acequias are privately owned, they are declared political subdivisions of the state,[41] and can function like a corporation with power to sue and be sued.[42]

Management of the community ditch is carried out by three commissioners and a mayordomo, elected by those members of the acequia who have water rights that are not in jeopardy due to delinquency in payment of ditch assessments. Each member in good standing votes during the annual election the number of shares he holds. To be a member of the association, a person must own land entitled to be irrigated from the acequia. The number of votes, rights and privileges he has varies among associations from direct proportion of land under irrigation to fixed one person one vote, to rights based upon the quantity of water that the owner is entitled to receive.

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[37]This right to sell or assign flows from the nature of a tenancy in common which dictates that each tenant owns his undivided interest in the total individually, not jointly, and so he is free at all times to dispose of it. See Biggs v. Utah Irrigation District Co., 7 Ariz. 331, 64 P.494 (1901).

[38]For an excellent account of the history, organization and operation of the acequias see Thomas F. Glick, The Old World Background of the Irrigation System of San Antonio, Texas, Southwestern Studies Series, Monograph No. 35, Univ. of Texas at El Paso, Texas, 1972, and Phil Lovato, Las Acequias del Norte, Technical Report No. 1, Four Corners Regional Commission, Taos, N.M., 1974.

[39]NEW MEXICO STATS. § 75-14-1 et seq. (1953).

[40]Id., § 75-14-31 through 75-14-37 (1953).

[41]Id., § 75-14-25.1 (1953).

[42]Id., § 75-14-11 (1953); UTAH CODE ANN. § 3.1.9 (1953). See also, Slosser v. Salt River Valley Canal Co., 7 Ariz. 376, 65 P.332 (1901).

The commissioners are responsible for the operation and management of the ditch. They adopt bylaws, rules and regulations and, in general, perform the functions of a board of directors.[43] They assign tasks to be prepared by other members and determine the assessments necessary to pay the association expenses. To carry out their duties, the commissioners designate from among themselves, a chairman, secretary and treasurer. In this manner, the commissioners perform the functional tasks. Collectively they decide operational issues.

The mayordomo is the person hired to carry out the water allocation and and distribution tasks of the acequia, levies and collects fines and assessments, prepares reports and in general performs the activities of the association. The mayordomo is elected by the members and must be a landowner with right to water.

The most important function of the acequia is the distribution of water to the members. This is done by the mayordomo or ditch rider according to the number of shares held. Glick observed an interesting pattern in San Antonio, Texas, that is similar to the warabundi of Pakistan and the delivery of water to the community of irrigators in Valencia, Spain, and other Moorish influenced irrigation systems of the Al-Andulus.[44] This is the "dula" or turn among the irrigators and share to the municipality.

Generally the majority of members has the right to control matters of the organization with the caveat that a person joining such a voluntary association does not vest in the majority the power to injure the rights of such person[45]. It can be seen that, from the nature of water, there may be times when it may be indispensable to the success of the operation, when all cannot agree, that the majority have the right to control policy to avoid working at a disadvantage. When this policy which the majority adopts does not materially injure the vested rights of the minority, a majority of tenants in common have the right to control the affairs of the ditch. Neither law nor equity will aid a stubborn minority in preventing the majority from doing an act for the manifest good of the whole community, wherein no one is injured and all benefit. Also, an association, though composed of a majority of water users from a certain source, has no

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[43]Lovato, Phil, Las Acequias del Norte, infra footnote 37., P.25+.

[44]Glick, T. The Old World Background... infra footnote 37, P.40+.

[45]Candelaria v. Vallejos, 13 N.M. 140, 81 P.589 (1905); Bartholemew v. Fayette Irrigation Co., 31 U. 1, 86 P.481 (1906). See also, KINNEY ON IRRIGATION AND WATER RIGHTS, 2nd Ed. § 1462 (1912) for a discussion of this point. The test seems to be whether vested rights will be injured by the majority. If they will be and if the change requested cannot be effected without hurting a minority, the rule seems to be as stated--that the majority cannot run roughshod over the minority. But, where no injury would result, a minority may not stand in the way. Too, where maintenance of the ditch becomes impossible--therefore the good of the community is at stake--without a change which will adversely affect a minority, the good of the community at large will prevail and the minority's objections will be to no avail.

right to interfere with or regulate the use of the water of the minority owners who do not join the association. It has been held that co-tenants are entitled to use all the water appropriated to them. Therefore, a wrongful diversion injures all co-tenants. It follows that all co-tenants have preventative powers to stop acts of a trespasser without joining the rest of the co-tenants in the action, they may act alone.[46]

Each tenant in common is individually bound to keep the ditch or other works in repair and those making such repairs may compel a contribution upon the part of those who failed to bear their share of the expense or labor.[47] Too, because assessments are the chief means of raising revenue for these associations and corporations, the companies may compel the members to pay their share of assessments[48] and may stop water delivery to insure compliance.[49]

Common Features of Local Irrigation Companies

Control of the Organization by Member: The stockholders, or members of the mutual companies--including voluntary associations, have the final control of its policies through the vote. See Figure 2. Their functions are few but vitally important. They elect the directors[50] and may remove them from office.[51] They may make, amend, or repeal bylaws[52] or

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[46]Cache la Poudre Irrigation Co. v. Weld Reservoir Co., 25 Colo. 144, 53 P.318 (1898). Loss of water by seepage or evaporation, after diversion from the stream or ditch, is not an injury to or a loss of a water right as between ditch co-tenants; Brighton Ditch Co. v. City of Englewood, 124 Colo. 366, 237, P.2d 116 (1951).

[47]The duty to maintain the ditches and works may be statutorily imposed; COLO. REV. STATS. § 31.14.8 (1963). See also, Arnett v. Linhart, 21 Colo. 188, 40 P.355 (1895); Smith v. North Canyon Water Co., 16 U. 194, 52 P.283(1898); Compton v. Knuth, 117 Colo. 523, 190 P.2d 117 (1948); and First National Bank of Denver v. Groussman, 28 Colo. App. 215, 483 P.2d 390 (1971).

[48]COLO. REV. STATS. § 31.14.4(1) (1963); NEW MEXICO STATS. § 75.14.23 35, seq. (1953).

[49]COLO. REV. STATS., Id., WYO. STATS. § 36.106 and § 41.221 (1957) for stockholders using water on land under the line of the same ditch.

[50]COLO. REV. STATS. § 30.3.12 (1963); UTAH CODE ANN. § 3.1.13 (1971); NEW MEXICO STATS. § 75.15.3 (1953). For convenience, the first directors may simply be appointed with elections being held thereafter. It is usually provided that directors and executive officers be chosen from the members or stockholders. See UTAH CODE ANN. § 3.1.3 (1953); COLO. REV. STATS. § 30.3.12 and § 30.3.13 (1963). From this, it is obvious that the job is usually not full-time so the member can also pursue his agricultural activities. Salary, therefore, is not great and a per diem basis may be best, i.e., $10 per meeting plus travel expenses. This may be varied depending on the amount of time an individual is required to devote to company business.

[51]COLO. REV. STATS. § 30.3.16 (1963): UTAH CODE ANN. § 3.1.16 (1953). The whims of the members are controlled by requiring at least ten percent of the members to join in the petition to request an election for removal of a director. In addition, officers appointed by directors may also be removed by this method. See UTAH CODE ANN. § 3.1.16 (1953) and WYO. STATS. § 17.175 (1957).

[52]COLO. REV. STATS. § 30.3.10 (1963); UTAH CODE ANN. § 3.1.8 (1953); WYO. STATS. § 17.159 (1957); WEST'S ANNOTATED CORPORATION CODE § 12900 (1955).

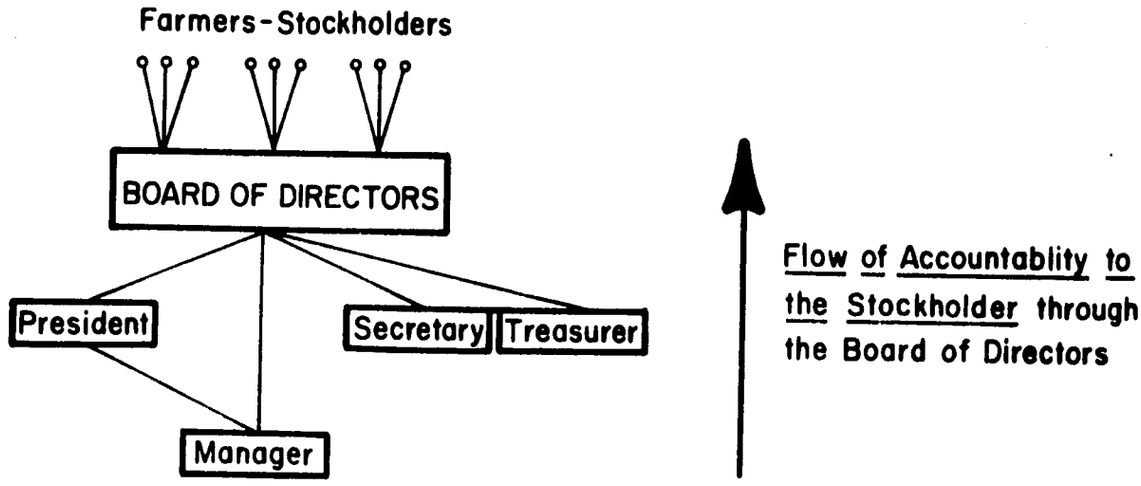

Figure 1. Voting control of Mutual Company emanating from stockholders.

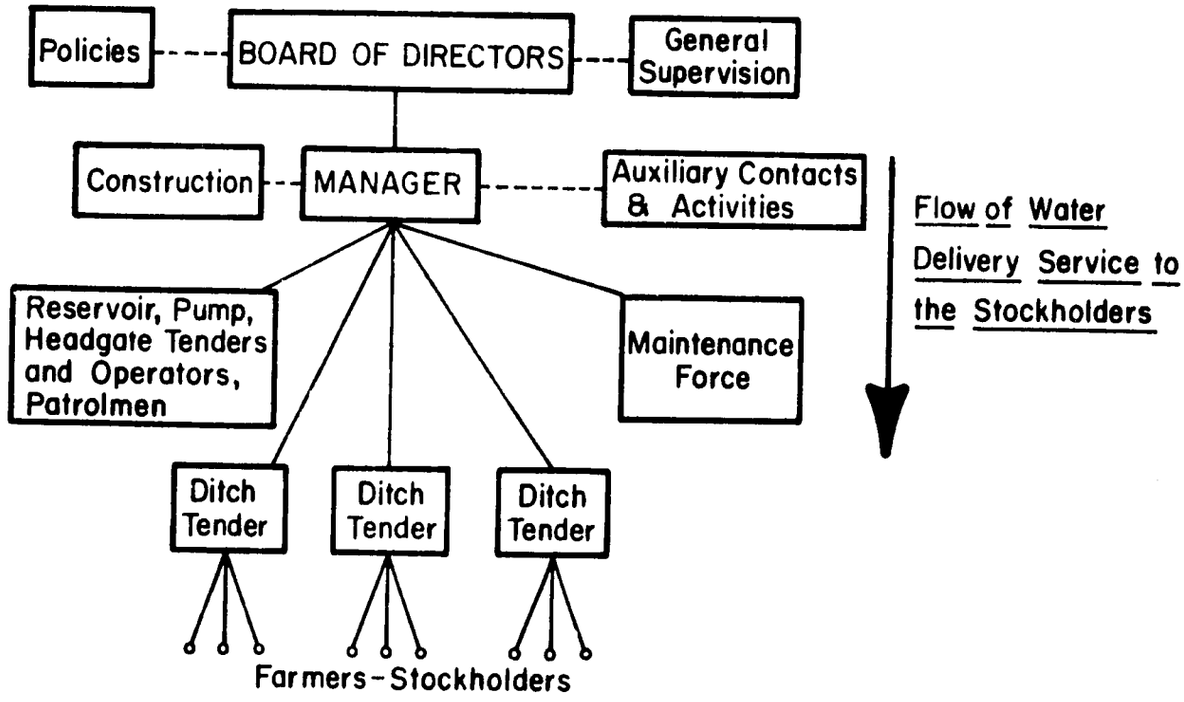

Figure 2. Control of water service to stockholders of Mutual Company emanating from Board of Directors.

may leave this power to the board of directors. All amendments to the articles of incorporation require the stockholders' prior approval.[53] Such fundamental steps as consolidation with other corporations or unincorporated associations[54] or voluntary dissolution of the corporation or association may be taken only with their consent.[55]

Stockholders' Meetings: The stockholders of such corporations and associations usually meet at least once a year.[56] Each stockholder has the right to vote at any election.[57] The voting is done on either a one vote per share basis[58] or a one vote per member basis.[59] If different

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[53]COLO. REV. STATS. § 30.3.9 (1963); UTAH CODE ANN. § 3.1.7 (1953); WYO STATS. § 17.169 (1957).

[54]UTAH CODE ANN. § 3.1.32 (1953). However, members may lose their votes if they do not respond to a public notice for impending election within the prescribed time, if their stock is not fully paid, or if they are delinquent in payment of their assessments. See UTAH CODE ANN., Id.; NEW MEXICO STATS. § 75.15.3 (1953); and WEST'S ANNOTED CORPORATION CODE § 12801 (1956).

[55]UTAH CODE ANN. § 3.1.20 (1953).

[56]COLO. REV. STATS. § 30.3.11 (1963) provides for one annual meeting or more meetings per year if desired; UTAH CODE ANN. § 3.1.12 (1953); WYO. STATS. § 17.174 (1957). Notice of meetings must be sent to members in order to give them adequate time to adjust their schedules and prepare to attend. See UTAH CODE ANN., Id. (10 day requirement) and WYO. STATS., Id. (20 day requirement).

[57]WEST'S ANNOTATED CORPORATION CODE § 12702. But note that this section provides that any member who has voting rights may vote. Members may lose their rights by not paying for their stock certificates or by being delinquent in payment of their assessments. Too, stock may be issued with no voting rights.

[58]NEW MEXICO STATS. § 75.15.3 (1953).

[59]COLO. REV. STATS. § 30.3.15 (1963); UTAH CODE ANN. § 3.1.10(b)(1953); WYO. STATS. § 17.172(s)(1957); WEST'S ANNOTATED CORPORATION CODE § 12702. Digression: As can be seen, this arrangement is more popular than the one allowing voting shares to be determined by the amount of water rights. There are dangers in both positions, of course. Where voting shares are allotted by amount of water rights, it is immediately apparent that the large landholders will probably control things. Where reform is sought and the vast majority of persons affected by the proposed reform are small landholders, as is the case in Pakistan, this drawback would likely impugn the entire effort. On the other hand, the inequities of allowing the small owner to dictate policy to one who has a much larger investment and interest at stake are immediately apparent.

Some middle ground would be best. As a suggestion, it might prove feasible to establish a system of cumulative voting. In this arrangement, voting stock would be distributed on the basis of water rights owned but, in an election, a stockholder might cast as many votes in the aggregate as he holds shares of stock, multiplied by the number of directors or issues upon which he is voting. He may cast the whole number for only one candidate or issue or he may divide them. This makes it possible for minorities to organize and elect a representative or push an issue through, but it would not give them total control. Neither would the major owners have absolute control.

classes of stocks are issued, the voting privileges of these classes may be varied,[60] although there is nothing compelling an arrangement of this sort.[61]

Management by Board of Directors: Sole responsibility for managing the affairs of such associations or companies is given to a board of directors.[62] This board has the power to formulate policies, make contracts, levy assessments, incur obligations, approve expenditures, and make rules and regulations for operation of the irrigation system and delivery of water to users.[63] The flow of responsibility of board to company is shown in Figure 3. To avoid dissension it is usually best to limit the number of members on the board of directors to as few as possible.[64] The terms of office for directors and officers may be statutorily prescribed[65] or may be determined by the articles of incorporation or bylaws.[66]

Executive Officers: The president is usually selected from the board of directors,[67] but, in cases where a vacancy occurs, the position may be filled by the members or stockholders in a special election.[68] Other officers might include a vice-president, secretary, and treasurer, or these offices may be occupied by the same person.[69] The president's function is generally to supervise affairs, approve vouchers, and sign papers. A manager may be required to supervise operation, maintenance, construction, land, farming, and contacts with other organizations. It is advantageous if he has engineering experience. Obviously, in small companies,

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[60]UTAH CODE ANN. § 3.1.11 (E) (1953); WYO. STATS. § 17.172(7) (1957).

[61]COLO. REV. STATS. § 30.3.15(7) (1963); WEST'S ANNOTATED CORPORATION CODE § 12404 (1956). Assessments may vary according to the class of stock held. It has been held that no problem arises, so long as assessments are made on a pro rata basis which assumes an equal burden per share among each class of stockholder. See Robinson v. Booth-Orchard Grove Ditch Co., 94 Colo. 515, 31 P.2d 487 (1934).

[62]COLO. REV. STATS. § 30.1.4 (1963); UTAH CODE ANN. § 3.1.13 (1953); WYO. STATS. § 17.173 (1957).

[63]COLO. REV. STATS. § 30.3.3 and § 30.3.6 (1963); UTAH CODE ANN. § 3.1.9 (1953); WYO. STATS. § 17.171 (1957).

[64]Three is obviously the smallest number possible as provided for in UTAH CODE ANN. § 3.1.13 (1953). Five, however, are not uncommon; COLO. REV. STATS. § 30.3.12 (1963). Larger boards may be allowed and designed to represent geographical districts or special interests. See COLO. REV. STATS. § 30.3.12 (1963) and WYO. STATS. § 17.173 (1957). Allowance for district delineation may be provided for in the bylaws.

[65]UTAH CODE ANN. § 3.1.13 and § 3.1.15 (1953); WYO. STATS. § 17.173 (1957).

[66]COLO. REV. STATS. § 30.3.10 (1963).

[67]COLO. REV. STATS. § 30.3.12 (1963); UTAH CODE ANN. § 3.1.13 (1953); WYO. STATS. § 17.173 (1957).

[68]COLO. REV. STATS. § 30.3.12(4) (1963); UTAH CODE ANN. § 3.1.13(111) (b) (1953).

[69]COLO. REV. STATS. § 30.3.13 (1963); UTAH CODE ANN. § 3.1.15 (1953).

the offices of president and manager might easily be combined.[70] Clerical functions, such as recording and disbursing to members the minutes of stockholders' meetings, can be taken care of by the secretary who does not need to be a director or member.[71]

Removal of Officers and Directors: The control emanating from the stockholders would be little more than an illusion if the only direct control available to them was through the ballot box at the annual elections. To allow greater control, sections for removal of undesirable[72] directors and officers are provided.[73]

Rights and Duties: The relationship between private organizations, whether organized as mutual or commercial corporations, and their shareholders is that of contract. The rights and duties of both parties grow out of the contract implied in a subscription for stock and construed by the provisions of their charters or articles of incorporation.[74] From this contract springs a trust relationship between the company and its stockholders, with the corporation being charged to conduct the common business in the interests of the stockholders[75] and, as trustee for its stockholders, the corporation

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[70]In small companies the two offices probably would be combined because there would not be enough duties to keep two people busy. Too, in the interests of policy stability, it is best to simplify the managerial structure where possible.

[71]COLO. REV. STATS. § 30.3.13 (1963).

[72]To eliminate the petulant and baseless harassment of officials, it is usually provided that, to remove an officer or director, the action must be based on cause. See WEST'S ANNOTATED CORPORATION CODE § 12600 (1955) and UTAH CODE ANN. § 3.1.16 (1953).

[73]To ensure that an action for removal is based on valid complaints (see above), it is generally required that charges be in writing (COLO. REV. STATS. § 30.3.16 (1963); UTAH CODE ANN., Id.; and WYO. STATS. § 17.175 (1957)) and that a petition for removal must be signed by a percentage of members, usually five (COLO. REV. STATS., Id.) or ten percent (UTAH CODE ANN., Id.; WYO. STATS., Id.). In cases where directors come from districts, a larger percentage of members of that district is required. Upon filing a valid petition with the secretary of the association, the director against whom the charges are filed is notified of the charges to allow time to prepare a rebuttal or defense. At the next regular meeting of the association, a general election is held (presumably after the merits of each side are considered) to put the matter to a vote. A majority of votes cast (not of total membership) determines the outcome. See COLO. REV. STATS., Id.; UTAH CODE ANN., Id.; and WYO. STATS., Id.

[74]Supply Ditch Co. v. Elliott, 10 Colo. 327, 15 P.691 (1887).

[75]Rocky Ford Canal Co. v. Simpson, 5 Colo. App. 30, 36 P.638 (1894); Miller v. Imperial Co. No. 8, 159 Cal. 27, 103 P. 227 (1909).

is bound to protect their interests.[76] If follows that a duty is incumbent upon the corporation to prosecute actions in the matters of protecting water rights or other company property, as representing its stockholders, without joining them in the action.[77] The officers, managers, and boards of directors also hold trust relationships with both the corporation and its stockholders. This means that the validity of a contract entered into by a board of directors may be challenged by the stockholders.[78] Also, officers are bound to avoid dealings where there is a conflict of interest between them and their stockholders, although they may have dealings in company matters where there is no conflict.[79]

In the formation of mutual corporations, it is common, though not universally the case, for owners of the original water rights to deed to the corporation their water rights and rights in the works and then to take shares of stock for the same in exact proportion as the value of the individual rights granted bears to the whole value of the property granted by all. Where this is done, the legal title is transferred to the company but equitable title remains in the original owner.[80] In other words, the

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[76]Supply Ditch Co. v. Elliott (see #73); Farmers' Independent Ditch Co. v. Agricultural Ditch Co., 22 Colo. 513, 45 P.444 (1896). The trust spoken of is a revocable trust during the lifetime of the grantor. He may sell his shares at any time unless a lien is attached as a result of nonpayment of an assessment. Title does not vest. East River Bottom Water Co. v. Boyce, 102 U.149, 128 P. 2d 277 (1942).

[77]Supply Ditch Co. v. Elliott (see #73); Farmers' Independent Ditch Co. v. Agricultural Ditch Co. (see #75); Montrose Canal Co. v. Lautsenhizer Ditch Co., 23 Colo. 233, 48 P.532 (1896).

[78]Goodell v. Verdugo Canon Water Co., 138 Cal. 308, 71 P.354 (1903); Butterfield v. O'Neill, 19 Colo. App. 7, 72 P.807 (1903). Officers may also be ordered to do something on a writ of mandamus issued pursuant to a complaint by a stockholder. Along the same lines, quo warrants may be issued to force an officer to explain his action.

[79]Farm Investment Co. v. Alta Land and Water Co., 28 Colo. 408, 65 P.22 (1901).

[80]The trust is revocable and the corporation does not have the right, generally, to sell a shareholder's stock. East River Bottom Water Co. v. Bouce, 102 U.149, 128 P.2d 277 (1942). To sell the stock would be a violation of the trust duty to act in the interests of the stockholders. However, in the absence of implied restrictions, a power to sell stock has been implied from the power of the corporation to acquire and own water rights. Old Mill Ditch and Irrigation Co. v. Estell, 65 Or. 586, 133 P.90 (1913). This is a danger avoided by using care in drafting the charter or articles of incorporation. See also, Consolidated Peoples' Ditch Co. v. Foothill Ditch Co., 205 Cal. 54, 269 P. 915 (1928); and Billings Ditch Co. v. Industrial Commission, 129 Colo. 69, 253 P.2d 1058 (1953). However, some courts still have difficulty ignoring the corporate firm. See Denver Joint Stock Land Bank v. Markham, 106 Colo. 509, 107 P.2d 313 (1940); Big Goose and Beaver Ditch Co. v. Wallop, 382 P.2d 388 (Wyo. 1963).

company holds the legal title in trust for its respective shareholders. The terms of this trust are governed by the articles of incorporation or bylaws of the same.[81]

Stock in Mutual Company: The shares of stock which are received for legal title to an individual's water rights represent those water rights. These shares are said to be muniments of title to an interest in the property of the association and evidence the proportional amount and extent of the appropriation of water which each holder possesses.[82]

There is some split of opinion as to whether stock is personal property or real property. The more persuasive authority holds that--where the title to water rights, the ditch, canal, and other works is in a mutual corporation which issues shares of stock representing both the water rights and the works of the company--such stock is considered personal property and a sale of such operates as a sale of both water rights and the interest in the works.[83] However, minority maintains that stock represents water rights and is real property.[84] The general rule is that for the sale and transfer of water rights, except those represented by stock shares, all the formalities of a transfer of real property must be observed.[85] In any case, it is important to remember that the right to the use of the water follows the shares of stock.[86]

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[81]Rocky Ford Canal Co. v. Simpson, 5 Colo. App. 30, 36 P.638 (1894); Fuller v. Azusa Irrigating Co., 138 Cal. 204, 71 P. 98 (1902); Genola Town v. Santaquin, 96 U.88, 80 P. 2d 930 (1938); Locke v. Yorba Irrigation Co., 35 Cal. 2d 205, 217 P.2d 425 (1950).

[82]Biggs v. Utah Irrigation Ditch Co., 7 Ariz. 331, 64 P.494 (1901). Thus, stock represents ownership of the corporate assets. It follows that this stock represents part of the irrigation system that delivers the water. But--in mutual companies, as opposed to commercial companies--this stock also represents the right to the service of water from the company's system.

[83]Cache la Poudre Irrigation Co. v. Larimer and Weld Reservoir Co., 25 Colo. 144, 53 P.318 (1898); "Stock not appurtenant is personal property." Denver Joint Stock Land Bank v. Markham, 106 Colo. 509, 107 P.2d 313 (1940). Similarly, where stock is not appurtenant, a deed or mortgage to the land carries with it no right in a ditch company supply water thereto. Oligarchy Ditch Co. v. Farm Investment Co., 40 Colo. 291, 88 P.443 (1906).

[84]Stone v. Imperial Water Co. No. 1, 173 Cal. 39, 159 P.164 (1906); Woodstone Marble and Tile Co. v. Dunsmore Canyon Water Co., 47 Cal. App. 72, 190 P.213 (1923); Wheat v. Thomas, 209 Cal. 306, 287 P.102 (1930). See also, Bank of Visalia v. Smith, 146 Cal. 398, 81 P. 542 (1905); Kennard v. Binney, 62 Cal. App. 732, 217 P.808 (1923).

[85]COLO. REV. STATS. § 188.1.2 (1963); WYO. STATS. § 41.254 (1957); Stesel v. Santa Ana River Water Co., 35 Cal.2d 117, 94 P.2d 1052 (1939).

[86]Cache la Poudre Irrigation Co. v. Larimer and Weld Reservoir Co., 25 Colo. 144, 53 P.318 (1898).

From the contractual relationship established by the transfer of legal title to water rights to the corporation, a duty evolves to deliver to each shareholder that amount of water to which he is entitled by virtue of his stock.[87] The shareholder does not need to depend on an implied contract for his water right as this right is an adjunct of his membership in the corporation: membership means water.[88] The corporation is under a duty to use reasonable care and diligence in making ratable distribution.[89] It is also the duty of the corporation to keep ditches, canals, and other works in repair. This duty is imposed so that the property may be utilized, as far as present needs are concerned, and preserved.[90]

Where a corporation fails to furnish the proper proportion of water to one of its shareholders, it is liable for the damages resulting from such failure.[91]

Suggested Plans for Stock Issue: Generally, there are two types of plans for issuance of stock. These are where stock represents land and is appurtenant or where stock represents a part of the total water supply. Generally, where stock represents acres of land and where the stock is appurtenant to the land, there are at least two options available:

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[87]COLO. REV. STATS. § 31.13.7 (1963); Rocky Ford Canal Co. v. Sampson, 5 Colo. App. 30, 36 P.638 (1894); Wheeler v. Northern Colorado Irrigation Co., 10 Colo. 582, 17 P. 487 (1888); Miller v. Imperial Water Co., 156 Cal. 27, 103 P.227 (1909); Lindsay-Strathmore Irrigation District v. Wutchumna Water Co., 111 Cal. App. 688, 296 P.933 (1931); and Sherwood Irrigation Co. v. Vandework, 183 Colo. 261, 331 P.2d 810 (1958).

[88]Miller v. Imperial Water Co. (see #86).

[89]Mountain Supply Ditch Co. v. Lindekugel, 24 Colo. App. 100, 131 P.789 (1913).

[90]COLO. REV. STATS. § 31.14.8 (1971); WYO. STATS. § 41.217 (1957); Mountain Supply Ditch Co. v. Lindekugel, 24 Colo. App. 100, 131 P.789 (1913); Engel v. Henry, 59 Cal. P.U.C. 457 (1962).

[91]O'Connor v. North Truckee Ditch Co., 17 Nev. 245, 30 P.882 (1883); Rocky Ford Canal Co. v. Sampson, 5 Colo. App. 30, 36 P.638 (1894). This is qualified, in some instances, and can be provided for in a company's contract. For example, Acts of God, forcible entry, hostile diversion, or temporary damage by flood or accident may excuse a failure to deliver water. However, if a shortage might have been prevented by judicious action on the part of the company, liability for damages suffered as a result of that shortage may results. Pawnee Land and Cattle Co. v. Jenkins, 1 Colo. 425, 29 P.381 (1892).

1. Have a share of stock fix by amount the definite quantity of water which is allowed[92] to each unit in the area of land represented by the stock certificate.[93]

2. Divide the available water in a given period among the shareholders in proportion to the number of acres owned by any individual as they relate to the total acreage of all shareholders in the company or proportionately by shares of stock of the total issued.

Stock may also represent a specific part of the total supply owned by the corporation or subject to its control for purposes of distribution. This plan is advantageous where the company's supply varies and where the stock is not to be appurtenant to any specific land.

Levy and Enforcement of Assessments: One of the main objects of incorporation is to obviate the difficulties arising in enforcing the prorata contributions of the co-owners of the water rights for the maintenance of the works and other necessary expenses. By merging individual rights, each shareholder may be compelled to contribute his proportion of all necessary expenses or forfeit his right to use of the water.[94] The same applied contract which obligates the company to deliver water implies the reciprocal duty on the part of the shareholders to pay their assessments.[95] Of course, in order to render such assessments valid, the purpose for which they are levied must come within the purposes of the incorporation, as set forth in the articles of incorporation or charter, and also must meet the statutory requirements.[96]

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[92]WYO. STATS. § 41.181 (1957) provides a limitation of one cubic foot per second for every seventy acres of land.

[93]Necessarily, these plans can only be used where the land area to be supplied is fixed in advance and where the supply of water is more than adequate to cover the stockholders' demands. Too, existing stockholders must have the right to veto the issuance of new stock if their water supply will be diminished by such issuance. Where a company is a public or quasi-public concern, a public agency will make the determination of sufficiency. See WEST'S ANN. PUBLIC UTILITIES CODE § 2708 (1956); Sunkist Homes, Inc. v. Southern California Water Co., 54 Cal.P.U.C.204 (1955).

[94]COLO. REV. STATS. § 31.14.4 (1965); WYO. STATS. § 36.106 (1957); Fuller v. Azusa Irrigation Co., 138 Cal. 204, 71 P.98 (1902). See also, WYO. STATS. § 41.221 (1969) for stockholders using water on land under the line of the same ditch.

[95]Calahan v. Chilcott Ditch Co., 37 Colo. 331, 86 P.123 (1906); McHale v. Goshen Ditch Co., 49 Wyo. 100, 52 P.2d 678 (1935); Henderson v. Kirby Ditch Co., 373 P.2d 591 (Wyo. 1962). The assessment may sometimes be in labor or money. COLO. REV. STATS. § 31.14.4(1); NEW MEXICO STATS. § 75.14.23-35. seq., in cases of community ditches.

[96]COLO. REV. STATS. § 31.14.4 (1965); WYO. STATS. § 36.106 (1957).

When assessments are made, they become liens on the water stock itself, rather than on the land.[97] However, where stock is appurtenant to land, there is authority that the assessment becomes a lien on the land,[98] superior to the lien of a mortgage on that land.[99] A more direct method of enforcement of payment is to simply refuse delivery of water. Such methods are recognized in New Mexico[100](in the case of community ditch or cooperative associations) and in Wyoming.[101] In New Mexico, a fine may be assessed before the water is denied.[102]

Stockholders may be exempt from assessments if it is so provided by the terms of their agreement made at the time they purchased their stock.[103] Further, it has been held that an assignee of a water right on which a past assessment is due is not personally liable for such past assessments unless expressly assumed.[104]

Power to Make Rules and Regulations: Mutual corporations may adopt such rules and regulations, not in violation of law governing the distribution and use of the water furnished among their shareholders, as are equitable and reasonable. But all rules and regulations have no effect unless authorized by the charter or articles of incorporation or unless assented to by the stockholders whose rights are affected.[105]

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[97]COLO. REV. STATS. § 31.14.14(4); Stevens v. Curtis, 122 C.A. 2nd 30, 264 P.2d 606 (1953).

[98]Green and Griffen Real Estate and Investment Co. v. Salt River Valley Water Users' Association, 25 Ariz. 354, 217 P.945 (1923). It should be noted that appurtenancy is being gradually abrogated in the districts which recognized it, pursuant to a policy of making water available in the most advantageous places rather than "locking" it to one piece of land. See ARIZ. REV. STATS. § 45.172 (1972).

[99]Federal Land Bank v. Bissonette, 51 Idaho 219, 4P.2d 364 (1931).

[100]NEW MEXICO STATS. § 75.14.24 and § 75.14.41 (1953).

[101]WYO. STATS. § 36.106 and § 41.221 (1957).

[102]NEW MEXICO STATS. § 75.14.34 (1953).

[103]Farmers' Pawnee Canal Co. v. Henderson, 46 Colo. 37, 105 P.1063 (1909). However, since assessment is the only way to raise extra revenue for mutual companies, this type of provision will rarely, if ever, appear.

[104]Laramie Rivers Co. v. Watson, 69 Wyo. 333, 241 P.2d 1080 (1952). A more direct method of enforcement of payment is to simply refuse delivery of water. Such methods are recognized in New Mexico; NEW MEXICO STATS. § 75.14.24 and § 75.14.41, in the case of the community ditch or cooperative association; and in Wyoming, WYO. STATS. § 36.106 and § 41.221 (1957). In New Mexico, a fine may be assessed before the water is denied; NEW MEXICO STATS. § 75.14.34 (1953).

[105]Under this category it has been held in early decisions that a company may make a ratable reduction in the amount of water to shareholders in time of drought. Since then, this has been codified in at least one state; WEST'S ANN. PUBLIC UTILITIES CODE § 2711 (1956). Fuller v. Azusa Irrigation Co., 138 Cal. 204, 71 P.98 (1902); Goodell v. Verdugo Cañon Water Co., 138 Cal. 308, 71 P.354 (1903).

Implied Powers: In some cases, in the absence of express restrictions, implied powers are seen to be inherent in the company to enable them to exercise the powers expressly conferred and to accomplish the objects for which they were created. Subject to charter restrictions, companies have been allowed to borrow money to finance an authorized project or to guarantee bonds issued therefore.[106] More importantly, a power to sell water rights may be implied from the power to acquire and own water rights.[107]

Limitations: As has been noted, a corporation may not act to the prejudice of the water rights of any one of its stockholders. Pursuant to this position, it follows that where stock with water rights is sold on the theory that water users buying such rights are to have a reasonably dependable supply of water, the company may not dilute such rights by selling more shares of stock when water actually available is barely sufficient for present holders of water rights.

As an aside, it is to be noted that, where a corporation is formed, it has no rights--even if it comprises a majority of co-owners of a ditch or water supply--to control or regulate the use of owners who did not come into the corporation.[108]

2. Quasi-Private Organization--Water User Associations

Objectives and Formation

Water user associations in the United States are incorporated associations[109] usually organized by actual or potential water users or a federation of existing companies to contract with the government[110] to build or improve irrigation works. These arrangements are made when the government recognizes land potential to be realized by conserving and storing surplus waters from rainy seasons and the more efficient utilization of these waters for irrigation. The advantage of such a system is that it provides a means for many poor landowners with small parcels to pool limited funds, irrigate their lands, and increase their crop yields, thereby increasing their incomes. Indeed, such a plan encourages purchases of arid but fertile land which can often be bought at low prices. After irrigation such land should support itself and increase in value.

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[106]Bethune v. Salt River Valley Water Users' Association, 26 Ariz. 525, 227 P.989 (1924).

[107]Old Mill Ditch and Irrigation Co. v. Estell, 65 Or. 586, 133 P.90 (1913). There is tension between this ruling and the general duty imposed on a company to restrain from acting to the detriment of its stockholders, and, indeed, to act for their benefit under the trust arrangement resulting from the contractual relationship discussed in text for footnotes 29-35.

[108]Bartholomew v. Fayette Irrigation Co., 31 U.1, 86 P.481 (1906).

[109]See, for example, COLO. REV. STATS. § 31.16.3 (1971 Supp.).

[110]It may be the state government or federal government. See 32 U.S. STATUTES AT LARGE 388 § 5 (1902); NEW MEXICO STATS. § 75.17.1 (1953); and WEST'S ANNOTATED CALIFORNIA WATER CODE § 51000 (1966).

Generally, the object of these associations is three-fold:

1. To provide irrigation in an area where individuals do not have funds to finance such a venture independently.

2. To allow the government to deal with one organization representing all water users in an area rather than having to deal with many users on an individual basis.

3. To provide a responsible organization to manage the irrigation contemplated by a reclamation act.

The organization of a water user association must be in such form as is acceptable to a governmental arbiter,[111] although the government takes no active role in operating and managing the works.[112]

Essential features of the articles of incorporation include provisions for effecting the reclamation law regarding ownership of the reclaimed area and for guaranteeing repayment to the government of the cost of the reclamation works. See Appendix 2 for indicative Statutes, Articles and Bylaws.

Acquisition of Lands

Public Lands: The reclamation laws give the Secretary of the Interior broad authority to withdraw from public entry those public lands required for irrigation works, as well as those believed to be susceptible of irrigation, from the works.[113] The current practice is that reclamation withdrawals shall embrace all lands required for the construction, operation, maintenance, and protection of main irrigation works and minor structures. All public lands, apparently susceptible to irrigation from a project or to being required in connection with the development of the project, are included in the withdrawal. This decision by the Secretary raises a nearly insurmountable barrier to reversal. Fraud appears to be the only grounds recognized by courts for review.[114] However, where the question of withdrawal involves lands which are already properly devoted to federal purpose, there is a serious question raised as to the Secretary's powers.[115]

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[111] It may be one person, such as the Secretary of the Interior in the case of the United States, or may be composed of persons with appropriate background.

[112] 32 U.S. STATUTES AT LARGE 388 § 6 (1902), 43 U.S.C. 416.

[113] Act of June 17, 1902, 32 STAT. 388, 43 U.S.C. 416. See also WEST'S ANNOTATED CALIFORNIA WATER CODE §§ 43530 through 43559 (1966).

[114] Donley v. West, Cal. App. 189 P.1052 (1920).

[115] Act of April 11, 1956, 70 STAT. 107, 43 U.S.C. 620b; Act of July 9, 1965, 79 STAT. 217, 16 U.S.C. 4601-18(c). The problem that such vast power does not exist is discussed in CLARK, WATERS AND WATER RIGHTS, Vol. 2, § 116.1 (1967). This volume contains an extended discussion on the reclamation program in the United States and is relied heavily upon herein.

Private Lands: Purposes of reclamation involve the acquisition of land and water through exercise of the eminent domain power. Ample authority is provided for this purpose.[116] Pursuant to this, Congress has provided that "the Secretary . . . shall pay just compensation, including severance damages, to the owners of private land utilized for ditches or canals in connection with any reclamation project."[117]

Rights of Water Users[118]

In the United States the Supreme Court regards it as settled that a project user has a vested property right which cannot be withdrawn at the will of the government.[119] However, the Secretary has authority to restrict water uses to those which are "beneficial"[120] and to protect project lands against deterioration due to improper use of water.[121] Too, requirements have been upheld limiting users to a certain quantity per irrigated acre as a means of preventing waste.[122] The Secretary also has powers to "make general rules and regulations governing the use of waste in the irrigation of the lands within any project."[123]

Conflicts arising under private systems of appropriation have not arisen under reclamation. This appears to be due largely to the practice of apportioning available water during shortages rather than using a seniority scheme which totally cuts off junior users.[124] Too, matters often litigated are commonly handled by the Secretary or his representative.[125]

Repayment of Costs[126]

The costs of these works fall into two general categories: 1) construction costs and 2) operation and maintenance costs. The difference is

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[116] Act of June 17, 1902, 32 STAT. 389, 43 U.S.C. 421. Broad authority is also provided to the Secretary in acquiring lands for relocation. See Act of Aug. 4, 1939, 53 STAT. 1197, 43 U.S.C. 389.

[117] Act of Sept. 2, 1964, 78 STAT. 808, 43 U.S.C. 945a.

[118] For a discussion of this, see CLARK, WATERS AND WATER RIGHTS, Vol. 2, §§ 118.2 through 118.4 (1967).

[119] Fox v. Ickes, 137 F.2d 30 (C.A.-D.C., 1943), cert. den. 320 U.S. 792, 64 S.Ct. 204 (1943).

[120] Act of June 17, 1902, 32 STAT. 390, 43 U.S.C. 372.

[121] Act of August 4, 1937, 53 STAT. 1191, 43 U.S.C. 485e.

[122] In re Bridges Valley Water Conservation Dist., Wyo. 401 P.2d 289 (1965).

[123] Act of June 17, 1902, 32 STAT. 390.

[124] This provision for apportionment may either appear in the statute or may be provided for in contracts for water or in the rules and regulations of the associations.

[125] A procedure, whereby interested parties might submit and hear evidence in a lawsuit proceeding, is probably desirable as a check on power abuse.

[126] See CLARK, WATERS AND WATER RIGHTS, Vol. 2, §§ 123.1 through 123.4 (1967).

important in light of the construction contract. Once a repayment contract is executed, the government is powerless to impose any liability upon the water users to pay for additional or supplemental construction, unless the users willingly contract to pay such additional costs.[127] However, the costs of operating and maintaining the works may be imposed on the water users whether or not they want to pay and whether or not they want the maintenance work done.[128] Further, the necessity of the work is at the discretion of the governmental agency (the Bureau of Reclamation of the United States).[129]

Repayment of Construction Costs: One of the distinguishing features of reclamation is the requirement that water users reimburse the government for at least part of the cost of building the project.[130] A recurrent problem is that of deciding which costs shall be subject to repayment by

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[127]Act of Aug. 13, 1914, 38 STAT. 687, 43 U.S.C. 469. See also Fox v. Ickes, 137 F.2d 30 (C.A.-D.C., 1943), cert. den. 320 U.S. 792, 64 S.Ct. 204 (1943).

[128]Act of Aug. 13, 1914, 38 STAT. 687, 43 U.S.C. 492; Swigart v. Baker, 229 U.S. 187, 33 S.Ct. 645 (1913).

[129]A showing of fraud or a decision so arbitrary, capricious, or grossly erroneous as to constitute bad faith may nullify this requirement. See United States v. Fort Belknap Irrigation District, 197 F. Supp. 812, (D. Mont., 1961). This case delineates the two uses as follows: "Construction costs" are those incurred constructing an irrigation system and putting it in condition to furnish and properly distribute water or those where expenditures are necessary because of faulty original construction in violation of contractual or statutory requirements or when the capacity of the original system must be expanded. However, when conditions must be remedied because of the use of the system or to maintain it as an efficient, effective going concern, they are charged to "operation and maintenance."

It is to be noted that under this rule the same work may be "construction" in one situation and "maintenance" in another. For instance, construction to increase capacity may be a result of an oversight in one case but may be necessary to fulfill needs which develop in association with normal and ordinary operation in another case. From this, it can be seen that the facts of each case determine the result of the applied test. See Nampa and Meridian Irrigation District v. Bond, 268 U.S. 50, 45 S.Ct. 383 (1925) for an illustration of this problem.

[130]The Act of June 17, 1902, 32 STAT. 389, provided that the entire cost of construction was to be assessed on a per acre basis on project land and paid in not more than ten annual installments. Nothing is mentioned about interest, however, so there is a considerable public underwriting. Also, the ten year requirement has now been extended to a more realistic forty year limit. See Act of August 4, 1939, Ch. 418, § 9(d), 53 STAT. 1195, 43 U.S.C. 485h(d).

the water users. It appears best to recover the actual, as distinguished from estimated, costs to construction.[131]

Deferment of Charges Due: The basic period of time for repayment of construction costs is 40 years. The Secretary is authorized to defer the time for repayment of any installments of construction charges in order to adjust payments to the ability of water users to pay.[132]

Plans for deferment of payments are extremely desirable because of the nature of a reclamation project. These projects usually include farmers who are in a precarious position because of lack of water. Any setback is likely to ruin them financially. In explanation, these water users associate under the pertinent laws of incorporation and issue shares of stock to each member. These shares usually represent land--one share for one acre, for example. The shares have a par value based on the value of land which they represent. This stock is then committed to secure the cost of a reclamation project which they desire the government to build.[133] Since the stock usually represents land, this means that the land is mortgaged, in effect, to secure the repayment of the estimated cost of construction. Failure to make the payments results in selling the security, the farmer's land, if the stock is made appurtenant to the land. Thus, the purpose of the project is defeated.

A plan for deferment of payments would eliminate much of the problem of forfeiture. For example, if a poor settler was induced to buy arid land--but, after paying living expenses, had no money for seed, teams, and future living expenses--he would be unable to produce crops on his land when the water arrived. A crop failure would have the same result; the land would be unable to support itself and the farmer would forfeit everything.

This problem could be resolved by extending the time of payment and allowing a low interest rate on the principal for the first few years, say five years. Settlers need more than watered land. They need money to live and time to prepare the land, plant, cultivate, and harvest. A plan with deferred payments with a small interest charge would allow this.

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[131] The actual and estimated costs often vary. Because the contract limits the cost of repayment, this cost may not be raised automatically. However, construction may be halted until an amended cost estimate is inserted in the contract. It is interesting to note that an action by the arbiter for the difference between actual and estimated cost will not lie on a theory of unjust enrichment. Fox v. Ickes, 137 F.2d 30 (C.A.-D.C., 1943), cert. den. 320 U.S. 792, 64 S.Ct. 204 (1943). The question of duress and bad faith involved in stopping construction has apparently never arisen.

[132] See #130, supra.

[133] Act of June 17, 1902, 32 STAT. 388 § 5.

Development Period Deferment: In cases where it is feasible to irrigate parts of a project before the entire project is completed, it may be advisable to defer payments for these small sub-areas. The purpose of such a provision is to give water users an extra margin of time to establish themselves during the difficult beginning years on a farm when production is being developed and cash return is likely to be low.[134]

Variable Repayment: Because of the variability in farm income from year to year, a program for repayment which sets fixed sums for repayment years in advance is likely to prove unsatisfactory. A combination of a long repayment period and variable repayment formula, permitting a variance in the required annual payments in light of economic factors and pertinent to the ability of the water users to pay, would probably be best.[135] This variable formula can be based on any number of considerations--price indices, crop production, etc.--and it may provide for both lower payments in below average years and increased payments during good years.

In allocating the costs of repayment among water users of a project, the measure of ability to pay is based on productive capacity per acre of farm land, cost of operation, and net income. From this, it is obvious that careful classification of land is essential; for good land can support a higher debt burden per acre than poor land.[136] The per-acre burden can be assigned on the basis of a water users' association classification of each farmer's land and the Secretary's classification for the total project land. After a repayment burden has been established for the entire project by the Secretary, the water users can assign burdens to individuals based on the projected productivity of each farmer's land.[137]

These same arrangements can be made to pay operation and maintenance costs as well as construction costs.

Enforcement of Payment: Persons delinquent in paying their annual shares of expenses face several possible sanctions. These are the imposition of an additional charge,[138] loss of the water supply,[139] or cancellation of the water right with forfeiture of payments already made.[140]

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[134]Act of August 4, 1939, Ch. 418, § 9(d)(1), 53 STAT. 1195, 43 U.S.C. 485(d)(1).

[135]Act of August 8, 1958, 72 STAT. 542, 43 U.S.C. 485h(d) (3).

[136]See, for example, WEST'S ANNOTATED CALIFORNIA WATER CODE, § 51231 (1966) and Hawley v. Reclamation District No. 730, 220 Cal. 271, 30 P.2d 505 (1934).

[137]Objections can be made on the grounds of disparity between the Commission's estimate and the association's estimate. Honegger v. Reclamation District No. 1619, 190 C.A. 2d. 684, 12 Cal. Rptr. 76 (1961).

[138]Act of August 4, 1939, Ch. 418, § 6, 53 STAT. 1191 43 U.S.C. 485e and WEST'S ANNOTATED CALIFORNIA WATER CODE § 57522 (1966).

[139]Act of August 4, 1939, Cha. 418, § 6, 53 STAT. 1191, 43 U.S.C. 485e.

[140]Act of August 13, 1914, Cha. 247, §§ 3,6, 38 STAT. 687, 688, 43 U.S.C. 480, 496. Sale of the parcel is also possible [WEST'S ANNOTATED CALIFORNIA WATER CODE § 51600 through 51618 (1966)], , though redemption of the sold tract is allowed, if accomplished within a year, by paying the purchase price and interest to the buyer. WEST'S ANNOTATED CALIFORNIA WATER CODE § 51646 through 51654 (1966).

3. Public Organizations--Irrigation Districts

Irrigation districts are quasi and public organizations, formed to amass sufficient capital to construct and operate irrigation systems on a larger geographical basis than covered by irrigation companies. The distinctive feature of the district is its ability to sell bonds and levy ad valorem property taxes to raise the monies necessary for project construction and repayment. Originating as a formalized concept in California with the Wright Act of 1887, the irrigation district idea was soon adopted by the other 16 Western states as a means to improve agricultural production through development of water use potentials.[141] See Appendix 3 for illustrative statutes.

Formation of irrigation districts can be brought about by the voluntary act of the irrigation community, or occasionally as a condition to federal and state funding of an irrigation project. Normally, a majority of landowners who will benefit from the district activities must vote for formation. Another approach followed in California is the proposal for formation by a set number of petitioners who must have title to not less than 20 percent of the assessed value of the land in the proposed district boundaries.

Upon approval of a majority of electors in the proposed district, a Board of Supervisors or Commissioners are elected. This Board then completes the formalities of district formation.

Initially districts were formed for the single purpose of improving the water delivery system and to provide proper timing of delivery. Then, salinity problems began occurring and the functions of drainage and waste water removal were added. Gradually, irrigation districts also expanded their functions to municipal water delivery.

The irrigation district is provided in this brief description on organizational entities in the U.S.A., merely to identify the hierarchy that exists as the organizational function attempts to achieve certain water user and public objectives. It is not recommended that Pakistan consider establishing the irrigation district concept per se, for the initial emphasis upon on-farm water management should logically focus upon the watercourse area. However, regional projects can best effectively be carried out if some institutional adhesion exists among the recipients of the project, and for that purpose, the irrigation district is a viable alternative.

4. Summary

At the local level there are three distinct private organizational entities designed to accomplish water resources development and management within a system. They are the mutual irrigation company, operated by users for their express benefit; the voluntary association with objectives similar to mutual companies but having their foundation less on legislative

[141] Clark, R. F., editor, Water and Water Rights, Vol. 1, p. 147+, Allen Smith Company, 1967.

enactments and more on custom, and the commercial irrigation company, organized by entrepreneurs for profitable conveyance of right holders' water or rented water. All have potential in countries such as Pakistan where economies of development and irrigation requirements prohibit individual landowners from operating efficiently as independent units. However, because of slow returns from farms, sensitivity of agricultural production to unforeseen disasters--such as floods, drought, salinization, etc.--it is recommended that the mutual irrigation company and voluntary associations model be considered. Profits for a commercial company are too speculative to draw much interest, especially in a developing area such as Pakistan. The voluntary associations have the advantage of tradition and history going back to basic Moslem/Spanish origin. Their simplicity in structure and operation is highly desirable.

It is strongly recommended that any major program in water resources at the user level should provide a sound legal foundation establishing uniformity in organization formation and operation. Key considerations to the members are powers and functions of the organization, voting and participation rights and duties, and membership fees or assessments.

Water users associations of the American version may well provide the vehicle for federating many local associations to negotiate with government programs of specific ad hoc or permanent nature. The ability to pay criteria used in the States is a useful concept, but requires a detailed understanding of total farm activities, land classification, and ability of the association to levy and collect assessments.

Irrigation districts have potentials for larger area initiated water projects and should be seriously considered. Depending upon what philosophy is most acceptable to the farmers, landowners and government, the public irrigation district or more private oriented hierarchical arrangement found in Taiwan provides good options for large scale local irrigation programs.

C. Water Resources Administration in Spain and the Irrigation System and Institutions in Valencia

1. Introduction

In attempting to design local water user associations for Pakistan, it is helpful to turn to Spain, with special emphasis on the City of Valencia, for instruction. It is interesting to note that this is not the first time the irrigation systems of Southern Europe, and in particular Spain, have been examined for providing an insight for improving water utilization and management in the Asian sub-continent. From 1867-1868, Lieutenant C. C. Scott Moncrief, a British Royal Engineer, was dispatched "to visit and report upon the Cavour Canal and other works of irrigation in Italy, Southern France and Spain" by the British Secretary of State upon application by the Government of India.[142] Lt. Moncrief, who was working in the Punjab and Northwest Province, and whose journey through other irrigation

[142] Moncrief, Lieut. C. C. Scott, Irrigation in Southern Europe, Pub. W. Clowes and Sons, Stamford & Charing Cross, London, 1868, p. iii.

systems, has undoubtedly had a significant impact on the system in India and Pakistan, provides us with a useful insight into conclusions of his study:

> "Two lessons I think I have learned--good lessons for the engineer:
> 1st. Seeing in Europe the thought and attention bestowed on canals of every small discharge compared with our great Indian works, in fact not larger than our rajbuhas, one cannot but be impressed with the value of every drop of water... It is everywhere considered a grievous hardship to deprive a single cultivator of water once bestowed...
> 2nd. The other point that has struck me forcibly is, that much can be done in irrigation without the help of any very scientific engineering. This is humbling perhaps to a mere engineer, but surely gratifying to one who knows how often in India sound sense and energy are to be met with in the absence of any great professional knowledge. Let the zealous magistrate or deputy-commissioner, who thinks making little canals quite beyond him, look at the beautifully irrigated province of Valencia. The old Moors, who made these works 600 years ago could hardly have possessed much scientific knowledge, and their successors have but little improved; but they remain in their rude simplicity, the source of vast wealth to the inhabitants."[143]

Similarly the State Engineer of California found an examination of history, customs, laws and administrative systems relating to irrigation, watercourses, and waters in France, Italy and Spain to be of great value to the emerging control and management problems of California and the arid west in the late 1880's.[144] One area of particular interest because of the previous influence in the southwestern part of the U.S.A. was the Spanish, and Hall took great care to elaborate the details of national law and local administration, specifically the system of Valencia.

A similar bondage exists between the Al-Andalus (Islamic Iberia) and Islamic nations of the Middle East and Southwest Asia, a thread of bondage spun centuries ago through the spread of irrigation practices and religious beliefs and now mostly forgotten. The principles of Islam were infused into the area surrounding Valencia in 711 following the Moorish conquests of the peninsula. The Moors introduced the canal system and an effective management and organizational system based on Moslem water law. The system of water allocation and distribution upon which calculation of the

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[143] Ibid., p. v and vi.
The authors, lawyers by training and profession, do not wish to chastise any discipline or profession with implications from the quote, but truly feel the message is as applicable today as it was in 1868 and pertains to individual and occupation involved in improving water management.

[144] Hall, Wm. Ham., Irrigation Development, Vol. 1, State Printing, Sacramento, California, 1886.

size of the canals and outlets was based was a Muslim concept that water is community property and must be equitably apportioned among the community.[145]

Before looking to the system of Valencia, however, it is well to look to the national water law of Spain.

2. Water Laws

The basic legislation for inland waters in Spain is the Ley de Agua[146] of 1866. This general statute codified existing tradition and attempted to deal with use and ownership of water. It deals with natural running water and not with regulated water and the basic thrust of the law is to attempt to establish orders of priority for the use of water.

Classes of Water

One feature of the Ley de Agua is that it distinguishes between public and private waters. This demarcation leads to some confusion at times.

Rivers are public waters from their source to their mouth (Water Act, Art. 4(3) and Civil Code (Art. 407(1) and 399(1)). Springs and streams flowing in their natural beds are public water (Water Act, Art. 4(2) and Civil Code (Art. 407(2)). These waters may be used while on the land of the person who owns the property but the surplus is public water. Stated differently, the water which leaves his land becomes public water. It is to be noted that he does not own the water on his land but may only use it. Of course, if he consumptively uses it all, the distinction is without a difference.

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[145] Radosevich, G. E., "Moslem Water Law and Its Influence on Spanish Water Law and the Irrigation Systems of Valencia." Proceedings of the Seminar on Legislation and Administration of the Waters of the Andean Group Countries, Quito, Ecuador, 1974.

[146] For a comprehensive analysis of the Spanish Water Law of 1866 see Sebastian Martin-Retortillo, La Ley de Aguas de 1866: Antecedentes y Elaboracion, Ediciones Centro de Estudios Hidrograficas, Madrid 1963. This exposition on Spanish Water Law is primarily summarized from Water Resources Administration in Spain by Sebastian Martin-Retortillo, Report to the Department of Economics and Social Affairs, United Nations, December 1969. From this summary, it should be clear that a dynamic national water policy in this country would be frustrated by the complexity of the existing law. Indeed, Dr. Martin-Retortillo makes this point throughout his report and recent discussions with Spanish water officials indicate a need to revise the basic water laws. Nevertheless, it is helpful to study the law in order to identify the strong points and weak points with a view to eliminating the latter. It is in this spirit that this review and analysis is presented.

The statute provides that water which rises continuously or intermittently in publically owned land is public as is water in fountains, sewers and establishments of a public nature.

Adding to the complexity in water classification are the following:

Still water is either public or private. Its classification depends on whether the land on which it sets is public or private. Even rainwater is classified by the state of ownership of the land on which it falls.

Ownership of wells is divided into two classes. The first is "ordinary wells" or those shallow wells used for domestic uses and other ordinary life uses. The other classification is artesian wells or those wells which depend on something other than human effort to be functional. In determining the ownership of the water from these wells, the person who extracts the water is the owner and not the owner of the land on which the well is located. Extracting water from a well on another land without the owner's permission is not permissible (Art. 127) so the owner can sell this right.

Uses of Water

There is a basic distinction found in Spanish water law between nonconsumptive use and consumptive use. Nonconsumptive use requires no official authorization and is available to anyone. Consumptive use [called appropriation], however, requires official authorization and is limited to the exclusive use of the person obtaining the authorization. (Water Act, Art. 126 et seq.)

It is noted that the general rule is that the water is available to all. The authorized uses are the exceptions to the general rule. The authorized uses are often seen in connection with uses which might impair the quality of water. That is to say, there are streams which have uses intended for them. The intended uses require a certain quality of water to be delivered. When someone wants to use the water, authorization is required. In that way, the quality of the stream is regulated.

The exclusive right to the use of water (appropriation) can be obtained in two ways. The first is the authorized concession by the appropriate body--usually the Ministry of Public Works. The second method is by prescription. This involves the exclusive use of the water for 20 years without interference from the government or third parties. At the end of 20 years the user has the exclusive right to the amount and use of water that he has made for those 20 years.

There is a statutory scheme setting out the order of importance for granting appropriations, or exclusive uses. This order is 1) water for townships, 2) water for railways, 3) irrigation, 4) navigation channels, 5) mills and manufacturing, 6) ferry boats and floating bridges and 7) fishponds and fish hatcheries. If two prospective users of the same rank apply for an appropriation, the one with the greatest utility is favored and, if all things are equal, the first one to apply is granted. (Art. 160(2)).

Having a priority of importance is an extremely helpful tool in water management and this order of uses generates some confidence in those using water as it is always better to know one's position than to be in doubt. This is especially true for planning future activities which are dependent on water. In a county needing food production, irrigation should agreeably be placed at a high point on the scale of importance.

Multiple Use

In areas with a limited water supply, the concept of multiple use has much to recommend it. Multiple use is using the same water for different purposes and it encompasses both simultaneous use, such as when it is found in reservoirs and can be used both as a fishery and a water supply and consecutive uses such as domestic and irrigation use of the water as it passes through a system. It also includes recycled water or water caught and reused before it escapes. The problem presented with multiple use is to ensure that everyone gets the water he is legally entitled to while each user maximizes his own use. The danger is that some water will never reach the one entitled to use it.

There are problems inherent in establishing an order of priorities. The problem is a tendency to rigidity in decision making. One of the best solutions is to have a multipurpose project which exists to serve all needs in times when plenty of water exists. The priority statute should only be used in times of shortage. Stating it differently, when water exists beyond the bare minimum amounts required for survival, all uses should be considered equally and decisions made on an economic and political basis.

This is not to say that the multipurpose project is without difficulties. But the difficulties that exist relate to where water shall be allocated and not so much as to where water will come from as is the more likely result under a system which views the use of water as a one-time phenomenon and plans for only one use of it.

Too, there is the problem of cost allocation among users. However, this problem is one which can be discussed and should not be insurmountable. In the case where farmers are to receive a substantial benefit, long-term repayment plans without interest could be one way of financing such projects.

The management of such projects should be in the hands of the users themselves. This often creates a sizable management board but this is necessary if the project is to consider as many views as possible and avoid slipping into being a single-purpose project.

To this point, what has been discussed is the legalities of water use or ownership and how the individual is affected. The administration of water and how the individual should function within the administrative system is the next topic.

Concessions

The process of receiving an appropriation right or concession (exclusive right) to water is one of petitioning for the right and having it

granted. The petitions may only be made by private individuals and each application is considered on its own merits. No application is approved if it will prejudice a third party. One who is prejudiced by such an action has no remedy with the administrative board but must go to the courts. This requirement of going to the courts can be detrimental to individuals as the process is time consuming. Time is vital when water is being taken; a few weeks will ruin a crop. The area of Valencia has developed a court system which meets weekly to hear such disputes. It costs nothing and a decision is handed down immediately. Such a system on a nationwide basis is needed to protect individuals.

The concessions are granted for a specific use with a specified, controllable flow (Water Act, Art. 152). This specific purpose cannot be altered without permission from the agency granting the appropriation and a new application is needed before the change is allowed. Moreover, water rights are said to be appurtenant to the land and, therefore, cannot be severed from the land which is benefitted by the water.

If the appropriation is granted to the one who uses the water, its duration is perpetual. If, however, it is granted to someone other than the one who directly benefits, it is for a limited duration. This is seen when granting a right to an irrigation association where the direct user is the individual but the appropriation is given to the association.

In addition to the methods of obtaining an appropriation (concession) and prescription, landowners may use the water flowing on their lands and owners of property which adjoins a road may collect the runoff for irrigation use.

3. Water Administration

Central Administration

Water administration in Spain takes place at two distinct organizational levels. At the government agency level, the Ministries of Public Works, Agriculture and Industry have various delegated functions in development construction and management, create projects and programs and infrastructure activities. Another category of organizations are the autonomous agencies or entities, principally the Area Water Authorities (Confederaciones Hidrograficas), river federations and the irrigation associations (Comunidades de Regantes). (See Figure 4.)

The Ministry of Public Works operates centrally through the Directorate General of Water Projects and regionally through area catchment offices (Comisarias de Aquas). Coordinating the activities of the area catchment offices is the Commissioner of Waters (Comisaria Central de Aquas) in the Directorate General's office. The Ministry is responsible for construction of major reservoirs and collection systems, major canals and drainage systems as well as main roads serving these facilities.

The Ministry of Public Works is responsible for considering and deciding matters of appropriations and concessions. The general steps to be taken include an application by the interested party, publication of the application in the press, a time delay in order that competing applications may be

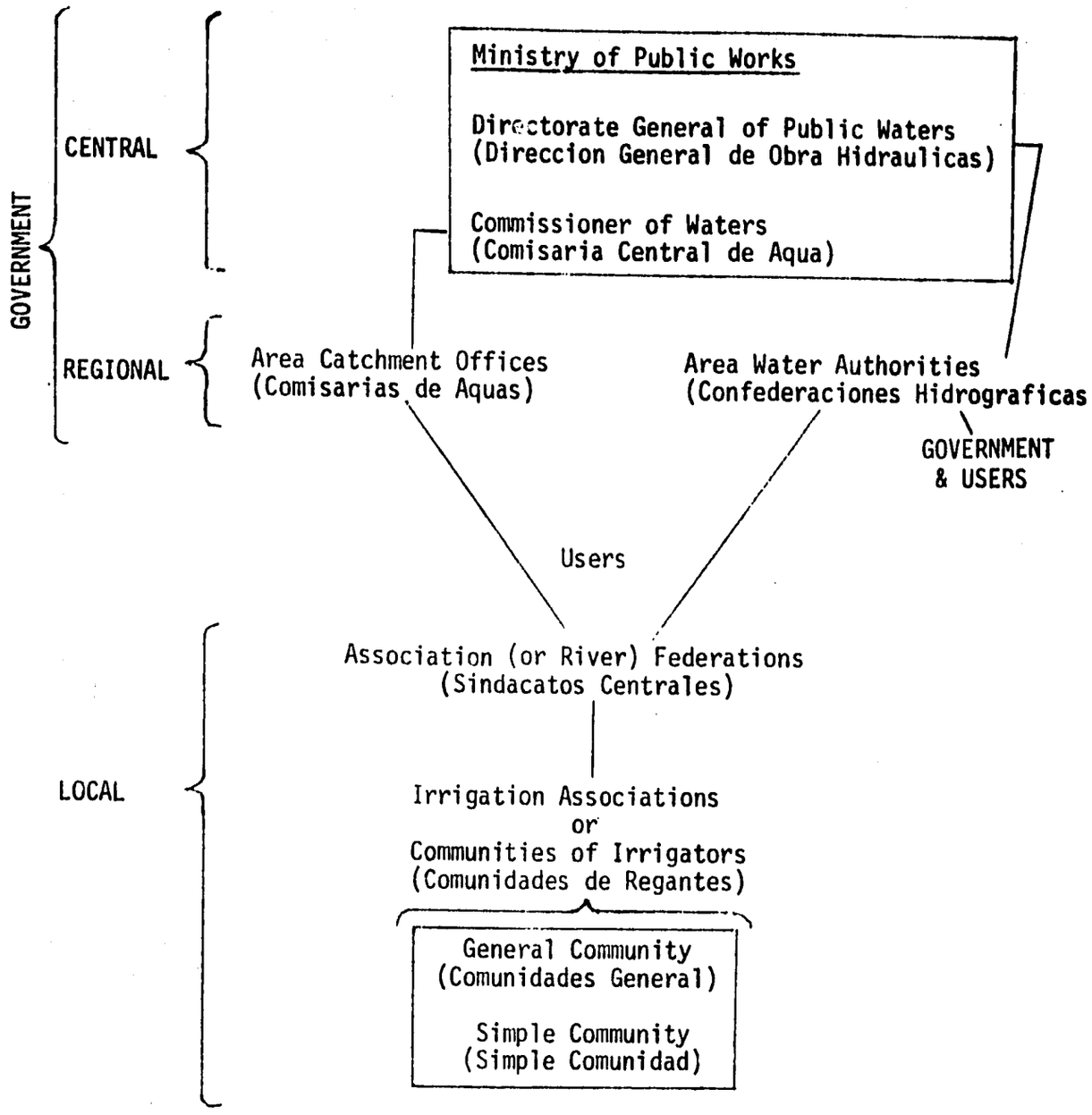

Figure 4. Organization of Water Entities in Spain.

submitted, a hearing on the application and the decision. The Ministry formerly had complete discretion in whether or not to grant a permit. This was to say that an individual had no right to compel the granting of a permit, he had no right of appeal. His only right of appeal, therefore, arose from injuries incurred in connection with granting a permit, not in refusal to do so. He had a right to insist on his full administrative hearing but the Ministry traditionally had the discretion to grant or deny the permit. This rigid rule was changed by statute which gave the individual substantial protection against arbitrary decisions. Today, he can appeal a decision given under the color of administrative discretion. Too, if the Ministry "invites tenders" of applications and stipulates certain conditions to be met, the applicant who best meets these conditions has a vested right in receiving his appropriation. The reasoning is that the Ministry has already exercised its discretion in deciding whether or not to issue a permit by requesting the application. The only thing to be decided is who best meets the prerequisites.

