

**Managing Irrigation for Environmentally  
Sustainable Agriculture in Pakistan**

**LEGAL FRAMEWORK FOR  
IRRIGATION MANAGEMENT IN  
PUNJAB AND SINDH PROVINCES, PAKISTAN**



**Consultancy Report  
by  
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**September 1998  
PAKISTAN NATIONAL PROGRAM  
INTERNATIONAL IRRIGATION MANAGEMENT INSTITUTE  
LAHORE**

H 23179 C1

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## FOREWORD

The effective functioning of water users organizations depends on the legal environment in which they are founded. The government is the appropriate authority to provide an appropriate enabling legal environment for social organization as one of its prime responsibilities in institutional development. Since the inception of IIMI's current action research effort related to water users organizations, attention has consistently been drawn on the urgent need for an effective administrative and legal base for the country's planned institutional development program. The Government's demonstrated willingness to accept these new organizations on the basis of a legal framework, including a mechanism for their registration, has already been forthcoming, but it needs the support of many professionals concerned with these institutional reforms.

In search of such support, IIMI's pilot efforts on social organization benefited substantially from the consultations with a prominent legal professional in Pakistan, Professor Dr. Dil Mohammad Malik, the Dean of the Faculty of Law of the Punjab University, Lahore. During our consultations with him, he was invited to undertake a study of the existing legal framework for irrigation in Pakistan. This report is the output of his valuable contribution to our studies.

While the appropriate authorities have already taken action to draft new laws to incorporate some of the planned institutional reforms in the irrigated agriculture sector, Professor Dr. Dil Mohammad's report will undoubtedly be of great value to all who are interested in broadening the knowledge base in this area, and also in refining the already established legal framework. Particularly, his report will be of immense value in formulating the required rules and regulations within the existing enabling laws, including the internal rules (bylaws) of the new WUOs and the legal instruments that define the linkages between the WUOs and the state agencies in the irrigated agriculture sector.

We thank Professor Dr. Dil Mohammad for agreeing to undertake this work in the midst of his busy professional duties.

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## ACKNOWLEDGEMENTS

This report, based on a research study, undertaken on behalf of IIMI, Pakistan, was the first of its nature in Pakistan. Accordingly, it had all the problems of a pioneer work, but fortunately, I had the generous support and cooperation of an efficient, competent and friendly team of the IIMI staff.

To begin with, I am grateful to the Director, Prof. Gaylord V. Skogerboe, who directly and indirectly extended encouragement and appreciation which kept our spirits high during the study.

I am very grateful to Mr. D.J. Bandaragoda, who helped me in every aspect of the study and took great pains in the finalization of this report; he practically discussed every word of this report with me.

Thanks are also due to the senior officers of the IIMI staff, Dr. Asghar Cheema and Zafar Iqbal Mirza, who had abundant knowledge of the working of the irrigation system in Pakistan. They provided insight to various issues in hand. I benefited from elaborate discussion with them on different issues.

Mr. Mehmood Ul Hassan, always welcome me smilingly whenever I approached him in connection with the study. He coordinated the different activities relating to it and accompanied me on a visit to the project area in Haroonabad. The IIMI staff in Haroonabad project area also helped me in conducting the study by extending their hospitality and cooperation without which the visit would not have been so fruitful.

Mr. Manzoor Hussain, Secretary to Mr. D.J. Bandaragoda, extended efficient typing and untiring patience in formatting and incorporating changes while preparing this report besides maintaining liaison between me and the IIMI staff.

Ms. Verenia Duke has played a silent and sincere role in polishing the final report with her microscopic work.

In summary, this study and report is essentially, the product of an efficient and cooperative team of IIMI which worked with me. May God bless all of them with good health and happiness.

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1. BACKGROUND**

The present consultancy relates to the legal aspects of a participatory irrigation management scheme undertaken by IIMI-Pakistan. The first part of this assignment is research intended to encompass a detailed study of the existing legal framework of the irrigation system in the Provinces of Sindh and Punjab, with a view to determine the scope of the Water Users' Association Schemes under experimentation in the project areas.

The consultant studied various laws related to the irrigation system of Pakistan. These are:

1. The Canal and Drainage Act (1873)
2. The Punjab Minor Canals Act (1905)
3. The Soil Reclamation Act (1952)
4. The Cooperative Agriculture Act (1976)
5. The Cooperative Societies Act (1920)
6. The Sindh Irrigation Act (1879)
7. The Sindh Water Users' Associations Ordinance (1982)
8. The Punjab Water Users' Associations Ordinance (1981)
9. The NWFP Water Users' Associations Ordinance (1982)
10. The Baluchistan Water Users' Associations Ordinance (1982)
11. The Punjab Irrigation and Drainage Authority Ordinance (1997)
12. The Punjab Irrigation and Drainage Authority Act (1997)
13. The Sindh Irrigation and Drainage Authority Ordinance (1997)
14. The Sindh Irrigation and Drainage Authority Act (1997)
15. The NWFP Irrigation and Drainage Authority Ordinance (1997)
16. The NWFP Irrigation and Drainage Authority Act (1997)

Out of the above enactment, those listed at serial 1, 6, 7, 8, 11, 12, 13 & 14 are directly related to irrigation and water users' associations in the project areas. Accordingly, these laws have been studied in depth.

The Canal & Drainage Act (1873) and Sindh Irrigation Act (1879), which are the main irrigation laws applicable to the Punjab and Sindh Provinces, respectively, have been studied in detail. A brief summary of these laws is given, in a non-technical narrative, for the benefit of those devoid of a legal background. Detailed summaries of these are also given to provide deeper insights into these laws. A list of the powers of various authorities/officers shows the distribution of different powers and functions under these laws.

The Water Users' Associations Ordinances and Irrigation & Drainage Authority Ordinances/Acts of the Punjab and Sindh Provinces have also been analysed to facilitate assessing its suitability/compatibility with the IIMI-Pakistan Scheme.

## **1.2. BRIEF SUMMARY OF FINDINGS**

### **Punjab**

1. The Canal and Drainage Act (1873), which is the principal legislation for irrigation in the Punjab province, has no scope for the water users' organizations as suggested by IIMI-Pakistan.
2. The Punjab Water Users' Associations Ordinance (1981) provides for such associations only at the watercourse level, but these associations, too, do not meet the requirements of the IIMI-Pakistan proposals. The Ordinance does not provide for any Water Users' Association at the higher (i.e., distributary, canal, etc.) levels.
3. The Punjab Irrigation and Drainage Authority Act (1997) provides for establishing Farmers Organizations (FOs) at distributary and minor levels with functions as assigned to them by the Provincial Government. The Act will, therefore, govern the FOs at distributary and minor levels, while the associations at the watercourse level will be covered under the Punjab Water Users' Associations Ordinance (1981).

### **Sindh**

4. The Sindh Irrigation Act (1879) also does not have any scope for water users' associations.
5. The Sindh Water Users' Associations Ordinance (1982) makes provision for the Water Users' Associations at the watercourse, distributary and canal levels. However, it would need a few amendments in order to make it compatible with the IIMI-Pakistan proposals.
6. The Sindh Irrigation and Drainage Authority Act (1972) provides for establishing Farmer Organizations at the distributary and minor levels. The functions as may be prescribed by regulation (to be framed by SIDA) leaves the Sind Water Users' Associations Ordinance (1982) to govern the associations at the watercourse level.

## **1.3. ORGANIZATION OF THE REPORT**

This chapter presents the introduction to the report. Chapters 2 and 3 are reviews of the existing legal frameworks of the Punjab and Sindh Provinces, respectively. Chapter 4 addresses the views of the water users and related agencies and Chapter 5 contains model laws. Recommendations are presented in Chapter 6.



## CHAPTER 2

### REVIEW OF LEGAL FRAMEWORK: PUNJAB

#### 2.1 THE CANAL AND DRAINAGE ACT (1873)

##### 2.1.1. A Brief Summary

The Canal and Drainage Act (1873) is the main legislation relating to irrigation in the Punjab province. In some areas like Rawalpindi, Dera Ghazi Khan, Muzaffar Garh, the Punjab Minor Canals Act (1905) deals with minor canals sprouting mainly from hill torrents and are privately owned. At present, this Act applies to some minor canals of Muzaffar Garh and Dera Ghazi Khan and excludes the operation of the Canal and Drainage Act on such canals. The Soil Reclamation Act (1952) also excludes, to some extent, the operation of the Canal and Drainage Act in the notified areas. Under S. 17 of the Soil Reclamation Act, the Soil Reclamation Board may make overriding provisions regarding irrigation, particularly at the watercourse level.

Under the Canal and Drainage Act, almost the entire irrigation network has been entrusted to the Provincial Government through the officers of the Irrigation and Revenue Departments, and Judicial Officers (see pp 11-14).

1. Important policy aspects of irrigation, like the acquisition of water for public use, fixing water rates, appointing canal officers/committees and framing rules have been entrusted to the Provincial Government.
2. Operational functions are entrusted to the canal officers. The pivotal role is played by the Divisional Canal Officer (DCO), with some control exercised by the Superintending Canal Officer (SCO). Important matters under the DCO's control include sanctioning new watercourses, providing water from an existing watercourse, transferring watercourses from one person to another, adjusting claims between persons jointly using a watercourse, stopping the supply of water, levying charges for unauthorised use of water or wastage of water certifying the dues recoverable and deciding appeals against some orders of the Sub-divisional Canal Officer.
3. The Sub-divisional Canal Officer has also been given an important role in irrigation administration. Important matters such as *warabandi* and dispute resolution fall within his domain. He also exercises concurrent jurisdiction with the DCO to sanction new watercourses and to adjust claims from joint users.
4. The actual fieldwork is done by the *Zilledar* and the canal *Patwari*. The canal *Patwari*, the lowest position in the irrigation hierarchy, measures irrigated land, deals with crop cultivation and assesses water rates for individual owners, etc. The *Zilledar* supervises the work of the canal *Patwari*.
5. The Revenue Administration helps the Irrigation Department to acquire land, determine compensation, collect water dues, appeal against/revise the orders of Canal Officers regarding levying charges for wasting water/unauthorized use of water. The Collector (Deputy Commissioner) plays the main role, with the

Commissioner and the Board of Revenue exercising some appellate/revisional authority.

6. Offences under the Canal and Drainage Act can be tried by Magistrates.
7. Disputes between water users, which are initially determined by the Sub-divisional Canal Officers and Divisional Canal Officers, may be taken to civil courts that have the jurisdiction to set aside, or modify, the decisions of canal officers.
8. Water users are responsible for maintenance, repair, cleaning and improvement of the watercourse, as well as for providing crossings.
9. Irrigation Committees, consisting of three or more local cultivators, can also be constituted by the Government to assist the canal officers in dealing with offences under the Canal and Drainage Act.

Thus, we find that the entire irrigation administration is entrusted to the bureaucracy, with almost nothing in the hands of water users. Consequently, there is no scope under this law for the effective role of water users' organizations as envisaged by IIMI-Pakistan.

### **2.1.2 Important Sections of the Canal and Drainage Act (1873)**

#### **2.1.2.1. Part-I Preliminary**

S. 1-3 Title and Interpretation.

#### **2.1.2.2. Part-II Application of water for public purpose**

S. 4. The appointment of Canal Officers by the Provincial Government.

S. 4 A. Appointment of Irrigation Committees by the Provincial Government for irrigation purposes.

S. 5. Acquisition of any source of water by the Provincial Government for irrigation purposes.

S. 7. Canal Officer, under the orders of the Provincial Government, may enter any land etc., for such application of the said water.

S. 7. Notice or claims of compensation by the Collector.

S. 8. No compensation for certain damage, etc..

Ss 9-13. Repealed.

#### **2.1.2.3. Part-III Construction and maintenance of work**

S. 14. Any Canal Officer may enter any land and carry out surveys. Compensation is payable for damage.

- S. 15. The Divisional Canal Officer, or anyone acting under his orders, may enter for purposes of repair, or to prevent any accident. Compensation is payable for damage.
- S. 16. Procedure for sanction and construction of a new watercourse (application for a new watercourse to the Divisional Canal Officer or Sub-divisional Canal Officer, approval of Superintending Canal Officer).
- S. 17. The Provincial Government responsible for providing crossings over canals (five or more owners may apply; Collector to make inquiry and report to the Government).
- S. 18. The Divisional Canal Officer may ask the users of a watercourse to construct or repair any bridge crossing, to pass water across any road, etc., and if the users fail to do so, the Divisional Canal Officer may get it constructed and recover the cost through the Collector.
- S. 19. Adjustment of claims between joint users; Divisional Canal Officers or Sub-divisional Officer, on application, may pass order, or appeal to the Commissioner, for amount due recoverable as arrears of land revenue.
- S. 20. Supply of water through an existing watercourse or change of water supply source; application to the Divisional Canal Officer - Divisional Canal Officer's order to be confirmed by the Superintending Canal Officer.
- S. 20 A. The Provincial Government may authorise the Divisional Canal Officer to take *suo motu* proceedings under Section 20.
- S. 20 B. The Divisional Canal Officer may cut off the water supply; confirmation by the Superintending Canal Officer.
- S. 21. Acquisition of land for the purpose of Sections 20, 23 and 68; application to the Divisional Canal Officer.
- S. 22. Procedure of acquisition.
- S. 23. The Divisional Canal Officer, on application, may transfer a watercourse from one person to another; confirmation by the Superintending Canal Officer.
- S. 24. All land in the province subject to acquisition.
- S. 25. The Superintending Canal Officer may entertain any objection against notice under Section 22.
- S. 26. The owner of the land may accept the award of compensation, or file an appeal before the Commissioner.
- S. 27. The Collector, Commissioner and Canal Officer have been vested with some powers of civil court in relation to cases before them.

S. 28. When proceedings under S.25 are completed and possession is delivered, the Divisional Canal Officer may allow the construction of a watercourse after the payment of compensation for any damage.

S. 29. Conditions imposed on a person who is put in occupation of land for the construction of a new watercourse:

- i. to be constructed in one year;
- ii. passage across road, etc, to be constructed; and
- iii. land not to be used for any other purpose.

S. 30. Procedure for alteration; above conditions to apply.

#### 2.1.2.4 Part-IV Supply of water

S. 31. Water supply rates and other conditions are to be determined by contract; in the absence of a contract, to be determined by rules. But, conditions laid down in Section 32 must be observed.

S. 32. (1) The Divisional Canal Officer may not stop the water supply, except when necessary to execute any work ordered by a competent authority, or the watercourse is not being maintained properly and water is wasted, or for a limited time up to 12 days fixed by the Divisional Canal Officer, or more than 12 days by the Superintending Canal Officer (read with Rules 15-18).

(2) No compensation is payable if water is stopped for:

- a) reasons beyond the control of the Provincial Government, or
- b) repair, alteration or addition to the canal, or
- c) measures taken to regulate the flow of water, or
- d) maintaining the established course of irrigation.

(3) In other cases, compensation is to be determined by the Collector.

(4) If water is supplied for one crop, availability will stretch the maturity of the crop; if fixed for more crops over a year; available for one year.

(5) No sale or sub-letting of water without the permission of the Superintending Canal Officer, except its use by tenants.

(6) Contracts between the Provincial Government and owner, etc., to be transferable when land is transferred.

(7) Part IV of the Limitation Act (1877) is not applicable. The Provincial Government is not bound to supply water, except under a contract.

#### 2.1.2.5. Part-V Water rates

S. 33. Unauthorised use of water; the Divisional Canal Officer is to levy charges under rules:

- a) If through any watercourse from the persons responsible/owner of land benefited/all users of a watercourse.
- b) If through other channels, from the person responsible/owner of land deriving benefit.

S. 34. Water running to waste; the Divisional Canal Officer may recover from the person responsible/users.

S. 35. Orders under S. 33

- a) appeal to the Superintending Canal Officer if the amount is up to 3 times the occupiers' rates; to the Commissioner if the amount is more; and
- b) thereafter, revision by the Commissioner and the Board of Revenue, respectively.

Orders under S. 34

- (a) appeal to the Collector; and
- (b) thereafter revision by the Commissioner.

S. 36. Rates (occupier's rates) to be fixed according to the Rules framed by the Government.

S. 37. The Government may, by Rules, impose the owners' rates.

S. 38. Limit on the owners' rates.

S. 39. Owners' rates not chargeable when land is temporarily assessed.

Ss. 40-43. Repealed.

S. 44. Water rates are payable by the manager, etc, when land is owned by joint owners.

S. 45. Certified dues are recoverable through the Collector as arrears of land revenue.

S. 46. The Divisional Canal Officer, or Collector, may enter into a contract with any person for the collection of dues.

S. 47. The Collector may ask the *Lumbardar*, or any other person, to collect the dues.

S. 48. Fines are not covered under Sections 45, 46 and 476.

2.1.2.6. Part-VI      Navigation

Ss 49-54. Navigation in the canals.

2.1.2.7. Part-VII      Drainage

Ss 55-62. Drainage of water from fields, land, etc..

2.1.2.8. Part-VIII      Labor

S. 64. The Provincial Government may direct the Collector to ascertain the proprietors whose villages benefit and set down in a list the number of laborers to be furnished by such proprietors, etc..

S.65 The Divisional Canal Officer may require a person mentioned in S. 64 to provide the labor (not more than his fixed share) if some work is to be done to avoid any public loss and it cannot be done in a routine manner. The Provincial Government may fix rates to be paid to the laborers. The Provincial Government may apply this section, permanently, or for the time being, for silt clearance, etc..

2.1.2.9. Part-IX Jurisdiction

S.67 Unless otherwise provided, any claim against the Provincial Government may be tried by a civil court, but no order shall affect any existing crop.

S. 68. - The settlement of disputes of water users:

- (a) application to Sub-divisional Canal Officer, who may decide a dispute or refer it to the Collector.
- (b) appeal to the Divisional Canal Officer against the decision at (a) above.
- (c) Suit in the civil court after (a) and (b) above.

S. 68. An interruption in water supply when the watercourse is dismantled; the Canal Officer may, on application, restore the same, pending the decision under S. 68.

S. 68. The canal officers, etc., are vested with powers to examine witnesses, etc..

S. 69. Offences relating to the irrigation are enumerated. These offences can be tried by a Magistrate.

S. 70-A. A fine imposed by the court may be paid as compensation to the person injured, or as a reward to the informant.

S. 71. A person may be tried under any other law for an offence under this law.

S. 72. Similar to S. 70-A.

S. 73. Any one in charge of, or employed upon, a canal may arrest a person without a warrant and take him to the Magistrate.

### **2.1.3. Powers and Functions of Officers etc. under Canal and Drainage Act (1873)**

2.1.3.1. Provincial Government	Appointing of Canal Officers.	S.4
	Appointing of Canal Committees to assist the Canal Officers.	S.4-A
	Acquiring of water, including underground water.	S.5
	Ordering the Canal Officer to enter any land and do needful acts for application of water.	S.6
	Providing crossings over canals.	S.17
	Directing the Divisional Canal Officer to commence proceedings under Sec. 20. (Supply of water from existing watercourse and change in the source of supply of water.)	S. 20-A
	Determining the occupiers' rates by framing rules.	S.36
	Determining the owners' rates by framing rules.	S. 37
	Directing the Collector to determine the provision of labor for canal work.	S. 64
	Determining the rates of payment for labor.	S. 65
	Determining the class of Magistrate to try the Canal Offenses.	S. 70
2.1.3.2. Board of Revenue	Revision against orders of the Commissioner under S. 33-34.	S. 35
2.1.3.3. Commissioner	Appeals against the orders of the Sub-divisional Canal Officer and Divisional Canal Officer (adjustment of claims).	S. 19
	Appeals against the decisions of the Collector under S. 25 regarding the acquisition of land after determination by the SCO.	S. 26
	Revision against the decision of the Collector under S.35(4) (appeal against order of the DCO, water running to waste, S.34).	S. 35(5)
	Appeals against orders of the DCO under Section 33-34.	S. 35
	Revision against decision of the Collector under Section 34 (water running to waste).	S. 35
2.1.3.4. Collector	Notice for compensation.	S. 7
	Notice for acquisition.	S. 22

	Acquisition of land after determination by SCO and determination of compensation.	S.25
	Appeals against order of DCO under Section 34 (water running to waste).	S.35(4)
	Collection of water dues as arrears of land revenue.	S. 45
	Requiring the Lumberdar to collect dues.	S. 47
	Dispute referred by SDCO.	S. 68
2.1.3.5. Superintending Canal Officer	Power to enter any land and carry out survey work.	S.14
	Confirmation of the orders of the Divisional Canal Officer regarding the sanction of a new watercourse.	S.16
	Confirmation of the orders of the Divisional Canal Officer regarding the supply of water, etc..	S.20
	Confirmation, or variation, of orders of the Divisional Canal Officer regarding cutting the supply of water.	S. 20-B
	Confirmation of orders of Divisional Canal Officer regarding the transfer of a watercourse.	S. 23
	Entertaining and deciding objections against a notice under S. 22 (acquisition of land for a new watercourse).	S.25
	Entertaining appeals against orders of the Divisional Canal Officer under S. 33, 34 (unauthorised use of water and water running to waste, respectively).	
2.1.3.6. Divisional Canal Officer	Power to enter any land and carry out survey work.	S. 14
	Sanctioning a new watercourse (confirmation by the SCO).	S. 16
	Directing the water users to construct bridges, crossings, etc..	S. 18
	Adjustment of claims between persons jointly using a watercourse.	S. 19
	Sanctioning the supply of water from an existing watercourse.	S. 20
	Initiating proceedings under S. 20 under the directions of the Provincial Government.	S. 20-A
	Cutting off the water supply.	S. 20-B.
	Application for acquisition of land regarding Sec. 20, 23 & 68.	S. 21



	Transferring a watercourse from one owner to another.	S. 23
	Permission to construct a new watercourse.	S. 28
	Levying charges; unauthorized use of water.	
	Levying charges; water running to waste.	S. 34
	Certification of the dues (water rates) recoverable.	S. 45
	Agreement for collection of water dues.	S. 46
	Ordering the irrigators/owners to provide labor.	S. 65
	Appeals against orders of the Sub-divisional Canal Officer (regarding the settlement of disputes).	S. 68
	Providing interim relief regarding disputes.	S. 68
2.1.3.7. Sub-divisional Canal Officers	Making adjustment of claims for joint users.	S. 19
	Enter any land and carry out survey work.	S. 14
	Sanction a new watercourse.	S. 16
	Settle disputes (determine himself, or refer to the Collector).	S. 68
	Warabandi under S. 68.	S. 68
2.1.3.8. Zilledar	Checking the work of the Canal <i>Patwari</i> ; final measurement.	Rules framed by Government
	Inquiring into unauthorised use and waste of water.	-do-
	Safeguarding the canal works under S. 73.	-do-
	Conducting inquiries and investigation of offences under S. 70.	-do-
	Collection of <i>taccavi</i> works.	-do-
	Maintenance of Registers, including:	
	i. Gauge and Discharge Register	
	ii. Irrigation Register	
	iii. <i>Shudkar</i> (Initial)	
	iv. <i>Khasra</i> (Final)	
	Arrest any person without a warrant and take him to the Magistrate.	S.73
2.1.3.9. Canal <i>Patwari</i>	Making the initial measurement of irrigated land ( <i>Shudkar</i> ).	Rules framed by Government
	Making the final measurement of the crop area.	-do-
	Preparing demand slips.	-do-
	Maintaining records.	-do-

2.1.3.10. *Lumberdar*

Collection of canal dues (under S.47).

Rules framed by  
Government

Liaison between irrigators and canal  
officers, etc..

-do-

Reporting breaches, damages, etc., to the  
Canal Officers.

-do-

## **2.2. THE PUNJAB WATER USERS' ASSOCIATION ORDINANCE (1981)**

### **2.2.1. Introduction**

The On-Farm Water Management and Water Users' Associations Ordinance (1981) provides some involvement for irrigators in water management at watercourse level through the water users' associations. The salient features of this legislation are:

1. The Ordinance is an extremely effective law, even though it was enacted by the Martial Law regime. In fact, it overrides all other laws in such matters under its cover.
2. The formation of water users' associations at the watercourse level is provided for.
3. The Field Officer (Director, OFWM) has substantial control over these associations; he has the final authority to register, or refuse registration to, a water users' association.
4. More than 50% of the water users of a watercourse may form an association and apply to the Field Officer for registration.
5. The Watercourse Association does not have any management power relating to canal water under this Ordinance.
6. The Field Officer may entrust the maintenance of a watercourse to the Association, but this must be carried out to the satisfaction of the Field Officer.

Thus, ineffective water users' associations at the watercourse level have been anticipated under this Ordinance. In view of the IIMI-Pakistan scheme, this Ordinance does not serve much purpose for use. Substantial amendments would be needed to accommodate the said scheme.

### **2.2.2. Defects and Deficiencies**

The consultant feels that the following defects or deficiencies, particularly, have rendered the Ordinance almost useless for the purpose of introducing and developing effective water users' associations in the Punjab Province.

#### **2.2.2.1. The Field Officer's Role**

The Field Officer (Director, OFWM) has been given a dominant role vis-a-vis the water users and water users' associations. The following provisions are particularly pertinent.

- (a) The Field Officer has the power to direct the irrigators to undertake reconstruction, maintenance or improvement of any watercourse. Although he is required to provide an opportunity to the Water Users' Association, if any, to do the necessary work, the irrigators/association must execute the work to the satisfaction of the Field Officer. If the irrigators/association fail to execute the work to the satisfaction of the Field Officer, he may take necessary steps to get the work done and recover its cost from irrigators/association (Section 3).
- (b) The Field Officer may inspect the maintenance of a watercourse from time to time and give necessary instructions to the irrigators. (S. 5).
- (c) The powers of registration of a Watercourse Association have been exclusively vested in the Field Officer. The decision of the Field Officer granting, or refusing to grant, registration to an Association is final and cannot be called in question in any court, or before any authority (S.6). Thus, an appeal to a higher authority is not provided against the decision of the Field Officer in granting, or refusing to grant registration, to an Association. Moreover, whether a person is, or is not an irrigator, is also to be decided by the Field Officer and an appeal against such a decision (S.6) cannot be made. The Ordinance even attempts to exclude the jurisdiction of the courts in this matter. But, this attempt is sure to fail because the courts have jealously been protecting their jurisdiction and have often successfully wriggled out of such ouster clauses.
- (d) The certificate of registration granted by the Field Officer is conclusive proof of the Association's due registration under the Ordinance. Accordingly, it creates an irrebutable presumption in favour of the registration of an association. (S. 7).
- (e) All disputes touching the business of an Association are to be referred to the concerned Field Officer. The jurisdiction is discretionary and decisions pertaining to such disputes are final and cannot be appealed before any authority (S.9).
- (f) The Field Officer has the authority to cancel the registration of an Association, *inter alia*, on the ground that the Association has failed to perform its duties. On such cancellation he can pass necessary consequential orders regarding the Association's assets, its payment to members, its winding up and the return of all articles, vehicles or instruments given to the Association by any government agency. (S. 10)
- (g) The Field Officer may, on his own, and shall, on the application of a creditor/contributory, examine the conduct of any person who appears to have misapplied, misappropriated or retained any money or property of the Association. As a result thereof, the Field Officer may make an order requiring that person to repay/restore the money/property; in case that person fails to comply the said amount may be recovered in lieu of land revenue arrears (S.11).
- (h) In addition to the above-mentioned powers, the Government may invest a Field Officer with the powers of the Collector to recover any amount due under the Ordinance as arrears of land revenue as provided in the Land Revenue Act (1967).

The power to recover the arrears of land revenue is a drastic power which, if misused, can severely affect the irrigators.

Thus, we find that the Field Officer has been placed in an autocratic position over the irrigators and Water Users' Associations. Accordingly, the Ordinance has not made any improvement with relation to the domination of bureaucracy over the irrigators. The master has merely changed; initially, from the Irrigation Department/Canal Officer, to the Agriculture Department/Field Officer.

The consultant feels that this aspect needs re-consideration and review in order for the Field Officer's role to be curtailed.

#### 2.2.2.2. Constitution of the Watercourse Association

The Ordinance has not provided for the constitution of the Water Users' Associations. The qualifications of Association members have not even been given yet. The majority of irrigators along watercourse can form an Association which, when registered by the Field Officer, shall become operative under the Ordinance. Similarly, the Ordinance does not provide for Association managing bodies. The definition of an irrigator is also not comprehensive, e.g., it does not include the representative of joint owners, etc.. The concept of 'member in good standing' has not been incorporated in the Ordinance.

These aspects appear to have been left for determination by the rules framed by the Government under S. 14 of the Ordinance. Pertinent to point out is that the constitution of the Water Users' Associations is an important policy decision, which must be determined by the primary legislation and should not be entrusted to any government agencies to deal with it through delegated legislation.

Accordingly, necessary amendments should be made in the Ordinance to provide for the constitution of the water users associations and its managing bodies.

#### 2.2.2.3. Role of the Watercourse Association

The Ordinance envisages ineffective and weak Water Users' Associations. These Associations have been given a very limited role in the affairs of a watercourse. For example, the Association has no power over the operation of a watercourse, its water delivery schedule, dispute resolution, punishment/fine for unlawful activity, etc.. Thus, such an association does not fit into the scheme of participatory irrigation management being developed by IIMI-Pakistan. In order for this to happen the Water Users' Associations must be given clear and effective roles in the affairs of a watercourse. The Associations must be vested with necessary powers to manage these affairs.

Similarly, the purpose of forming Water Users' Associations must clearly be given in the statute. Adopting a multi-functional approach is advisable so that these Associations are also able to perform other related functions. The primary purpose of forming a Water Users' Association should be related to irrigation, while the

secondary purpose may encompass other cooperative activities in the field of agriculture.

#### **2.2.2.4. Registration Process**

The process of registration provided under the Ordinance is defective. Section 6(2) of the Ordinance provides that a Water Users' Association shall not be registered unless the office bearers have been duly elected, the bylaws of the Association have been framed and an account in a scheduled bank has been opened. Thus, the cart has been put before the horse. All these activities can only be carried out after the Association has been duly registered. The N.W.F.P. Ordinance, for example, provides that an association shall, within thirty days of the approval of the list of members, elect the office bearers, approve bylaws and open an account [S. 6(9)].

#### **2.2.3. Conclusion**

Substantial amendments are needed in the law relating to the Water Users' Associations in the Punjab province; otherwise, useful and effective Water Users' Associations cannot be formed in the province. The concerned quarters must make serious efforts, on a priority basis, to bring about necessary changes in the legal framework of participatory irrigation management.

Encouraging to note is that other provinces, perhaps drawing from the experience in the Punjab province's legislation, have drafted more improved water users' associations laws. The N.W.F.P., in particular, came up with a very good Ordinance in 1982, from which the Punjab province can learn much.

### **2.3. THE PUNJAB IRRIGATION AND DRAINAGE AUTHORITY ACT (1997)**

#### **2.3.1. Salient Features**

- (1) The recently-promulgated Punjab Irrigation and Drainage Authority Act (1997) has substantially changed the organizational set-up of the Irrigation Department. The Act provides for the establishment of the Punjab Irrigation and Drainage Authority, a body corporate having the power to acquire, hold and dispose of property, and sue, or be sued, in its own name. However, the constitution of the Authority has not been provided by the Act, which the Government has been left to determine.
- (2) The management of the Authority's affairs has been vested in the Board of Management, appointed by the Authority with the approval of the Provincial Government.
- (3) The Authority has been vested with vast powers relating to drainage and irrigation in the Province. All the powers available under the Canal and Drainage Act (1873), the Soil Reclamation Act (1952) and other laws relating to these subjects have been entrusted to it. Control over all the water resources in the province.

subject to the Indus Water Treaty (1960) and the Water Apportionment Accord (1991), has been given to the Authority.

- (4) The Authority is required to formulate, adopt and implement policies for the promotion, formation and growth of Area Water Boards at the canal level and Farmer Organizations at the distributary and minor levels.
- (5) All the employees of the Irrigation Department, except those specified by the Provincial Government, have been placed under the employment of the Authority on existing, or better, terms and conditions of service.

### **2.3.2. Defects and Deficiencies**

The Act is not a comprehensive piece of legislation; the consultant feels that there are a number of serious defects and deficiencies in this Act and substantial amendments would be needed in order to make it meaningful and useful. In particular, the following aspects need serious reconsideration:

#### **2.3.2.1 Composition of the Authority**

Section 3 of the Act provides that the Authority (PIDA) shall consist of such members, one of whom shall be its Chairman, as may be notified by the Government. This provision gives exclusive power to the Government in all matters relating to the members, (i.e., their numbers, qualifications, appointments, terms of office and vacation allocations), the meetings of the Authority and rules of business, etc.. Although this section provides that at least six members of the Authority shall be farmers and that the number of non-farmer members shall not exceed the number of farmer members, the Government will still be able to make appointments at its own will. The chairman must be a suitably qualified and independent person and the Authority must have irrigator representatives. The consultant feels that the existing provisions will render the Authority completely subservient to the Government. The Act must provide for an independent Authority that can function without unnecessary official influence.