In summary, the Ministry of Public Works is charged to administer water resources use activities related to irrigation, power production, industry and domestic supplies.

Briefly, in the water resources area the Ministry of Agriculture undertakes construction of minor roads and secondary canals and drains, closely coordinating these functions with the Ministry of Public Works.

Regional Administration

At the regional level of water administrations two distinct but similar entities exist, both organized around hydrologic boundaries of the watershed. They are the Area Catchment Offices (Comisarias de Aquas) and Area Water Authorities (Confederaciones Hidrograficas). The former is an organ of the Ministry of Public Works, the latter an autonomous entity.

The function of the Comisarias de Aquas was set out in the Water Organizations Decree of 8 October 1959. They are:

1. Handle proceedings for formation of irrigation associations (or communities of irrigators), and when determined necessary order the creation of such local organizations for better water control.

2. Grant concessions of less than 200 l/s, maintain a registry of concessions and work discharges in the basin.

3. Police the use of the canals and approve and supervise expansion of water delivery networks and irrigated areas, and changes in points of diversion.

4. Implement regulations on use of waters and canals and impose punishments for breach.

5. Solve problems among communities of irrigators when the communities are not integrated into general communities or sindicators centrales.

The comisarias, thus, are part of the governmental framework directly concerned with water allocation, distribution and utilization.

The Area Water Authorities were created in 1926 but their functions have been the subject of several changes through decree, with the effect that this autonomous body at the basin level has ban leaving some functions to the comisarias. Their present functions are primarily oriented toward planning, executing and operating water projects, collecting hydrologic data, collecting project assessments, and promoting the creation of irrigation communities.

The internal structure of the "confederaciones" originally consisted of a general assembly of members, but this was changed in 1949 to a Board of Government consisting of water users and representatives of the government. The membership of the organization, however, is made up of water users to give them a direct avenue of input into water resources planning and project selection and construction.

This is the basic reason for creating an institutional body parallel to the comisarias. There are as many conferaciones as comisarias with the major organizational distinction being that water users form the former while the comisarias are bureaucratic institutions without user participation. There has, however, been a definite trend toward a lessening of power and support of the conferacion in favor of the comisarias.

Local Administration

At the local level, there exists a logical and simple hierarchy of autonomous entities consisting of water users of public waters.[147] This hierarchy is placed in a category called Comunidades de Regantes (irrigation associations or communities of irrigators)[148] and is a strong traditional feature of the Spanish water administrative system, making up the backbone of water resources control and management for national food production. Their success in Spanish agriculture is an example of decentralized administration of public property.

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[147] Only the entities receiving public waters under concession are discussed here, since it is primarily these organizations that have relevance to Pakistan. There are, however, groups of water users that use only private waters.

[148] In addition to the fine works of Dr. Martin-Retontillio, from which much of this discussion is based, the senior author has also sought counsel in the following excellent expositions on irrigation communities through the interpretation and consulting of Dr. Miguel Solanes, lawyer and water law specialist from Mendoza, Argentina, and Research Associate to the Conference Committee for the International Conference on Global Water Law Systems, 1974-1975: Comunidades de Regantes: Concepto, Naturaleza Juridica y Regulacion Positiva, by Sr. Julio Maestre Rosa, Bosch, Casa Editorial, Barcelona, 1969; Tratado de la Legislacion de Aquas: Publicas y Privadas, by Srs. R Gay de Montella y Cristobal Masso Escofet, Bosch, Casa Editorial, Barcelona, 1956, Vol. II-Legislacion Complementaria, de Las Comunidades de Regantes y sus Sindicatos y de los Jurados de Riego, p. 248-279; Regimen Juridico de las Comunidades de Regantes by Juan Antonio Bolea Foradada, Escuela Nacional de Administracion Publica, Madrid, 1969; Manual de Aquas by Angel Carmona Hernandez, Editorial Bayer Hnos. Barcelona, 1966.

The communities may be organized voluntarily by action of water users of a common canal or watercourse, or by direction of the Comisario de Aquas in the basin. The latter action can occur when a watercourse serves 20 or more irrigators and 200 irrigable hectares or, if the comisario determines local agricultural interests would be best benefited by such an organization.

As a legal entity, the irrigation association has several unique and important features, features that should be strongly considered among the organizational needs of the Pakistani water uses. These features are:

1. Corporate entity--they are organized under public law and in addition to their autonomous nature, having inherent responsibility to the state for use of public property. Consequently the logic for a governmental institution in the form of the Comisarios de Aquas to provide the link between bureaucracy and the users.

2. Judicial personality--the association can possess and enforce rights, the latter through internal decisions and sanctions or through lawsuits. This is a feature that facilitates resolution of conflicts between water users. Thus the associations are not only governed by national legislation but by their own regulations.

3. Element of reality--the basis for forming an association is its nexus to parcels of irrigable lands. Without irrigable land, irrigated by public waters, there could be no association. This is not to imply that only irrigators can be members of the community; municipalities, and industries can also join the association. Consequently, the association has a fundamental purpose to pursue in order to justify its existence--it is to control and manage the orderly, efficient and correct distribution of water among the members.

In Spain, water concessions could be granted to:

1. Individual users

2. Communities of irrigators

3. Institutions of the State

4. Provinces

5. Municipalities

When the concession is granted for irrigation it should be expressed in $m^3/s/ha$. when the concessions are attached to the land. If a person, even when granted a concession, leaves the land he loses the concession, which passes to the new landowner. When the waters are granted to a community it is charged with the control of the distribution of the water among its members. It administers the waters. If a person leaves the community he loses his right because he is leaving the lands. The right to use the waters is on the members of the community. The community, even when granted the water, performs only a distributive function. The rights to use water is given by the possession of land in the area of jurisdiction of the community.

The community is granted a given volume of water which is then distributed among its members in proportion to the extension of land each one owns. They share the water in proportion to their land. This right is a right of use and not a property right. Waters, even when granted and used, never lose their character of public property.

Each member receives his water in proportion to the land he owns, and not in relation with the kind of crops that he is growing. In times of scarcity the water that each one receives is reduced in proportion to the rights that each irrigator has in normal circumstances. Waters are always public. The community administers public waters, the user uses public water. The right is appurtenant to the land, not a personal property.

The hierarchy of the irrigation associations begins with a very simple entity serving a small area from a lateral or sub-watercourse to a federation of irrigation associations on the river. At the base of the hierarchy is the simple community (simple comunidad). The next level is the general community (comunidad general) which takes on very formal organizational characteristics and consists of simple communities and users served from a public canal and diversion works. The general community must defend the interests of the simple communities within their water delivery area. They are also responsible for the control and distribution of the community waters.

The highest level is the federation of communities or associations (sindicato central), lacking many of the internal features of the comunidad general, and formed to pursue the mutual interest of communities on a reach of a natural watercourse getting water from different diversion works. (See Figure 4.)

The organic structure of the community of irrigators illustrates a logical functional diversion of activities particularly relevant to water control and management. It consists of three organs:

1. Junta general (general assembly). This consists of all water users and is equivalent to a legislative body. The right to vote in the junto is normally proportional to the irrigated land. The assembly meets every year or every other year, as established by the members, to participate in major decisions, adopt budgets and new regulations, and elect members to the sindicato and jurado.

2. Sindicato de Riego (board of directors). The sindicato is the executive body of the community responsible for managing the affairs of the association, in particular, apportioning and distributing water. It consists of: a) President, b) vocales sindicos (area representatives), c) secretary and d) treasurer-accountant. The president controls the implementation of the resolutions adopted by the junta and presides over the junta meetings. He is an elected official.

3. Jurado de Riego (jury of water users). This is the unique and an important organ of the community; it is the judicial body consisting of: a) President elected by the sindicato and a member of it, b) vocoles o furodes (members of the community), and c) secretary (who

is also normally the secretary of the sindicato). Their function is to resolve disputes between members of the community and punish offenders of the association regulations. The jurado proceedings are very informal, oral and open to the public.

The simple comunidad may apply and the comunidad general applies this pattern or internal organization. The sindicato central does not have all three organs, but normally only consists of a board of directors representing the member communities. The sindicato central is operated by a president, vice-president, treasurer and secretary.

The canals, diversion structures and other water works are the property of the community if it is not specifically stated otherwise. New water works are proposed by the community sindicato to the junta. The junta must approve construction before any construction is undertaken. In the event of an emergency, however, the sindicato can order construction without convening the junta.

Each year a budget is approved for these expenses. The sindicato carries out the works and controls the money. The authorization is a general one. The sindicato controls and administers the authorized money.

Each member of the community must pay the assessments allocated him according to the quantity of water delivered. Although the water is not metered, a "duty of water" for various types of crops is established by the sindicato. That quantity is distributed through canal outlets calculated to deliver a certain flow for a certain period of time. The junta approves the budget and fees charged to the members.

4. Irrigation Communities and Their Administration: The Case of Valencia

History

It can be seen from the foregoing discussion that Spanish water law is complex and cumbersome if it alone was the tool to improving local water management. The operation of the law is often slow, and by the time the formalities of the bureaucracy had been observed, a crop would be lost. Clearly, while a national policy is vital and a bureaucracy to administer that policy is necessary, a more expedient solution is needed to operate at the local level.

To insure that the law can be practically applied, a range of organizations were established. The local organizations previously described are in operation throughout Spain. However, there are peculiarities in each river system among the organizations, and an effort was made to select an area indicative of good water management and practical organizational features. The irrigation system of Valencia represents such a model of administration of water at the local level. The system of Valencia has been selected since it was greatly affected by the Moors and still retains many of the water use practices and institutions infused by them.

The history of Valencia for our purposes begins in 711 with the Moorish conquest of the peninsula. Prior to this time the law of Valencia was

predominantly Roman with strains of German customary and canal law. The invaders found a broad and highly fertile plain at the mouth of the Turia River, but the area lacked an effective water distribution system and the capacity of the region to grow crops was not fully utilized. Almost immediately the newcomers set to work capitalizing upon the natural resources. The principles of Islam were superimposed and, during the reign of Caliph Alhaken II, the first systematic irrigation system and management scheme in Spain was created in Valencia and Granada. The Moors introduced canal systems, new exotic plants and trees, and, most important, a uniquely simple but effective management and organizational system based upon Moslem water law. The canal system that was either built or added to by the Moors consisted of canals taking off from the Turia River.

Moslem rule in the southeastern Spain began to disintegrate in the 11th Century and was finally concentrated in Granada from 1232 to 1492. Valencia was temporarily recaptured in 1094 by Cid Campeador and permanently taken in 1232 by Jamie I of Aragon. Recognizing the skill of the Moorish farmers, one of the first decrees issued by Jamie I stated that the water should be taken and used in the order established within the communities of irrigations. Jamie I allowed seven of the eight canals to be retained by the people of Valencia. The eighth, the Moncada, he kept for his personal use until 1268, and the canal still remains autonomous. As a result of the early precedent set by Jamie I, Valencia was actually irrigated by Moorish farmers until 1610.

The irrigation system of Valencia is fed by the Turia River or Guadalaviar ("white river" in Arabic). The Turia is about 160 miles long and begins in the Sierra de Molina, west of Valencia. It runs through valleys and ravines for about 140 miles of its length before entering the beautiful huerta of Valencia. The river runs through the middle of the plains and, from where it enters the valley to midway through, eight canals take off the main stream alternating left and right. These original eight canals are said to have been constructed or greatly improved on by the Moors. Many of the old masonry and stone weirs that date back to the 11th Century can still be seen. The system of water allocation and distribution that led to the calculation of the canal and outlet size was based upon the Muslim concept that water is community property and must be equitably apportioned among the community. To insure this proportional distribution among the irrigators, a series of minor canals and ditches were constructed from the major canals, varying in size according to the area to be irrigated under this charge.

So where the engineer left off, the legislation began. A system of administration developed to insure that water was delivered in the most equal portions possible. All irrigators receiving water from a particular canal were equal and had a right to a share in the water according to the size of their holdings. When the supply of water is abundant, there is little restriction to the use of the waters. However, when a scarcity occurs, the old Islamic principle of proportionality is implemented. Water delivery is divided into hours of the day and days of the week, with each irrigator having a turn based upon the acreage and type of crop

grown.[149] In this manner, each irrigator can adjust the cropped land according to the water supply and all can at least grow some products. The rules are simple and direct. The system operates almost automatically since the outlets into the canals and cequias will allow a flow corresponding to the area to be irrigated.

Community of Irrigators

Administration of the irrigation system is carried out by a community of irrigators and the Tribunal of Waters. The principal characteristic of these institutions is local autonomy in formulating operating procedures and other governing rules along with autonomy in choosing administrative officers.

The basic unit is the community of irrigators--or all the holders of land with irrigation rights in a single canal's service area (rech). Even if a man's land is bounded by two canals, he may only draw from one. Only when the course of a canal is changed can a parcel of land be changed into another service area.[150] The community owns the water and sees that it is equitably distributed.

Three distinct principles pervade the community of irrigators in their efforts to seek maximum cooperation through direct administration. They are:

1. Concept of proportional distribution--each cultivator receives water in proportion to the land he irrigates.

2. Concept of individual responsibility to the community for upkeep of his part of the canal and prevention of waste in water use.

3. Concept of collective responsibility by self-government and management only by community.

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[149] Various methods were used for measuring the time unit. For example, measurement of shadows cast upon a person or on a vertical post may possibly be the most primitive mode of reckoning time.

Medieval Spaniards used three simple nonmechanical devices to measure irrigation time; the sinking bowl, the outflow clepsydra and the sandclock. The sinking bowl is a vessel with a hole in the bottom which floats upon the water until it fills and sinks. The outflow clepsydra is a bucket with a hole in the bottom which allows the bucket to drain over a fixed period of time. These two inventions are relatively ancient. A newer innovation is the sandclock with the simple hourglass set for varying periods of time.

Today, of course, mechanical clocks are used predominantly, but some primitive methods still survive.

See Glick. "Medieval Irrigation Clocks," Technology and Culture, 9 (1968), p. 165-180.

[150] Glick, Thomas F., Irrigation and Society in Medieval Valencia, the Belknap Press of Howard University Press, Cambridge, Massachusetts, 1970, p. 31.

Each landholder is entitled to one vote in the community's legislature or general assembly (junta general). His right to canal water and his share of the community's expenses for maintaining and operating the canal are measured roughly in proportion to the land that he owns.

The assembly, which meets every two years, votes on changes that have been proposed in the canal's policies. rules, and regulations concerning operating procedures, canal maintenance and other matters for the annual operation of the canal's affairs. Too, they vote on any changes in administrative officers of the canal. The assembly also elects an executive committee to conduct the canal's business until the assembly meets again. This committee consists of five to eight delegates, each representing the users of a given lateral or zone of the service area, and the committee is headed by the canal's chief administrative officer, the syndico. There are eight syndicos in the Valencia huerta--one for each canal.

The organizational arrangement of the community consists of a President, Vice-president, Representatives from throughout the canal system, a Secretary, and an Assessor. In addition, the President of each community serves as the Water Syndico or Trustee. This leadership of a community of irrigators serves as a jury to decide all disputes between irrigators of that canal. It can also decide if certain crops should not be grown and, in general, is responsible for the efficient use of water allotted to it.

An important feature of the selection of representatives is their geographic distribution. All areas of the community must be represented. Thus, if four representatives are elected, one must come from the area near the start of the canal, one from the tail-end area of the canal, and two from the center area. This insures equal status to all users on the committee.

The committee has supervisory responsibility for regular maintenance of the canal, especially the annual silt removal, and must make decisions on when the canal is to be shut down for this purpose, who will do the work and who is to pay for it. It hears complaints against its workers and either appoints or approves the Syndico's appointment of employees.

The Syndico is elected by a majority of the general assembly for a period of two to four years, though frequently he continues to hold the position much longer by virtue of re-election. The Syndico must be a landowner who works his farm in the canal's service area, but he cannot own a mill that uses canal water. The syndico is the chief administrator of the canal and its properties, and he has responsibility for the collection and expenditure of all funds for maintenance and operation of the system. Employees are accountable to him. He is also the chief regulator of the distribution of water to the supply laterals of the network and ultimately to its farms. He works with the norms established by ordinance in the executive committee (which consists of five to eight Syndicos) but he has considerable discretion in times of drought.

To assist the Syndico carry out the management and operation duties of the community and insure the proper maintenance of structures, three other categories of officers are commonly found. Guards are employed to keep the

canals and laterals free from obstruction and proper flows in the delivery system. These individuals are normally nonlandowners under the canal system. Ditch riders assist the Syndicos in water distribution. They usually are farmers who are selected for the job by their peers. Finally, inspectors are appointed to insure that repair work is done properly and the propriety of individual irrigation turns.

Tribunal of Waters

The most notable contribution of the Moorish influence upon the irrigation system of Valencia is the famed Tribunal de las Aguas, thought to be instituted by the Moor, Alhaken Almonstansir Billar in 960.[151] This court, which consists of the Syndicos from each of the eight communities of irrigators, was developed to keep the peace within the Valencian irrigation system. Its operation was so effective that Jamie I retained it after the Christians reconquest in 1232. It is truly a primitive and oriental body which carries forth justice in a summary fashion.

The tribunal meets every Thursday at noon in the open on special benches at the La Puerta de los Apostoles at the Cathedral of Valencia. Prior to the conquest of Jamie I this tribunal met at the gate or entrance to a mosque, but after the Christians reclaimed Valencia the mosque was destroyed and the present cathedral constructed. The philosophy behind meeting at the gate in the open air is that one small submit to God and his fellow man to be judged and will be less inclined to deviate from the truth. Likewise, the judges will be under the shadow of the "Gate" and attempt to deliver judgments in the most just manner.

The court conducts its proceedings in a simple and direct manner--typifying the philosophy of its creators. No barristers or attorneys practice before the court, there is no writing down of evidence or decisions, and there is no appeal. Although the court is voluntary and the accused does not have to submit to its jurisdiction, the economics and swiftness of its decision are substantial factors in deciding whether to go before the civil court or Tribunal.

To insure justice and impartiality, the accused is brought before the Tribunal and in everyone's presence the evidence is presented against him. He can defend himself and call upon others who have testimony. He may be subjected to questions from the President of the court and other members of the Tribunal. To achieve impartiality, Syndicos of the canals on the opposite side of the river from the accused pass sentence on him. The Syndico from the accused's community then applies the penalty under the laws of that community.

Operation of the System

The water delivery system in Valencia consists of eight canals and a multitude of laterals and ditches leading from these canals throughout

[151] This account is taken from El Tribunal de las Aguas de la Vega de Valencia, by Vincente Giner Boira, Valencia 1969, pp. 25-27, and from Glick, Thomas F., Irrigation and Society in Medieval Valencia, The Belknap Press of Harvard University Press, Cambridge, Mass., 1970, pp. 65-66.

their service area to the individual farms. A majority of the laterals and ditches are lined. The water is diverted into each by canal dividers or structures that measure the proportional flow of water for that particular lateral under a hydraulic delivery system. Many of the dividers are gated to interrupt the automatic separation of flow process.

Long canals are divided into sectors which have a rotation on demand system of delivery within the sector area. This is particularly favorable to insure that the tail-end "sector" receives water during low flow periods.

When water is abundant, the irrigator takes as much water as he needs during his turn. There are no time limits imposed, just a duty not to waste water.

During periods of drought, however, the system does revert to a timed rotation system of the like pattern to the sanctioned warabundi in Pakistan. The volume of water delivered is in proportion to the land irrigated and crop requirements. The irrigation communities do have a commendable element of flexibility, however, to abandon even this equalitarian concept of delivery during extremely severe droughts. Water is then delivered according to priorities of community needs for the crops grown.

Another unique feature of the community of irrigators is the concept of "favor water." This feature is based upon the principle of collective responsibility and induced welfare economics. Although water rights are normally appurtenant to the land, water can be transferred temporarily to another's land, or another lateral if the latter is in need of the water, and the donor individual or lateral would not be caused undue harm as a result of the transfer. Restrictions on the implementation of this concept, however, do require that all effected laterals approve, that the recipient lateral be operating under a strict rotation system and that only lands with water rights receive favor water.

5. Relevance to Pakistan

Water user associations at the local level have greatly contributed to the development and effective utilization of available sources of water in Spain. As seen from the previous discussion, there is quite a range of organizational structures from the basic to the very sophisticated. The particular system of administration in Valencia has many attributes common to the rest of Spain, but an equally number of features unique to that fertile valley. The present system, although changed very little over time, has had the opportunity of centuries of experience of local control. It is this experience that is most useful to a country like Pakistan, where local administration of water is highly desirable to accommodate an extensive canal delivery network.

Again, the authors do not suggest an implantation of the Spanish or Valencian local water administration practices, but do contend the following points are relevant to the design and evolution of a system of water users associations in Pakistan:

a. The Spanish organizational system from the central government down to local organizations functions partly because of the accepted and ingrained philosophy of levels of administration. This practice is well known in Pakistan. Conceptually, both the needs of the irrigators in decentralized management and the government in at least monitoring the activities of local water use, can be met with the organizational base of the Spanish system. The hierarchy from communities to federations to confederations, in some form followed in many countries, has merit in Pakistan if the water development and management of the country is to be dynamic.

b. Focusing directly upon the water users association (community of irrigators), it is recommended that a social consciousness in the use of a public or state resource be generated. To initiate this philosophy, a policy statement, in new legislation creating water user associations, identifying the organization as a private entity (user control) with responsibility to the State to utilize the public waters and properties in the most effective and efficient manner possible should be adopted. The substantive provisions of the law can spell out how this policy effects the formation and operation of the organizations.

c. The Moorish infusion of many Moslem principles into the structure of the "community of irrigators" in Valencia and the Al-Andalus provides a link or basis of association for the Pakistani farmer. Perhaps this element may be as significant in terms of user acceptance, than major features of the organization.

d. In order to develop and maintain an enthusiastic attitude of the farmer to participate in the water user association activities, every farmer, regardless of size of holdings, wealth, location on the watercourse, landlord or tenant, or membership in caste group or baradri, must be able to participate. Several features of the community of irrigators enables this.

FIRST, the four basic concepts of the association enable local control and self-imposed management.[152]

1) An association's existence is justified by a need to deliver water to a specific parcel of land in a more efficient and effective way.
2) Concept of proportional distribution, practiced in Pakistan under the warabundi, theoretically favors no man, but rather provides to each irrigator a portion of water according to the size of the holding.

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[152]Quoting from Hall, p. 384, on the virtues of self-government, footnote 144, "It is not to be inferred from this, however, that local action and self-imposed regulation is all that is desirable in any irrigation district, for that which is good about the Valencia system has been dearly paid for by several centuries of wrangling and discord."

3) Concept of individual responsibility to community for maintenance of his part of the watercourse and duty not to waste water makes each irrigator unique and significant. Infractions may result in fine or nondelivery of water.
4) Concept of collective responsibility through internal organs of the association placed the capability and success of effective control and management upon the irrigators themselves. Association regulations can be adopted and amended to meet the changing conditions of the irrigators.

SECOND, decision making is functional, divided into three organs of the association (assembly, board and water court) for check and balance by the members of the association activities and resolving disputes.

THIRD, the composition of community is confined to landowners and tenants in the command area and only members who are actively involved in irrigation may hold office. In fact, the qualifications of becoming the "syndic" or President of the association makes it indispensible that he be a laborer of irrigated lands, i.e. that he actually works the fields and not just be the landowner.

FOURTH, an equitable representation on the board of directors (sindicato) from throughout the watercourse is fundamental to the protection of interests and rights in water of those irrigators located at the tail of the watercourse.

e. Voting privileges is one item of extreme importance in order to encourage participation in the decision-making process and protect the interests and rights of all water users. The system varies among the water users associations in Spain, from number of votes per person directly proportionate to size of irrigated landholding in the community, to one person/one vote for the working landowner or tenant. It is not suggested that either of these approaches be applied because of the obvious favoritism to either large holding landowners or multitude of small holding farmers. In the following section, the system in Argentina will be discussed as a more ideal and equitable approach.

f. One of the most unique features of the Valencian irrigation system is the Tribunal of Waters. This body, originating from the Moorish influence, is similar functionally to the jurga in the tribal areas of Pakistan. It is an institution in Valencia and throughout Europe, highly regarded for its equity and swiftness in resolving water problems. Its applicability to the needs of Pakistan would occur if water user associations are formed for each watercourse and federations created at the village and minor canal levels. Situated at the mosque, a "tribunal" consisting of the presidents of the common associations could resolve water disputes and problems in an oral, public, rapid and inexpensive proceeding.[153]

[153] Procedural details of the Tribunal are excellently explicated by Victor Fairess Guillen in El Proceso, Ante de Tribunal de las Aguas de Valenia, Valencia, 1974.

D. Water Users Associations in Argentina[154]

1. Introduction

Water law and administration in Argentina has been greatly influenced by the 1866 Spanish Water Law (as modified in 1879) and the form of local administration discussed in the previous section. Inclusion of the Argentinian system here is primarily to illustrate the variation with the internal regulations of the irrigation associations; the main feature of interest to Pakistan being the method of determining voting privileges.

In Argentina, the operation and problems of water user associations has never been the subject of a dynamic analysis. The studies have usually been made by lawyers or engineers, who limited their analysis to a formal description of legal instruments regulating the association or the physical delivery system; but no study reflects the social role of these institutions or their significance in the efficient use of water resources. But there is little doubt of their importance in such provinces as Mendoza where high cash value crops (grapes) are intensively grown under close allocation and control of water by the associations.

A major difference exists in the philosophy of water regulation between Spain and Argentina that is significant to Pakistan. The Spanish water law is a national system, a system with rights, duties and administration in water emanating from the central government. Argentina, on the other hand, is a federal country consisting of 22 provinces. Like Pakistan, water in Argentina is a provincial matter, and thus each province enacts its own water legislation and regulations over water entities. There are, of course, national government laws which are concerned with interprovincial waters, construction of water projects in provinces, and the Rural Code directing that in national territories where irrigation is practiced, water judges will be elected by the irrigators.

2. Local Water User Associations

The variations in climate and water supply conditions in Argentina, has influenced not only the substantive provisions of water law, but also formation of water users associations. But regardless of whether the province is in an arid or humid zone, the reason and function of the water associations, where they exist, is in relation to irrigation. They have no functions related to other water uses, i.e. flood control, drainage or water quality control.

The Provinces of Chaco, Chubut, Cordoba, Corrientes, Entre Rios, Formosa, Neuquen, Misiones, Salta, Santa Fe, Santiago del Estro, Tucuman and Santa Cruz either do not have laws or regulations regarding water user

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[154] This material is the result of conversations with Dr. Miguel Solanes, lawyer and water law specialist from Mendoza, Argentina, who is serving as a Research Associate, CSU, to the principal author for the International Conference on Global Water Law Systems project 1974-1975. Great appreciation is expressed to Dr. Solanes for reviewing the bibliographical material in preparing notes for this section.

associations or the "association" has not been an effective instrument in local water use. The remaining nine provinces have adopted laws and regulations of various configurations. Each province is discussed separately.

Catamarca Province: The system is contained in the Laws 594 (1896), and 655 (1900). The Law 594 requires the irrigators to constitute an "Irrigation Commission" in the Departments (counties) in which there are more than ten irrigators. The Commissions have to have three members, elected by the irrigators. In the districts of irrigation in which there are less than ten irrigators, one "Commissioner" has to be elected, instead of a Commission.

The purpose of the "Commissions" is merely consultive. The commissioners can adopt their own regulations to establish the conditions that members of the Commission have to fulfill in order to be elected. These regulations must be approved by the Governor of the Province. The Commissions prepare their yearly budget; they also nominate and appoint their employees. They have the power to establish the timing in the water distribution to each user. The hours at which the user will get the water, not the time during which the user will get water.

The Province of Jujuy: This Province has enacted complete regulations for water users associations which date back to 1950 and is contained in the Law No. 161. The associations, called "consortiums", are considered to be public service institutions, whose task is to encourage the rational and efficient use of the water. They could be related with all the possible uses of the water. They can be formed by special requests of a user or group of users or by administrative directive. They are not imposed by legislation, like in other provinces in which a person becomes a legal member of a water association without any possibility to renounce membership.

There is a procedure to analyze each request upon case per case basis, and the constitution of each association is ordered by decree of the governor of the province. If a person is included in a consortium against its will, he/she can appeal to the courts. Each association enacts its own statutes, which should be approved by the governor. The statutes should determine the contributions of each member, and the lands that will be in the territory of the consortium. They should also determine the criteria to distribute expenses between the members of the consortium.

The organs of the consortium are the assembly (all the members), and the Directory (elected by the assembly, it is the executive organism). The conditions to be elected member of the Directory is part of the consortium statutes.

The contributions to the consortium have the status of public charges. Associations can be fused into others and it is possible to make an association or associations.

In practice, no association has been formed under the Law 161/1950. There exists two "de Facto" associations in the whole province.

La Pampa Province: La Pampa Province established obligatory membership in water associations. The membership is acquired by the use of the

waters of an irrigation canal. The users associations have to determine what kind of investment should be made in order to maintain and to improve the irrigation canal, as well as the criteria to distribute the costs between the users. The law that regulates the associations is the Law No. 2518 from 1960.

La Rieja Province: This Province had ancient associations (de facto ones) that encompassed the users of waters of Los Sauces River Basin. By Law No. 11435, the associations authorized to construct water works in cooperation with the government of the province, and after works are finished, the maintenance costs of them should be borne by the water users. The system has not worked and water project costs are all paid by the government, which also administered them. The associations are directed by a "Junta de Delegodos e Inspectores," which operates the secondary canals. The main canals are operated by a junta, integrated by the Inspectors of the secondary canals.

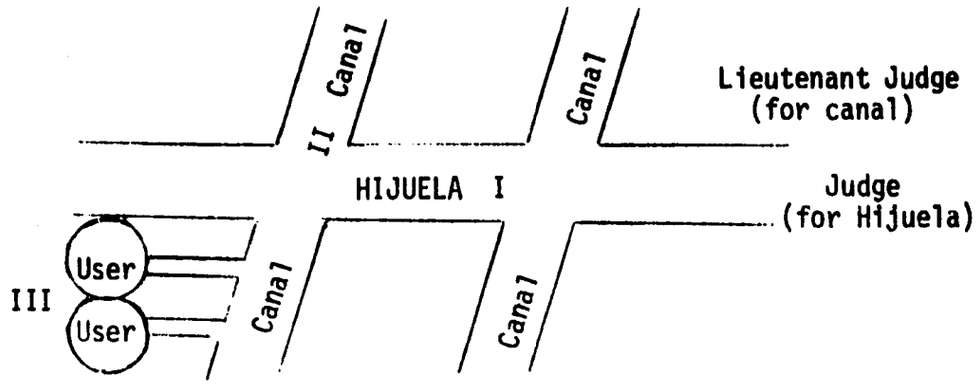
Mendoza Province: Mendoza in the most irrigated Province of Argentina. Irrigation and water control works began in Mendoza in the 1600's. (The city of Mendoza was founded in 1561.) Several decrees and regulations of water, of historical interest, exist in the water legislation of this Province up to 1884, the year in which the actual water law was enacted. (The model was the 1866 Spanish water law as modified in 1879.)

Before the Law of 1884, users associations existed and their functions and faculties were established in laws and regulations. They distributed waters, executed water works, raised funds from their members to pay the common expenses, and could solve conflicts among its members. They were formed "deiure propio," and by the sole fact to be a user of water delivered by a particular canal, a person acquired membership in the association. The highest position in the community of irrigators was held by the Judge of the "hijuela" (canal). The community was formed by all the persons using the canal, who once a year, each year, elected the Judge.

Up to 1877 the vote of all persons had the same value. The system was based on "per capita" votes. In 1877, the system was changed, and the votes were no longer "one person-one vote" but "one person-variable votes." The number of votes that a person had varied with the amount of hectares owned by the person. The maximum were 20 votes, for the owners of big land extensions.

The decisions of the Judge of the Hijuela could be appealed before the "Juez General de Aguas" (General Judge of Waters). The orders of the Judge of Hijuela were carried out by the Lieutenant Judge of the Hijuela. There was one of them for each canal starting in the hijuela.

Graphically, it would be:



In 1884, the system was changed. The name of the water judge was changed to "Inspector." The Inspector was elected by the irrigators of each canal. It was necessary that at least one more than half of the irrigators of each canal concurred to the act of election (if there were 100 irrigators on a whole canal, 51 should go to vote). And, in order to get elected, a candidate should get at least one more than half of the votes of the present members (if of the 100 members, 60 were present, the candidate should obtain 31 votes).

If the election did not take place, the Inspector was appointed by the administration.

The Inspector receives the water necessary to supply the water rights depending on his canal, and to distribute it. He communicates to the Superintendent all irregularities noticed in the system under his authority. He was also compelled to obey all the mandates and special commissions ordered by the Superintendent. He could designate employees to help him. In the original text of the law, they were helped by three delegates, which were in charge of contracting the maintenance works of the channels. The cost of these works was distributed among the irrigators in proportion to the amount of land each one irrigated.

In 1889, the law was modified: The Inspectors were given judicial functions suppressed by the 1884 law. They were in charge of the canal's administration, and the irrigators of the canal elected them. Each irrigator had votes in proportion to the amount of irrigated land he owned, and the maximum of votes was 15 – disregarded the extension of land owned.

The Inspectors prepared the budget of each canal, and then distributed the cost in the same form that was used under the 1884 law.

There were also three delegates, when the canal supplied more than 300 hectares, who were also elected by the irrigators. They contract the maintenance works and prorate costs between the users. The Inspectors, as well as the delegates, were under the authority of the Irrigation Department.

The Constitution of 1916 (which is today in force) established that the irrigators of each canal have the right to elect their authorities, as well as to administer their own budget and rents, notwithstanding the right of the Irrigation Department to control the management that the association make of the money.

The present name of the association is "Inspecciones de Cauces." The law determines all the functions and powers of the association.

The "Inspectors" serve for one year. They must have land in the area irrigated by the canal. A tenant can be Inspector. The Inspector must live in Mendoza Province and he/she should not owe any money in concept of water taxes, or water charges. The vote for inspector can be made through a proxy. If no election is held, the Inspector is appointed by the Department of Irrigation.

The main functions of the Inspectors have remained unchanged through 100 years: They control water distribution, take care of the canal maintenance, distribute costs among the irrigators, and solve "de facto" problems between the water users. The decisions of the Inspectors can be appealed before the Administrative authorities of the Irrigation Departments.

The Inspectors should keep a system of accountability, and the books are to be presented to the newly elected Inspector. The books are also to be submitted to the Irrigation Department.

Presently, the Inspector does not collect the contributions of each user; they are collected by the central offices of the Irrigation Department. But the Inspector prepares the budget of each year, and indicates how much each irrigator should pay. He makes investments and submits his accounts to the Department for approval.

The system functions very well and there are about 500 Users Associations in Mendoza.

Rio Negro Province: In Rio Negro Province, the Superintendent of the Direction of Waters can be elected by the water users, as established by Article 47 of the Constitution of the Province. Water user associations are regulated by the Law No. 268, 1962.

There are two forms of water associations, "de facto" associations, and "de jure" associations. The "de Jure" associations can be created by private initiative or by administrative requirement. In the latter case, the order can be "ex oficio" or upon petition made by a user to the Director of Waters.

Members of the community use the same canal. The association determines, each year, the costs of construction, exploitation, and conservation of water works. These costs form the budget of the association, which is financed through contributions of the water users. The consortium has the right to establish its own statutes, as well as the procedures to elect its authorities. Both should be approved by the administration. The executive organ is the Directive Commission which can enforce its decisions against dissidents. Decisions regarding financial charges can be appealed before the Director of Waters.

Associations of consortiums can be formed, which are called "Associations of second degree."

The "de facto" associations are named "Communities" and members designate a "Compartidor," who is in charge of the distribution of water among the members of the "community." He is in charge of administrative decisions, which can be appealed before the Direccion of Waters of the Province, and administers the budget of the community.

San Juan Province: In the Province of San Juan, the authority of water user associations is contained in the Water Laws No. 1866 (1942), and No. 57 (1957).

The consortiums should be formed in all canals, or groups of canals, that supply water to more than 300 hectares. The minimum of irrigators necessary to form a consortium are six concessionaries.

The association is called an "Irrigation Commission" and is managed by three members, elected by the canal irrigators. To insure equal representation on the Commission, the canals are divided into three areas, and each member of the Commission represents the irrigators of the area from which he was elected.

The members vote on issues significant to the operation and management of the association. The number of votes each irrigator has is proportional to the number of hectares under irrigation that he possesses but on a graduated basis. The maximum amount of votes is ten. In canals not irrigating at least 300 hectares, or not having at least six water users, one person is elected, instead of the Commission. The Commissions have to perform the same functions that the "Inspectors" perform in Mendoza. The Commissions are integrated in "Juntas Departamentales" (County Boards), whose members are elected by the members of the Commissions. These Boards have also three members, and are in charge of the maintenance of secondary canals, while the "Commissions" are in charge of tertiary canals. They fix the time at which each tertiary canal should receive water.

The system of San Juan Province is very effective.

San Luis Province: In this Province the user associations do not have executive powers, they are only consultive bodies, managed by six water users. This board is elected by water users registered in the Direction of Waters Files. The Board membership lasts two years and they represent the upper, the middle, and the lower part of the watercourse. Each water user has one vote, without regard for the number of hectares he might have. The commissions can recommend, to the Direccion of Waters, the works that should be done, as well as to recommend how the costs should be distributed.

Buenos Aires Province: Buenos Aires Province is a special case of user associations in a humid area. The associations are regulated by law No. 5962. It requires that irrigators should contribute to the maintenance and conservation costs of the canals, in proportion to their water rights. The association functions are performed by "de facto" institutions which do not subject themselves to the law.

3. Conclusions

Argentina offers a wide variety of water user association systems, with the most successful being the systems of San Juan and Mendoza. They are simple organizations, based on the physical reality of an irrigation canal. Creation is imposed by law, and membership cannot be renounced. The organizations do not have many functions, on the contrary, their functions are few, and relatively not complex, but their performance is essential for the management of the whole system of water distribution. The state determines the faculties, functions, and duties of the associations' members. The associations have executive functions and are considered to be public institutions.

In most of the other provinces of Argentina, the systems are much more complex and usually they exist only in the laws, without effective performance of functions in practice.

An element that should be pointed out in Mendoza and San Juan, is that tenants are allowed to be part of the user associations, as well as to be elected an authority. The system of land tenure of both provinces also encourages tenant diligence because he gets a share of each year's crop, and not a salary. As the crop is directly related with water availability, the tenant, as well as the owner, is very diligent in all water related activities, including water associations. (The share is about 20 percent, all the costs are paid by the landowner, with the exception of labor animals, when used.)

The main differences between the water user associations in Argentina and those of Spain are the internal organs for conducting association activities and the voting rights of members. The graduated system of determining voting rights is one strongly recommended for any water user association formed in Pakistan to provide a basis for equity among the members. The geographic distribution pattern of association officers is likewise strongly suggested in Pakistan.

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E. Local Water Organizations in Turkey

1. Conditions of Agriculture

There are a number of reasons for selecting Turkey in laying out a spectrum of organizational possibilities for on-farm water management in Pakistan. Perhaps the most important are the common characteristics of the two nations: arid to semi-arid conditions; commonality of religion and consequencial influence upon the relationship between man and the natural resources and a predominantly agrarian society.

Turkey is likewise a country with tremendous potential for increasing agricultural production and has undertaken an extensive effort to do so since the 1950's. Commenting on the general problems of agricultural production in Turkey which has precipitated many current and proposed changes, Messers. Sayin and Yegin[155] summarized the reasons as:

a. Inadequacies in some irrigation systems and consequently the need for rehabilitation for overcoming these shortages;

b. The fact that the landholdings are scattered and very small;

c. The fact that some of the holdings have not been registered and difficulties are encountered in developing activities where land registration has not been completed;

d. Difficulties encountered in making the farmers organize;

e. Difficulties in convincing the farmers to abandon their wrong habits of irrigation.

Many of these same reasons adversely effect agricultural production in Pakistan.

Irrigated agriculture in Turkey entered a radically new phase after World War II when the State became involved in irrigation development. Prior to 1949, there were 2,158,775 acres under private irrigation and only 99,570 acres irrigated by state owned works. By 1968, the total area placed under irrigation increased to 4.26 million acres with a slight increase to 2.47 million acres under private farmers and local organizations and a nearly doubling of acreage to 1.79 million acres from state constructed irrigation systems.[156] As of 1971, there has been an increase in state developed irrigation systems to 2.03 million hectares.

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[155] Sayin, Sabahattin and Yegin, Hüseyin, "The Organizations Concerned With Water Resources and Problems of Coordination in Turkey," Proceeding: International Conference on Water for Peace, 1968, Washington, D.C.

[156] Framji, K. K. and Mahajan, I. K., Irrigation and Drainage in the World, 2d Ed., Vol. II, 1968, "Turkey," p. 1096-1097.

The sources of water supply for irrigation is 60 percent from reservoirs, 36 percent from diversion dams and 4 percent from wells.[157]

In light of the nearly doubling of irrigated lands since 1949, it is estimated that with newly discovered groundwater and improved utilization of surface supplies, 21 million acres of land can economically be irrigated.[158] This potential of meeting food and fiber requirements for its people has been a major impetus to change in the institutional and technical parameters of agriculture in Turkey. The administration and management of water by the Government and at the farmer level, characterized by cooperation and coordination of activities among related organizations is of primary importance to successful optimizing this potential.

2. Water Laws and Administration

The formal water law of Turkey has experienced a revolutionary change consistent with the pre-1924 and post-1924 political evolution. Turkey, predominantly a Moslem nation, experienced the total infusion of religious principles into nearly every aspect of social activity prior to 1924. The Shari'a canon law was enforced until 1876 when the civil law of the Ottoman Empire was first codified and called the Mejelle (Mejelie-i Ahkam-i Adliyye). This codification based on canon law regulated the private matters of Turkish citizens including water. Waters in their natural state, whether ground or surface, remained common property, freely acquirable by members of the public. However, once "acquired" or placed under the direct control of the capture, water becomes the property for use of the individual and others may not demand equal rights in it. These principles are consistent with the traditional Moslem water law concepts of common property of certain fugitive natural resources and equity in use by society.

On April 8, 1924, the Seriat (religious courts) were abolished and on April 20, 1924 a new republican constitution for Turkey was adopted. Article 130 of the constitution set out the basic principle for water rights under the modern state, declaring state "natural wealth and resources are under the jurisdiction and disposal of the State." This principle differs very little from the Mejelle, except that water use is now a matter of public law instead of private law and regulation is centralized in Specialized public agencies. All subsequent laws must be in conformity with this constitutional provision. On February 17, 1926, the Turkish Civil Code was enacted ending Muslim family law and superceding the Mejelle (Appendix 5). As a result of Ataturks reforms, a secular state was created which prohibits the exploitation of religion for political purposes and forbids any attempts to base official government orders upon religious principles.[159] Of course, the rural life far removed from Turkey's main cities is still very much centered around the Islamic beliefs and it is not possible to say that even among common water users, the underlying philosophy is not inherently Moslem.

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[157] Ovayurt, Kenan, "Water Resources Administration in Turkey," Interregional Seminar on Current Issues of Water Resources Administration, New Delhi, India, Dec. 1971, ESA/RT/Meeting V/Country Report No. 11., p. 4.

[158] Id., p. 1.

[159] Encyclopedia Americana, Vol. 27, Turkey, 1972.

Since 1926, many laws have been enacted regarding rights, distribution and administration of water, particularly community supplies. The supply and management of water for utilization by the public in cities, towns and villages are entrusted to municipalities.[160] The responsibility for maintenance and repair of waterways and sources of water belongs to these municipalities even if the source of the supply system lies beyond the municipality's boundaries.[161] It should be added that the costs of installation, the operation of these water systems is also borne by the municipalities.[162] These costs are passed on to the individuals of the municipality on a pro-rata basis.[163] The landowner may contribute manpower as part of his payment[164] and the assessment may be challenged if done within seven days. The challenge is made to the executive board, whose decision on the matter is final. Those persons using a water system before it was transferred to a municipality or those persons' beneficiaries, may continue to use the system with no obligation to pay thereafter.[165] Though ownership of the surface waters rests with the municipalities, it is the Prime Minister, the Minister of Interior Affairs, and the Minister of Health and Public Welfare who are charged with the functions of implementing the above provisions.[166]

Perhaps the most significant water legislation is Act No. 167 relative to groundwater (see Appendix 5). This act subjects all groundwaters to state ownership and imposes licensing requirements for exploitation and use of groundwater.[167] However, it does permit a limited amount of extraction and use by individuals (the landowner in Turkey) without special authorization. This Act states that as and when the limits and characteristics of groundwater deposits are determined, they shall be incorporated into the public domain and shall be classified as "exploitation sectors."[168] Whoever sinks a well in a groundwater exploitation sector shall be authorized to withdraw from it only so much water as is absolutely necessary for his own "suitable purposes."[169] Outside the limits of the exploitation sector, the fieldowner has the right to prospect on his own land and to use the groundwater he has discovered in quantities no greater than are required for his "suitable purposes."[170] However, if his excavation exceeds

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[160]Act No. 831 of 1926, Art. 1.

[161]Act No. 2659 of 1934, Art. 1.

[162]Act No. 831 of 1926, Art. 4.

[163]Act No. 2659 of 1934, Art. 5.

[164]Id., Art. 6.

[165]Act No. 831 of 1926, Art. 7.

[166]Act No. 831 of 1926, Art. 9 and Act No. 2659 of 1934, Art. 11.

[167]Act No. 167 of 1960. Art. 1. This significantly modified the position of earlier legislation giving the muncipalities ownership (see Act No. 831 of 1926 and Act No. 2659 of 1934). Moreover, the position of state ownership is reminiscent of the position taken by the Royal Register No. 14 dated 1583: "Water is not the property of anyone. Selling it is a violation of the law."

[168]Turkey, Groundwater Regulations of July 20, 1961, issued under the auspices of Act No. 167 of 1960, Art. 3.

[169]Act No. 167 of 1960, Art. 4.

[170]Id., Art. 5.

the depth limit set by the administration or if he brings water to the surface by horizontal or inclined galleries or tunnels, he must obtain a license.[171]

For the purposes of the Act, groundwater is defined as "all kinds of water under the ground, smooth or moving,"[172] while a ground reservoir is "the strata of crust which carries a groundwater; in case water is drawn from any point of the strata the whole reservoir is affected."[173]

The person requesting a license for usage applies directly to the office of the General Directorate of State Hydraulic Works in his district.[174] All licenses granted will be registered with this office.[175]

Those who fail to comply with these licensing requirements are fined between 500 and 3,000 T.L. Moreover, the well may be closed and the costs resulting from these operations are assessed to the owner.[176]

Thus, in Turkey water resources are under the control of the State and subject to the rules and regulations adopted for allocation, distribution and administration. Ovayurt notes that as of 1971, the real problems in effective administration eminates from a failure to adopt rules for determining the status of water rights and maintaining a water registry, hence preventing effective coordination among related organizations and users.[177]

Administration of water resources is primarily carried out by three organizations: the General Directorate of State Hydraulic Works (DSI), the General Directorate of Soil Conservation and Farm Irrigation (TOPRAKSU) and the General Directorate of Agricultural Affairs. The agencies maintain a central office in Ankara and regional field offices throughout the country.

The primary objective of the DSI is to "perform the necessary services for the prevention of damages caused by surface and groundwaters and to utilize these waters in various ways with main duties: To build and operate facilities of flood control, irrigation, drainage, and hydroelectrical power production and to make the streams navigable; to study, approve and supervise the water supply and sewerage plans prepared for cities; to make various kinds of investigations and feasibility studies in relation to the above activities; to collect data required for these studies and to build and operate stations for this purpose."[178] Regarding irrigation, the DSI is charged with duty of developing and constructing structures and canals which have a discharge of more than 17.1 cusecs and the major drainage system.

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171 Id., Art. 8.
172 Id., Art. 2.
173 Id.
174 Id., Art. 13.
175 Id., Art. 15.
176 Id., Art. 18 (a) (b).
177 Ovayurt, p. 8.
178 Sayin, p. 2.

TOPRAKSU is a relatively new organization, created in 1960. The general duties of this organization are: Soil and water conservation on agricultural lands, development of small water resources (which have discharge less than 500 litres per second) for irrigation; preparation of land for irrigation through land levelling and farm drainage; teaching the farmers the modern irrigation methods; land consolidation; reclamation of saline, alkali, acid, stony and peat lands; improvement, restoration and development of the areas covered with wild dives, carobs, mastics, brush lands, maquilands and natural pastures."[179] Among the most important functions is the authority to encourage farmers to organize into cooperatives for operation and maintenance of small irrigation schemes. DSI and TOPRAKSU are required, by their scope of authority over volumetric and discharge structures, to work closely together. The mechanism is well established to facilitate an efficient diversion, delivery, and removal of waters from the main sources of supply to individual user. Further, the organizational compositional placing the DSI in the Ministry of Energy and Natural Resources and TOPRAKSU in the Ministry of Village Affairs, insures the traditionally technical concerned water officials and the rural and farmer oriented officials a place of equal voice at the top government level. It is presumed the TOPRAKSU personnel would be more involved with on-farm water needs and constraints and represent these positions in the governmental hierarchy. This capability of farmer representation at regional (provincial) and national levels is a feature highly recommended for Pakistan.

The third agency, the General Directorate of Agricultural Affairs in the Ministry of Agriculture, is not directly concerned with water control and management, but rather those agronomic and production activities necessary to move beyond subsistence farming. Several other agencies, such as the General Directorate of Rural Electricity, Road and Water Supply and the Agricultural Bank (which also extends credits for irrigation, drainage and flood control) are likewise important organizations. Figure 5 is a schematic representation of the Turkish water agencies and activities.

3. On-Farm Water Management

Turkey, like other nations in the Middle East and Asia, has a well established "traditional system of associations" between farmers in local irrigation systems. The village elderman's committees include concern over water control and collection of irrigation fees. In the last century, more formalized associations developed, such as cooperatives, water-users' unions headed by village majors and capital investment companies.

These associations, however, have not met the needs of Turkey's growing population. These lacked the incentive for farmers to genuinely organize and participate in expanding irrigated agriculture or managing the government developed projects. Attacking this problem directly, the first five-year plan (1963-1967) set as a top priority the development of land designed for irrigation under government constructed projects by requiring villagers to organize into irrigation cooperatives. The plan included a directive to the Ministries of Agriculture, Public Works, Justice and Interior to prepare legislation implementing this objective.

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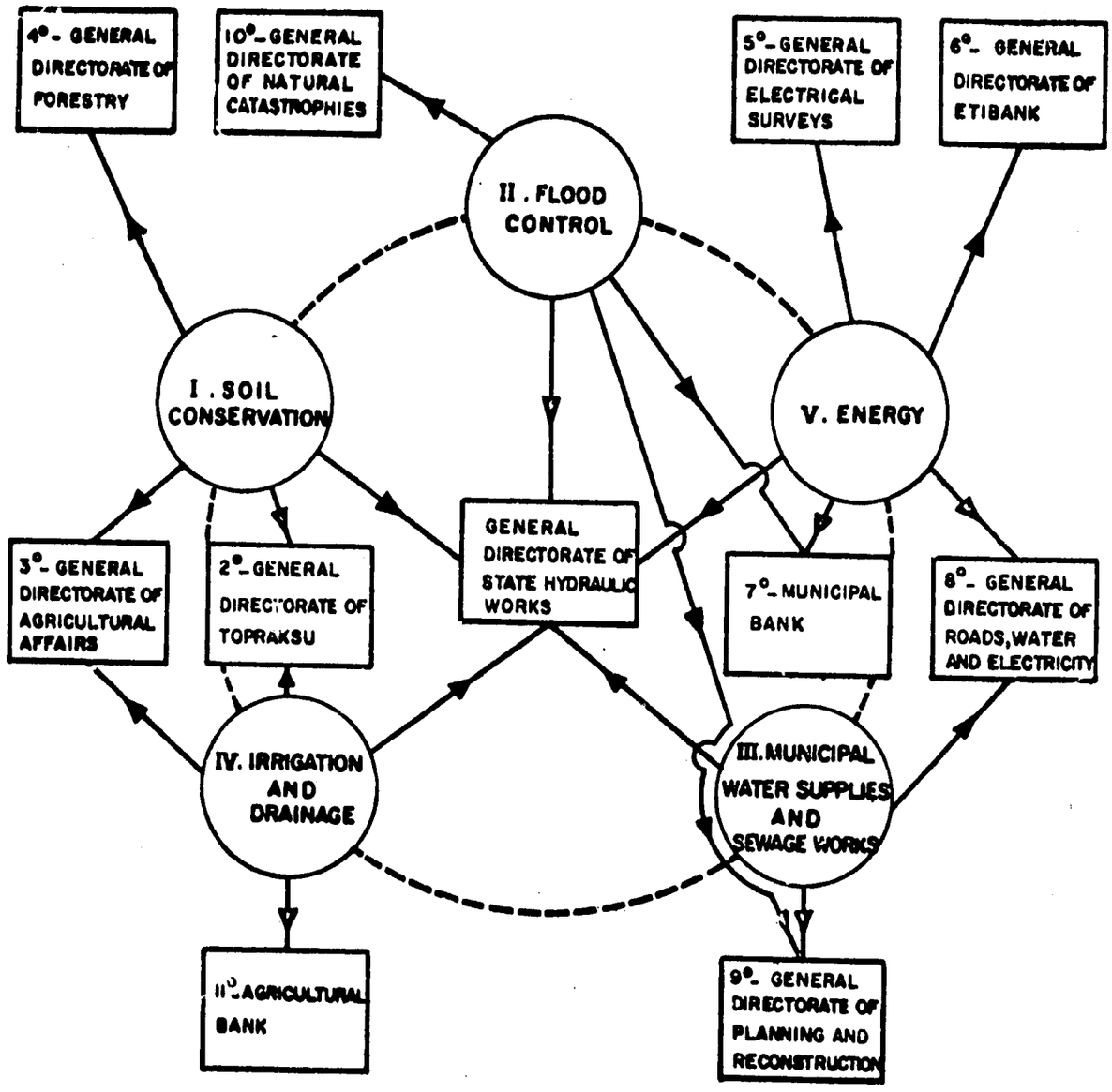
[179]Framji, P. 1106.

Figure 5

THE AGENCIES IN TURKEY PRIMARILY CONCERNED WITH THE ACTIVITIES FOR THE DEVELOPMENT OF WATER AND RELATED LAND RESOURCES



From S. Sayin and H. Yegin, "The Organizations Concerned With Water Resources and Problems of Coordination in Turkey," Water For Peace, Vol. IV., Washington, D.C., 1968.

○ KINDS OF ACTIVITIES

□ RELATED AGENCIES

Accordingly, a proposed law for the establishment of "Soil and Water Resources Development Cooperatives" was prepared by TOPRAKSU to provide the organization framework for farmer cooperation in improving irrigated agriculture.[180] (See Appendix 6 for translation of the law). The objective of the draft law is to organize the farmers into soil and water development units which can undertake studies, research, prepare projects, undertake construction and operation, and rent, take over, or own movable and real property. The organizations will be called TOPSU cooperatives.

To initiate creation of a TOPSU cooperative, at least seven landowners in a particular area must submit a written application to the Governor of the province. The application provides the details on size and members of landholdings, type of project to be undertaken or operated, etc. If provincial officials find the plan sound, it is submitted to the landowners of the area for approval. If landowners owning two-thirds or more of the land in the project area approve the plan, a cooperative is established. There must, however, be at least 20 members in the organization.

Each member has one vote regardless of the size of his landholding, and in the case of jointly owned property, only one vote is allowed to be cast by a partner or representative.

The organization is operated in a manner similar to other cooperatives, with perhaps a little less formality and required paper work. A General Board consisting of all the cooperative members and a five man executive committee elected by the General Board for two years are the two organs of the cooperative. The executive committee is charged with daily operation and administration of the cooperative. If disputes arise within the cooperative that cannot be settled in a General Board meeting, then the provincial board of administration is requested to resolve the conflict.

The proposed law contains financial provisions, including government assistance, special funds and revenue collection, calls for a land survey, covers crimes and security within the area, and most important prohibits cooperatives from becoming involved in politics.

Although the cooperative is administratively connected to the provincial board of administration TOPRAKSU is the government agency principally responsible for encouraging the formation of TOPSU cooperatives and providing technical assistance and the direct link, through the Ministry of Village Affairs to the highest levels of Government.

At the time the proposed law was submitted to the National Assembly, the following expected benefits from TOPSU cooperatives were identified:

a. Develop agricultural resources, prevent waste of these resources as well as manpower.

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[180]The authors have not been able to ascertain the status of the proposed law, however, its application as an example in this exposition of alternative schemes is considered relevant to Pakistan.

b. Assure maximum benefit, especially for small farmers, from services and facilities.

c. Assure more productive work from people through Government guidance.

d. Assure greater efficiency and economy in various services and installations.

e. Assure people's participation in projects and investments by encouragement. guidance and assistance, and help adoption of rational and efficient methods.

f. Assure suitability of services and installations to local structure and needs.

g. Reduce cost and increase production through encouragement of cooperation among small farmers.

h. Prevent clashes between farmers and eliminate factors which handicap increase of production.

i. Assure protection of Government-built installations and their proper maintenance and longevity.

j. Encourage farmers to solve their problems with their own means through education, Government support and technical assistance.

k. Assure efficient operation of Government-built irrigation networks and irrigation of the entire area which was anticipated in the original plans.

l. Take measures jointly with the farmers and construct needed installations to make best use of the waters obtained from Government irrigation systems, and prevent damages of inadequate irrigation.

The objective: "The attached proposed law is prepared to assure through TOPSU Cooperatives development of soil and water resources, to obtain maximum benefit from per unit land and manpower, and to assist Government in fulfillment of its responsibilities vested by Articles 36, 37 and 52 of the Constitution."[181]

Pakistan has many water user needs in common with the farmers of Turkey. The proposed program in Turkey clearly illustrates one approach sponsored by the national government to improve irrigation management and increase water use efficiency through a quasi-public organization. The cooperative may also be a desirable approach to on-farm water management in Pakistan, if many of the same underlying municiples are applied. They are:

a. Separate cooperative for water resources and soil improvement which enables the entity jurisdiction to be dictated by the water service area, thus preventing a disinterested membership.

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[181]Unidentified statement, translated by Ekrem Dorukman, USAID, April 1968.

b. Channel of communication from the water user to the top level of government.

c. Nonpolitical involvement of the organization.

d. High degree of flexibility in undertaking water and related irrigation projects.

F. Water Laws and Irrigation Associations of Taiwan

1. Introduction

Taiwan is a humid, subtropical nation with only 25 percent of its total 35,961 square kilometers under cultivation. Since almost the entire population depends upon rice, this crop is the predominant interest where irrigation is possible.[182]

There is little similarity between the agricultural needs and conditions of Taiwan and Pakistan, as compared to the common features between Pakistan and the Western U.S.A., Spain and Turkey. However, in this report on alternative water user association schemes for Pakistan, Taiwan represents an entirely different system than found in the other countries discussed. Further, the system in Taiwan illustrates the evolution of a highly sophisticated organizational network, created out of an absolute need to maximize the limited land resources and abundant water supplies to meet the demands of a large population.

2. Water Law[183] and National Administration

Water of Taiwan is a state resource regardless of the ownership of land. (Art. 2) As such, control over the water resources is a national subject with authority to the central government to establish water conservancy areas along hydrologic boundaries to assist in the implementation of the law. Rights to the use of water is granted to an applicant after a complex procedure of form filing, hearings and assurances that others will not be adversely affected. (Art. 15 to 41) One aspect of the water right relevant to Pakistan is the opportunity for joint users of water to file an application as co-holders of the right. (Art. 31) The system of water rights is not directly applicable in Pakistan, except for the possibility of implying a water right appurtenant to a serviced watercourse. Priority of right is applied in the Taiwan law when scarcity of supply occurs. (Art. 20)

An important provision of the water law is Article 12, which provides for creation and approval by the central conservancy agency of a farm irrigation association "to undertake and develope farm irrigation works." The

[182] Ko, Hai-Sheng and Levine, Gilbert, A Case Study of On-Farm Irrigation and the Off-Farm System of Water Delivery in the Chianan Irrigation Association, Taiwan. Report for Seminar on Management of Irrigation Systems for Farm Level, A.O.C., Inc., Cornell Univ., Ithaca, N.Y. 1972.

[183] See Appendix 7 for an English translation of the Water Law for the Republic of Taiwan.

law further provides that such associations shall be public entities with authority to develop their own regulations unless specified in other laws of the nation.

3. Irrigation Associations

The irrigation associations of Taiwan are distinctly different from the water user associations of the other countries discussed. This distinction is in the size of the command area under the association and level of involvement with the water user. There are 26 irrigation associations in Taiwan, with the largest (the Chianan and Changhua Irrigation Associations) managing an area over 50,000 hectares. Five associations command an area between 20,000 and 50,000 hectares, three manage between 10,000 and 20,000 hectares, nine control areas between 5,000 and 10,000 hectares and seven manage irrigated lands of less than 5,000 hectares. As of 1964, the associations collectively managed 505,326 hectares. Based upon comparable sizes, the Irrigation Association of Taiwan is similar to the irrigation districts in the U.S.A. However, the internal organization is complete and very functional.

The government initiated a program in 1922 to combine government and public constructed canals under the management of Hydraulic Associations with the purpose of bringing the farmers more directly into the responsibilities of irrigation management.[184] In 1945, the Hydraulic Associations were reorganized into Irrigation Associations with the major change being the introduction of the period of self-management by the water users, a very significant milestone in the history of irrigation enterprises.

The association is a self-governing corporate body organized by farmers to administer the irrigation facilities, construct irrigation works, distribute water, assist in planning new water projects and serve as the direct mechanism for operation of a repayment program. They may be created at the determination of the provincial agency in charge when economic benefits and water use efficiency require the mandatory action, or action to organize can be initiated by 50 or more qualified potential members. Specific rules governing the organization of the associations were enacted by presidential decree. These appear as Appendix 8 of this report.

The association consists of two major bodies, the policy making body and executive body (see Figure 6). The former is the representative assembly whose size varies from 15 to 55 according to command area of the association. The association members elect the representatives for a four year term. Two-thirds of the representatives must be farmers from the area. The assembly meets twice a year to decide issues relevant to the entity's functions.

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[184] Much of the discussion on the irrigation associations is taken from two papers by L. T. Chin, Land and Water Development Division, FAO, entitled, "Irrigation Associations" and "Management, Operation and Maintenance of a Completed Project," presented at the FAO/UNDP Regional Seminar on Measures to Accelerate Benefits From Water Development Projects by Improving Irrigation, Drainage and Water Use at the Farm Level, held in Manila, Philippines, 7-16 Oct. 1970.

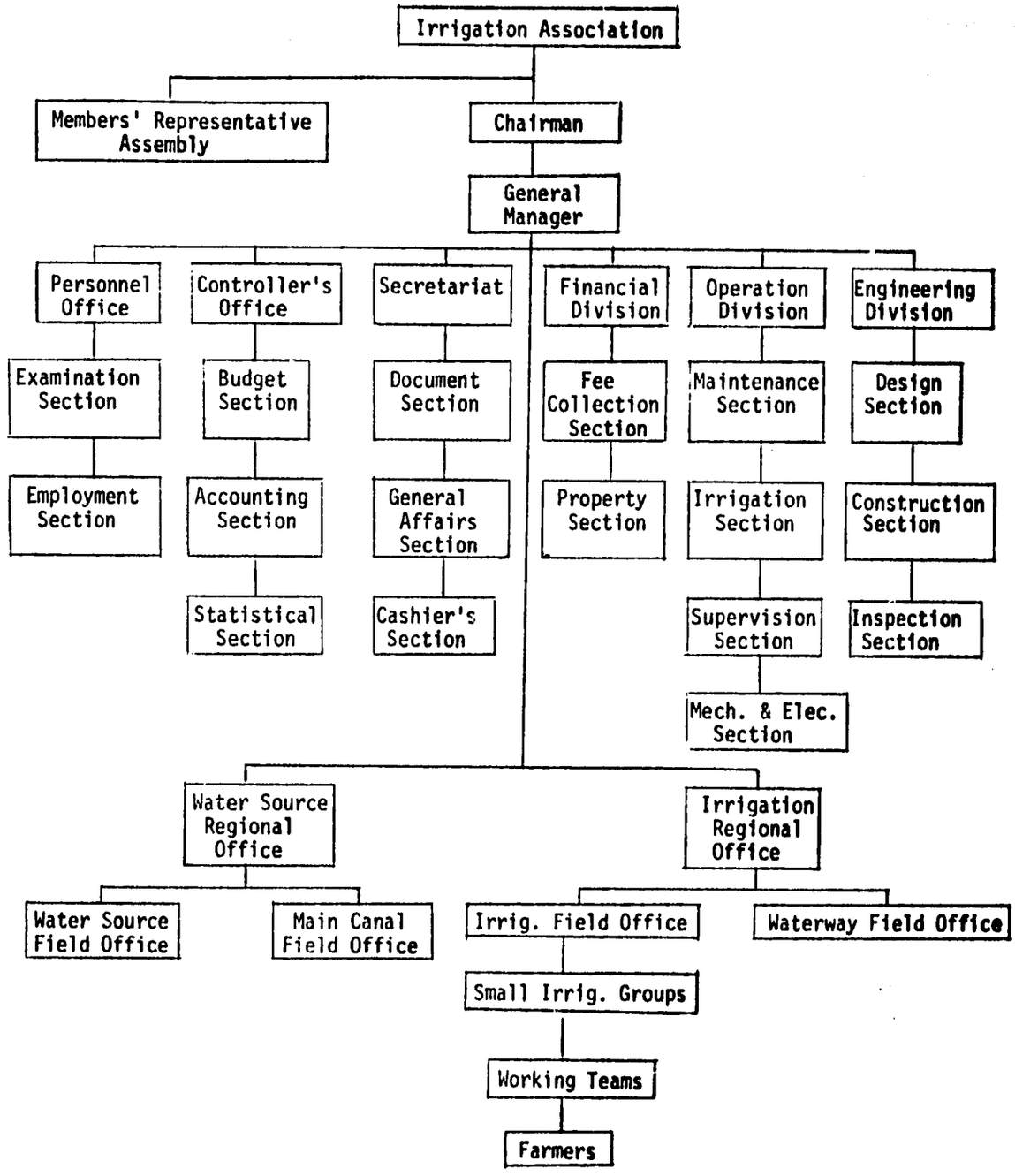

Figure 6. Organizational Chart of an Irrigation Association (Taiwan, Republic of China).
Source: Chin, see footnote 184.

Operation of the association is carried out by the executive body which consists of three levels of administration: head office, regional offices, and field offices. The head office is the nucleus of the organization, made up of a chairman, general manager and staff offices in the engineering, financial, personnel, controller, operation and general secretariat. Figure 6 illustrates the extensive composition of the largest associations in Taiwan. The structure is simplified as the area under control decreases as shown in the following table:

Size of Project	General Guide for Organization Simplification
1. From 50,000 ha to 20,000 ha	Sections under Controller's and Personnel offices can be eliminated.
2. From 20,000 ha to 10,000 ha	Inspection Section from Engineering Division, Maintenance Section from Irrigation Division and Accounting Section from Controller's Office can be eliminated as well as those in (1) above.
3. From 10,000 ha to 5,000 ha	Engineering Division should be put under Operation Division as a section and the section under financial division eliminated as well as those in (1) and (2) above.
4. Below 5,000 ha	Sections under Operation Division and Secretariat are to be eliminated as well as those in (1), (2) and (3) above, the Controller's and Personnel Office are reduced to one accountant and one personnel officer, respectively.[185]

Regional offices are of two types--water source and irrigation, but in projects under 50,000 hectares, the regional office is eliminated. The field offices are the working stations and are divided into waterway and irrigation offices. In small projects, these field offices may be condensed into a field water source office, but in all cases irrigation field offices are formed. This latter office is in direct contact with the irrigators and is the most important communication link of the association.

Association members form irrigation small groups around 50-150 hectares that operate with working teams of 10-15 farmers elected by the members for four year terms. In addition to collectively working directly with the irrigation field office, this level of organization is responsible for operation, maintenance and repair of the irrigation and drainage network, water management, establishing common seedling beds, and construction of minor laterals and diversion works.

The entire hierarchy of the irrigation is made up of water users, with the exception of technicians and other specialists. Officials and representatives of the association are elected by the members according to the level of activity in which they participate.

The membership is a key feature of the association since the basic philosophy for their creation is to stimulate farmer involvement in the

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[185] Id., p. 238.

decision-making process of national water use. Any person living in the jurisdictional limits of the entity who is either: a) an owner of private land; b) lesses or tenant of public or private land; or c) managing public land is a member of the association.

At the top of the hierarchy is the Joint Council for Rural Reconstruction (JCRR) which coordinates the activities of the associations and is the liaison between the government and the water users.

The basic function of the irrigation association is to deliver water to the irrigators. In the normal operation, the associations are also charged to perform the following activities:

a. Construction, improvement, operation and maintenance of irrigation systems.

b. Prevention and relief of damage to irrigation systems.

c. Respond to emergency flood relief and prevention needs.

d. Financing of irrigation systems.

e. Rent or purchase land for irrigation projects.

f. Study and development of the benefit of irrigation.

g. Coordination with government policies of land, agriculture, industry and rural development.

h. Anything entrusted by the government agency in charge according to law.

To cover the costs of the association members are required to pay membership fee and assessment for repayment of loans. In addition, charges can be made for use of the delivery system and sale of surplus waters.

Water delivery in the command area is normally not based upon a demand system. The uniqueness of the principle crop grown, rice, and the intensive cultivation has led to the adoption of a precise schedule under a method called rotation irrigation. The rotation method results in calculated delivery at regular intervals with a predetermined head of water. This system was designed approximately 200 years ago under a water short period and is rapidly replacing the demand or continuous irrigation practice. Water can be rotated in one of three ways: a) rotation by sections of the main canal; b) rotation by laterals and sublaterals; and c) rotation by farm ditches.[186]

4. Applicability to Pakistan

Taiwan was selected to conclude this chapter on various alternative organizational arrangements for local water control because the Irrigation Association system is perhaps the most sophisticated and highly structured

[186] Ko, p. 28-29.

system in existence. The differences between the needs and conditions of Taiwan and Pakistan are apparent, but the similarities in a dynamic state are the basis for inclusion.

Critical similarities are: a) the need to accommodate a labor intensive agriculture, and b) the need to permit and encourage self-management by local water users in order to establish an effective cadre of agriculturalists. The philosophy of the hierarchy in the association does provide an ideal structure for Pakistan if the entity were organized around a minor canal or distributary.

Further, the rotation method in Taiwan is similar in operation to the warabundi. There is, of course, a major difference between the rational of the two systems. But, the result in Pakistan with appropriate farmer involvement in water management would be the same as in Taiwan, i.e. farmer predictability, control, and certainty of water supply.[186]

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[186] For a discussion on these three criteria for optimum farming involvement in local water management, see Reidinger, Richard B., "Institutional Rationing of Canal Water in Northern India: Conflict between Traditional Patterns and Modern Needs," Journal of Economic Development and Cultural Change, Vol. 23, No. 1, October, 1974, p. 79-104.

CHAPTER III

ORGANIZING WATER USER ASSOCIATIONS IN PAKISTAN

A. Rationale for Local Water Entities

Agriculture remains the cornerstone of Pakistan's economy even though the country has experienced a phenomenal growth in industry and has become diversified in other sectors.[1] Although its share in the gross national product decreased from 60 percent in 1949-50 to 48.2 percent in 1964-65[2] and 46 percent in 1967-68, agriculture is still the livelihood for 90 percent of the people living in rural areas.[3]

Yet, in spite of this importance, agriculture is one of the most tenuous components of the economy primarily due to the many unpredictable forces acting upon the individual farmer and his productive capacity. Climatic variations, uncertainty and unpredictability of water supply, soil conditions and seed and fertilizer availability are among a few of the preharvest elements which the farmer must contend with. In addition, population pressures, smallness of individual holdings, lack of knowledge of improved farming methods and capital makes it difficult for the agriculturist to improve his condition. It is, therefore, necessary to develop a feasible and acceptable program that will reduce the risk associated with his profession.

Many of these contingencies and constraints to increased benefits from resources use can be alleviated if the farmer can take advantage of economies of scale and be induced to internalize certain externalities that are now being passed onto others. To successfully accomplish this task, some common denominator must be identified. In the case of irrigated agriculture, that common denominator is distributed water, and characteristic of irrigation is the necessity to cooperate and coordinate activities.

In most irrigation systems, the cooperation that has developed among farmers needs only to be formalized to give stability and reliance to the arrangement. It is recognized that among the farmers in many villages throughout Pakistan there is a high degree of cooperation in water use, aside from the theory of the warabundi, and in some cases, even amount to a well structured and semipermanent arrangement. Without a fixed and definite purpose, however, the ad hoc arrangement may unexpectedly be dissolved, consequently adding to the host of uncertain factors facing the farmer.

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[1]Sabzwari, M. A., "Food Production and Population Growth in West Pakistan--Problems and Effects," Food Production Increase in West Pakistan by C. M. Sharif, PARD, Peshawar, 1971, p. 11-29. There has been a 160 percent increase in industrial output from 1960-68 according to the Area Handbook for Pakistan, USGPO., Washington, D.C. 1971, p. 413.

[2]Agriculture In Pakistan: Resources, Progress and Prospects, Agriculture Division, USAID, Karachi, 1966, p. 6.

[3]Sabzwari, p. 11.

Pakistan has no institutionalized system of water user associations by which her farmers can jointly pursue optimizing a mutual task. Many of the problems faced by the irrigator, and in particular the small farmer, can be partially solved by providing him an opportunity to formally organize with his neighbors to increase agricultural production by improving water management. The water user association can become the nucleus of mutual on-farm water activities pursuing objectives of equitable distribution of water, resolving disputes, watercourse rehabilitation, irrigation scheduling, assistance in land leveling, augmenting water supplies through tubewells and conservation practices, integrating water quality control through conjunctive use of ground and surface water and proper drainage and collection of fees and assessments.

Labor intensive programs can be adopted to involve Pakistan's increasing population in the agricultural sector. It is acknowledged that machinery is far more productive than human power, but there is an attendant danger of labor displacement if machinery is introduced too quickly.[4] While machinery is desirable to aid in increasing production, the use of good seed, fertilizer, and improved implements and the combination of small holdings into larger blocks, proper alignment of irrigation channels, and crop rotation are at least equally important in increasing productivity. Water user associations can be extremely helpful in achieving all these improvements.

Every new program has both positive and negative aspects, and instituting water user associations is not without exception. The benefits are easily seen, particularly when observing the schemes evolved in many other highly productive agricultural societies. Often the "costs" are subtle. Financial and technical assistance is a cost, but one which will hopefully be offset by future benefits. The most critical negative effect will be upon those individuals and officials who will have to change their mode of operation to accommodate the water associations. The willingness to accept and internalize change may be the most difficult step in the entire process. Many functions singularly carried out in the past will have to be jointly pursued or at least the decision making process will have to be shared. Certain traditional positions, i.e. the potwari, could most easily be displaced and these functions granted to the association. Other negative effects may occur and must be evaluated.

B. Utilizing Exogenous Experiences

In Chapter 2, local water administration of five countries was examined and their various attributes discussed. Each system is somewhat unique in itself. Each system had to go through the painful process of evolving, of having the input from within the social structure such that the participants of the system could identify with it. Hall noted that what is good about the system of Valencia was dearly paid for by several centuries of

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[4] Khan, Jameel. Economics of Farm Mechanization and Water Development Policies in Pakistan: A Case Study, Ph.D. Thesis, Department of Economics, Colorado State University, December, 1974.

wrangling and discord.[5] But, the characteristics and experiences of the system can serve as a guide.

The irrigation company and irrigation district formed in the Western U.S. A. illustrate the structure and functions of private and public organizations. Internally, both types of entities are very similar, consisting of a board of directors who may also serve as managers. The distinct feature between the two types being that a private organization has greater flexibility in operation, i.e. voting rights, multi-purpose objectives, and obtains its finances from assessments made against the voluntary membership. A public entity usually has more rigid statutory guidelines to follow and is subject to greater governmental control. Membership may be compulsory and the organization can levy taxes under various formulas to acquire financing.

The voluntary associations and mutual irrigation company are the most relevant because they do originate at the water use level. The simplicity of structure is desirable.

Similar to the voluntary association is the community of irrigators of Spain and Argentina. The most advantageous features of the community is: a) its Moslem roots; b) self-governing, and individual and collective responsibility; c) three internal organs which provide legislative, executive and judicial functions for maximum involvement of all members; d) geographic representation on the governing bodies; and e) variations in voting practices. Neither the one man-one vote nor rights base strictly proportional to landholding is considered desirable. The Argentinian system of graduated voting rights is more equitable for Pakistan.

Turkey and Spain illustrate the infusion of micro and macro levels into water management, the former under a cooperative approach, the latter under autonomous water entities with parallel user and bureaucratic liaison or middle organizations. This line of communication is approached differently in Taiwan by placing greater emphasis upon the private sector with liaison only at the top of a coordinated private hierarchy. Turkey's proposed law prohibiting political involvement by the cooperatives is also recommended.

Each system illustrates the need for a hierarchy of organization. Taiwan has a complete hierarchy within the private sector. The American system is to have distinct public and private entities, while the other three systems are variations of blending quasi-public and public responsibility together ranging from the local autonomous irrigation associations in Spain and Argentina to the purely public nature of the cooperative in Turkey. The hierarchy in the case of U.S.A., Spain and Taiwan occurs both at the macro and micro level, a feature considered highly desirable in Pakistan.

Both Taiwan and Spain encourage labor intensive involvement in the managing and operation of the entities.

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[5]Hall, Wm. Ham, Irrigation Development, Supt. of State Printing, Sacramento, Calif., 1886, Vol. 1 p. 384, footnote 1.

Regarding the rights in the water resources, all five systems recognize state or public ownership in water; however, the Argentinian and Spanish (and in a few western states in the U.S.A.) systems link the right to use water with the right to the land. This insures the allocation of water to agriculture and, in particular, preserves the efforts and productive capability of the reclaimed soils. One drawback to this system is now being felt in both Spain and the U.S.A. This alienation of transfer of water use is a major constraint when national priorities change due to energy crises, new industries, etc.

Another feature of the Spanish and American systems is the effort to administratively integrate water quantity and quality control. Irrigation associations are to undertake this task where the problem exists, along with their other functions of efficient water distribution and maintenance of the distribution system.

C. Designing Water User Organizations

1. Watercourse and Village Level

Water user associations in Pakistan can be a tremendous boost to national and provincial efforts toward optimization of available water supplies. The association itself will do little, but in conjunction with a conscious effort by irrigation department officials and others in the agricultural production sector, the association can serve as the most useful tool or catalyst in pursuit of improved resources use. The Government's Integrated Rural Development Program and the watercourse lining programs will be greatly strengthened by creating an institution that is the water users own.

In designing a system of local water user organizations in Pakistan, there are several fundamental principles that should be taken into account:

a. A policy of decentralized, self-management at the watercourse level should be adopted. This principle will go a long way to inducing participation by water users, developing a sense of pride in operation, and stimulating a progressive agricultural economy.

b. The format of the association should be structured similar to existing institutions to present only a limited amount of social disruption. An interesting situation occurred in Ceylon (Sri Lanka) during the last half of the 19th century.[6] Two changes were introduced by the British that modified local practices in the use and maintenance of irrigation systems. The custom of forced services was abolished and the British system of minor courts was introduced. Local leaders couldn't get assistance to repair watercourses and the new method of resolving disputes was not understood. This combination of adverse affects from the two changes was extremely detrimental.

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[6]Coward, Walter, Jr., "Water Runs Down Hill and Evaporates: Human Organization and the Management of Water Environments," presented, Mekong Development Seminar, Pattaya, Thailand, Aug. 20-23, 1974, p. 5.

c. To be most effective, much flexibility should be allowed to give the agriculturalists in local areas the opportunity to adopt the types of organizations most acceptable to them.

d. Not only the positive aspects of forming associations should be discussed, but also a clear understanding of sanctions and enforcement against infractions of association rules must be made.

e. The purpose to be served by the organization should justify its existence. In the converse, no association should be formed simply to create an entity. Further, the organization should be publicly responsible for use of public waters.

f. Goals of the associations should not only include improving water delivery and scheduling but include the minimization of risk while maximizing production for association members.

It will be necessary to design several water user organizations that will operate within the recognized customs of Islamic irrigation practices. However a general scheme is proposed that will utilize the principles forementioned and the key features from the exogenous systems described.

The scheme is a modification of the Spanish and American mutual irrigation companies and the Taiwanian system. The Spanish system is effective because of its Islamic roots and practical, long-range features. The concepts of equity and proportionality (each Moslem entitled to a share of water), water appurtenant to land (water cannot be sold; there is only the right to use it on designated land), and the right and burden of local control being placed upon the users of the system (speaking now of those farmers under the watercourse) are inherent in Moslem law.

The other particular features should be included. First, the organization should consist of members representing various areas within the watercourse. Second, this body should be multi-functional--acting as jury and judge on matters solely within the watercourse; conducting administrative functions of operating and maintaining the system, hiring ditch walkers, etc.; serving as a planning board for exploring ways of improving distribution and utilization of water within the system; planning cooperative efforts between systems to facilitate delivery of water on demand without upsetting the canal conveyance system; and being responsible for ensuring that penalties are carried out, water is properly delivered according to predetermined schemes, etc.

Like the American mutual ditch company, the organization needs legal status, temporarily organizing under existing legislation, not under customary law. Strongly recommended is an addition to the national and provincial water laws setting forth the substantive and procedural issues relative to formation of water user associations and the role of government agencies toward them.

The water user associations in Taiwan provide for the necessity of creating levels of organization. This system, in conjunction with the Spanish community of irrigators, Sindicato Central and Tribunal de las

Aguas, illustrates the management, control, development, equitable infraction determination, and enforcement factors essential for short and long run success. The Spanish have not materially altered their Islamic-based water administration and dispute resolving system since the 10th century when it was first documented.

The association would be organized on each watercourse (Figures 7 and 8). As previously stated the governing body (assembly) would be made up of all members, membership being working landowners and tenants.[7]

The managing body would consist of a five man board (or some number depending upon the size of the watercourse), and representing different areas of the watercourse (e.g., one from the head of the watercourse, two from the middle, and two from the tailend). A rotating presidency or chairmanship is suggested with the president selecting a treasurer and secretary, all from within the five representatives. Three year terms of office may be best suited, with terms expiring in staggered manner. No officer would have any power greater than each other.

A dispute resolving body would be formed consisting of the president and secretary of the board and three members of the association, one each from the head, middle and tail of the watercourse. This body would meet at the village mosque to resolve issues related to the functions and purposes of the association.

Voting rights of the membership should be graduated. There would be a minimum and maximum number of votes to protect the interests of both large and small farmers. For example, in Mendoza, Argentina, votes/irrigated land area is as follows:

Irrigated area	Vote
0.1 ha to 5 ha (hectares)	1
5.0 " to 10 "	2
10.1 " to 15 "	3
15.1 " to 20 "	4
20.1 " to 25 "	5
25.1 " to 30 "	6
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70.1 " to 75"	15
above 75 ha	15

[7]A working landowner is a landowner whose main activity and source of income is from operating his farm; whereas a tenant is one who farms land, not his own, and who pays rent with a portion of the crop or in cash. The right of the landowner is to utilize his land as he sees fit without causing unreasonable injury to his neighbors and who incurs liability for the misuse of his property where injury is caused a third person. The right of the tenant is to utilize the land and appurtenances according to the terms of the lease arrangement between he and the landowner and may incur liability for misuse and negligence.

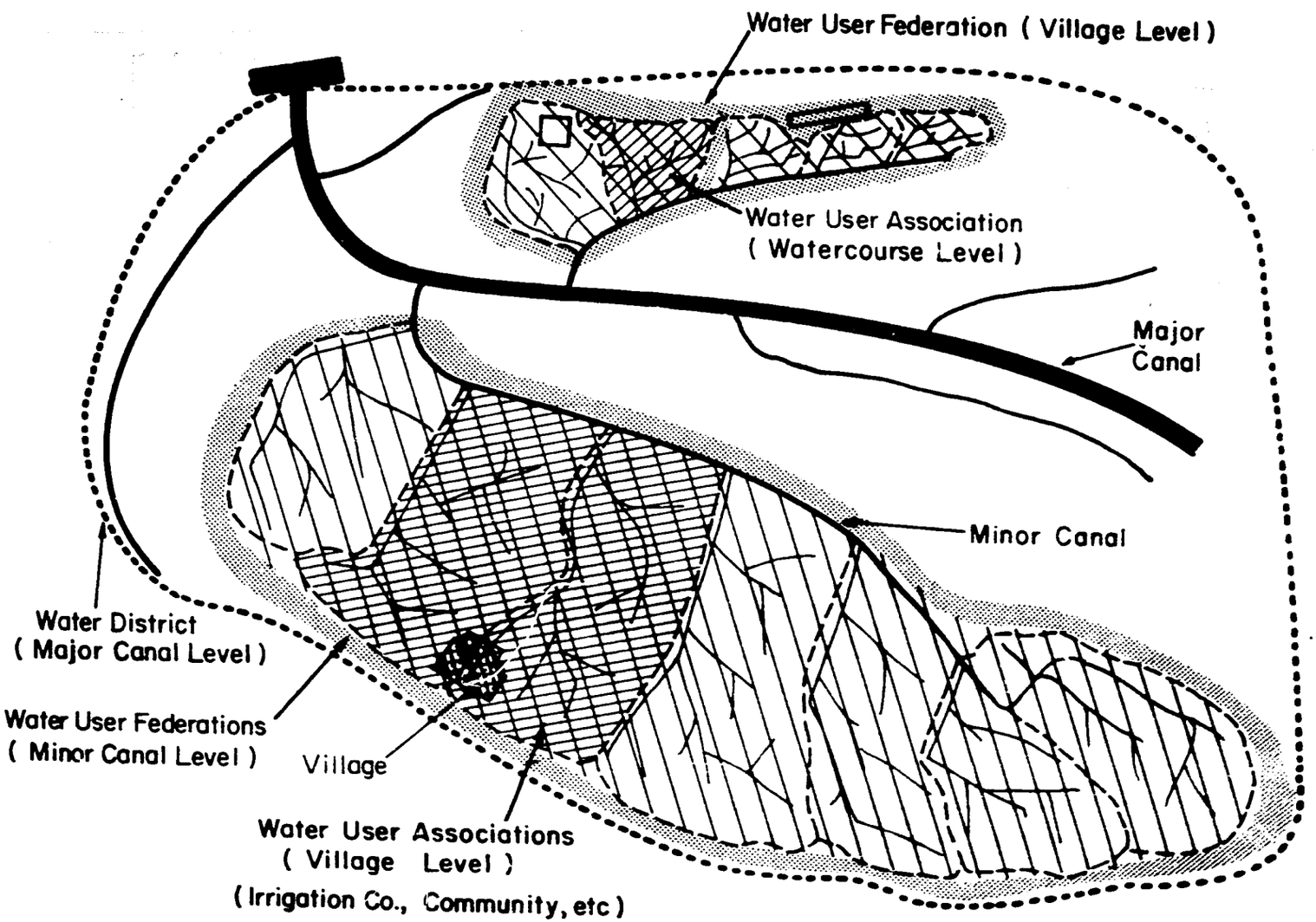

Figure 7. Water User Organizations for Pakistan: Development Scheme.

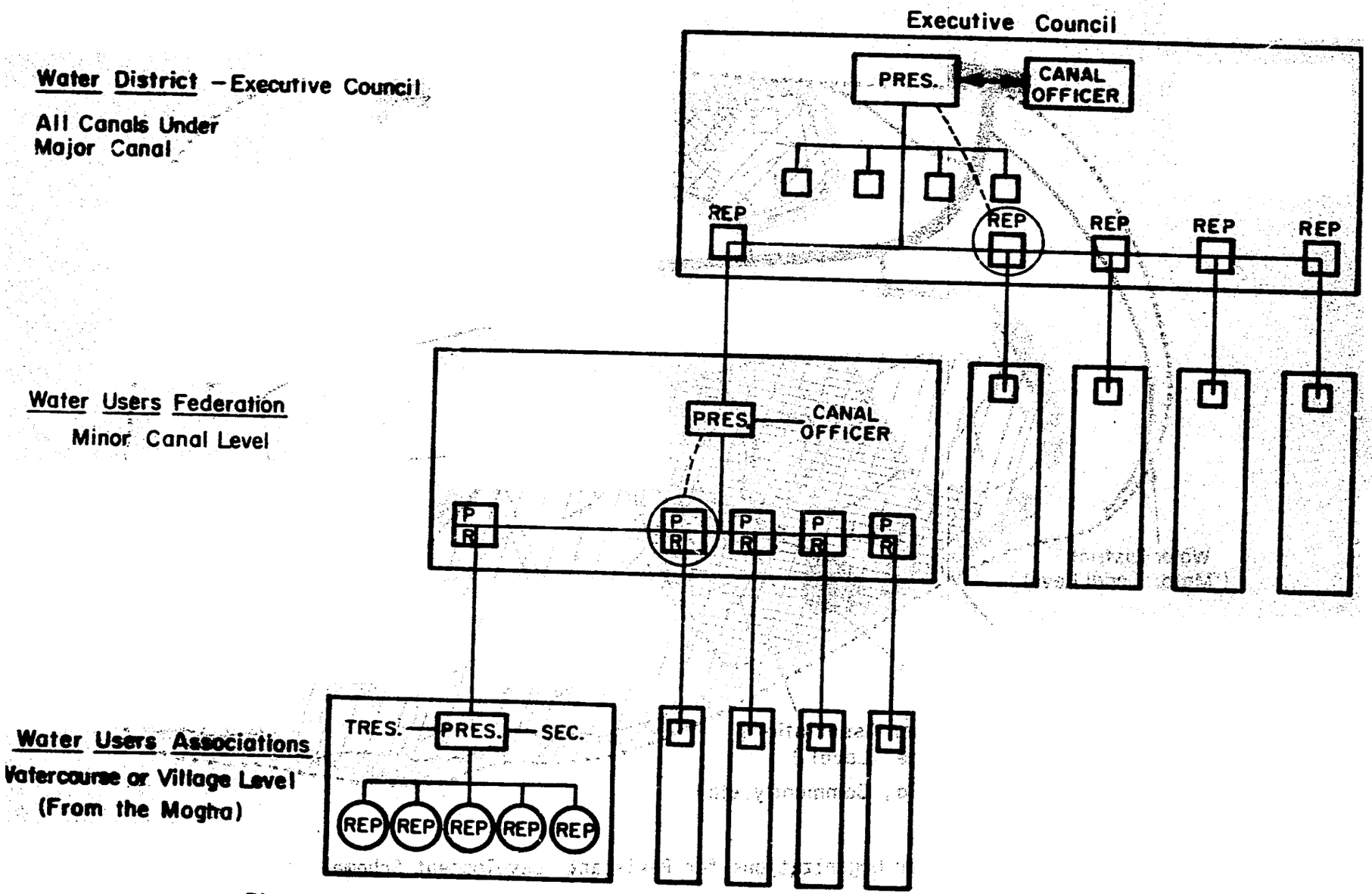

Figure 6. Water User Organization for Pakistan: Organization Schem

This level of organization is considered the most essential to improved water management. However, several upward extensions of the association are recommended to place the irrigators in a better position to implement irrigation scheduling, dissemination of information on canal rotation and closures, participating in delivery decisions made by the Irrigation Department, and working with WAPDA, Land and Water Development Board, etc. The organizations at the watercourse or village could be created under special legislation giving associations legal status, or formed as voluntary associations under the company or cooperative laws of the provinces.

2. Minor Canal or Village Level

The next level of organization would be a federation of water user associations at the minor canal and/or village level. In the case where two or more watercourses serve one village, the commonality of interest could be the basis of forming a federation to better manage the waters for irrigation and other rural needs. The composition of this entity would consist of the presidents (or chairmen) from the associations represented. One from among the representatives would be selected as president of the federation. He, like the president of the associations, would have no greater power than other federation officers, requiring a majority approval for all actions.

In addition to this formal board, the canal officer could be made a technical advisor without voting privileges.

3. Major Canal Level

Carrying the hierarchy one level further, a water district can be formed at the major canal level primarily to disseminate information on water supplies, deliveries, etc., and enabling the Irrigation Department to acquire water users' input into the decision-making process. An executive council consisting of presidents or chairmen from federations (or elected representatives from unfederated minor canals) would be formed. The Irrigation Department would maintain an official position in the district, without voting privileges.

Voting rights for the federation and district would likewise be graduated according to area served. This would prevent a small watercourse or canal command area from over influencing the activities of large command areas.

The structures suggested are perceived to be implemented over a considerable period of time. This would enable the users, themselves, to make the necessary modifications that will personalize the system for Pakistan. However, the purpose for setting out a rather detailed and sophisticated program is an attempt at the very outset to prevent constraints to creating a hierarchy from developing.

D. Legal Foundation for Associations

At the outset, it is to be noted that no serious impediments exist in Pakistan regarding the formation of water users' associations. On

the other hand, little exists which explicitly encourages such associations. The major encouragement exists in the customs and religion of the country. This is fortunate in that custom and religion still play a direct role in determining behavior of the common citizen in Pakistan more so than does the legislation. Further, Pakistan is an "administrative" oriented nation and the water users are familiar with the basic concepts or at least the need for effective administration. This familiarity should, however, be used to assist the farmer in developing and improving his own administrative capability as a member or officer of an association and not become a government type program imposed and controlled by bureaucratic forces.

There exists many formal provisions which can be used to form water users associations in Pakistan. The most important are the Companies Act of 1913 and Cooperatives Societies Act of 1925.[8] Other significant acts include the Soil and Reclamation Act of 1952, the Water and Power Development Act of 1958 and the Easements Act of 1883.

1. The Companies Act of 1913 and Relevant Decisions[9]

A "company" is defined by its common usage as "an association of a number of individuals formed for some common purpose."[10] Section 4(2) of the Companies Act provides that no company, association, or partnership consisting of more than twenty persons shall be formed for the purpose of carrying on any function (except banking) that has as its object the acquisition of gain unless it is registered[11] as a company under the Companies Act or other act or charter. This provision does enable the voluntary formation of water user associations, since such entities are not created for gain or profit, but rather to help the users in optimizing their total resource capabilities.

The effort of failing to incorporate is to become an illegal company or a nonentity which cannot contract or sue to enforce a contract already entered into.

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[8]The author examined the Societies Registration Act of 1860 as a legal basis for water user associations and has concluded this Act could not be used for a functional organization at the watercourse or village level. However, the Act may be used in the formation of educational, extension or other purposes selected to dissemination of information on agricultural activities. See M. Z. Khan, Commentary on the Societies Registration Act, 1860, Lahore Law Rib. House, Lahore, 1973.

[9]Company Law in Pakistan, for a detailed analysis of the Company Act of 1913, See A. G. Chaudhary, 2nd edition, Pakistan Publishers Ltd., 1970.

[10]Id., 1.

[11]The steps of registration of a company are: (1) preparation of a Memorandum of Association defining the scope of activities and setting forth the constitution of the company and its name (see §§ 5,6,7,8, and 11 of the Companies Act); (2) preparation of the Articles of Association which set forth rules for internal management of the company (see §§ 17 and 18 of the Companies Act); (3) registration of the company (see § 24(2) of the Companies Act); and (4) issuance of the prospectus or statement in lieu of a prospectus (see § 2(14) of the Companies Act). The latter is not required of private companies.

An association which has incorporated may issue shares representing partial ownership. These shares are transferable[12] and so become, in effect, "movable property."[13] Capital represented by shares may be consolidated and divided into shares of a larger amount than the existing shares and reconverted into paid-up shares of any denomination.[14] Such provisions clearly encourage incorporation and facilitate management of capital.

Under this act, a form of water users association similar to the mutual irrigation company in the U.S.A. or the community of irrigators of Spain could be organized. Although a system of water rights or concessions per se do not exist in Pakistan, the right to receive water from the mogha could be termed an equivalent for the association. Membership can be described as working landowners and tenants. Shares in the association can be appurtenant to the land, i.e. transfer from present owner to purchaser upon sale of land or from landlord to tenant or tenant to tenant upon change of working parties.

Provisions to register are highly recommended (as a practice in many countries) not only to provide statistical data but more importantly for dissemination of information to individual associations. Powers of the association can be broad enough to permit assumption of water rate and other assessment collection with failure to pay empowering the association officers to deny water delivery.

The flexibility in structure also permits forming various operational organs in the association for planning, management and dispute resolution. Most important, organizing under the Company Act (in the absence of specific legislation on the topic) enables a high degree of self-management and operation by the water users.

Depending upon the objectives of a federation of companies, a hierarchy could be formed with or without registering. If the federation is simply to improve water management through better timing of delivery or some other function not requiring contracting or assuming other legal responsibilities or liabilities, this may be done through informal unregistered association or registered entities.

There are advantages and disadvantages of incorporating. When dealing with companies, the property of the company belongs to the company. This loss of control of ownership is offensive to a people who do not have much to begin with.[15] However, creditors can proceed against only the company and not the individuals.[16] Therefore, in organizing, the farmers will want to be informed of the implications so a conscious decision can be made on what properties, if any, will become company properties.

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[12] The Companies Act, § 28 (1913).
[13] Id.
[14] Id., § 50(1) (a) and (c).
[15] In re George Newman Company (1895), Chapter 685.
[16] Harikar Prosad v. Bansi Missir, A.I.R. 1931, Pak. 321 (F.B.) § 25. Partnership Act, 1932.

2. The Cooperative Societies Act, 1925

This Act was passed to facilitate the formation and working of cooperative societies for the promotion of thrift, self-help, and mutual aid among agriculturists and other persons with common economic needs so as to bring about better living, better business, and better methods of production.[17] It was made applicable to the whole of Pakistan, except in Tribal Areas, by the Sind Cooperative Societies (West Pakistan Amendment) Ordinance, 1965.

The Act applies to "producers societies," which are groups formed with the object of producing and disposing of goods as the collective property of their members, and "consumers societies," which are societies formed with the object of obtaining and distributing goods to or of performing services for their members and customers and of dividing among their members the profits accruing from such supply and distribution.[18]

Only societies registered as cooperatives may use the word "cooperative" in their titles.[19] The Provincial Government may, by special order, exempt any society from registration requirements in an effort to save time and trouble.[20] Provisions of the Companies Act do not apply to societies registered under the Cooperatives Societies Act,[21] and this simplifies administration.

Cooperatives are the method of water user involvement in Turkey, but their success to date is not known to the authors. The provisions of the Cooperatives Societies Act are very similar to those acts in U.S.A. and other countries, particularly regarding the registering and monitoring of cooperative affairs. This latter point is one which has caused concern in many countries, among farmers, who as a group are individuals. Cooperatives have a definite attribute in traditional agricultural cooperative activities such as product marketing and credit acquisition. But, in reality any water users association formed as a cooperative must be cognizant of the jurisdictional limitations of the hydraulic unit served, thus a multitude of "cooperatives" would need to be formed along watercourse or village levels for on-farm water use improvement purposes in order to insure that those who are to benefit from the cooperative will not be dominated by "outsiders."

3. Related Legislation

The formation of water user associations is facilitated by three acts which provide a legal foundation to carry local water management activities. These three acts are the Soil Reclamation Act of 1952, WAPDA Act of 1955 and the Easements Act of 1883.

[17] The Co-Operative Societies Act, Preamble (1925), for detailed analysis see The Cooperative Societies Act, 1925, with Rules, by M. H. Jahania, The Monsoon Book House, Lahore, 1967.
[18] Id., Chapter 1, §§ 2 and 3.
[19] Id., Chapter 9, § 62.
[20] Id., Chapter 11, § 66.
[21] Id., Chapter 11, § 68.

Regarding the possibility of implementing any water users' association or other organizational arrangement leading to user management of water within designated agricultural areas, the Soil Reclamation Act of 1952 as amended in 1964-65 and 1972 provides the authority to cause a department or other agency of the government to frame a scheme considering such matters as, and not withstanding any provisions contained in the Canal and Drainage Act, the improvement, alteration, extension, or curtailment of any watercourse; the amalgamation or separation of any irrigation chak; the transfer by any area of one source of irrigation to another; the temporary increase or decrease of water allowance to any area or total curtailment of water supply; the alteration, amendment or cancellation of any order already in force regarding the distribution of water on any watercourse or the mutual rights or liabilities in respect of the use; the construction or maintenance of a watercourse or the issuance of a fresh order superceding any existing order or mutual agreement; the construction of any field drains or drainage works; the implementation of lining of channels in consultation with the irrigation department where the board considers such a measure desirable. The installation, management and maintenance of tubewells and the doing of all acts intended to promote the health, well-being and prosperity of local residents including soil conservation and preservation from injury or pollution of rivers and other sources and means of water supply.[22] Prior to January, 1973, the Act was implemented through the Land and Water Development Board. However, in the Punjab effective 31 January 1973, these duties and powers were transferred to the Irrigation and Power Department.[23]

Section 18 contains the procedural aspects giving notice of such a scheme and the handling of responses by individuals.

Under Section 22 of the Act, if the government sanctions any scheme after proper notice and response by concerned persons and agencies, then "it shall announce the fact by notification and the board shall forthwith proceed to execute the scheme."

A notification under Subsection I, in respect of any scheme, shall be exclusive evidence that the scheme has been duly framed and sanctioned and shall not be called into question by or before any court; therefore, this provision eliminates the right to judicial review by anyone adversely affected. Section 26 of the Act states that, as soon as the scheme for a local area or part thereof is sanctioned and notified under Subsection I of Section 22, the use of underground water in that area, except the water used for domestic purposes or for watering livestock, shall come under control of the agency. The agency shall frame rules to define for different areas from time to time the uses which are to be included in the term "domestic purposes" for watering livestock.

Although the Act was adopted to resolve problems of waterlogging and reclaim saline lands for maximum agriculture production, the purpose and

[22] Id., Chapter 4, § 17.
[23] Notification No. SOV (O & M) 2-15/72.

powers of the Act are broad enough to enable the designated agency or board authority to work with local water users on programs to improve water and related resources use.

Laws related to implementation of water users associations is the WAPDA Act. Under the Act, WAPDA can designate critical areas of salinity control and pursue a reclamation program in the area. It would be advantageous if WAPDA could contract with local water users through some representative entity specifically created to improve water management.

The last act, the Easements Act of 1883, is very important to a new association undertaking watercourse realignment and rehabilitation. Easements for constructing and maintaining the distribution structures can be obtained with consent or through legal action under the act.

E. Changes in the Law to Accommodate Improved Water Management

From an examination of the Cooperatives Act, Companies Act, WAPDA Act, Soil and Reclamation Act, Canal and Drainage Act and Minor Canals Act, it is concluded that water users associations as suggested in the preceding section can be formed. However, a major reorientation of the laws will be necessary to permit the most rapid and extensive development of all water resources and land capabilities.

Most notable is the absence of a national water policy which, in addition to government agency action, encourages beneficial use of water by users and user associations. A policy statement is considered essential to set the tone and priorities for development and conservation of resources.

The program of initiating water users associations and potentially a hierarchy to establish an effective line of communication between the government and the water users can best be undertaken with special legislation setting out the purposes and requirements of these local entities. This, however, should not be done until sufficient experience has been gained to determine the nature and scope of an acceptable form of entity.

Legislation on specific ministry programs should be developed providing incentives to formation and operation of water user associations.

Perhaps the most significant changes or enactments needed are with the water laws. Suggested is a fundamental change in principle from the 1873 Canal and Drainage Act, but considered to be essential to the optimum benefit from water user associations. This change is to explicitly permit trading and renting of water turns within the watercourse or federation of associations where this can be accomplished.

Other major changes are: recodification of the laws to give recognition to the hydrologic unit of water supply systems, and interprovincial allocations of water, integration of quantity and quality control of water resources and conjunctive use of ground and surface waters.

Existing water law should be amended making the system of rotation more flexible and the farmers' ability to influence the timing of water delivery through the mogha. Water application based on crop demand can lead to increased crop production, reduction of water waste and improved standards of living for the rural population. Of importance also, would be the improved image and standing of government irrigation officials. Water user associations can accomplish a great deal in improving timing and on-farm water management.

In addition, serving as a trial to implement improved technologies, the water users association can be most effective in a procedure we shall call the "reverse turn." This is a practice which has met with success in the very arid northeastern part of Mexico.[24] It was introduced simultaneously with creation of irrigation districts. Prior to the "reverse turn," farmers in this area practiced a similar "nakka to nakka warabundi."

The reverse turn operates in the following manner. Water is diverted into the watercourse to the very end user and instead of the traditional approach of working down the watercourse it starts at the tail and ascends in reverse to the users at the head of the watercourse. The difference in operation, aside from the reverse nature, however, is that the turns commence as soon as water reaches the last outlet. Turns are not tied to a specific length of time and fixed time of day, nor is the rotation fixed on a 7 or 14 day basis. Where the rotation may have been a 7 day warabundi previously, under the "reverse turn" it may be that water users would get their water every 6, 5 or 4 days depending upon how quickly the water could be conveyed to the tail and the turns commence.

The theory upon which this system is recommended for Pakistan is that the time in conveyance is now spread equally among all the users on the watercourse, since the turns do not begin until the water reaches the end farmer.

This is in stark contrast to how conveyance time is presently spread among the water users. Under the head to tail rotation, a full head of water reaches the first field outlet. This farmer is thus concerned about the state of repair for only this length of watercourse, and once his turn is over unless he also owns or operates lands in other parts of the watercourse, he really has no reason nor incentive to care about watercourse maintenance.[25] Sequencially, as water moves down the watercourse, the head is diminished, due to seepage, overflow and leakage. Water takes a little longer each time to go from outlet to outlet.

The losses, in addition to the physical need to build up the head at each outlet, exponentially increases the time between turns. Consequently,

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[24]This point is based upon an explanation of the operation of irrigation districts made to the author by a water law specialist from Mexico City, Mexico, at Fort Collins in June, 1975.

[25]The authors recognize that in the vast majority of watercourses in Pakistan, whether sanctioned or not, the strict nakka to nakka rotation is not followed, rather the rosewari or free movement systems are practiced.

the users further down the watercourse either lose precious minutes of a turn or some standard formula is applied to lengthen their turn. In either case, no incentive exists to keep in repair the entire watercourse, except that the desire is increased as one goes beyond some point toward the middle to the end. The result is well known in Pakistan. Production at the tail of the watercourse is less than at the head, with corresponding affects upon the landowners or operators.

Improving and maintaining the watercourse under the traditional head to tail system does definitely improve water delivery efficiency and reduce losses and is strongly recommended for this reason. Likewise, organizing users to carry out operation and maintenance will insure the continuation of the operation and maintenance. However, instituting the "reverse turn" simultaneously with formation of water users associations has a three-fold advantage. It provides an incentive for all users to improve the watercourse to the optimum. A structural mechanism exists to enable self government of collective responsibility cum benefit. And finally, it is making at least some (if not nearly all) users better off without adversely affecting others (in terms of crop output).

The benefits are both physical and social. The physical benefits and the incentive to improve the watercourse leads to reduction of transmission losses, provides a "maintained" head immediately at the outlet and enables users to shorten the time between periods of their next turn. Socially, the water users have an opportunity to work together for mutual benefit without relinquishing any rights or privileges.

The cornerstones of the "reverse turn" to be successful are: 1) agreement and organization of farmers; 2) commencing the turn only when water reaches tail user; 3) willingness of water users to improve the watercourse; 4) a change in the Canal and Drainage Act or regulations of the Provincial Irrigation and Power Departments to permit and encourage the reverse warabundi.

It is further recommended that a licensing system be established, commensurate with the institution of water user associations, that will provide the security necessary to the agriculturalist for the capital investment. The license would be for the volume entitled to the watercourse and granted to the irrigation association. This would be an incentive for formation and a realistic gesture approving self-management and collective responsibility.

Although the development of groundwater has moved forward rapidly since the 1930's, there is a noticeable lack of sufficient legislation controlling the spacing of wells, withdrawal rates, and installment of wells. It is recommended that such legislation be drafted simultaneously with the re-codification of water laws.

F. Land Tenure and Land Reform

There is one area of legal involvement and control not previously discussed that is very important to developing a program of water user associations; this is the law and regulations regarding land tenure and

land reform. Prior to 1950, the Punjab NWFP Tenancy Acts of 1887 provided the only statutory foundation governing relationship between landowners and tenants. Then in 1950, the Punjab, Sind and NWFP enacted laws which granted tenants certain rights and recognized certain duties of the landlords. Major changes occurred in 1959 with the adoption of Martial Law Regulation 64. It attempted land reforms among which the most important were the limits placed on size of holdings, restrictions in fragmentation of holdings, encouraging the consolidation of holdings and providing security of tenure for tenants.

Pakistan has seen many changes in land reform since its creation in 1947, but the most sweeping and immediately important are the Land Reform Regulations of 1972. An effort was made to bring the field of land reform into conformity with the Islamic principles of equitable distribution of wealth and economic power by redistributing wealth and reducing income disparities, increasing productions, and decreasing unemployment and improving relations between landlord and tenant. The 1972 Regulations shifted from limiting family size holdings of 500 acres under 1959 regulations to individual holdings of 150 acres (or equivalent in produce index units) and special provisions for government servants. Transfers of excess land after December 1971, unless qualifying under an exemption, were declared void. Important to tenants are the provisions which give the present tillers of the land a preference in the distribution of excess acreages.[26]

These are a few key changes under the 1972 regulations and subsequent amendments. This is an area of law that is changing very rapidly and as a consequence of the dynamic nature, a more detailed discussion is not in order. However, it is a topic of great importance to any long range program directed to improving on-farm water management and the contemporary state should be assessed at the time changes affecting landlords' and tenants' water use are being formulated. Regardless of the form of water user association, the membership will undoubtedly consist of cultivating landowners, absentee landowners, tenants and/or cultivating owners who also lease additional lands and, thus, are owners cum tenants. The interdependence of land reform regulations and organizing successful water user associations is in the complexity of the entity and establishing a method by which all irrigators can be represented in the decision making affecting their water supply. Fragmented holdings complicate irrigator involvement as well as generating economic inefficiency in the farmer work hours during water distribution, in a fast network of laterals to service parcels, and in evapotranspiration and seepage of water. Yet, this is a condition that must be taken into account in formulating the scope and operation of the local irrigation organizations.

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[25]For detailed discussions and analyses of the 1972 Land Reform Regulations see Mian Abdul Hamid, The Land Reform Regulations of 1972, Khyber Law Publishers, Lahore, 1974, and Ronald Herring and M. Ghaffar Chaudry, "The 1972 Land Reforms in Pakistan and Their Economic Implications: A Preliminary Analysis," The Pakistan Development Review, Vol. XIII, No. 3, Autumn 1974, p. 245-279.

6. Training and Extension Needs

The creation of water users associations presumes the agreement of farmers in a watershed to voluntarily proceed with a water management program and realize the benefits in the short and long run, not only of the technical and financial components of the program, but also of organizing. To insure this latter component is clearly understood and that farmers are not merely responding to preconditions for assistance, extension personnel must meet with the water users and discuss the attributes, manner of creation and operation and importance to the individual, community, province and nation. Continuous extension assistance will have to be offered on matters of internal operation of the association, i.e. voting, accounting, obtaining financial assistance, etc., simultaneously with technical assistance. Workshops should be held to discuss matters of importance to the water users.

The training and extension activities do not cease at the farm level. In fact, they must permeate both the micro and macro levels. Irrigation Department and Revenue officers need to be made aware of their role in a program of improved water management. Department manuals need to be revised to explicate the interrelationship that exists between the purveyor of water and the user in terms of optimizing total available resources and technologies for increased food production and living standards.

APPENDIX 1

CHAPTER 2B

Nearly every arid western state in the U.S.A. has adopted legislation specifically authorizing creation of irrigation, ditch or water companies. States where special legislation does not exist, permit formation of private organizations for water delivery and storage under the general corporation, partnership or business codes.

To illustrate legislation and legal documents applied in the creation of private organizations, the corporation and irrigation company laws of Colorado and Grand Valley Irrigation Company were selected. Colorado follows the doctrine of prior appropriation, is an arid climate and has within its boundaries, several large rivers and a multitude of irrigation systems dependent upon the continued efficient operation of irrigation companies.

Legislative Provision: Colorado Uniform Corporation Code

Colorado Corporation Code

ARTICLE 1

Definitions and Application

7-1-101. Short title. Articles 1 to 10 of this title, with amendments and additions thereto, shall be known and may be cited as the "Colorado Corporation Code".

7-1-102. Definitions. As used in this code, unless the context otherwise requires:

(1) "Address" means street name and number, city or town, and United States post office zip code designation. If, by reason of rural location or otherwise, a street name, number, town, or city shall not exist, other appropriate "address" fixing as nearly as possible the actual physical location may be substituted, but in all such exceptional cases the rural free delivery route, the county, and the United States post office zip code designation shall be included.

(2) "Articles of incorporation" means the original or restated articles of incorporation and all amendments thereto and includes articles of merger.

(3) "Authorized shares" means the shares of all classes which the corporation is authorized to issue.

(4) "Capital surplus" means the entire surplus of a corporation other than its earned surplus.

(5) "Corporation" or "domestic corporation" means a corporation for profit subject to the provisions of this code, except a foreign corporation.

(6) "Duplicate originals" means each instrument typed on only one side of each sheet and executed in duplicate by all parties, or true copy made when the original was made or copy made by picture or other process from the original, which resulting copy must be black type on white paper.

(7) "Earned surplus" means the portion of the surplus of a corporation equal to the balance of its net profits, income, gains, and losses from the date of incorporation or from the latest date when a deficit was eliminated by an application of its capital surplus or stated capital or otherwise, after

deducting subsequent distributions to shareholders and transfers to stated capital and capital surplus to the extent such distributions and transfers are made out of earned surplus.

(8) "Foreign corporation" means a corporation for profit organized under laws other than the laws of this state for a purpose or purposes for which a corporation may be organized under this code.

(9) "Insolvent" means inability of a corporation to pay its debts as they become due in the usual course of its business.

(10) "Net assets" means the amount by which the total assets of a corporation, excluding treasury shares, exceed the total debts of the corporation.

(11) "Shareholder" means one who is a holder of record of shares in a corporation.

(12) "Shares" means the units into which the proprietary interests in a corporation are divided.

(13) "Stated capital" means, at any particular time, the sum of:

(a) The par value of all shares of the corporation having a par value that have been issued;

(b) The amount of the consideration received by the corporation for all shares of the corporation without par value that have been issued, except such part of the consideration therefor as may have been allocated to capital surplus in a manner permitted by law; and

(c) Such amounts not included in paragraphs (a) and (b) of this subsection (13) as have been transferred to stated capital of the corporation, whether upon the issue of shares as a share dividend or otherwise, minus all reductions from such sum as have been effected in a manner permitted by law.

(d) Irrespective of the manner of designation thereof by the laws under which a foreign corporation is organized, the stated capital of a foreign corporation shall be determined on the same basis and in the same manner as the stated capital of a domestic corporation.

(14) "Subscriber" means one who subscribed for shares in a corporation, whether before or after incorporation.

(15) "Surplus" means the excess of the net assets of a corporation over its stated capital.

(16) "Treasury shares" means shares of a corporation which have been issued and subsequently acquired by and belong to the corporation, and have not, either by reason of the acquisition or thereafter, been cancelled or restored to the status of authorized but unissued shares. Treasury shares shall be deemed to be "issued" shares, but not "outstanding" shares.

7-1-103. Purposes and applicability. (1) Corporations may be organized under this code for any lawful purpose; except that, where another statute of Colorado requires that corporations of a particular class shall be organized exclusively thereunder, corporations of that class shall be organized under such other statute.

(2) Where another statute requires corporations of a particular class to be organized under that other statute and also in addition under general corporation laws, such corporations shall be organized under such other law and in addition thereto under this code to the extent general corporation laws are applicable.

(3) Where another statute permits corporations of a particular class to be organized either under such statute or under the general corporation laws, such a corporation may at the election of its incorporators be organized under this code. Unless the articles of incorporation of such corporation indicate that it is organized under such other alternate statute, it shall for all purposes be considered as organized under this code.

(4) This code shall apply to corporations of every class, including classes organized under and governed by other statutes of Colorado, to the extent that it is not inconsistent with the other statutes. Nothing contained in this code shall apply to nonprofit corporations organized under articles 20 to 29 of this title, nor to any nonprofit corporation which has elected to accept the provisions of said articles.

7-1-104. Application to existing corporations. The provisions of this code shall apply to all existing corporations organized under any general law of this state providing for the organization of corporations for a purpose for which a corporation might be organized under this code, where the power has been reserved by constitution or statute to amend, repeal, or modify the law under which such corporation was organized, and where such law is repealed by this code.

7-1-105. Application to interstate and foreign commerce. The provisions of this code shall apply to commerce with foreign nations and among the several states only insofar as the same may be permitted under the provisions of the constitution of the United States.

7-1-106. Effect of repeal of prior laws. The repeal of a prior law by this code shall not affect any right accrued or established or any liability or penalty incurred under the provisions of the law prior to the repeal thereof.

7-1-107. Reservation of legislative power. The general assembly may at any time alter, amend, or repeal this code and shall at all times have power to prescribe such regulations and provisions as it deems advisable, which regulations and provisions shall be binding on any corporations formed under the provisions of this code. This code shall not be held to revive or extend any private charter or law heretofore granted or passed concerning any corporation.

ARTICLE 2

Incorporation - Articles - Amendments

7-2-101. Incorporators. Three or more natural persons of the age of twenty-one years or more may act as incorporators of a corporation by signing, verifying, and delivering in duplicate to the secretary of state articles of incorporation for the corporation.

7-2-102. Articles of incorporation. (1) The articles of incorporation shall set forth:

(a) The name of the corporation;

(b) The period of duration, which may be perpetual;

(c) The purpose for which the corporation is organized;

(d) The aggregate number of shares which the corporation has authority to issue; if such shares are to consist of one class only, the par value of each of the shares or a statement that all of the shares are without par value; or, if the shares are to be divided into classes, the number of shares of each class and a statement of the par value of the shares of each such class or that the shares are to be without par value;

(e) If the shares are to be divided into classes, the designation of each class and a statement of the preferences, limitations, and relative rights with respect to the shares of each class;

(f) If the corporation is to issue the shares of any preferred or special class in series, then the designation of each series and a statement of the variations in the relative rights and preferences as between series insofar as the same are to be fixed in the articles of incorporation and a statement of any authority to be vested in the board of directors to establish series and fix and determine the variations in the relative rights and preferences as between series;

(g) For corporations organized subsequent to December 31, 1958, if cumulative voting is not desired in the election of directors, a statement to that effect shall be made; if no such statement is made, cumulative voting shall be mandatory in the election of directors. For corporations organized prior to January 1, 1959, the certificate of incorporation shall state whether cumulative voting shall be allowed in the election of directors or trustees.

If the certificate of incorporation of the company permits cumulative voting, stockholders shall be permitted to cumulate their shares in the election of directors as provided in section 7-4-116.

(h) Any provision limiting or denying to shareholders the preemptive right to acquire additional or treasury shares of the corporation or securities convertible into shares or carrying stock purchase warrants or privileges;

(i) Any provision, not inconsistent with law, which the incorporators elect to set forth in the articles of incorporation for the regulation of the internal affairs of the corporation, including any provision restricting the transfer of shares or any provision granting the corporation the right to impose restrictions on the transfer of its shares, and any provision which under this code is required or permitted to be set forth in the bylaws;

(j) The address of its initial registered office and the name of its initial registered agent at such address;

(k) The number of directors constituting the initial board of directors and the names and addresses of the persons who are to serve as directors until the first annual meeting of shareholders or until their successors are elected and qualify;

(l) The name and address of each incorporator.

(2) It shall not be necessary to set forth in the articles of incorporation any of the corporate powers enumerated in this code.

7-2-103. Filing of articles of incorporation. (1) Duplicate originals of the articles of incorporation shall be delivered to the secretary of state. If the secretary of state finds that the articles of incorporation conform to law, he shall, when all fees have been paid as in this code prescribed: Endorse on each of such duplicate originals the word "Filed" and the month, day, and year of the filing thereof; file one of the duplicate originals in his office; issue a certificate of incorporation to which he shall affix the other duplicate original; issue additional certificates of incorporation without affixing such duplicate originals as may be requested.

(2) The certificate of incorporation, together with the duplicate original of the articles of incorporation affixed thereto by the secretary of state, shall be returned to the incorporators or their representative.

7-2-104. Effect of issuance of certificate of incorporation. Upon the issuance of the certificate of incorporation, the corporate existence shall begin, and each certificate of incorporation shall be conclusive evidence that all conditions precedent required to be performed by the incorporators have been complied with and that the corporation has been incorporated under this code. Nothing in this section shall affect the right of this state to institute a proceeding to cancel or revoke the certificate of incorporation or for involuntary dissolution of the corporation or the right of any aggrieved person to maintain an action to enjoin or obtain other relief for a violation or failure to comply with the provisions of section 7-3-106 (3).

7-2-105. Organization meeting of directors. After the issuance of the certificate of incorporation an organization meeting of the board of directors named in the articles of incorporation shall be held, either within or without this state, at the call of a majority of the incorporators for the purpose of adopting bylaws, electing officers, and the transaction of such other business as may come before the meeting. The incorporators calling the meeting shall give at least three days' notice by mail to each director so named, which notice shall state the time and place of the meeting.

7-2-106. Right to amend articles of incorporation. (1) A corporation may amend its articles of incorporation, from time to time, in any and as many respects as may be desired, so long as its articles of incorporation as amended contain only such provisions as might be lawfully contained in original articles of incorporation at the time of making the amendment, and, if a change in shares or the rights of shareholders or an exchange, reclassification, or cancellation of shares or rights of shareholders is to be made, such provisions as may be necessary to effect such change, exchange, reclassification, or cancellation.

(2) In particular and without limitation upon the general power of amendment in subsection (1) of this section, a corporation may amend its articles of incorporation so as:

(a) To change its corporate name;

(b) To change its period of duration;

(c) To change, enlarge, or diminish its corporate purposes;

(d) To increase or decrease the aggregate number of shares or shares of any class which the corporation has authority to issue;

(e) To increase or decrease the par value of the authorized shares of any class having a par value, whether issued or unissued;

(f) To exchange, classify, reclassify, or cancel all or any part of its shares, whether issued or unissued;

(g) To change the designation of all or any part of its shares, whether issued or unissued, and to change the preferences, limitations, and relative rights in respect of all or any part of its shares, whether issued or unissued;

(h) To change shares having a par value, whether issued or unissued, into the same or a different number of shares without par value and to change shares without par value, whether issued or unissued, into the same or a different number of shares having a par value;

(i) To change the shares of any class, whether issued or unissued and whether with or without par value, into a different number of shares of the same class or into the same or a different number of shares, either with or without par value, of other classes;

(j) To create new classes of shares having rights and preferences either prior and superior or subordinate and inferior to the shares of any class then authorized, whether issued or unissued;

(k) To cancel or otherwise affect the right of the holders of the shares of any class to receive dividends which have accrued but have not been declared;

(l) To divide any preferred or special class of shares, whether issued or unissued, into series and fix and determine the designations of such series and the variations in the relative rights and preferences as between the shares of such series;

(m) To authorize the board of directors to establish, out of authorized but unissued shares, series of any preferred or special class of shares and fix and determine the relative rights and preferences of the shares of any series so established;

(n) To authorize the board of directors to fix and determine the relative rights and preferences of the authorized but unissued shares of series theretofore established in respect of which either the relative rights and preferences have not been fixed and determined or the relative rights and preferences theretofore fixed and determined are to be changed;

(o) To revoke, diminish, or enlarge the authority of the board of directors to establish series out of authorized but unissued shares of any preferred or special class and fix and determine the relative rights and preferences of the shares of any series so established;

(p) To limit, deny, or grant to shareholders of any class the preemptive right to acquire additional or treasury shares of the corporation or securities convertible into shares or carrying stock purchase warrants or privileges, whether then or thereafter authorized.

7-2-107. Procedure to amend articles of incorporation. (1) Except as otherwise provided in this code, amendments to the articles of incorporation shall be made in the following manner:

(a) The board of directors shall adopt a resolution setting forth the proposed amendment and directing that it be submitted to a vote at a meeting of shareholders, which may be either an annual or a special meeting. A special meeting may also be called for the purpose of submitting the question of amendment to the stockholders whenever the holders of at least one-tenth of the outstanding voting stock of any corporation, or in the case of any

corporation not having capital stock at least one-tenth of the members thereof, shall request, in writing, the president or other head officer to call an appropriate meeting of stockholders or members for the purpose of considering a proposed amendment to the articles of incorporation.

(b) Whether or not a meeting is called by the board of directors or by shareholders, written or printed notice setting forth the proposed amendment or a summary of the changes to be effected thereby shall be given to each shareholder of record entitled to vote thereon within the time and in the manner provided in this code for the giving of notice of meetings of shareholders; except that not less than thirty days' notice shall be given of all meetings at which it is proposed that the authorized shares be increased. If the meeting is an annual meeting, the proposed amendment or such summary may be included in the notice of the annual meeting.

(c) At the meeting a vote of the shareholders entitled to vote thereon shall be taken on the proposed amendment. The proposed amendment shall be adopted upon receiving the affirmative vote of the holders of at least two-thirds of the shares entitled to vote thereon, unless any class of shares is entitled to vote thereon as a class, in which event the proposed amendment shall be adopted upon receiving the affirmative vote of the holders of at least two-thirds of the shares of each class of shares entitled to vote thereon as a class and of the total shares entitled to vote thereon.

(2) Any number of amendments may be submitted to the shareholders and voted upon by them at one meeting.

7-2-108. Class voting on amendments. (1) The holders of the outstanding shares of a class shall be entitled to vote as a class upon a proposed amendment, whether or not entitled to vote thereon by the provisions of the articles of incorporation, if the amendment would:

(a) Increase or decrease the aggregate number of authorized shares of such class;

(b) Increase or decrease the par value of the shares of such class;

(c) Effect an exchange, reclassification, or cancellation of all or part of the shares of such class;

(d) Effect an exchange or create a right of exchange of all or any part of the shares of another class into the shares of such class;

(e) Change the designation, preferences, limitations, or relative rights of the shares of such class;

(f) Change the shares of such class, whether with or without par value, into the same or different number of shares, either with or without par value, of the same class or another class;

(g) Create a new class of shares having rights and preferences prior and superior to the shares of such class or increase the rights and preferences of any class having rights and preferences prior or superior to the shares of such class;

(h) In the case of a preferred or special class of shares, divide the shares of such class into series and fix and determine the designation of such series and the variations in the relative rights and preferences between the shares of such series or authorize the board of directors so to do;

(i) Limit or deny the existing preemptive rights of the shares of such class;

(j) Cancel or otherwise affect dividends on the shares of such class which have accrued but have not been declared.

7-2-109. Articles of amendment. (1) The articles of amendment shall be executed in duplicate by the corporation by its president or a vice-president and by its secretary or an assistant secretary and verified by one of the officers signing such articles and shall set forth:

(a) The name of the corporation;

(b) The amendment so adopted;

(c) The date of the adoption of the amendment by the shareholders;

(d) The number of shares outstanding and the number of shares entitled to vote thereon and, if the shares of any class are entitled to vote thereon as a class, the designation and number of outstanding shares entitled to vote thereon of each such class;

(e) The number of shares voted for and against the amendment, respectively, and, if the shares of any class are entitled to vote thereon as a class, the number of shares of each such class voted for and against such amendment, respectively;

(f) If the amendment provides for an exchange, reclassification, or cancellation of issued shares and if the manner in which the same shall be effected is not set forth in the amendment, a statement of the manner in which the same shall be effected;

(g) If the amendment effects a change in the amount of stated capital, a statement of the manner in which the same is effected and a statement, expressed in dollars, of the amount of stated capital as changed by such amendment.

7-2-110. Filing of articles of amendment. (1) Duplicate originals of the articles of amendment shall be delivered to the secretary of state. If the secretary of state finds that the articles of amendment conform to law, he shall, when all fees and franchise taxes have been paid as in this code prescribed: Endorse on each of such duplicate originals the word "Filed" and the month, day, and year of the filing thereof; file one of such duplicate originals in his office; issue a certificate of amendment to which he shall affix the other duplicate original.

(2) The certificate of amendment, together with the duplicate original of the articles of amendment affixed thereto by the secretary of state, shall be returned to the corporation or its representative.

7-2-111. Effect of certificate of amendment. (1) Upon the issuance of the certificate of amendment by the secretary of state, the amendment shall become effective, and the articles of incorporation shall be deemed to be amended accordingly.

(2) No amendment shall affect any existing cause of action in favor of or against such corporation, nor any pending suit to which the corporation is a party, nor the existing rights of persons other than shareholders; and, if the corporate name is changed by amendment, no suit brought by or against the corporation under its former name shall abate for that reason.

7-2-112. Restated articles of incorporation. (1) A domestic corporation may at any time restate its articles of incorporation, as theretofore amended, upon approval of its board of directors, which shall adopt a resolution setting forth the proposed restated articles of incorporation.

(2) Upon such approval, restated articles of incorporation shall be executed in duplicate by the corporation by its president or a vice-president and by its secretary or assistant secretary and verified by one of the officers signing the articles and shall set forth:

(a) The name of the corporation;

(b) The period of its duration;

(c) The purpose which the corporation is then authorized to pursue;

(d) The aggregate number of shares which the corporation has authority to issue; if such shares consist of one class only, the par value of each of the shares or a statement that all of the shares are without par value; or, if the shares are divided into classes, the number of shares of each class and a statement of the par value of the shares of each such class or that the shares are without par value;

(e) If the shares are divided into classes, the designation of each class and a statement of the preferences, limitations, and relative rights in respect of the shares of each class;

(f) If the shares of any preferred or special class are issuable in series, the designation of each series and a statement of the variations in the relative rights and preferences as between series, insofar as the same have been fixed and a statement of any authority vested in the board of directors to establish series and fix and determine the variations in the relative rights and preferences as between series;

(g) Any existing provision limiting or denying to shareholders the preemptive right to acquire additional or treasury shares of the corporation;

(h) Any provisions, not inconsistent with law, which are then set forth in the articles of incorporation as theretofore amended for the regulation of the internal affairs of the corporation, including any provision relating to cumulative voting, including the last registered office address and registered agent on file;

(i) A statement that the restated articles of incorporation correctly set forth without change the corresponding provisions of the articles of incorporation as theretofore amended and that the restated articles of incorporation supersede the original articles of incorporation and all amendments thereto.

(3) Duplicate originals of the restated articles of incorporation shall be delivered to the secretary of state. If the secretary of state finds that the restated articles of incorporation conform to law, he shall, when all fees and franchise taxes have been paid as in this code prescribed:

(a) Endorse on each of such duplicate originals the word "Filed" and the month, day, and year of the filing thereof;

(b) File one of the duplicate originals in his office;

(c) Issue a restated certificate of incorporation to which he shall affix the other duplicate original.

(4) The restated certificate of incorporation, together with the duplicate original of the restated articles of incorporation affixed thereto by the secretary of state, shall be returned to the corporation or its representative.

(5) Upon the issuance of the restated certificate of incorporation by the secretary of state, the restated articles of incorporation shall become effective and shall supersede the original articles of incorporation and all amendments thereto.

(6) Except for a change in the corporate name, the restated articles of incorporation may contain amendments if they are adopted pursuant to the provisions of section 7-2-107. When the restated articles of incorporation contain amendments, said articles shall state that they correctly set forth the provisions of the articles of incorporation, as amended, that they have been duly adopted as required by law, and that they supersede the original articles of incorporation and all amendments thereto. The voting requirements of section 7-2-109 (1) (d) and (1) (e) shall be followed and evidence thereof shall be included in the restated articles of incorporation.

7-2-113. Amendment of articles of incorporation in reorganization proceedings. (1) Whenever a plan of reorganization of a corporation is confirmed by decree or order of a court of competent jurisdiction in proceedings for the organization of the corporation, pursuant to the provisions of any applicable statute of the United States relating to reorganizations of corporations, the articles of incorporation of the corporation may be amended in the manner provided in this section in as many respects as may be necessary to carry out the plan and put it into effect, so long as the articles of incorporation as amended contain only such provisions as might be lawfully contained in original articles of incorporation at the time of making the amendment.

(2) Amendments to the articles of incorporation pursuant to this section shall be made in the following manner:

(a) Articles of amendment approved by decree or order of court shall be executed and verified in duplicate by such person as the court shall designate or appoint for the purpose and shall set forth the name of the corporation, the amendments of the articles of incorporation approved by the court, the

date of the decree or order approving the articles of amendment, the title of the proceedings in which the decree or order was entered, and a statement that such decree or order was entered by a court having jurisdiction of the proceedings for the reorganization of the corporation pursuant to the provisions of an applicable statute of the United States.

(b) Duplicate originals of the articles of amendment shall be delivered to the secretary of state. If the secretary of state finds that the articles of amendment conform to law, he shall, when all fees and franchise taxes have been paid as in this code prescribed: Endorse on each of such duplicate originals the word "Filed" and the month, day, and year of the filing thereof; file one of such duplicate originals in his office; issue a certificate of amendment to which he shall affix the other duplicate original.

(3) The certificate of amendment, together with the duplicate original of the articles of amendment affixed thereto by the secretary of state, shall be returned to the corporation or its representative.

(4) Upon the issuance of the certificate of amendment by the secretary of state, the amendment shall become effective and the articles of incorporation shall be deemed to be amended accordingly without any action thereon by the directors or shareholders of the corporation and with the same effect as if the amendments had been adopted by unanimous action of the directors and shareholders of the corporation.

7-2-114. Certificate of incorporation as evidence - when. When a certificate of incorporation or amendment thereto is filed in the office of the secretary of state, he shall record and carefully preserve the same in his office; and a copy thereof duly certified by the secretary of state under the great seal of the state of Colorado shall be evidence of the existence of the corporation and prima facie evidence of the contents of said certificate of incorporation or amendments thereto.

ARTICLE 3

Corporate Powers and Limitations

7-3-101. General powers. (1) Each corporation has the power:

(a) To have perpetual succession by its corporate name, unless a limited period of duration is stated in its articles of incorporation;

(b) To sue and be sued, to complain and defend, and to participate in administrative or other proceedings in its corporate name;

(c) To have a corporate seal which may be altered at pleasure and to use the same by causing it, or a facsimile thereof, to be impressed or affixed or in any other manner reproduced;

(d) To purchase, take, receive, lease, or otherwise acquire, own, hold, improve, use, and otherwise deal in and with real or personal property, or any interest therein, wherever situated;

(e) To sell, convey, mortgage, pledge, lease, exchange, transfer, and otherwise dispose of all or any part of its property and assets;

(f) To lend money to, to guarantee the obligations of, and to otherwise assist its employees and, upon the affirmative vote of the holders of at least two-thirds of the outstanding shares of the corporation which are entitled to vote for directors, to lend money to, to guarantee the obligations of, and to otherwise assist its directors and officers, but no loans shall be made by a corporation secured by its shares;

(g) To purchase, take, receive, subscribe for, or otherwise acquire, own, hold, vote, use, employ, sell, mortgage, lend, pledge, or otherwise dispose of, and otherwise use and deal in and with shares or other interests in or obligations of other domestic or foreign corporations, associations, partnerships, or individuals or direct or indirect obligations of the United States, or of any other government, state, territory, governmental district, or municipality, or of any instrumentality thereof;

(h) To make contracts and incur liabilities, borrow money at such rates of interest as the corporation may determine, issue its notes, bonds, and other obligations, and secure any of its obligations by mortgage or pledge of all or any of its property, franchises, and income;

(i) To lend money and to guarantee the obligations of others for its corporate purposes, to invest and reinvest its funds, and to take and hold real and personal property as security for the payment of funds so loaned or invested or as security for the obligations of others to it;

(j) To conduct its business, carry on its operations, and have offices and exercise the powers granted by this code within or without this state;

(k) To elect or appoint officers and agents of the corporation and define their duties and fix their compensation;

(l) To make and alter bylaws, not inconsistent with its articles of incorporation or with the laws of this state, for the administration and regulation of the affairs of the corporation;

(m) To make donations for the public welfare or for charitable, scientific, or educational purposes and in time of war to make donations in aid of war activities;

(n) In time of war to transact any lawful business in aid of the United States in the prosecution of the war;

(o) To indemnify any director or officer or former director or officer of the corporation, or any person who has served at its request as a director or officer of another corporation in which it owns shares of capital stock or of which it is a creditor, and the personal representative of any of such persons against expenses actually and necessarily incurred by him in connection with the defense of any action, or proceeding in which he is made a party by reason of being or having been such director or officer, except in relation to matters as to which he is adjudged in such action or proceeding to be liable for negligence or misconduct in the performance of duty; but such indemnification shall not be deemed exclusive of any other rights to which the director or officer is entitled under any bylaw, agreement, vote of shareholders, or otherwise;

(p) To pay pensions and establish pension plans, pension trusts, profit-sharing plans, stock bonus plans, stock option plans, and other incentive plans and to provide medical service, life, sickness, accident, disability, or unemployment insurance, education, housing, social and recreational services, and other similar aids and services for any of the directors, officers, and employees of the corporation or of any subsidiary thereof wholly or partly at the expense of the corporation;

(q) To cease its corporate activities and surrender its corporate franchise;

(r) To enter into general partnerships, limited partnerships (whether the corporation is a limited or general partner), joint ventures, syndicates, pools, associations, and other arrangements for carrying on one or more of the purposes set forth in its articles of incorporation jointly or in common with others;

(s) To have and exercise all powers necessary or convenient to effect any of the purposes for which the corporation is organized.