#### **2.3.2.2. Control over Provincial Water Resources**

A technical error in Section 8 refers to the Water Apportionment Accord (1991). This Accord is not a permanent arrangement; the Council of Common Interests, established under the Constitution of Pakistan, can alter it in the future. "Water Apportionment Accord for the time being in force", is how it should read.

#### **2.3.2.3. The Budget, Audit and Accounts**

Section 13 of the Act provides that the budget of the Authority shall be approved and its accounts be maintained and audited in such a manner as may be prescribed. Who may prescribe it is unclear. Perhaps this will be clarified when rules are framed by the Government. Here, again the Act has not addressed this important matter properly, which has been left undecided and dependent on the free will of the Government.

There shall be detailed provisions in the Act relating to accounts, financial statements, audit and other related financial matters. As an alternative, such provisions must be made through delegated legislation (Rules/Regulations).

#### 2.3.2.4. Constitution of the Area Water Boards

Section 14 empowers the Government to establish Area Water Boards (AWBs) and assign to them such functions as it may deem fit. Thus, the constitution of the AWBs, their membership, territorial jurisdiction, meetings, powers and functions, etc., are entirely in the hands of the Government, which may establish weak AWBs and may assign them ineffective roles in the irrigation system. Therefore, it is suggested that the law be amended to provide for these matters.

#### 2.3.2.5. Function of the Area Water Boards

The functions and powers of AWBs have not been spelled out in the Act. This aspect has been left to the Government's discretion. The AWBs will not be able to play effective roles in the new irrigation system unless these are entrusted with meaningful responsibilities and given commensurate powers for that purpose. The consultant feels that the functions entrusted to AWBs, under the SIDA Act (1997), may also be entrusted to AWBs under this Act.

#### 2.3.2.6. The Farmers Organizations

- (1) To begin with, the term Farmers Organizations (FOs) is misleading, or, at least, ambiguous. The Act essentially deals with the subject of irrigation and, therefore, should have catered for the organizations/associations of irrigators/water users. The broader term of Farmers Organizations may lead to complications relating to the constitution of these organizations. This term may be retained if the membership of the FOs is restricted to the irrigators; otherwise, it should be substituted by the water users associations/organizations.
- (2) The constitution of the Farmers Organizations is also not given in the statute, thus, leaving it to the Government's discretion. This, too, needs reconsideration. The constitution of the FOs must be provided by the statute itself.
- (3) The Farmers Organizations are available at distributary and minor levels. The provision for such organizations form part of the distributary level in order to cater for watercourses to acquire water directly from the distributaries, is also desirable.
- (4) The Act does not make any mention of Water Users' Associations at the watercourse level, which leads to the conclusion that such associations will continue to be governed by the Water Users' Associations Ordinance (1981).
- (5) The functions of the Farmers Organizations must be clearly spelled out by the statute. The following functions are suggested for FOs to perform:

- (a) operate, manage and improve the irrigation and drainage infrastructure;
- (b) obtain irrigation water from the Authority, or AWB concerned, at the head of the minor, or the distributary, and supply the same to their members and other users, if any;
- (c) receive the drainage effluent from their water users and convey the same through field/collector drains to the designated nodal points of the drainage system;
- (d) collect the agreed water charges/other dues from its water users and deposit these with the Authority or AWB concerned;
- (e) engage, hire or employ any consultants, advisors and employees; and
- (f) any other power and functions which may be vested in the FOs under the regulations and bylaws framed by the Authority and the Farmers Organizations.

#### 2.3.2.7. Rules/Regulations/Bylaws

Section 16 empowers the Government to frame the Rules for purposes of carrying out the Act. Similarly, Section 17 empowers the Authority to make Regulations for the administration and management of the Authority. However, the division of responsibility between the Government and the Authority is not clearly given. The Regulations have been made subservient to the Rules framed by the Government and, therefore, the Authority will be able to frame Regulations on such subjects which are not covered by the Rules framed by the Government and, if the Government occupies substantial area by the Rules, the Authority will become subservient to the Government.

That this important issue be determined by the Act is desirable. The consultant feels that three tiers of delegated legislation be provided, as described below:

- a. Rules by the Government.
- b. Regulations by the Authority.
- c. Bylaws by the Farmers Organizations (with the approval of the AWB/Authority).

Similarly, the subjects to be covered by Rules, Regulations and Bylaws should also be specified by the Act. The following divisions are suggested:

- 1. Government may frame Rules to carry out the functions vested in them by the Act.
- 2. Authority may frame Regulations to carry out the functions vested in it by the Act.
- 3. The Farmers Organizations shall frame Bylaws to carry out the functions suggested in the proceeding chapter.



## **CHAPTER 3**

### **REVIEW OF EXISTING IRRIGATION LAWS: SINDH**

#### **3.1. THE SINDH IRRIGATION ACT (1879)**

##### **3.1.1. A Brief Summary**

The Sindh Irrigation Act (1879) is the main enactment relating to irrigation in the Province of Sindh. Under this Act, the entire task of irrigation has been entrusted to the Provincial Government, Canal Officers, the Revenue Department and judicial officers (see pp 22-23).

1. Important policy aspects of irrigation, like the appointment of the Canal Officers, acquisition of water for public use, payment of compensation, water rates, drainage schemes, canal crossings and framing the rules, have been entrusted to the Provincial Government.
2. Operational functions are entrusted to the Canal Officers but the Act does not specify which Canal Officers are empowered to act under any of its provisions. Therefore, a Canal Officer must be duly authorised by the Provincial Government to act under any provision of the Act.
3. The Revenue Administration helps the Irrigation Department to acquire land, determine compensation and collect water dues. Moreover, the Commissioner and Collector have substantial powers to settle disputes among irrigators and can decide appeals against the decisions of the Canal Officers. Thus, the Canal Officers are substantially subservient to the Revenue Department.
4. The offences under the Act can be tried before the Magistrate.

Thus, we find that the irrigation administration is entrusted to the bureaucracy and there is no role for the, water users. Consequently, there is no scope under this law for any role of water users associations as envisaged by IIMI-Pakistan.

##### **3.1.2. Important Sections of the Sindh Irrigation Act (1879)**

###### **3.1.2.1. Part I Preliminary**

- S.1-3. Title, Interpretation, etc..  
S.4. Appointment of Canal Officers by the Provincial Government or any Crown Servant.

###### **3.1.2.2. Part II Construction and Maintenance**

- S.5. Declaration regarding use of water for canal irrigation by the Provincial Government.  
S.6. A Canal Officer may occupy any land to carry out survey work, etc..  
  
S.7. A Canal Officer may enter any land to conduct an inquiry etc..  
S.8. Power to inspect and regulate water supply.  
S.9. Power to enter for repairs and to prevent accidents.  
S. 10. Notice to occupier of building regarding entry under S. 7,8, 9.

- S. 11. Suitable means of crossing to be provided by the Provincial Government.
- S. 12. Removing obstruction in any river, channel etc..
- S. 13. Order any person to remove such obstruction.
- S. 14. Canal Officer may remove such obstruction and recover expenses.
- S. 15. Drainage Schemes to be prepared by the Provincial Government.

#### 3.1.2.3. Part III Watercourse

- S. 16. Permission for the construction of new watercourse by agreement.
- S. 17. Construction without agreement.
- S. 18. Procedure for the construction of a new watercourse
- S. 19. Collector to acquire land for the purpose of irrigation.
- S. 20. Canal Officer may deliver possession of a watercourse after payment of dues.
- S. 21. Obligations of the owner of a watercourse.
- S. 22. Private agreement/orders of Canal Officer for use of watercourse by non-owners.
- S. 23. Permission to use an existing watercourse, or to declare a person a joint owner of a watercourse.
- S. 24. Land acquired for a watercourse is not to be used for other purposes except by the permission of a Canal Officer duly authorized.
- S. 25. Repair of watercourse by the Canal Officer if the owner fails to comply.
- S. 26. Settlement of disputes by the Canal Officer with the consent of the concerned parties; if consent is non-existent the Canal Officer must transfer the case to the Collector.

#### 3.1.2.4. Part IV Supply of Water

- S. 27. Application for supply of water to the Canal Officer on the prescribed form as determined by the Provincial Government. Supply of water for non-irrigation purposes by the Canal Officer, sanctioned by the Provincial Government.
- S. 28. Cutting of water supply by the Canal Officer.
- S. 29. Supply for a crop to continue up to its maturity.
- S. 30. (1) Right to irrigation is transferable with land – presumption.  
(2) Transfer of water (otherwise) by permission of the Canal Officer.

#### 3.1.2.5. Part V Award of Compensation

- S. 31. Compensation for ascertainable damage, but no compensation in specified cases.
- S. 32. Claims entertainable within 12 months.
- S. 33. Repealed.
- S. 34. Compensation for damage due to entry under Sections 6, 8 and 9 - tender of compensation by the Canal Officer concerned; if not accepted the Canal Officer is to refer the case to the Collector.
- S. 35. Award of compensation by the Collector for interruption of water supply.
- S. 36. The decision of the Collector is final unless appealable according to the Rules.
- S. 37. Notice of acquisition of water by the Provincial Government through the Collector.  
Notice for acquisition of land or claims of compensation by the Collector.
- S. 38. Claims for compensation (except S. 34, 35) to the Collector.
- S. 39. The Collector to be guided by Land Acquisition Act (1870).
- S. 40. Determination of compensation.
- S. 41. Compensation due after three months.

S. 42. Abatement of inferior land holders revenue.

#### 3.1.2.6. PART VI Water Rates

S. 44. Water rates to be determined by the Government.

S. 45. Un-authorized use of water ... charges from the person responsible; if the person is not identified from the owner of the land which derived benefit; if no benefit is derived by any land, charges leviable from all persons chargeable for the use of the watercourse.

S. 46. When water runs to waste, charges leviable from the person responsible; if not identified, from all chargeable for the use of the watercourse.

S. 47. Charges recoverable as water rates.

S. 48. Water rates chargeable if percolation gives benefit to any land, or well, within 200 years.

S. 49-56. Repealed.

S. 57. Water rates payable in a manner and by a person to be determined by the Provincial Government.

- Arrears to be recovered as arrears of land revenue.

#### 3.1.2.7. Part VII Labor

S. 58. The Canal Officer may direct every able-bodied person residing in the vicinity and whose name is included in the list (S. 59) to work - payment to labor.

S. 59. List of laborers by the Collector.

S. 60. Report by the Canal Officer to Collector.

S. 61. Penalties meted by the Magistrate.

S. 62. Endangering stability of the canal - fine of Rs. 200 and imprisonment up to six months, decided by the Magistrate.

S. 63. Obstruction/damage to be repaired - cost to be paid by the person responsible.

S. 64. Arrest without warrant of offender by the Canal Officials.

S. 65. Prosecutions under other laws intact.

S. 66. Fine may be paid as reward to the informant.

S. 67. Appeals against the orders of the Canal Officers under Sections 13, 18, 25, 30, 45, 46 & 48 - Supervision and control of the Revenue Commissioner.

- Ordering any person to remove obstruction (13).
- Construction of a new watercourse (18).
- Under S. 21, the owner of a watercourse is to provide the necessary works and keep it fit for irrigation; if he fails the Canal Officer may do the needful after serving a notice.
- Transfer of water use (30).
- Levy of charge for un-authorized use of water (45).
- Levy of charge when water runs to waste (46).
- Levy of charges for land deriving benefit from percolation etc. (48).

S. 68. Power to summon and examine a witness.

S. 69. Service of notice.

S. 70. Rules to be framed by the Provincial Government.

### **3.1.3. Powers And Functions Of Officers/Authority Under the Sindh Irrigation Act (1879)**

3.1.3.1. Provincial Government	Appointment of Canal Officers.	S. 4
	Declaration regarding the use of water for canal irrigation.	S. 5
	Providing suitable means to cross the canal.	S. 11
	Removing obstructions in canals.	S. 12
	Preparing drainage schemes.	S. 15
	Prescribing forms for application for the supply of water.	S. 27
	Sanction of water for non-irrigation purposes.	S. 27
	Payment of compensation.	Part-V
	Determination of water rates.	S. 44
	Fixing the manner of payment for water rates, and the person by whom payable.	S. 57
	Framing the Rules under the Act.	S. 70
3.1.3.2. Revenue Commissioner	Determining the manner and the person who is to pay rates (concurrent with the Provincial Government).	S. 57
	Revision against the decisions of the Collector in appeals under S. 67.	S. 67
3.1.3.3. Collector	Acquisition of land for watercourse.	S. 19
	Settlement of disputes if parties don't agree on arbitration of the canal officer.	S. 26
	Determination of compensation for damage (done due to work under S. 6,8 & 9) if the compensation tendered by the canal officer is not accepted.	S. 34
	Determination of compensation for the interruption of water supply.	S. 35
	Notice for acquisition of water by the Government.	S. 37
	Claims for compensation (except S. 34).	S. 38
	Abatement of revenue when water supply is diminished.	S. 42
	Preparing a list of laborers.	S. 59
	Appeals against the orders of a canal officer:	S.67
	1. Ordering any person to remove obstruction (13).	
	2. Construction of a new watercourse (18).	
	3. When the owner of a watercourse fails, the canal officer may order the construction of any work (25).	
	4. Transfer of watercourse (30).	
	5. Charges for unauthorised use of water (45).	
	6. Charges for water running to waste (46).	

7. Land deriving benefit from percolation charges (48).

3.1.3.4. Magistrate

Trial of offences (S. 61, 62).

S. 63

3.1.3.5. Canal Officers

The operational aspect of canal irrigation has been entrusted to the canal officers. But, unlike the Canal & Drainage Act (1873), which is applicable to the Punjab and N.W.F.P. Provinces, the Sind Irrigation Act does not entrust particular powers/functions to a specified canal officer, i.e., Superintending Canal Officer, Divisional Canal Officer or the Sub-divisional Canal Officer, etc.. Therefore, to act under any provision of this Act, a canal officer must be authorised by the Government, or Rules, to do so.

## **3.2. SINDH WATER USERS ASSOCIATION ORDINANCE (1982)**

### **3.2.1. Introduction**

The Sindh Water Users' Associations Ordinance (1982) provides for a three-tier structure comprising the following water users' associations.

- (a) Watercourse Associations
- (b) Distributary Associations
- (c) Canal Associations

These associations may be formed, on a voluntary basis, by the water users of any area. These associations are not fully independent. The Director (OFWM), a government appointee, has supervisory and controlling authority over these associations; he has substantial powers relating to the following matters:

- (a) Registration of the Associations.
- (b) Supervision of the maintenance of the watercourse done by the Associations.
- (c) Inquiries into the affairs of the Associations.
- (d) Preparation of model bylaws of the Associations.
- (e) Approval of the bylaws framed by the Associations.

The Water Users' Associations have the status of corporate bodies with the power to hold, purchase and dispose of property, and to sue, or be sued, in their own names. They also have the power to collect and manage funds, recover dues through the Collector and acquire land for watercourses/tube wells.

### **3.2.2. Watercourse Association (S 4)**

#### **3.2.1. Formation and Registration**

At least 51% of water users of a watercourse may apply to the Director (OFWM) for registration. The Director (OFWM) is required to call a meeting of all the water users of the said watercourse within 60 days. Section 4 (2) refers to resolution passed by 66% of the water users of the watercourse, the significance of such a resolution is not clear, whether it is a precondition for registration, or otherwise, entails some meaningful consequences. The provision appears to have been adopted from the NWFP Water Users Association Ordinance (1981), where it clearly specifies the effect of such a resolution.

In the case of any objection to the registration of any person as a member, an appeal may be filed with the Collector (Deputy Commissioner). The Director (OFWM) is enjoined to issue a certificate of registration, which proves the legal existence of the association.

#### **3.2.2. Powers of the Watercourse Association**

The Watercourse Association has been granted substantial powers relating to maintenance and the improvement of a watercourse, fixing water schedules, employing of labor and general, or special, assessments, etc.. Section 7 of the Ordinance enumerates the following powers of the Watercourse Association.

- (a) operate, maintain, improve and rehabilitate the watercourse;
- (b) improve the water supply from surface or sub-soil water sources;
- (c) sanction upgrading and maintenance of farm ditches and field outlets;
- (d) locate, own, operate and maintain tubewells/lift pumps;
- (c) adopt practices of improved on-farm water use and management, and agricultural input practices;
- (f) establish schedule of water delivery and supervise water allocation and distribution;
- (g) ensure that each member gets his fair share of water at the appropriate time;
- (h) locate, install and maintain drains for fields;
- (i) remove obstructions in the watercourse during realignment, operation and maintenance;
- (j) employ labor for general, or emergency, repairs of the watercourse, or other allied purposes;
- (k) determine and collect general, and special, assessment;
- (l) ensure that all members of the association contribute their shares of labor, or money, for improvement, maintenance and operation of the watercourse in the prescribed manner;

- (m) enter into contracts to obtain loans and grants and to set a repayment schedule; and
- (n) participate in programs to improve watercourse, land leveling and agronomic practices, and lease, own, operate and maintain equipment, structures and other material associated with improvement efforts.