7-3-102. Right of corporation to acquire and dispose of its own shares. (1) A corporation shall have the right to purchase, take, receive, or otherwise acquire, hold, own, pledge, transfer, or otherwise dispose of its own shares, but purchases of its own shares, whether direct or indirect, shall be made only to the extent of unreserved and unrestricted surplus.

(2) To the extent that surplus is used as the measure of the corporation's right to purchase its own shares, such surplus shall be restricted so long as the shares are held as treasury shares, and upon the disposition or cancellation of any such shares the restriction shall be removed pro tanto.

(3) Notwithstanding the limitation of subsection (2) of this section, a corporation may purchase or otherwise acquire its own shares for the purpose of:

(a) Eliminating fractional shares;

(b) Collecting or compromising indebtedness to the corporation;

(c) Paying dissenting shareholders entitled to payment for their shares under the provisions of this code;

(d) Effecting, subject to the other provisions of this code, the retirement of its redeemable shares by redemption or by purchase at not to exceed the redemption price.

(4) No purchase of or payment for its own shares shall be made at a time when the corporation is insolvent or when the purchase or payment would make it insolvent.

7-3-103. Agent may convey real estate. Corporations, domestic and foreign, by written powers executed in the manner provided for the conveyance of real estate by corporations, may appoint agents or attorneys-in-fact to convey their real estate. All conveyances executed by such agents or attorneys-in-fact in the name of the corporation shall pass the legal title of the corporation to the real estate thereby conveyed, as effectually as if such conveyances had been executed by the corporation in the manner provided by law for the conveyance for real estate by corporations; and it shall not be necessary to affix the seal of the corporation to any conveyance so executed by such agent or attorney-in-fact.

7-3-104. Unauthorized assumption of corporate powers. All persons who assume to act as a corporation without authority so to do shall be jointly and severally liable for all debts and liabilities incurred or arising as a result thereof.

7-3-105. Defense of ultra vires. (1) No act of a corporation and no conveyance or transfer of real or personal property to or by a corporation shall be invalid by reason of the fact that the corporation was without capacity or power to do such act or to make or receive such conveyance or transfer, but such lack of capacity or power may be asserted:

(a) In a proceeding by a shareholder against the corporation to enjoin the doing of any act or the transfer of real or personal property by or to the corporation. If the unauthorized acts or transfer sought to be enjoined are being or are to be performed or made pursuant to any contract to which the corporation is a party, the court may, if all of the parties to the contract are parties to the proceeding and if it deems the same to be equitable, set aside and enjoin the performance of the contract and in so doing may allow to the corporation or to the other parties to the contract, as the case may be, compensation for the loss or damage sustained by either of them which results from the action of the court in setting aside and enjoining the performance of the contract, but anticipated profits to be derived from the performance of the contract shall not be awarded by the court as a loss or damage sustained.

(b) In a proceeding by the corporation, whether acting directly or through a receiver, trustee, or other legal representative, or through shareholders in a representative suit, against the incumbent or former officers or directors of the corporation;

(c) In a proceeding by the attorney general, as provided in this code, to dissolve the corporation or in a proceeding by the attorney general to enjoin the corporation from the transaction of unauthorized business.

7-3-106. Corporate names. (1) All names of corporations formed after January 1, 1959, and all names adopted by amendment to the articles of incorporation of corporations existing before January 1, 1959, shall contain the word "corporation", "company", "incorporated", or "limited" or shall contain an abbreviation of one of such words, but this subsection (1) shall not apply to corporations organized under other statutes of this state which permit the use of other names.

(2) Such name shall not contain any word or phrase which indicates or implies that it is organized for any purpose other than one or more of the purposes contained in its articles of incorporation.

(3) Such name shall not be the same as, or deceptively similar to, the name of any domestic corporation existing under the laws of this state or any foreign corporation authorized to transact business in this state, or a name the exclusive right to which is, at the time, reserved in the manner provided in this code, or the name of a corporation which has in effect a registration of its corporate name as provided in this code, or any trade name which is registered with the secretary of state under articles 70 to 73 of this title, or for which application for registration under said articles is pending.

(4) Such name, if comprised of initials, will have the initials separated by a full typewriter space of one letter or a period after each initial.

7-3-107. Reserved name. (1) The exclusive right to the use of a corporate name may be reserved by:

(a) Any person intending to organize a corporation under this code;

(b) Any domestic corporation intending to change its name;

(c) Any foreign corporation intending to make application for a certificate of authority to transact business in this state;

(d) Any foreign corporation authorized to transact business in this state and intending to change its name;

(e) Any person intending to organize a foreign corporation and intending to have such corporation make application for a certificate of authority to transact business in this state.

(2) The reservation shall be made by filing with the secretary of state an application to reserve a specified corporate name, executed by the applicant. If the secretary of state finds that the name is available for corporate use, he shall reserve the same for the exclusive use of the applicant for a period of one hundred twenty days.

(3) The right to the exclusive use of a specified corporate name so reserved may be transferred to any other person or corporation by filing in the office of the secretary of state a notice of the transfer, executed by the applicant for whom the name was reserved, and specifying the name and address of the transferee.

(4) The secretary of state shall not reserve the same name for more than one hundred twenty days to the same applicant or for the use or benefit of the same person or corporation; nor shall consecutive reservation be made by or for the use or benefit of the same person or corporation of names so similar as to fall within the prohibition of this section.

7-3-108. Registered name - limitation - procedure. (1) Any corporation organized and existing under the laws of this or any state or territory of the United States may register its corporate name under this code, if its corporate name is not the same as, or deceptively similar to, the name of any domestic corporation existing under the laws of this state, or the name of any foreign corporation authorized to transact business in this state, or any corporate name reserved or registered under this code, or any trademark and business name which is registered with the secretary of state under articles 70 to 73 of this title, or for which an application for registration under said articles is pending.

(2) Such registration shall be made by: Filing with the secretary of state an application for registration executed by the corporation by an officer thereof, setting forth the name of the corporation, the state or territory under the laws of which it is incorporated, the date of its incorporation, a statement that it is carrying on or doing business, and a brief statement of the business in which it is engaged, and a certificate setting forth that the corporation is in good standing under the laws of the state or territory wherein it is organized, executed by the secretary of state of such state or territory or by such other official as may have custody of the records pertaining to corporations; and paying to the secretary of state a registration fee in the amount of one dollar for each month, or fraction thereof, between the date of filing the application and December 31 of the calendar year in which the application is filed.

(3) Such registration shall be effective until the close of the calendar year in which the application for registration is filed.

7-3-109. Renewal of registered name. A corporation which has in effect a registration of its corporate name may renew the registration annually by filing an application for renewal setting forth the facts required to be set forth in an original application for registration and a certificate of good standing as required for the original registration and by paying a fee of ten dollars. A renewal application may be filed between October 1 and December 31 in each year and shall extend the registration for the following calendar year.

7-3-110. Registered office and registered agent. (1) Each corporation shall have and continuously maintain in this state:

(a) A registered office which may be, but need not be, the same as its place of business;

(b) A registered agent who may be either an individual resident in this state whose business office is identical with the registered office, a domestic corporation, or a foreign corporation authorized to transact business in this state, the articles of incorporation of which domestic or foreign corporation, among other things, shall expressly provide that it may act as resident or statutory agent and having a business office identical with the registered office. Nothing contained in this section shall be construed to affect nonprofit corporations.

7-3-111. Change of registered office or registered agent. (1) A corporation may change its registered office or change its registered agent, or both, upon filing in the office of the secretary of state a statement setting forth:

(a) The name of the corporation;

(b) The address of its then registered office;

(c) If the address of its registered office is changed, the address to which the registered office is to be changed;

(d) The name of its then registered agent;

(e) If its registered agent is changed, the name of its successor registered agent;

(f) That the address of its registered office and the address of the business office of its registered agent, as changed, will be identical.

(2) Such statement shall be executed by the corporation by its president or a vice-president, verified by him, and delivered to the secretary of state. If the secretary of state finds that the statement conforms to the provisions of this code, he shall file the statement in his office, and, upon such filing, the change of address of the registered office, the appointment of a new registered agent, or both, as the case may be, shall become effective.

(3) Any registered agent of a corporation may resign as such agent upon filing a written notice thereof, executed in duplicate, with the secretary of state, who shall forthwith mail a copy thereof to the corporation at the last address of the corporation as shown on the latest document filed with the secretary of state. The appointment of such agent shall terminate upon the expiration of thirty days after receipt of such notice by the secretary of state. Upon the expiration of thirty days after the mailing of such notice the secretary of state shall prepare a list of such corporations that have not filed a change of registered office or registered agent statement replacing the registered agent who resigned and shall publish the same in this state in a newspaper of general circulation for one issue. Upon said publication being completed and a proof of publication being filed thereof with the secretary of state by such newspaper, such corporation shall thereupon be deemed defunct and inoperative and subjected to the provisions of sections 7-8-113 (6) and 7-10-109. In addition to other obligations under this code, reinstatement because of action under this section must include the new registered office and registered agent statement filing.

(4) The location of the office of any registered agent of a corporation in any city or town of this state may be transferred from one address to another in the same city or town or from any city or town in this state to any other city or town in this state upon the making and executing by such

registered agent of a statement, duly acknowledged, setting forth the name of the corporation represented by the agent, the address at which the agent has maintained the registered office for the corporation, and the new address to which the registered office will be transferred and at which new address the agent will thereafter maintain the registered office for the corporation named in the statement. If the secretary of state finds that such statement conforms to the provisions of this code, he shall file the statement in his office, and thereupon the change of address of the registered office shall become effective. The fees to be charged by the secretary of state for the filing of such statement shall be as described in section 7-10-104. The provisions of this subsection (4) shall in no way affect the right of a corporation to file a statement of change of registered office or registered agent as provided in subsection (1) of this section.

7-3-112. Process - service on corporation. (1) The registered agent appointed by a corporation shall be an agent of such corporation upon whom any process, notice, or demand required or permitted by law to be served upon the corporation may be served.

(2) If a corporation fails to appoint a registered agent or to maintain a registered agent in this state, or if its registered agent cannot with reasonable diligence be found at the registered office, then the secretary of state shall be an agent of such corporation upon whom any such process, notice, or demand may be served. Service on the secretary of state of any such process, notice, or demand shall be made by delivering to and leaving with him, or with the deputy secretary of state, or with any assistant in his office a copy of such process, notice, or demand. The person so serving the secretary of state shall immediately send a notice of such service and a copy of the process, notice, or demand, by registered or certified mail, return receipt requested, addressed to the corporation at its registered office, or, if it has no registered office, to the address shown on the last annual report filed by it, or to such other address as may be known to such person. Such service on the corporation shall be complete upon receipt by such person of the corporation's return receipt or, if the corporation refuses to accept such registered or certified mail, upon receipt by such person of such mail with the corporation's refusal to accept indicated thereon and, if such process, notice, or demand has issued in a court proceeding, upon filing with the clerk of such court, of such return receipt or such returned mail, together with the affidavit of the person so serving the secretary of state of his compliance with this section. In lieu of mailing such notice as aforesaid, such service shall be complete upon service on the corporation of such notice and such copy, if found within the state, by a person duly qualified to serve legal process, or, if found without the state, by the sheriff or deputy sheriff in the name of the sheriff of the county in any state in which such corporation is found, or by a United States marshal if the corporation is found in a United States territory or district, or by a United States consul or by some person of legal age appointed by such consul if the corporation is found in a foreign country, or by any licensed, practicing attorney, and, if such process, notice, or demand has issued in a court proceeding, upon filing with the clerk of such court of proof of such service.

(3) The secretary of state shall keep a record of all processes, notices, and demands served upon him under this section and shall record therein the time of such service and his action with reference thereto.

(4) Nothing in this section contained shall limit or affect the right to serve any process, notice, or demand required or permitted by law to be served upon a corporation in any other manner now or hereafter permitted by law or by applicable rules of procedure.

7-3-113. Interrogatories by secretary of state. The secretary of state may propound to any corporation, domestic or foreign, subject to the provisions of this code and to any officer or director thereof such interrogatories as may be reasonably necessary and proper to enable him to ascertain whether the corporation has complied with all the provisions of this code applicable to the corporation. The interrogatories shall be answered within thirty days after the mailing thereof or within such additional time as fixed by the secretary of state, and the answers thereto shall be full and complete and shall be made in writing and shall contain or be verified by a written declaration that they are made under the penalties prescribed in section 7-10-112. If the interrogatories are directed to an individual they shall be answered by him, and if directed to a corporation they shall be answered by the president, vice-president, secretary, or assistant secretary thereof. The secretary of state need not file any document to which such interrogatories relate until the interrogatories are answered as provided in this section, and not then if the answers thereto disclose that the document is not in conformity with the provisions of this code. The secretary of state shall certify to the attorney general, for such action as the attorney general may deem appropriate, all interrogatories and answers thereto which disclose a violation of any of the provisions of this code.

7-3-114. Information disclosed by interrogatories. Interrogatories propounded by the secretary of state and the answers thereto shall not be open to public inspection nor shall the secretary of state disclose any facts or information obtained therefrom, except insofar as his official duty may require the same to be made public or in the event such interrogatories or the answers thereto are required for evidence in any criminal proceedings or in any other action by this state.

7-3-115. Powers of secretary of state. The secretary of state shall have the power reasonably necessary to enable him to administer this code efficiently and to perform the duties therein imposed upon him.

7-3-116. Appeal from secretary of state. (1) If the secretary of state fails to approve any articles of incorporation, amendment, merger, consolidation, or dissolution or any other document required by this code to be approved by the secretary of state before the same is filed in his office, he shall, within ten days after the delivery thereof to him, give written notice of his disapproval to the person or corporation, domestic or foreign, delivering the same, specifying the reasons therefor. From such disapproval, such person or corporation may appeal to the district court of the county in which the registered office of the corporation is, or is proposed to be, situated by filing with the clerk of such court a petition setting forth a copy of the articles or other documents sought to be filed and a copy of the written disapproval thereof by the secretary of state; whereupon, the matter shall be tried de novo by the court, and the court shall either sustain the action of the secretary of state or direct him to take such action as the court deems proper.

(2) If the secretary of state revokes the certificate of authority to transact business in this state of any foreign corporation, pursuant to the provisions of this code, the foreign corporation may likewise appeal to the district court of the county where the registered office of the corporation in this state is situated, by filing with the clerk of such court a petition setting forth a copy of its certificate of authority to transact business in this state and a copy of the notice of revocation given by the secretary of state; whereupon, the matter shall be tried de novo by the court, and the court shall either sustain the action of the secretary of state or direct him to take such action as the court deems proper.

(3) Appeals from all final orders and judgments entered by the district court under this section in review of any ruling or decision of the secretary of state may be taken as in other civil actions.

7-3-117. Certificates and certified copies to be received in evidence. All certificates issued by the secretary of state in accordance with the provisions of this code and all copies of documents filed in his office in accordance with the provisions of this code when certified by him shall be received in all courts, public offices, and official bodies as prima facie evidence of the facts therein stated. A certificate by the secretary of state under the great seal of this state as to the existence or nonexistence of the facts relating to corporations which would not appear from a certified copy of any of the foregoing documents or certificates shall be received in all courts, public offices, and official bodies as prima facie evidence of the existence or nonexistence of the facts therein stated.

7-3-118. Forms to be furnished by secretary of state. All reports required by this code to be filed in the office of the secretary of state shall be made on forms which shall be prescribed and furnished by the secretary of state. Forms for all other documents to be filed in the office of the secretary of state shall be furnished by the secretary of state on request, but the use thereof, unless otherwise specifically prescribed in this code, shall not be mandatory.

ARTICLE 4

Shareholders and Shares of Stock

7-4-101. Authorized shares. (1) Each corporation has the power to create and issue the number of shares stated in its articles of incorporation. Such shares may be divided into one or more classes, any of which classes may consist of shares with par value or shares without par value, with such designations, preferences, limitations, and relative rights as are stated in the articles of incorporation. The articles of incorporation may limit or deny the voting rights of or provide special voting rights for the shares of any class to the extent not inconsistent with the provisions of this code.

(2) Without limiting the authority contained in this section, a corporation, when so provided in its articles of incorporation, may issue shares of preferred or special classes:

(a) Subject to the right of the corporation to redeem any of such shares at the price fixed by the articles of incorporation for the redemption thereof;

(b) Entitling the holders to cumulative, noncumulative, or partially cumulative dividends;

(c) Having preference over any other class of shares as to the payment of dividends;

(d) Having preference in the assets of the corporation over any other class of shares upon the voluntary or involuntary liquidation of the corporation;

(e) Convertible into shares of any other class or into shares of any series of the same or any other class, except a class having prior or superior rights and preferences as to dividends or distribution of assets on liquidation, but shares without par value shall not be converted into shares with par value unless that part of the stated capital of the corporation represented by the shares without par value is, at the time of conversion, at least equal to the aggregate par value of the shares into which the shares without par value are to be converted.

7-4-102. Issuance of shares - classes in series. (1) If the articles of incorporation so provide, the shares of any preferred or special class may be divided into and issued in series. If the shares of any such class are to be issued in series, then each series shall be so designated as to distinguish the shares thereof from the shares of all other series and classes.

(2) Any of the series of any such class and the variations in the relative rights and preferences as between different series may be fixed and determined by the articles of incorporation, but all shares of the same class shall be identical except as to the following relative rights and preferences, as to which there may be variations between different series:

(a) The rate of dividend, time of payment of dividends, and date from which dividends are cumulative;

(b) The price at and the terms and conditions on which shares are redeemed;

(c) The amount payable upon shares in event of involuntary liquidation;

(d) The amount payable upon shares in event of voluntary liquidation;

(e) Sinking fund provisions for the redemption or purchase of shares;

(f) The terms and conditions on which shares may be converted, if the shares of any series are issued with the privilege of conversion;

(g) Voting powers, if any.

(3) If the articles of incorporation expressly vest authority in the board of directors, then, to the extent that the articles of incorporation have not established series and fixed and determined the variations in the relative rights and preferences as between series, the board of directors has authority to divide any of such classes into series and, within the limitations set forth in this section and in the articles of incorporation, fix and determine the relative rights and preferences of the shares of any series so established.

(4) In order to establish a series, where authority so to do is contained in the articles of incorporation, the board of directors shall adopt a resolution setting forth the designation of the series and fixing and determining the relative rights and preferences thereof, or so much thereof as shall not be fixed and determined by the articles of incorporation.

(5) Prior to the issue of any shares of a series established by resolution adopted by the board of directors, the corporation shall file in the office of the secretary of state a statement setting forth: The name of the corporation; a copy of the resolution establishing and designating the series and fixing and determining the relative rights and preferences thereof; the date of adoption of resolution; that such resolution was duly adopted by the board of directors.

(6) Such statement shall be executed in duplicate by the corporation by its president or a vice-president and by its secretary or an assistant secretary and verified by one of the officers signing the statement and shall be delivered to the secretary of state. If the secretary of state finds that the statement conforms to law, he shall, when all franchise taxes and fees have been paid as in this code prescribed: Endorse on each of such duplicate originals the word "Filed" and the month, day, and year of the filing thereof; file one of such duplicate originals in his office; return the other duplicate original to the corporation or its representative.

(7) Upon the filing of such statement by the secretary of state, the resolution establishing and designating the series and fixing and determining the relative rights and preferences thereof shall become effective and shall constitute an amendment of the articles of incorporation.

7-4-103. Subscriptions for shares. (1) A subscription for shares of a corporation to be organized shall be irrevocable for a period of six months, unless otherwise provided by the terms of the subscription agreement or unless all of the subscribers consent to the revocation of such subscription.

(2) Unless otherwise provided in the subscription agreement, subscriptions for shares, whether made before or after the organization of a corporation, shall be paid in full at such time, or in such installments and at such times, as determined by the board of directors. Any call made by the board of directors for payment on subscriptions shall be uniform as to all shares of the same class or as to all shares of the same series, as the case may be.

(3) In case of default in the payment of any installment or call when such payment is due, the corporation may proceed to collect the amount due in the same manner as any debt due the corporation. The bylaws may prescribe other penalties for failure to pay installments or calls that become due, but no penalty working a forfeiture of a subscription, or of the amounts paid

thereon, shall be declared as against any subscriber unless the amount due thereon remains unpaid for a period of twenty days after written demand has been made therefor. If mailed, the written demand shall be deemed made when deposited in the United States mail in a sealed envelope addressed to the subscriber at his last post-office address known to the corporation with postage thereon prepaid.

(4) In the event of the sale of any shares by reason of any forfeiture, the excess of proceeds realized over the amount due and unpaid on the shares shall be paid to the delinquent subscriber or to his legal representative.

7-4-104. Consideration for shares. (1) Shares having a par value may be issued for such consideration expressed in dollars, not less than the par value thereof, as shall be fixed from time to time by the board of directors.

(2) Shares without par value may be issued for such consideration expressed in dollars as may be fixed from time to time by the board of directors, unless the articles of incorporation reserve to the shareholders the right to fix the consideration. If such right is reserved as to any shares, the shareholders shall, prior to the issuance of the shares, fix the consideration to be received for such shares by a vote of the holders of a majority of all shares entitled to vote thereon.

(3) Treasury shares may be disposed of by the corporation for such consideration expressed in dollars as may be fixed from time to time by the board of directors.

(4) That part of the surplus of a corporation which is transferred to stated capital upon the issuance of shares as a share dividend shall be deemed the consideration for the issuance of such dividend shares.

(5) In the event of a conversion of shares or in the event of an exchange of shares with or without par value for the same or a different number of shares with or without par value, whether of the same or a different class the consideration for the shares so issued in exchange or conversion shall be deemed to be: The stated capital then represented by the shares so exchanged or converted; and that part of surplus, if any, transferred to stated capital upon the issuance of shares for the shares so exchanged or converted; and any additional consideration paid to the corporation upon the issuance of shares for the shares so exchanged or converted.

7-4-105. Payment for shares. (1) The consideration for the issuance of shares may be paid, in whole or in part, in money, in other property, tangible or intangible, or in labor or services actually performed for the corporation. When payment of the consideration for which shares are to be issued has been received in an amount not less than par value or stated value by the corporation, such shares shall be deemed to be fully paid and nonassessable. In the absence of fraud in the transaction, the judgment of the board of directors or the shareholders, as the case may be, as to the value of the consideration received for the shares, shall be conclusive.

(2) Neither promissory notes nor future services shall constitute payment or part payment for shares of a corporation.

7-4-106. Stock rights and options. Subject to any provisions set forth in its articles of incorporation, a corporation may create and issue, whether or not in connection with the issuance and sale of any of its shares or other securities, rights or options entitling the holders thereof to purchase from the corporation shares of any class. Such rights or options shall be evidenced in such manner as the board of directors shall approve and, subject to the provisions of the articles of incorporation, shall set forth the terms upon which, the time within which, and the price at which such shares may be purchased from the corporation upon the exercise of any such right or option. In the absence of fraud in the transaction, the judgment of the board of directors as to the adequacy of the consideration received for such rights or options shall be conclusive. The price to be received for any shares having a par value, other than treasury shares to be issued upon the exercise of such rights or options, shall not be less than the par value thereof.

7-4-107. Expenses of organization and financing - payment from consideration - effect. The reasonable charges and expenses of organization or reorganization of a corporation and the reasonable expenses of and compensation for the sale or underwriting of its shares may be paid or allowed by such corporation out of the consideration received by it in payment for its shares without thereby rendering such shares either not fully paid or assessable.

7-4-108. Certificates representing shares. (1) The shares of a corporation shall be represented by certificates signed by the president or a vice-president and the secretary or an assistant secretary of the corporation and may be sealed with the seal of the corporation or a facsimile thereof. The signatures of the president or vice-president and the secretary or assistant secretary upon a certificate may be facsimiles if the certificate is countersigned by a transfer agent or registered by a registrar other than the corporation itself or an employee of the corporation. If any officer who has signed or whose facsimile signature has been placed upon such certificate has ceased to be such officer before the certificate is issued, it may be issued by the corporation with the same effect as if he were such officer at the date of its issue.

(2) Every certificate representing shares issued by a corporation which is authorized to issue shares of more than one class shall set forth upon the face or back of the certificate or shall state that the corporation will furnish to any shareholder upon request and without charge a full statement of the designations, preferences, limitations, and relative rights of the shares of each class authorized to be issued and, if the corporation is authorized to issue any preferred or special class in series, the variations in the relative rights and preferences between the shares of each such series, so far as the same have been fixed and determined, and the authority of the board of directors to fix and determine the relative rights and preferences of subsequent series.

(3) Each certificate representing shares shall state upon the face thereof: That the corporation is organized under the laws of this state; the name of the person to whom issued; the number and class of shares and the designation of the series, if any, which such certificate represents; the par value of each share represented by such certificate or a statement that the shares are without par value.

(4) No certificate shall be issued for any shares until such shares are fully paid.

7-4-109. Issuance of fractional shares or scrip. A corporation may, but shall not be obliged to, issue a certificate for a fractional share and, by action of its board of directors, may issue in lieu thereof scrip in registered or bearer form which shall entitle the holder to receive a certificate for a full share upon the surrender of such scrip aggregating a full share. A certificate for a fractional share shall, but scrip shall not unless otherwise provided therein, entitle the holder to exercise voting rights, to receive dividends thereon, and to participate in any of the assets of the corporation in the event of liquidation. The board of directors may cause such scrip to be issued subject to the condition that it shall become void if not exchanged for certificates representing full shares before a specified date, or subject to the condition that the shares for which the scrip is exchangeable may be sold by the corporation and the proceeds thereof distributed to the holders of such scrip, or subject to any other conditions which the board of directors may deem advisable.

7-4-110. Shareholder's preemptive rights, employee stock plans. (1) The preemptive right of a shareholder to acquire unissued or treasury shares of a corporation or securities convertible into shares or carrying stock purchase warrants or privileges may be limited or denied to the extent provided in the articles of incorporation; but nothing in this code shall confer any preemptive rights with respect to treasury shares of corporations organized prior to January 1, 1959, unless such preemptive rights are specifically given shareholders by the articles of incorporation of the corporation.

(2) Unless specifically prohibited by its articles of incorporation, any corporation, whether or not the shareholders have preemptive rights, may issue and sell its shares and may grant stock rights and options to any of the directors, officers, and employees of the corporation, or of any subsidiary thereof, and may establish stock bonus plans and other incentive plans for their benefit without first offering such shares, stock rights, and options to its shareholders for such consideration and upon such terms and conditions as have been approved by the shareholders or otherwise lawfully provided for before April 18, 1963, or as shall thereafter be approved by holders of a majority of the outstanding shares entitled to vote thereon at a duly constituted meeting or by its board of directors pursuant to like approval of the shareholders; but, if a corporation concurrently offers and sells its shares to the public or its shareholders, such corporation by adoption of an appropriate resolution by its board of directors may sell its shares to any of the directors, officers, and employees of the corporation, or of any subsidiary thereof, without obtaining the approval of the shareholders, if the shares sold to the directors, officers, and employees of the corporation, or of its subsidiary, do not exceed ten percent of the number of shares then being offered to the public or its shareholders and if the price per share is not less than the offering price to the public or its shareholders.

7-4-111. Meetings of shareholders. (1) Meetings of shareholders may be held at such place, either within or without this state, as may be stated in or fixed in accordance with the bylaws. If no other place is stated or so fixed, all meetings shall be held at the registered office of the corporation.

(2) An annual meeting of the shareholders shall be held at such time as may be provided in the bylaws. Failure to hold the annual meeting at the designated time shall not work a forfeiture or dissolution of the corporation.

(3) Special meetings of the shareholders may be called by the president, the board of directors, the holders of not less than one-tenth of all the shares entitled to vote at the meeting, or such other officers or persons as may be provided in the articles of incorporation or the bylaws.

7-4-112. Notice of shareholders' meetings. Written or printed notice stating the place, day, and hour of the meeting and, in case of a special meeting, the purpose for which the meeting is called shall be delivered not less than ten nor more than fifty days before the date of the meeting, either personally or by mail, by or at the direction of the president, the secretary, or the officer or persons calling the meeting to each shareholder of record entitled to vote at such meeting; except that, if the authorized shares are to be increased, at least thirty days' notice shall be given. If mailed, the notice shall be deemed delivered when deposited in the United States mail, addressed to the shareholder at his address as it appears on the stock transfer books of the corporation, with postage thereon prepaid.

7-4-113. Closing transfer books and fixing record date. (1) For the purpose of determining shareholders entitled to notice of or to vote at any meeting of shareholders or any adjournment thereof, or entitled to receive payment of any dividend, or in order to make a determination of shareholders for any other proper purpose, the board of directors of a corporation may provide that the stock transfer books be closed for a stated period but not to exceed, in any case, fifty days. If the stock transfer books are closed for the purpose of determining shareholders entitled to notice of or to vote at a meeting of shareholders, such books shall be closed for at least ten days immediately preceding such meeting.

(2) In lieu of closing the stock transfer books, the bylaws or, in the absence of an applicable bylaw, the board of directors may fix in advance a date as the record date for any such determination of shareholders, such date in any case to be not more than fifty days and, in case of a meeting of shareholders, not less than ten days prior to the date on which the particular action requiring such determination of shareholders is to be taken.

(3) If the stock transfer books are not closed and no record date is fixed for the determination of shareholders entitled to notice of or to vote at a meeting of shareholders or shareholders entitled to receive payment of a dividend, the date on which notice of the meeting is mailed or the date on which the resolution of the board of directors declaring the dividend is adopted, as the case may be, shall be the record date for such determination of shareholders.

(4) When a determination of shareholders entitled to vote at any meeting of shareholders has been made as provided in this section, the determination shall apply to any adjournment thereof.

7-4-114. Voting list. (1) The officer or agent having charge of the stock transfer books for shares of a corporation shall make, at least ten days before each meeting of shareholders, a complete list of the shareholders entitled to vote at the meeting or any adjournment thereof, arranged in alphabetical order with the address of and the number of shares held by each. The list, for a period of ten days prior to such meeting, shall be kept on file at the principal office of the corporation, whether within or outside Colorado, and shall be subject to inspection by any shareholder at any time during usual business hours. Such list shall also be produced and kept open at the time and place of the meeting and shall be subject to the inspection of any shareholder during the whole time of the meeting. The original stock transfer books shall be prima facie evidence as to who are the shareholders entitled to examine the list or transfer books or to vote at any meeting of shareholders.

(2) Failure to comply with the requirements of this section shall not affect the validity of any action taken at such meeting.

(3) An officer or agent having charge of the stock transfer books who fails to prepare the list of shareholders, or keep it on file for a period of ten days, or produce and keep it open for inspection at the meeting, as provided in this section, shall be liable to any shareholder suffering damage on account of such failure to the extent of such damage.

7-4-115. Quorum of shareholders. Unless otherwise provided in the articles of incorporation, a majority of the shares entitled to vote, represented in person or by proxy, shall constitute a quorum at a meeting of shareholders, but in no event shall a quorum consist of less than one-third of the shares entitled to vote at the meeting. If a quorum is present, the affirmative vote of the majority of the shares represented at the meeting and entitled to vote on the subject matter shall be the act of the shareholders, unless the vote of a greater number or voting by classes is required by this code or the articles of incorporation or bylaws. If a quorum is not represented at any meeting of the shareholders, such meeting may be adjourned for a period not to exceed sixty days at any one adjournment.

7-4-116. Voting of shares. (1) Each outstanding share, regardless of class, shall be entitled to one vote, and each fractional share shall be entitled to a corresponding fractional vote on each matter submitted to a vote at a meeting of shareholders, except to the extent that the voting rights of the shares of any class are limited or denied by the articles of incorporation as permitted by this code.

(2) Neither treasury shares, nor shares of its own stock held by a corporation in a fiduciary capacity, nor shares held by another corporation if the majority of the shares entitled to vote for the election of directors of such other corporation is held by the corporation shall be voted at any meeting or counted in determining the total number of outstanding shares at any given time.

(3) A shareholder may vote either in person or by proxy executed in writing by the shareholder or by his duly authorized attorney-in-fact. No proxy shall be valid after eleven months from the date of its execution, unless otherwise provided in the proxy.

(4) At each election for directors, every shareholder entitled to vote at such election shall have the right to vote, in person or by proxy, the number of shares owned by him for as many persons as there are directors to be elected and for whose election he has a right to vote, or if the privilege of cumulative voting in the election of directors is in effect under the provisions of section 7-2-102 (1) (g), to cumulate his votes by giving one candidate as many votes as the number of directors multiplied by the number of his shares shall equal, or by distributing such votes on the same principle among any number of such candidates.

(5) Shares standing in the name of another corporation, domestic or foreign, may be voted by such officer, agent, or proxy as the bylaws of the corporation may prescribe, or, in the absence of such provision, as the board of directors of the corporation may determine.

(6) Shares held by an administrator, executor, guardian, or conservator may be voted by him, either in person or by proxy, without a transfer of such shares into his name. Shares standing in the name of a trustee may be voted by him, either in person or by proxy, but no trustee shall be entitled to vote shares held by him without a transfer of the shares into his name.

(7) Shares standing in the name of a receiver may be voted by such receiver, and shares held by or under the control of a receiver may be voted by such receiver without the transfer thereof into his name if authority so to do is contained in an appropriate order of the court by which the receiver was appointed.

(8) A shareholder whose shares are pledged shall be entitled to vote such shares until the shares have been transfered into the name of the pledgee, and thereafter the pledgee shall be entitled to vote the shares so transferred.

(9) Redeemable shares which have been called for redemption shall not be entitled to vote on any matter and shall not be deemed outstanding shares on and after the date on which written notice of redemption has been mailed to shareholders and a sum sufficient to redeem such shares has been deposited with a bank or trust company with irrevocable instruction and authority to pay the redemption price to the holders of the shares upon surrender of certificates therefor.

7-4-117. Voting trust. (1) Any number of shareholders of a corporation may create a voting trust for the purpose of conferring upon a trustee the right to vote or otherwise represent their shares, for a period of not to exceed ten years, by entering into a written voting trust agreement specifying the terms and conditions of the voting trust, by depositing a counterpart of the agreement with the corporation at its registered office, and by transferring their shares to such trustee for the purposes of the agreement.

(2) Each trustee shall maintain at his principal office, either within or outside Colorado, books and records showing the names and addresses of the holders of interests in the voting trust, the extent of each such holder's interest, the number of shares of stock transferred to the voting trust, and the transfer of interests in the voting trust.

(3) Each beneficiary of the voting trust and his agents and attorneys have the same right to inspect such books and records as a shareholder has with respect to the books and records of a corporation under this code.

(4) The counterpart of the voting trust agreement so deposited with the corporation shall be subject to the same right of examination by a shareholder of the corporation, in person or by agent or attorney, as are the books and records of the corporation and shall be subject to examination by any holder of beneficial interest in the voting trust, either in person or by agent or attorney, at any reasonable time for any proper purpose.

7-4-118. Greater voting requirements. When, with respect to any action to be taken by the shareholders of a corporation, the articles of incorporation require the vote or concurrence of the holders of a greater proportion of the shares, or of any class or series thereof, than required by this code with respect to such action, the provisions of the articles of incorporation shall control.

7-4-119. Waiver of notice. When any notice is required to be given to any shareholder or director of a corporation under the provisions of this code or under the provisions of the articles of incorporation or bylaws of the corporation, a waiver thereof in writing signed by the person entitled to such notice, whether before, at, or after the time stated therein, shall be equivalent to the giving of such notice.

7-4-120. Liability of subscribers and shareholders. (1) A holder of or subscriber to shares of a corporation shall be under no obligation to the corporation or its creditors with respect to such shares other than the obligation to pay to the corporation or to the creditors the full unpaid amount of consideration for which the shares were issued or to be issued. The consideration for par value shares shall be not less than par value, and the consideration for no par value shares shall be not less than stated value.

(2) Any person becoming an assignee or transferee of shares or of a subscription for shares in good faith and without knowledge or notice that the full consideration therefor has not been paid shall not be personally liable to the corporation or its creditors for any unpaid portion of such consideration.

(3) An executor, administrator, conservator, guardian, trustee, assignee for the benefit of creditors, or receiver shall not be personally liable to the corporation as a holder of or subscriber to shares of a corporation, but the estate and funds in his hands shall be so liable.

(4) No pledgee or other holder of shares as collateral security shall be personally liable as a shareholder.

7-4-121. Actions by shareholders - limitations. (1) No action shall be brought in this state by a shareholder in the right of a domestic or foreign corporation unless the plaintiff was a holder of shares or of voting trust certificates therefor at the time of the transaction of which he complains or his shares or voting trust certificates thereafter devolved upon him by operation of law from a person who was a holder at such time.

(2) In any action instituted on or after January 1, 1959, in the right of any domestic or foreign corporation by the holder of shares of such corporation or of voting trust certificates therefor, the court having jurisdiction, upon final judgment and a finding that the action was brought without reasonable cause, may require the plaintiff to pay to the parties named as defendant the costs and reasonable expenses directly attributable to the defense of such action, but not including fees of attorneys.

(3) In any action pending, instituted, or maintained on or after January 1, 1959, in the right of any domestic or foreign corporation by the holder of less than five percent of the outstanding shares of any class of such corporation or of voting trust certificates therefor, unless the shares or voting trust certificates so held have a market value in excess of twenty-five thousand dollars, the corporation in whose right such action is brought shall be entitled, at any time before final judgment, to require the plaintiff to give security for the costs and reasonable expenses which may be directly attributable and incurred by it in the defense of such action or may be incurred by other parties named as defendant for which it may become legally liable, but not including fees of attorneys. Market value shall be determined as of the date that the plaintiff institutes the action or in the case of an intervenor

as of the date that he becomes a party to the action. The amount of such security may from time to time be increased or decreased, in the discretion of the court, upon showing that the security provided has or may become inadequate or is excessive. The corporation shall have recourse to such security in such amount as the court having jurisdiction shall determine upon the termination of such action.

7-4-122. Action by directors or shareholders without a meeting. (1) Any action required by this code to be taken at a meeting of the directors, executive committee, or shareholders of a corporation, or any action which may be taken at a meeting of the directors, executive committee, or shareholders, may be taken without a meeting if a consent in writing, setting forth the action so taken, is signed by all of the directors, executive committee, or shareholders entitled to vote with respect to the subject matter thereof.

(2) Such consent has the same force and effect as an unanimous vote of the directors or shareholders and may be stated as such in any articles or document filed with the secretary of state under this code.

ARTICLE 5

Directors - Officers - Records

7-5-101. Board of directors. The business and affairs of a corporation shall be managed by a board of directors which shall exercise all the powers of the corporation, except as otherwise provided in this code or by its articles of incorporation. Directors need not be residents of this state or shareholders of the corporation, unless the articles of incorporation or bylaws so require. The articles of incorporation or bylaws may prescribe other qualifications for directors. The board of directors shall have the authority to fix the compensation of directors, unless otherwise provided in the articles of incorporation.

7-5-102. Number, election, and term of directors. The number of directors of a corporation shall be not less than three. Subject to such limitation, the number of directors shall be fixed by the bylaws, except as to the number constituting the initial board of directors, which number shall be fixed by the articles of incorporation. The number of directors may be increased or decreased by amendment to the bylaws, but no decrease shall have the effect of shortening the term of any incumbent director. In the absence of a bylaw fixing the number of directors, the number shall be the same as that stated in the articles of incorporation. The names and addresses of the members of the first board of directors shall be stated in the articles of incorporation. Such persons shall hold office until the first annual meeting of shareholders and until their successors have been elected and qualified. At the first annual linng of shareholders and at each annual meeting thereafter, the shareholders shall elect directors to hold office until the next succeeding annual meeting, except in case of the classification of directors as permitted by this code. Each director shall hold office for the term for which he is elected and until his successor has been elected and qualified.

7-5-103. Classification of directors. In lieu of electing the whole number of directors annually, the articles of incorporation may provide that the directors be divided into either two or three classes, each class to be as nearly equal in number as possible, the term of office of directors of the first class to expire at the first annual meeting of shareholders after their election, that of the second class to expire at the second annual meeting after their election, and that of the third class, if any, to expire at the third annual meeting after their election. At each annual meeting after such classification, the number of directors equal to the number of the class whose term expires at the time of such meeting shall be elected to hold office until the second succeeding annual meeting, if there are two classes, or until the third succeeding annual meeting, if there are three classes.

7-5-104. Vacancies. Any vacancy occurring in the board of directors may be filled by the affirmative vote of a majority of the remaining directors though less than a quorum of the board of directors. A director elected to fill a vacancy shall be elected for the unexpired term of his predecessor in office. Any directorship to be filled by reason of an increase in the number of directors shall be filled by the affirmative vote of a majority of the directors then in office or by an election at an annual meeting or at a special meeting of shareholders called for that purpose. A director chosen to fill a position resulting from an increase in the number of directors shall hold office until the next annual meeting of shareholders and until his successor has been elected and qualified.

7-5-105. Removal of directors. (1) At a meeting called expressly for that purpose, directors may be removed in the manner provided in this section. The entire board of directors or any lesser number may be removed, with or without cause, by a vote of the holders of the majority of the shares then entitled to vote at an election of directors; except that, where the certificate of incorporation of corporations organized prior to January 1, 1959, classifies directors, the directors whose terms expire at the next annual meeting of shareholders may be removed by a vote of the holders of a majority of such shares, and directors whose terms do not expire at the next annual meeting of shareholders may be removed only by a vote of the holders of at least two-thirds of such shares.

(2) In the case of a corporation having cumulative voting, if less than the entire board is to be removed, no one of the directors may be removed if the votes of a sufficient number of shares are cast against his removal which, if then cumulatively voted at an election of the entire board of directors or, if there are classes of directors, at an election of the class of directors of which he is a part, would be sufficient to elect him.

(3) If the holders of the shares of any class are entitled to elect one or more directors by the provisions of the articles of incorporation, the provisions of this section shall apply, in respect to the removal of a director or directors so elected, to the vote of the holders of the outstanding shares of that class and not to the vote of the outstanding shares as a whole.

7-5-106. Quorum of directors. A majority of the number of directors fixed by the bylaws or, in the absence of a bylaw fixing the number of directors, of the number stated in the articles of incorporation shall constitute a quorum for the transaction of business, unless a greater number is required by the articles of incorporation or the bylaws. The act of the majority of the directors present at a meeting at which a quorum is present shall be the act of the board of directors, unless the act of a greater number is required by the articles of incorporation or the bylaws.

7-5-107. Executive committee. If the articles of incorporation or the bylaws so provide, the board of directors, by resolution adopted by a majority of the number of directors fixed by the bylaws or, in the absence of a bylaw fixing the number of directors, of the number stated in the articles of incorporation, may designate two or more directors to constitute an executive committee, which committee, to the extent provided in such resolution or in the articles of incorporation or the bylaws of the corporation, shall have all of the authority of the board of directors in the management of the corporation; but the designation of such committee and the delegation thereto of authority shall not operate to relieve the board of directors, or any member thereof, of any responsibility imposed upon it or him by law.

7-5-108. Place and notice of directors' meetings. Meetings of the board of directors, regular or special, may be held either within or without this state. Regular meetings of the board of directors may be held with or without notice as prescribed in the bylaws. Special meetings of the board of directors shall be held upon such notice as is prescribed in the bylaws. Attendance of a director at a meeting shall constitute a waiver of notice of such meeting, except where a director attends a meeting for the express purpose of objecting to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the board of directors need be specified in the notice or waiver of notice of such meeting unless required by the bylaws.

7-5-109. Bylaws. The initial bylaws of a corporation shall be adopted by its board of directors. The power to alter, amend, or repeal the bylaws or adopt new bylaws shall be vested in the board of directors unless reserved to the shareholders by the articles of incorporation. The bylaws may contain any provisions for the regulation and management of the affairs of the corporation not inconsistent with law or the articles of incorporation.

7-5-110. Dividends. (1) The board of directors of a corporation may, from time to time, declare and the corporation may pay dividends on its outstanding shares in cash, property, or its own shares, except when the corporation is insolvent or when the payment thereof would render the corporation insolvent or when the declaration or payment thereof would be contrary to any restrictions contained in the articles of incorporation, subject to the following provisions:

(a) Dividends may be declared and paid in cash or property only out of the unreserved and unrestricted earned surplus of the corporation, except as otherwise provided in this section.

(b) Dividends may be declared by corporations engaged in the business of exploiting natural resources and paid in cash out of the depletion reserves, but each such dividend shall be identified as a distribution of the reserves, and the amount per share paid from such reserves shall be disclosed to the shareholders receiving the same concurrently with the distribution thereof; except that no such dividend shall be paid to the holders of any class of shares which would reduce the remaining net assets of the corporation below the aggregate preferential amount payable in the event of voluntary liquida- to the holders of shares having preferential rights to the assets of the corporation in the event of liquidation.

(c) Dividends may be declared and paid in its own shares out of any treasury shares that have been reacquired out of surplus of the corporation.

(d) Dividends may be paid out of the corporation's net assets in excess of its stated capital; except that no such dividends shall be paid to the holders of any class of shares if the payment would reduce the remaining net assets of the corporation below the total of stated capital, plus additional amounts not forming part of stated capital, payable in the event of voluntary liquidation to the holders of shares having rights to the assets of the corporation in liquidation preferential to those of the class on which such distribution is made.

(e) Dividends may be declared and paid in its own authorized but unissued shares out of any unreserved and unrestricted surplus of the corporation upon the following conditions:

(I) If a dividend is payable in its own shares having a par value, such shares shall be issued at not less than the par value thereof, and there shall be transferred to stated capital at the time such dividend is paid an amount at least equal to the aggregate par value of the shares to be issued as a dividend.

(II) If a dividend is payable in its own shares without par value, such shares shall be issued at such value as is fixed by the board of directors

by resolution adopted at the time the dividend is declared, and there shall be transferred to stated capital at the time the dividend is paid an amount of surplus equal to the aggregate value so fixed in respect of such shares, and the amount per share so transferred to stated capital shall be disclosed to the shareholders receiving the dividend concurrently with the payment thereof.

(f) No dividend payable in shares of any class shall be paid to the holders of shares of any other class unless the articles of incorporation so provide or such payment is authorized by the affirmative vote or the written consent of the holders of at least a majority of the outstanding shares of the class in which the payment is to be made.

(g) A split-up or division of the issued shares of any class into a greater number of shares of the same class without increasing the stated capital of the corporation shall not be construed to be a share dividend within the meaning of this section.

7-5-111. Distributions in partial liquidation. (1) The board of directors of a corporation may distribute, from time to time, to its shareholders in partial liquidation, out of stated capital or capital surplus of the corporation, a portion of its assets in cash or property, subject to the following provisions:

(a) No such distribution shall be made at a time when the corporation is insolvent or when such distribution would render the corporation insolvent.

(b) No such distribution shall be made unless the articles of incorporation so provide or the distribution is authorized by the affirmative vote of the holders of at least two-thirds of the outstanding shares of each class whether or not entitled to vote thereon by the provisions of the articles of incorporation of the corporation.

(c) No such distribution shall be made to the holders of any class of shares unless all cumulative dividends accrued on all preferred or special classes of shares entitled to preferential dividends have been fully paid.

(d) No such distribution shall be made to the holders of any class of shares which would reduce the remaining net assets of the corporation below the aggregate preferential amount payable in event of voluntary liquidation to the holders of shares having preferential rights to the assets of the corporation in the event of liquidation.

(e) Each such distribution, when made, shall be identified as a distribution in partial liquidation and the amount per share disclosed to the shareholders receiving the same concurrently with the distribution thereof.

(2) The board of directors of a corporation may also, from time to time, distribute to the holders of its outstanding shares having a cumulative preferential right to receive dividends, in discharge of their cumulative dividend rights, dividends payable in cash out of the capital surplus of the corporation, if at the time the corporation has no earned surplus and is not insolvent and would not thereby be rendered insolvent. Each such distribution when made shall be identified as a payment of cumulative dividends out of capital surplus.

7-5-112. Sale, mortgage, or lease of assets. (1) The board of directors has the power to sell, lease, exchange, mortgage, pledge, or make other disposition of the business, property, assets, or franchises of the corporation upon such terms and conditions and for such considerations, which may consist in whole or in part of money or property, real or personal, including shares of any other corporation, as are authorized by said board.

(2) If the directors desire to sell, exchange, or lease the principal part or all of the business, assets, property, or franchises of the corporation not in the usual course of its business, they may do so only upon a vote of two-thirds of the outstanding authorized shares of the corporation entitled to vote thereon by the provisions of the articles of incorporation at a meeting of the shareholders duly called for such purpose. If any class of shares is entitled to vote thereon as a class, the affirmative vote of the holders of two-thirds of the shares of each class of shares entitled to vote as a class is required. The term "sell, exchange, or lease" as used in this subsection (2) shall not include mortgage or pledge.

7-5-113. Rights of dissenting shareholders upon sale, exchange, or lease of assets not in the usual course of business. (1) If a sale, exchange, or lease of the principal part or all of the business, assets, property, or franchises of a corporation not in the usual course of its business or in connection with the dissolution and liquidation of the corporation is authorized by a vote of the shareholders of the corporation, any shareholder who has filed with the corporation a written objection thereto prior to or at the meeting of shareholders at which the sale, exchange, or lease is authorized and who has not voted in favor thereof may, within ten days after the date on which the vote was taken, make written demand on the corporation for the payment to him of the fair value of his shares as of the day prior to the date on which the vote was taken. If the sale, exchange, or lease is effected, the corporation shall pay to such shareholder, upon surrender of his certificate representing such shares, the fair value thereof. Such demand shall state the number and class of the shares owned by such dissenting shareholder. Any dissenting shareholder failing to make demand within the ten-day period shall be bound by the terms of the sale, exchange, or lease.

(2) Within ten days after the sale, exchange, or lease is effected, the corporation shall give notice thereof to each dissenting shareholder who has made demand as provided in this section for the payment of the fair value of his shares.

(3) If, within thirty days after the date on which the sale, exchange, or lease was effected, the value of such shares is agreed upon between the dissenting shareholder and the corporation, payment therefor shall be made within ninety days after the date on which the sale, exchange, or lease was effected, upon the surrender of his certificate representing such shares. Upon payment of the agreed value, the dissenting shareholder shall cease to have any interest in such shares or in the corporation.

(4) If, within such period of thirty days, the shareholder and the corporation do not so agree, then the dissenting shareholder may file a petition within sixty days after the expiration of the thirty-day period in any court of competent jurisdiction in the county where the registered office of the corporation is located asking for a finding and determination of the fair value of such shares, and he shall be entitled to judgment against the corporation for the amount of such fair value as of the day prior to the date on which such vote was taken approving the sale, exchange, or lease, together with interest thereon to the date of the judgment. The judgment shall be payable only upon and simultaneously with the surrender to the corporation of the certificate representing such shares. Upon payment of the judgment, the dissenting shareholder shall cease to have any interest in such shares or in the corporation. Unless the dissenting shareholder files such petition within the time limited in this section, such shareholder and all persons claiming under him shall be bound by the terms of the sale, exchange, or lease.

(5) The right of a dissenting shareholder to be paid the fair value of his shares as provided in this section shall cease if and when the corporation abandons the sale, exchange, or lease or the shareholders revoke the authority to make such sale, exchange, or lease.

(6) Shares acquired by the corporation pursuant to the payment of the agreed value thereof or to payment of the judgment entered therefor, as provided in this section, may be held and disposed of by the corporation as in the case of other treasury shares.

7-5-114. Liability of directors in certain cases. (1) Directors of a corporation who vote for or assent to the declaration of any dividend or other distribution of the assets of a corporation to its shareholders contrary to the provisions of this code or contrary to any restrictions contained in the articles of incorporation are jointly and severally liable to the corporation for the amount of such dividend which is paid or the value of such assets which are distributed in excess of the amount of such dividend or distribution which could have been paid or distributed without a violation of the provisions of this code or the restrictions in the articles of incorporation.

(2) Directors of a corporation who vote for or assent to the purchase of its own shares contrary to the provisions of this code shall be jointly and severally liable to the corporation for the amount of consideration paid for such shares which is in excess of the maximum amount which could have been paid therefor without a violation of the provisions of this code.

(3) The directors of a corporation who vote for or assent to any distribution of assets of a corporation to its shareholders during the liquidation of the corporation without the payment and discharge of, or making adequate provision for, all known debts, obligations, and liabilities of the corporation shall be jointly and severally liable to the corporation for the value of such assets which are distributed, to the extent that such debts, obligations, and liabilities of the corporation are not thereafter paid and discharged.

(4) The directors of a corporation who vote for or assent to the making or guaranteeing of a loan to an officer or director of the corporation, or the making or guaranteeing of any loan secured by shares of the corporation, shall be jointly and severally liable to the corporation for the amount of such loan or guarantee until the repayment thereof, unless the voting procedure specified in section 7-3-101 (1) (f) has been followed.

(5) A director of a corporation who is present at a meeting of its board of directors at which action on any corporate matter is taken shall be presumed to have assented to the action taken, unless his dissent is entered in the minutes of the meeting or unless he files his written dissent to such action with the person acting as the secretary of the meeting before the adjournment thereof or forwards such dissent by registered mail to the secretary of the corporation immediately after the adjournment of the meeting. Such right to dissent shall not apply to a director who voted in favor of such action.

(6) A director shall not be liable under subsection (1), (2), or (3) of this section if he relied and acted in good faith upon financial statements of the corporation represented to him to be correct by the president or the officer of the corporation having charge of its books of account or a written report by an independent public or certified public accountant or firm of such accountants fairly reflecting the financial condition of such corporation, nor shall he be so liable if in good faith in determining the amount available for any such dividend or distribution he considered the assets to be of their book value.

(7) Any director against whom a claim is asserted under or pursuant to this section for the payment of a dividend or other distribution of assets of a corporation and who is held liable thereon shall be entitled to contribution from the shareholders who accepted or received any such dividend or assets, knowing the dividend or distribution to have been made in violation of this section, in proportion to the amounts received by them respectively.

(8) Any director against whom a claim is asserted under or pursuant to this section shall be entitled to contribution from the other directors who voted for or assented to the action upon which the claim is asserted.

(9) The liabilities imposed by this section shall be in addition to any other liabilities imposed by law on directors of a corporation.

7-5-115. Officers. (1) The officers of a corporation shall consist of a president, one or more vice-presidents as may be prescribed by the bylaws, a secretary, and a treasurer, each of whom shall be elected by the board of directors at such time and in such manner as may be prescribed by the bylaws. Such other officers and assistant officers and agents as are deemed necessary may be elected or appointed by the board of directors or chosen in such other manner as may be prescribed by the bylaws. Any two or more offices may be held by the same person, except the offices of president and secretary.

(2) All officers and agents of the corporation, as between themselves and the corporation, shall have such authority and perform such duties in the management of the corporation as may be provided in the bylaws, or as may be determined by resolution of the board of directors not inconsistent with the bylaws.

7-5-116. Removal of officers. Any officer or agent may be removed by the board of directors or by the executive committee, if any, whenever in its judgment the best interests of the corporation will be served thereby, but such removal shall be without prejudice to the contract rights, if any, of the person so removed. Election or appointment of an officer or agent shall not of itself create contract rights.

7-5-117. Books and records. (1) Each corporation shall keep correct and complete books and records of account and shall keep minutes of the proceedings of its shareholders and board of directors; and each corporation shall keep at its registered office or principal place of business, or at the office of its transfer agent or registrar either within or without Colorado, a record of its shareholders, giving the names and addresses of all shareholders and the number and class of the shares held by each.

(2) Any person who has been a shareholder of record for at least six months immediately preceding his demand or who is the holder of record of at least five percent of all outstanding shares of a corporation, upon written demand stating the purpose thereof, shall have the right to examine, in person or by agent or attorney, at any reasonable time and for any proper purpose, its books and records of account, minutes, and record of shareholders and to make extracts therefrom.

(3) Any officer or agent who, or a corporation which, refuses to allow any such shareholder, or his agent or attorney, to examine and make extracts from its books and records of account, minutes, and record of shareholders, for any proper purpose, is liable to such shareholder for a penalty of ten percent of the value of the shares owned by the shareholder in addition to any other damages or remedy afforded him by law. It is a defense to any action for penalties under this section that the person suing therefor has within two years sold or offered for sale any list of shareholders of such corporation or any other corporation, or has aided or abetted any person in procuring any list of shareholders for any such purpose, or has improperly used any information secured through any prior examination of the books and records of account, or minutes, or record of shareholders of such corporation or any other corporation, or was not acting in good faith or for a proper purpose in making his demand.

(4) Nothing in this section shall impair the power of any court of competent jurisdiction, upon proof by a shareholder of proper purpose, irrespective of the period of time during which such shareholder has been a shareholder of record and irrespective of the number of shares held by him, to compel the production for examination by such shareholder of the books and records of account, minutes, and record of shareholders of a corporation.

(5) Upon the written request of any shareholder of a corporation, the corporation shall mail to such shareholder its most recent annual financial statements showing in reasonable detail its assets and liabilities and the result of its operations.

7-5-118. Emergency bylaws. (1) The board of directors of any corporation may adopt emergency bylaws, which shall, notwithstanding any different provision elsewhere in this section or in the articles of incorporation or bylaws, be operative during any emergency resulting from an attack on the United States or any nuclear or atomic disaster. The emergency bylaws may make any provision that may be practical and necessary for the circumstances of the emergency, including provisions that:

(a) A meeting of the board of directors may be called by any officer or director in such manner and under such conditions as shall be prescribed in the emergency bylaws.

(b) The directors in attendance at the meeting or any greater number fixed by the emergency bylaws shall constitute a quorum.

(c) The officers or other persons designated on a list approved by the board of directors before the emergency, all in such order of priority and

subject to such conditions and for such period of time (not longer than reasonably necessary after the termination of the emergency) as may be provided in the emergency bylaws or in the resolution approving the list, shall, to the extent required to provide a quorum at any meeting of the board of directors, be deemed directors for such meeting.

(2) The board of directors, either before or during any such emergency, may provide, and from time to time modify, lines of succession in the event that during such an emergency any officers or agents of the corporation shall for any reason be rendered incapable of discharging their duties.

(3) The board of directors, either before or during any such emergency, may, effective in the emergency, change the head office or designate several alternative head offices or regional offices or authorize the officers so to do.

(4) No officer, director, or employee acting in accordance with any emergency bylaws shall be liable except for willful misconduct.

(5) To the extent not inconsistent with any emergency bylaws so adopted, the bylaws of the corporation shall remain in effect during any emergency, and upon its termination the emergency bylaws shall cease to be operative.

(6) Unless otherwise provided in emergency bylaws, notice of any meeting of the board of directors during such an emergency may be given only to such of the directors as it may be feasible to reach at the time and by such means as may be feasible at the time, including publication or radio.

(7) To the extent required to constitute a quorum at any meeting of the board of directors during such an emergency, the officers of the corporation who are present shall, unless otherwise provided in the emergency bylaws, be deemed, in order of rank and within the same rank in order of seniority, directors for such meeting.

ARTICLE 6

Stated Capital - Amount and Reduction

7-6-101. Determination of amount of stated capital. (1) In the case of the issuance by a corporation of shares having a par value, the consideration received therefor shall constitute stated capital to the extent of the par value of such shares, and the excess, if any, of such consideration shall constitute capital surplus.

(2) In the case of the issuance by a corporation of shares without par value, the entire consideration received therefor shall constitute stated capital, unless the corporation determines as provided in this section that only a part thereof is stated capital. Within a period of sixty days after the issuance of any shares without par value, the board of directors may allocate to capital surplus not more than twenty-five percent of the consideration received for the issuance of such shares. No such allocation shall be made of any portion of the consideration received for shares without par value having a preference in the assets of the corporation in the event of involuntary liquidation except the amount, if any, of such consideration in excess of such preference.

(3) The stated capital of a corporation may be increased from time to time by resolution of the board of directors directing that all or a part of the surplus of the corporation be transferred to stated capital. The board of directors may direct that the amount of the surplus so transferred be deemed stated capital in respect of any designated class of shares.

7-6-102. Restriction on redemption or purchase of redeemable shares. No redemption or purchase of redeemable shares shall be made by a corporation when it is insolvent or when such redemption or purchase would render it insolvent, or which would reduce the net assets below the aggregate amount payable to the holders of shares having prior or equal rights to the assets of the corporation upon involuntary dissolution.

7-6-103. Cancellation of redeemable shares by redemption or purchase. (1) When redeemable shares of a corporation are redeemed or purchased by the corporation, the redemption or purchase shall effect a cancellation of such shares, and a statement of cancellation shall be filed as provided in this section. Thereupon, such shares shall be restored to the status of authorized but unissued shares, unless the articles of incorporation provide that such shares when redeemed or purchased shall not be reissued, in which case the filing of the statement of cancellation shall constitute an amendment to the articles of incorporation and shall reduce the number of shares of the class so cancelled which the corporation is authorized to issue by the number of shares so cancelled.

(2) The statement of cancellation shall be executed in duplicate by the corporation by its president or a vice-president and by its secretary or an assistant secretary and verified by one of the officers signing such statement and shall set forth:

(a) The name of the corporation;

(b) The number of redeemable shares cancelled through redemption or purchase, itemized by classes and series;

(c) The aggregate number of issued shares, itemized by classes and series, after giving effect to such cancellation;

(d) The amount, expressed in dollars, of the stated capital of the corporation after giving effect to such cancellation;

(e) Whether the articles of incorporation provide that such shares when redeemed or purchased shall or shall not be reissued;

(f) Whether the cancellation is being effected under this section.

(3) Duplicate originals of such statement shall be delivered to the secretary of state. If the secretary of state finds that such statement conforms to law, he shall, when all fees and franchise taxes have been paid as in this code prescribed: Endorse on each of such duplicate originals the word "Filed" and the month, day, and year of the filing thereof; file one of such duplicate originals in his office; return the other duplicate original to the corporation or its representative.

(4) Upon the filing of such statement of cancellation, the stated capital of the corporation shall be deemed to be reduced by that part of the stated capital which was, at the time of the cancellation, represented by the shares so cancelled.

(5) Nothing in this section shall be construed to forbid a cancellation of shares or a reduction of stated capital in any other manner permitted by this code.

7-6-104. Cancellation of nonredeemable shares. (1) A corporation may at any time, by resolution of its board of directors, cancel all or any part of the shares of the corporation of any class reacquired by it, other than redeemable shares redeemed or purchased, and in such event a statement of cancellation shall be filed as provided in this section.

(2) The statement of cancellation shall be executed in duplicate by the corporation by its president or a vice-president and by its secretary or an assistant secretary and verified by one of the officers signing such statement and shall set forth:

(a) The name of the corporation;

(b) The number of reacquired shares cancelled by resolution duly adopted by the board of directors, itemized by classes and series, and the date of its adoption;

(c) The aggregate number of issued shares, itemized by classes and series, after giving effect to such cancellation;

(d) The amount, expressed in dollars, of the stated capital of the corporation after giving effect to such cancellation;

(e) Whether the cancellation is being effected under this section.

(3) Duplicate originals of such statement shall be delivered to the secretary of state. If the secretary of state finds that the statement conforms to

law, he shall, when all fees and franchise taxes have been paid as in this code prescribed: Endorse on each of such duplicate originals the word "Filed", and the month, day, and year of the filing thereof; file one of such duplicate originals in his office; return the other duplicate original to the corporation or its representative.

(4) Upon the filing of such statement of cancellation, the stated capital of the corporation shall be deemed to be reduced by that part of the stated capital which was, at the time of the cancellation, represented by the shares so cancelled, and the shares so cancelled shall be restored to the status of authorized but unissued shares.

(5) Nothing in this section shall be construed to forbid a cancellation of shares or a reduction of stated capital in any other manner permitted by this code.

7-6-105. Reduction of stated capital in certain cases. (1) A reduction of the stated capital of a corporation, where such reduction is not accompanied by any action requiring an amendment of the articles of incorporation and not accompanied by a cancellation of shares, may be made in the following manner:

(a) The board of directors shall adopt a resolution setting forth the amount of the proposed reduction and the manner in which the reduction shall be effected and directing that the question of such reduction be submitted to a vote at a meeting of shareholders, which may be either an annual or a special meeting.

(b) Written or printed notices, stating that the purpose or one of the purposes of such meeting is to consider the question of reducing the stated capital of the corporation in the amount and manner proposed by the board of directors, shall be given to each shareholder of record entitled to vote thereon within the time and in the manner provided in this code for the giving of notice of meetings of shareholders.

(c) At such meeting a vote of the shareholders entitled to vote thereon shall be taken on the question of approving the proposed reduction of stated capital, which shall require for its adoption the affirmative vote of the holders of at least a majority of the shares entitled to vote thereon.

(d) When a reduction of the stated capital of a corporation has been approved as provided in this section, a statement shall be executed in duplicate by the corporation by its president or a vice-president and by its secretary or an assistant secretary and verified by one of the officers signing such statement and shall set forth:

(I) The name of the corporation;

(II) A copy of the resolution of the shareholders approving the reduction, and the date of its adoption;

(III) The number of shares outstanding, and the number of shares entitled to vote thereon;

(IV) The number of shares voted for and against the reduction, respectively;

(V) A statement of the manner in which such reduction is effected, and a statement, expressed in dollars, of the amount of stated capital of the corporation after giving effect to the reduction.

(e) Duplicate originals of this statement shall be delivered to the secretary of state. If the secretary of state finds that such statement conforms to law, he shall, when all fees and franchise taxes have been paid as in this code prescribed: Endorse on each of such duplicate originals the word "Filed" and the month, day, and year of the filing thereof; file one of such duplicate originals in his office; return the other duplicate original to the corporation or its representative.

(f) Upon the filing of such statement, the stated capital of the corporation shall be reduced as therein set forth.

(2) No reduction of stated capital shall be made under the provisions of this section which would reduce the amount of the aggregate stated capital

of the corporation to an amount equal to or less than the aggregate preferential amounts payable upon all issued shares having a preferential right in the assets of the corporation in the event of involuntary liquidation, plus the aggregate par value of all issued shares having a par value but no preferential right in the assets of the corporation in the event of involuntary liquidation.

7-6-106. Special provisions relating to surplus and reserves. (1) The surplus, if any, created by or arising out of a reduction of the stated capital of a corporation is capital surplus.

(2) The capital surplus of a corporation may be increased from time to time by resolution of the board of directors directing that all or a part of the earned surplus of the corporation be transferred to capital surplus.

(3) A corporation may, by resolution by its board of directors, apply any part or all of its capital surplus to the reduction or elimination of any deficit arising from losses, however incurred, but only after first eliminating the earned surplus, if any, of the corporation by applying such losses against earned surplus and only to the extent that such losses exceed the earned surplus, if any. Each such application of capital surplus shall effect a reduction of capital surplus.

(4) A corporation may, by resolution of its board of directors, create a reserve out of its earned surplus for any proper purpose and may abolish any such reserve in the same manner. Earned surplus of the corporation to the extent so reserved shall not be available for the payment of dividends or other distributions by the corporation except as expressly permitted by this code.

ARTICLE 7

Merger or Consolidation

7-7-101. Procedure for merger. (1) Any two or more domestic corporations may merge into one of such corporations pursuant to a plan of merger approved in the manner provided in this code.

(2) The board of directors of each corporation shall, by resolution adopted by each such board, approve a plan of merger setting forth:

(a) The names of the corporations proposing to merge and the name of the corporation into which they propose to merge which is designated in this article as the surviving corporation;

(b) The terms and conditions of the proposed merger;

(c) The manner and basis of converting the shares of each merging corporation into shares or other securities or obligations of the surviving corporation;

(d) A statement of any changes in the articles of incorporation of the surviving corporation to be effected by such merger;

(e) Such other provisions with respect to the proposed merger as are deemed necessary or desirable.

7-7-102. Procedure for consolidation. (1) Any two or more domestic corporations may consolidate into a new corporation pursuant to a plan of consolidation approved in the manner provided in this code.

(2) The board of directors of each corporation shall, by a resolution adopted by each such board, approve a plan of consolidation setting forth:

(a) The names of the corporations proposing to consolidate and the name of the new corporation into which they propose to consolidate which is designated in this article as the new corporation;

(b) The terms and conditions of the proposed consolidation;

(c) The manner and basis of converting the shares of each corporation into shares or other securities or obligations of the new corporation;

(d) With respect to the new corporation, all of the statements required to be set forth in articles of incorporation for corporations organized under this code;

(e) Such other provisions with respect to the proposed consolidation as are deemed necessary or desirable.

7-7-103. Approval by shareholders. (1) The board of directors of each corporation, upon approving such plan of merger or plan of consolidation shall direct, by resolution, that the plan be submitted to a vote at a meeting of shareholders, which may be either an annual or a special meeting. Written or printed notice shall be given to each shareholder of record entitled to vote at such meeting, not less than ten days before such meeting, in the manner provided in this code for the giving of notice of meetings of shareholders and shall state the purpose of the meeting, whether the meeting be an annual or a special meeting. A copy of a summary of the plan of merger or plan of consolidation, as the case may be, shall be included in or enclosed with such notice.

(2) At each such meeting, a vote of the shareholders shall be taken on the proposed plan of merger or consolidation. Each outstanding share of the corporation shall be entitled to vote on the proposed plan of merger or consolidation, whether or not such share has voting rights under the provisions of the articles of incorporation of the corporation. The plan of merger or consolidation shall be approved upon receiving the affirmative vote of the holders of at least two-thirds of the outstanding shares of each such corporation, unless any class of shares of the corporation is entitled to vote as a class thereon, in which event, as to such corporation, the plan of merger or consolidation shall be approved upon receiving the affirmative vote of the holders of at least two-thirds of the outstanding shares of each class of shares entitled to vote as a class thereon and of the total outstanding shares. Any class of shares of any such corporation shall be entitled to vote as a class if the plan of merger or consolidation, as the case may be, contains any provision which, if contained in a proposed amendment to articles of incorporation, would entitle such class of shares to vote as a class.

(3) After such approval by a vote of the shareholders of each corporation and at any time prior to the filing of the articles of merger or consolidation, the merger or consolidation may be abandoned pursuant to provisions therefor set forth in the plan of merger or consolidation.

7-7-104. Articles of merger or consolidation. (1) Upon such approval, articles of merger or articles of consolidation shall be executed in duplicate by each corporation by its president or a vice-president and by its secretary or an assistant secretary and verified by one of the officers of each corporation signing the articles and shall set forth:

(a) The plan of merger or the plan of consolidation;

(b) As to each corporation, the number of shares outstanding and, if the shares of any class are entitled to vote as a class, the designation and number of outstanding shares of each such class;

(c) As to each corporation, the number of shares voted for and against such plan, respectively, and, if the shares of any class are entitled to vote as a class, the number of shares of each such class voted for and against the plan, respectively.

(2) Duplicate originals of the articles of merger or articles of consolidation shall be delivered to the secretary of state. If the secretary of state finds that such articles conform to law, he shall, when all fees and franchise taxes have been paid as in this code prescribed: Endorse on each of such duplicate originals the word "Filed" and the month, day, and year of the filing thereof; file one of such duplicate originals in his office; issue a certificate of merger or a certificate of consolidation to which he shall affix the other duplicate original.

(3) The certificate of merger or certificate of consolidation, together with the duplicate original of the articles of merger or articles of consolidation affixed thereto by the secretary of state, shall be returned to the surviving or new corporation, as the case may be, or its representative.

7-7-105. Effect of merger or consolidation. (1) Upon issuance of the certificate of merger or the certificate of consolidation by the secretary of state, the merger or consolidation shall be effected.

(2) When such merger or consolidation has been effected:

(a) The several corporations parties to the plan of merger or consolidation shall be a single corporation, which, in the case of a merger, shall be that corporation designated in the plan of merger as the surviving corporation and, in the case of a consolidation, shall be the new corporation provided for in the plan of consolidation.

(b) The separate existence of all corporations parties to the plan of merger or consolidation, except the surviving or new corporation, shall cease.

(c) Such surviving or new corporation shall have all the rights, privileges, immunities, and powers and shall be subject to all the duties and liabilities of a corporation organized under this code.

(d) Such surviving or new corporation shall thereupon and thereafter possess all the rights, privileges, immunities, and franchises, of a public as well as a private nature, of each of the merging or consolidating corporations; and all property, real, personal, and mixed, and all debts due on whatever account, including subscriptions to shares, and all other choses in action, and every other interest of or belonging to or due to each of the corporations so merged or consolidated shall be deemed to be transferred to and vested in such single corporation without further act or deed; and the title to any real estate, or any interest therein, vested in any of such corporations shall not revert or be in any way impaired by reason of the merger or consolidation.

(e) Such surviving or new corporation shall thenceforth be responsible and liable for all the liabilities and obligations of each of the corporations so merged or consolidated; and any claim existing or action or proceeding, whether civil or criminal, pending by or against any of such corporations may be prosecuted as if the merger or consolidation had not taken place, or such surviving or new corporation may be substituted in its place. Neither the rights of creditors nor any liens upon the property of any such corporation shall be impaired by such merger or consolidation.

(f) In the case of a merger, the articles of incorporation of the surviving corporation are deemed to be amended to the extent, if any, that such changes in its articles of incorporation are stated in the plan of merger; and, in the case of a consolidation, the statements set forth in the articles of consolidation and which are required or permitted to be set forth in the articles of incorporation of corporations organized under this code are deemed to be the original articles of incorporation of the new corporation.

(g) The net surplus of the merging or consolidating corporations which was available for the payment of dividends immediately prior to the merger or consolidation, to the extent that such surplus is not transferred to stated capital or capital surplus by the issuance of shares or otherwise, shall continue to be available for the payment of dividends by the surviving or new corporation.

7-7-106. Merger of subsidiary corporation. (1) Any corporation owning at least ninety percent of the outstanding shares of each class of another corporation may merge the other corporation into itself without approval by a vote of shareholders of either corporation. Its board of directors shall, by resolution, approve a plan of merger setting forth:

(a) The name of the subsidiary corporation and the name of the corporation owning at least ninety percent of its shares, which is designated in this article as the surviving corporation;

(b) The manner and basis of converting the shares of the subsidiary corporation into shares or other securities or obligations of the surviving corporation or the cash or other consideration to be paid or delivered upon surrender of each share of the subsidiary corporation.

(2) A copy of the plan of merger shall be mailed to each shareholder of record of the subsidiary corporation.

(3) Articles of merger shall be executed in duplicate by the surviving corporation by its president or a vice-president and by its secretary or an assistant secretary and verified by one of its officers signing such articles and shall set forth:

(a) The plan of merger;

(b) The number of outstanding shares of each class of the subsidiary corporation and the number of such shares of each class owned by the surviving corporation;

(c) The date of the mailing to shareholders of the subsidiary corporation of a new copy of the plan of merger.

(4) On or after the thirtieth day after the mailing of a copy of the plan of merger to shareholders of the subsidiary corporation or upon the waiver thereof by the holders of all outstanding shares, duplicate originals of the articles of merger shall be delivered to the secretary of state. If the secretary of state finds that such articles conform to law, he shall, when all fees and franchise taxes have been paid as in this code prescribed: Endorse on each of such duplicate originals the word "Filed" and the month, date, and year of the filing thereof; file one of such duplicate originals in his office; issue a certificate of merger to which he shall affix the other duplicate original.

(5) The certificate of merger, together with the duplicate original of the articles of merger affixed thereto by the secretary of state, shall be returned to the surviving corporation or its representative.

7-7-107. Merger or consolidation of domestic and foreign corporations. (1) One or more foreign corporations and one or more domestic corporations may be merged or consolidated in the following manner, if such merger or consolidation is permitted by the laws of the state under which each such foreign corporation is organized:

(a) Each domestic corporation shall comply with the provisions of this code with respect to the merger or consolidation of domestic corporations, as the case may be, and each foreign corporation shall comply with the applicable provisions of the laws of the state under which it is organized.

(b) If the surviving or new corporation, as the case may be, is to be governed by the laws of any state other than this state, it shall comply with the provisions of this code with respect to foreign corporations if it is to transact business in this state, and in every case it shall file with the secretary of state of this state:

(I) An agreement that it may be served with process in this state in any proceeding for the enforcement of any obligation of any domestic corporation which is a party to such merger or consolidation and in any proceeding for the enforcement of the rights of a dissenting shareholder of any such domestic corporation against the surviving or new corporation;

(II) An irrevocable appointment of the secretary of state of this state as its agent to accept service of process in any such proceeding, with a complete address to which the service of process in any such proceeding shall be mailed;

(III) An agreement that it will promptly pay to the dissenting shareholders of any such domestic corporation the amount, if any, to which they are entitled under the provisions of this code with respect to the rights of dissenting shareholders.

(2) The effect of such merger or consolidation shall be the same as in the case of the merger or consolidation of domestic corporations, if the surviving or new corporation is to be governed by the laws of this state. If the surviving or new corporation is to be governed by the laws of any state other than this state, the effect of the merger or consolidation shall be the same as in the case of the merger or consolidation of domestic corporations, except insofar as the laws of such other state provide otherwise.

(3) At any time prior to the filing of the articles of merger or consolidation, the merger or consolidation may be abandoned pursuant to provisions, if any, set forth in the plan of merger or consolidation.

7-7-108. Rights of dissenting shareholders in mergers or consolidations. (1) If a shareholder of a corporation which is a party to a merger or consolidation files with such corporation, prior to or at the meeting of shareholders at which the plan of merger or consolidation is submitted to a vote, a written objection to the plan of merger or consolidation and does not vote in favor thereof, and if such shareholder, within ten days after the date on which the vote was taken, makes written demand on the surviving or new corporation, domestic or foreign, for payment of the fair value of his shares as of the day prior to the date on which the vote was taken approving the merger or consolidation, or if a shareholder of a corporation being merged into another corporation in a case where a meeting of shareholders is not required by law makes written demand within fifteen days after the plan of such merger has been mailed to shareholders, then, if the merger or consolidation is effected, the surviving or new corporation shall pay to such shareholder, upon surrender of his certificate representing such shares, the fair value thereof. Such demand shall state the number and class of the shares owned by the dissenting shareholder. Any such dissenting shareholder failing to make demand within the required period shall be bound by the terms of the merger or consolidation.

(2) Within ten days after the merger or consolidation is effected, the surviving or new corporation, as the case may be, shall give notice thereof to each dissenting shareholder who has made demand as provided in this section for the payment of the fair value of his shares.

(3) If within thirty days after the date on which such merger or consolidation was effected the value of such shares is agreed upon between the dissenting shareholder and the surviving or new corporation, payment therefor shall be made within ninety days after the date on which such merger or consolidation was effected, upon the surrender of his certificate representing the shares. Upon payment of the agreed value, the dissenting shareholder shall cease to have any interest in such shares or in the corporation.

(4) If within such period of thirty days the shareholder and the surviving or new corporation do not so agree, then the dissenting shareholder may, within sixty days after the expiration of the thirty-day period, file a petition in any court of competent jurisdiction in the county where the registered office of the corporation is located asking for a finding and determination of the fair value of such shares, and he shall be entitled to judgment against the surviving or new corporation for the amount of such fair value as of the day prior to the date on which the vote was taken approving the merger or consolidation, together with interest thereon to the date of such judgment. The judgment shall be payable only upon and simultaneously with the surrender to the surviving or new corporation of the certificate representing such shares. Upon payment of the judgment, the dissenting shareholder shall cease to have any interest in such shares or in the surviving or new corporation. Unless the dissenting shareholder files the petition within the time provided in this subsection (4), such shareholder and all persons claiming under him shall be bound by the terms of the merger or consolidation.

(5) Shares acquired by the surviving or new corporation pursuant to the payment of the agreed value thereof or to payment of the judgment entered therefor, as in this section provided, may be held and disposed of by such corporation as in the case of other treasury shares.

(6) The provisions of this section shall not apply to a merger if on the date of the filing of the articles of merger the surviving corporation is the owner of all the outstanding shares of the other corporations, domestic or foreign, which are parties to the merger and shall not apply to shareholders of the surviving corporation if no meeting of shareholders of the surviving corporation was necessary to authorize the merger.

ARTICLE 8

Dissolution - Voluntary and Involuntary

7-8-101. Voluntary dissolution by incorporators. (1) A corporation which has not commenced business and which has not issued any shares may be voluntarily dissolved by its incorporators at any time within three years after the date of the issuance of its certificate of incorporation in the following manner:

(a) Articles of dissolution shall be executed in duplicate by a majority of the incorporators, and verified by them, and shall set forth:

(I) The name of the corporation;

(II) The date of issuance of its certificate of incorporation;

(III) That none of its shares has been issued;

(IV) That the corporation has not commenced business;

(V) That the amount, if any, actually paid in on subscriptions for its shares, less any part thereof disbursed for necessary expenses, has been returned to those entitled thereto,

(VI) That no debts of the corporation remain unpaid;

(VII) That a majority of the incorporators elect that the corporation be dissolved.

(b) Duplicate originals of the articles of dissolution shall be delivered to the secretary of state. If the secretary of state finds that the articles of dissolution conform to law, he shall, when all fees and franchise taxes have been paid as in this code prescribed: Endorse on each of such duplicate originals the word "Filed" and the month, day, and year of the filing thereof; file one of such duplicate originals in his office; issue a certificate of dissolution to which he shall affix the other duplicate original.

(c) The certificate of dissolution, together with the duplicate original of the articles of dissolution affixed thereto by the secretary of state, shall be returned to the incorporators or their representative. Upon the issuance of such certificate of dissolution by the secretary of state, the existence of the corporation shall cease.

7-8-102. Voluntary dissolution by consent of shareholders. (1) A corporation may be voluntarily dissolved by the written consent of all of its shareholders.

(2) Upon the execution of such written consent, a statement of intent to dissolve shall be executed in duplicate by the corporation by its president or a vice-president and by its secretary or an assistant secretary and acknowledged by one of the officers signing such statement, which statement shall set forth: The name of the corporation; the names and respective addresses of its officers; the names and respective addresses of its directors; a statement that a written consent has been signed by all shareholders of the corporation or signed in their names by their duly authorized attorneys.

7-8-103. Voluntary dissolution by act of corporation. (1) A corporation may be dissolved by the act of the corporation when authorized in the following manner:

(a) The board of directors shall adopt a resolution recommending that the corporation be dissolved and directing that the question of such dissolution be submitted to a vote at a meeting of shareholders, which may be either an annual or a special meeting.

(b) Written or printed notice shall be given to each shareholder of record entitled to vote at such meeting within the time and in the manner provided in this code for the giving of notice of meetings of shareholders and, whether the meeting be an annual or special meeting, shall state that the purpose, or one of the purposes, of such meeting is to consider the advisability of dissolving the corporation.

(c) At such meeting, a vote of shareholders entitled to vote shall be taken

on a resolution to dissolve the corporation. Each outstanding share of the corporation shall be entitled to vote thereon, whether or not entitled to vote thereon by the provisions of the articles of incorporation. Such resolution shall be adopted upon receiving the affirmative vote of the holders of at least two-thirds of the outstanding shares of the corporation, unless any class of shares is entitled to vote as a class thereon, in which event the resolution shall require for its adoption the affirmative vote of the holders of at least two-thirds of the outstanding shares of each class of shares entitled to vote as a class thereon and of the total outstanding shares.

(d) Upon the adoption of such resolution, a statement of intent to dissolve shall be executed in duplicate by the corporation by its president or a vice-president and by its secretary or an assistant secretary, and acknowledged by one of the officers signing such statement, which statement shall set forth:

(I) The name of the corporation;

(II) The names and respective addresses of its officers;

(III) The names and respective addresses of its directors;

(IV) A statement that a resolution was adopted by the shareholders authorizing the dissolution of the corporation;

(V) The number of shares outstanding, and, if the shares of any class are entitled to vote as a class, the designation and number of outstanding shares of each such class;

(VI) The number of shares voted for and against the resolution, respectively, and, if the shares of any class are entitled to vote as a class, the number of shares of each such class voted for and against the resolution, respectively.

7-8-104. Filing of statement of intent to dissolve. Duplicate originals of the statement of intent to dissolve, whether by consent of shareholders or by act of the corporation, shall be delivered to the secretary of state. If the secretary of state finds that such statement conforms to law, he shall, when all fees and franchise taxes have been paid as in this code prescribed: Endorse on each of such duplicate originals the word "Filed" and the month, day, and year of the filing thereof; file one of such duplicate originals in his office; return the other duplicate original to the corporation or its representative.

7-8-105. Procedure after filing of statement of intent to dissolve. (1) After the filing by the secretary of state of a statement of intent to dissolve, the corporation shall immediately cause notice thereof to be mailed to each known creditor of the corporation.

(2) The corporation shall proceed to collect its assets, convey and dispose of such of its properties as are not to be distributed in kind to its shareholders, pay, satisfy, and discharge its liabilities and obligations, and do all other acts required to liquidate its business and affairs and, after paying or adequately providing for the payment of all its obligations, distribute the remainder of its assets, either in cash or in kind, among its shareholders according to their respective rights and interests.

(3) The corporation, at any time during the liquidation of its business and affairs, may make application to the district court of the county in which the registered office or principal place of business of the corporation is situated to have the liquidation continued under the supervision of the court as provided in this code.

7-8-106. Effect of statement of intent to dissolve. Upon the filing by the secretary of state of a statement of intent to dissolve, whether by consent of shareholders or by act of the corporation, the corporation shall cease to carry on its business, except insofar as may be necessary for the winding up thereof, but its corporate existence shall continue until a certificate of dissolution has been issued by the secretary of state or until a decree dissolving the corporation has been entered by a district court of the county in which the registered office or principal place of business of the corporation is situated as provided in this code.

7-8-107. Articles of dissolution. (1) If voluntary dissolution proceedings have not been revoked, when all debts, liabilities, and obligations of the corporation have been paid and discharged or adequate provision has been made therefor and all of the remaining property and assets of the corporation have been distributed to its shareholders, articles of dissolution shall be executed in duplicate by the corporation by its president or a vice-president and by its secretary or an assistant secretary and verified by one of the officers signing such statement, which statement shall set forth:

(a) The name of the corporation;

(b) That the secretary of state has filed a statement of intent to dissolve the corporation;

(c) That all debts, obligations, and liabilities of the corporation have been paid and discharged or that adequate provision has been made therefor;

(d) That all the remaining property and assets of the corporation have been distributed among its shareholders in accordance with their respective rights and interests;

(e) That there are no suits pending against the corporation in any court, or that adequate provision has been made for the satisfaction of any judgment, order, or decree which may be entered against it in any pending suit, and that there are no criminal proceedings pending against it;

(f) All trade names owned or used by the corporation pursuant to articles 70 to 73 of this title, together with a statement that the same are to be cancelled or to be assigned or reassigned to a third party and including the name and address of such third party.

7-8-108. Filing of articles of dissolution - certificate of dissolution. (1) Duplicate originals of such articles of dissolution shall be delivered to the secretary of state. If the secretary of state finds that such articles of dissolution conform to law, he shall, when all fees and franchise taxes have been paid as in this code prescribed: Endorse on each of such duplicate originals the word "Filed" and the month, day, and year of the filing thereof; file one of such duplicate originals in his office; issue a certificate of dissolution to which he shall affix the other duplicate original. A corporation may file articles of dissolution by May 1 without filing an annual report and without paying the license tax due in the year of dissolution, if such corporation has paid all fees and taxes for the preceding year ending December 31.

(2) The certificate of dissolution, together with the duplicate original of the articles of dissolution affixed thereto by the secretary of state, shall be returned to the representative of the dissolved corporation. Upon the issuance of such certificate of dissolution, the existence of the corporation shall cease, except for the purpose of suits, other proceedings, and appropriate corporate action by shareholders, directors, and officers as provided in this code.

7-8-109. Revocation of voluntary dissolution proceedings by consent of shareholders. By the written consent of all of its shareholders, a corporation, at any time prior to the issuance of a certificate of dissolution by the secretary of state, may revoke voluntary dissolution proceedings theretofore taken, in the following manner: Upon the execution of such written consent, a statement of revocation of voluntary dissolution proceedings shall be executed in duplicate by the corporation by its president or a vice-president and by its secretary or an assistant secretary and acknowledged by one of the officers signing such statement, which statement shall set forth: The name of the corporation; the names and respective addresses of its officers; the names and respective addresses of its directors; a statement that a written consent has been signed by all shareholders of the corporation revoking the voluntary dissolution proceedings; and that such written consent has been signed by all shareholders of the corporation or signed in their name by their duly authorized attorney.

7-8-110. Revocation of voluntary dissolution proceedings by act of corporation. (1) By the act of the corporation, a corporation, at any time prior to the issuance of a certificate of dissolution by the secretary of state, may revoke voluntary dissolution proceedings theretofore taken in the following manner:

(a) The board of directors shall adopt a resolution recommending that the voluntary dissolution proceedings be revoked and directing that the question of such revocation be submitted to a vote at a special meeting of shareholders.

(b) Written or printed notice stating that the purpose or one of the purposes of such meeting is to consider the advisability of revoking the voluntary dissolution proceedings shall be given to each shareholder of record entitled to vote at the meeting within the time and in the manner provided in this code for the giving of notice of special meetings of shareholders.

(c) At such meeting, a vote of the shareholders entitled to vote shall be taken on a resolution to revoke the voluntary dissolution proceedings, which shall require for its adoption the affirmative vote of the holders of at least two-thirds of the outstanding shares.

(1) Upon the adoption of such resolution, a statement of revocation of voluntary dissolution proceedings shall be executed in duplicate by the corporation by its president or a vice-president and by its secretary or an assistant secretary and acknowledged by one of the officers signing such statement, which statement shall set forth: The name of the corporation; the names and respective addresses of its officers; the names and respective addresses of its directors; a statement that a resolution was adopted by the shareholders revoking the voluntary dissolution proceedings; the number of shares outstanding; and the number of shares voted for and against the resolution, respectively.

7-8-111. Filing of statement of revocation of voluntary dissolution proceedings. Duplicate originals of the statement of revocation of voluntary dissolution proceedings, whether by consent of shareholders or by act of the corporation, shall be delivered to the secretary of state. If the secretary of state finds that such statement conforms to law, he shall, when all fees and franchise taxes have been paid as prescribed in this code: Endorse on each of such duplicate originals the word "Filed" and the month, day, and year of the filing thereof; file one of such duplicate originals in his office; return the other duplicate original to the corporation or its representative.

7-8-112. Effect of statement of revocation of voluntary dissolution proceedings. Upon the filing by the secretary of state of a statement of revocation of voluntary dissolution proceedings, whether by consent of shareholders or by act of the corporation, the revocation of the voluntary dissolution proceedings shall become effective, and the corporation may again carry on its business.

7-8-113. Involuntary dissolution. (1) A corporation may be dissolved involuntarily by a decree of the district court in an action filed by the attorney general when it is established that:

(a) The corporation procured its articles of incorporation through fraud; or

(b) The corporation has continued to exceed or abuse the authority conferred upon it by law; or

(c) The corporation has failed for thirty days to appoint and maintain a registered agent in this state; or

(d) The corporation has failed for thirty days after change of its registered office or registered agent to file in the office of the secretary of state a statement of such change.

(2) District courts shall have full power to liquidate the assets and business of a corporation:

(a) In an action by a shareholder when it is established: That the directors are deadlocked in the management of the corporate affairs and the shareholders are unable to break the deadlock and that irreparable injury to the

corporation is being suffered or is threatened by reason thereof; or that the shareholders are deadlocked in voting power and have failed, for a period which includes at least two consecutive annual meeting dates, to elect successors to directors whose terms have expired or would have expired upon the election of their successors and that injury to the corporation or a shareholder is being suffered or is threatened by reason thereof;

(b) In an action by a creditor: When the claim of the creditor has been reduced to judgment and an execution thereon returned unsatisfied and it is established that the corporation is insolvent; or when the corporation has admitted in writing that the claim of the creditor is due and owing and it is established that the corporation is insolvent;

(c) Upon application by a corporation which has filed a statement of intent to dissolve, as provided in this code, to have its liquidation continued under the supervision of the court;

(d) When an action has been filed by the attorney general to dissolve a corporation and it is established that liquidation of its business and affairs should precede the entry of a decree of dissolution.

(3) Proceedings under paragraphs (a), (b), and (c) of subsection (2) of this section shall be brought in the district court of the county in which the registered office of the corporation is situated.

(4) It shall not be necessary to make shareholders parties to any such action or proceeding unless relief is sought against them personally.

(5) Corporations which were defunct for at least five years under the provisions of any prior statute on January 1, 1959, are hereby dissolved by operation of law without the necessity of any other action under the provisions of this section and sections 7-8-114 and 7-8-115.

(6) Commencing on January 1, 1964, and continuing thereafter on January 1 of each successive year, corporations which were defunct for the preceding five-year period under the provisions of sections 7-3-111 (3) and 7-10-109 shall be dissolved by operation of law without the necessity of any other action under the provisions of this section and sections 7-8-114 and 7-8-115; but prior to January 1, 1970, any corporation which was defunct on January 1, 1964, but which was not, prior to January 1, 1964, involuntarily dissolved by operation of law under this subsection (6) may become reinstated, revived, and operative as provided in sections 7-3-111 (3) and 7-10-109 by filing with the secretary of state the reports provided for in sections 7-3-111 (3) and 7-10-109, and paying to the secretary of state the taxes, fees, and penalties provided for in section 7-10-109 subject to the provisions of subsection (7) of this section concerning corporate names.

(7) The involuntary dissolution by operation of law of any corporation under subsection (6) of this section prior to June 7, 1969, which was, on January 1, 1964, defunct but not dissolved by operation of law and which, prior to January 1, 1970, becomes reinstated, revived, and operative as provided in subsection (6) of this section and in sections 7-3-111 (3) and 7-10-109 is hereby revoked and rescinded; but if the name of the dissolved corporation, or a name to which the name of such dissolved corporation would be deceptively similar, has been taken or reserved since the involuntary dissolution thereof, by or on behalf of a person or another corporation pursuant to articles 1 to 52 of this title, and if such person or other corporation does not release such taken or reserved name or transfer the same to the dissolved corporation, it shall be a condition to the dissolved corporation's becoming reinstated, revived, and operative that it adopt a new corporate name in accordance with articles 1 to 52 of this title by following the procedures and paying the fees provided for in articles 1 to 52 of this title, such change of name to be retroactive to the date such dissolved corporation became dissolved by operation of law.

7-8-114. Notification to attorney general. (1) The secretary of state shall certify to the attorney general from time to time the names of all corporations which have given cause for dissolution as provided in this code other than those stated in subsections (5) to (7) of section 7-8-113, together with the facts pertinent thereto.

(2) When the secretary of state certifies the name of a corporation to the attorney general as having given any cause for dissolution, the secretary of state shall concurrently mail to the corporation at its registered office a notice that the certification has been made. Not less than thirty days after the receipt of such certification, the attorney general shall file an action in the name of the state against the corporation for its dissolution.

(3) If, before action is filed, the corporation appoints or maintains a registered agent as provided in this code or files with the secretary of state the required statement of change of registered office or registered agent, this act shall be forthwith certified by the secretary of state to the attorney general, and he shall not file an action against the corporation for such cause.

(4) If, after action is filed, the corporation appoints or maintains a registered agent as provided in this code or files with the secretary of state the required statement of change of registered office or registered agent and pays the costs of the action and a penalty of fifty dollars, the action for such cause shall abate.

7-8-115. Venue and process. (1) Every action for the involuntary dissolution of a corporation brought by the attorney general shall be commenced either in the district court of the county in which the registered office of the corporation is situated or in the district court of the city and county of Denver. Summons shall issue and be served as in other civil actions.

(2) If process is returned not found, the attorney general shall cause publication to be made as in other civil cases in some newspaper published in the county where the registered office of the corporation is situated, containing a notice of the pendency of the action, the title of the court, the title of the action, and the date on or after which default may be entered. The attorney general may include in one notice the names of any number of corporations against which actions are then pending in the same court. The attorney general shall cause a copy of such notice to be mailed to the corporation at its registered office within ten days after the first publication thereof.

(3) The certificate of the attorney general of the mailing of the notice shall be prima facie evidence thereof. Such notice shall be published at least once each week for two successive weeks, and the first publication may begin at any time after the summons has been returned. Unless a corporation has been served with summons, no default shall be taken against it earlier than thirty days after the first publication of the notice.

7-8-116. Procedure in liquidation of corporation by court. (1) In proceedings to liquidate the assets and business of a corporation, as provided in section 7-8-113, the court has power to issue injunctions, to appoint a receiver pendente lite with such powers and duties as the court from time to time directs, and to take such other proceedings as may be requisite to preserve the corporate assets wherever situated and carry on the business of the corporation until a full hearing can be had.

(2) After a hearing had upon such notice as the court may direct to be given to all parties to the proceedings and to any other parties in interest designated by the court, the court may appoint a liquidating receiver with authority to collect the assets of the corporation, including all amounts owing to the corporation by shareholders on account of any unpaid portion of the consideration for the issuance of shares. Such liquidating receiver shall have authority, subject to the order of the court, to sell, convey, and dispose of all or any part of the assets of the corporation wherever situated, either at public or private sale. The assets of the corporation or the proceeds resulting from a sale, conveyance, or other disposition thereof shall be applied to the

expenses of the liquidation and to the payment of the liabilities and obligations of the corporation, and any remaining assets or proceeds shall be distributed among its shareholders according to their respective rights and interests. The order appointing such liquidating receiver shall state his powers and duties. These powers and duties may be increased or diminished at any time during the proceedings.

(3) The court has power to allow from time to time, as expenses of the liquidation, compensation to the receiver and to attorneys in the proceedings and to direct the payment thereof out of the assets of the corporation or the proceeds of any sale or disposition of such assets.

(4) A receiver of a corporation appointed under the provisions of this section shall have authority to sue and defend in all courts in his own name as receiver of the corporation. The court appointing the receiver shall have exclusive jurisdiction of the corporation and its property, wherever situated.

7-8-117. Qualifications of receivers. A receiver shall in all cases be a citizen of the United States or a corporation authorized to act as receiver, which corporation may be a domestic or a foreign corporation authorized to transact business in this state and shall in all cases give such bond as the court may direct with such sureties as the court may require.

7-8-118. Decree of involuntary dissolution. In proceedings to liquidate the assets and business of a corporation, as provided in section 7-8-113, when the costs and expenses of the proceedings and all debts, obligations, and liabilities of the corporation have been paid and discharged and all of its remaining property and assets distributed to its shareholders or if its property and assets are not sufficient to satisfy and discharge such costs, expenses, debts, and obligations, and all the property and assets have been applied so far as they will go to their payment, the court shall enter a decree dissolving the corporation, whereupon the existence of the corporation shall cease.

7-8-119. Filing of decree of dissolution. If the court enters a decree dissolving a corporation, it is the duty of the clerk of the court to cause a certified copy of the decree to be filed with the secretary of state. No fee shall be charged by the secretary of state for the filing thereof.

7-8-120. Filing of claims in liquidation proceedings. In proceedings to liquidate the assets and business of a corporation, as provided in section 7-8-113, the court may require all creditors of the corporation to file with the clerk of the court or with the receiver, in such form as the court prescribes, proofs under oath of their respective claims. If the court requires the filing of claims, it shall fix a date, which shall be not less than four months from the date of the order, as the last day for the filing of claims and shall prescribe the notice that shall be given to creditors and claimants of the date so fixed. Prior to the date so fixed, the court may extend the time for the filing of claims. Creditors and claimants failing to file proofs of claims on or before the date so fixed may be barred, by order of court, from participating in the distribution of the assets of the corporation.

7-8-121. Discontinuance of liquidation proceedings. The liquidation of the assets and business of a corporation may be discontinued at any time during the liquidation proceedings if it is established that cause for liquidation no longer exists. In such event the court shall dismiss the proceedings and direct the receiver to redeliver to the corporation all its remaining property and assets.

7-8-122. Survival of remedy after dissolution. (1) The dissolution of a corporation in any manner shall not take away or impair any remedy available to or against the corporation, its directors, officers, or shareholders for any right or claim existing or any liability incurred prior to such dissolution if action or other proceeding thereon is commenced within two years after the date of the dissolution. The foregoing limitation shall not apply to any action affecting the title to real estate. Any action or proceeding by or against the corporation may be prosecuted or defended by the corporation in its corporate name. The shareholders, directors, and officers shall have power to take

such corporate or other action as shall be appropriate to protect this remedy, right, or claim. If a corporation was dissolved by the expiration of its period of duration, such corporation may amend its articles of incorporation at any time during this period of two years so as to extend its period of duration in perpetuity or for such other period of time as fixed in the amendment.

(2) Notwithstanding any provision of this code to the contrary, after dissolution, title to any corporate property not distributed or disposed of in the dissolution shall remain in the corporation. The majority of the surviving members of the last acting board of directors as named in the files of the secretary of state pertaining to such corporation shall have full power and authority to sue and be sued in the corporate name and to hold, convey, and transfer such corporate property, and for purposes of suit against said corporation each director is an agent for process. Final disposition of such property shall be made by the majority of the surviving directors in the manner provided in section 7-8-105 (2). Upon the death of the last survivor of said directors, any remaining property shall be disposed of in the manner provided by section 38-34-104, C.R.S. 1973, as if the last surviving director were the last surviving trustee of an express trust.

7-8-123. Disposition of amounts due certain creditors and shareholders. (1) Upon the voluntary or involuntary dissolution of a corporation as provided in this article, the portion of its assets distributable to a creditor or shareholder who is unknown or cannot be found or who is under legal disability and there is no person legally competent to receive and receipt for such distribution shall be reduced to cash and deposited with the state treasurer. Such deposit shall discharge the person making the same from any further liability or responsibility for such distributable portion.

(2) If, within twenty-one years of the date of such deposit, the creditor or shareholder or his legal representative provides proof satisfactory to the state treasurer of his right to such deposit, the state treasurer shall pay the deposit to the claimant, without interest.

(3) If, within such twenty-one year period, the state treasurer has not received proof satisfactory of a claimant's right to such deposit, the state shall not thereafter be liable for such deposit, and the deposit shall be transferred to the credit of the general fund. During such twenty-one year period the state treasurer may invest the deposit, and all interest from such investment shall be credited to the general fund.

Nonprofit Corporations

ARTICLE 20

Definitions and Application

7-20-101. Short title. Articles 20 to 29 of this title shall be known and may be cited as the "Colorado Nonprofit Corporation Act".

7-20-102. Definitions. As used in articles 20 to 29 of this title, unless the context otherwise requires:

(1) "Acknowledged" means that type of acknowledgement which is required by section 38-35-101, C.R.S. 1973, and has the same effect.

(2) "Articles of incorporations" includes the original or restated articles of incorporation, articles of consolidation, or articles of merger, and all amendments thereto, and shall also include:

(a) For a corporation created by special act of the general assembly or pursuant to general law, which corporation has elected to accept the provisions of said articles 20 to 29, the special charter and any amendments thereto made by special act of the general assembly or pursuant to general law prior to the corporation's election to accept the provisions of said articles.

(b) For a corporation organized under article 40, 50, or 51 of this title, which corporation has elected to accept the provisions of said articles 20 to 29, the certificate of incorporation or affidavit and any amendments thereto made prior to the corporation's election to accept the provisions of said articles.

(3) "Board of directors" means the group of persons vested with the management of the affairs of the corporation irrespective of the name by which such group is designated.

(4) "Bylaws" means the code of rules adopted for the regulations or management of the affairs of the corporation irrespective of the name by which such rules are designated.

(5) "Corporation" or "domestic corporation" means a nonprofit corporation subject to the provisions of said articles 20 to 29 except a foreign corporation.

(6) "Duplicate originals" means each instrument typed on only one side of each sheet and executed in duplicate by all parties, or true copy made when the original was made or copy made by picture or other process from the original, which resulting copy must be black type on white paper.

(7) "Foreign corporation" means a nonprofit corporation organized under laws other than the laws of this state.

(8) "Insolvent" means inability of a corporation to pay its debts as they become due in the usual course of its affairs.

(9) "Member" means one having membership rights in a corporation in accordance with the provisions of its articles of incorporation or bylaws.

(10) "Nonprofit corporation" means a corporation no part of the income or profit of which is distributable to its members, directors, or officers, except that income or profit may be distributable to a member which is another nonprofit corporation.

7-20-103. Applicability. (1) The provisions of articles 20 to 29 of this title relating to domestic corporations shall apply to:

(a) All corporations organized under said articles;

(b) Any nonprofit corporation organized prior to January 1, 1968, under article 40 or 50 of this title without shares or capital stock and for a purpose for which a corporation might be organized under articles 20 to 29 of this title and which elects to accept said articles as provided in said articles; and

(c) Any corporation having shares or capital stock and organized under article 40, 50, or 51 of this title, and each nonprofit corporation whether with or without shares or capital stock organized prior to January 1, 1968, under general law or created by special act of the general assembly of Colorado in each case for a purpose for which a corporation may be organized under articles 20 to 29 of this title, but not otherwise entitled to the rights, privileges, immunities, and franchises provided by said articles which elects to accept said articles as provided in said articles.

7-20-104. Purposes. Corporations may be organized under articles 20 to 29 of this title for any lawful purpose, including, without being limited to, any one or more of the following purposes: Charitable, benevolent, eleemosynary, educational; civic; patriotic; political; religious; social; fraternal; literary; cultural; athletic; scientific; agricultural; horticultural; animal husbandry; and professional, commercial, industrial, or trade association; but labor unions, cooperative associations referred to in article 56 of this title, and insurance companies may not be organized under articles 20 to 29 of this title.

7-20-108. Existing corporations - failure to file reports and designate registered offices and agents - dissolution. (1) Beginning January 1, 1970, corporations which were organized prior to January 1, 1968, and which could, if they so elected, elect to be governed by articles 20 to 29 of this title, pursuant to sections 7-21-111 to 7-21-114, but which corporations have not done so, shall nevertheless be thereafter subject to section 7-28-101 and required to file annual reports and pay the annual filing fees therefor as provided in said articles. Such corporations shall also, beginning January 1, 1970, be required to designate and maintain thereafter registered offices and registered agents as provided in section 7-22-104. Said registered agents shall be the agents for service of process on said corporations as provided in section 7-22-106, and in the event such registered agent is not appointed by May 1, 1970, or maintained thereafter, the secretary of state shall be the agent for service of process of such corporation as set forth in section 7-22-106. The initial designation of such registered office and agent shall be made in such corporation's initial annual report and may be changed thereafter in the same manner as provided for other corporations subject to articles 20 to 29 of this title.

(2) In addition to filing the annual reports and designating the registered office and agent required by subsection (1) of this section, each corporation whose articles, affidavit of incorporation, or other basic corporate charter, by whatever name denominated, is not on file in the office of the secretary of state shall file a certified copy of such articles, affidavit of incorporation, or other basic corporate charter in the office of the secretary of state at the time of filing the first annual report of such corporation. Such certified copy may be secured from any clerk or recorder with whom the instrument may be filed or recorded.

(3) If any corporation, organized prior to January 1, 1968, and which could, if it so elected, elect to be governed by articles 20 to 29 of this title, pursuant to sections 7-21-111 to 7-21-114, but which has not so elected, shall, after December 31, 1969, for two consecutive years, fail to file annual reports or designate a registered office and agent, the secretary of state shall give written notice to the corporation at the last known address given for such corporation in the files of the secretary of state, and at such other address, if any, as may be readily available to the secretary of state, of the corporation's failure to file the required annual reports or designate and maintain a registered office or agent. More than thirty days after the giving of such notice, the secretary of state shall prepare a list of such corporations which have failed to file their required annual reports or designate and maintain registered offices and agents and shall publish such list in any newspaper of general circulation in this state for two consecutive issues. In addition, the secretary of state shall post a copy of said list in a conspicuous place in his office.

(4) Upon said publication being completed and a proof of publication being filed with the secretary of state by such newspaper, the corporation shall thereupon be deemed defunct and inoperative and no longer competent to conduct its affairs within this state; except that the members of such corporation may hold their annual or special meetings for the election of directors, and the corporation may hold, or continue to hold, mortgage, sell, or convey real estate, and make such reports as are required by the laws of the United States and state of Colorado and elect corporate officers.

(5) Notwithstanding the provisions of subsection (3) of this section, the secretary of state shall not be required to give notice either by mailing, publishing, or posting to any corporations whose articles, affidavit of incorporation, or other basic corporate charter, by whatever name it may be denominated, is not on file in the office of the secretary of state. Such corporation shall become defunct and inoperative as provided in subsection (4) of this section if, after December 31, 1969, it fails for two consecutive years to file the annual reports or designate and maintain registered offices and agents required under articles 20 to 29 of this title without any further notice, subject to reinstatement as provided in subsection (7) of this section.

(6) If the members' meetings have been regularly called and due notice has been given to the members of any such defunct and inoperative corporation, as required by law, and a quorum is not present at any members' meeting, then an election of directors may be held by a majority vote of the members present at such meeting, if not less than thirty percent of all members are present at said meeting in person or by written proxy.

(7) Any defunct corporation may be reinstated, revived, and operative by making and filing all due and appropriate annual reports and designating a registered office and agent, and, upon such filing and the payment of all filing fees and the penalty prescribed in section 7-28-105, all as required by law, and upon the payment of all such delinquent fees, such defunct and inoperative corporation shall become reinstated, revived, and operative. The declaration of such corporation as defunct and inoperative shall not take away or impair any remedy given against such corporation or its members, directors, or officers for any liability incurred prior thereto.

(8) Any corporation which has been defunct for a period of five years under the foregoing provisions shall be dissolved by operation of law without the necessity of any other action. Such dissolved corporations shall be subject to the provisions of section 7-26-120 relating to the survival of remedies of dissolved corporations.

7-20-106. Unauthorized assumption of corporate powers. All persons who assume to act as a corporation without authority to do so shall be jointly and severally liable for all debts and liabilities incurred or arising as a result thereof.

7-20-107. Reservation of power. The general assembly shall at all times have power to prescribe such regulations, provisions, and limitations as it may deem advisable, which provisions and limitations shall be binding upon any corporation subject to the provisions of articles 20 to 29 of this title, and the general assembly has the power to amend, repeal, or modify said articles at pleasure.

7-20-108. Actions against nonprofit corporations. Any other provision of law to the contrary notwithstanding, any civil action permitted under the laws of this state may be brought against any nonprofit corporation, and the assets of any nonprofit corporation which would, but for articles 20 to 29 of this title, be immune from levy and execution on any judgment shall nonetheless be subject to levy and execution to the extent that such nonprofit corporation would be reimbursed by proceeds of liability insurance policies carried by it were judgment levied and executed against its assets.

ARTICLE 21

Incorporation - Articles - Amendments

7-21-101. Incorporators. One or more persons may incorporate a corporation by signing, acknowledging, and delivering articles of incorporation in duplicate to the secretary of state.

7-21-102. Articles of incorporation. (1) The articles of incorporation shall set forth:

(a) The name of the corporation;

(b) The period of duration, which may be perpetual;

(c) The purpose for which the corporation is organized;

(d) Any provisions, not inconsistent with law, which the incorporators elect to set forth in the articles of incorporation for the regulation of the internal affairs of the corporation, including any provision for distribution of assets on dissolution or final liquidation;

(e) The address of its initial registered office, which address shall include the number, street, town or city, county, and zip code or rural route number, and the name of its initial registered agent at such address;

(f) The number of directors constituting the initial board of directors and the names and addresses of the persons who are to serve as the initial directors; and

(g) The name and address of each incorporator. If one or more of the incorporators are also initial directors, the address of such incorporators need not be repeated.

(2) It shall not be necessary to set forth in the articles of incorporation any of the corporate powers enumerated in articles 20 to 29 of this title.

(3) Unless the articles of incorporation provide that a change in the number of directors shall be made only by amendment to the articles of incorporation, a change in the number of directors made by amendment to the bylaws shall be controlling. In all other cases, whenever a provision of the articles of incorporation is inconsistent with a bylaw, the provision of the articles of incorporation shall be controlling.

7-21-103. Filing of articles of incorporation. (1) Duplicate originals of the articles of incorporation shall be delivered to the secretary of state. If the secretary of state finds that the articles of incorporation conform to law, he shall, when all fees have been paid as prescribed in articles 20 to 29 of this title:

(a) Endorse on each of such duplicate originals the word "Filed" and the month, day, and year of the filing thereof;

(b) File one of such duplicate originals in his office; and

(c) Issue a certificate of incorporation to which he shall affix the other duplicate original.

(2) The certificate of incorporation, together with the duplicate original of the articles of incorporation affixed thereto by the secretary of state, shall be returned to the incorporators or their representative.

7-21-104. Effect of issuance of certificate of incorporation. Upon the issuance of the certificate of incorporation, the corporate existence shall begin, and such certificate of incorporation shall be conclusive evidence that all conditions precedent required to be performed by the incorporators have been complied with and that the corporation has been incorporated under articles 20 to 29 of this title, except as against the state in a proceeding to cancel or revoke the certificate of incorporation or for involuntary dissolution of the corporation.

7-21-105. Organization meetings. (1) After the issuance of the certificate of incorporation, an organization meeting of the board of directors named in the articles of incorporation shall be held, either within or without this state, at the call of a majority of the incorporators for the purpose of adopting bylaws, electing officers, and transacting such other business as may come before the meeting. The incorporators calling the meeting shall give at least three days' notice by mail to each director so named, which notice shall state the time and place of the meeting.

(2) A first meeting of the members may be held at the call of the directors, or a majority of them, upon at least three days' notice, for such purposes as shall be stated in the notice of the meeting.

7-21-106. Right to amend articles of incorporation. A corporation may amend its articles of incorporation, from time to time, in as many respects as may be desired, so long as its articles of incorporation as amended contain only such provisions as are lawful under articles 20 to 29 of this title.

7-21-107. Procedure to amend articles of incorporation. (1) Amendments to the articles of incorporation shall be made in the following manner:

(a) If there are no members, or no members entitled to vote thereon, an amendment shall be adopted at a meeting of the board of directors upon receiving the vote of a majority of the directors in office.

(b) If there are members entitled to vote thereon, the board of directors shall adopt a resolution setting forth the proposed amendment and directing that it be submitted to a vote at a meeting of members entitled to vote thereon, which may be either an annual or a special meeting. Written notice setting forth the proposed amendment or a summary of the changes to be effected thereby shall be given to each member entitled to vote at such meeting within the time and in the manner provided in articles 20 to 29 of this title for the giving of notice of meetings of members. The proposed amendment shall be adopted upon receiving at least two-thirds of the votes which members present at such meeting or represented by proxy are entitled to cast.

(2) Any number of amendments may be submitted and voted upon at any one meeting.

7-21-108. Articles of amendment. (1) The articles of amendment shall be executed and acknowledged in duplicate by the corporation by its president or a vice-president and by its secretary or an assistant secretary and shall set forth:

(a) The name of the corporation;

(b) The amendment so adopted;

(c) If there are members entitled to vote thereon, either a statement setting forth the date of the meeting of members at which the amendment was adopted, that a quorum was present at such meeting, and that such amendment received at least two-thirds of the votes which members present at the meeting or represented by proxy were entitled to cast or a statement that such amendment was adopted by a consent in writing signed by all members entitled to vote with respect thereto.

(d) If there are no members, or no members entitled to vote thereon, a statement of such fact, the date of the meeting of the board of directors at which the amendment was adopted, and a statement of the fact that such amendment received the vote of a majority of the directors in office.

7-21-109. Effectiveness of amendment. (1) Duplicate originals of the articles of amendment shall be delivered to the secretary of state. If the secretary of state finds that the articles of amendment conform to law, he shall, when all fees have been paid as prescribed in articles 20 to 29 of this title:

(a) Endorse on each of such duplicate originals the word "Filed" and the month, day, and year of the filing thereof;

(b) File one of such duplicate originals in his office; and

(c) Issue a certificate of amendment to which he shall affix the other duplicate original.

(2) The certificate of amendment, together with the duplicate original of the articles of amendment affixed thereto by the secretary of state, shall be returned to the corporation or its representative.

(3) Upon issuance of the certificate of amendment by the secretary of state, the amendment shall become effective, and the articles of incorporation shall be deemed to be amended accordingly.

(4) No amendment shall affect any existing cause of action in favor of or against such corporation, or any pending action to which the corporation is a party, or the existing rights of persons other than members; and, if the corporate name is changed by amendment, no action brought by or against the corporation under its former name shall abate for that reason.

7-21-110. Restated articles of incorporation. (1) Except for a change in its corporate name, a domestic corporation may at any time restate its articles of incorporation as amended in the following manner:

(a) If there are members entitled to vote thereon, the board of directors shall adopt a resolution setting forth the proposed restated articles of incorporation and directing that they be submitted to a vote at a meeting of members entitled to vote thereon, which may be either an annual or a special meeting.

(b) Written notice setting forth the proposed restated articles or a summary of the provisions thereof shall be given to each member entitled to vote thereon within the time and in the manner provided in articles 20 to 29 of this title for the giving of notice of meetings of members. If the meeting is an annual meeting, the proposed restated articles or a summary of the provisions thereof may be included in the notice of such annual meeting.

(c) At such meeting, a vote of the members entitled to vote thereon shall be taken on the proposed restated articles, which shall be adopted upon receiving the affirmative vote of a majority of the members entitled to vote thereon present at such meeting or represented by proxy.

(d) If there are no members, or no members entitled to vote thereon, the proposed restated articles shall be adopted at a meeting of the board of directors upon receiving the affirmative vote of a majority of the directors in office.

(2) Upon such approval, restated articles of incorporation shall be exe-

7-21-111. Procedure to elect to accept articles 20 to 29 of this title. (1) Any nonprofit corporation with shares of capital stock heretofore organized under articles 40, 50, or 51 of this title, any nonprofit corporation heretofore organized under article 40 or 50 of this title without shares of capital stock, and any nonprofit corporation whether with or without shares of capital stock and heretofore organized under any general law or created by any special act of the general assembly for a purpose for which a corporation may be organized under articles 20 to 29 of this title may elect to accept said articles in the following manner:

(a) If there are members or stockholders entitled to vote thereon, the board of directors shall adopt a resolution recommending that the corporation accept articles 20 to 29 of this title and directing that the question of acceptance be submitted to a vote at a meeting of the members or stockholders

cuted and acknowledged in duplicate by the corporation by its president or vice-president and by its secretary or assistant secretary and shall set forth:

(a) The name of the corporation;

(b) The period of its duration;

(c) The purpose which the corporation is authorized to pursue;

(d) The date of the initial incorporation of the corporation, the names and addresses of its incorporators, and the current registered office and registered agent of the corporation;

(e) Any other provisions, not inconsistent with law, which are then set forth in the articles of incorporation as theretofore amended; except that it is not necessary to set forth in the restated articles of incorporation the names of its directors.

(3) The restated articles of incorporation shall state that they correctly set forth the provisions of the articles of incorporation as amended, that they have been duly adopted as required by law, and that they supersede the original articles of incorporation and all amendments thereto.

(4) Duplicate originals of the restated articles of incorporation shall be delivered to the secretary of state. If the secretary of state finds that such restated articles conform to law, he shall, when all fees have been paid as prescribed in articles 20 to 29 of this title:

(a) Endorse on each of such duplicate originals the word "Filed" and the month, day, and year of the filing thereof;

(b) File one such duplicate original in his office; and

(c) Issue a restated certificate of incorporation to which he shall affix the other duplicate original.

(5) The restated certificate of incorporation, together with the duplicate original of the restated articles of incorporation affixed thereto by the secretary of state, shall be returned to the corporation or its representative.

(6) Upon the issuance of the restated certificate of incorporation by the secretary of state, the restated articles of incorporation shall become effective and shall supersede the original articles of incorporation and all amendments thereto.

entitled to vote thereon, which may be either an annual or special meeting. Written notice stating that the purpose, or one of the purposes, of the meeting is to consider electing to accept said articles shall be given to each member and stockholder entitled to vote at the meeting within the time and in the manner provided in said articles for the giving of notice of meetings to members. Such election to accept said articles shall require for adoption at least two-thirds of the votes which members or stockholders present at such meeting in person or by proxy are entitled to cast.

(b) If there are no members or stockholders entitled to vote thereon, election to accept articles 20 to 29 of this title may be made at a meeting of the board of directors pursuant to a majority vote of the directors in office.

(c) In effecting such acceptance, the corporation shall, in addition, follow the requirements of the law under which it was organized, its articles of incorporation, and its bylaws so far as applicable.

(d) If the corporate name is not in conformance with the provisions of section 7-22-103, the corporation shall change its name to conform with said section. The adoption of a name which is in conformance with said section by the members or stockholders of the corporation, and its inclusion in the statement of election to accept said articles 20 to 29 as the corporate name, and the issuance of a certificate of acceptance by the secretary of state shall be the only action necessary to effect such change. The articles of incorporation, affidavit, or other basic organizational document shall be deemed for all purposes amended to conform to such corporate name.

(e) If the corporation does not have a registered office and a registered agent in this state registered in the office of the secretary of state, it shall designate a registered office and appoint a registered agent having an office identical with such registered office.

(f) All corporations whose articles, affidavit of incorporation, or other basic charter, by whatever name denominated, is not on file in the office of the secretary of state shall file a certified copy of such articles, affidavit of incorporation, or other basic charter in the office of the secretary of state at the time of filing the statement of election to accept articles 20 to 29 of this title. Such certified copy may be secured from any clerk or recorder with whom such instrument may be filed or recorded.

7-21-112. Statement of election to accept articles 20 to 29 of this title. (1) A statement of election to accept articles 20 to 29 of this title shall be executed and acknowledged in duplicate by the corporation by its president or a vice-president and by its secretary or an assistant secretary and shall set forth:

(a) The name of the corporation;

(b) A statement by the corporation that it has elected to accept said articles and that all required reports have been or will be filed and all fees, taxes, and penalties due to the state of Colorado accruing under any law to which the corporation heretofore has been subject have been paid;

(c) If there are members or stockholders entitled to vote thereon, a statement setting forth the date of the meeting of such members or stockholders at which the election to accept articles 20 to 29 of this title was made, that a quorum was present at the meeting, and that such acceptance was authorized by at least two-thirds of the votes which members or stockholders present at such meeting in person or by proxy were entitled to cast;

(d) If there are no members or stockholders entitled to vote thereon, a statement of such fact, the date of the meeting of the board of directors at which election to accept said articles was made, that a quorum was present at the meeting, and that such acceptance was authorized by a majority vote of the directors present at such meeting;

(e) A statement that, in addition, the corporation followed the requirements of the law under which it was organized, its articles of incorporation, and its bylaws so far as applicable in effecting such acceptance;

(f) The address of the registered office of the corporation in this state and the name of the registered agent at such address;

(g) The names and respective addresses of its officers and directors;

(h) A statement that the attached copy of the articles of incorporation, affidavit, or other basic corporate charter of the corporation is true and correct;

(i) If the corporation has issued shares of stock, a statement of such fact including the number of shares heretofore authorized, the number issued and outstanding, and a statement that all issued and outstanding shares of stock have been delivered to the corporation to be cancelled upon the acceptance of articles 20 to 29 of this title by the corporation becoming effective and that from and after the effective date of said acceptance the authority of the corporation to issue shares of stock is terminated; except that this shall not apply to corporations organized for the acquisition and distribution of water to their stockholders.

7-21-113. Filing statement of election to accept articles 20 to 29 of this title. (1) Duplicate originals of the statement of election to accept articles 20 to 29 of this title shall be delivered to the secretary of state. If the secretary of state finds that said statement conforms to the law, he shall, when all fees have been paid, as prescribed in said articles:

(a) Endorse on each of such duplicate originals the word "Filed" and the month, day, and year of the filing thereof;

(b) File one of such duplicate originals in his office; and

(c) Issue a certificate of acceptance to which he shall affix the other duplicate original.

(2) The certificate of acceptance, together with the duplicate original of the statement of election to accept articles 20 to 29 of this title affixed thereto by the secretary of state, shall be returned to the corporation or its representative.

7-21-114. Effect of certificate of acceptance. (1) Upon the issuance of a certificate of acceptance, the election of the corporation to accept articles 20 to 29 of this title shall become effective, and such corporation shall have the same powers and privileges and be subject to the same duties, restrictions, penalties, and liabilities as though such corporation had been originally organized under said articles and shall also be subject to any duties or obligations expressly imposed upon the corporation by a special charter, subject to the following:

(a) The first annual report of the corporation so accepting the benefits of said articles shall be filed between the first day of January and the first day of May of the year next succeeding the calendar year in which the certificate of acceptance has been issued.

(b) If no period of duration is expressly fixed in the articles of incorporation of such corporation, its period of duration shall be deemed to be perpetual.

(c) No amendment to the articles of incorporation adopted after such election to accept articles 20 to 29 of this title shall release or terminate any duty or obligation expressly imposed upon any such corporation under and by virtue of a special charter or enlarge any right, power, or privilege granted to any such corporation under a special charter, except to the extent that such right, power, or privilege might have been included in the articles of incorporation of a corporation organized under said articles.

(d) In the case of any corporation with issued shares of stock, the holders of such issued shares who surrender them to the corporation to be cancelled upon the acceptance of said articles by the corporation becoming effective shall become members of the corporation with one vote for each share of stock so surrendered until such time as the corporation by proper corporate action relative to the election, qualification, terms, and voting power of members shall otherwise prescribe.

ARTICLE 22

Corporate Powers and Limitations

7-22-101. General powers. (1) Each corporation has the power:

(a) To have perpetual succession by its corporate name unless a limited period of duration is stated in its articles of incorporation;

(b) To sue and be sued, complain, and defend in its corporate name;

(c) To have a corporate seal which may be altered at pleasure and to use the same by causing it or a facsimile thereof to be impressed or affixed or

ARTICLE 42

Ditch and Reservoir Companies

7-42-101. Additional statements in certificates. (1) When three or more persons associate under the provisions of law to form a corporation for the purpose of constructing a ditch, reservoir, pipeline, or any part thereof to convey water from any natural or artificial stream, channel, or source whatever to any mines, mills, or lands or for storing the same, they shall in their articles of incorporation, in addition to the matters otherwise required, specify: The stream, channel, or source from which the water is to be taken; the point or place at or near which the water is to be taken; the location, as near as may be, of any reservoir intended to be constructed; the line, as near as may be, of any ditch or pipeline intended to be constructed; and the use to which the water is intended to be applied.

(2) A corporation organized under the "Colorado Nonprofit Corporation Act" shall have all of the rights and powers granted by this article to the extent not inconsistent with said act, if such nonprofit corporation otherwise complies with the terms and provisions of this article.

7-42-102. Work after organization. (1) Any corporation formed under the provisions of law for the purpose of constructing any ditch, flume, bridge, ferry, or telegraph line, within ninety days from the date of its certificate of incorporation, shall commence work on such ditch, flume, bridge, ferry, or telegraph line, as shall be named in the certificate, and shall complete the work with due diligence. The time of the completion of any such ditch, bridge, ferry, or telegraph line shall not be extended beyond a period of two years from the time work was commenced.

(2) Any corporation failing to commence work within ninety days from the date of the certificate, or failing to complete the same within two years from the time of commencement, shall forfeit all right to the water so claimed, and the same shall be subject to be claimed by any other company. The time for the completion of any flume constructed under the provisions of law shall not be extended beyond a period of four years.

(3) This section shall not apply to any ditch or flume for mining or other purposes constructed through and upon any grounds owned by the corporation. Any company formed to construct a ditch for domestic, agricultural, irrigating, milling, and manufacturing purposes or any of them shall have three years from the time of commencing work thereon within which to complete the same but no longer.

7-42-103. Right-of-way. Any ditch, reservoir, or pipeline corporation formed under the provisions of law shall have the right-of-way over the line named in the certificate, and shall also have the right to run water from the stream, channel, or water source, whether natural or artificial, named in the certificate through its ditch or pipeline, and store the same in any reservoir of the company when not needed for immediate use. The line proposed shall not interfere with any other ditch, pipeline, or reservoir having prior rights, except the right to cross by pipe or flume; nor shall the water of any stream, channel, or other water course, whether natural or artificial, be diverted from its original channel or source to the detriment of any person or persons having priority of right thereto, but this shall not be construed to prevent the appropriation and use of any water not theretofore utilized and applied to beneficial uses.

7-42-104. Assessment on stock. (1) If any corporation owning any ditch or canal for conveying or reservoir for storing water for irrigation purposes deems it necessary to raise funds to keep its ditch, canal, or reservoir in good repair or to pay any indebtedness theretofore contracted or the interest thereon, the corporation shall have power to make an assessment on the capital stock thereof, to be levied pro rata on the shares of stock payable in money, labor, or both, for the purpose of keeping the property of the corporation in good repair and for the payment of any indebtedness or interest thereon.

(2) But no such assessment shall be made unless the question of making the assessment shall be first submitted to the stockholders of the corporation at an annual meeting or at a special meeting called for that purpose, and a majority of the stock issued and outstanding, represented either by the owner in person or by proxy, voting thereon shall vote in favor of making such assessment; and if said stockholders fail to hold any such meeting or fail to make or authorize any assessment by the first of April in any year, the directors shall have power to make any such assessment at any regular or special meeting called therefor for that year.

(3) Such corporation may provide for the sale and forfeiture of shares of stock for such assessment as provided in subsection (4) of this section and may have the benefit of said subsection (4) for the recovery of such assessments by forfeiture or sale of the stock in default, and such corporation shall have a perpetual lien upon such shares of stock and the water rights represented by the same for any and all such assessments until the same are fully paid. Such corporation may also provide that no water shall be delivered until all assessments are paid.

(4) The shares of stock shall be deemed personal property and transferable as such in the manner provided by the bylaws, and subscriptions thereof shall be made payable to the corporation and shall be payable in such installments and at such times as shall be determined by the directors or trustees. An action may be maintained in the name of the corporation to recover any installment which shall remain due and unpaid for the period of twenty days after personal demand therefor or, if personal demand is not made, within thirty days after a written or printed demand has been deposited in the post office properly addressed to the post office address of the delinquent stockholder. The directors or trustees may prescribe by bylaws for a forfeiture or sale of stock on failure to pay the installments or assessments that from time to time may become due, but no forfeiture of stock or of the amount paid thereon shall be declared as against any estate or against any stockholder before demand has been made for the amount due thereon either in person or by written or printed notice duly mailed to the last known address of such stockholder at least thirty days prior to the time the forfeiture is to take effect; but the proceeds of any sale, over and above the amount due on said shares, shall be paid to the delinquent stockholder.

7-42-105. Right to purchase own stock. (1) It is lawful for any corporation owning any ditch or canal for conveying or reservoir for storing water for irrigation purposes for its stockholders to purchase and acquire any of its outstanding capital stock, but no purchase of or payment for its own shares shall be made at a time when the purchase or payment would make it insolvent.

(2) Any sale, exchange, lease, or other disposition of any part or all of the business, assets, property, or franchise of any such corporation to any conservancy district, irrigation district, or to the United States or any agency of the United States shall be deemed to be in the usual course of the corporation's business.

7-42-106. Assessments to pay purchase price. When any such stock has been purchased or contract entered into for the purchase of the same, the corporation shall have the power to use its funds and to levy and collect assessments on the remaining outstanding capital stock in the manner provided by law for the payment of any other indebtedness, for the purpose of paying the purchase price of the stock so purchased.

7-42-107. Shall furnish water to whom - rate. Any corporation constructing a ditch under the provisions of law shall furnish water to the class of persons using the water in the way named in the certificate, in the way the water is designated to be used, whether to miners, millmen, farmers, or for domestic use, whenever it has water in its ditch unsold, and it shall at all times give the preference to use of the water in said ditch to the class named in the certificate. The rates at which water shall be furnished are to be fixed by the board of county commissioners as soon as the ditch is completed and prepared to furnish water.

7-42-108. Shall keep ditch in repair. Every ditch corporation organized under the provisions of law shall be required to keep its ditch in good condition so that the water shall not be allowed to escape from the same to the injury of any mining claim, road, ditch, or other property. If it is necessary to convey any ditch over, across, or above any lode or mining claim or to keep the water so conveyed therefrom, the corporation, if necessary to keep the water of the ditch out of from any claim, shall flume the ditch so far as necessary to protect the claim or property from the water of said ditch.

7-42-109. Penalty for damage. Any person who willfully or maliciously damages or interferes with any road, ditch, flume, bridge, ferry, railroad, or telegraph line or any of the fixtures, tools, implements, appurtenances, or property of any corporation which is organized under the provisions of law is guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not more than five hundred dollars, or by imprisonment in the county jail for not more than one year, or by both such fine and imprisonment. Any such fine shall be paid into the county treasury, and the offender shall also pay all damages that any such corporation sustains, together with costs of suit.

7-42-110. Consolidation of ditch companies. Companies organized under the laws of this state holding ditches or canals by virtue of their organization, which derive their supply of water for their respective ditches or canals from the same head gate or the same source of supply, may consolidate their interests and unite their respective companies under one name and management by filing a certificate of that fact in the office of the secretary of state and a counterpart thereof in the office of the recorder of the counties in which such ditches or canals are situated. The certificate shall be signed by the presidents of the companies so uniting with the common seals of the companies affixed thereto, and shall set forth the fact of such union of interests, and give the name of the new company thus formed.

7-42-111. Extension of term. When the term of years for which any corporation has been incorporated as a ditch company for the purpose of carrying water for irrigation purposes or as a reservoir company for the storage of water for irrigation purposes has expired or is about to expire by lawful limitation, and such corporation has not been administered upon as an expired corporation or gone into liquidation and settlement and division of its affairs, it may have its term of incorporation extended and continued the same as if originally incorporated, as provided in section 7-42-112.

7-42-112. Procedure to extend term. (1) Whenever the corporate life of any such ditch or reservoir company has expired or is about to expire, the stockholders may vote upon the question of extending the life of such company for another twenty years, or for any other term provided by statute, by first giving notice of such intention by publication for two successive weeks in the newspaper printed nearest the place where the principal operations of said company are carried on. Such notice shall be signed by stockholders owning at least ten percent of the entire capital stock of said company, and shall state the place where and the time when the question of renewal shall be submitted to the votes of the stockholders of said company at the meeting held in pursuance of such notice, if a majority of the stock of the corporation is represented.

(2) The votes shall be taken by ballot and each stockholder shall be entitled to as many votes as he owns shares of stock in said company or holds proxies therefor. If a majority of the votes cast is in favor of a renewal of the corporation, the president and secretary of said company, under the corporate seal of said company, shall certify the fact, and shall make as many certificates as may be necessary, so as to file one in the office of the recorder of deeds in each county where the company does business and one in the office of the secretary of state. Thereupon the corporate life of said company shall be renewed upon filing the declaration, and all stockholders shall have the same rights in the renewed corporation as they had in the company as originally formed. Upon filing said certificate such corporation shall pay to the secretary of state a fee of three dollars fifty cents and this fee shall entitle the corporation to receive a certificate from the secretary of state as evidence of the filing of the certificate of renewal.

7-42-113. Duplicate certificate issued, when. Any owner of capital stock, as shown by the records of a corporation organized and existing under the laws of the state of Colorado, entitling the stockholder to the services of a ditch or to the use of water subject to the payment of assessments, or the legal representative or assignee of any such stockholder, whose stock certificate has been lost, mislaid, or destroyed, may have a duplicate certificate issued in accordance with sections 7-42-114 to 7-42-117.

7-42-114. Statement of loss. If more than three years have elapsed since such stockholder, legal representative, or assignee has notified the corporation that such certificate has been lost, mislaid, or destroyed, and such stockholder, legal representative, or assignee has paid all assessments levied by such corporation against such stock since such notification, the stockholder or his legal representative or assignee may file with the secretary of said corporation a statement under oath that the certificate of stock has been lost, mislaid, or destroyed and that the certificate is the property of the person making such statement and has not been transferred or hypothecated by him, and demand the issuance of a duplicate certificate in accordance with sections 7-42-114 to 7-42-117.