However, these powers are subject to the Rules framed by the Provincial Government under this Ordinance. Therefore, the Provincial Government can curtail these powers through the Rules.

Out of the above powers of the Watercourse Association, some powers are exercisable by the General Body of the Association and others by the Board; broadly speaking, the policy matters are given to the General Body and implementation aspects to the Board.

#### 3.2.2.3. Maintenance of the Watercourse

The future maintenance of an improved watercourse is the responsibility of the Watercourse Association, and must be conducted in accordance with the guidelines laid down by the Director (OFWM). In the case of default, the Director may order the maintenance and recover the expenditure from the Association.

#### 3.2.2.4. Management of the Watercourse Association

- (i) **Board:** The WUA Ordinance has vested the management of the Watercourse Association in a Board consisting of five, or more, private members to be elected by the members of the WUA. Two-thirds of private members are empowered to decide any matter. Private members are elected for a period of two years, but no such member can serve for more than two consecutive terms. In addition, the Provincial Government may appoint up to three official members with no rights to vote.
- (ii) **Officers:** The Ordinance provides for two/three officers to manage the administration of the Association. These are Chairman, Secretary and/cum Treasurer.
- (iii) **General Body:** All the members of the Association constitute the general body of the Association, which has been vested with the main powers of the Association such as, (a) election of the Board (b) resolution of some disputes (c) framing bylaws (d) delegating powers to the Board (e) making the policy of the Association (f) managing finances, including assessment of water rates, fines etc. and (g) undertaking expansion programs.

#### 3.2.3. Distributary and Canal Associations (S.9 & 10)

More than half of the Watercourse Associations in a project area can form a Distributary Association. Similarly, more than half of the Distributary Associations can form a Canal Association. All the chairmen of the Watercourse Associations of a Distributary form the general body of the Distributary Association, and in the same manner, the chairmen of the Distributary Associations form the general body of the

respective Canal Association. The general bodies of Distributary Associations and Canal Associations are required to elect their chairmen, secretaries and treasurers for a term of one year.

The Distributary and Canal Associations do not have any executive powers. These Associations have only two roles; firstly, to make recommendations to the Irrigation Department relating to the distribution of water and construction of minor channels, bridges, etc., and secondly, to serve as a link between the irrigators and the Irrigation Department. The only effective power of the Association is the determination/recovery of the dues payable under the Ordinance.

### **3.2.4. Deficiencies and Amendments**

In a nutshell, the Ordinance is somewhat close to the requirements of the IIMI-Pakistan participatory management scheme. However, it is deficient in some respects, particularly pertaining dispute resolution and the powers and functions of the Distributary and Canal Associations. Thus, the purpose may be served if necessary amendments are effected.

#### **3.2.4.1. Purpose of Associations**

The purpose of forming the Water Users' Associations must be given in the Ordinance. In this context, a multi-functional approach shall be adopted. Thus, along with the primary purpose of the Association (i.e., to perform functions connected to irrigation), the secondary purpose (i.e. to deal with other matters relating to agriculture and social welfare of the people) should also be provided in the Act.

##### **1. The primary purpose of the Association shall be:**

- The operation, maintenance, improvement and rehabilitation of the watercourse;
- The improvement of water supply from surface or ground water; and
- The improvement of On-Farm Water Management.

The secondary purpose of the Association shall be to perform such other functions that relate to obtaining other agricultural inputs and the economic and social well-being of members.

#### **3.2.4.2. Dispute Resolution**

The Water Users' Associations do not have much powers in dispute resolution. Section 15 (1) of the Ordinance provides that a dispute between members of the Association arising under this Ordinance shall be referred to the General Body of the Association, which may settle the disputes, or require the Board of the Watercourse Association to do so. But, it has further been provided that if the dispute relates to a matter which is covered by any law relating to irrigation, it shall be referred to Irrigation Department. Thus, disputes relating to the operational aspect of irrigation



would not fall under the jurisdiction of the Water Users' Associations; only such disputes would come before the Associations which relate to the formation of association, election of office bearers, framing of bylaws, etc..

Therefore, it is suggested that Section 15(1), proviso, and 15(4) be deleted and words "arising under this Ordinance" be deleted from Section 15(1).

#### 3.2.4.3. Appeals

S. 4(5) of the Ordinance allows appeals to the Collector (Deputy Commissioner) against the decision of the Field Officer, only in matters pertaining to the registration of a member; other decisions are not appealable. That other decisions, particularly those relating to the registration of a Water Users' Association, should be challengeable before some higher authority is desirable. Accordingly, it is suggested that an appeal to the Collector shall be provided against all the decisions of the Field Officer.

#### 3.2.4.4. Members in Good Standing

The Ordinance does not distinguish between responsible and irresponsible members belonging to the Association. A horse and a donkey should not be treated alike. The concept of 'member in good standing' must be incorporated in the law. The Ordinance, therefore, needs amendments to cater for this purpose.

1. The definition of 'a member in good standing' be included in the definition clause (S.2); the following new clause may be added in S. 2 of the Ordinance.

"member in good standing," means any member whose payment of assessment is not in arrears for more than one year, or who is not under conviction for a criminal offence, or who is not a minor."

2. Section 5 of the Ordinance be amended so that only 'members in good standing' are eligible to be elected on the Board.

#### 3.2.4.5. Audit

The Ordinance has made no provision to audit the accounts of the Association, which is very essential for any public functionary with authority over finances. A new section should, therefore, be added in the Ordinance to provide for auditing the accounts.

#### 3.2.4.6. Preferential Treatment

The Water Users' Associations must be established on a multi-functional basis so that these can also perform functions, other than irrigation, which are closely related to agriculture. The Associations can perform these functions only when they are given some preferential treatment by concerned government agencies. In view of this requirement, the Ordinance must enjoin government agencies to treat Water Users' Associations on preferential bases.

#### 3.2.4.7. Powers of Watercourse Association

The Association must be expressly vested with powers to impose fines and resolve disputes relating to irrigation management.

### 3.3. The Sindh Irrigation and Drainage Authority Act (1997)

#### 3.3.1. Brief Summary

1. The Sindh Irrigation and Drainage Authority Act (1997), enacted by the Sindh Assembly, is a fairly good piece of legislation. The Act has evolved fundamental changes in the organization, and the working structure of the Irrigation Department in the Province.
2. The Act, in its preamble, clearly spells out the purposes of the law, which include the participation of beneficiaries in the operation and management of the irrigation and drainage network.
3. The Act provides for the establishment of the Sindh Irrigation and Drainage Authority, a body corporate with power to acquire, hold and dispose of property, etc., and to sue or be sued in its own name. Unlike the law in the Punjab Province, this law clearly spells out the constitution of the Authority and addresses the important procedural and other related aspects.
4. The Authority has been vested with almost all possible powers in the field of irrigation, drainage and related matters. All the powers of the Government under the Sindh Irrigation Act (1879), as well as control over the water resources in the Province has been provided. Thus, all irrigation work will be under the control of the Authority.
5. The management of the Authority has been vested in a Board of Management, comprising a Managing Director and four General Managers, to be appointed by the Authority with the approval of the government.
6. The Act makes detailed provisions for the establishment of Area Water Boards on a Canal Command basis. The constitution and functions of these Boards is also provided for; the Farmer Organizations have been given representation on these Boards.
7. The Act provides for formation of the Farmers Organizations at the distributary and minor levels with functions as may be prescribed by the Regulations framed by the Authority, on the Government's approval.
8. The Authority is required to promote the formation, growth and development of Area Water Boards and Farmers Organizations as self supporting entities, and ensure their orderly and systematic induction into the operations of the Authority.
9. The Act makes detailed provisions for the appointment of officers and servants of the Authority, their liability, disciplinary matters, removal, delegation of powers

and transfer of the employees of the Irrigation Department (Wing) to the Authority, etc..

10. There are detailed provisions relating to finances, audit, annual financial statements, reports/statements and procedures to fix the water rates, etc..

### **3.3.2. Defects and Deficiencies**

Thus, the Act has substantially changed the legal framework of irrigation management in the province. The Act appears to be a fair attempt to provide a new organizational structure for irrigation in the province. However, a critical analysis of the Act reveals some defects/deficiencies, which need to be removed at the earliest.

#### **3.3.2.1. Constitution of the Authority**

The constitution of the Sindh Irrigation & Drainage Authority given in the Ordinance, is presented below:

a.	Minister of Irrigation, or any other person appointed by the Government	Chairman
b.	Senior Member, Board of Revenue	Member
c.	Additional Chief Secretary, Planning and Development Department	Member
d.	Secretary, Finance Department	Member
e.	Secretary, Irrigation and Power	Member
f.	Secretary, Agriculture Department	Member
g.	Managing Director of the Authority	Member
h.	A representative from Farmers Organizations	Member

Thus, seven out of eight members of the Authority are official members. There is only one non-official member, i.e., a representative from the Farmers Organizations. Even the method to appoint this member is not provided for in the Act. That, too, will subsequently be prescribed by the Government. The Authority is, therefore, going to be under heavy official influence. The water users will not have any effective role in the affairs of the Authority. That the Authority should be independent of official influence is described. In order to achieve this objective, the following changes are needed:

- 1) The Minister of Irrigation should not be the ex-officio Chairman of the Authority. The Chairman shall be a technocrat with a good background of irrigation management.
- 2) The representation of Farmers Organizations shall be increased. Suggested, is that Farmers Organizations representatives be given a majority in the Authority (a somewhat similar provision is available in the PIDA Act, 1997).
- 3) In order to enhance the credibility and independence of the Authority, a judge of the High Court should be included in the Authority.

- 4) Consequently, necessary changes relating to the procedure of meetings would also be required.

#### 3.3.2.2. Removal of the Chairman & Members

Section 6 of the Act provides for grounds to remove the Chairman, or a member. Six grounds are enumerated in the said section. Another ground, i.e., misuse of powers, may be included therein.

In line with the principles of natural justice, the proviso to Section 6 enjoins that before removing a Chairman/member, an opportunity to be heard shall be granted. Suggested is that a reasonable opportunity shall be provided; a formality is not enough.

#### 3.3.2.3. Board of Management

Section 7 of the Act provides for a Board of Directors to carry out the day-to-day affairs of the Authority under the overall control and guidance of the Authority. The Board will consist of a Managing Director and up to four General Managers.

It has been further provided that the Managing Director and General Managers shall have such qualifications, backgrounds and experiences relevant to their job descriptions. The Managing Director and General Manager shall have 25 and 15 years professional experience in the field of Irrigation and Drainage, respectively. Accordingly, the entire Board will comprise of the technocrats in the field of irrigation. It is desirable that the Board shall also have members from the field of Finance and Agriculture.

#### 3.3.2.4. Powers of the Authority

Section 8 of the Act has invested extensive powers over the irrigation and drainage management in the province in the Authority. However, one technical error must be removed from clause (a) (1). The clause provides that subject to the Indus Water Treaty (1960) and the Water Apportionment Accord (1991), the Authority shall have the power to receive irrigation water from the barrages within the province, and/or from the inter-provincial/link canals, delivering the same to the various AWBs, bodies or persons etc..

Pertinent to point out is that unlike the Indus Water Treaty, the Water Apportionment Accord (1991) is not a permanent agreement. Therefore, it is suggested that the Water Apportionment Accord for the time being enforced, be incorporated there.

#### 3.3.2.5. Arrangements with Local Bodies, etc.

Section 11(2) adversely affects the autonomy of the Authority by empowering the Government to direct the Authority to hand over any completed scheme to a local council, or to an agency of the Government, or to take over from any agency a scheme completed by the agency on such terms and conditions as may be determined by the Government. Therefore, it is suggested that this provision be deleted from the Act.

### 3.3.2.6. Control Over Provincial Water Resources

Section 12 contains the same technical error which has been pointed out in Section 8(a)(1), and for the same reason, a similar amendment should be made in Section 12 as well.

### 3.3.2.7. Procedure for Fixation of Water Rates for Supply of Water

Section 21(2) lays down the steps to be taken before enhancing the water rates. The consultant feels that consultation with the Farmers Organizations shall also be mandatory before any enhancement can be effected.

### 3.3.2.8. Audit

Section 22 enjoins the Authority to get its accounts audited by commercial auditors appointed by the Authority. This is a strange provision. How can an employee independently audit the accounts of his employer? The consultant feels that the accounts of the Authority should be checked by the Auditors appointed by the Government.

### 3.3.2.9. Constitution of the Area Water Boards

Section 23(2) which lays down the composition of the Area Water Board, is quite ambiguous, providing that:

The Area Water Board shall consist of a Chairman and the following members:

- (a) Two representatives from Farmers Organizations to be elected by the Chairman of the FOs concerned.
- (b) One MPA from concerned area of AWB to be nominated by Chairman, SIDA.
- (c) A representative of the Authority.
- (d) Two government representatives; one of whom shall be from the Agriculture Department not below the rank of Director.
- (e) Director of the AWB.
- (f) Two technocrats, one each with proven backgrounds in (i) Water Resources Management, and (ii) Finance, respectively, to be nominated by the Chairman, SIDA.

Thus, the Farmers Organizations are under-represented in Area Water Boards, with only two representatives out of ten members of the Board. This representation should be increased to give a majority to FO representatives.

#### 3.3.2.10. Farmers Organizations

The Act does not make any provision for Farmer Organizations at the watercourse level, therefore, such organizations/associations will continue to be governed by the Sindh Water Users' Associations Ordinance (1982).

#### 3.3.2.11. Rules/Regulations/Bylaws

Section 30 empowers the Government to frame the Rules to carry out the purpose of this Act. Similarly, Section 31 empowers the Authority to make Regulations and Bylaws in order to effect the provisions of the Act. However, the division of responsibility between the Government and the Authority is not given in the Act. As the Regulations are subservient to the Rules framed by the Government, the Authority will be able to frame Regulations only on subjects that are not covered by the Rules framed by the Government. If the Government occupies a substantial area by the Rules, the Authority will become quite subservient to the Government.

It is desirable that this important issue must be determined by the Act. The consultant feels that three tiers of delegated legislation be provided, as presented below:

- a. Rules by the Government.
- b. Regulations by the Authority.
- c. Bylaws by the Farmers Organizations (with the approval of AWB/Authority).

Similarly, the subjects to be covered by Rules, Regulations and Bylaws also be specified by the Act. The following division is suggested:

1. The Provincial Government may frame Rules to carry out the functions vested in them by the Act.
2. The Authority may frame regulations to carry out administration and management of the Authority.
3. The Farmers Organizations shall frame Bylaws to carry out the functions vested in them by the Act.

## **CHAPTER 4**

### **WATER USERS' AND RELATED AGENCY STAFF'S VIEW ON THE WUO LEGAL FRAMEWORK**

#### **4.1. Introduction**

In order to obtain the views of various stakeholders of the canal irrigation system, a number of agency staff and farmers were contacted and the flaws in the present legal framework were discussed. Their opinions were also sought on various legal issues related to farmers' participation in irrigation management. Annex A is a list of persons met. This chapter addresses the views of the main stakeholders.

##### **4.1.1. Categories of People**

The consultant had intensive discussions with the following categories of people:

1. IIMI-Pakistan experts, officers and officials working on pilot projects.
2. Responsible PID officers in the project area.
3. OFWM officials in the FESS Project area.
4. Office bearers of the water users' associations in the project area (4-R Hakra).
5. Water users in the above project area.

##### **4.1.2. Summary of the Views:**

The following views were expressed by the above-mentioned persons.

1. A clear-cut policy is visible at the Government level.
2. IIMI-Pakistan officials are quite optimistic about the success of the participatory irrigation management program.
3. OFWM officials are also quite confident about the success of the participatory irrigation management program.
4. The office bearers of the water users' associations in the project areas are adequately motivated to initiate the formal functioning of the organizations. They are quite eager to take over/share the responsibilities of the irrigation management.
5. The irrigators are not satisfied with the present state of affairs. They are seriously concerned about the inefficiency, inequity, corruption, loss of revenue, and bureaucratic dominance, etc.. Their opinions are given in detail later in this chapter.

6. PID officials have strong reservations about the new system of irrigation management. They have expressed serious doubts about the success of this system. The main argument advanced by them is that the farmers are illiterate and will not be able to run the system effectively and successfully.