7-42-115. Publication of notice of demand. Upon receipt of such demand, the corporation shall publish, at the expense of the person making such demand, at least once a week for five successive weeks, the fifth publication being on the twenty-eighth day after the first publication, in a newspaper of general circulation in the county in which the principal office of the corporation is located or, if there is no newspaper in such county, then in such a newspaper of an adjoining county, a notice that such a demand has been filed with the corporation in accordance with the terms of sections 7-42-114 to 7-42-117, setting forth such demand in full and stating that said corporation will issue, on or after a date therein stated, following the last publication of said notice by at least thirty days, a duplicate certificate to the registered owner or his legal representative or assignee unless a contrary claim is filed with said corporation prior to the date stated in the notice.

7-42-116. Duplicate conclusive against original. If no claim of interest or ownership other than that made by the person filing such notice or his legal representative or assignee is filed with the secretary of the corporation prior to the date stated in the notice, the corporation shall issue, on or after said date, a duplicate certificate to said person or his legal representative or assignee, and all rights under the original certificate shall immediately cease and determine and no person shall at any time thereafter assert any claim or demand against the corporation or any other person on account of such original certificate.

7-42-117. Proof of right to certificate. The corporation may require any legal representative or assignee of a stockholder of record to prove his legal right to such certificate as a legal representative or assignee of said stockholder of record.

ARTICLES OF INCORPORATION

of

HE GRAND VALLEY IRRIGATION COMPANY

KNOW ALL MEN BY THESE PRESENTS, that we, Benton Cannon, M. L. Allison, and A. A. Miller, of Mesa County, State of Colorado, have associated ourselves together for the purpose of forming and organizing a body corporate and politic and in accordance with the laws of the said State of Colorado, we do hereby make, execute and acknowledge, in triplicate this certificate in writing, in and by which we certify, as follows:

FIRST. The corporate name of said corporation, hereby organized shall be The Grand Valley Irrigation Company.

SECOND. The objects for which said body corporate shall be created are:

To purchase and acquire all the franchises, rights of way, canals, ditches, laterals, water rights and property of the Grand River Ditch Company, The Grand Valley Canal Company, The Mesa County Ditch Company, The Pioneer Extension Ditch Company and the Independent Ranchmen's Ditch Association, and to operate, manage, control, build, add to, extend and complete said canal system when purchased.

To furnish to and distribute among the stockholders of said corporation water for irrigation and domestic purposes, but this corporation shall not be or become a common carrier of water, or make contracts to sell or to rent water, or sell or rent water, or carry water for hire for irrigation or domestic use.

To use, operate, rent, sell, or otherwise dispose of any water power, or water for furnishing power or operating machinery, which said corporation may have or obtain in connection with its canals or water system.

THIRD. The stream from which the water for the canals or ditches of this corporation shall be taken is the Grand River. (Now known as the Colorado River). The point or place on said stream at which the water is to be taken out is a point on said river about one thousand four hundred and twenty (1,420) feet south of the northeast corner of Section Three, Township One, south of Range Two East, Ute Principal Meridian, under a ledge of rock. The line of the ditch and canal of this company runs, for the first twelve miles, in a westerly direction, down Grand Valley, to a point on said ditch known as the Little Drop. From thence two branches or laterals run down the valley, in a westerly direction, to the end thereof, about fifteen miles; and also a feeder, known as The Independent Ranchmen's Feeder, and also one known as the Mesa County Ditch; and also one known as the Pioneer Extension Ditch; the general line of which extensions and feeders run westerly down the valley. A more particular description of which said ditches and the line thereof will be found in the recorded certificates of Incorporation of the Grand River Ditch Company, The Grand Valley Canal Company, The Mesa County Ditch Company, The Independent Ranchmen's Ditch Association, The Pioneer Ditch Extension Company, which have been recorded

in the office of the County Clerk and Recorded of Mesa County which records are hereby referred to for greater certainty.

The water from said ditches and canals is to be used for irrigation and domestic purposes, and for water power and for mechanical purposes.

FOURTH. The capital stock of this corporation shall be Two Hundred and Forty Thousand ($240,000) Dollars, to be divided into Forty-eight Thousand (48,000) shares of Five (5) Dollars each, and said stock, shall be assessable to pay the debts of said corporation, and for all other purposes.

FIFTH. This corporation shall exist for a term of twenty (20) years from the date thereof.

SIXTH. The said corporation shall have a Board of Directors consisting of nine (9) persons, and the names of the Directors who shall manage the affairs of the corporation for the first fiscal year are: Albert A. Miller Wm. Bomgardner, Civallus A. Brett, B. C. Oyler, Addison J. McCune, Albert D. Mahany, Milton R. Hall, Patrick Sullivan and Charles Hartman.

SEVENTH. The principal office of said company shall be at Grand Junction, Mesa County, Colorado, and the principal business of the company shall be carried on in the County of Mesa in said State.

EIGHTH. The directors of said company shall have power to make such prudential bylaws as they may deem proper for the management of said company, for the carrying on of all kinds of business, and to appoint and elect such officers and agents as are necessary for the successful prosecution of said business.

In witness whereof, the said persons aforesaid have hereunto set their hands and seals this twenty-seventh day of January, A.D. 1894.

Benton Canon
M. L. Allison
A. A. Miller

State of Colorado }
} SS
County of Mesa

This 27th day of January, A.D. 1894, before me personally came Benton Canon, M. L. Allison and A. A. Miller, who are personally known to me to be the persons whose names are subscribed to the within and foregoing Certificate of Incorporation and acknowledged that they signed, sealed and delivered the said instrument in writing freely and voluntarily, for the uses and purposes therein set forth.

I further certify that my commission expires October 1st, 1896.

Given under my hand and notarial seal on the 27th day of January, A.D. 1894.

ULYSSES G. RAMEY,
Notary Public

The corporate life of the Company was renewed and extended 20 years from the 27th day of January, A.D. 1914. The corporate life of the Company was renewed and became perpetual the 27th day of January A.D. 1934.

BYLAWS

ARTICLE I.

Sec. 1. The Board of Directors, provided for in the Articles of Incorporation of this Company, shall be elected annually at the regular annual meeting of the stockholders, as hereinafter provided, and shall hold their office until their successors are elected and qualify.

Sec. 2. Said Directors shall be stockholders in said Company, and shall be residents of Mesa County, Colorado.

Sec. 3. Any vacancy occurring in the Board of Directors shall be filled by the remaining members of said Board.

ARTICLE II.

Officers

Sec. 1. The Board of Directors shall at their first regular meeting after their election, elect a President, Vice-President and Auditor from among their number, and at said meeting the Board shall appoint a Secretary-Treasurer, who shall be subject to removal at any time, and all of said officers shall hold office for one year and until their successors are elected and qualify.

Sec. 2. The Secretary-Treasurer shall give bond in such sum and with such security as the Directors may require, conditioned on the faithful performance of the duties and to turn over to his successor in office, all papers, money, funds and property of whatever kind or nature belonging to the Company, upon the expiration of his respective term of office or upon being removed therefrom or with such other conditions as may be proper.

Sec. 3. The President shall preside at all meetings of the Directors or stockholders. He shall sign as President all certificates of stock and all contracts and other instruments in writing, which may have been ordered by the Board of Directors. He shall supervise all officers and employees of the Company and see that their duties are properly discharged and report to the Board of Directors any negligence or misconduct of such officers or employees. He shall know from reports that ditches are in repair for carrying water and see that water is running in said ditches approximately April 1 until November 1 of each year, unless there is an emergency. In the absence or disability of the President the Vice-President shall perform his duties.

Sec. 4. The Secretary-Treasurer shall keep a record of the proceedings had by the Board of Directors, and also of the meetings of the stockholders. He shall keep a book of blank certificates of stock, fill up and countersign

all certificates issued and make corresponding entries upon the marginal stub of each of such certificates issued. He shall keep a stock ledger in due form, showing the number of shares issued to and transferred by any stockholder and the date of issuance and transfer. He shall have charge of the corporate seal and affix the same to all instruments requiring a seal. He shall keep in the manner prescribed by the Board of Directors, all the accounts of the Company in books provided for such purpose. He shall collect all money due the company, shall keep safely all monies belonging to the Company and shall disburse the same under the direction of the Board of Directors, upon the check signed by him and countersigned by the Auditor and not otherwise. At each annual meeting of the stockholders, he shall submit a complete financial statement and report of the company for the past year. He shall perform such other duties pertaining to his office as shall be prescribed by the Board of Directors. He is authorized to deposit the funds of the Company in either of the local banks and in such other banks as the Board of Directors may from time to time designate.

Sec. 5. The bills, payrolls and items of expense against the Company shall be submitted for allowance and approval to the Board of Directors at their monthly meeting and upon approval by said Board they shall be audited by the auditor, who shall then countersign all checks issued in payment therefor by the secretary.

ARTICLE III.

Sec. 1. The regular meeting of the Board of Directors of the Company shall be held at the office of the Company on the first Thursday of each month, unless said day falls upon a legal holiday, in which case the meeting shall be held upon the call of the President within three days of the regular meeting date. Special meetings of the Board of Directors may be called by the President by giving one day's notice of such proposed meeting to each director.

Sec. 2. A majority of the Board of Directors shall constitute a quorum for the transaction of business, but a less number may adjourn to a day upon giving notice to absent members of said Board of such adjournment.

Sec. 3. The Board of Directors shall have power:

1. To call special meetings of the stockholders whenever such meeting is necessary in the manner and form hereinafter provided.

2. To appoint and remove at pleasure all employees and agents of the company, prescribe their duties, fix their compensation, and, when they deem it necessary, require security for the faithful performance of their duties.

3. To make rules and regulations not inconsistent with the laws of the State of Colorado and the Articles of Incorporation or the Bylaws of the Company for the guidance of the officers and the management of the officers of the Company.

4. To make assessments on such stock of the Company as shall have been issued, necessary to carry out the objects and purposes of the Company as expressed in the Articles of Incorportaion, and to provide the time of payment of such assessments and the manner of collecting the same.

5. To forfeit and sell the stock of any delinquent stockholder, or so much thereof as may be necessary to satisfy the unpaid assessments in the manner and form hereinafter provided.

6. To incur such indebtedness as they may deem necessary for carrying out the objects and purposes of the company and to authorize the president and secretary to make the note of the Company with which to raise money to pay such indebtedness.

Sec. 4. It shall be the duties of the Board of Directors:

1. To cause to be kept a complete record of all their meetings and acts, and also the proceedings of the stockholders, present full statements at the regular annual meetings of the stockholders showing in detail the assets and liabilities of the Company and the condition of its affairs in general. A similar statement shall be presented at any other meeting of the stockholders when thereto previously requested by persons representing at least one-third of the capital stock of the Company.

2. To supervise all the acts of the officers and employees, require the Secretary-Treasurer to keep full and accurate books of account and prescribe the form and mode of keeping such books.

3. To cause to be issued to the persons entitled thereto certificates of stock according to the several interests not exceeding in the aggregate, the capital stock of the Company.

Sec. 5. No contract by any officer of the Company shall be valid without the previous authorization or the subsequent ratification of the Board of Directors.

Sec. 6. The Board of Directors shall at their first meeting after their election, elect two members to act with the President and Superintendent as a construction committee, who shall have full charge of all construction and repair work on the ditch.

ARTICLE IV.

Superintendent

Sec. 1. A Superintendent shall be appointed by The Board of Directors, whose duty it shall be to direct and control all labor and business pertaining to the business and operation of the system of ditches and canals of the Company subject to the direction and control of the Board of Directors, who shall have the direct management of the canal. He shall divide the water from the canal to all persons entitled to receive the same according to the respective stock as certified to him from time to time by the Secretary of Company, and to discharge all such other duties pertaining to his said office

as may be from time to time prescribed by the Board of Directors, and to make correct returns to the Board of all persons hired and employed on the canal or elsewhere in the interest and in the behalf of the Company, with a statement of the wages, at such stated periods, as may be prescribed by the rules of the Company.

ARTICLE V.

Sec. 1. The members of the Board of Directors shall be allowed the sum of Ten Dollars ($10.00) for each meeting per day attended. Board members and employees traveling on Company business, other than Board meetings, shall be allowed actual expense incurred.

The secretary-treasurer, superintendent and auditor shall receive such compensation for their services as the Board of Directors shall determine.

ARTICLE VI.

Stockholders

Sec. 1. Any person or persons owning a subsisting water right in the Grand Valley Irrigation Company may have said water as represented by said stock turned out in any of the canals we operate, Main Line, High Line, Independent Ranchman and Mesa County.

Provided, that any person or persons whose stock may be so held in escrow, shall be entitled to all the rights and privileges of a stockholder so long as his, her or their right to the use of water under such water right shall remain.

Sec. 2. Certificates of stock shall be signed by the President and Secretary, and each certificate shall express upon its face, its number, the date of issuance, the number of shares for which, and the person or persons to whom it is issued, and several certificates may be issued to the same person or persons; provided that in the aggregate they do not exceed the shares belonging to such person or persons, the certificate book shall contain a marginal stub upon which shall be entered the number, date, number of shares, and the names of the person or persons expressed in the corresponding certificate.

Sec. 3. Certificates of stock, when issued, shall be issued as full paid stock of the par value of Five Dollars ($5.00) per share and such shares of stock may be transferred at any time by the holders thereof, or by attorney in fact, or by legal representatives. Such transfers shall be made by endorsement on the certificate of stock and the surrender of the same, provided that such transfer shall not be valid, except as between the parties thereto, until the same shall have been noted in the proper form on the books of the Company. No certificate of stock shall be issued for less than one share and no fractional share shall be issued.

The transfer books of the Company shall be closed ten days before the annual meeting of the stockholders and remain closed until the day following said meeting.

In case the owner of any certificate of stock claims the same to have been stolen, destroyed or otherwise lost and demands a new certificate, such new certificate shall be issued to him only after satisfactory proof has been made to the Board of Directors that the original certificate has in fact been stolen, destroyed or otherwise lost; and before issuing a new certificate the Directors shall demand a bond, with good and sufficient surety, from the claimant of the stock, indemnifying the corporation against liability from possible bona fide holders of the original certificate, in an amount double to the actual value of the stock.

The surrendered certificate shall be cancelled and a new certificate in lieu thereof shall be issued and no transfer of any share of stock shall be valid or allowed upon the books of the company upon which any assessments are due and unpaid.

Sec. 3-A. A transfer fee of One Dollar ($1.00) shall be charged for each single transfer of any shares of the capital stock of the Company and the same shall be collected by the Secretary at the time of such transfer.

Sec. 4. Each share of stock shall entitle the holder to receive four-tenths of a statute inch of water from the Company under such rules and regulations as the Board of Directors may prescribe, provided, that water may be delivered to third persons upon the written order of the holders of stock under such rules and regulations as may be made by said Board.

Sec. 5. The Board of Directors shall, at the regular meeting to be held during the month of November in each year, levy an assessment upon all of the capital stock of the company outstanding to provide revenue for the purposes of paying indebtedness of the Company, the maintenance and operation of its canals and ditches for the ensuing year, and for the proper maintenance and operation of the Company and its officers, and for the purpose of creating such reserve or contingent fund as the Board may from time to time deem necessary and proper for the financial stability and welfare of the Company.

When such an assessment shall have been levied as aforesaid the said Board of Directors shall cause the Secretary of the Company, not later than the ensuing January, to notify all of the stockholders of such assessment and of the time and manner in which the same is ordered to be paid by depositing in the post office a notice to that effect, directed to the last known post office address of the several stockholders. In case any of the stockholders shall fail to pay any such assessment so made at the time and in the manner ordered by the Board of Directors, the collection of such assessment may be enforced in the following manner, to-wit:

1. By the refusal on the part of the Company to deliver any water to such stockholder until such assessment has been paid, and if, at any time, the water is being used by such stockholder on his stock, water may be shut off and kept shut off until such assessment is paid.

2. The Board of Directors may order a suit brought against the stockholders to recover the amount of such assessment and such suit shall not be brought until twenty days after personal demand shall have been made for

the amount due, or, in case where a personal demand is made, then only upon the expiration of thirty days after a written or printed demand shall have been deposited in the post office properly addressed to the post office address of such delinquent stockholder.

3. The stock of the stockholder so in default may be sold at public auction to the highest and best bidder for cash by the secretary of the Company on the order of the Board of Directors in manner as follows, to-wit: If the assessment shall not have been paid at the time that the same is made due and payable by the Board of Directors, the secretary shall either in person or by written or printed notice duly mailed to the last known address of the delinquent stockholder demand payment of the amount of the assessment and shall also, at said time, notify the stockholder that unless such payment is made within thirty days from the date of such demand, then, at the end of said time the shares owned by such delinquent stockholder will be subject to forfeiture and sale as by law provided. If such assessment shall not have been paid at the end of said thirty days, the Board of Directors may declare said stock forfeited and order the same sold and, upon such order being made, the secretary shall publish a notice of the sale of such stock giving the time and place of the sale in some newspaper published at or near the principal place of business of the company by two insertions in a weekly newspaper; provided, however, that no greater number of shares of said stock shall be sold than an amount necessary to bring the amount of the assessment and costs of sale; and the proceeds derived from such sale over and above the amount due on said shares and the expenses incident to and occasioned by the sale thereof, shall be paid over to the delinquent stockholder.

In case of emergency, when the annual assessment so made by the Board of Directors shall prove to be insufficient to meet the requirements of the Company, the Board of Directors may at any time levy a further assessment in like manner as the annual assessment for the purpose of providing for such deficiency in revenue.

The Board of Directors may take any one or all of the above methods to enforce the payment of assessments as they may deem fit. The stockholders of this Company shall be deemed, by taking stock therein, to assent and agree to the above methods of making and enforcing the collection of assessments on the capital stock of the company.

4. All assessments on the capital stock of the Company made by the Board of Directors, pursuant to Article VI, Section 5, of these Bylaws shall, if not paid by May 1 of the year following the levying of such assessment, draw interest at the rate of 1% per month from May 1 until paid. Any emergency assessment levied by the Board of Directors, pursuant to Article VI, Section 5. (3) of these Bylaws, shall draw interest at the rate of 1% per month from the date established by the Board of Directors as the due date thereof until paid.

Unpaid interest shall be collected in the same manner as prescribed in these Bylaws for the non-payment of assessments levied against the stock of the Company.

ARTICLE VII.

Annual Meeting

Sec. 1. The annual meeting of the stockholders for the election of Directors shall be held on the first Saturday in December in each year, but if for any reason it should not be held on such day, it may be held on any day subsequent thereto as hereinafter provided.

Sec. 2. The Board of Directors shall be elected by the Stockholders at the regular annual meeting. Written or printed notice stating the place, day, and hour of the meeting and, in case of a special meeting, the purpose or purposes for which the meeting is called, shall be delivered not less than ten or more than fifty days before the date of the meeting, either personally or by mail, by or at the direction of the president, the secretary, or the officer or persons calling the meeting, to each shareholder of record entitled to vote at such meeting, except that if the authorized shares are to be increased, at least thirty days' notice shall be given. If mailed, such notice shall be deemed to be delivered when deposited in the United States mail addressed to the shareholder at his address as it appears on the stock transfer books of the corporation, with postage thereon prepaid.

Sec. 3. Elections of directors shall be made by such of the stockholders as shall attend for that purpose, either in person or by proxy, provided a majority of the stock issued shall be represented; and if a majority of the stock issued be not represented, such meeting may be adjourned by the stockholders present for a period not exceeding sixty days at any one adjournment. All elections shall be by ballot and each stockholder shall have the right to vote in person or by proxy the number of shares of stock owned by him.

ARTICLE VIII.

Sec. 1. These Bylaws may be amended by the affirmative vote of a majority of the directors at any general meeting, but in case of the proposed amendment of the Bylaws, notice of such proposed amendment or amendments having been given at the regular meeting preceeding the meeting when the adoption of said amendment is to be considered.

* * *

RULES
of
THE GRAND VALLEY IRRIGATION COMPANY

Adopted September 1, 1966

RULE 1. Any new connection made into the canals of this Company in the form of tap boxes will be at the expense of the stockholder, the work to be done by the company. The prerequisite for this tap box is ownership of five shares of Grand Valley Irrigation Company stock. No pumps will be operated by any other means than through this tap box arrangement.

RULE 2. All headgate locks are under the supervision of the superintendent.

RULE 3. No water shall be turned out to any person on any stock until all assessments due on such stock shall have been paid.

RULE 4. The superintendent shall have all headgates on the ditch inspected and repaired before water is turned into the ditch for the season.

RULE 5. All stockholders shall give written notice to the office on blanks to be furnished for that purpose, designating the number of the box through which they desire the water delivered.

RULE 6. When water is rented for the season, the owner of the stock shall give a written order to the company on blanks to be furnished for that purpose, designating the amount of water and the name of the party to whom rented and the renter shall designate the number of the box through which he desires such water delivered.

RULE 7. Any disagreement arising between the superintendent and any employee of the company or between the superintendent and any water consumer upon any matter not provided for by these rules or the bylaws of the Company may be decided by any of the directors, whose decision in such matters shall be binding, subject, however, to an appeal to the Board of Directors.

RULE 8. No flume, bridge or other structure shall be constructed across, over or under the ditch right of way of the Company, except on written permission of the Construction Committee or Board of Directors under the supervision of the Superintendent.

RULE 9. No check, wheel, dam or other obstruction shall be allowed in the ditch except on the order of the Board of Directors.

* * *

HISTORY OF ADJUDICATION

The Grand Valley Canal was begun in the year 1882. The priority date of our first water right is August 22, 1882. A. J. McCune, then engineer of the Grand River Ditch Company, filed a statement on behalf of that company showing actual construction began January 10, 1883.

The title to the Grand Valley Canal system in the beginning was in various corporations. At one time it was owned and operated by the Traveler's Insurance Company. The Grand Valley Irrigation Company was incorporated January 27, 1894. The Company, as recited in its Articles of Incorporation, was organized to purchase all rights of The Grand River Ditch Company, The Grand Valley Canal Company, The Mesa County Ditch Company, and The Independent Ranchmen's Ditch Association. The Grand Valley Irrigation Company has operated and maintained this system for many years and has from the beginning worked to improve the canal system with many changes being made. From the start of the Company, the charters were for 20 year periods and in December 1933, the Company obtained a perpetual charter.

The Grand Valley Irrigation Company was awarded a Decree from the Colorado River for 520.81 second feet of water with a priority date of August 22, 1882. This is the first Decree out of the Colorado River.

In 1882-1883 the Company supplied water to irrigate about 30,000 acres. We now supply water to irrigate about 44,000 acres.

The Company has at all times worked, as money became available, to enlarge the capacity of the canals and more water has been supplied over the years. By 1914 an additional 120 second feet of water was required to fully supply the system at its peak demand. An adjudication hearing was held in 1916 at which time the Company was granted a Decree for 119.47 second feet of water with a priority date of April 26, 1914. The Company has absolute Decree for 640.28 second feet.

Until 1945 a shareholder was entitled to 5/16 of an inch per share. In 1945 the Bylaws were amended fixing 4/10 of an inch per share. This was considerable gain to the shareholder in actual ownership but was not felt too much in delivery of water at that time because of previous increased delivery through the years. Until 1945, the Company owned some shares of stock which were disposed of at that time.

The Grand Valley Irrigation Company has an authorized capital of $240,000.00 divided into 48,000 shares of the par value of $5.00 each.

The total amount of water for which the Company has absolute Decrees is 640.28 second feet or 24,586.75 statute inches. The first enlargement has a priority date of July 23, 1914. This was made absolute in July 25, 1941. This Decree and the water thereby made available to us is without doubt a very important amount to the company as there is a great loss of water from seepage and evaporation. As water becomes increasingly scarce due to drought and the demands of an industrial society, this water has great future value.

It may be noted that there is a difference between the amount of water represented by shares and the amount adjudicated. This represents the extra water which the Company must have to deliver the proper amount to the respective shareholders' headgates. It has been calculated that the loss from seepage and evaporation has been and continues to be about 20%.

There are many details concerning the history of the Grand Valley Irrigation Company which can not be here set forth because of space limitation.

INCORPORATED UNDER THE LAWS OF THE STATE OF COLORADO

No. 20581

SHARES

THE GRAND VALLEY IRRIGATION COMPANY

THE SAID SHARES OF THIS COMPANY ARE ASSESSABLE UNDER ITS BY-LAWS, BY THE BOARD OF DIRECTORS

CAPITAL STOCK, $240,000 — 48,000 SHARES, $5.00 EACH

THIS CERTIFIES THAT _____ is the owner of _____ Shares of the Capital Stock of THE GRAND VALLEY IRRIGATION COMPANY, Full Paid and Assessable transferable only on the books of the Corporation by the holder hereof in person or by Attorney upon surrender of this Certificate properly endorsed.

IN WITNESS WHEREOF the said Corporation has caused this Certificate to be signed by its duly authorized officers and its Corporate Seal to be hereunto affixed this _____ day of _____ A.D. 19__

SECRETARY

PRESIDENT

SHARES

APPENDIX 2

CHAPTER 2B

Water User Associations

Water user associations in the U.S.A. are generally organized as contracting entities with the federal government or more recently federations of irrigation companies cooperating in pursuit of a common objective.

The water users association law of Colorado is used in this appendix to illustrate typical legislation on the subject. The Articles of Incorporation and Bylaws of the Grand Valley Water Users Association illustrate the organizational documents.

CHAPTER 31
CORPORATIONS
ARTICLE 16
Water Users' Associations

31-16-1. Tax exemptions—fees.—Any water users' association which is organized in conformity with the requirements of the United States, under the reclamation act of June 17, 1902, and which, under its articles of incorporation, is authorized to furnish water only to its stockholders, shall be exempt from the payment of any income tax and from the payment of any annual franchise tax, but shall be required to pay, as preliminary to its incorporation, only a fee of twenty dollars for the filing and recording of its articles of incorporation and the issuance of certificate of incorporation.

31-16-2. Stock subscription record.—Any water users' association organized in conformity with the requirements of the United States, under the reclamation act of June 17, 1902, with the consent of the county commissioners, may furnish the clerk and recorder of any county in Colorado, a book containing printed copies of its articles of incorporation and forms of subscription for stock; and the county clerk and recorder to whom such book shall be furnished shall use the same for recording the stock subscriptions in such association, and the charges for the recording thereof shall be made on the basis of the number of words actually written therein.

31-16-3. Organization—assessments.—A corporation known as a water users' association may be organized under the "Colorado Corporation Code" or organized under or elect to be governed by the "Colorado Nonprofit Corporation Act," for the purpose of dealing with, contracting with, or cooperating with the United States under the provisions of the act of congress of June 17, 1902, and acts amendatory thereof or supplementary thereto for the securing of a water supply or irrigation works or both, and shall have in addition to the powers now conferred by law upon ditch, canal, or irrigation companies, the power to make assessments on other than a pro rata basis for the purpose of raising funds to accomplish the purposes for which organized, or to pay its debts or obligations, or to secure reduction in the principal debt due the United States of America for reclamation project construction cost, or delinquent assessments, or charges already due and payable, when the articles of incorporation so permit, or when required under existing or future contracts between the United States and the association or between the association and its stockholders or under present or future laws or regulations of the United States.

31-16-4. Directors may file petition in district court.—(1) The board of directors of any water users' association organized under section 31-16-3 at any time may file a petition in the district court of the county wherein is situated the

office of such water users' association, praying a judicial examination and determination of the question of the validity of the organization of the association, or of any power conferred by the articles of incorporation, or of any amendment to the articles of incorporation, or of any assessment levied, or of any act, proceeding or contract of said association. Such petition shall set forth the facts wherein the validity of such organization, power conferred by the articles of incorporation, amendment to the articles of incorporation, assessment, act, proceeding, or contract is founded and shall be verified by a member of the board. Thereupon a notice in the nature of a summons shall issue under the hand and seal of the clerk of said court, directed to all stockholders, creditors, or other persons interested in said water users' association, naming it, which designation shall be deemed sufficient to give the court jurisdiction of all matters and parties involved and interested. Service shall be obtained by publication of such notice as in the case of publication of summons in an action to quiet title to real property.

(2) Any stockholder, creditor or other interested person may demur to or answer such petition within time allowed therefor. All persons filing demurrers or answers shall be entered as defendants in the cause, and their several defenses consolidated for hearing or trial. Upon hearing, the court shall examine into all matters and things affecting the validity of the matter in controversy, shall make a finding with reference thereto, and shall enter judgment and decree as the case warrants. In reaching his conclusions in such causes, the court shall follow a liberal interpretation of the law, and shall disregard informalities or omissions not affecting the substantial rights of the parties, unless it is affirmatively shown that such informalities or omissions led to a different result than would have been otherwise obtained. The rules of civil procedure shall govern matters of pleading and practice as nearly as may be. Costs may be assessed or apportioned among contesting parties in the discretion of the trial court. Review of judgments of the district court by the supreme court may be had as in other civil cases.

31-16-5. Apply to prior associations. — Sections 31-16-3 and 31-16-4 also apply to any water users' association heretofore organized under the laws of the state of Colorado.

31-16-6. Water users' association petition in district court, when.—(1) Where any water users' association organized under the laws of this state has entered into or proposes to enter into a contract with the United States for the payment by the association of the construction and other charges of a federal reclamation project constructed or under construction within this state, and where the funds for the payment of such charges are to be obtained by the association from assessments levied upon the stock of such association and constituting liens upon the lands of such stockholders, the association, in any case where the said contract or proposed contract would modify or affect any individual contracts between the United States and such stockholders or between the association and such stockholders, may file in the district court of the county wherein is situated the office of such water users' association a petition entitled "————water users' association against the stockholders of said association and the owners and mortgages of land within the ——— federal reclamation project." No other or more specific description of the defendants shall be required.

(2) In the petition it may be stated that the association has entered into or proposes to enter into a contract with the United States, to be set out in full in said petition, with a prayer that the court find said contract to be valid, and a modification of any individual contracts between the United States and the stockholders of said association or between the association and its stockholders, so far as such individual contracts are at variance with such association contract. Thereupon a notice in the nature of a summons shall issue under the hand and seal of the clerk of the court, stating in brief outline the contents of said petition, and showing where a full copy of said contract or proposed contract may be examined, such notice to be directed to the said defendants under the same general designations, which shall be deemed sufficient to give the court jurisdiction of all matters involved and parties interested.

(3) Service shall be obtained by publication of such notice as in the case of publication of summons in an action to quiet title to real property; and by the posting of the notice and complete copy of the said contract or proposed contract in the office of the association, and at three other public places within the boundaries of such federal reclamation project. Any stockholder in the plaintiff association, or owner, or mortgagee of land within said federal reclamation project affected by the contract proposed to be made by the association, may demur to or answer said petition within twenty days, or such further time as may be allowed therefor by the court. The failure of any person affected by the said contract to answer or demur shall be construed, so far as such person is concerned as an acknowledgment of the validity of the said association contract and as a consent to the modification of the said individual contracts with the association or with the United States, to the extent that such modification is required to cause the said individual contracts to conform to the terms of the contract or proposed contract between the plaintiff and the United States. All persons filing demurrers or answers shall be entered as defendants in said cause and their defenses consolidated for hearing or trial.

(4) Upon hearing the court shall examine all matters and things in controversy and shall enter judgment and decree as the case warrants, showing how and to what extent, if any, the said individual contracts of the defendants or under which they claim are modified by said association's contract or proposed contract with the United States. In reaching his conclusions in such causes, the court shall follow a liberal interpretation of the law, and shall disregard informalities or omissions not affecting the substantial rights of the parties, unless it is affirmatively shown that such informalities or omissions led to a different result than would have been obtained otherwise. The rules of civil procedure shall govern matters of pleading and practice as nearly as may be. Costs may be assessed or apportioned among contesting parties in the discretion of the trial court. Review of the judgment of the district court by the supreme court may be had as in other civil cases.

31-16-7. Associations may extend corporate life.—Any water users' association organized under the laws of this state may amend its articles of incorporation so as to extend the life of such association to any date not later than one hundred years from the date of the approval, February 13, 1931.

No.....

Grand Valley Water Users Association

SUBSCRIPTION FOR STOCK

.....

.....

For ..... Shares

Lands .....

.....

.....

Dated .....

Presented and Filed

.....

.....

Secretary G. V. W. U. A.

SENTINEL PRESS

No.....

THE GRAND VALLEY WATER USERS ASSOCIATION

SUBSCRIPTION FOR STOCK

.....

.....

STATE OF COLORADO, } ss.
Mesa County. }

I hereby certify that this instrument was filed for record in my office at..... o'clock....M., ..., 19....., and is duly recorded in Book ..... Page.....

.....
Recorder.

Know All Men by These Presents:

That I, ..., do hereby subscribe for and agree to take.....shares of the capital stock of the **GRAND VALLEY WATER USERS ASSOCIATION**, a corporation duly organized under the laws of the State of Colorado, and for that purpose and in order to become a member of said Association do hereby, subject to all the provisions thereof and of the by-laws of said Association not inconsistent therewith, subscribe to the following copy of the Articles of Incorporation of said Association, which are as follows:

Articles of Incorporation of the Grand Valley Water Users Association

Know all men by these articles of incorporation that we, the undersigned, have associated ourselves together under the laws of the State of Colorado, as a body corporate.

ARTICLE I.

The name of this corporation shall be and is The Grand Valley Water Users Association.

ARTICLE II.

The names of the incorporators are Lawrence M. Miller, S. P. Green, H. H. Beach, Daniel Lynch, John T. Beaman, James B. Hunter, George Smith, Marion O. Delaplain, William S. Wallace, James H. Smith and Merrill W. Blakeslee, but others may become members of this association by subscribing for the stock of the Association or by the transfer of stock to them in the regular course of the administration of the affairs of the Association.

ARTICLE III.

The principal place of transacting the business of the Association shall be at Grand Junction, in the County of Mesa, in the State of Colorado.

ARTICLE IV.

SECTION 1. The purposes for which this Association is organized and the general nature of the business to be transacted are: To acquire, furnish, provide for, and distribute to the lands of the shareholders of the Association as herein provided, an adequate supply of water for the irrigation thereof; to divert, store, develop, pump, carry and distribute water for irrigation and all other beneficial uses, deriving the same from all available sources of supply; to construct, install, operate, and maintain pumps, ditches, conduits and other drainage works for draining any or all of the lands receiving water through the irrigation works of the Association; to construct, purchase, lease, condemn, or acquire in any manner whatsoever, and to own, use, sell, transfer, convey, control, maintain, and operate any irrigation works, structures, telephone systems, electric or other power plants, and transmission lines, and property both real and personal of every kind whatsoever, necessary or appropriate for the accomplishment of any of the purposes of this organization; to generate, create, transmit, use and sell power and electrical energy; to act as trustee, agent or attorney for the sale, disposal, and transfer of lands, in order to facilitate the disposal of such lands, or any part thereof, to persons qualified to perfect rights to the use of water under the laws of the United States applicable thereto, and the rules and regulations established thereunder; to incur indebtedness, floating or bonded, and to secure the same by mortgage, deed of trust, pledge or otherwise, to acquire, hold, and dispose of stock in other corporations, domestic or foreign; to purchase or acquire land by foreclosure or otherwise and to hold, own, sell, transfer or convey such land, any such sale, transfer or conveyance to be upon such terms and conditions as may be fixed by the Board of Directors of this Association; to have and exercise all the powers and to perform any and all acts necessary or appropriate for the accomplishment of any one or more of the said purposes or anything incident thereto.

SECTION 2. This Association shall have the power to enter into any contract or other arrangement with the proper representative of the United States, individual, association of individuals or corporation, for the accomplishment of any of the aforesaid purposes, by means of the construction, acquisition or control of appropriate works or structures, or in any other manner whatsoever.

SECTION 3. It shall have the power to enter into any agreement with the proper representative of the United States with reference to the collection and payment of any and all charges made under the federal statutes for the works providing water for the lands of its shareholders.

SECTION 4. It shall have the power to comply with the provisions of any federal statutes applicable to the work done by the United States in connection with such system of water supply, and any rules and regulations established thereunder.

SECTION 5. The territory within which the lands to be irrigated as aforesaid are situated, to be known as the Grand Valley Irrigation district, includes all lands within the boundaries described as follows, to-wit:

That portion of Grand Valley lying between the east boundary line of Range Ninety-eight (98) west 6th Principal Meridian, and the west boundary line of Range One Hundred and Four (104) west 6th Principal Meridian irrigable by diversion of water from the Grand River in Colorado.

ARTICLE V.

SECTION 1. The capital stock of the Association shall be Seventy-five Thousand Dollars ($75,000), divided into seventy-five thousand (75,000) shares, of the par value of One Dollar ($1.00) each. Said stock shall be assessable and assessments thereon for all purposes shall be made by the Board of Directors of this Association.

SECTION 2. Only those who are owners of lands, or occupants of public lands having initiated a right to acquire the same, within the area described in Article IV or within such extensions thereof as may be duly made, shall be qualified to own the shares of this Association. Not more than one share shall be allotted for each acre of land, but fractional shares may be issued on fractions of acres.

SECTIONS 3, 4, and 5, Article V, are omitted.

SECTION 6. The ownership of each share of stock of this Association shall carry, as incident hereto, a right to have water delivered to the owner thereof by the Association for the irrigation of the lands to which such share is appurtenant.

SECTION 7. The amount of water to be delivered to such owner shall be that proportionate part to all the water available for distribution by the Association during any irrigation season, as the number of shares owned by him shall bear to the whole number of valid and subsisting shares then outstanding, such water to be delivered to and upon said lands at such times during such season as he may need for the proper irrigation thereof.

SECTION 8. By subscribing to the shares of this Association each signer agrees that the right to any water theretofore appropriated by him, or by his predecessor in interest, for the irrigation of the lands described in said subscription, or customarily used thereon, shall become appurtenant to such lands and be and remain incident to the ownership of such shares appurtenant to such lands. There shall be further incident to the ownership of such shares the right to have such water delivered to the owner thereof by the Association for the irrigation of said lands, as the Association shall from time to time acquire or control means for that purpose: Provided, that the whole amount of water actually delivered to such lands from all sources shall not exceed the amount necessary for the proper cultivation thereof.

SECTION 9. The records of the Association and each and every certificate or other evidence of ownership of shares of stock in the Association, when issued, shall contain a description of the lands to be irrigated, and to which the aforesaid rights and shares shall be perpetually appurtenant; and, thereafter all rights whatever their source or whatever their manner of acquisition to the use of water for the irrigation of said lands shall forever be inseparably appurtenant thereto, together with the said shares of stock, and all rights and interests represented thereby or existing or accruing by reason thereof, unless such rights shall become forfeited under the provisions of these Articles of Incorporation, or of by-laws adopted in pursuance thereof, or by operation of law, or by the voluntary abandonment thereof by deed, grant or other instrument, or by non-user for the term prescribed by law: but no such abandonment shall be for the benefit of any person designated by such shareholder, directly or indirectly, or to his use, nor confer any right whatsoever upon the holder of any grant, release, waiver, or declaration of abandonment of any kind: Provided, however, that if for any reason it should at any time become impracticable to beneficially use water for the irrigation of the land to which the right to the use of the water is appurtenant, the said right may be severed from said land and simultaneously transferred and attached to other lands to which shares of stock in this Association are or shall thereby be made appurtenant, if a request for leave to transfer, showing the necessity therefor, shall have first been allowed by a two-thirds vote of the Board of Directors at a regular meeting and approved by the Secretary of the Interior. All the provisions and agreements of this section shall be set forth in the aforesaid certificate or other evidence of the ownership of shares of stock in the Association, together with any other provisions and agreements made necessary by these articles, and such certificate or other instrument shall be signed, executed and acknowledged by the President and Secretary of the Association, and by the person to whom it is issued, in the manner required by law for the execution and acknowledgment of deeds for the conveyance of real property, and the Board of Directors shall pass by-laws prescribing the form of such certificate or other instrument, not inconsistent with these articles.

SECTION 10. Every transfer of the title to any lands to which the said rights and shares are appurtenant, whether by grant or by operation of law (except where the land may be subjected by grant, or involuntarily under any law, to an easement, the exercise of which does not interfere with the cultivation of the soil by the servient owner) shall operate, whether it be so expressed therein or not, as a transfer to the grantee or successor in title, of all rights to the use of water for the irrigation of said lands, also all rights arising from, or incident to, the ownership of such shares, as well as the shares themselves; and upon presentation to this Association of proof of any such transfer of land, the proper officer shall transfer such share of stock upon its books to the successor in title to said lands.

SECTION 11. Any transfer or attempted transfer, of any of the shares of this Association, made or suffered by the owner thereof, unless simultaneously a transfer of the land to which it is appurtenant is made or suffered to or in favor of the same party, shall be of no force or effect for any purpose and shall confer no rights of any kind whatsoever on the person or persons to whom such transfer may have been attempted to be made.

SECTION 12 is omitted.

SECTION 13. If it should be determined by the United States that the amount of water available from the entire irrigation system as owned or controlled by it and by the Association shall be insufficient to properly irrigate one acre of land for each share of the capital stock, then no shares in excess thereof shall be issued, and the number of shares shall be so reduced by appropriate amendment of these articles, as not to exceed the number of acres determined by the United States as irrigable from the entire available supply of water.

SECTION 14. If, when such determination is made, the number of shares subscribed shall be in excess of the number of acres so determined, an allotment of shares shall be made to the subscribers, equal to the number of acres irrigable, giving preference to the cultivated land. The surplus of shares so subscribed shall thereupon be cancelled and shall not be re-issued. By-laws shall be adopted to govern such allotment.

SECTION 15. If the number of acres of irrigable land or the cost of the works, or both, as determined by the United States, shall exceed the number of shares of the capital stock authorized herein, appropriate amendment of these articles as to the number of shares, the par value thereof and the capital stock shall be made in compliance with the laws applicable thereto.

ARTICLE VI.

SECTION 1. The revenues for the accomplishment of the purposes of this Association shall be raised:

(a) From income arising from the carriage, rental, or delivery of water for irrigation or other purposes, or from the sale, rental, lease, or furnishing otherwise of electric or other power or power privileges, or from any other lawful operations of the Association.

(b) From assessments against the shares of stock of the Association so far as they may be from time to time necessary to meet:

(1) The cost of construction, improvement, enlargement, betterment, repairs, operation and maintenance of the irrigation works of the Association or of those managed, controlled, operated or maintained by it.

(2) Payments due the United States under any contract or contracts between the United States and the Association, or payments under any contract between the United States and other parties which are assumed or guaranteed by the Association.

(3) Deficiencies caused by the failure of some of the shareholders of the Association to pay assessments upon their shares of stock.

(4) Any and all lawful obligations of the Association.

SECTION 2. The directors shall have power to make and enforce necessary by-laws for making, levying, collecting and enforcing the payment of such assessments and charges for water and other services.

SECTION 3. Assessments for the ordinary cost of operation, maintenance and repair, of the works of the Association, or of those the maintenance and control of which are, or may be hereafter, lodge in the Association, shall be equally assessed against all shareholders in proportion to the number of shares held by them respectively, unless existing or future contract or contracts with the United States or the laws or regulations of the United States now or hereafter require unequal assessments. Assessments other than for such ordinary cost of operation, maintenance and repair and other than for the purposes covered by Sections 4 and 5 of this Article shall be equally assessed against all shareholders in proportion to the number of shares held by them respectively, unless existing or future contract or contracts with the United States or the laws or regulations of the United States now or hereafter require unequal assessments.

SECTION 4. Assessments for the purpose of constructing or acquiring, or for the betterment, improvement, renewal, replacement or preservation of any works, property, or rights of the Association, or for the purpose of preserving or increasing or more efficiently or economically distributing the water supplies available for distribution by the Association, or for the fulfillment of any obligation undertaken by the Association, or in any contract, agreement or other arrangement with the United States government, or necessary for the accomplishment or carrying out of the purposes of the Association, may be equally assessed against all shareholders in proportion to the number of shares owned by them respectively. This section, however, is not to prevent unequal assessments when required under existing or future contract or contracts with the United States or under present or future laws or regulations of the United States.

SECTION 5. Assessments for expenditures for purposes that are of benefit to a part of the shareholders may be specially assessed in proportion to such benefits against such shareholders, but no expenditure to be provided for, or covered by, such special assessment shall be made, or obligation to expend the same incurred, except upon the petition of the holders of two-thirds of the shares to be so specially benefited: Providing, that the terms of this section shall not be construed as applying to any variation in the charges to be made on account of the building, operation and maintenance of the project, as assessed by the Secretary of the Interior.

SECTION 6. Assessments shall, from time to time, as they are made and levied and until they are paid or otherwise discharged, become, be and remain a lien upon the shares of stock against which they are levied and upon the lands to which such shares are appurtenant, and upon all rights and interests represented by such shares. The manner of fixing the lien and enforcing the same shall be as prescribed in these articles or in the by-laws of the Association, or in any contract to which a stockholder of the Association is a party. The Association may enforce the payment of assessments by foreclosure and sale of said lands and shares of stock in the manner provided by law for the foreclosure of real estate mortgages or by suit thereof in a court of competent jurisdiction, and levy in satisfaction of such judgment to be confined, however, to the land of the judgment debtor described in such suit and subscribed to the Association and/or which is under any contract or water right application with the United States.

SECTION 7. Except for operation, maintenance and repair, no work shall be undertaken, purchase made or indebtedness incurred or be authorized during any one year, whereof the cost shall exceed Fifty Thousand Dollars ($50,000) until it shall have first been ratified by at least two-thirds of the shares represented by the votes cast at an election to be called for that purpose. Special elections may be called and held for such purpose under such by-laws as the Board of Directors may prescribe, not inconsistent with these Articles.

ARTICLE VII.

SECTION 1. The exercise of the corporate powers of this Association and the management of its affairs shall be vested in 11 directors, from whom the President and Vice-President shall be chosen. The officers shall consist of the President, Vice-President, Treasurer and Secretary and shall be elected by the Board of Directors, but the Treasurer and Secretary need not be members of the Board of Directors or Stockholders of the Association. Any and all other officers, agents and employees as shall or may be from time to time created and established by the by-laws, shall be elected by the Board of Directors.

SECTION 2. The annual election of the Board of Directors and of the other officers for whose elections these Articles provide, shall be held on the second Tuesday in January, 1906, and of each year, thereafter in such manner as the by-laws shall provide.

SECTION 3. Each director shall at the time of his election be the owner of land situated within the district for which he is elected, to which shares of stock of this Association are appurtenant, and shall also be a resident of the district, and if he shall during his term of office cease to be such owner or resident of said district, his office shall thereupon and by reason thereof become vacant.

SECTION 4. Until the election of the Board of Directors at the annual election in 1906, and until their qualification the directors shall consist of the following named persons: Lawrence M. Miller, S. P. Green, H. H. Beach, Daniel Lynch, John T. Beaman, James B. Hunter, George Smith, Marion O. Delaplain, William S. Wallace, James H. Smith and Merrill W. Blakeslee.

SECTION 5. The Board of Directors shall have power to make such prudential by-laws as shall be necessary to the government of this Association, not inconsistent with these Articles, and for the management of its business and the conduct of its affairs, and to repeal, modify and amend the same from time to time. The Board shall not have power to adopt or enforce any by-laws that in anywise conflicts with any rules or regulation established by the Secretary of the Interior or other Agency of the Government, in connection with the Reclamation Act.

SECTION 6. In the event of a vacancy in the Board of Directors by reason of death, resignation or otherwise, the vacancy shall be filled by the Board of Directors.

SECTION 7. Regular and special meetings of the Board of Directors shall be called and held in such manner and at such times and places as may be prescribed by the by-laws.

SECTION 8. Special meetings of the Board of Directors may be called by the President, or by any six of the members of the Board. Such call shall be in writing and signed by either the President, or any six of the members and shall state the time of such proposed meetings, and the nature of the business to be transacted thereat. Such written call shall be filed with the Secretary, who shall thereupon immediately, and at least five days before the time fixed for such meeting mailed postcard to the President, and each member of the Board, a copy of such call, and shall publish the same in some newspaper published and of general circulation in the territory, described in Article IV, of these Articles, on three consecutive days before, and exclusive of, the day fixed for such special meeting. If the Secretary fail or refuse to publish such call or to mail copies thereof, as above provided, then either the President, if he issued the call, or any one of the members who issued the same, may make publication and mail copies of the call, with like effect as if done by the Secretary. Special meetings of the Board of Directors shall be held at the office of the Association.

SECTION 9. The Directors shall have the power, in the name of the corporation, to prosecute, defend, and compromise all law suits; to make all contracts, in the name of the Association, necessary and proper for the conduct of affairs and the carrying on of the business of the Association, subject to all limitations and regulations prescribed by these Articles or the by-laws.

SECTION 10. The Board shall have the power to estimate, make and levy all assessments against the shares of stock of this Association to the extent and in the manner authorized by these Articles and the by-laws, and shall also have the power to enforce collection of assessments in such manner as may be prescribed in these Articles or in the by-laws of this Association, and shall also have power to prescribe the terms and conditions under which shares of stock may be subscribed for land to be supplied with water from the irrigation system of this Association, and shall also have power to prescribe terms and conditions for supplying water upon land from the irrigation system of this Association.

SECTION 11. The Board shall have the power to make, publish, and enforce rules and regulations concerning the distribution, use and application of the water under its control, subject at all times to, and not inconsistent with, these Articles, or with the by-laws, or with the federal statutes applicable thereto and the rules and regulations established thereunder.

SECTION 12. The Board shall keep, or cause to be kept, a record of its transactions, which shall at all times remain in the office of the Association and shall, during office hours, be open to the inspection of the shareholders, or their properly authorized agents.

SECTION 13. The Board shall hear and determine complaints of shareholders of non-service, or of improper service or distribution of water, or of improper performance of duty by any employee of the Association relative to the distribution of water.

SECTION 14. The members of the Board of Directors shall receive such compensation as may be prescribed by the by-laws.

ARTICLE VIII.

SECTION 1. At all elections the electors shall possess the following qualifications:

(a) Shall be at the time of the election the owner of at least one share of capital stock of this Association, and shall have been the owner thereof, as shown by the books of the Association, for at least twenty days before such election.

(b) Shall be of the age of twenty-one years or more and of sound mind.

SECTION 2. At all elections each shareholder shall be entitled to one vote for each share of stock owned by him, not however to exceed in the aggregate one hundred and sixty votes.

SECTION 3. The votes shall be by written or printed ballot, and be voted only by the electors at the polls in person or by written proxy.

SECTION 4. The Board of Directors may make reasonable by-laws for the registration of voters and the method of holding elections.

SECTION 5. At all elections the person receiving the highest number of votes for any office shall be deemed elected to such office.

ARTICLE IX.

SECTION 1. The President, Vice-President, Treasurer and Secretary shall perform such duties as are prescribed by these Artices and by the by-laws, wherein such by-laws shall not be inconsistent with the law or with these Articles and shall receive such compensation as may be fixed by the by-laws, which compensation shall neither be increased nor diminished during the respective terms of office.

SECTION 2. In case of the absence, illness, or inability of the President to act from any cause, or in case of a vacancy in that office, the Vice-President shall act in the place and stead of the President.

SECTION 3. The President shall be the chief executive officer of the Association, and shall have general supervision over all other officers of the Association in the performance of their duties as such, and of the conduct of the business and affairs of the Association. He shall preside at all meetings of the Board of Directors and shall perform such other duties as may be devolved upon him by the by-laws.

SECTION 4. All certificates or other evidence of the ownership of shares of stock in the Association issued by the Association shall be signed by the President and Secretary of the Association and shall have the seal of the Association affixed.

SECTION 5. All the contracts and instruments in writing executed for, or in behalf of the Association, shall be executed in the name of the Association by the President and Secretary and shall have the seal of the Association affixed.

SECTION 6. The Treasurer shall receive and be the custodian of all moneys and other funds of the Association. No moneys shall be paid out by the Treasurer unless upon warrants drawn on him by the President and Secretary, except as provided in Article XI, Section 8. No warrants shall be drawn on the Treasurer by the President and Secretary except upon the order of the Board of Directors, recorded in the minutes of the Board, and in a warrant record to be kept by the Secretary.

SECTION 7. The Treasurer shall keep a full, complete and accurate account of all moneys of the Association received and disbursed by him, in books belonging to the Association, and shall present a report and account thereof at every regular meeting of the Board, and shall, at the expiration of each quarter, prepare and publish, in such manner as the by-laws may prescribe, a quarterly statement to shareholders showing all such receipts and disbursements during the last preceding quarters; and the Treasurer shall perform such other duties as may be devolved upon him by the by-laws.

SECTION 8. The Secretary shall act as the clerk of the Board of Directors and keep a record of all their proceedings. He shall immediately upon their adoption, record in a book of by-laws to be kept by him in his office, all by-laws adopted, and shall keep such book open to the inspection of any member of the Association, or his properly authorized agent, at all times during business hours. And the Secretary shall perform such other duties as may be devolved upon him by the by-laws.

SECTION 9. The Treasurer and Secretary shall give such bond as may be prescribed by the by-laws; Provided, that neither the President, Vice-President, or any member of the Board of Directors or the Secretary, shall be accepted as a surety on a bond of the Treasurer.

ARTICLE X.

SECTION 1. The Board of Directors may create such other offices as may be necessary for the carrying on of the business and affairs of this Association, and prescribe the manner of appointment, powers, duties, terms of office, eligibility and compensation thereof by by-laws not inconsistent with these Articles.

SECTION 2. The Board of Directors may remove from office, the Treasurer, Secretary, or the incumbent of any office created by the Board for incompetence, neglect of duty, misappropriation of funds of the Association, or for violation of any of the provisions of these Articles or of any by-law. The Board shall adopt by-laws to govern the procedure for such removal.

ARTICLE XI.

SECTION 1. The irrigation system which it is the purpose of this Association to acquire, or secure control of, is to consist of a canal to be constructed by the United States Government to furnish water for irrigation and domestic purposes to unwatered lands lying within the boundaries of said Grand Valley Irrigation District, as defined in Section 5, Article IV, hereof, and such diversion works, ditches, laterals, distribution works, power plant, electric transmission lines, pumping plants, telephone system, and other works or structures as are necessary or proper in connection with the construction and maintenance of said irrigation system. The headgate of said canal is to tap the water of the Grand River at a point near the south line of the Northwest quarter of Section thirteen, Township ten South, Range ninety-eight West of the 6th Principal Meridian, whence the canal will extend in a southwesterly direction through the Canyon of the Grand River for a distance of about six miles, thence in a general westerly and northwesterly course between sixty and sixty-five miles to a point near the Excelsior Divide, so called, discharging its waste water into the Grand River or tributaries thereof.

ARTICLE XII.

The corporate indebtedness other than that incurred for construction, purchase, or securing control of the irrigation system shall not exceed two-thirds of the capital stock.

ARTICLE XIII.

The term of existence of this corporation shall be twenty years.

ARTICLE XIV.

SECTION 1. These articles may be amended in accordance with the provisions of the statutes of the State of Colorado in such case made and provided.

SECTION 2. These articles shall not be so amended as to in anywise conflict with any federal statutes, or the rules and regulations established thereunder relating to the supply of water to the land of shareholders of this Association.

Section 1. This Association may accept and avail itself of or subject itself to the provision of any law or laws enacted or that may be enacted by Congress, or the Legislative body of the state, which may be applicable to corporations organized for like purposes as this Association. Such acceptance or subjection shall be valid when ratified by at least two-thirds of the shares represented by the votes cast at any annual election or any special election called for the ratification thereof. Notice of such election shall be given in the method prescribed by these Articles and the by-laws of the Association, stating the purpose thereof.

Section 2. The undersigned furthermore grants to the United States, over the lands described herein, as may be required in connection with the works constructed or controlled by the United States, for the use and benefit of the stockholders, necessary right-of-way for the construction, operation and maintenance of canals, tunnels, and other water conduits, telephone and electric transmission lines, drains, dikes, and other works for irrigation, drainage and reclamation.

Section 3. The undersigned furthermore releases and discharges the United States from damage or claim for damage on account of the construction, operation and maintenance of the canals or other irrigation works built or operated in connection with this project, including consequential damages, except that reasonable compensation will be made for all improvements actually damaged or destroyed by such construction. The undersigned also releases and hereby grants to the United States the right to take, appropriate and use all seepage, waste and spring water arising on the land herein described and not heretofore appropriated.

ARTICLE XVI.

The seal of this Association shall be a figure of two concentric circles, the outer being two inches, and the inner one and one-half inches in diameter. In the space between the two shall be the words "Grand Valley Water Users Association," and bearing within the center space an unrolled scroll with the words and figures therein "Incorporated 1905," "Colorado."

The said shares of stock, and all rights and interests represented thereby or existing or accruing by reason thereof, or incident thereto, are to be inseparably appurtenant to the following described real estate, that is to say:

.....

.....

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.....

.....

in.....County, Colorado, containing.....acres, and no more, of which I am the owner (or am the occupant having initiated a right to acquire the same).

IN WITNESS WHEREOF, the undersigned have hereunto subscribed our names and set our seals this.....day of....., 19.....

STATE OF COLORADO, } ss. .....(L. S.)

County of..... } .....(L. S.)

Before me....., a Notary Public in and for said County and State, on this day personally appeared .....known to me to be the person..... whose name..... subscribed to the foregoing instrument, and acknowledged to me that.....executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office, this.....day of....., A. D. 19.....

STATE OF COLORADO, } ss. .....Notary Public.

County of..... } My commission expires.....

Before me..... a Notary Public in and for said County and State, on this day personally appeared .....known to me to be the person..... whose name..... subscribed to the foregoing instrument, and acknowledged to me that.....executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office, this.....day of....., A. D. 19.....

My commission expires..... .....Notary Public.

BYLAWS OF THE

GRAND VALLEY WATER USERS' ASSOCIATION

ARTICLE I

Articles of Incorporation

The object of this Association, territory covered, the qualifications, duties, rights and liabilities of the members of this Association, the number and election of, and the qualifications, duties, rights and liabilities of the Directors of this Association, shall be as provided for and as required and stated in the Articles of Incorporation, and these bylaws.

ARTICLE II

Stockholders

Section 1. Annual meetings

The regular annual meeting of the stockholders of this Association shall be held at Grand Junction, Mesa County, Colorado, on the second Tuesday in February of each year, at 10 o'clock a.m., if not a legal holiday, but if a legal holiday then the day following.

Section 2. Special meetings

Special meetings of the stockholders of this Association may be held at any time pursuant to a resolution of the Board of Directors or as otherwise may be provided or required by the laws of the State of Colorado.

Section 3. Notice of meetings

Notice of all regular and special meetings of the stockholders shall be given as required by the laws of the State of Colorado.

Section 4. Voting

Only stockholders of record shall be entitled to vote at the regular and special meetings of stockholders. At such meetings each shareholder shall be entitled to one vote for each share of stock held in his name, and only such number of shares as are appurtenant to what is classed as productive or paying land within the meaning of the Act of Congress of May 25, 1926 (44 Stat. 636-650). In the election of Directors however cumulative voting shall be practiced notwithstanding anything herein contained to the contrary.

Section 5. Definition of term stockholder

When the word "shareholder", the word "shareholders", the word "stockholder", or the word "stockholders" is used in the Articles of Incorporation or these bylaws, it shall be taken to mean, until shares are actually issued, subscribers (or the successor in interest of those who

have subscribed) for the stock of this Association, whose subscriptions have not for any reason been canceled or the land for which the subscriptions were made have not been excluded by the United States government from the Grand Valley Project, Colorado.

Section 6. Quorum

For the purpose of determining a quorum only shares of outstanding stock which are appurtenant to land classed as productive or paying land as specified in Section 4 of this article shall be considered. A majority of such shares of outstanding stock unless otherwise provided in the Articles of Incorporation or by the laws of the State of Colorado shall be necessary to constitute a quorum at all meetings of shockholders. When a quorum is present at any meeting a majority of the stock represented there at unless otherwise provided in the Articles of Incorporation or by the laws of the State of Colorado, shall decide any question brought before such meeting.

Section 7. Failure of quorum

In the event no quorum is present at any meeting the Directors may call another meeting of stockholders as soon as reasonably possible, provided, however, nothing herein contained shall prevent any meeting when a quorum is not present from being adjourned from time to time for the purpose of securing a quorum.

Section 8. Proxies

Any stockholder entitled to vote may be represented at any regular or special meeting of stockholders by a duly executed proxy. Proxies shall be in writing and properly signed but shall require no other attestation. No proxies shall be recognized unless executed within eleven months of the date of the meeting at which they are presented.

Section 9. Committee for Registration of proxies

To facilitate stockholders elections, whether general or special, there shall be hereafter a standing committee of three, consisting of the Secretary and two other persons to be selected by the Board of Directors, whose duty it shall be to register and tabulate proxies, votes, and voters before the time of holding any stockholders' election.

Section 10. Time of filing of proxies

That all proxies to be given by anyone shall be delivered to the Secretary before 12 o'clock noon on the day of the stockholders' meeting, otherwise such proxies cannot be voted.

Section 11. Tabulation of proxies

That said Committee shall register all proxies and persons entitled to vote and to what extent, either in person or by proxy and shall in a systematic way register and tabulate said voters and votes so the same may be

readily cast at such meeting and shall report the result at the opening of the stockholders' meeting, and if said report is not unanimous, majority and minority reports or a report from each member may be reported to the stockholders' meeting and in such an event, the stockholders at the meeting shall decide the legal voters and proxies reported.

Section 12. Judges of election

The presiding officer at a stockholders meeting shall appoint a committee of three members to act as the judges of election. They shall not be candidates for election as Directors. They shall provide a ballot box to be used at the meeting. Each ballot shall state the names of candidates voted for, and the number of votes for each, and shall be signed by the elector. The committee shall furnish the blank ballot, and count and report the result of the vote.

Section 13. Order of business

The order of business at the regular annual meeting and so far as possible at all other meetings of stockholders shall be as follows:

1. Calling to order.
2. Report of proxy and election committee as to quorum.
3. Call and proof of due notice of meeting.
4. Reading and disposal of any unapproved minutes.
5. Reports of officers.
6. Reports of committees.
7. Unfinished business.
8. New business.
9. Election of Directors.
10. Adjournment

Section 14. Officers of meetings

The President, if present, shall preside at all meetings of the stockholders. In his absence the Vice-President shall preside. If both President and Vice-President are absent a presiding officer shall be elected by the members present. The Secretary shall keep a faithful record of the proceedings of all stockholders meetings.

ARTICLE IV

Directors

Section 1. Number and authority

A board of eleven Directors shall be annually elected, who shall have entire charge of the property, interests, business and transactions of the Association, with full power and authority to manage and conduct the same.

Section 2. Qualifications

No person shall be elected, nor shall be competent to act as a Director of the Association unless possessing the qualifications prescribed in the Articles of Incorporation of the Association.

Section 3. Vacancies

Any vacancy occurring in the Board of Directors shall be filled for the unexpired term by a majority of the remaining members. In the event of the membership of the Board falling below the number necessary for a quorum a special meeting of the stockholders shall be called and such number of Directors shall be elected thereat to restore the membership of the Board to its full number.

Section 4. Regular meetings

The regular meetings of the Board of Directors shall be held in the office of the Association in the City of Grand Junction, Colorado, at 10 o'clock a.m. on the fifth day of each month, if not a legal holiday, but if a Sunday or a legal holiday, then on the day following. If deemed expedient, however, the Board may meet any time or place, provided the place is designated in the notice of the meeting.

Section 5. Special meetings

Special meetings of the Board of Directors may be held at any time on the call of the President, providing each member of the Board be given notice of the time, place and purpose of meeting at least 24 hours prior thereto. Special meetings may be held at any time and place and without notice by unanimous consent of the Board.

Section 6. Quorum

A majority of the Board of Directors shall constitute a quorum and a majority vote of the members in attendance at any Board meeting shall in the presence of a quorum, decide its action. A minority of the Board present at any regular or special meeting may, in the absence of a quorum, adjourn to a later date, but may not transact any business until a quorum has been secured.

Section 7. Election of Officers

At the first meeting of the Board of Directors after the election of directors each year, a President, Vice-President, Secretary, Treasurer or other officers shall be elected to serve for the ensuing year and until the election of their respective successors. Election shall be by ballot and a majority of the votes cast shall be necessary to elect. The Secretary and the Treasurer need not be stockholders.

Section 8. Compensation of Directors, officers and employees

The Board of Directors shall fix the compensation of Directors, officers and employees.

Section 9. Order of business

The regular order of business at meetings of the Board of Directors shall be as follows:

1. Roll call.
2. Reading and disposal of any unapproved minutes.
3. Reports of officers.
4. Reports of committees.
5. Unfinished business.
6. Communications to the Board.
7. Allowance of bills.
8. New business.
9. Adjournment.

Section 10. Reports of officers

Full and detailed reports shall be made by the President, Secretary and Treasurer at the annual meeting of the stockholders.

Section 11. Auditing committee

An auditing committee to consist of three Directors, who are not officers, shall be appointed by the President at the first meeting of Directors after the annual stockholders meeting. Such auditing committee shall at such time as they deem advisable examine the books of the officers of the Association, and shall report their findings to the Board of Directors. At least one examination shall be made each year just prior to the annual meeting of the stockholders.

Section 12. Bonds of officers and employees

The Board shall have the power to require any officer or employee to give any and all bonds for the protection of the Association as it may deem necessary or desirable.

ARTICLE V

Revenues

Section 1. Raising of revenues

The stockholders for the purpose of raising revenues to meet any and all obligations of the association are empowered to and shall make all necessary levies or assessments against shares of stock of the Association and/or establish charges for water and other services all to the end that there may be sufficient funds available to promptly meet when due any and all obligations of the Association as aforesaid, to be done as provided by the laws of Colorado particularly Chapter 80 of the 1927 Session Laws and Chapter 76 of the 1929 Session Laws of Colorado. Provided that in case said stockholders fail to make such assessment the same may be made by the Board of Directors as provided by said laws.

Section 2. Payment of assessments and service charges

Any order or resolution levying any such assessments or establishing charges for water or other services shall specify the time or times when the same shall be payable and shall be levied or established sufficiently

in advance of the date of payment so as to permit of collection thereof in an orderly and business-like manner on or before the time when due.

Section 3. Amount of assessments and service charges

In determining the amount of any such assessments and/or water or other service charges reasonable allowance for estimated deficits caused by the failure of some stockholders to pay the same shall be made.

Section 4. Notice of assessment

The Secretary on or before fifteen days in advance of the date of payment shall notify each shareholder of any and all such assessments and of the amount thereof and the time payable either personally or by depositing the same in the post office, postage paid, addressed to the stockholder at his last known address as shown by the records of the Association.

Section 5. Interest on delinquent assessments

All assessment shall bear interest at the rate to be fixed when the assessment is made from the date due until paid.

ARTICLE VI

Enforcement of Collections

Section 1. Time after delinquency

The Board of Directors after the due date for any unpaid assessment, levy, charge or other payment against the shares of stock of the Association or under any subscription for stock to the Association or under any contract or water right application with the United States or under any other instrument in writing providing for payments either to the United States or the Association whether running to the Association or the United States or under any contract between the United States and the Association may proceed on behalf of the Association and in its name to enforce the collection of the same against land, water rights, and/or appurtenances described in any such subscription for stock to the Association or in any such contract or other instrument in writing, given for the purpose of creating a lien to secure payment thereof, in the manner provided in the Articles of Incorporation, in these bylaws and/or in any such contract or other instrument in writing.

Section 2. Nature of lien

For the purpose of mutually protecting the Association, stockholders, water right applicants, contract holders, water users or land owners and insuring the prompt collection of any and all assessments, charges or other payments to be paid or made by such parties or any of them under the terms of any subscription for stock to the Association or under any contract or water right application with the United States or under any other instrument in writing providing for payments to the United States or the Association or under any of these bylaws or the Articles of Incorporation now existing or as the same may hereafter be amended, each such subscription for stock to

the Association, contract or water right application or other instrument in writing shall operate and be corsidered and be construed as a real estate mortgage.

Section 3. Parties authorized to foreclose

The lien provided for in any subscription for stock to the Association or any contract or water right application with the United States or in any other instrument in writing whether such subscription for stock to the Association, contract, water right application, or other instrument in writing has been made in the past or shall hereafter be made, may be considered and construed as a mortgage in favor of the Association and/or the United States and foreclosure proceedings may be instituted in the name of either without reference to whether the particular instrument upon which such proceedings are instituted names the party instituting the foreclosure proceedings or not.