## **4.2. Views of the Water Users and Their Organizations**

A series of meetings with the Water Users' Organizations (WUOs) of the Hakra 4-R Distributary in Haroonabad and the Minor Committee of the Bahadarwah Minor of Sirajwah Distributary yielded that the water users liked to participate in the irrigation management, specifically in taking over responsibilities related to operation and maintenance of the distributaries and minors. They were not satisfied with the current procedure of unilateral decision-making. The suggestions forwarded by the WUOs are presented in the sub-sections below.

### **4.2.1. Objectives of the WUF of the Hakra 4-R Distributary**

The irrigators believe that a participatory irrigation management scheme should contain the following major objectives related to irrigation:

- to ensure equitable water distribution among water users with the assistance of the concerned agency;
- to ensure timely and better maintenance of the distributary and related structures with technical assistance from the concerned governmental operating agency;
- to implement the assessment and collection of *abiana* better and with more transparency, through the WUOs, so that an adequate amount of money is available for O&M of the distributary, as well as to supply water at the distributary head; and
- to expeditiously resolve water-related disputes at the local level.

### **4.2.2. Irrigators' Reasons for the Formation of WUAs**

#### **4.2.2.1. Time Factor**

The irrigators feel that valuable time is wasted when dealing with officials and dispute resolution, and that if water users' organizations are formed and work according to the IIMI-Pakistan plan, wasting time can be avoided.

#### **4.2.2.2. Accountability of Irrigation Officers**

At present, the irrigation officers are not responsible to any water users' representative body. They have responsibilities only within the administrative hierarchy, and are generally isolated from irrigators' opinions. The new scheme will provide for the participation of water users in policy making and irrigation administration.



#### 4.2.2.3. Economic Efficiency in Operation and Maintenance (repairs, silt clearance, etc.) of the Irrigation Channels

The existing irrigation system is very inefficient: The O&M cost can be reduced if the water users participate. The chances of misuse of funds allocated for repairs, etc. will be reduced. The following functions may be entrusted to the irrigators:

1. Silt clearance
2. Berm cutting
3. Strengthening embankments
4. Re-structuring
5. Control of outlets and head regulators
6. Removal of vegetation
7. Plantation

#### 4.2.2.4. Dispute Resolution

The existing system of dispute resolution is quite time-consuming and inconvenient, as it revolves around traditional judicial and quasi-judicial governmental authorities. The irrigators feel that their disputes can be resolved properly at the local level by a jury of elders, special committees and similar other bodies, provided that these are vested with legal authority for dispute resolution.

#### 4.2.2.5. Proper Collection of Water Rates/Charges

The system of collection of water rates suffers from various defects, which result in reduced income to the Government. Influential people get undue exemptions and assessing officials and irrigators oblige each other at the cost of public revenue. The participatory irrigation management will help to reduce, if not altogether eradicate, these malpractices.

#### 4.2.2.6. Equitable Distribution of Water to Weaker Water Users

Under the present system of irrigation, the water schedule (*warabandi*) is not properly enforced. The stronger elements in the command area, with the support of irrigation officials, obtain more than their due share of water. The situation will improve considerably with the participation of water users in irrigation management, as the weaker elements will have an equal say in the affairs of water users associations.

#### 4.2.2.7. Efficient Distribution of Water to Ensure Provide Water at the Tails

The major grievance of the water users, which appears to be quite genuine, is that the tails of water channels are often dry during the dry season, and when water is direly needed by thirsty crops. During the rainy season these channels are flooded with water, resulting in damage to cultivated areas. Efficient management of the irrigation water will solve this problem to a great extent.

#### 4.2.2.8. Emancipation from Bureaucratic Rule

The major irrigation laws were enacted during the heydays of British colonial rule in the sub-continent, which was the golden age of bureaucracy. Obviously the irrigation bureaucratic set-up also enjoyed vast administrative powers in dealing with the people. The times have changed and the political culture no longer tolerates unnecessary authority, or autocratic administration. The prevailing democratic rule and participation of people at all levels of government/administration does not allow the unrepresentative bureaucracy to rule the people. The irrigators appear to be frustrated with the present set-up. The participatory irrigation management scheme will ameliorate its position by breaking the hegemony of the irrigation bureaucracy.

#### 4.2.2.9. WUAs as Interest Groups to Protect Legitimate Rights of Water Users

The participation of the water users in irrigation management will help to protect their legitimate rights over irrigation water, etc.. In addition, WUAs can play a positive and effective role as pressure groups to protect the rights of water users, especially at levels devoid of formal participation from these people. The irrigators of the project area are confident that the water users' associations will help them to acquire their genuine demands accepted by the otherwise apathetic officials.

The water user feels that the water users' association can work as cooperative societies to promote cooperative activities in other areas of agriculture, i.e., procuring seeds/fertilizer/pesticides, marketing agricultural produce and obtaining loans, etc.. Such a multi-purpose approach has already been recommended by another consultant (Piyaansina Ganewatte, 1996).

#### 4.2.3. Authority Required

The water users believe that they need the following authority in order to run the program successfully:

1. The WUOs should be legally recognized and registered with the PIDA as corporate bodies acting on behalf of its members.
2. The WUOs should be authorized to negotiate and implement action plans for operation and maintenance of the channels, for an initial period of two years on a pilot basis.
3. To implement O&M activities and to recover costs successfully, the WUOs need powers to investigate and penalize crimes related to irrigation misbehavior and defaulters (the authority vested with XEN under the Canal and Drainage Act, 1873).
4. To inspect water distribution records maintained at the distributary head.
5. To conduct crop surveys through *Patwaris* and to double check the same by the WUF for *abiana* assessment.

6. To receive the full amount of the collected *abiana*, and arrears from the *Lumberdars*.
7. To disconnect irrigation services temporarily for the defaulters.
8. To create new plantations and its disposal along distributary channels on agreed terms and conditions.

#### **4.2.4 Perceived Benefits**

- improved equity as a result of strict social control, which will help reduce waterlogging and salinity problems and enhance land productivity;
- improved system maintenance at a lower cost;
- swift decisions and implementation due to localized management;
- sense of ownership and responsibility among users to protect the system;
- efficient O&M due to close and stern supervision;
- less corruption due to strict accountability mechanisms;
- improved cost recovery and reduced financial obligations;
- reduced workload on agency staff operating at higher levels of the system; the time thus saved can be invested in designing and implementing improvement plans for the upstream system; and
- improved agricultural productivity and reduced hazardous environmental impacts (waterlogging and salinity).

#### **4.2.5. Government Action Needed**

In order to undertake the above-mentioned tasks and to meet its objectives, the following actions are needed from the government:

- the WUOs should be recognized by the PIDA as the representative corporate body of the water users acting on their behalf for O&M of their distributaries;
- the operation (allocation, acquisition and distribution) and maintenance be handed over to the WUOs for an initial period of two years;
- the WUOs should be given the necessary authority and powers mentioned in the foregoing sections, and the staff of the PID should be instructed to facilitate the WUOs to the maximum possible extent to conduct its work;

- the operation and revenue staff related to the distributary should be directed to assist in refining, negotiating and implementing the Joint Management Action Plan on the basis mentioned above;
- the staff, responsible for collection of *abiana*, should be instructed to deposit complete *abiana* receipts with the WUOs; and
- the powers for dispute resolution, penalizing irrigation misbehavior, and entertaining and deciding requests for additional water allowance should be given to the WUOs. The powers currently with the XEN, and below, regarding a Distributary should be given to the WUOs, or its designated persons.

#### **4.3. Views of the On-Farm Water Management Staff**

The On-Farm Water Management (OFWM) wing of the Agriculture Department has experience of almost two decades of working among farmers and organizing them into Water Users' Associations (WUAs) under WUA Ordinance (1981). Up to now, over 40,000 Water Users' Associations have been formed and registered at the watercourse level, covering about 40 percent of Pakistan Indus Basin Irrigation System.

OFWM experience presents a remarkable achievement, and farmers' enthusiastic acceptance of the OFWM's projects is reflected in the rapid growth of WUAs. These associations have been quite active in mobilizing human and financial resources for the improvement of their watercourses. The success of the OFWM Program can be considered as an indication of the potential managerial capability of local leadership. However, once a watercourse is improved, the farmers return to the traditional pattern of operation and maintenance. Each user operates the system according to his turn and farmers periodically organize themselves to clear the silt, weeds, etc., from the watercourses, as was the case before improvement. That the majority of the WUAs are now dormant, is true, but one should look for reasons.

For an organization to be successful and sustainable, it has to be self-supporting, self-regulating and self-governing, so that it has an independent capacity for group action through its leadership.

Water Users' Associations (WUAs) created in the Punjab Province were initially to serve the temporary need of improving watercourses. Little chance existed for these to develop into viable institutions. Sharing a common watercourse does not provide enough opportunity, nor a sufficiently strong bond to develop into viable institutions. WUAs need tasks that reflect the more permanent and regular needs of the farmers, and which could generate, a cash flow. The tasks could be the users' involvement in operation and maintenance of the irrigation system, both, at tertiary (watercourse) and secondary (minor/distributary) levels, where they can exercise direct influence, or some control over the system on which they depend for the delivery of water.

Similarly, farmers' involvement in assessment and collection of water supply charges (*abiana*), dispute resolution and joint marketing of their produce could be other possible areas of interest which need to be tested.

Unfortunately, the Punjab WUA Act (1981) does not provide for users' participation in these areas at any level. The Ordinance seems to have been designed almost solely to meet the requirements of the donor agencies. Also, there is no provision to federate WUAs at a level above that of the watercourse. However, the corresponding Sindh and NWFP WUA Ordinances make provisions for the federation of WUAs at distributary and canal levels.

OFWM wing of Punjab Agriculture Department, based on their 20 years of experience, strongly believes that there is a great potential for establishing farmers' institutions and they can get organized for a common cause. They feel that following measures need to be taken in this regard:

Water Users need to be involved in operation and maintenance of the irrigation system at distributary and watercourse level. The water users' participation will bring decentralization of powers and sense of ownership among the farmers. This will improve equity and reliability in water distribution.

The pre-requisites for effective farmers' participation need to be met first, i.e. proper legal framework and sincere commitment at all levels of the government.

Mechanical approaches to organizing farmers will meet a limited success. The best strategy would be to learn, through pilot programs for replication on a broader scale, and in a gradual manner.

The Water Users' Organizations (WUOs) established under on-going pilot projects in the country should be immediately recognized by transferring the responsibilities for operation and maintenance to test their viability in managing the system.

The responsibility of assessment and collection of the water charges (*abiana*) should also be transferred to WUOs. This will improve revenue collection and reduce government expenditure.

The water rates should be fixed on the command area basis to reduce inefficiencies in assessment and collection.

In order to make the Water Users' Organizations effective, viable, self-supporting, self-governing and sustainable, requisite amendments in relevant laws are needed.

Future roles and responsibilities of relevant actors have to be clearly and precisely defined, and strongly adhered to.

#### **4.4. Views of the Staff of the Irrigation Department**

The staff of the Irrigation Department stressed the following points about farmers' participation in irrigation management:

1. Farmers' participation in the irrigation system already exists. For instance:

- a) three, or more, farmers from each watercourse can form a canal committee under Section 4-A of the Canal and Drainage Act (1873) for the purpose of reporting and investigating irrigation-related crimes;

- b) preparation of *warabandi* can be done by the water users; the department only intervenes at the request of the shareholders;
  - c) the *Lumberdar* is a user representative; and
  - d) the users are not restricted to resolve irrigation disputes if they wish to solve these collectively.
2. The irrigation system is operating without any problems. The few problems being faced are due to political interference and the lack of funds for O&M. If sufficient funds are provided for O&M and the farmers do not intervene politically, the department can operate and maintain the system very effectively and efficiently.
  3. The staff earns meagre salaries on which they cannot survive, with the result that the lower staff, at times, indulges in malpractices.
  4. If PIDAs are established, many irrigation staff members will lose their jobs; this situation may create unrest due to increased unemployment.
  5. The users' participation in the form of organizations, such as WUOs, is seen as a conspiracy against the country. The main argument advanced is that the farming community is generally illiterate and is divided into a number of socio-political, ethnic and religious groups. They will be unable to run the highly technical irrigation system. The result will be that the system will be destroyed and there will be fights and murders among the farmers.

#### **4.5. Views of IIMI-Pakistan Staff about Participatory Irrigation Management**

Pakistan is privileged to have one of the worlds' biggest and most contiguous canal irrigation systems. The canal system was originally designed for extensive irrigated agriculture in the flood plains of the Indus Basin. The productivity of the canal-irrigated areas in Pakistan has started declining in the Indus Food Machine, owing to a number of reasons, that include the inefficient management of the irrigation system. The inefficient operation and maintenance of the irrigation system has not only caused inequitable and unreliable irrigation supplies to the users, but has also fostered many social diseases, such a political interference in the hardware and software of the system, corruption, and farmers anarchy. Apart form the declining land productivity, waterlogging and salinity in many parts of the country are the other outcomes of inefficient management. The older laws that have become irrelevant in the present situation are still managing the canals. Hardly any endeavor has been made to rephrase irrigation management to suit the country's present needs. The management of the canal irrigation system needs to be reconsidered in the present context if the system has to be physically and socially sustained.

The ultimate users of the irrigation system are the farmers. They are the ones who benefit from the irrigation system and bear all the consequences of decisions taken by the highly centralized irrigation bureaucracies. Sizable evidence in literature indicates that common resources are best managed if all the stakeholders are involved in the decision-making and operation and maintenance (O&M) of common resources. The farmers, therefore, need to be involved in the management of the canal irrigation system. Farmers' participation in the O&M has produced good results in many

countries, such as Mexico, Turkey, Sri Lanka, Nepal, India, etc.. The farmers' systems are managed better than agency-managed systems in terms of better quality and more timely maintenance, improved operational practices, reliable supply of water to the users, equitable distribution of irrigation water, cost recovery, etc..

There is also evidence that many countries have not attempted for policy decisions to maximize users' participation in the management of irrigation systems. The four provincial assemblies of Pakistan have recently opted for Provincial Irrigation and Drainage Authorities (PIDAs), whereby the users will be involved in irrigation system management in the form of Farmers Organizations (FOs) at the distributary command level. The respective provincial governments have committed through their respective acts to introduce Participatory Irrigation Management (PIM) by turning over distributaries/minors, parts of irrigation systems, to the FOs for O&M and cost recovery at the pilot scale.

IIMI-Pakistan's initiatives on PIM started much earlier than the PIDAs in the form of pilot action research projects in the Sindh and Punjab Provinces of Pakistan. By now, IIMI-Pakistan has succeeded in organizing farmers into four Water Users Federations (WUFs) for PIM at three medium-sized pilot distributaries/minors in the Sindh province, and one large distributary in the Punjab province. The On-Farm Water Management Directorate of the Punjab Agriculture Department has also organized farmers at one minor canal in the Punjab Province. Other agencies are also working with respective government agencies and farmers in other provinces for similar work. The social viability of PIM has, thus, been established. The work being undertaken at these pilot experiment sites can provide useful lessons and experiences to implement PIM on a wider scale. However, the government's initiatives to recognize the pilot WUFs and enable them to operate legally and maintain their distributaries/minors are immensely essential. The commitment of the government agencies at both, the policy and field level to make PIM a success is the most critical input that is yet lacking in Pakistan.

Research on PIM so far suggests that the success and sustainability of farmers managing irrigation systems highly hinges upon the legal framework for such endeavors. The farmers participating IIMI-Pakistan's pilot projects have also expressed a dire need for such a framework to overcome the prevalent social diseases in the canal irrigation network.

## **CHAPTER 5**

### **MODEL LAWS**

#### **5.1. MODEL IRRIGATION AND DRAINAGE AUTHORITY ACT**

An Act to provide for the establishment of the Irrigation and Drainage Authority in the Province of -----.

#### **PREAMBLE**

Whereas it is expedient to provide for the establishment of the Irrigation and Drainage Authority in the Province of ----- for the equitable distribution of irrigation water, and effective drainage and flood control that would be sustainable on a long term basis through participation of beneficiaries in the operation and management of the irrigation and drainage network, as well as to provide for matters connected therewith or incidental thereto;

It is hereby enacted as follows:

#### ***CHAPTER 1***

#### **PRELIMINARY**

##### **1. Short Title, Extent and Commencement**

1. (1) This Act may be called the ----- Irrigation and Drainage Authority Act (1997).
- (2) It extends to whole of the Province of -----
- (3) It shall come into force at once.

##### **2. Definitions**

In this Act, unless there is anything repugnant to the subject or context:

- (i) "Authority" means the ----- Irrigation and Drainage Authority established under Section 3;
- (ii) "AWB" means an Area Water Board established under Section 23;
- (iii) "Board" means the Board of management constituted under Section 7;
- (iv) "canal" means a canal as defined in the ----- ;
- (v) "Chairman" means the Chairman of the Authority;



- (vi) "drain" means a natural drain, surface, or sub-surface, drainage network provided for the evacuation of the surplus subsoil and surface water from the land under the command of a canal system;
- (vii) "drainage cess" means the drainage cess levied for conveyance and disposal of effluent through the drains;
- (viii) "FO" means the Farmers Organization formed under Section 26;
- (ix) "Government" means the Government of -----;
- (x) "Local Council" means a local council constituted under the -----;
- (xi) "Managing Director" means the Managing Director of the Authority;
- (xii) "member" means the member of the Authority;
- (xiii) "prescribed" means prescribed by rules or regulations under this Act;
- (xiv) "regulations" means regulations made under this Act;
- (xv) "rules" means rules made under this Act;
- (xvi) "WAPDA" means the Pakistan Water and Power Development Authority;
- (xvii) "water" includes any water, stationary or moving on the surface or at sub-surface, at any place in the province, but does not include the water stored in the inter-provincial reservoirs and/or rivers and canals as is allocated to any other province; and
- (xvii) "water rate" means the charge levied for supply of water under the Water Apportionment Accord (1991) or any subsequent such Award.

## ***CHAPTER II***

### **CONSTITUTION AND MANAGEMENT OF THE AUTHORITY**

#### **3. Establishment of the Authority**

- (1) As soon as may be after the commencement of this Act, but not later than one year, there shall be established an Authority to be known as the ----- Irrigation and Drainage Authority.
- (2) The Authority shall be a body corporate with power to acquire, hold and dispose of property, allowed perpetual succession and a common seal, and shall by the said name sue, and be sued.
- (3) The Headquarters of the Authority shall be at -----

#### **4. Constitution of the Authority**

- (1) The Authority shall consist of :
  - (a) A suitable qualified person appointed by the Government Chairman
  - (b) Additional Chief Secretary, Planning and Development Department Member
  - (c) Secretary, Finance Department Member
  - (d) Secretary, Irrigation and Power Department Member
  - (e) Secretary, Agriculture Department Member
  - (f) Managing Director of the Authority Member
  - (g) Seven representatives of Farmers Organizations equitably distributed across the province Member
- (2) The Chairman and members, other than the ex-officio members, shall, unless resigned or removed early, hold office for four years and shall be eligible for re-appointment for one similar term.
- (3) In cases of death, resignation or removal of such Chairman or a member as a Chairman or as the case may be, a member may be appointed in his place for the un-expired term of such Chairman or member.
- (4) The Chairman or a member may, by writing under his hand, resign from his office, but his resignation shall not take effect until it is accepted by the Government.
- (5) No act or proceeding of the Authority shall be invalid by reason only of existence of a vacancy in, or the Constitution of, the Authority.

#### **5. Meetings, etc.**

- (1) There shall be at least one meeting of the Authority in each quarter during a year.
- (2) The meetings of the Authority shall be held at such times and at such places and in such manners as may be prescribed by Regulations, or until Regulations are made in this regard, as and when convened by the Chairman.

- (3) Notwithstanding the provisions of Sub-section (1), the Chairman shall convene a meeting of the Authority if six or more members so request him in writing and such meeting shall be convened after giving at least seven days notice within a period of fifteen days of receipt of such requisition.
- (4) The quorum for a meeting of the Authority shall be six members.
- (5) The Chairman, or in his absence, a member elected by the members present in a meeting of the Authority, shall preside at such meetings of the Authority.
- (6) A decision of the Authority shall be binding if 50% of the members approve. In the event of an equality of votes, the Chairman or the member presiding a meeting, shall have a casting vote.
- (7) A non-official member shall receive such allowances as may be prescribed by the Authority for attending a meeting of the Authority.

#### **6. Removal of Members, etc.**

The Government may, by notification, remove a non-official member or the Managing Director from the membership of the Authority if he:

- (a) is incapable of discharging his responsibilities under this Ordinance; or
- (b) has been declared insolvent by a court of competent jurisdiction; or
- (c) has been declared disqualified for employment, or has been dismissed from the service of the Government, or has been convicted for an offense involving moral turpitude; or
- (d) has knowingly acquired or has continued to hold, without the permission, in writing, of the Government, directly or indirectly, or through a partner, any share or interest in any contract or employment, with or on behalf of the Authority, or in any land or property, which to his knowledge is likely to benefit, or has benefited, as a result of the operations of the authority;
- (e) is guilty of patent misuse of powers.

Provided always that no action shall be taken under this section against the Chairman or member without affording him a reasonable opportunity of being heard.

#### **7. Board of Management**

- (1) Subject to the overall control and guidance of the Authority, the day-to-day management of the affairs of the Authority shall be carried out by a Board of Management consisting of the Managing Director and not

more than four General Managers, as may be appointed by the Authority with the approval of the Government.

- (2) The Managing Director and the General Managers shall have such qualifications, technical backgrounds and practical experiences in the profession relevant to their job descriptions, provided that the Managing Director and the General Managers shall, respectively, possess at least twenty five years' and fifteen years' professional standing in the field of Agriculture, Irrigation and Drainage.
- (3) The Managing Director shall be the Chief Executive of the Authority and shall be responsible to manage the day-to-day affairs and business of the Authority.
- (4) The Managing Director, or a General Manager, may be removed if he has incurred any of the disqualifications mentioned in Section 6.
- (5) Subject to other provisions of this section, the Managing Director and General Managers shall be appointed on such terms and conditions as may be prescribed by the Rules.
- (6) The Managing Director and a General Manager shall unless resigned or removed early, hold office for four years and shall be eligible for reappointment for another similar term, or for a shorter term as the Government may decide.
- (7) The Managing Director, or any General Manager, may, at any time, resign, provided that his resignation shall not take effect until accepted by the Government.

### ***CHAPTER III***

#### **8. Powers and Duties of the Authority**

The Authority shall have the following powers and duties:

##### **(a) General**

- (1) Subject to the provision of the Indus Water Treaty (1960) and the Water Apportionment Accord for the time being in force, to receive irrigation water at the barrages and/or headworks falling within the province and/or from the inter-provincial/link canals and deliver the same in agreed quantities to the various AWBs, bodies or persons in the manner and on the terms and conditions as may be prescribed by the Authority at the relevant canal headworks, and to receive drainage effluent at the designated points and convey the same to the inter-provincial out-fall drains.
- (2) To exercise all powers under the irrigation laws and rules as are not inconsistent with, or in derogation to, any provision of this Act, Rules or Regulations.

- (3) To levy and collect water rates and drainage cess and surcharge for late payment of such rates and cess.
- (4) To prescribe and receive fees or charge for providing any service under this Act.
- (5) To recover any amount payable to the Authority under this Ordinance as arrears of land revenue.

**(b) Policy and Regulation**

- (1) To formulate and implement policy/guidelines and procedures for the proper and efficient implementation of the provisions of this Act.
- (2) To formulate and implement policies in the water resources sector with a view to continuously improve and achieve effective, economic and efficient utilization, preservation and improvement of such water resources on a sustainable basis.
- (3) To prescribe training requirements and programs which may be necessary for the purpose of this Ordinance, and to prescribe the manner and authority for conducting such training and programs.
- (4) To conduct any inquiries, investigate any complaints or adjudicate any disputes and/or differences under this Act among the different entities established under this Act, and among such entities and an individual, or group of individuals.
- (5) To prescribe the procedures for obtaining and filing of documentation pertaining to water allocation.
- (6) To grant, renew or cancel the license, or lease, as may be prescribed.

**(c) Capital Operations**

- (1) To plan, design, construct, operate and maintain the irrigation drainage and storage reservoirs and flood control infrastructure, including hill torrent control and development work for irrigation of lands including watershed management practices in catchment areas of any river, hill torrent, or streams.
- (2) To maintain records, registers and data banks, as may be necessary for the effective performance of any, or all, of its powers and duties under this Act.
- (3) To take all such steps as may reasonably be necessary for the removal and prevention of encroachments and unauthorized construction along, or on, the properties of the Authority.
- (4) To operate and maintain the equipment, machinery and stores of the Authority effectively, efficiently and in a business-like manner.

(5) To undertake, or assign any person, in a prescribed manner, anti-erosion operations including conservation of forests and re-forestation in the catchment areas of any river, hill torrent or stream, and for the purpose that may restrict, or prohibit, clearing or breaking land, as may be necessary.

(6) To prescribe rates, fees and other charges payable for services rendered by the Authority under this Act.

**(d) Finance and Administration**

(1) To undertake any works, incur expenditure, procure machinery plants and stores required by the Authority.

(2) To negotiate, execute and adopt/rectify all such contracts as may be considered necessary or expedient for the purpose of this Act.

(3) To utilize the Authority fund to meet the costs and expenses incurred on account of, and in connection with, the due performance of the various functions of the Authority under this Act, including the payments of salaries, gratuities, pensions and other remuneration to officers, employees and other persons engaged by the Authority.

(4) To properly manage finances and maintain accounts and assets of the Authority.

(5) To direct any work that is required to be carried out by a person in the form of training about rivers, hill torrents and/or any other streams or undertaking of anti-erosion measures, including conservation of forests and re-forestation, but left undone, shall, after reasonable notice to such person and due consideration of any objections raised by him in this regard, be undertaken by the Authority and determine the cost to be borne by such a person, or after notice and due inquiry by any other person who may be held by the Authority to be liable for the same.

(6) To formulate, implement and continuously review/improve the policies and procedures relevant to the management of finances and maintenance of the accounts of the Authority, as well as for the inventory and assets valuation and disposal, and for the recruitment, promotion, retirement and termination of the services of the employees of the Authority.

(7) To formulate financial policies aimed at ensuring that the finances of the Authority are managed in a consistent, conservative and diligent manner that would protect its assets, including the provision of their maintenance and periodic replacement as necessary to preserve its capital and reserves, and to provide prompt servicing of its debts and obligations. Financial policies must be based on principles of sustainability.

(8) To prepare for the approval of the Authority, the Annual Budget Statement indicating the revenues and sources thereof, and the details of revenue and capital expenditure.

**(c) Transition**

- (1) To promote formation, growth and development of AWBs/FOs as self supporting and financially self-sustaining entities, and to ensure orderly and systematic induction thereof into the operations of the Authority.
- (2) To prepare, or cause to be prepared, and regularly update, or cause to be updated, Staffing and Operational and Financial Plans, which will generally deal with, and reflect, the following aspects:
  - (i) composition of the Authority and Board of Management;
  - (ii) functions and responsibilities of the Authority and BOM;
  - (iii) vision and strategy;
  - (iv) organizational structure, including job descriptions for key positions and grading;
  - (v) human resource strategy, staffing plans and compensation policies;
  - (vi) measures to reduce costs and to improve the efficiency of the operations of the Authority;
  - (vii) cost-sharing/recovery arrangements, including measures to improve collection of water rates/drainage cess;
  - (viii) financial arrangements;
  - (ix) schemes/program for the improvement of irrigation, drainage, flood control and hill torrents in the province;
  - (x) operations management, including water allocation, operation and maintenance and effluent disposal;
  - (xi) program to establish AWBs and FOs;
  - (xii) detailed financial plans/projections, clearly outlining the capital budget, operating statement (revenue and expenditure statement), balance sheets and the funds flow statement showing sources and utilization of funds;
  - (xiii) transparency and accountability arrangements;
  - (xiv) performance and monitoring standards; and
  - (xv) co-ordination with the Finance and Planning & Development Departments to ensure that the provincial irrigation assets are properly maintained and the Authority's development programs are in conformity with provincial planning priorities.
- (3) To formulate policies with a view to ensuring that the Authority and other entities under this Act become fully operative and self-supporting and financially self-sustaining entities with regard to the Operation and Maintenance cost of irrigation and drainage as defined in Chapter V, within a period of seven to ten years.

**(f) Research and Development**

- (1) To formulate, implement and regularly update policies, studies and research program with a view to solve/eliminate and prevent waterlogging and salinity, and to develop irrigated agriculture.
- (2) To conduct studies with a view to regularly analyze and evaluate the impact of the operations and policies of the Authority on the ecology and the environment

with a view to establish the various available options for the minimization of the adverse impact of such operations and policies, if any, and to adopt the optimal option(s) for further action.

- (3) To coordinate/regulate the measures being undertaken/required to be undertaken for recording/gauging surface waters, monitoring the ground water table and the quality of water, and the compilation of data relevant thereto, and in this regard to establish and regularly maintain proper liaison with similar work being undertaken in other provinces.
- (4) To publish, or cause to be published, the various policies, details, data and information relevant to the affairs of the Authority on a regular basis, and to ensure reasonable public access to the same.

## **9. Contractual Services**

The Authority may, under a written agreement as to the terms and conditions including the extent and manner of payment for the same, undertake execution of any scheme(s) or provide agreed services to exercise technical supervision and administrative and financial control over the execution of any scheme(s) framed, or sponsored, by Government or any other Agency.

## **10. Acquisition of Land by the Authority**

Acquisition of any land, or any interest in land, for the Authority for the purposes of, or for, any scheme under this Act shall be deemed to be an acquisition of a public purpose within the scope and meaning of the Land Acquisition Act (1894), the provisions which shall have effect accordingly.

Provided that the Authority, prior to approaching the Government for any proposed acquisition of land, or any interest thereto, shall, with the consultation of the affectees, if any, prepare resettlement plans duly approved by the Authority.

## **11. Arrangement with Local Bodies or other Agencies**

As soon as any scheme has been completed by the Authority, or at a later date, the Authority may arrange, by written agreement with a Local Council or other agency within whose jurisdiction any particular area covered by the scheme lies, to take over and maintain any of the works comprising such schemes in the said area.

## **12. Control over Provincial Water Resources**

Subject to the relevant provisions in the Indus Basin Treaty (1960) and the Water Apportionment Accord (1991) for the time being in force, the Authority shall have control over all the rivers, canals, drains, streams, hill torrents, springs, reservoirs (except such reservoirs as are under the control of WAPDA) and underground water resources within the province.



### **13. Right of Entry**

The Managing Director, or any other person authorized by him in writing, may, after prior notice to that effect and with a copy to the respective Deputy Commissioner, enter upon and survey any land, erect pillars for the determination of intended lines of work, make borings and excavations and do all other acts that may be necessary for the preparation and implementation of any scheme under any provisions of this Ordinance; provided that when the affected land does not vest in the Authority, the power conferred by the above sub-section shall be exercised in such a manner as to cause the least interference with, and/or damage to, such land and the rights of the owner thereof.

### **14. Compensation**

When any person enters into, or upon any land pursuant to Section 13, he shall, at the time of such entry, or as soon thereafter as may be practicable, but in no case later than 60 days from the date of such entry, pay or tender payment for all necessary damage likely to be caused, or caused on account of any operations proposed to be carried out, or carried out, under Section 13. In the case of any dispute, the same shall be referred to the Collector/Deputy Commissioner of the District, who shall decide the same within a maximum period of 30 days from the date of such reference.

## ***CHAPTER IV***

### **ESTABLISHMENT**

### **15. Appointment of Officers, Servants**

- (1) Subject to any other provisions of this Act, the Authority may, from time to time, employ such officers and servants, or appoint such experts and consultants, in accordance with Regulations, as it may consider necessary for the performance of its functions, on such terms and conditions as it may deem fit.
- (2) Notwithstanding anything contained in Sub-section (1), any Rules/Regulations made, or orders or instructions issued under this Act, the Authority may, at any time, for reasonable cause, relieve or remove from its service any person, after giving him not less than ninety days notice, or pay for the period by which such notice falls short of ninety days.

### **16. Disciplinary Powers**

The Authority shall be competent to take disciplinary action against its officers and employees in accordance with the Regulations.

### **17. Immunity of the Authority and its Employees**

- (1) The Managing Director, members of the Board, officers and employees of the Authority shall, when acting or purporting to act in pursuance of any of the

provisions of this Act, be deemed public servants within the meaning of section 21 of the Pakistan Penal Code.

- (2) No anti-corruption or other legal proceedings shall lie against the Authority, the Managing Director, members or officers and employees of the authority, in respect of anything done, or intended, in good faith under this Act.

### **18. Delegation of Powers**

The Authority may, by general or special order, delegate to the Managing Director, a member of the Board or officer or employees of the Authority, any of its powers under this Ordinance, subject to such conditions as it may deem fit.