Section 4. Institution of suit to foreclose

The Board of Directors shall institute in the corporate name of the Association any and all law-suits necessary to enforce any of the terms of that certain contract dated January 4, 1928 or of any other contract between the United States and the Association or of any subscription for stock to the Association or of any contract or water right application with the United States or of any other instrument in writing either to the Association or the United States. The indebtedness against land of any stockholder, water user or land owner shall be in the amount and according to the terms of said contract dated January 4, 1928 or of any other contract between the United States or the Association or of any subscription for stock to the Association or of any contract or water right application with the United States or of any other instrument in writing to the Association or the United States and/or in the amount and according to the terms of any assessment or assessments levied against his shares of stock.

Section 5. Suit instituted after delinquency

Upon the failure of any stockholder, water user, land owner, water right applicant or contract holder to pay any indebtedness, levy or assessment mentioned in or provided for or referred to in these bylaws or in Articles of Incorporation or in said contract dated January 4, 1928, or of any other contract between the United States and the Association or in any subscription for stock to the Association or in any contract or water right application with the United States or in any other instrument in writing either to the Association or the United States as and when due the Board of Directors may institute a suit on behalf of and in the name of the Association under the Articles of Incorporation or these bylaws and/or said contract dated January 4, 1928 or under any other contract or subscription to the Association or contract or water right application with the United States referred to herein, foreclosing the interest of such delinquent in and to the land, water rights or appurtenances described in any such contract or subscription to the Association or contract or water right application with the United States as aforesaid and against which there shall be such indebtedness, levy or assessment including assessments for deficits

due to the failure of some stockholders, water users, land owners, water right applicants or contract holders to pay when due assessments levied upon their shares of stock or against their lands.

Section 6. Failure to satisfy judgment

In any suit so brought to foreclose the land, water rights and/or appurtenances aforesaid, the Association shall be permitted as against said property or any delinquent shareholder to obtain judgment for all sums, indebtedness, levies or assessments when due and in default under said contract dated January 4, 1928 or under any other contract between the United States and the Association or under any subscription for stock to the Association or under any contract or water right application with the United States or under any other instrument in writing either to the Association or the United States, together with all penalties and interest and a reasonable attorney's fee incurred by the Association in any such foreclosure suit. Upon the failure of the delinquent or anyone for him to pay and satisfy said judgment immediately after the rendition thereof, the land against which said sum, indebtedness, levy or assessment is or will be a lien shall be sold by the sheriff of the County in which said land is located, to satisfy said judgment and if thereafter within the time provided by the laws of the State of Colorado for the redemption of lands from sale under judgment after the issuance of the sheriff's certificate of purchase on said land, water right or appurtenances, the delinquent or any other party authorized so to do as provided by the Statutes of the State of Colorado pertaining to redemption fails to redeem the same sheriff's deed shall issue thereon to the person or party entitled to the same. The Association in any foreclosure proceedings brought by it under the terms of said contract dated January 4, 1928 or under any other contract between the United States and the Association or under any subscription for stock to the Association or under any contract or water right application with the United States or under any other instrument in writing with the Association or the United States shall include in every published notice advertising for sale the land, water rights and appurtenances aforesaid, notice to the effect that any purchaser at said sale shall buy said land, water rights and appurtenances, subject to the lien of the Association and the United States for any sums, installments, indebtedness, levies or assessments when due an unpaid or in the future to become due and payable under the terms of said contract dated January 4, 1928 or under any other contract between the United States and the Association or under any subscription for stock to the Association or any contract or water right application with the United States or under any other instrument in writing with the Association or the United States. Redemption of the land so foreclosed shall be made in the manner now or as may hereafter be provided by the laws of the State of Colorado pertaining to the redemption of real estate sold on foreclosure.

Section 7. Sale subject to continuing lien of the United States and Association

Every person or party purchasing said property under foreclosure proceedings or obtaining a sheriff's deed therefore shall take title thereto subject to the continuing lien of the Association and/or the United States provided for in these bylaws, the Articles of Incorporation or in said contract dated January 4, 1928 or any other contract between the United

States and the Association or in any subscription for stock to the Association or in any contract or water right application with the United States or in any other instrument in writing either to the Association or the United States and that as to any part or portion of the indebtedness due the Association or the United States which shall then be due and unpaid or payable in the future and the title obtained by any purchaser at such foreclosure sale shall be subject to the lien of any part or portion of the indebtedness due the Association or the United States which shall then be due and unpaid or payable in the future, and shall remain so subject until said indebtedness shall have been fully satisfied, liquidated and discharged. Immediately upon the issuance of sheriff's deed under any such foreclosure the grantee therein shall be substituted on the records of the Association of the Association and of the United States as the successor in interest of the delinquent.

Section 8. Foreclosure to include shares of stock

Under such foreclosure proceedings and as a part thereof there shall be foreclosed and sold together with the land and appurtenances the shares of stock of the Association owned by the delinquent pertaining to or appurtenant to the lands so foreclosed and any sheriff's sale as between the delinquent and the United States and the Association shall foreclose any and all of said rights both as to the land, water, shares of stock and stock subscription and quiet title in the purchaser at any such foreclosure sale subject to the continuing lien to the Association and the United States.

Section 9. May refuse to deliver water

In case any stockholder fails to pay any assessment so made at the time and in the manner ordered the collection of such assessment may also be enforced by the refusal on the part of the Association to deliver water to such stockholder until such assessment has been paid and if at any time the water is being used by such stockholder the water may be shut off and kept shut off until such assessment is paid.

ARTICLE VII
Amendments

Section 1. Amendment of Articles of Incorporation

Amendment may be made to the Articles of Incorporation in the manner provided by law.

Section 2. Amendment to bylaws

The Board of Directors may amend, alter, add to or repeal these bylaws subject only to the limitations provided by the Articles of Incorporation or by any contract between the United States and the Association.

ARTICLE VIII
Repeal of former bylaws

Section 1.

And any and all bylaws heretofore adopted and in force are hereby repealed and these bylaws or as they may hereafter be amended, shall constitute the sole and only bylaws of the Association and shall take effect immediately upon their adoption.

APPENDIX 3

CHAPTER 2B

STATE OF IDAHO

IRRIGATION DISTRICT LAW
(Selected Provisions)
TITLE 43
CHAPTER 1
ORGANIZATION OF DISTRICTS

Sec. 43-101. WHO MAY PROPOSE ORGANIZATION.

Whenever fifty, or a majority, of the holders of title, or evidence of title, to lands susceptible of one or more modes of irrigation from the same or different sources and by the same or different systems of works, desire to provide for the irrigation of the same, or when for other reasons they desire to organize the proposed territory into one district, they may propose the organization of an irrigation district under this title: provided, said formation into one district meets with the approval of fifty, or a majority of the holders of title, or evidence of title, to lands in each of the communities affected: provided, further, said holders of title or evidence of title shall hold such title or evidence of title to at least one-fourth part of the total area of the land in the proposed district, exclusive of state and government land which will be assessable for the purposes of the district. The equalized county assessment roll next preceding the presentation of a petition for the organization of an irrigation district shall be sufficient evidence of title for the purpose of this title, but other evidence may be received, including receipts or other evidence of the rights of entrymen on lands under any law of the United States or of this state, and such entrymen shall be competent signers of such petition, and the lands on which they have made such entries shall, for the purposes of said petition, be considered as owned by them.

Sec. 43-102. PETITION FOR ORGANIZATION.

A petition shall be first presented to the board of county commissioners of the county in which the greatest proportion of the proposed district is situated, signed by the required number of holders of title or evidence of title to the required area of such proposed district, evidenced as above provided, which petition shall set forth and describe, with the degree of certainty required by law in a tax roll, all the lands proposed to be included in said district, and shall state whether it is proposed to purchase irrigation works already in operation or to construct new works, or as the case may be, and shall pray that the same be organized into an irrigation district. The petition, together with all maps, cross-sections and papers filed therewith, shall, at all proper hours, be open to public inspection at the office of the clerk of the board of county commissioners between the date of their said filing and the date of the final hearing thereon.

Sec. 43-103. MAPS AND WATER SUPPLY DATA.

If it be proposed by said petition to construct new works for the irrigation of said lands, or to purchase works only partially completed and not yet in operation, the petitioners must accompany the petition with a map of the proposed district. Said map shall show the location of the proposed canal or other works by means of which it is intended to irrigate the proposed district, and all the canals situated within the boundaries of the proposed district: provided, that canals that only pass through said lands and which do not in fact irrigate any of the same need not be shown. If said water supply be from natural streams, the flow of said stream or streams shall be stated in terms of cubic feet per second. If the water supply for said district is to be gathered by storage reservoirs, said map shall show the location of said proposed reservoirs, and shall give their capacity in acre feet. Said map shall be drawn to a scale of two inches to the mile. Cross sections of the proposed canal, and all canals existing within the boundaries of said proposed district and shown on said map, and all proposed dams and embankments, shall be given in sufficient number to show the contemplated mode of construction, and the capacity shall be given in cubic feet per second of the proposed and said existing canals. Such cross sections shall be drawn to a scale of ten feet to the inch, and said map and cross sections, together with an estimate of the cost of such works, shall be certified to by a well-known and competent irrigation engineer.

Sec. 43-104. BOND.

The petitioners must also accompany the petition with a bond, to be approved by the said board of county commissioners, in double the amount of the probable cost to the county of organizing such district, conditioned that the bondsmen will pay all said costs, in case said organization be not effected.

Sec. 43-105. NOTICE OF PRESENTATION TO COMMISSIONERS.

Such petition may be filed with the clerk of the board of county commissioners at any time, and on such filing said clerk shall publish a general notice that (giving the first name on the petition) and others have filed a petition for the organization of an irrigation district. If it be proposed in said petition to construct a new canal system, such notice shall state that fact and give the numbers of the sections in which the lands are situated which it is proposed to include in said district, but if it is proposed to purchase a canal already in operation, the notice shall state that fact and give the name by which such canal system is generally known, and shall state that the lands covered by said canal system are the lands proposed to be included in such district. The notice shall further state the time at which such petition will be presented to the board of county commissioners, which time shall be during a regular meeting of said board or a special meeting called for that purpose, and such notice shall be published two weeks before the day on which the same is to be presented, and if any portion of such proposed district be within another county or counties, then said notice shall be published in a newspaper published in each of said counties.

Sec. 43-106. NOTICE OF HEARING.

When such petition is presented, the said board shall set a time for a hearing upon the same, which time shall not be less than four nor more than eight weeks from the date of presentation. A notice of the time of such hearing shall be published by said board, at least three weeks before the time of such hearing, in a newspaper published within each of the counties in which any part of said district is situated.

Sec. 43-107. EXAMINATION BY DEPARTMENT OF WATER ADMINISTRATION - REPORT TO COUNTY COMMISSIONERS - AMENDMENT OF PLAN.

A copy of such petition and all maps and other papers filed with the same shall be filed in the office of the Department of Water Administration at least four weeks before the date set for such hearing. It shall be the duty of the department to examine such petition, maps and other papers, and, if it deem it necessary, to further examine the proposed district, the works proposed to be purchased, or the location of the works to be constructed, and it shall prepare a report upon the matter in such form as it deems advisable, and submit the same to the board of county commissioners at the meeting set for the hearing of said petition. Whenever the Department of Water Administration shall report to the board of county commissioners against the organization of such district, said board of county commissioners shall refuse to further consider such petition unless it be requested in writing so to do by three-fourths of the landowners in said proposed district, such ownership to be determined as provided in section 43-101. At the time set for hearing the board may, on receiving an adverse report from the department, adjourn the proceedings for two weeks for the purpose of enabling the petitioners to file a request for such further proceedings. In any case, the petitioners may amend such plan of irrigation at such hearing to meet the approval of the department, or as they may find advisable. It shall be the duty of the county commissioners to notify the Department of Water Administration of the final action, either favorable or unfavorable, taken upon a petition for the formation of an irrigation district.

Sec. 43-108. ORDER OF BOARD.

When they shall have determined to proceed with the matter, said board may adjourn such hearing from time to time, not exceeding four weeks in all, and on final hearing may make such changes in the proposed boundaries as they may find proper, and shall make an order on their records describing the lands which they shall have determined to include in said district, and stating that such lands will be organized into an irrigation district if the vote of the electors thereafter to be taken on the proposition shall be favorable to such organization: provided, that any person whose lands are susceptible of irrigation from the same source may, in the discretion of the board, upon application by him, have such lands included in said district.

Sec. 43-109. DIVISIONS OF DISTRICT FOR ELECTION OF DIRECTORS.

Such board shall also make an order dividing the district into not less than three nor more than seven divisions of as nearly equal size as practicable, which shall be numbered first, second, third, etc., and one director, who shall be an elector and resident in the division, shall be elected from each division of the district at large, except that in districts of 3,000 acres or less the directors may be elected from qualified electors, holding title or evidence of title to land in the district and residing in the county in which some portion of the district is located. The number of divisions into which said district shall be divided shall be specified in the petition for the organization of the district, and if not otherwise specified shall be three.

Sec. 43-110. NOTICE OF ELECTION.

Said board shall then give notice of an election to be held in such proposed district for the purpose of determining whether or not the same shall be organized under the provisions of this title. Such notice shall describe the lands in said district with the certainty required in an ordinary deed and shall state the name of the proposed district as designated by the board of commissioners, and shall state that a map showing the lands in said district is on file in the office of the board of county commissioners, which map, if not previously made as required herein, shall be made by the petitioners after the determination of said commissioners of the question of what lands shall be included in the proposed district, and if previously made, lands added to said district or deducted therefrom by the board may be indicated thereon. Said notice shall be published for four weeks prior to such election, in a newspaper published within each of said counties as aforesaid. Such notice shall require the electors to cast ballots which shall contain the words 'Irrigation district–yes,' or 'Irrigation district–no,' or words equivalent thereto, and also the name of one person from each such division for director of said district.

Sec. 43-111. QUALIFICATIONS OF VOTERS.

No person shall be entitled to vote at any election held under the provisions of this title for the purpose of electing directors, for the purpose of determining whether indebtedness shall be created or bonds issued by the district, or for any other purpose, unless he shall possess all the qualifications required of electors under the general laws of the state, and own land within the district, or the proposed district, and be a resident of the county in which the district, or a portion thereof, is located.

Sec. 43-112. CONDUCT OF ELECTIONS.

Such election shall be conducted as nearly as practicable in accordance with the general laws of the state: provided, no particular form of ballot shall be required, and that the provisions of the election laws as to the form and distribution of ballots shall not apply.

Said board of county commissioners shall establish one or more election precincts, not exceeding seven, as may be necessary, and define the boundaries thereof, which boundaries, when the district is divided into precincts, shall be the same as the division boundaries above-provided for and which said precincts may thereafter be changed by the board of directors of such district as may be necessary: provided, that districts containing more than 10,000 acres shall have not less than three, nor more than seven voting precincts.

Said board shall also appoint three judges of election for each such election precinct, who shall perform the same duties as near as may be as judges of election, under the general laws of the state.

Sec. 43-113. REGISTRATION NOT REQUIRED.

No registration shall be required in any irrigation district election, but in lieu thereof the judges of election shall require every elector to subscribe to an elector's oath as prerequisite to casting his vote, and such oath shall be the usual elector's oath with the following words added thereto, 'and I own land within the _____ irrigation district, and am a resident of the county within which the district, or a portion thereof, is located.'

Sec. 43-114. CANVASS OF VOTES - COMPLETION OF ORGANIZATION.

Immediately after any election for voting upon the organization of an irrigation district, the judges of such election shall forward the official results of said election to the clerk of said board of county commissioners. The said board of county commissioners shall meet within ten days after said returns are received, and shall proceed to canvass the votes cast thereat, and if upon such canvass it appears that two-thirds of the votes cast are 'Irrigation district--yes,' the said board shall, by order entered on its minutes, declare such territory duly organized as an irrigation district, under the name and style theretofore designated, and shall declare the persons receiving respectively the highest number of votes for such several offices to be duly elected to such offices.

Sec. 43-115. LIMITATION ON PROCEEDINGS AFFECTING VALIDITY.

No action shall be commenced or maintained, or defense made affecting the validity or such organization after two years from and after the making and entering of said order on its minutes by the board of county commissioners.

Sec. 43-116. ORGANIZATION MEETING OF BOARD.

Said board shall cause a copy of such order, duly certified, to be immediately filed for record in the office of the county recorder of each county in which any portion of such lands are situated.

If it shall appear, however, that more than one-third of said votes are 'Irrigation district—no,' then a record of that fact shall be duly entered upon the minutes of said board, and all proceedings in regard to the organization of said district shall be void, and the expenses properly incurred thereunder may be collected on the bond provided for in section 43-104.

From and after the date of such filing of said order of the board of county commissioners, the organization of such district shall be complete. The officers of the district shall be entitled to enter immediately upon the duties of their respective offices, upon qualifying according to law, and shall hold such offices respectively, until their successors are elected and qualified. The board of directors so elected shall meet within thirty days after their election and elect a president, and appoint a secretary and treasurer, who shall perform the duties imposed upon such officers under this title. All officers of the district, except as above provided, must be residents thereof.

CHAPTER 3

Powers and Duties of Board of Directors

Sec. 43-301. ELECTION OF OFFICERS.

On the first Tuesday of January next following their election, the board of directors shall meet and organize as a board, elect a president from their number and appoint a secretary and treasurer, who shall each hold office during the pleasure of the board. At any regular or special meeting the board of directors may appoint an assistant secretary or an assistant treasurer, or both, and fix the duties, the length of term, and the amount of bond, of each of them.

Sec. 43-302. OFFICE OF BOARD.

On the organization of the first board of directors of any such district they shall designate some place within the district as the office of said board: provided, that the board of directors may establish the office of the district temporarily outside of the boundary of the district, but within the county in which the same or some portion thereof is situated, in cases where the business of the district may be more conveniently transacted thereby; and if such temporary location be approved by a majority of the electors of the district voting at any regular election at which such question may be submitted then such temporary location may be fixed as the location of the office of the district for such period of years as may be designated on their ballots by the majority of such electors at such election.

Sec. 43-303. MEETINGS OF BOARD.

The board of directors shall hold a regular monthly meeting in their office on the first Tuesday in every month or such date each month as it shall fix by resolution and such special meetings as may be required for the proper transaction of business.

All special meetings shall be ordered by the president or a majority of the board, the order must be entered of record and the secretary must give each member not joining in the order five (5) days' notice of such special meetings. The order must specify the business to be transacted at such special meeting and none other than that specified shall be transacted: provided, that whenever all members of the board are present, however called, the same shall be deemed a legal meeting and any lawful business may be transacted.

All meetings of the board must be public, and a majority shall constitute a quorum for the transaction of business; but on all questions requiring a vote there shall be a concurrence of at least a majority of the members of the board. All records of the board shall be open to the inspection of any elector during business hours.

Sec. 43-304. GENERAL POWERS OF BOARD - BY-LAWS - RIGHT OF ENTRY - ACQUISITION OF PROPERTY.

Said board shall have the power to manage and conduct the business and affairs of the district, make and execute all necessary contracts, employ and appoint such agents, officers and employees as may be required and prescribe their duties, to establish equitable by-laws, rules and regulations for the distribution and use of water among the owners of such land, as may be necessary and just to secure the just and proper distribution of the same, which said by-laws, among other things, shall establish a fiscal year, and in case the by-laws do not provide for the establishment of a fiscal year, the fiscal year shall commence the first day of November and end the thirty-first day of October of each and every year. Said by-laws, rules and regulations must be printed in convenient form for distribution throughout the district.

The board and its agents and employees shall have the right to enter upon any land to make surveys, and may locate the necessary irrigation works and the line of any canal or canals, and the necessary branches for the same on any lands which may be deemed best for such location.

Said board shall also have the right to acquire, either by purchase, condemnation or other legal means, all lands and water rights, and other property necessary for the construction, use and supply, maintenance, repair and improvement of said canal or canals and works, including canals and works constructed and being constructed by private owners, lands for reservoirs for the storage of needful waters, and all necessary appurtenances. In case of purchase, the bonds of the district hereinafter provided for may be used to their par value in payment. Said board may also construct the necessary dams, reservoirs and works for the collection of water for said district, and do any and every lawful act necessary to be done that sufficient water may be furnished to each landowner in said district for irrigation purposes. The use of all water required for the irrigation of the lands of any district formed under the provisions of this title, together with the rights of way for canals and ditches, sites for reservoirs, and all other property required in fully carrying out the provisions of this title, is hereby declared to be a public use, subject to the regulation and control of the state, in the manner prescribed by law.

The board of directors of an irrigation district organized under the laws of the state of Idaho may enter into contracts for a water supply to be delivered to the canals and works of the district, and do any and every lawful act necessary to be done that sufficient water may be furnished to the lands in the district for irrigation purposes.

Sec. 43-305. DRAINAGE OF LANDS - PAYMENT OF COST - APPORTIONMENT OF COST WHEN PAYMENT DEFERRED.

Any irrigation district heretofore organized or hereafter to be organized, may, whenever it appears necessary, proper or beneficial to drain any of the lands within said district, whether for the benefit of the land actually requiring drainage or for the protection of other lands within said district, whether the irrigation works have been actually acquired or constructed or not, cause drainage canals and works to be constructed and to this end such district shall in all respects have the same power and authority as is now conferred or may hereafter be conferred respecting irrigation, and all the powers conferred upon irrigation districts under the laws of this state with respect to irrigation shall be construed to include drainage.

Any irrigation district now, or which may hereafter be organized under the laws of the state of Idaho, shall have the authority to construct drainage works for the purpose of draining any land or lands within such irrigation district, and such authority shall be exercised by the board of directors in its discretion. The cost of any such drainage works may be paid for out of the maintenance, operation charges, tolls, or assessments, or out of either or all of such funds which are not otherwise necessary for the purposes for which such funds were created; that not to exceed twenty per cent of the total amount of such maintenance, operation charges, tolls and assessments for any year shall be expended for drainage.

In all cases where the construction of drainage works requires the issuance of bonds or such works are constructed by the United States under a contract by which the payments therefor are deferred, the board of directors of such irrigation district shall apportion the cost of such drainage works to each tract of land in said district according to benefits. In determining the amount to be apportioned to each tract of benefits under this section, the board of directors may consider benefits to each tract drained; the damage done to the low land from seepage and saturation from irrigation water from high land, and the necessity for carrying off waste water, and such high land may be considered as being benefited to the extent and in the amount that such lands are responsible for damage to low lands from seepage and saturation by irrigation water; the board may also consider any advantage to the lands of the district and each tract thereof, growing out of the construction of such drainage works. In lieu of issuing bonds or contracting with the United States for the construction of drainage works, the board of directors may consider such drainage works as a part of the irrigation system and may make levies to pay for the same upon the same basis as assessments for the construction of the irrigation works by which the lands of the district are irrigated. In all cases where the cost of drainage works shall be apportioned to all the tracts of lands of the district as herein provided, all the provisions of this title applicable to procedure and the confirmation of the apportionment by the court, including the right of appeal, shall be applicable to the apportionment of benefits under this section.

Sec. 43-306. LEVY AUTHORIZED FOR PURPOSE OF DRAINING LANDS WITHIN DISTRICT.

Any irrigation district now organized, or which may hereafter be organized, under the laws of the state of Idaho, shall have authority to construct drainage works for the purpose of draining, or reclaiming, any land, or lands, within such irrigation district, which authority shall be exercised by the board of directors in its discretion.

The board of directors before levy as hereinafter provided, shall determine by resolution spread on the minutes thereof if any of the lands within an irrigation district are in need of drainage, and should be drained to protect said land or other lands within said district from damage from seepage or other waters, subterranean or otherwise, then the board of directors of such district shall have the power and authority, at the time provided by law for levying assessments for the operation and maintenance of said irrigation district in addition to such assessments, also to levy an assessment against the lands of said irrigation district for drainage purposes, said levy not to exceed in any one year forty per cent of the total amount levied for operation and maintenance purposes. Such assessment for drainage shall in all respects be levied and collected at the same time and in the same manner as assessments for operation and maintenance.

All funds collected for drainage purposes under the provisions hereof shall be kept in a separate fund to be known as 'Drainage Fund' of said irrigation district, and the moneys in said 'Drainage Fund' from time to time may be expended by the board of directors of said irrigation district.

Sec. 43-307. AUTHORITY TO EXERCISE FUNCTIONS OF DRAINAGE DISTRICTS.

Any irrigation district heretofore or hereafter organized under the laws of this state desiring so to do, and having received the petition required by and complied with the provisions of section 43-308 as amended, and sections 43-309, 43-310, 43-311, 43-312, may exercise, and it is hereby given, all the functions, powers and authority of a drainage district and of its board of commissioners under the laws of this state relating to drainage districts. The functions, powers and authority granted by this act shall be exercised by such irrigation district through its board of directors and, so far as may be, in the manner provided in the drainage district laws of the state.

Sec. 43-308. AUTHORITY TO EXERCISE FUNCTIONS OF DRAINAGE DISTRICTS - PETITION AND RESOLUTION.

After receiving a petition signed by the holders of title or evidence of title to one-fifth of the lands within the district praying it shall do so, any irrigation district desiring to accept the provisions of this act shall so declare by resolution adopted by majority vote of its directors and spread upon its minutes, and thereupon said district shall cause to be filed with the clerk of the district court of the county in which a greater portion of the lands of said irrigation district are located, its petition praying that the court shall set a day for hearing said petition and on and after said hearing make and enter its order and decree

authorizing such irrigation district to perform all of the functions of a drainage district under the laws of the state of Idaho, and that there are lands within said district which need drainage: that there shall be attached to said petition so filed with the clerk of said court a true and correct copy of the petition of the said land owners in this section provided, together with a copy of said resolution of the board of directors of said district.

Sec. 43-309. NOTICE OF HEARING OF PETITION.

After the filing of said petition the judge of said court shall fix the time for hearing said petition by order by him made, which order shall provide that said petition shall be published for at least three successive weeks in some newspaper or newspapers printed and published in said county or counties in which the lands are situated, or in case no such paper is published in said county, then in some paper of general circulation therein; together with a notice of the time and place when said judge shall consider said petition.

Sec. 43-310. HEARING - OBJECTIONS - FINDINGS.

Upon the day fixed for the hearing of said petition, any person or corporation interested therein, may appear before said court and make objections in writing to the granting of said petition but said objections shall be limited to determining whether or not the granting of authority to said irrigation district to perform the duties and functions of a drainage district and as such perform such functions is a proper and advantageous method of accomplishing the reclamation and protection of swamped, bogged or water-logged lands and lands subject to overflow therein, and whether or not there is a reasonable probability that the object sought by granting such powers to said irrigation district may be accomplished, and whether or not the drainage of lands in said district will be conducive either to the public health, welfare or convenience or increase the public revenue; and at the hearing the court shall hear and consider such evidence only as may be presented for or against the petition or objections thereto. Thereupon the court shall make its findings upon the facts alleged in the petition and objections and any other facts necessary and proper for the determination of the propriety of granting such powers to said irrigation district; and if such petition be granted the judge of said court shall make findings of fact setting forth the facts found by the said judge upon the hearing of said petition.

Sec. 43-311. DECREE GRANTING PETITION - VESTING OF POWERS AND AUTHORITY IN DISTRICT.

Upon the filing of the findings of fact at the final hearing of said petition, as set forth in the last preceding section, said judge, if he finds that the granting of said petition and the drainage of the lands in said irrigation district will be conducive either to the public health, welfare or convenience, or will increase the public revenue, or will be of special benefit to the majority of the acreage of the lands in said irrigation district, shall enter the decree of said court granting said petition. Thereupon a certified copy of same shall be filed in the office of the secretary of state: and from and after the date of said filing of said decree, said irrigation district shall be vested with all of such functions, powers and authority of a drainage district and its board of commissioners under the laws of this state relating to drainage districts. The function, powers and authority granted by this act shall be exercised by such irrigation district through its board of directors and so far as may be in the manner provided by the drainage district laws of this state.

Sec. 43-312. APPEALS.

Appeal may be taken by any interested person from said decree of the district court to the Supreme Court by serving a written notice of such appeal upon the secretary of said board of the irrigation district, within thirty days after the rendition of said decree by said court.

Sec. 43-313. ELECTRIC POWER PLANTS - CONSTRUCTION AND OPERATION.

The board of directors of any irrigation district, organized under the laws of the state of Idaho, shall have the power to construct and operate, or to contract for the construction and operation, of electric power plants, power transmission lines, and all other works in connection therewith necessary or proper for generating and transmitting electric power, and for pumping water for irrigation and domestic use; and to contract to sell surplus power generated at such power plants. *[1915, ch. 50, § 1, p. 137; reen. C. L., § 2386p; C. S., § 4348; am. 1923, ch. 27, § 1, p. 29; am. 1931, ch. 22, § 1, p. 49; I. C. A., § 42-308; am. 1973, ch. 183, § 1, p. 427.]**

Sec. 43-314. ELECTRICAL POWER PLANTS - SALE OF SURPLUS POWER - RATIFICATION OF CONTRACT.

The question of the ratification of contracts for the sale of surplus power as provided in the preceding section shall be submitted in the same manner, and shall be governed by the same limitations and provisions as questions creating indebtedness: provided, that the form for the notices and the form upon the prepared ballots, and the form for the returns, shall be so changed as to conform to the purposes of this and the preceding section.

Sec. 43-315. ASSESSMENT FOR EXTERMINATION OF RODENTS.

The board of directors of an irrigation district may levy an assessment upon the lands within the district, not to exceed ten cents per acre for the purpose of raising funds to be used for the extermination of gophers and other rodents. Said assessment shall be levied at the same time and in the same manner and with a like effect, as assessments levied for maintaining and operating the property of the district. Said assessments shall constitute a lien upon the property assessed and shall be collected, in like manner as assessments for maintenance and operation.

The funds realized from such assessment shall be used for the extermination of gophers and other rodents within the irrigation district, in such manner and by such means as the said board of directors may direct.

Sec. 43-320. OFFICERS MUST NOT BE INTERESTED IN CONTRACTS.

No director or any other officer named in this title shall in any manner be interested, directly or indirectly, in any contract awarded or to be awarded by the board, or in the profits to be derived therefrom; and for any violation of this provision such officers shall be deemed guilty of a misdemeanor, and such conviction shall work a forfeiture of his office, and he shall be punished by a fine not exceeding $500.00, or by imprisonment in the county jail not to exceed six months, or by both such fine and imprisonment.

Sec. 43-321. SPECIAL ASSESSMENTS - ELECTIONS - COLLECTION OF ASSESSMENTS - DELINQUENT LIST.

The board of directors may, at any time when in their judgment it may be advisable, call a special election and submit to the qualified electors of the district the question whether or not a special assessment shall be levied for the purpose of raising money to be applied to any of the purposes provided in this title, and shall, at the same time, fix a date upon which such assessment shall become delinquent, which date shall be not less than sixty days nor more than ninety days from the date of said meeting of said board. Such election must be called upon the notice prescribed, and the same shall be held, and the result thereof determined and declared, in all respects in conformity with the provisions of section 43-401. The notice must specify the amount of money proposed to be raised, and the purpose for which it is intended to be used. At such elections the ballots shall contain the words 'Assessment _____ yes' or 'Assessment _____ no.' If two-thirds or more of the votes cast are 'Assessment _____ yes,' the board shall immediately levy an assessment sufficient to raise the amount voted.

The assessment so levied shall be computed and entered on the assessment roll by the secretary of the board, and within ten days after such assessment, the secretary must deliver the assessment book to the treasurer of the district who shall, within ten days after receipt of such book, publish a notice in a newspaper published in each county in which any portion of the district may lie, that said assessments are due and payable and will become delinquent at six o'clock p.m. of the day fixed by the board of directors, naming such day and date, and also the times and places at which the payment of the assessment may be made; which notice shall be published for a period of two weeks.

The treasurer must attend at the times and places specified in the notice to receive assessments which must be paid in lawful money of the United States. Within fifteen days after the delinquent date as fixed by the board of directors, said treasurer shall begin the preparation of the delinquent list, which delinquent list shall contain a description of all the tracts of land upon which such special assessments are delinquent, and the amount of such assessment against each of the said tracts, and the name of the owner as shown on the assessment book. And on or before thirty days thereafter, the treasurer shall complete said delinquent list, shall properly certify the same, and prepare a duplicate thereof; and deliver the delinquent list to the secretary of the district. At the same time the treasurer must commence to publish the delinquent list and publication shall continue three weeks and must contain the names of the owners, a description of the property delinquent at that time, the amount of assessments and penalties and the costs due, opposite each name and description. After said publication

shall have been made for the first time the treasurer shall collect twenty-five cents in addition to the assessment and penalties on each description of lands published. The treasurer must append and publish with the delinquent list a notice that unless the assessments delinquent, together with penalties and costs, are paid, the real property upon which said assessments are made will be sold at public auction on the first Tuesday in September following date of notice. The publication must be made in some newspaper published in the district, if it can be so published, and if it can not be so published, then in some newspaper published in the county in which the office of the board of directors is situated; and if it can not be so published, then by posting in not less than three places in said district, one of which shall be at the door of the office of said board of directors.

The place of such sale shall be at the office of said board of directors. The treasurer, as soon as he has made the publication required, must file with the secretary proof of such publication by affidavit, or like proof of posting in case such notice was posted as herein required. Such sales and all proceedings thereafter shall be in accordance with the provisions of sections 4392 to 4401, both inclusive, of Idaho Compiled Statutes, where not in conflict herewith.

When collected such assessments shall be paid into the district treasury for the purposes provided in the notice of such special election.

Sec. 43-322. POWER TO INCUR DEBTS - WARRANTS.

The board of directors, or other officers of the district, shall have no power to incur any debt or liability whatever, either by issuing bonds or otherwise, in excess of the express provisions of this section; and any debt or liability incurred in excess of such express provisions shall be and remain absolutely void: provided, that for the purpose of organization, or for any of the purposes of this title, the board of directors may, before the collection of the first assessment, incur indebtedness and cause warrants of the district to issue therefor according to the following limitations: Districts embracing 50,000 acres, or more, of irrigable land, not in excess of $15,000 of warrants; districts embracing 40,000 acres, or more, and less than 50,000 acres of irrigable land, up to $12,000 of warrants; districts embracing 30,000 acres, or more, and less than 40,000 acres of irrigable land, up to $9,000 of warrants; districts embracing 20,000, or more, and less than 30,000 acres of irrigable land, up to $6,000 of warrants; districts embracing 10,000 acres, or more, and less than 20,000 acres of irrigable land, up to $4,000 of warrants; districts embracing more than 2,000 acres, or more, and less than 10,000 acres of irrigable land up to $3,000 of warrants, and districts embracing less than 2,000 acres of irrigable land up to $2,000 of warrants.

Provided, further, that for the purpose of defraying the expenses in the care, operation, repair and improvement of such portion of the irrigation works of the district as are completed and in use, including salaries of officers and employees, the board of directors of an irrigation district may at any time issue warrants of such district in payment of claims of indebtedness against the district, not to exceed the district's anticipated revenue.

The warrants herein authorized shall be in form and substance the same as county warrants or as near the same as may be practicable and shall be signed by the chairman and attested by the secretary of said board. All such warrants shall be presented by the holder thereof to the transfer of the district for payment

who shall indorse thereon the day of presentation for payment with the additional indorsement thereon, in case of nonpayment, that they are not paid for want of funds, and such warrants shall draw interest at seven per cent (7%) per annum from the date of their presentation to the treasurer for payment as aforesaid until such warrants are paid. No warrants shall be issued in payment of any indebtedness of such district for less than face or par value. It shall be the duty of the treasurer from time to time when he has sufficient funds in his hands for that purpose to advertise in some newspaper in the county in which the district is situated requiring the presentation to him for payment of as many of the outstanding warrants as he may be able to pay. Ten (10) days after the first publication of said notice by the treasurer calling in any of said outstanding warrants, said warrants shall cease to bear interest, which shall be stated in the notice. Said notice shall be published two (2) weeks consecutively and said warrants shall be called in and paid in the order of their indorsement.

Provided, further, after an irrigation district has organized and has no warrants outstanding, the district may maintain its operation on a cash basis and pay by check the expenses of operation and maintenance, repair, improvement, obligations on contractual or bonded indebtedness, and all other general necessary expenses incurred by the district.

Sec. 43-323. REPORT TO DEPARTMENT OF WATER ADMINISTRATION.

At least as often as once a year after organization, the board of directors shall make a report to the Department of Water Administration of the condition of the work of construction, as to capacity, stability and permanency, and whether or not the plan of irrigation formulated under the provisions of this title is being successfully carried out, and whether or not in the opinion of the board the funds available will complete the proposed works. Upon the receipt of such report by the department, it shall make such suggestions and recommendations to such board of directors as it may deem advisable for the best interest of the district.

Sec. 43-324. STATEMENT OF FINANCIAL CONDITION.

On or before the second Tuesday of February of each year the board of directors of each irrigation district organized under this title shall publish in at least one issue of some newspaper published in the county or counties in which such district is situated, a full, true and correct statement of the financial condition of said district, at the end of the last preceding fiscal year, giving all liabilities and assets of the said district, in a form to be prescribed by the bureau of public accounts of the state of Idaho and shall file a certified copy of such financial statement with the Department of Water Administration of the state of Idaho.

Sec. 43-325. COUNTY COMMISSIONERS TO HAVE ACCESS TO BOOKS.

Any board of directors of any such irrigation district, or the secretary thereof, shall at any time allow any member of the board of county commissioners, when acting under the order of such board, to have access to all books, records and vouchers of the district which are in possession or control of said board of directors or said secretary of said board.

Sec. 43-326. POWER TO MAINTAIN PARKS.

The board of directors of any irrigation district shall have the power to maintain public parks and recreation grounds for the benefit of the people of the district and may set aside for this purpose, land belonging to the district, including land acquired by the district from sale for delinquent water assessments. The district shall have the power to purchase land, or to acquire land by lease, within the district for public parks and recreation ground. In the maintenance of said grounds, the board of directors may construct buildings and provide facilities for recreation purposes and may receive gifts and donations of either real or personal property for the purposes hereinbefore enumerated.

Sec. 43-327. DELINQUENT ASSESSMENTS - SHUTTING OFF OF WATER.

The board of directors of any irrigation district shall have the power to refuse to deliver water for the use on any lands upon which any assessments, tolls or charges levied, assessed or charged against said lands or the owner, lessee, occupant or contract purchaser thereof, under any section of this title, whether for irrigation or domestic water service, are unpaid for more than ninety (90) days after delinquency until such assessments, tolls or charges, together with any lawful penalties and additional charges are paid.

Provided, that, in irrigation districts having a contract with the United States under the provisions of this title, for the construction, or operation, or maintenance of a domestic water system or for the repayment to the United States of a loan for any such purpose, the board of directors of such district may, by resolution, from time to time, fix a date or dates after which any or all lawful tolls and/or charges of the district, including without limitation domestic water tolls and charges, and excepting only assessments provided for in this title against real property within the district, shall be deemed delinquent. Such district shall have the right, in addition to and supplemental to all other legal rights now in effect, or hereafter acquired for the collection of any such sums, to cease delivery of domestic and irrigation water to all lands in connection with which such tolls or charges have been incurred and, at the district's option, also to all other lands within the district belonging to the person or persons, firm, corporation or other legal entity incurring any such tolls or charges. Such delivery may be ceased at any time after the tenth day following the date any such sums become delinquent, and until all such sums together with any lawful penalties, additional charges and/or interest at the legal rate are paid.

Sec. 43-328. PETITION TO CONSTRUCT IMPROVEMENTS FOR IRRIGATION - ASSENT OF PETITIONERS TO ASSESSMENT OF COST OF IMPROVEMENT.

The holders of title, or evidence of title, representing a majority of the acreage of any body of land within any irrigation district, may file with the board of

directors of the district a petition in writing, praying for the construction of any improvement necessary or expedient for the efficient irrigation of the lands. The petition shall in a general way describe the proposed improvement and shall describe the tracts, or body of land, owned by the petitioners, and shall contain a description of the exterior boundaries of the land for which the proposed improvement is to be constructed, and describing therein any lands that are to be excepted from the benefit or use of the proposed improvement. The petition shall also contain an agreement on the part of the petitioners that the cost of construction of the improvement shall constitute a lien upon the lands within the exterior boundaries of the land described in the petition, except the lands that are therein excepted from the benefit or use of the proposed improvement, and that the lands shall be assessed for and pay the cost of the improvement. The petition shall be deemed to give assent of the petitioners to construction of the improvement and shall authorize the assessment of the cost of such improvement upon and against the lands described in the petition and not specifically therein excepted. The petition shall be acknowledged in the same manner that conveyances of land are required to be acknowledged. *[1973, ch. 64, § 1, p. 105.]* *

Sec. 43-329. ELECTIONS TO DETERMINE QUESTION AS TO CONSTRUCTION OF IMPROVEMENT - RESOLUTION OF DIRECTORS.

(1) The board of directors, if they deem it for the best interest of the district that the proposed improvement be constructed, may by resolution call an election to be held within the boundaries of the land described in the petition for the purpose of submitting the question as to whether or not the proposed improvement shall be constructed. The board shall in the resolution fix the time and place of holding the election, and specify the polling place, and shall also appoint three (3) judges who shall constitute a board of election. The resolution shall also contain the ballot title to be used at the election, which title shall contain such information as in the judgment of the board will advise the owners of the land to be charged with the cost of the proposed improvement as to the general nature of the improvement and the estimated cost.

(2) The board at the time of calling the election within the land described in the petition shall also by resolution call an election to be held within the district at large for the purpose of submitting the question as to whether or not the proposed improvement shall be constructed. This resolution shall contain provisions identical with those provided for in subsection (1) of this section. The election in the district at large shall be held on the same day that the election within the territory described in the petition is held. The election shall be conducted, as nearly as practicable, in accordance with the general election laws of the state applicable to irrigation districts. *[1973, ch. 64, § 2, p. 105.]* *

* Effective 3-2-73

Sec. 43-330. MAJORITY OF VOTES AS DETERMINATIVE - CONSTRUCTION OF IMPROVEMENT - COST - APPORTIONMENT - ASSESSMENT.

If a majority of the votes cast by the electors within the boundaries of the land described in the petition are 'Improvement–Yes,' and if a majority of the votes cast by the electors in the district at large are 'Improvement–Yes,' then, but not otherwise, the board shall construct the improvement. The cost of construction shall be apportioned by the board to the lands within the boundaries described in the petition, so that each acre of irrigable land therein shall be assessed and required to pay the same amount. In all other respects the assessment and its levy and collection shall be, as nearly as practicable, in accordance with the assessment, levy and collection of other assessments and taxes levied upon lands within the district. *[1973, ch. 64, § 3, p. 105.]* *

Sec. 43-331. DIRECTORS MAY CONSTRUCT OR MAINTAIN IMPROVEMENTS, LEVY ASSESSMENTS.

(1) This section applies: (a) When a parcel of land lying within an irrigation district is subdivided into tracts of four (4) acres or less, and the owner has made no provision which in the opinion of the board of directors is adequate for the proper distribution of water thereto; or (b) When improvements for the distribution or delivery of water to any tract of land are not owned by the district and the owner or person in control of the improvement fails to maintain, repair or replace the improvement as required for the proper and efficient distribution or delivery of water to any tract.

(2) Whenever the interest or convenience of such tracts requires the construction, repair or maintenance of any ditch, flume, dike, aqueduct or other improvement, the board may construct, repair or maintain such improvement, and levy and collect an assessment upon all tracts specially benefited thereby, to defray the whole or any portion of the cost and expense thereof. The board may determine what lands are specially benefited by such construction, repair or maintenance, and the amount to which each tract is benefited. *[1973, ch. 64, § 4, p. 105.]* *

Sec. 43-332. APPORTIONMENT OF WATER TO TRACTS - EMPLOYMENT OF PERSON TO DISTRIBUTE WATER - ASSESSMENT OF COST - LIEN ON LAND.

Whenever a parcel of land lying within an irrigation district is subdivided into tracts of four (4) acres or less, and plats of such subdivision are filed as provided by law, and the owners fail to properly apportion the water to their various tracts in the subdivision, the board of directors may employ some competent

* Effective 3-2-73

person to distribute and apportion water for such tracts. The reasonable cost of such services shall be apportioned each year by the board to such tracts. The cost of such services shall be assessed by the board as a special charge to the tracts in the same manner as other assessments are made by the board. The assessment so levied and apportioned shall be a lien upon the tracts, and shall be collected in the same manner as all other assessments are levied and collected by the board. *[1973, ch. 64, § 5, p. 105.]* *

Sec. 43-333. RESOLUTION FOR WATER DISTRIBUTION WORKS OR SERVICES - HEARING OF OBJECTIONS - CONSTRUCTION, REPAIR OR MAINTENANCE OF IMPROVEMENT - APPORTIONMENT OF COSTS - ASSESSMENT.

(1) Whenever the board of directors shall deem it expedient or necessary to construct, repair or maintain ditches, flumes, dikes, aqueducts or other improvements as provided in section 43-331, Idaho Code, or to employ the services of some competent person to distribute and apportion water for any subdivision, as provided in section 43-332, Idaho Code, it shall declare such necessity by resolution.

(2) A resolution shall be posted in three (3) public places in the subdivision for five (5) days. Within ten (10) days from the date when the resolution is posted, the owner of any property within the tract may file with the secretary a written remonstrance against the proposed improvement or employment. The board hearing such remonstrances may, in its discretion, overrule any remonstrance and by a resolution order construction, repair or maintenance of the improvements. The board may either enter into a contract to complete the improvement or, in its discretion, complete the improvement under its own supervision. After the work on the improvement is completed the board shall, by resolution, apportion the costs and shall declare an assessment upon each tract benefited, which assessments shall be final and conclusive. *[1973, ch. 64, § 6, p. 105.]* *

Sec. 43-334. PROCEDURE FOR LEVY AND COLLECTION OF SPECIAL ASSESSMENT - APPEAL.

Whenever the board of directors levies a special assessment against the various tracts of land as provided in section 43-331 and section 43-332, Idaho Code, it shall be extended against the tracts of land in the same manner as other assessments are levied and extended upon the assessment rolls of the irrigation district or county. The assessments shall be collected in the same manner as other assessments are collected. An appeal may be taken from the action of the board to the district court of the county in which the land is situated. The appeal shall be taken, perfected and prosecuted in the same manner and within the same period of time as an appeal from the board of county commissioners. *[1973, ch. 64, § 7, p. 105.]* *

* Effective 3-2-73

Sec. 43-401. PLAN OF CONSTRUCTION - ISSUANCE OF BONDS - ELECTION.

As soon as practicable after the organization of any such district the board of directors shall, by a resolution entered on its records, formulate a general plan of its proposed operations, in which it shall state what constructed works or other property it proposes to purchase and the cost of purchasing the same; and further what construction work it proposes to do and how it proposes to raise the funds for carrying out said plan. For the purpose of ascertaining the cost of any such construction work, said board shall cause such surveys, examinations and plans to be made as shall demonstrate the practicability of such plan, and furnish the proper basis for an estimate of the cost of carrying out the same. All such surveys, examinations, maps, plans and estimates, shall be made under the direction of a competent irrigation engineer and certified by him. Said board shall then submit a copy of the same to the Department of Water Administration, and within ninety days thereafter the department shall file a report upon the same with said board, which report shall contain such matters as, in the judgment of the department may be desirable.

Upon receiving said report said board of directors shall proceed to determine the amount of money necessary to be raised, and shall immediately thereafter call a special election, at which shall be submitted to the electors of said district possessing the qualifications hereinafter prescribed the question whether or not the bonds of said district, or the right to enter into an obligation with the United States in the manner hereinafter in this title provided, in the amount as determined, shall be authorized.

Notice of such election must be given by posting notices in three public places in each election precinct in said district at least four week before the date of said election, and the publication thereof for the same length of time in some newspaper published in the district, and in case no paper is published in the district, then in a paper published in each county in which the district or any part thereof is located. Such notice must specify the time of holding the election, the qualifications of voters, the amount of bonds proposed to be issued, and, in case such maps and estimates have been made, it shall further state that copies thereof, and in all cases it shall state that said report of the Department of Water Administration, are on file and open to public inspection by the people of the district, at the office of said board and at the office of the Department of Water Administration at the state capitol.

No person who is not a resident holder of title or evidence of title to lands located and subject to assessment within such district, or the wife or husband of such holder of title or evidence of title, shall be entitled to vote at such election. Otherwise said election must be held and the results thereof determined and declared in all respects as nearly as practicable in conformity with the provisions of this title governing the election of officers: provided, that no informalities in conducting such an election shall invalidate the same if the election shall have been otherwise fairly conducted. At such election the ballots shall contain the words 'bonds–yes' or 'bonds–no,' or other words equivalent thereto. If two-thirds of the votes cast are 'bonds–yes' the board of directors shall cause bonds in said amount to be issued; if more than one-third of the votes cast at any bond election are 'bonds–no' the result of such election shall be so declared and entered of record.

And whenever thereafter said board in its judgment deems it for the best interest of the district that the question of the issuance of bonds in said amount, or any other amount, shall be submitted to the electors, it shall so declare of record in its minutes, and may thereupon submit such questions to said electors in the same manner and with like effect as at such previous election.

Sec. 43-401A. REHABILITATION OF IRRIGATION STRUCTURES.

The board of directors may contract for the reconstruction, rehabilitation or replacement of dams, structures or works belonging to the district or to the United States, necessary to the storage, diversion or delivery of water appurtenant to land within the district. The board shall determine the necessity and cost of such proposed improvements, and determine what amount of money needs to be raised and call a special election, at which shall be submitted to electors of the district possessing the qualifications prescribed in section 43-401, Idaho Code, the question of whether or not the bonds of said district in the amount as determined, shall be authorized. Such election shall be held in the manner provided in section 43-401, Idaho Code, except that no report need be obtained from the Department of Water Administration and the notice of election need not recite anything concerning a report from the Department of Water Administration. If the issuance of bonds is approved at the election, the board may thereafter proceed in conformity with chapter 4, title 43, Idaho Code, in the issuance, confirmation and sale of said bonds. The provisions of chapters 5, 6, 7, 8 and 9, title 43, Idaho Code, shall apply to the said bonds and the work proposed to be done with the funds derived from the sale thereof. *[1973, ch. 181, § 1, p. 423.]* *

Sec. 43-402. FORM OF BONDS.

The bonds authorized by any vote shall be designated as a series and the series shall be numbered consecutively as authorized. The portion of the bonds of a series sold at any time shall be designated as an issue, and each issue shall be numbered in its order. The bonds of each issue shall be numbered consecutively, commencing with those earliest falling due. All bonds shall be negotiable in form and payable in money of the United States.

Interest coupons shall be attached thereto, and all bonds and coupons shall be dated on January 1, or July 1 next following the date of their authorization and they shall bear interest, payable semiannually on the first days of January and July of each year. The principal and interest shall be payable at the place designated therein. Said bonds shall be each of the denomination of not less than $100 nor more than $5000, and shall be signed by the president and secretary, and the seal of the board of directors shall be affixed thereto. Coupons attached to each bond shall be signed by the secretary. Said bonds shall express on their face that they were issued by the authority of this title, naming it, and shall also state the number of the issue of which such bonds are a part. The secretary and treasurer shall each keep a record of the bonds sold, their number, the date of sale, the price received, and the name of the purchaser. In case the money raised

* Effective 3-6-73

by the sale of all the bonds be insufficient for the completion of the plans and works adopted, and additional bonds be not voted, it shall be the duty of the board of directors to provide for the completion of said plan by a levy of assessment therefor, in the manner hereinafter provided.

Bonds may be issued with maturities under any one (1) of the following plans:

Plan No. 1, Eleven-Twenty Year Bonds. At the expiration of eleven (11) years from each issue, five per cent (5%) of the whole number of bonds of such issue; at the expiration of twelve (12) years, six per cent (6%); at the expiration of thirteen (13) years, seven per cent (7%); at the expiration of fourteen (14) years, eight per cent (8%); at the expiration of fifteen (15) years, nine per cent (9%); at the expiration of sixteen (16) years, ten per cent (10%); at the expiration of seventeen (17) years, eleven per cent (11%); at the expiration of eighteen (18) years, thirteen per cent (13%); at the expiration of nineteen (19) years, fifteen per cent (15%); at the expiration of twenty (20) years, sixteen per cent (16%); provided, that such percentages may be changed sufficiently so that every bond shall be in an amount of $100 or a multiple thereof, and the above provisions shall not be construed to require any single bond to fall due in partial payments.

Plan No. 2, Amortization Plan. Bonds may be issued on the amortization plan covering a period of forty (40) years or less, at the discretion of the board of directors, with the principal payable in annual or semiannual instalments, so arranged as to maturities that the combined principal and interest payments during the entire period shall be approximately the same each year during the life of the issue.

Plan No. 3, Five-Thirty Year Bonds. Bonds may be issued payable in annual instalments over a period of thirty (30) years or less. The board of directors may fix a date, not more than five (5) years from the date of each issue, for the earliest maturity of each issue. Beginning with the date of the earliest maturity of each issue, the principal shall be payable in annual amounts designated by the board of directors over the remaining life of the bonds not to exceed thirty (30) years from the date of issue.

Sec. 43-403. FORM OF BONDS - STATEMENTS ENHANCING SECURITY OF BONDS.

In case the works of any irrigation district shall have been constructed by the reclamation service of the United States of America, or in case the general plan and estimates of the works have been examined by the reclamation service of the United States of America and declared feasible and practicable by such reclamation service and the works and the lands within such district good security for the payment of the interest and principal of the bonds of such district, such fact shall be stated in said bonds, and in case the sale of such bonds has been approved by the courts, as provided by section 43-406, such confirmation and approval may be stated on said bonds by the clerk of the district court, under the seal of said court.

Sec. 43-404. APPORTIONMENT OF BENEFITS.

Whenever the electors shall have authorized an issue of bonds as hereinbefore provided, the board of directors shall examine each tract or legal subdivision of land in said district, and shall determine the benefits which will accrue to each of such tracts or subdivisions from the construction or purchase of such irrigation works; and the cost of such works shall be apportioned or distributed over such tracts or subdivisions of land in proportion to such benefits; and the amount so apportioned or distributed to each of said tracts or subdivisions shall be and remain the basis for fixing the annual assessments levied against such tracts or subdivisions in carrying out the purpose of this chapter.

Such board of directors shall make, or cause to be made, a list of such apportionments or distribution, which list shall contain a complete description of each subdivision or tract of land of such district, with the amount and rate per acre of such apportionment or distribution of cost, and the name of the owner thereof; or they may prepare a map on a convenient scale showing each of said subdivisions or tracts with the rate per acre of such apportionment entered thereon: provided, that where all lands on any map or section of a map are assessed at the same rate, a general statement to that effect shall be sufficient.

Said list or map shall be made in duplicate and one copy of each shall be filed in the office of the department of water administration and one copy shall remain in the office of said board of directors for public inspection.

Whenever thereafter any assessment is made either in lieu of bonds, or any annual assessment for raising the interest on bonds, or any portion of the principal, it shall be spread upon the lands in the same proportion as the assessment of benefits, and the whole amount of the assessment of benefits shall equal the amounts of bonds or other obligations authorized at the election last above-mentioned.

Sec. 43-404A. CONTRACTS OF PAYMENT FOR REHABILITATION.

If the reconstruction, rehabilitation or replacement of dams, structures or works determined necessary in accordance with section 43-401A, Idaho Code, involves a dam, structure or works which also provide water storage, diversion or delivery of water to water users or water user organizations for the use of said water on lands not within the boundaries of the district proposing the improvements, the district (hereinafter referred to as constructing district) may contract with such water users or water user organizations for payment by them, over a period of time not to exceed the period of any bonded indebtedness incurred by the constructing district to finance construction of the improvements, of a proportionate share of the cost of such improvements, including design, construction, land acquisition and other related costs, to include interest on the unpaid balance of said proportionate share of such water users or water user

organization at a rate equal to the average rate of interest payable by the constructing district on any bonded indebtedness incurred by it in financing the improvements.

If the water user organization contracting for payment of a proportionate share of the costs of the improvements is an irrigation district (hereinafter referred to as contracting district) organized pursuant to title 43, Idaho Code, the board of directors of such district shall negotiate a proposed contract with the constructing district. Thereafter, the question of entering into the proposed contract shall be submitted to the electors of such contracting district in a manner substantially in conformance with the provisions of section 43-401, Idaho Code. If at least two-thirds (2/3) of the electors approve the execution of the contract, the board shall confirm the proceeding as provided in connection with a bond issue, and following confirmation, the board shall execute the contract and thereafter an annual assessment to provide revenue for payment of the obligation and interest thereon shall be levied and collected on lands within the contracting district in the manner provided for assessment for payment of bonds and interest thereon. The provisions of section 43-404, Idaho Code, shall be applicable to apportionment of benefits accruing under the terms of said contract.

If the water user organization contracting for payment of a proportionate share of the costs of the improvements is an operating company entitled to a lien for maintenance charges under chapter 22, title 42, Idaho Code, it shall annually assess and collect the costs of meeting its obligations under the contract as a toll, assessment or charge under chapter 22, title 42, Idaho Code.

If the water user organization contracting for payment of a proportionate share of the costs of the improvements is a lateral ditch water user association organized and operating under chapter 13, title 42, Idaho Code, the annual cost of meeting the association's obligation under the contract shall be included in the assessment made under section 42-1303, Idaho Code, and chapter 13, title 42, Idaho Code, shall apply to the collection and disbursement of said assessment. *[1973, ch. 181, § 2, p. 423.]* *

Sec. 43-405. APPORTIONMENT OF BENEFITS - NOTICE AND HEARING - APPEAL.

After the board shall have examined the lands in said district, and before proceeding to make the assessment of benefits and the list and apportionment as provided in the last preceding section, they shall give notice to the owners of said lands that they will meet at their office on a day to be stated in said notice for the purpose of making such assessment and list and apportionment. They shall, as far as practicable, give such notice by a postal card mailed or delivered to each of said landowners and the same shall be mailed or delivered to landowners residing out of the county where said office is located at least ten days before the day fixed for such meeting, and to such as reside in said county it shall be so mailed or delivered at least six days before the time for such meeting. For the purpose of giving notice to nonresidents and such owners as it is not reasonably practicable to notify personally or by mail as aforesaid, the notice shall be published in some newspaper published in the same county two weeks before the time of such meeting.

* Effective 3-16-73

At such meeting the board shall proceed to hear all parties interested who may appear, and they shall continue in session from day to day until the assessment is completed. They shall hear all evidence offered, including any maps or surveys which any owners of lands may produce, and they may classify the lands in such way that the assessment when completed shall be just and equitable. Any person interested who shall fail to appear before the board shall not be permitted thereafter to contest said assessment or any part thereof except upon a special application to the court in the proceedings for confirmation of said assessment, showing reasonable excuse for failing to appear before said board of directors. In case any landowner makes objection to said assessment or any part thereof before said board, and said objection is overruled by the said board, and the landowner does not consent to the assessment as finally determined, such objection shall, without further proceedings, be regarded as appealed to the district court and to be heard at the said proceedings to confirm as aforesaid.

Sec. 43-1505. IRRIGATION LATERAL DISTRICTS.

For the purpose of constructing, operating, and managing water in distributing systems by means of laterals, sublaterals, ditches, flumes, and pipe lines, an irrigation lateral district may be organized and created within the territory already organized as an irrigation district, in the same manner and by the same process required by the provisions of this title, for the creation of an irrigation district from unorganized territory, and such interior irrigation lateral district, when organized shall through its board of directors, other officers and employees have all necessary powers for the purpose of its creation conferred by this title upon the original irrigation district, including the power to issue; negotiate and sell bonds payable and secured as is in this title provided; to build and construct new works and to levy assessments and taxes necessary for the purpose of conducting its affairs in the same manner and by the same process as are by this title provided in the case of irrigation districts; provided, however, it is distinctly understood that the negotiation and sale of coupons bonds and levying of assessments and taxes and incurring of debts and obligations by any such irrigation lateral district shall not in any way or manner affect any of the bonds, assessments, taxes, or obligations of the irrigation district of which it is a part and shall not in any way or manner limit the power of such original irrigation district to incur the indebtedness, levying of assessments and issue its bonds for any of the purposes for which such district is by this title entitled to levy or issue the same.

APPENDIX 4
CHAPTER 2E

THE CIVIL CODE

ARTICLE - 641.

Ownerless objects (res nullius) and properties of public benefit are under the rule and disposal of the State. Unless proven otherwise, waters enjoyed by the public, inarable land, rocks, hills, mountains and springs issuing forth therefrom are no one's property (res nullius). In respect of capture and occupancy of ownerless objects, as well as of exploitation and utilization of such public-benefit property (res publicae) as roads and open grounds (agoras), streams and their beds, specific provisions of law shall be instituted.

ARTICLE - 644.

The holdership of a land also involves holdership of same to a depth below and to a height above which will be beneficial in its use.

Reserving legally imposed limitations, the proprietary right also encompasses things built and erected thereon and resources derived thereof.

ARTICLE - 653.

Conduits of such utilities as electricity, gas, water, etc. are to be regarded appurtenances of the land for which they are installed and the property of the owner of the facility thereon, even if they may lie without such property, but provided that it is not otherwise provided. If the right of installation of such utility conduits is not created by provisions concerning neighborly relations, and unless they are installed by easement, it shall not bind the land of another person by the same right. If such conduit is not on the surface (in the open) easement is created by registration in the property deed, and if on the surface, then by the construction of such conduit.

ARTICLE - 666.

The owner of a real estate is obligated to receive into his land the running waters coursing through a higher neighboring property, specifically rain waters and uncaptured spring waters. None of the neighbors may prevent this natural run of water to the detriment of another.

ARTICLE - 677.

If the waters of a swamp have been running into a field below it, then the owner of the field below shall be obligated to accept the waters which will result from the owner's operations for the purpose of draining and drying that swamp. If damage is anticipated to the field below by such run of the water, then the owner of the field may demand the owner of the swamp to construct water ways (ditches) through his field. The cost of such construction shall be for the part of the owner of the swamp.

ARTICLE - 668.

In cases where alternate routing shall be either impossible or shall require unreasonably higher cost, owners of real property are obligated to permit installation of water conduits or gas or electric conduits over or under their land, contingent upon compensation of any and all damage thereby caused, in full and in cash.

Such installation, upon will of its owner, and at the owner's expense, may be recorded in the deed register.

ARTICLE - 679. (Amended: 138 - 23.11.1960)

A spring is a component unit of the land, and its ownership is acquired with the ownership of the land where it ensues. The enjoyment of water from a spring on someone else's land is registered in the deed register as an easement.

ARTICLE - 681.

If the springs which are necessary for the exploitation or occupancy of a real estate or for the supply of water therefor are cut off or polluted, their restoration to the extent possible, may be demanded. Unless circumstances so necessitate, restoration to original state cannot be demanded for other places.

ARTICLE - 682.

Whereas several springs in the same vicinity shall belong each to its holder, in the case where water from one and the same spring branches off and forms a system of streams, each of the individual owners may demand that the water be collectively accumulated and proportionately distributed among the users in the same ratio as their former benefit therefrom.

Holders of the rights of enjoyment shall then undertake the costs of the collective facility pro rata to their shares of benefit therefrom. Should one of them object thereto, then each of the others shall be free to do all things as are appropriate, to harness and conduct the water from his spring, even if this may diminish the water in the other springs; and if such operation has resulted in an increase in the water ensuing from his spring, he shall then be liable to compensate only pro rata to that increase.

ARTICLE - 683.

That person who, unless he makes extensive operations and incurs exorbitant cost, cannot obtain water necessary for his house or land, may demand--against compensation in full--relinquishment of that part of a neighbor's water for his enjoyment. In this connection, primarily the interests of the water owner shall be safeguarded. If new circumstances develop, then alteration of things formerly made may be also demanded.

ARTICLE 684.

The owner of a spring or a fountain or of a stream, whose benefit or enjoyment thereof is nil or disproportionate to their significance, is obligated to relinquish--against compensation in full--his spring or well or fountain or stream if so required for public benefit in supplying water for other fountains or springs, or for other public benefit waterworks. Such compensation may be limited to leaving a certain part of the water to the owner.

ARTICLE - 685.

In the interest of the public; for the purpose of precluding pollution of a spring from a neighboring land, the expropriation of a part of that land to the extent necessary, may be demanded.

ARTICLE - 752.

A person who holds right on a spring situated on someone else's land may force the landowner to give permission for taking or conducting water from that spring.

ARTICLE - 752. (cont.)

In the absence of a contract providing otherwise, this right may be assigned to third parties and shall inure to inheritors.

If this right is of independent and constant nature, it may then be entered in the deed register as an individual immovable property.

APPENDIX 5
CHAPTER 2E

TURKEY

Act No. 167 relative to groundwaters. - 16 December 1960. - *Resmî Gazete* No. 10,688, 23 December 1960, p. 2853.

OWNERSHIP OF GROUNDWATERS

1. Groundwaters form part of national waters and shall be subject to State ownership and possession. All kinds of prospecting, utilization, protection and registration of such waters shall be governed by the provisions of this Act.

DEFINITIONS

2. The terms used in this Act in relation to groundwaters shall be defined as follows:

Groundwaters shall be all waters found below the ground, whether still or in motion (flowing waters).

Groundwater Sheet shall be any deposit of groundwaters existing in underground strata the withdrawal of water from which at any point exercises an effect on the total water mass.

Persons shall be physical and juridical persons with official, semi-official or private status.

Neighbours shall be persons who own adjoining land or persons who while inhabiting the same general area must, in cases of necessity, utilize groundwater in the same way as owners of adjoining land.

Applicants shall be persons seeking a licence for prospecting, utilization, or improvement and alterations.

Licensee shall be a person who has obtained a licence for prospecting, for utilization or for improvement and alterations.

PROSPECTING AND UTILIZATION OF GROUNDWATERS OUTSIDE THE LIMITS OF OFFICIALLY CONSTITUTED GROUNDWATER EXPLOITATION SECTORS

5. Outside the limits of officially constituted groundwater exploitation sectors, every landowner shall have the right to prospect for such waters on his own land and to make use of any waters so discovered in quantities required for his own suitable purposes.

Nevertheless, in so far as the provisions of Article 8 apply hereto, the party concerned shall be bound to obtain a licence beforehand.

The requirements of water for suitable purposes shall be established in accordance with the provisions of Article 4.

NEIGHBOUR'S RIGHT

6. The conditions in which any person whose land lacks sufficient water to meet his suitable purposes or who would incur undue expenditure in obtaining such water, may utilize groundwaters situated on his neighbour's land, shall be laid down in the Regulations referred to in Article 20 below.

POWERS OF THE STATE GENERAL DIRECTORATE OF HYDRAULIC WORKS

7. For purposes of conducting investigations and prospecting for groundwaters, the State General Directorate of Hydraulic Works shall have the right to sink wells or to cause them to be sunk in any locality whatsoever. No expropriation shall be made in respect of such wells.

In the case of wells specifically sunk for exploitation purposes or of test wells subsequently converted into exploitation wells, the land necessary for such operations and for access thereto shall be subject to expropriation by the State General Directorate of Hydraulic Works. The amount of indemnity for such expropriation shall be charged to the cost of the well. The right of utilizing such exploitation wells may be assigned or leased to natural or juridical persons by the State General Directorate of Hydraulic Works, at a price fixed thereby.

The owner of the land shall enjoy a preferential right in regard to assignment or lease of the right of utilizing the well in question.

OBLIGATION TO OBTAIN A LICENCE AND TO SUPPLY INFORMATION

8. For purposes of the execution of the operations of sinking or opening up a well as referred to in paragraphs *a*) and *b*) below, a licence must be obtained from the State General Directorate of Hydraulic Works for:

Suitable purposes shall be the use of groundwaters for drinking and cleansing purposes, municipal services, watering of livestock, agricultural irrigation, mining and industrial exploitation, sport or other installations.

Water requirements for suitable needs shall mean the supply of water required by persons using groundwaters for suitable purposes.

Safe marginal limit shall mean the quantity of water that may be withdrawn continuously without affecting unfavorably the level of the groundwater sheet concerned.

Test wells shall be wells sunk for the purpose of obtaining data relative to groundwaters.

Exploitation wells shall be wells intended for exploitation.