### **19. Persons Serving in the Provincial Irrigation and Power Department**

- (1) All employees of the Irrigation Wing of the Provincial Irrigation and Power Department, except such employees as may be specified by the Government in this behalf, shall, subject to any other provision(s) contained herein, on the commencement of this Act stand transferred to, and become the employees of the Authority.
- (2) The employees under Sub-section (1) shall serve the Authority on such terms and conditions as may be prescribed by the Rules, but such terms and conditions shall not be less favourable than the terms and conditions of service admissible to them immediately before their transfer; provided that the Authority shall be competent to take disciplinary action against any employee.
- (3) The Government shall contribute towards the pension and gratuity admissible to, and transfer the provident fund of such employees to the Authority in accordance with the Rules.

## ***CHAPTER V***

### **FINANCE**

### **20. Authority Fund**

- (1) There shall be a fund to be known as the "Authority Fund" vested in the Authority.
- (2) The Authority fund shall consist of:
  - (a) all sums received by the Authority in respect of water charges, sale proceeds, and drainage cess;
  - (b) grants made by the Government;
  - (c) loans obtained from the Government;

- (d) grants made by Local Councils as required by the Government;
- (e) sale proceeds of bonds, or any other debt instruments issued under the authority of the Government;
- (f) loans obtained by the Authority with the sanction of the Government;
- (g) foreign assistance and loans obtained from different foreign agencies with the sanction of, and on such terms and conditions as may be approved by the Government, in consultation with the Federal Government; and
- (h) all other sums receivable by the Authority.

## **21. Authority Deemed as a Local Authority**

The Authority shall be deemed as a Local Authority under the Local Authorities Loans Act (1914) for the purpose of borrowing money under the said Act, and the making and execution of any scheme under this Ordinance shall be deemed as work which such Authority is legally authorized to carry out.

## **22. Limited Liability**

The liability of the Government, or the creditors of the Authority, shall be limited to the extent of grants made by the Government and the loan raised by the Authority with the sanction of the Government.

## **23. Procedure for Fixation of Rates for Supply of Water**

- (1) The Authority shall normally supply water to different areas on an equitable and reasonably assured basis.
- (2) The rates at which the Authority shall supply water shall be so fixed as to provide for meeting the operation and maintenance cost of the system within a period of seven to ten years; provided always that before proposing any enhancement in the existing rates, and/or agreeing to the same, the Authority/AWBs concerned shall use their best endeavours to reduce the quantum of the proposed enhancement of rates by adopting the following measures:
  - (i) reducing cost;
  - (ii) improving assessment and collection of water rates and drainage cess;
  - (iii) recovery of arrears.
  - (iv) recovery of cost for providing drainage flood control to non-farming beneficiaries; and
  - (v) de-investment of fresh water tube-wells in SCRAP areas.

- (3) The components of O&M to be recovered from the farmers in the form of *abiana* shall be the full O&M cost of irrigation canals and secondary drains.
- (4) The O&M cost of flood protection and public sector FWG tube-wells will be excluded from *abiana*. A nominal proportion (say, five to ten percent) of the O&M cost of SGW tube-wells, and/or main drains, may, however, be borne by the farmers should such a need be felt by the Authority at some later stage.

#### **24. Annual Financial Statements and Audit**

- (1) The Authority shall, not later than six months after the end of each financial year, prepare financial statements including a balance sheet as at the end of the financial year, income and expenditure account for the financial year, and a statement of changes in the financial position, or statement of sources, and application of funds for the financial year.
- (2) The balance sheet shall give a true and fair view of the state of affairs of the Authority as at the end of its financial year, and the income/expenditure account shall give a true and fair view of the surplus, or deficit, of income over expenditure of the Authority for the financial year.
- (3) Accounting standards of the Pakistan Institute of Chartered Accountants shall be followed for accounting, bookkeeping and preparation of financial statements.
- (4) Accounting policies shall be stated as part of the financial statements.
- (5) The Authority shall attach to its financial statements, a statement providing information on any material charges and commitments affecting the financial position of the Authority which have occurred between the end of the financial year to which the financial statements relate, and the date on which the financial statements were prepared.
- (6) In the month of February each year, the Authority shall submit to the Government for information, projected financial statements for the next year.

#### **25. Audit**

- (1) The Authority shall have a double audit system.
- (2) The financial statements of the Authority shall be audited every year by the Auditor General of the province, as well as by commercial auditors appointed by the Authority.
- (3) The auditors shall carry out the audit in accordance with professional standards of auditing prescribed by the Pakistan Institute of Chartered Accountants, and shall issue a report on the audit.

- (4) The Authority shall provide a copy of the audit report of the commercial auditors and financial statements, together with detailed information and explanations for any observation, reservation, qualification or adverse remarks contained in the auditor's report to the Government, and shall file a copy with the Accountant General of the province within 30 days of the receipt of the report.
- (5) The Authority shall carry out all directives issued by the Government for compliance with any observation, reservation, qualification or adverse remarks in the audit report.

## ***CHAPTER-VI***

### **AREA WATER BOARD**

#### **26. Establishment of Area Water Board**

1. The Government shall, within one year of the commencement of this Act, establish AWBs together with their respective territorial jurisdictions, which will preferably be based on the canal commands; provided that such AWBs shall commence functioning on successful completion of a pilot study of a specified AWB on a canal command.
2. The Area Water Board shall consist of a Chairman and the following members:
  - (a) Seven representatives from FOs elected according to the Regulations.
  - (b) A representative from the Authority.
  - (c) Two representatives from the Government; one of whom shall be from the Agriculture Department not below the rank of Director.
  - (d) Managing Director from the AWB.
  - (e) Two technocrats, each with proven backgrounds in
    - (i) Water Resources Management and
    - (ii) Finance, respectively.
- (3) The members shall, in the first meeting of the Board, elect from amongst themselves a Chairman (of the Board).
- (4) The Chairman shall be elected from amongst the members at (a) above. He shall preside over the meetings of the Board.
- (5) Where the Chairman, for any reason, is unable to attend a meeting of the Board, the members present at such a meeting may elect one of the members mentioned in (a) above to act as Chairman for that meeting.

- (6) A member other than ex-officio members shall, unless resigned or removed early, hold office for a term of four years and shall be eligible for re-nomination/election for one more similar term.

#### **27. Meetings of the Board**

- (1) The Board shall meet at least once in every quarter during a year; provided that the Chairman of the Board shall, upon receipt of a requisition signed by at least half the members, convene a meeting of the Board after giving seven days notice to all the members within a period of fifteen days from the date of receipt of such requisition.
- (2) The quorum for a meeting of the Board shall be six members.

#### **28. Functions of Area Water Board**

Subject to control and direction of the Authority, the Board shall:

- (1) formulate and implement policies to achieve effective, economic and efficient utilization of irrigation water at its disposal;
- (2) ensure that it becomes fully operative as a self-supporting and financially self-sustaining entity within a period of seven to ten years from the date of its constitution;
- (3) plan, design, construct, operate and maintain the irrigation, drainage and flood control infrastructure located within its territorial jurisdiction;
- (4) adopt and implement policies aimed at promoting the formation, growth and development of FOs, including pilot projects for FOs, and faithful monitoring of the results thereof; and
- (5) perform any other functions assigned by the Authority.

### ***CHAPTER VII***

#### **FARMERS ORGANIZATIONS**

#### **29. Formation of FOs**

The FOs shall be formed at the minor/distributary level in phases and with the functions as may be prescribed by the Regulations; provided that WUOs formed under the Water Users Association law shall be deemed as FOs under this Act.

### **30. Functions and Powers of FOs**

A Farmers Organization (FO) shall:

- (a) operate, manage and improve the irrigation and drainage infrastructure, comprising minors, distributaries and drains, together with any structures thereon located within the area relevant to the FO concerned;
- (b) obtain irrigation water from the Authority or AWB concerned at the head of the minor, or the distributary, and to supply the same to their members and other water users, if any;
- (c) receive the drainage effluent from their water users and to convey the same through field/collector drains to the designated nodal points of the drainage system;
- (d) collect the agreed water charges/other dues, if any, from its water users and to pay the agreed consideration for supply of irrigation water and conveyance and/or disposal of drainage effluent to the Authority or AWB concerned;
- (e) engage, hire or employ any consultants, advisors and employees as may be deemed necessary, or be otherwise reasonably required, for the due and effective performance of various powers and functions on such terms and conditions as may be prescribed, including terms and conditions relevant to the conclusion, or premature determination, of such engagements, etc., of any consultant, advisor or employee, as the case may be; and
- (f) exercise any other power and perform such other functions, not being inconsistent with the functions and powers given above, which may be vested in the FOs under the bylaws and Regulations framed by the Authority under Section 35.

## ***CHAPTER VIII***

### **REPORTS AND STATEMENTS**

#### **31. Submission of Yearly Reports and Returns**

- (1) The FOs, AWBs and the Authority shall submit to the Government, as soon as possible after the end of every financial year, but before the expiry of a period of seven months of such end of financial year, a report on the conduct of their affairs for that year, including an audited financial statement for the year in question.
- (2) The Government may reasonably require the submission of the following:
  - (i) any return, statement, estimate, statistic or other information regarding any matter under the control of such an entity; or
  - (ii) a report on any such matter; or
  - (iii) a copy of any document in the charge of such an entity; and
  - (iv) the entity concerned shall comply with every such requisition.

- (3) The Authority and AWBs shall cause to be published their annual reports submitted under Sub-section (1), together with brief particulars of the projects proposed to be undertaken during the next financial year in at least one English/Urdu/ Regional language newspaper.

## ***CHAPTER IX***

### **MISCELLANEOUS**

#### **32. Compensation for Loss**

Where the Authority suffers any loss by grant of remission of water rates or drainage cess, compensation to the extent of loss shall be paid to the Authority by the Government.

#### **33. Transfer of Rights and Liabilities**

- (1) On the commencement of this Act, all assets and liabilities and all rights and obligations of the Irrigation Wing of the Irrigation and Power Department, shall stand transferred to the Authority, on such terms and conditions with particular regard to the use and disposal of the said assets as may be prescribed by the Government.
- (2) All contracts made by the Irrigation and Power Department relating to irrigation, drainage and flood control shall be deemed as contracts made by the Authority.
- (3) All decisions, and/ or instruments, shall be signed/authenticated, for, and on behalf of, the Authority, by the signatures of the Managing Director and/or any other employee or employees of the Authority duly authorized by the Managing Director on his behalf.

#### **34. Rules**

The Government may design Rules to carry out the functions entrusted to it under this Act.

#### **35. Regulations**

- (1) Subject to the provision of this Act and Rules, the Authority may, with the approval of the Government, design Regulations to carry out the functions entrusted to it by the Act.
- (2) Subject to the provision of this Act and the Rules/Regulations framed under it, the FOs may frame Bylaws to ensure the proper functioning of the FOs.



### **36. Removal of Difficulties**

If any difficulty arises in effecting any of the provisions of this Act, the Government may make such orders, not inconsistent with the provisions of this Act, as may appear to it to be necessary for the purpose of removing the difficulty.

### **37. Provisions of this Act to Over-ride other Laws**

In the case of any conflict or inconsistency between (among) any provision (s) of this Act and any other law(s), the provisions of this Act, to the extent of such conflict or inconsistency, as the case may be, shall prevail.

## **5.2. MODEL WATER USERS' ASSOCIATIONS ACT**

**An Act to provide for the formation, operation and promotion of  
water users' associations in the -----**

### **Preamble**

Whereas it is expedient to provide for the formation, operation and promotion of water users' associations in the province and matters ancillary thereto in the manner hereinafter appearing, it is hereby enacted as follows:

### ***Chapter 1***

### **PRELIMINARY**

#### **1. Short Title, Extent and Commencement**

- (1) This Act may be called the Water Users' Associations Act.
- (2) It extends to the whole of the province.
- (3) This section shall come into force at once and all, or any other remaining provisions of this Act shall come into force in such area, or areas, and on such date, or dates, as the Government may, by notification, direct.

#### **2. Definitions**

In this Act, unless there is anything repugnant to the subject or context:

- (a) "association" means a water users' association (*Anjuman-e-Abpashi*), organized and registered under this Act;
- (b) "association in good standing" means an Association that is not in default of a *bona fide* legal obligation;

- (c) “association village” means that area of land irrigated from the source of water developed or utilized by the Association;
- (d) “Board of Directors” means the governing body of representatives elected by the General Body;
- (e) “Bylaws” means the bylaws of the Association;
- (f) “Canal Officer” means the Canal Officer as defined in the Canal and Drainage Act, 1873 (VIII of 1873);
- (g) “Collector” means the Collector as defined in the West Pakistan Land Revenue Act, 1967 (WP Act XVII of 1967);
- (h) “Field Officer” means Director, OFWM, or an officer designated by the Director;
- (i) “General Body” means the collective body of membership of the Association;
- (j) “irrigator” means the operator of a separate farm, whether he is an owner of land, tenant or lessee, and includes the representative chosen by the joint owners or joining operators of a jointly-owned or operated farm;
- (k) “member in good standing” means any member whose payment of assessment is not in arrears by more than one year, or who is not under conviction for a criminal offense, or is not a minor;
- (l) “membership” means all the irrigators who are members of the Association and are entitled to participate in the general assembly;
- (m) “outlet/tube-well village” means that portion of land irrigated from a particular canal outlet or Government tube-well; and
- (n) “watercourse” means the main channel from the canal outlet (*mogha*) and laterals.

## *Chapter 2*

### **PURPOSE, POWERS AND FORMATION**

#### **3. Purpose**

- (1) The primary purpose of the Association shall be:
  - (i) the operation, maintenance, improvement and re-habilitation of the watercourse;

- (ii) the improvement of water supply from surface or groundwater; and
  - (iii) the improvement of On-Farm Water Management.
- (2) The secondary purpose of the Association shall be to perform such other functions as relate to obtaining other agricultural inputs and the economic and social well-being of the membership.

#### **4. Association to the Bodies Corporate**

An Association shall be a body corporate by the name under which it is registered, and allowed perpetual succession with power to hold property, both movable and immovable, and shall by the said name sue and be sued.

#### **5. Formation of Association**

- (1) Whenever at least fifty-one per cent of the irrigators of a watercourse are above the age of eighteen years, agree to the formation and operation of an Irrigator's Association (*Anuman-e-Abpashi*), they shall make an application to the Field Officer.
- (2) Upon receipt of the application, the Field Officer shall review the application and convene a meeting for all irrigators in the watercourse command area.
- (3) If seventy-five per cent of the irrigators, above the age of eighteen years, consent to the formation of the Association, membership of the non-consenting irrigators, or those who are not capable of so consenting under any law for the time being in force, shall be mandatory and they shall be deemed to have consented to be the members of the Association.
- (4) Upon receipt of the complete membership list and after ascertaining the facts as mentioned in sub-section (1), or as the case may be, Sub-section (3), the Field Officer shall approve the application, register the Association by entering the name and particulars of the Association in a register to be kept for the purpose, send one copy of the list to the Provincial Director, On-Farm Water Management, and provide the Association with a certificate of formation as evidence of the legal existence.
- (5) The membership list shall be kept current by the Association.
- (6) The Field Officer shall examine and approve the membership list, and shall determine that each member is a *bona fide* landowner, or an operator, or a tenant.

- (7) Any person aggrieved by the decision of the Field Officer may file an appeal to the Collector, whose decision thereon shall be final.
- (8) The list of Associations and names of officers of Associations shall be sent to the Irrigation, Agriculture, Revenue and other requesting departments.
- (9) The Association shall, within 30 days of the approval of the membership list, convene a meeting of the General Body, elect the Board of Directors, adopt bylaws and open a bank account.
- (10) The level of formation of an Irrigators' Association shall be at the outlet village, or tube-well village. The Association may increase its irrigated area with the use of tube-wells, and Associations sharing a common Government or private tube-well may make provisions in bylaws for operation and maintenance of the same.
- (11) Whenever the area of an outlet, or tube-well village, is changed by the Irrigation Department, the membership of existing Associations shall change accordingly. If membership changes by twenty-five per cent, or more, there shall be a fresh election of the Board of Directors.