ESTABLISHMENT OF GROUNDWATER DEPOSITS AND CONSTITUTION OF GROUNDWATER EXPLOITATION SECTORS

3. As and when the limits and characteristics of groundwater deposits are determined, the said deposists shall be recognized and incorporated into the public domain, by an Order of the Council of Ministers on the recommendation of the Minister of Public Works, constituting them "groundwater exploitation sectors".

SINKING OF WELLS IN DEPOSITS CONSTITUTED AS GROUNDWATER EXPLOITATION SECTORS

4. The number of wells to be sunk within the groundwater exploitation sectors, after the grant of a licence in accordance with the provisions of Article 8, their locations, depth, other characteristics and quantities of water that may be withdrawn therefrom shall be determined and established by the State General Directorate of Hydraulic Works.

Hydraulic works of any character within the provisions of Article 8, in respect of groundwaters comprised within such exploitation sectors, shall be carried out in accordance with the provisions of technical regulations established by the Minister of Public Works.

Whoever sinks a well shall be authorized to withdraw therefrom only that quantity of water absolutely necessary for his own suitable purposes.

The extent of such needs for suitable purposes shall be determined and specified, in accordance with the purposes expressly established in this respect, by the State General Directorate of Hydraulic Works, subject to previous consideration by the Ministries concerned.

a) excavations of all kinds, and also the sinking and opening up of water wells whatever the width thereof, if their depth is in excess of the limit established by the State General Directorate of Hydraulic Works, as approved by the Council of Ministers and duly published (except for wells dug by manual labour);

b) galleries and tunnels of all kinds, horizontal or inclined, provided with apertures for water catchment, regardless of their length and cross-section.

In the case wherein the sinking and the opening up of wells are not intended for the purpose of water catchment, it shall not be necessary to procure a licence, but if the State General Directorate of Hydraulic Works so requests it shall be obligatory to supply information concerning them.

PROSPECTING LICENCE

9. For the execution of groundwater prospection works which require the grant of a licence, there shall be issued a prospecting licence valid for one year. Upon the expiry of that period, if prospecting has not yet been completed, the licence shall be renewable for a further year provided that the licensee makes application for such renewal within the month before the date of expiry. If prospecting has still not been completed by the date of expiry of the period of renewal, the licence shall be considered to have expired and the party concerned must apply for a new licence.

UTILIZATION LICENCE

10. A person upon whose land water has been discovered as a result of prospection under a licence shall be authorized to make use of such water.

Application for a utilization licence must, however, be made to the State General Directorate of Hydraulic Works within one month after such water is found.

IMPROVEMENTS AND ALTERATIONS LICENCE

11. The holder of a utilization licence may not proceed on his own initiative to undertake operations of any nature designed to increase the output of the wells or groundwater sources on his land or for any other purpose, or to change the form of use of such wells. Such operations may be undertaken only subject to the previous grant by the State General

Directorate of Hydraulic Works of an "improvements and alterations licence".

EXEMPTION FROM PAYMENT OF ALL FEES AND TAXES FOR LICENCES

12. All licences granted pursuant to the provisions of Articles 9, 10 and 11 above shall be exempt from payment of all charges, stamp duties, fees or any other taxes whatsoever.

APPLICATION FOR LICENCES

13. Any person wishing to obtain a licence for prospecting, utilization or improvements and alterations shall make application to the office of the State General Directorate of Hydraulic Works at the place of his residence, or where no such office exists there, through the offices of the nearest civil authority.

Requests for licences must be approved or refused within one month after their submission.

APPROACH TO THE SAFE MARGINAL LIMIT IN THE CASE OF SIMULTANEOUS APPLICATIONS

14. When the volume to be withdrawn under simultaneous requests approaches the safe marginal limit of the groundwater deposit, all requests for use of the same groundwater deposit filed within a period of one week from the date of submission of the said requests shall be reviewed by a Commission composed of representatives of the Ministries concerned, which shall then designate the applicants to whom a utilization licence shall be issued.

REGISTRATION

15. All licences issued on the basis of this Act shall be recorded in a register kept by the State General Directorate of Hydraulic Works.

ESTABLISHMENT AND CONTROL OF CONDITIONS

16. The Regulations referred to in Article 20 of this Act shall stipulate the conditions governing operations for prospecting, utilization, and improvements and alterations respectively as well as the rights, authority and responsibility devolving upon technical experts in connection with well sinking operations and the inspection thereof.

TECHNICAL PROJECTS AND RESPONSIBILITIES

17. Investigations and projects and works of all kinds carried out in view of the use of groundwater, whether newly constructed or improved or altered in accordance with the provisions of this Act, shall be based upon an approved plan drawn up by and on the responsibility of authorized experts.

Surface wells sunk in alluvial soil, with a depth not exceeding the limit specified in Article 8, shall not be subject to the provisions of this Article.

PENAL PROVISIONS

18. Without prejudice to the imposition of more severe penalties provided for under other legislation, those persons failing to fulfil the obligations strictly incumbent upon them under this Act, shall be punished in accordance with the provisions of the present Article.

a) Those who carry out the operations specified in Article 8 without having obtained a licence to do so and those who deliberately supply false information shall be punished by a fine of between 500 and 3,000 Turkish pounds. In cases where, after the payment of the fine, the State General Directorate of Hydraulic Works finds that there is no obstacle to the opening and exploitation of the well concerned, the necessary licence shall be issued to the owner. Otherwise, such well shall be closed down at the expense of the party responsible for opening it up. In the case of a repeated offence the fine shall be doubled, the issue of a licence to the offender shall be refused, and the well shall be closed down at his expense.

b) Those who contravene the provisions of Articles 10 and 11, those who fail to observe the conditions imposed during operations for prospecting, utilization, and improvements and alterations, as well as those who refuse to supply the data requested in application forms or who fail to observe the obligations imposed upon them by the last paragraph of Article 8, shall be punished by a fine of between 500 and 1,500 Turkish pounds. In the case of a repeated offence the fines shall be doubled and the licence either refused or, if already issued, withdrawn. The well shall be closed down at the expense of the party responsible for opening it up.

c) Disputes arising out of this Act shall be heard by the Magistrate's Courts.

EXEMPTIONS

19. Waters considered to be mineral waters within the meaning of Act No. 6309 and waters with therapeutic qualities for drinking or bathing purposes governed by Acts Nos. 927, 4268 and 6977 shall be exempt from the provisions of this Act. The provisions of the last paragraph of Article 8 shall, however, remain applicable thereto.

PREVIOUSLY OPENED WELLS

Temporary Article: Owners of groundwater wells opened before the coming into force of this Act, falling within the scope of Article 8 and used for agricultural irrigation or for mining and industrial operations shall within two years from the coming into force of this Act submit the matter to the office of the State Hydraulic Works Service in the district where the well is situated, by forwarding thereto the special printed forms, duly filled in. Within one month from the date of submission of such forms, the State General Directorate of Hydraulic Works shall, after having studied them, establish the conditions governing the use of the wells in question and issue a utilization licence to their owners.

Those who fail to obtain such licence within the time limit granted by this Temporary Article shall be liable to a fine of between 500 and 1,500 Turkish pounds.

PREPARATION OF REGULATIONS

20. Regulations governing matters in application of this Act shall be jointly prepared by the Ministries of Public Works, Agriculture, Industry, and City Planning and Housing.

21. This Act shall come into force on the date of publication.

22. The provisions of this Act shall be promulgated by the Council of Ministers.

APPENDIX 6

CHAPTER 2E

PROPOSED LAW FOR SOIL AND WATER RESOURCES DEVELOPMENT COOPERATIVES

PREAMBLE OF THE SAME LAW AND EXPLANATION OF ITS CLAUSES

(Turkey)

(Ataturk)

Translation: Ekrem Dorukman
April 1, 1968

PART ONE

GENERAL PROVISIONS

OBJECTIVE:

Article 1 - Soil and water development units may be established and given legal entity to organize, develop, protect and to utilize the soil and water resources in a given area, and to solve the common related problems as well as to fulfill the duties assigned.

In this Law the "Soil and Water Resources Development Cooperatives" is abbreviated as the "TOPSU cooperatives."

RESPONSIBILITY:

Article 2 - The TOPSU Cooperatives are responsible to fulfill the services within the scope of their project as specified. The manner of fulfillment of responsibilities is described in the basic agreement of TOPSU Cooperatives.

TOPSU Cooperatives may undertake studies, research, prepare projects, undertake construction and operation, rent or take over or own movable property and real estate. The TOPSU Cooperatives may perform all the foregoing on basis of agreements with concerned agencies or organizations, and within the scope of the objectives of their establishment

INSPECTION AND SUPERVISION:

Article 3 - The TOPSU Cooperatives are under the inspection and supervision of the Ministry of Village Affairs. However, the agencies or organizations which transfer any installation or establishment to the Cooperatives retain their right to inspect and supervise the activities pertaining to the latter.

PART TWO

ORGANIZATION PRINCIPLES

ORGANIZATION:

Article 4 - TOPSU Cooperatives are organized upon a written request of at least seven landowners from a given area, and with completion of procedures as mentioned in Article 5 and upon concurrence of the Council of Ministers.

Article 5 - For establishment of TOPSU Cooperatives, the following procedures need to be completed:

a) A written application should be presented to the Governor of the province. The application is studied by the responsible provincial office concerned with TOPRAKSU and a project is prepared. In preparation of the project special consideration is given to Article 2, paragraph e of Law 7457.

Landowners within the project area, and the size of land which falls to each individual owner are determined on the basis of information obtained from the village council or other sources.

The concerned individuals are responsible to supply correct personal information in due time.

b) The newly-prepared project and the basic agreement of TOPSU Cooperatives are forwarded to the provincial administrative council. If the establishment of a cooperative is found feasible, the project and the basic agreement of cooperative are submitted for approval of the landowners in the project area.

c) In case the project is approved by a sufficient number of landowners whose total land exceeds one-half of the total project area, and two-thirds of the number of landowners approve the project, it is deemed that the establishment of a TOPSU Cooperative is wanted. The file on these transactions is then forwarded to the Ministry of Village Affairs, together with the conclusive note of the concerned Provincial Governor.

Organization of TOPSU Cooperative becomes a reality and is publicized upon a favorable report of the Ministry of Village Affairs and approval of the Council of Ministers.

d) TOPSU Cooperatives are formed by at least 20 members.

e) When the project and the basic agreement are approved by the landowners as shown in paragraph c, all landowners in the project area will have to accept cooperative measures and activities mentioned in the project, such as unification, leveling, building new canals and paths.

MEMBERSHIP:

Article 6 - The landowners in a project area will become members of the Cooperative. Those who fail to do so will be directly registered as Cooperative members by the village administrative council and will be informed of this action.

Transfer of land ownership will entail transfer of rights and and responsibilities of membership to new owner.

Landowners who are not old enough to have legal responsibility are represented by their parents, and landowners with limited legal responsibility are represented by their legal representatives.

Each member has a right of a single vote regardless of the size of his land.

Article 7 - Each partner in a jointly-owned land becomes a member of the TOPSU Cooperative and has a right to vote.

The partners of a jointly-owned land are represented by a partner they elect among themselves or a representative elected by authorities. A representative thus elected has a right to a single vote.

Article 8 - All legal entities which come under special laws, as well as public organizations which happen to own land within the project area, will have to become members of the TOPSU Cooperative and fulfill the responsibilities which befall them. These organizations and legal entities have a right to a single vote while voting in meetings.

Responsibilities pertaining to development of the land under State ownership or private ownership which is not currently used in public interest, are fulfilled by the Ministry of Village Affairs.

PART THREE

ORGANS OF TOPSU COOPERATIVES AND THEIR MANAGEMENT

ORGANS:

Article 9 - TOPSU has the following organs:

a) General Board

b) Executive Committee

GENERAL BOARD:

Article 10 - The General Board is composed of the members as mentioned in Articles 6, 7 and 8.

Article 11 - The General Board normally meets once a year in January.

It can also convene on request of one-fifth of the TOPSU Cooperative members or a request of the executive committee.

Also, the Minister of Village Affairs may personally call for a meeting of the General Board, or he may do this on request of the Provincial Governor.

Article 12 - The members who are not able to attend General Board meetings for any reason may send their representatives who are approved by the village "muhtar." One representative may not represent more than three members.

Article 13 - The General Board may discuss only the agenda items. However, other items requested by at least one-twentieth of the total members attending the meeting will be included on the agenda.

Article 14 - The General Board meets with presence of the majority of total number of members. When the needed quorum is not obtained for the meeting, it is held the following day regardless of the number of members present. Decisions are taken by majority of votes.

The date, time, place, and the agenda of meeting are communicated to members through usual means of communication at least three days prior to the meeting.

Article 15 - Duties of the General Board:

a) To elect members of the executive committee.

b) Supervise and relinquish the executive committee.

c) Review and decide on the budget and the activity reports. Determine principles of agreements to be reached with concerned agencies and organizations suitable to objectives of TOPSU Cooperatives, and authorize the executive committee in this connection.

d) Give orders to executive committee within the principles of agreements and projects.

e) Discuss and decide on the agenda items.

EXECUTIVE COMMITTEE:

Article 16 - The executive committee is formed by five principal members

and five alternates who are elected by the General Board for a period of two years. A member completing his term may be re-elected.

Each year the executive committee elects a chairman and a deputy chairman from among its members.

Article 17 - Relatives, such as a member's mother, father, brother (or sister), grandfather, grandmother, child, grandchild, husband, wife, may not be elected to the executive committee for the same term.

Article 18 - A member of TOPSU Cooperative's executive committee who fails to show up for three consecutive meetings with no valid excuse is considered as though he has resigned, and is replaced with an alternate who is at the top of the waiting list.

Article 19 - An executive committee member who receives a punishment in the middle of a term, which limits his freedom needed for the fulfillment of his responsibilities toward TOPSU Cooperative, will lose his membership.

Article 20 - The nature of activity of the executive committee, the qualifications of its members, and other matters are explained in the basic agreement.

Article 21 - The executive committee which refrains from performing the duties assigned to it by the law, or which does not perform them properly or which works against the TOPSU Cooperatives, will be disbanded by the Ministry of Village Affairs. In this case a new executive committee will be formed by alternate members. If a new executive committee cannot be formed by alternate members, a temporary executive committee is formed by five members appointed by the Provincial Governor's office to undertake TOPSU Cooperative's affairs with full authority until the General Board convenes to elect a new executive committee. The General Board should meet in a month following the appointment of a temporary executive committee.

Article 22 - Following are the responsibilities of the executive committee:

a) Assure realization of project according to principles of TOPSU Cooperative's basic agreement.

b) Undertake TOPSU Cooperative's affairs in accordance with existing legislation and General Board decisions.

c) Prepare and present to General Board the budget, the final accounts, and pertinent reports.

When it is necessary employ directors, technical, administrative, and assistant workers, determine their salaries and discharge them when it is found necessary.

d) Keep records on decisions, incoming and outgoing documents, members, property, furniture, etc.

e) Handle expenditures according to principles determined on basis of Article 35, keep records pertaining to them, and file pertinent documents.

f) Determine expenses pertaining to establishment, operation, administration, maintenance on basis of the expenditures and profits of the land of each member, distribute or collect them from members in due time.

g) Purchase movable property or real estate on behalf of TOPSU Cooperative within the limits of authority given by the General Board, keep, administer or trade, sell, or lease them.

h) Undertake all types of loaning and borrowing of money upon decision of the General Board.

i) Indulge in joint activities with public organizations in holding experiments, demonstrations and in publishing articles (extension) pertaining to subjects which fall within the scope of TOPSU Cooperative's work.

Make timely payment of debts generating from credits received from Turkish Agriculture Bank, or from transfer or rental agreements reached with concerned agencies or organizations.

REPRESENTING THE COOPERATIVE:

Article 23 - The chairman or deputy chairman of executive committee and in their absence a member authorized by the chairman represents the TOPSU Cooperative.

Any member of the TOPSU Cooperative may be authorized by the executive committee to represent the Cooperative on condition that it is limited to a specific matter.

PART FOUR

FINANCIAL PROVISIONS

REVENUES:

Article 24 - Following are the revenues of TOPSU Cooperatives:

a) Contributions of members.

b) Money collected from members against establishment, operation, management and maintenance expenditures.

c) Other contributions.

d) Penalty increases for delayed payments.

e) Various other revenues.

CONTRIBUTION OF MEMBERS:

Article 25 - According to this law, the amount of contribution of members for their participation is determined by the executive committee on the basis of the size and quality of their land. The members may object to this amount at the General Board meeting. However, the objections do not stop the collection of contributions.

SPECIAL FUND:

Article 26 - A credit is extended from a special fund to be established at the Turkish Agriculture Bank to TOPSU Cooperatives for realization of this project.

These credits may be for as long as 20 years on basis of the special character of the project. The rate of interest and postponing the repayment of installments are jointly determined by the Ministries of Finance, Village Affairs, and Commerce.

Provision will be made in the Ministry of Village Affairs budget each year for transfer of needed money to the aforementioned special fund at the Turkish Agriculture Bank. The amount to be provided in the Village Affairs budget will be based on the TOPSU projects anticipated for the current year.

Article 27 - Following are the sources of the Special Fund:

a) The yearly sum to be provided in the Ministry of Village Affairs budget.

b) Funds to be collected from TOPSU Cooperatives against transferred property--if there is no contradictory provisions in the agreement.

c) Various domestic and foreign assistance.

d) Interest and penalty increase on delayed payments.

Article 28 - The responsibilities assigned to the Turkish Agriculture Bank with this law are the principal duties of the Bank which may in turn establish additional sections and cadres for performance of these duties with concurrence of the Ministries of Village Affairs and Finance. The expenditures of these additional sections are met from the special fund. The Bank keeps a separate annual account for these expenditures and prepares a separate balance sheet.

The Bank's expenditures as mentioned in the first paragraph may not be higher than the interest of credits extended from the fund and the penalty increase for delayed payments.

GOVERNMENT ASSISTANCE:

Article 29 - The Government may extend assistance to TOPSU Cooperatives up to 50 percent of their total project expenditures. This assistance

may be extended through the agency concerned with a part of the project, or by cash payments to concerned individuals on behalf of the TOPSU Cooperative on basis of assessment reports as the expenditures are realized.

Amounts of assistance to be extended according to various subjects of activity are jointly determined by the Ministries of Finance and Village Affairs and approved by the Council of Ministers.

Article 30 - An amount as decided by the Government is added each year to the budget of the Ministry of Village Affairs to assure Government assistance to TOPSU Cooperatives. This total amount is based on the size of the TOPSU Cooperative projects planned for the current year.

BUDGET:

Article 31 - The TOPSU Cooperative budget is prepared by the executive committee and submitted to the General Board. The General Board discusses the income and expenditure figures and makes needed changes.

Article 32 - The budget year of TOPSU Cooperatives is the regular calendar year.

Article 33 - The Provincial Governor is authorized to approve TOPSU's budget. The budget should be reviewed and revised when necessary, and approved by the Governor in a maximum period of 15 days following its submittal to the Governor's office.

A TOPSU budget which is not approved by the Provincial Governor in 15 days takes effect as it is.

Article 34 - The previous year's budget remains in effect until the new budget is approved.

TRANSACTIONS AND EXPENDITURE PROCEDURES:

Article 35 - Transactions and expenditures of TOPSU Cooperatives are not subject to provisions of General Accounting Law No. 1050 or the Law for Adjudication or Invitation to Bids No. 2490. These matters are conducted according to a regulation to be prepared by the Ministries of Finance and Village Affairs.

Article 36 - TOPSU Cooperative Credits which are not repaid to TOPSU within 30 days of the end of the installment term as determined by the Cooperative executive committee and communicated to members will be collected with a ten percent increase for the delay. The TOPSU Cooperative credits which are not repaid by members in due time, and collection of which is decided upon by executive committee, will be enforced by the court similar to court decisions.

YEARLY COLLECTION PROGRAM:

Article 37 - Total collections made from TOPSU Cooperative members in one year under various names or titles may not be in excess of 75 percent of the total profit increase of the project achieved in one year.

PART FIVE

VARIOUS PROVISIONS

AUTHORITIES TO SETTLE DISPUTES:

Article 38 - Of the disputes which arise between TOPSU Cooperatives and local or central government agencies or organizations, the ones which fall within the scope of courts are subject to Law No. 3533, which pertains to settling of disputes between government agencies or municipalities which are financed through general budget or appended or special budgets, and those agencies or organizations whose total capital belongs to the Government or municipalities or local administrations.

Article 39 - Administrative and juridical disputes which arise between TOPSU Cooperatives and their members or other real persons will be settled by the provincial board of administration of the province if the TOPSU Cooperative is located in one province;but in case the Cooperative is located in a number of provinces, the dispute will be settled by the administrative board of the province where the cause of dispute has generated due to an action.

Article 40 - In case the majority which is found necessary by paragraph c of Article 4 decides that application of the basic agreement clauses or implementation of the project or resumption of TOPSU Cooperative activities are not necessary or possible, the TOPSU Cooperative will be closed by approval of the Ministry of Village Affairs and decision of the Council of Ministers.

Article 41 - Upon closing of a TOPSU Cooperative the debits and credits of members will be determined by a five-member committee, formed by the TOPSU Cooperative members jointly with the provincial board of administration with concurrence of the TOPSU organization and other concerned public agencies.

Article 42 - In case land unification is needed in TOPSU Cooperative area, the cadastre (land survey) should first be made by the Ministry of Village Affairs.

Article 43 - Of the previously constructed government buildings, those which are deemed useful for TOPSU Cooperatives may be transferred to TOPSU Cooperatives on basis of agreement to be reached for this purpose.

TOPSU COOPERATIVE PROPERTIES:

Article 44 - Those who commit a crime against property of TOPSU Cooperatives will be punished as those who commit these crimes against government property.

CRIMES COMMITTED AGAINST MONEY AND VALUABLES

Article 45 - Those who commit a crime against money or documents or notes and other valuable property of TOPSU Cooperatives which are considered as good as money, or those who commit forgery on balance sheet statements, minutes, reports, and all types of papers, books, and records, or those who belong to organizations which purposefully destroy these documents are subject to punishments which are applied to government personnel.

TOPSU COOPERATIVE GUARDS:

Article 46 - The guards who work for TOPSU Cooperatives have the same authority as the guards who protect farmers' property as mentioned in Law No. 4081 pertaining to protection of farmers' property. These guards are armed, and these firearms and their bullets are supplied by concerned agencies at the Cooperative's expense. The type of clothing and weapons is decided upon by the Ministry of Interior.

SALARY AGAINST SERVICE PERFORMED:

Article 47 - Executive committee members may receive a salary against their service upon decision of the General Board.

PROHIBITION OF POLITICAL INDULGENCE:

Article 48 - TOPSU Cooperatives may not indulge in politics, neither should they support political parties or accept their assistance.

AMENDMENT ON PROJECT:

Article 49 - Needed amendments may be made on the project upon decision of the TOPSU Cooperative General Board and concurrence of the Ministry of Village Affairs.

TECHNICAL ASSISTANCE:

Article 50 - The Ministry of Village Affairs may extend all kinds of technical assistance when needed, and may assign its personnel at TOPSU Cooperatives on TDY when requested by the Cooperatives.

AGREEMENTS AMONG TOPSU COOPERATIVES:

Article 51 - In solution and settlement of problems concerning land of two or more cooperatives, the concerned TOPSU Cooperatives may act according to their individual basic agreements or to mutual agreements they may reach among themselves.

MATTERS WHICH ARE NOT COVERED BY THIS LAW:

Article 52 - Matters which are not covered by this law are subject to general provisions.

PREPARATION OF REGULATIONS:

Article 53 - The regulations which show the enforcement of Articles 5 and 20 and of the necessary provisions will be prepared and enacted by the Ministry of Village Affairs with a maximum period of one year following the enactment of this law.

DATE OF ENACTMENT:

Article 54 - This law takes effect as of the date of its publication.

ENFORCEMENT:

Article 55 - Provisions of this law are enforced by the Council of Ministers.

APPENDIX 7
CHAPTER 2F

WATER LAW OF THE REPUBLIC OF CHINA*

Foreword

The Water Law of the Republic of China was first drawn up by the former Central Water Conservancy Commission of the Executive Yuan and promulgated by the National Government on 7 July, 1942. After the bylaws, the regulations of water registration and their relevant rules had been adopted by the Executive Yuan, the water law was enforced by order of the National Government and became effective on 1 April, 1943. In recent years, the Ministry of Economic Affairs established a working party to amend this law, and some new articles were added to meet certain special needs. The present amendment was put into effect by order of the President on 10 December, 1963. There are ten chapters in the Water Law. All the articles deal solely with the fundamental principles upon which many regulations and rules are formulated by different agencies connected with water conservancy enterprises.

The English version was translated for reference only.

THE WATER LAW

As amended on 29 November 1963 and promulgated on 10 December 1963

Chapter 1. General provisions

Article 1: In handling of matters relating to administration of water conservancy and undertaking of water conservancy works, provisions of this Law shall govern; provided that local custom may be followed if it does not conflict with this Law.

Article 2: Being regarded as natural resources, water shall belong to the State, regardless of the land ownership held by the people.

Article 3: The term "water conservancy" as referred to this Law shall mean control and utilization of surface or ground water by any human means for flood control, tide prevention, irrigation, drainage, leaching of injurious salts, soil conservation, storing of water, water supply, harbor construction, water transport, and development of water power.

Article 4: The term "authority-in-charge" as used in this Law shall mean the central water conservancy agency in the case of the central Government, a provincial (or municipal) government in the case of a province (or municipality), and a hsien (or municipal) government in the case of hsien (or municipality).[1]

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*By the Government of the Republic of China

[1]In China, there are two kinds of municipality, those ranking as roughly equivalent to provinces and those roughly equivalent to hsien or countries; hence the repetition of "municipal" and "municipality."

Chapter 2. Water conservency areas and agencies

Article 5: The central authority-in-charge shall demarcate water conservancy areas according to the national geographical distribution of waterways, and submit the same to the Executive Yuan for approval and announcement.

Article 6: Where a water conservancy area includes two or more than two provinces (or municipalities), or the water conservancy projects are of great importance and can hardly be undertaken by the local agency, the central authority-in-charge may set up a special water conservancy agency therefor.

Article 7: Where a water conservancy area includes two or more than two hsiens (or municipalities), or the water conservancy projects are of great importance and can hardly be undertaken by the hsien (or municipal) government, the provincial (or municipal) authority-in-charge may set up a special water conservancy agency therefor.

Article 8: If water conservancy projects undertaken by a provincial (or municipal) government concern two or more than two provinces (or municipalities) approval therefor shall be obtained from the central authority-in-charge. If water conservancy projects undertaken by a hsien (or municipal) government concern two or more than two hsiens (or municipalities), approval therefor shall be obtained from the provincial authority-in-charge.

Article 9: Change of waterways or construction of a canal shall not be made without approval therefor granted by the central authority-in-charge.

Article 10: When undertaking water conservancy projects, the provincial (or municipal) and hsien (or municipal) authority-in-charge may formulate special regulations in connection therewith in so far as such regulations do not conflict with this Law; provided that the regulations thus formulated shall be reported to the central authority-in-charge.

Article 11: For undertaking any hydraulic engineering project, the authority-in-charge of each level may require labour services from beneficiaries, and shall submit the measures therefor to its superior authority-in-charge for approval and report the same to the central authority-in-charge.

Article 12: The authority-in-charge may, taking into account the local needs, grant approval for organization of a farm irrigation association to undertake and develop farm irrigation work along with the lines laid down by the government.

The farm irrigation association as referred to in the preceding paragraph shall be a public juristic person. The organization rules thereof shall be stipulated separately.

Article 13: In the case of water conservancy projects undertaken by the government, beneficiaries thereof who directly underwrite expenses for such water conservancy projects may apply to the authority-in-charge for granting of approval for setting up a water conservancy promotion association.

Article 14: People who undertake water conservancy projects may organize a water conservancy company in accordance with laws after obtaining approval therefor from the authority-in-charge.

Chapter 3. Water rights

Article 15: The term "water rights" as used in this Law shall mean the rights acquired under law for utilization or collection of fruits from surface water or groundwater.

Article 16: Except utilization of water under Article 42 of this Law, no person without Chinese nationality may acquire water rights; provided, however, that this shall not apply in the cases where approval is granted by the Executive Yuan upon request submitted by the central authority-in-charge.

Article 17: When an organization, a company, or a person has acquired a water right for a specific purpose, the quantity of water to be used shall be limited to that actually needed for his undertakings.

Article 18: The priority of purposes for which water is to be used shall be as follows:

1. For domestic use and public water supply;
2. For agricultural use;
3. For water power;
4. For industrial use;
5. For water transport;
6. For other purposes.

In the case of a specific waterway or an industrial zone designated by the government, the provincial (or municipal) authority-in-charge may, taking into consideration the actual circumstances, submit a request to the central authority-in-charge for approval for change of the priority stipulated in the preceding paragraph.

Article 19: In case where water in a water source is not enough for domestic use and public water supply, if there is no other water source available, the authority-in-charge may suspend or cancel the water rights except the one stipulated in item 1, paragraph 1 of the preceding article, or place a limitation on utilization of water. Where holders of water rights sustain serious damage as a result of the suspension or cancellation of water rights or limitation on utilization of water as referred to in the preceding paragraph, the authority-in-charge may give them compensation as it sees fit.

Article 20: Where a dispute arises among holders of the registered water rights as a result of deficiency of water in the water source, priority shall be given to the water right acquired first in time. Where water rights are

acquired at the same time, water shall be either distributed in proportion to the quantities of water as stipulated in the respective water right certificates or utilized by turns, and measures therefor shall be stipulated by the authority-in-charge.

Article 21: If study of hydrologic measurements leads to the judgement of the authority-in-charge that water in a certain water source within the area under its jurisdiction is more than enough to meet the demand of valid water rights for a certain period of time, the authority-in-charge may authorize temporary rights for utilization of water during the same period, and may suspend such temporary rights when it feels that water in the water source runs short.

Article 22: If study of scientific technique leads to the judgment of the authority-in-charge that water in a certain water source within the area under its jurisdiction can be economized, the authority-in-charge may order the original holders of the already established water rights to improve their ways of or facilities for obtaining and utilizing water. The surplus water thus obtained may be distributed for use separately; provided that holders of water rights for utilization of such surplus water shall bear the expense for improvement of ways of or facilities for obtaining and utilizing water by original holders of water rights.

Article 23: When a water course undergoes a natural change, the original holders of water rights may, for utilization of part or entire quantity of water as specified in the water right certificate, request the authority-in-charge to designate both a suitable point in the new water course for diverting water and a new water conduit.

Article 24: In case where a water right is not used for continuous two years, upon investigation and promulgation of the fact by the authority-in-charge, the water right shall lapse; provided that this does not apply if approval has been granted for preservation thereof by the authority-in-charge.

Article 25: Where a dispute arises between co-holders of a water right about distribution of water, the authority-in-charge may reallocate the right according to the prevailing conditions of utilization of water.

Article 26: The authority-in-charge may change or cancel the water right already registered by private individuals in order to meet the demands of a public utility; provided that adequate compensation shall be paid to the holder of the cancelled water right.

Chapter 4. Registration of water rights

Article 27: Acquisition, creation, transfer, alteration or lapse of water right shall be null and void unless duly registered in accordance with this Law.

The provision of the preceding paragraph does not apply to users of a natural water course for navigation

Article 28: An application for registration of a water right shall be made to the hsien (or municipal) authority-in-charge. The application for registration of a water right shall be made to the provincial (or municipal) authority-in-charge in case the water source runs through two or more than two hsiens (or municipalities), and to the central authority-in-charge in case the water source runs through two or more than two provinces (or municipalities).

In handling registration of a water right, the authority-in-charge shall prepare a register therefor.

Article 29: An application for registration of a water right shall be made to the authority-in-charge by a holder of a water right and an obligator, or a representative thereof, by submitting the following documents:

1. The application form;

2. Certifying document or water right certificate;

3. Other documents or maps required by law.

Where application for registration of a water right is made by a representative, a certificate of delegation of authority shall also be submitted.

In the case of water conservancy projects undertaken by the government, the government agency undertaking such projects shall be an applicant for registration of a water right.

In the case of groundwater development, application for a water right shall be made beforehand by submitting the plan of the construction work and a detailed exposition, and the water right shall be acquired in accordance with laws after water has been supplied upon completion of the construction work.

Article 30: In the application form referred to in the preceding article, following matters shall be recorded:

1. Name, sex, native place, age, residence, and occupation of an applicant;

2. Validity period of the water right applied for;

3. Origin of the water right;

4. Reasons for registration;

5. Purposes for which water is used;

6. Water source from which water is obtained;

7. Scope within which water is used;

8. Methods by which water is used;

9. Point from which water is diverted;

10. Point from which water recedes;

11. Quantity of water used;

12. Depth of water (for water power use);

13. Depth of well (for groundwater use);

14. Hours for utilization of water;

15. Date;

16. Other matters that shall be recorded.

Article 31: In the case of a joint water right, an application for registration of the water right shall be made by co-holders of the water right under joint signature, or by their representative.

Article 32: When registration of a water right affects interest of a third party, a written consent signed by such third party or other certifying documents shall be submitted in addition to the application form.

Article 33: Upon receipt of an application for registration of a water right, the authority-in-charge shall effect screening without delay and designate personnel to conduct an investigation. If requirements for the application are not fully met or at the time when the application is made there has already been a dispute or litigation over the water applied for, the authority-in-charge shall ask the applicant to make necessary corrections or to presume the application after the litigation or the dispute has been settled.

Article 34: When, after screening and investigation, an application is deemed inadequate by the authority-in-charge, the application shall be turned down within one month after completion of the screening with a statement of reasons therefor attached. If the application is deemed adequate, approval for registration shall be announced within one month after completion of the screening in accordance with the following provisions:

1. Approval for registration shall be announced in the regular bulletins issued by the authority-in-charge or its direct superior authority-in-charge;

2. The approval shall be posted at a prominent place of the locality covered by the water right;

3. The approval shall be posted on the bulletin board of the authority-in-charge.

The period of time for posting the approval as stipulated in items 2 and 3 of the preceding paragraph shall not be less than 30 days.

Article 35: In the public notices as referred to in the preceding article, following matters shall be recorded:

1. Name of an applicant for registration of a water right;

2. Reasons for registrations;

3. Validity period of the water right granted;

4. Purposes for which water is used;

5. Water source from which water is obtained;

6. Scope within which water is used;

7. Methods by which water is used;

8. Point from which water is diverted;

9. Point from which water recedes;

10. Quantity of water used;

11. Depth of water (for water power use);

12. Depth of a well (for groundwater use);

13. Hours for utilization of water;

14. Date of application;

15. Limited period within which and the place to which exception may be taken against such registration;

16. Other matters that shall be announced.

Article 36: Within 60 days after the announcement has been made in accordance with the preceding two articles, the interested party may file exception with the authority-in-charge by submitting thereto a statement of reasons and evidence.

Article 37: After announcement of the approval for registration of a water right, if no exception has been taken or exception taken has failed, the authority-in-charge shall register the approved water right without delay and issue a water right certificate; provided that the hsien (or municipal) or provincial (or municipal) government shall, when issuing the water right certificate, forward the same to the superior authority-in-charge for transmission to or directly to the central authority-in-charge for seal checking and file.

The water right certificate referred to in the preceding paragraph shall be prepared by the central authority-in-charge.

Article 38: In the water right certificate, following matters shall be recorded:

1. Serial number and number of the water right certificate;

2. Date and number of application;

3. Name of the holder of water right;

4. Validity period of the water right granted;

5. Purposes for which water is used;

6. Water source from which water is obtained;

7. Scope within which water is used;

8. Methods by which water is used;

9. Point from which water is obtained;

10. Point from which water recedes;

11. Quantity of water used;

12. Depth of water (for water power use);

13. Depth of a well (for groundwater use);

14. Hours for utilization of water;

15. The authority-in-charge effecting registration;

16. Other matters that shall be recorded.

Article 39: When deeming it necessary, the authority-in-charge may order the holder of a water right to submit for examination a water utilization card, filling therein water utilization conditions of and the quantity of water actually used in, each month of the year.

Article 40: Upon termination of the validity period of the water right granted, the holder of the water right, if deeming it necessary to extend such period, shall apply for registration of extension thereof six months before the termination.

Article 41: When a water right lapses, the holder of the water right or the obligator shall hand in the water right certificate for registration of the lapse thereof. Where no application is made within the prescribed period of time for registration of the lapse of the water right after termination of the validity period thereof, the authority-in-charge shall cancel the water right and make announcement to this effect.

Article 42: Use of the following water may be exempted from registration:

1. Water for domestic use including water for domestic animals;

2. Water of ponds dug on the private land;

3. Water of wells drilled on the private land and the quantity of water springing out therefrom is less than 100 liters per minute;

4. Water drawn of human power, animal power or other means of simple diversion.

Where use of water as referred to in each item of the preceding paragraph interferes with public water conservancy projects or with the rights of other water users, the authority-in-charge may place proper limitation thereon or require registration for the use.

Article 43: When conducting registration of a water right, the authority-in-charge shall reserve part of water in the water source for domestic or public water supply use. In the case of registration of a water right for ground water, the authority-in-charge shall fix proper distance between wells according to hydrologic data of the locality concerned and quantity of water springing out from wells, and make announcement thereof.

Article 44: Where application is made for temporary use of water in accordance with article 21 of this Law, the authority-in-charge shall designate personnel to conduct investigation, grant or turn down the application within the time limit set forth in article 34, and after approval is granted, announce registration of the temporary water right and issue a license for temporary use of water.

Article 45: To unify procedures for registration of a water right, the authority-in-charge may stipulate regulations governing registration of a water right.

Chapter 5. Water conservancy projects

Article 46: For starting water conservancy projects, construction, repair or removal of the following shall have a prior approval of the authority-in-charge:

1. Flood control structures;
2. Water diversion structures;
3. Water storage structures;
4. Water drainage works;
5. Structures for aid or control of navigation;
6. Structures utilizing water power;
7. Other hydraulic structures.

For construction and repair of the structures listed in each item of the preceding paragraph, the sponsor of the water conservancy projects shall apply to the authority-in-charge for approval by submitting detailed plans, drawings and an exposition thereof. If special circumstances require modification of the already approved original plans, the said sponsor shall submit a statement of reasons therefor together with the modified plans, drawings, and an exposition thereof to the authority-in-charge for approval, and effect such

modification after approval is granted thereto; provided that, for prevention of dangers and emergent relief, proper measures may be taken without prior approval, and reported afterward to the authority-in-charge for file. The authority-in-charge may order the remodelling or removing of the hydraulic structures built without its prior approval.

Article 47: In case one of the following conditions occurs after water conservancy projects have been approved, the authority-in-charge shall cancel the approval or place limitations thereon, and, when necessary, may order removal or change of hydraulic structures:

1. When the construction work deviates from the approval plan or goes beyond that approved;

2. When the construction work is carried out in the wrong way so that public interests are adversely affected;

3. When procedures of the construction work are not in conformity with laws and ordinances;

4. When the construction work is not started or completed within the time limit specified provided that this does not apply if, under special circumstance, permission is granted by the authority-in-charge for extension of the time limit.

Article 48: When floodgates are installed in the structures for flood control, water diversion, water storage, and water drainage, the sponsor of the water conservancy project shall prepare a schedule of methods and time for opening such floodgates, and submit the same to the authority-in-charge for approval and announcement. When deeming it necessary, the authority-in-charge may order revision of the schedule within a prescribed period of time.

Article 49: The works for flood control, water diversion, water storage and water drainage constructed by the sponsor of the water conservancy project shall be repaired every year, maintained with care, readjusted and remodelled at regular intervals, and the annexed structures thereof shall be inspected thoroughly or, if necessary, rebuilt.

Article 50: When water conservancy projects interfere with the interests of the other holder of water rights, the authority-in-charge may order the sponsor of such projects to build suitable structures or adopt other corrective measures.

Article 51: When water conservancy projects adversely affect flood control measures, the authority-in-charge may order the sponsor of such projects to build proper flood control structures.

Article 52: When, for water conservancy projects, it is necessary to construct dams on navigable waterways, navigation locks shall be built at suitable locations. The authority-in-charge shall specify the number, size, and time for opening and closing such locks according to the actual needs.

The expenses for construction of navigation locks referred to in the preceding paragraph shall be borne by the sponsor of the water conservancy projects; provided that, if construction of dams results in increase in depth of navigable waters, the authority-in-charge may, taking into account the natur of waterways, give the sponsor a subsidy with prior approval of its superior authority-in-charge.

Article 53: Where water conservancy projects are of value for multi-purposes, other people or organizations connected with such purposes may be asked to participate in the projects, and the expenses therefor may be shared according to the economic evaluation. When necessary, a request may be submitt to the authority-in-charge for assistance and guidance.

Article 54: When deeming it necessary to enlarge the water conservancy projects, or increase purposes of such projects, the authority-in-charge may, without consent of agencies and organizations related to such purposes, order the sponsor of the projects to preserve room for enlargement or to install additional fundamental equipments and advance necessary funds therefor.

Article 55: In case additional water sources of waterways are tapped by the sponsor of the water conservancy projects for investment in hydraulic structures, the sponsor of the projects shall have the right to apply for utilization of or collection of fruits from such water sources in preference to others in so far as the vested interests of the holders of water rights on the lower reaches of the waterways are not affected. The vested interests as referred to in the preceding paragraph shall mean the natural flux before the tapping of additional water sources; provided that this shall be limited to the quantity of water covered by the registered water rights.

Article 56: When, for water conservancy projects, it is necessary to construct dams on waters which are not navigable and used only for transportation of bamboo or wooden rafts and for fishing, routes for such rafts or fish ladders shall be opened at proper locations, and measures therefor shall be stipulated by the authority-in-charge. The expenses for opening routes for rafts or fish ladders as referred in the preceding paragraph shall be borne by the sponsor of the water conservancy projects.

Article 57: If the use of land for water conservancy projects interferes with communications of a land owner or with the conveyance of irrigation or drainage, the sponsor of such projects shall obtain the consent of the land owner thereto, and build for him bridges, flumes, troughs and other structures, or pay him a proper compensation.

Article 58: When damage is caused to a private land by the construction work of water diversion, the land owner may claim against the sponsor of the water conservancy projects for compensation, or ask him to purchase the land; provided that if this does not apply the original state can be restored immediately upon completion of the construction work without any damage to the land.

Article 59: The sponsor of the water conservancy projects shall annually report operational conditions, utilization of water, and supervision and maintenance of the construction works to the authority-in-charge for examination.

Article 60: In the case of an application for registration of drilled well, a stratum map and a record of pumping equipments and tests shall be submitted to the authority-in-charge for report within 60 days after water has been supplied.

Article 61: When the water conservancy projects adversely affect cleanliness of the water source, the authority-in-charge may place limitation on or prohibit such projects.

Article 62: In the case of waterways used for specific types of navigation, the authority-in-charge may limit construction of canals and use of pumps.

Article 63: When matters connected with the water conservancy projects are concerned with the functions of other ministries and agencies under the central government, the central authority-in-charge shall dispose of such matters in consultation with the concerned ministries and agencies; provided that an agency established for a certain enterprise purpose shall, when undertaking water conservancy projects for the said purpose, obtain the consent of the authority-in-charge.

Chapter 6. Storage and drainage of water

Article 64: Water shall be drained into the main channel or other rivers, lakes and the sea, and special attention shall be paid to protection and maintenance of the concerned structures and important equipment thereof; provided that this does not apply if, with the approval of the superior authority-in-charge, water may be drained into other or newly opened waterways.

Article 65: For reducing flood damage, the authority-in-charge may restrict use of land within the district covered by floods by partitioning the district.

The scope of restriction on use of land and measures for partition of the district as referred to in the preceding paragraph shall be specified separately by the authority-in-charge in the light of flood records and the results of predictions. The execution thereof shall be made after the same has been submitted to the superior authority-in-charge for approval and announcement.

Article 66: The owner of lower lying land shall not obstruct the natural flow of water from higher land.

Article 67: When draining water from higher to lower land by artificial means, the owner of the higher land shall select such locations and methods as to cause minimum damage to lower land, and shall pay proper compensation to the owner of such lower land.

Article 68: Waste water of factories and mines or city's sewerage shall be drained into properly selected locations after adequate treatment. If such waste water or sewerage adversely affects the quality of water, human health, public interests or interests of a third party, the authority-in-charge may place limitation on or prohibit drainage thereof, and the sufferer may claim for compensation.

Article 69: When storage or drainage of water results in damage to owners of both upper and lower lying land on the bank, the person responsible for such storage or drainage shall pay proper compensation therefor; provided that this does not apply to any damage caused by force majeure.

Article 70: When the flow of water is arrested at the lower land owing to an accident, the owners of upper lands may undertake a construction work to facilitate the flow of water at their own expense.

Article 71: The authority-in-charge shall submit regulations regarding the standard water level of and the time for opening and closing of outlet control gates of storage works to its superior authority-in-charge for approval and announcement.

Article 72: Any structure spanning a waterway shall provide flow channels past passing such structure. The area of the cross-section thereof shall be fixed by the authority-in-charge.

If the waterway referred to in the preceding paragraph is a navigable one, a bridge shall be built and the elevation of the bottom chord and panel length of the bridge shall be specified by the authority-in-charge.

Chapter 7. Protection and maintenance of waterways

Article 73: As to the annual repair work on waterway structure, the authority-in-charge shall, at the end of each flood control period, dispatch personnel to make a survey and carry out such repair work after submitting the report thereon to its superior authority-in-charge for approval. The repair work shall be completed before the beginning of the flood control period of the following year and reported to the superior authority-in-charge for inspection upon completion.

Article 74: The authority-in-charge shall, by taking into account currents of the past years, decide the water level and the date for flood control alert.

The flood control period shall mean the period from the beginning to the ending of the flood control alert.

Article 75: In as far as protection and maintenance of waterways are concerned, the authority-in-charge may exercise police powers.

During the flood control period, the authority-in-charge may, if necessary, request police and military forces in the flood control area to assist in protection and maintenance of waterways.

Article 76: In case of emergency, the authority-in-charge may, for the sake of emergency measures, requisition the needed materials, labour and land, and remove structures blocking the flow of the water.

The authority-in-charge shall afterwards pay proper compensation for the requisitioned materials, labour and land and the removed structures as referred to in the preceding paragraph.

Article 77: During the flood control period, the agency in charge of flood control may instruct the local authority-in-charge on the bank of the river to give assistance in protection and maintenance of waterways. In case of emergency the local authority-in-charge shall set the local strength in motion for assistance in prevention of a flood.

Article 78: For protection of waterways, the authority-in-charge may prohibit the following:

1. Building, planting, piling or scooping anything that will prevent the flow of the water;

2. Farming, and digging sand, gravel, bricks, etc. within the specified area surrounding the toe of a dike or annexed structures thereof;

3. Cultivating crops, grazing animals or building anything harmful on a dike or annexed structures thereof, or driving vehicles and animals outside the specified passage on the dike;

4. Destroying or removing at random hydraulic structures or equipments;

5. Opening or closing floodgates, locks or control equipments without permission;

6. Destroying grass sod or cutting down trees on a dike;

7. Other activities detrimental to the protection of a dike.

The specified area as referred to in item 2 of the preceding paragraph shall be decided by the authority-in-charge.

Article 79: The authority-in-charge may order the person concerned to modify, remove and destroy plants or structures on the banks of waterways, if they, in its opinion, prevent the flow of the water; provided that proper compensation shall be paid therefor.

Article 80: Unless after the flood control period has passed, the reeds, aquatic grasses, willows or other trees and grasses growing in the area from the dike to the edge of the bank, which are useful in prevention of erosion by wind or waves shall not be cut down at will, regardless of whether they are of public or private possession; provided that this does not apply if approval is granted therefor by the authority-in-charge.

Article 81: Water channels, sand banks, and tidal flats shall not be enclosed or cultivated; provided that this does not apply if the authority-in-charge, when regarding such enclosures or cultivation as not detrimental to the flow of the water or the control of flood, grants permission therefor with approval of its superior authority-in-charge.

Article 82: Lands on the projected line of the channel conservation or the projected dike line may be confiscated after the authority-in-charge has submitted a report thereof to its superior authority-in-charge for approval and announcement. For flood control, the authority-in-charge may also restrict the use of such lands which are not confiscated.

Article 83: Lands within the district submerged at a normal flood level may not be held in private ownership. The authority-in-charge may confiscate such lands which are presently held in private ownership, and, for flood control, may restrict the use of such lands which are not confiscated.

The district submerged at a normal flood level as referred to in the preceding paragraph shall be decided by the authority-in-charge and reported to its superior authority-in-charge for approval and announcement.

Chapter 8. Funds for water conservancy projects

Article 84: For developing and maintaining water conservancy works, the government may collect the following fees:

1. Water right fee;

2. River construction fee;

3. Flood control beneficial fee.

Except for payment of the management expenses, all of the fees specified in the preceding paragraph shall be alloted as exclusive funds for water conservancy projects, and set down in the budget by the authority-in-charge for unified employment.

Article 85: The water right fee shall be collected from a cubic meter of water supplied per minute as a starting point of reckoning in the case of water for agricultural and industrial use, and from a cubic meter of water suppplied per second as a starting point of reckoning in the case of water for water power use. The rate thereof shall be fixed by the provincial (or municipal) authority-in-charge and submitted to the central authority-in-charge for approval and announcement.

Article 86: For construction and maintenance of the inland transport waterways and wharf works thereof, the government may collect river construction fees from the passing vessels. The criteria of such collection and measures therefore shall be stipulated by the central authority-in-charge in consultation with the Ministry of Communications.

Article 87: For construction and maintenance of flood control works, the government may collect the flood control beneficial fees from the beneficiaries in proportion to the benefit they receive. The provincial (or municipal) authority-in-charge shall specify the district where and criteria on which the flood control beneficial fees are to be levied by the local authority-in-charge, and shall submit the same to the central authority-in-charge for examination.

Article 88: The flood control beneficial fees shall be levied on owners of the lands in the beneficial district. In case of the land subject to a lien, the said fees shall be levied on the lien-holders. In case there exists a factory, a mine, a shop, or constructional improvement on the land referred to in the preceding paragraph, regulations shall be formulated for collection of flood control beneficial fees in proportion to the beneficial degrees.

Article 89: The sponsor of the water conservancy projects may charge fees from the users according to the conditions of use of the water conservancy works made by them. The authority-in-charge shall fix the maximum and minimum rate of the fees referred to in the preceding paragraph, and submit the same to its superior authority-in-charge for decision.

Article 90: When handling registration of water rights, the authority-in-charge may levy a registration fee, a water right certificate fee, and a fee for a survey on the applicants in the light of actual needs. The provincial (or municipal) authority-in-charge shall fix the rate of such fees, and submit the same to the central authority-in-charge for decision and announcement.

Chapter 9. Penal provisions

Article 91: Any person who destroys or steals structures or materials or other equipments referred to in Articles 46 and 51 shall, besides being ordered to repair them or pay compensation within the limited period of time, be punished with imprisonment of not more than five years, detention or a fine of not more than 1,000 yuan.

If serious damage results from the destruction or theft referred to in the preceding paragraph, such person shall be punished with imprisonment of not less than five years. If conditions are very serious and lives and properties of many persons are endangered, he shall be punished with death, life imprisonment, or imprisonment of not less than ten years.

An attempt at the offense referred to in the paragraph 1 shall be punished.

Article 92: Any person who opens or blocks channel without obtaining permission from the authority-in-charge shall, besides being ordered to restore things to original state or stop the practices, be punished with a fine of not more than 1,000 yuan. If the public safety is endangered in consequence thereof, he shall be punished with imprisonment of not more than five years, and, in addition thereto, a fine of not more than 1,000 yuan may be levied on him.

Article 93: Any person who draws, uses or drains water, or obstructs the drawing, using or draining of water, in contradiction to this Law or ordinances in connection with control of water conservancy works issued by the authority-in-charge shall be punished with a fine of not more than 500 yuan. If rights and interests of other persons are endangered as a result thereof, he shall be punished with imprisonment of not more than two years, detention or a fine of not more than 1,000 yuan.

The authority-in-charge may seize tools and machines used for drawing, using or draining water, or for obstructing the drawing, using or draining of water as referred to in the preceding paragraph.

Article 94: Any person who forces the gatekeeper to open or close a floodgate or a lock and thus endanger the rights and interests of other persons shall be punished with imprisonment of not more than three years, detention or a fine of not more than 1,000 yuan.

If the offense referred to in the preceding paragraph is committed during the flood control period, which subsequently endangers the public safety, a punishment of imprisonment of not more than five years shall be levied and, in addition thereto, a fine of not more than 1,000 yuan be levied.

Where the offense referred to in the preceding two paragraphs are committed by forcing the mob, the punishment shall be increased by half.

Article 95: Any person who acts contrary to the obligation of commission or noncommission as specified by this Law or by ordinances issued by the authority-in-charge under this Law shall be obliged to fulfil his obligation, or suspended from exercising part or whole of the rights to which he is entitled under law, or, in addition thereto, may be punished with a fine of not more than 1,000 yuan but not less than 200 yuan.

Article 96: The fine referred to in this Law shall be levied by the authority-in-charge. In case of failure of administrative execution, the case may be transmitted to the court for compulsory execution.

Chapter 10. Supplementary provisions

Article 97: In connection with the compensation or disposal of the water rights as specified in this Law, if any dispute arises among the interested parties, the authority-in-charge may hold a conference on the dispute with relevant agencies and organizations.

Article 98: Regulations governing enforcement of this Law shall be stipulated by the Executive Yuan.

Article 99: This Law shall come into effect as from the date of its promulgation.

APPENDIX 8
CHAPTER 2F

UNOFFICIAL TRANSLATION

GENERAL RULES GOVERNING THE ORGANIZATION OF IRRIGATION ASSOCIATIONS

(Promulgated by Presidential decree, July 2, 1965; revised and promulgated by Presidential decree, February 9, 1970)

Chapter I. General

Article 1. These Regulations are enacted in accordance with Article 12 of the Water Law.

Article 2. The organization of Irrigation Associations and its relevant matters shall be governed by these Regulations. Those which are not stipulated in these Regulations are permissible to apply the provisions of other related laws.

Article 3. An Irrigation Association shall be entitled with the name of its location or watersource or canal system.

Article 4. The competent authorities referred to in these Regulations shall be the central water conservancy agency at the national level, the provincial or municipal government at the provincial and municipal level and county or city government at the county and city level.

Chapter II. District and Establishment

Article 5. The jurisdiction area of an Irrigation Association shall be suggested by the competent authorities at the provincial or municipal level considering the geographical conditions and the economic benefits. This suggestion is submitted to the competent authority at the national level or approval.

Article 6. The establishment of an Irrigation Association shall be initiated according to either of the following items:

(1) In the defined district, an Association may be established through the initiation of over fifty qualified members as prescribed in Article 14 and with approval of the competent authorities at the provincial or municipal level.

(2) The competent authorities at the provincial or municipal level may decide to establish an Irrigation Association when deemed necessary.

Article 7. The preparation for the establishment of an Irrigation Association shall be made according to either of the following alternative ways:

(1) A preparatory body is organized by the initiators under the guidance of the competent authorities at the provincial or municipal level.

(2) The competent authorities at the provincial or municipal level appoint its personnel or invite local people, who are enthusiastic about the water conservancy affairs, to organize a preparatory body.

Article 8. The preparatory body for the establishment of an Irrigation Association shall submit the application forms, draft of organizational rules, map showing the jurisdiction area of the association, work plan and budget, name list of all qualified members and an agreement letter signed by the majority of members to the competent authorities at the provincial or municipal level for approval on the establishment of the Association.

Article 9. If there are changes in natural enbironment or in the planning of water resources after the establishment of Irrigation Associations, the competent authorities at the provincial or municipal level have the right, with or without the request of the Irrigation Associations, to execute the combination, separation, alternation or termination of the related Irrigation Associations, provided that prior approval has been obtained from the competent authority at the national level.

Chapter III. Duties and Rights

Article 10. The duties of the Irrigation Associations are as follows:

(1) Construction, improvement, operation and maintenance of irrigation projects.
(2) Prevention and relief of damage of irrigation facilities.
(3) Irrigation financing and the establishment of fundations.
(4) Study and further development of irrigation benefits.
(5) Coordination with government policies on land, agriculture, industry and rural development.
(6) Performance of other duties entrusted by the competent authorities according to law.

Article 11. When land requisition is necessary for engineering construction, or improvement work, the Irrigation Association shall negotiate with the landowner or the person having other rights on the land to lease or purchase the land. If such a negotiation fails, the Irrigation Association may appeal to the competent authority at the national level through proper channel for compulsory purchase of the land according to law.

When the land is a public property, the irrigation association may apply for lease or purchase of it through proper procedures. Any private land originally used as right of way for irrigation purposes shall continue to be so used, and the landowner shall be exempt from paying the land tax leviable thereon as long as it continues to be so used.

Article 12. If it is necessary to remove obstacles for the survey of an irrigation work, the Irrigation Association shall request the competent authorities at the county or city level to notify the landowner or occupant to remove the obstacles. As to the damage or losses thus incurred, the landowner or occupant may demand the Irrigation Association for compensation. If a dispute occurs, it shall be reported to the competent authorities for settlement.

Article 13. For emergent relief of flood damage, the Irrigation Association shall report to the competent authorities for immediate action according to Article 70 of the Water Law.

Chapter IV. Membership and Organization

Article 14. Any person living in the jurisdiction area of an Irrigation Association and possessing one of the following qualifications is a member of the Association.

(1) The managing agency of public land or the representative of the agency using the land.
(2) The owner or the mortgagee of private farm land.
(3) The lessee or the tenant of public or private arable land.
(4) Other beneficiaries.

If a person prescribed in the items (2), (3) or (40 or this Article is a legal person, the manager or representative shall be a member of the Association.

Article 15. In an irrigation association, the members have rights to enjoy irrigation and other legal benefits, and also have obligations to pay membership fees and to perform other duties according to the provisions of laws, ordinances or the rules of the Association.

If a member does not carry out the obligations mentioned in the preceding paragraph, the Irrigation Association shall request the competent water conservancy authorities to approve the suspension of his or her rights in part or in total. If the case is serious, it shall be disposed of according to law.

When a member suffers damage or losses due to the fact that the Irrigation Association takes improper action or infringes law, ordinances or its own rules, he may demand the Association for compensation according to the actual conditions. Any objection thereto may be reported to the competent water conservancy authorities for settlement according to law.

Article 16. The Irrigation Association has the general assembly as the ruling body which is formed by the representatives elected by members. The representatives serve gratuitously. The term is four years and they may serve additional terms if re-elected. The number of the representatives varies from fifteen to fifty and is determined by the competent authorities at the provincial or municipal level.

Two thirds of the representatives mentioned in the preceding paragraph shall be farming members.

The general assembly of the representatives shall be convened once every six months. Extraordinary sessions may be called for special matters.

Article 17. Any member aged twenty-three or over, who is a primary school graduate, has been on the staff of an irrigation association for two or more years, and has good service records, or who is a graduate of a national middle school, or a junior middle school, or a school higher than the junior middle school, may Be a candidate for Representative, provided he is not otherwise disqualified for any one of the following causes:

(1) A member whose rights of membership have been suspended and not yet restored.
(2) A member who has been deprived of his civic rights and has not yet had them restored.
(3) A member who has been convicted of sedition, aiding and

abetting a foreign enemy, or dereliction of duty and been definitively sentenced without any further right of appeal.

(4) A member who has been sentenced to a term of imprisonment for any one of the offenses mentioned in the preceding section and whose term of imprisonment has not yet expired.

(5) A member who has been suspended from office for some cause which has not yet been removed.

(6) A member who is mentally deranged or physically disabled and unable to hold any office.

Article 18. The functions of the General Assembly of the Representatives are as follows:

(1) Decisions on the organizational rules and the matters related to the rights and obligations of members.

(2) Decision on the plan of operations.

(3) Decision on the budget of the Association.

(4) Review of balance accounts.

(5) Decision on loans and contributions.

(6) Decision on the proposals of the Chairman and the Representatives.

(7) Decision on the matters requested by the members.

(8) Hearing the report of the Chairman.

(9) Other legal functions.

The execution of the above-mentioned functions shall be performed through resolutions in meetings. Except those which are particularly stipulated in laws or ordinances, all decisions made under above Items from (1) to (6) shall be reported to the competent authorities for approval before they are put for enforcement.

When disputes or difficulties occur in execution of the items of this article, the association shall report to the competent authorities at the provincial or municipal level to make decisions.

Article 19. The Irrigation Association has a Chairman who is responsible for overall supervision of its activities according to laws, ordinances, and its rules, to direct and supervise all the staff and its subordinate organs, and to represent the Association in dealing with other agencies.

The Chairman shall be elected by the Representatives according to one of the qualifications stipulated in Article 20. He has a term of four years and may serve one more term if re-elected. The recall of the Chairman shall be decided through ballot by the General Assembly of Representatives.

Article 20. Any member aged twenty-five or over, who has been a member for one or more years and has any one of the following qualifications but not otherwise disqualified for any one of the causes specified in Article 17, may be a candidate for the Chairmanship:

(1) Anyone who has graduated from a Chinese or foreign college or other institutions of higher learning officially recognized by the Ministry of Education, or has successfully passed the higher civil service examination, and has had two or more years of practical administrative experience in irrigation work.

(2) Anyone who has attained the rank of recommended service and has good service records in forestry or irrigation work.

(3) Anyone who has served as a member of the Provincial Assembly or the Municipal Council for six or more years.
(4) Anyone who has served as magistrate or major, or Speaker of the County or Municipal Council, for three or more years, or as township chief for six or more years, and who has good service records.
(5) Anyone who has served as Chairman, Vice-Chairman, or general manager of an irrigation association for three or more years, or as chief of department or section for six or more years, and who has good service records.
(6) Anyone who has graduated from a senior agricultural or technical vocational school, or successfully passed the general civil service examination in agricultural or technical subjects, has served as general manager of a farmers' association at the provincial, municipal, or county level for six or more years, and has good service records.

Article 21. If the Chairman is in vacancy for special reasons, the competent authorities at the provincial or municipal level shall appoint a person to assume office and immediately convene a General Assembly of Representatives to elect a new Chairman. The term of the succeeding Chairman shall be limited to the remaining term of the preceding Chairman. No re-election may be made if the term left by the preceding Chairman is less than one year.

Article 22. The matters of an Irrigation Association concerning the organization and formation, the election and recall of the representatives and the Chairman, the calling and rules of procedures of Assembly of Representatives and the appointment, compensation and disciplinary measures of staff, except those stipulated in these Rules, shall be all separately determined by the competent authorities at the provincial or municipal level and reported to the competent authority at the national level for record.

Article 23. The Chairmen and the staff of Irrigation Associations shall be considered as government employees as specified in penal laws and are not allowed to take other official positions concurrently.

Chapter V. Finance

Article 24. The appropriations of the Irrigation Associations shall be financed from the revenue of the following sources:
(1) Membership fees.
(2) Business income.
(3) Financial profits.
(4) Governmental subsidies.
(5) Subscriptions and donations.
(6) Other legal income.

Article 25. The membership fees are collected from the members who receive the benefits from irrigation or drainage. A member who requests to use an additional amount of water or to pump extra water for irrigation shall pay additional membership fee in proportion to the degree of benefits which he or she receives.

Article 26. In order to meet actual needs by carrying out irrigation construction projects which are approved or directed by the competent

authorities, the Irrigation Association may collect the engineering costs from their members who directly receive the benefits from the projects. Collection of the engineering costs in installments starts from the second year after the land is benefited. The amount of collection shall be limited to the total engineering costs.

In case the benefited land is to be used for purposes other than farming, the landowner shall continue to pay his share of the outstanding amount of the engineering cost. In case the ownership of the benefited land is transferred to another person, that person shall be responsible for paying his share of the outstanding amount of the engineering cost.

Article 27. New members or the members receiving additional benefits from a new construction project shall share the engineering cost by proportion. The collected fees shall be reserved as a special fund which shall not be used without the approval of the competent authority at the provincial or municipal level.

Article 28. The Irrigation Association may collect fees from the users of its structures and/or surplus water. The collection of fees thereof shall be considered as the business income of the Association.

Article 29. The rates and collection method of the fees stipulated in the previous four Articles shall be determined by the competent authorities at provincial or municipal level and reported to the competent authority at the national level for record.

Article 30. In collection of the membership fees and engineering costs stipulated in these Rules, the irrigation association may collect an additional amount, 1% of the arrears for every three days with a maximum of 10% in total, for cases in arrears of payments thereto.

If the membership fees and engineering costs mentioned in the preceding paragraph are not duly paid even after 30 days, the irrigation association may bring the case with the notice of arrears thereof to the court for a decision of compulsory payment. If the person disagrees with the court decision, he may appeal against it but his appeal is limited to once only. Decision by the court shall be made within seven days.

Article 31. The total annual revenue of the Irrigation Association, excluding the amount necessary for personnel and necessary operation expenditures, shall be used for construction, maintenance, and improvement of irrigation facilities, and partly be kept as surplus and reserve funds for damage rehabilitation and depreciation.

All reserve funds mentioned in the preceding paragraph are not allowed to be disbursed prior to the approval of the competent authorities.

Article 32. The appropriations of the Irrigation Associations shall be deposited in governmental financial agencies appointed by the competent authorities at the provincial or municipal level. Twenty percent of the net profits gained by the agencies shall be allotted to the joint organization of the Agricultural Irrigation Associations for the promotion of affairs of common interest.

Article 33. The Irrigation Associations shall have the budget estimates and the settlement of accounts for the income and expenditures of each fiscal year. The method of formulating the budget and settlement of accounts shall be determined by the competent authorities at the provincial or municipal level.

Article 34. The accounting system and financing regulations shall be determined by the competent authorities at the provincial or municipal level and reported to the competent authority at the national level for record.

Chapter IV. Supervision and Guidance

Article 35. The responsibilities for supervision and guidance on the Irrigation Associations shall be taken by the Provincial Water Conservancy Bureau (Municipal Public Works Bureau or Reconstruction Bureau) at the provincial (or municipal) level and by the County Reconstruction Bureaus (or Sections) at the county level. The regulations concerning supervision and guidance thereof shall be suggested by the competent authorities at the provincial or municipal level to the competent authority at the national level for approval. The fund needed for the supervision and guidance mentioned in the preceding paragraph shall be budgeted for each fiscal year individually by the Provincial Water Conservancy Bureau (Municipal Public Work Bureau or Reconstruction Bureau) and the County Reconstruction Offices (or Sections), and shall be disbursed according to law.

Article 36. If an irrigation association inflicts damage upon public welfare due to its contravention of laws or negligence of duties, the competent authorities shall give correction or restraint thereto, and, in serious cases, shall reform it or act for its functions and reorganize it. The result thereof must be reported to the competent authority at the national level for record.

Article 37. In case the Chairman of an irrigation association acts in violation of laws and regulations and such action adversely affects the work of irrigation, the competent authorities at the provincial or municipal level may relieve him of his post if warnings served on him by the said authorities should remain unheeded. In case a representative of an irrigation association fails to carry out his duties according to the regulations, or acts in violation of laws and regulations, and such failure or such action adversely affects the work of irrigation, he may be relieved of his position as a representative by the competent authorities at the provincial or municipal level if warnings served on him by the said authorities should remain unheeded. Regulations governing service rating, rewards and punishments of Chairmen and representatives of irrigation associations shall be drawn up by the competent authorities at the provincial or municipal level and submitted by them to the competent authorities at the central level for approval.

Article 38. The Chairman, representatives, and staff of the Irrigation Associations shall not have the following behavior:

(1) To undertake directly or indirectly engineering jobs of individual irrigation association or to sell commodities thereto.

(2) To make profit by using official capacities or public funds.
(3) To disclose the secrets of official affairs for others to gain illegal benefits.

A Chairman, representative, or staff of the Irrigation Associations, who has behavior of any item mentioned above, shall be warned, punished, recalled, disqualified or discharged according to the actual situation.

Chapter VII. Supplementary Rules

Article 39. The Irrigation Associations may establish a provincial (or municipal) joint organization to promote mutual cooperation and development. Its organizational rules and pertinent regulations shall be drawn up by the competent authorities at the provincial or municipal level and approved by the competent authority at the national level.

Article 40. All Irrigation Associations' organization regulations promulgated before enforcement of these Regulations, if not consistent with these Regulations, shall be corrected in accordance with the stipulation under these Regulations.

Article 41. These Regulations shall come into force from the day of their promulgation.