## **6. Powers of Association**

In carrying out the functions under this Act, the Association shall generally have the powers:

- (i) to improve, rehabilitate, operate and maintain the watercourses;
- (ii) to improve the water supply from surface, or sub-surface, sources;
- (iii) to locate, own, operate and maintain tube-wells and lift pumps in the name of the Association;
- (iv) to sanction upgrading and maintenance of farm ditches and field outlets;
- (v) to encourage adoption of improved on-farm water use and management practices and other improved land and agricultural input practices;
- (vi) to participate in programs to improve watercourse, land leveling and agronomic practices, and to lease, own, operate, maintain equipment, structures and other matters associated with improvement efforts;
- (vii) to establish water delivery schedules and supervise water allocation and distribution in the Association village in such a manner so as not to interfere with canal water delivery;
- (viii) to set and collect general and special assessments;
- (ix) to conscript labor for emergency repair of watercourse;
- (x) to locate, install and maintain drainage facilities for fields;
- (xi) to remove obstructions in watercourse during realignment, operation and maintenance;
- (xii) to enter into contracts to obtain loans and grants and to set a repayment schedule;

- (xiii) to settle the disputes of water users related to irrigation;
- (xiv) to ensure that all members' rights under the law are respected and that each member gets his fair share of water in a timely fashion; and
- (xv) to ensure that all members of the Association contribute their fair share of labor, money and other services for improvement, maintenance and operation of the watercourse.

### ***Chapter 3***

## **GENERAL BODY**

### **7. Composition**

The irrigators of an Association shall constitute the General Body.

### **8. Duties of General Body**

The General Body shall:

- elect the Board of Directors;
- make, or approve, organizational policies and plan of operation;
- approve and amend bylaws;
- approve assessment and budget;
- approve selection of ditch tenders and assessment collectors;
- approve adoption of improvement programs and leasing, purchasing, or otherwise obtaining equipment, pumps, seeds, fertilizer, chemicals and other like products; and
- perform all other acts necessary to carry out the purposes of the Act and the Association's bylaws.

### **9. General Meetings**

Every Association shall call an annual general meeting of the General Body and not less than one other general meeting per year.

### **10. Special Meetings**

At the request of not less than one-fifth of the members of the Association, or at the request of the Board of Directors, the Chairman shall call a special meeting of the membership.

### **11. Voting**

- (1) All irrigators shall be entitled to vote on issues that require voting to carry out the duties of the General Body.

- (2) Each decision by the General Body shall require a two-thirds majority of votes.

## **12. Resolving Disputes**

- (1) The General Body may either elect a special body, or delegate to the Board of Directors the authority, to hear and decide disputes between members of the Association.
- (2) Violation of the decision of the Board, or the special body, shall only be punishable with a fine, and not suspension of water delivery unless approved by the General Body.

## ***Chapter 4***

### **BOARD OF DIRECTORS**

## **13. Composition**

- (1) They shall be elected by the General Body, using secret ballot, a Board of Directors consisting of not less than five members in good standing.
- (2) The General Body shall decide and include in the Association bylaws whether the representatives to the Board of Directors are to be elected from geographic portions of the watercourses (head, middle and tail), or at large.
- (3) No member elected to the Board of Directors shall enjoy any benefits greater than any other member by virtue of his elected position.
- (4) Members of the Board of Directors shall be elected for two-year terms, except in the first election after organization when one-half, or thereabouts, shall be elected for one year and thereafter half, or thereabout, shall be elected annually. A person shall not serve for more than two consecutive terms on the Board of Directors.

## **14. Chairman and Officers**

The members of the Board of Directors shall annually choose a Chairman, Secretary and Treasurer. If the bylaws so specify, Chairmen may be elected by rotation.

## **15. Quorum**

Action by the Board of Directors shall require a two-thirds vote of the total members of the Board.

## **16. Oath**

Members of the Board of Directors shall take an oath to uphold the purposes and duties of the Association and if they be Muslims, to also uphold the tenets of Islam.

## **17. Duties of Board of Directors**

The Board of Directors shall be responsible for carrying out the purposes of this Act, the Association bylaws and more particularly, shall:

- (i) manage the Association activities in the delivery of water;
- (ii) develop a plan of operation, maintenance, improvement and rehabilitation of the watercourse;
- (iii) supervise the construction and maintenance of the watercourse and other improvement activities;
- (iv) employ and discharge ditch tenders, collectors, and construction personnel;
- (v) exercise emergency powers to repair the watercourse;
- (vi) negotiate and contract with government agencies and other institutions for improvement programs acceptable to the General Body;
- (vii) serve as the communication link between government agencies in the dissemination of information and all matters representing the view and requests of the Irrigators' Associations;
- (viii) maintain the financial and organizational records of the Association; and
- (ix) call special meetings of the General Body for any matter involving original expenditures and other important issues involving the general membership.

## **18. Duties of Chairman**

The Chairman shall be responsible to call and conduct meetings of the Board of Directors and General Body and to otherwise act on behalf of the Association in all other matters. The Chairman and the Secretary shall sign all contracts and other obligations of the Association.

## **19. Duties of Secretary**

The Secretary shall keep a record of minutes of the functioning of the Association.

## **20. Duties of Treasurer**

The Treasurer shall keep and maintain financial records of the Association. The Treasurer may make deposits in the Association's account, but all withdrawals shall require the signatures of both, the Chairman and the Treasurer.

## **21. Assistance to the Board**

The Board of Directors may appoint a person competent to perform the duties of Secretary, or Treasurer, to assist the Secretary, or Treasurer, in the performance of their duties.

# ***Chapter 5***

## **FEDERATION OF ASSOCIATIONS**

### **22. Sub-system/Distributary Associations**

- (1) The Water Users' Associations of specified watercourses on a distributary or a part thereof, may form a Sub-system/Distributary Organization.
- (2) When more than half of the said watercourses are organized into Water Users' Associations, they may form a Sub-system/Distributary Organization. Any other Association formed thereafter on any other watercourse of the same distributary shall immediately become a constituent member of the Sub-system/Distributary Organization.
- (3) Each Water Users' Association shall send one, or two, representatives to the Sub-system/Distributary Organization.
- (4) The members of the Sub-system/Distributary Organization shall select a Chairman and other officers as needed.

### **23. Registration of Distributary and Sub-system Associations**

The Sub-system/Distributary Organization shall be registered with the Director of On-Farm Water Management Project/agency concerned. A copy of the registry and name of the Chairman shall be provided to all other concerned departments.

### **24. Duties and Powers**

- (1) the Sub-system Organization or Distributary Organization shall:
  - (i) represent its members in issues and problems related to the distributary;
  - (ii) represent its respective constituent members to the Departments of Irrigation, Agriculture and any other departments;



- (iii) serve as a channel of communication between the Irrigation Department and the constituent members of the organization;
  - (iv) participate actively with the Irrigation Department in the improvement, maintenance and operation of the minors and distributary;
  - (v) maintain financial records and minutes of meetings, levy assessments on member-associations and exercise collection authority on a voluntary basis, or in the case of default, by certifying the amount for collection to the Collector;
  - (vi) make bylaws and rules of operation, and
  - (vii) settle disputes referred by the Watercourse Associations.
- (2) The Sub-system Organization, or the Distributary Organization, may make recommendations and requests:
- (i) distribution of water into a sub-system or distributary on a demand, or fixed delivery, basis;
  - (ii) the Irrigation Department to construct bridges, regulators, drop structures, new minor canals, etc., at the organizations' cost, or by cost-sharing.

## **25. Capital Expenditure and Improvements**

The Board of Directors of the Sub-system, or Distributary Organization, shall, before committing, or making any major capital expenditure or improvements, obtain the approval of membership to their respective irrigators.

## **Chapter 6**

### **MISCELLANEOUS PROVISIONS**

#### **26. Evidence of Land Ownership**

Membership in the Association as a representative of joint owners, or as a tenant, does not imply relinquishing *prima facie* evidence of title to land.

#### **27. Transfer of Membership**

In the event of a transfer of any type of an irrigator's holding to another irrigator who previously was not a member of the Irrigators' Association, the membership in the Association shall also stand transferred.

#### **28. Assessments**

- (1) General Assessments shall be to carry out the primary purposes of the Association.
- (2) Special Assessments shall be to carry out the secondary purposes of the Association.

- (3) Assessments should be allocated in proportion to cultivable lands in the Association village.

### **29. Credit**

Credit may be extended to a legally constituted Association responsible for its debts and actions being in good standing.

### **30. Auditing of Accounts**

The Association shall have the financial accounts audited every year by an auditor selected from the government list of approved auditors.

### **31. Fines for Abuse**

The Association shall adopt a schedule of fines in its bylaws, which shall be either commensurate with the damage caused or, as the case may be, the benefit received, or may be levied in proportion to acreage irrigated on the watercourse.

### **32. Enforcement of Fines and Fees**

- (1) the Board of Directors may certify to the Collector the amount recoverable from a member as fines or fees, which the member refuses to pay on demand, collectable as arrears of land revenue.
- (2) the Collector shall recover the said amount so certified and reimburse this amount to the Association.

### **33. Acquisition of Lands**

The Association may acquire lands necessary for location, or relocation, of watercourses and installation of tube-wells with compensation to be paid accordingly for the land so acquired.

### **34. Contract Water and Water Rates**

The Association, or Federation of Associations at any level, may contract with the Irrigation Department for the supply of canal water on a contract basis at the outlet, or contract on a volumetric-rate basis at the minor or distributary canal, as provided in the canal rules, instead of the crop-rate basis commonly used. In this case, the Association will collect, and pay, the agreed rate to the Government.

### **35. Improvement of Distributary**

Any Association or Federation of Associations, which desires to improve the distributary or participate in the improvement process on the sub-system, or distributary, must first have the approval and supervision of the Area Water Board.

### **36. Preferential Treatment**

The Departments of Irrigation, Agriculture, Revenue and Co-operatives and credit institutions shall give preferential treatment to Irrigators' Associations organized and registered under this Act to facilitate their efficient functions.

### **37. Preparation of Forms**

The Director, On-farm Water Management, shall prepare necessary forms to expedite and facilitate the formation of Irrigators' Associations and Federations of Associations.

### **38. Rules**

The Government may design Rules to carry out the purposes of this Act.

### **39. Bylaws**

Subject to the provisions of this Act and Rule framed under it, an Association may, with the approval of the AWB, design bylaws to carry out the purposes of this Act.

## **CHAPTER 6**

### **RECOMMENDATIONS**

#### **6.1. Strategies to Initiate Participatory Irrigation Management**

##### **6.1.1. Strategy 1**

We may start the water users' associations under the existing legal framework and thereafter seek the intervention of the Provincial Governments to make the necessary amendments in the existing laws so as to have the best possible system of participatory irrigation management based on sound legal foundations.

##### **6.1.1.1. Advantages**

1. Incorporating the lessons learnt from the working of the water users' associations in these amendments will be easy; otherwise another Government intervention would be needed at a latter stage. This course of action may not be advisable; the fewer the requests for intervention, the better.
2. The participatory irrigation management program can be started without losing valuable time in making the amendments in the existing legal framework.
3. The enthusiasm of the water users will be a positive contribution towards the success of the pilot projects.
4. The successful working of the water users' associations will make it easier to legislate the necessary amendments.
5. The quarters opposing the new system will not be able to frustrate the program by employing delay tactics, as the present initiative may die out with the passage of time.

##### **6.1.1.2. Disadvantages**

1. The new system will start from a weak base and lead to problems, which may frustrate the scheme.
2. That concerned quarters are only making half-hearted efforts is likely to be the message conveyed.

### **6.1.2. Strategy 2**

Instead of starting the participatory irrigation management program under the existing legal framework, we may persuade the concerned quarters to provide a strong legal framework through delegated legislation (Rules, Regulations and Bylaws) under PIDA/SIDA Act, and thereafter, start the new system according to the new framework. Necessary delegated legislation is suggested in the following pages.

#### **6.1.2.1. Advantages**

1. The new system will be built on a strong legal basis which is likely to have a positive effect on the new scheme.
2. The seriousness of purpose will be indicated and impose a negative effect on the quarters opposing the new system.

#### **6.1.2.2. Disadvantages**

1. Designating the necessary amendments might take a long time and thus, lose much time to start the new system.
2. Even if the Government provides the desired legal framework, it might still need some adjustments on the basis of the experience of the new system. What the Government's response at that time will be is difficult to assess.
3. The loss of time to get the legal framework might have a negative effect on the attitude of the water users. Moreover, the quarters opposing the new system will get enough time to propagate against it.

### **6.1.3. Suggested Strategy**

#### **6.1.3.1. Punjab**

Strategy No. 2 is recommended because many legal formalities are needed to start effective and useful water users' associations. All the maladies of the existing laws, by making amendments to them, will be difficult to cure.

#### **6.1.3.2. Sindh**

Strategy No. 2 is recommended in the Sindh's case. However, Strategy No. 1 can also be adopted.

## **6.2. Suggested Subordinate Legislation Under PIDA Act**

### **6.2.1. Notifications**

#### **6.2.1.1. Notifications Relating to PIDA**

- a) To establish PIDA (Section 2).
- b) To nominate the members of the PIDA (Section 3).

##### Suggested Policy

- i) Farmer members of PIDA shall be representatives of the FO/AWBs.
- ii) Farmer members be given a majority in the Authority.

#### **6.2.1.2. Notifications Relating to Area Water Boards**

- a) To establish AWBs in pilot project areas (Section-14).
- b) To nominate the members of the said AWBs.

##### Suggested Policy

- i) Farmer members shall be representatives of the Farmers Organizations.
- ii) Farmer members shall be given a majority in the AWBs.
- c) To assign functions to AWBs (Section 14).

##### Suggested Policy

- i) The following functions may be assigned to the AWB:
  - to formulate and implement policies with a view to achieve and continuously improve effective, economic and efficient utilization of irrigation water at its disposal, and to ensure that within a period not exceeding 7 to 10 years from the date of its constitution, it becomes fully operative as a self-supporting and financially self-sustaining entity;
  - to operate and maintain the irrigation, drainage and flood control infrastructure located within its territorial jurisdiction;
  - to adopt and implement policies aimed at promoting formation, growth and development of FOs, including pilot projects for FOs and faithful monitoring of the results thereof;
  - to decide appeals against the decisions of the FOs relating to the irrigation disputes; and
  - to perform any other functions assigned by the Authority.

- ii) The powers of the Superintending Canal Engineer under the Canal and Drainage Act may be vested in the AWB, or as its chairman.

#### **6.2.1.3. Notifications Relating to Farmers Organizations**

- a. To establish FOs under Section 29.
- b. To assign functions to the FOs under Section 30.

##### Suggested Policy

The following functions may be assigned to the Farmers Organizations:

- i) operate, manage and improve the irrigation and drainage infrastructure, comprising minors, distributaries and drains, together with any structures thereon located within the area relevant to the FO concerned, other than civil canals;
- ii) assess *abiana*, drainage cess/ fees /fines/ other charges etc., in consultation with the WUAs at the watercourse level;
- iii) obtain irrigation water from the Authority, or AWB concerned, at the head of the minor, or the distributary, and to supply the same to their members and other water users, if any;
- iv) receive the drainage effluent from their water users and to convey the same through field/collector drains to the designated nodal points of the drainage system;
- v) collect the agreed water charges/other dues, if any, from its water users and to pay the agreed consideration for supply of irrigation water and conveyance and/or disposal of drainage effluent to the Authority or AWB concerned;
- vi) engage, hire or employ any consultants, advisors and employees as may be deemed necessary, or be otherwise reasonably required, for the due and effective performance of various powers and functions on such terms and conditions as may be prescribed, including terms and conditions relevant to the conclusion, or premature determination of such engagement, etc., of any consultant, advisor or employee, as the case may be;
- vii) resolve disputes referred by the Water Users' Association at the watercourse level;

- viii) revise water turn schedules (warabandi) in consultation with the WUAs so as to ensure adequate, reliable and equitable water supply to the water users;
- ix) exercise the powers of the Collector under the Land Revenue Act for the collection of arrears of water charges/*abiana*/drainage cess/fees/other charges to recover it as arrears of land revenue;
- x) provide sanctions, including fines against the misconduct, relevant to irrigation of the FOs and other persons according to the bylaws of the Organization;
- xi) exercise magisterial powers available under the Canal and Drainage Act (1873);
- xii) frame its bylaws for the efficient working of the Organization;
- xiii) promote agricultural productivity and higher incomes to the farming community through procurement and distribution of agricultural inputs, credit facilities and efficient and profitable marketing of crop produce;
- xiv) carry out afforestation/plantation of trees at the distributary/minor banks for the purpose of increasing the income of the Farmers Organization, in view of the requirements of irrigation and the environment; and
- xv) levy any charges/rates/other charges, etc., for non-irrigation use of distributary and minor structures, such as the service road, navigation, aqua-culture, etc..

### **6.2.2. Regulations**

Section 17 of the Act empowers the Authority to frame such Regulations that are necessary for the administration and management of the Authority. These Regulations must not be inconsistent with the provisions of the PIDA Act (1897), or Rules framed under it by the Provincial Government in this regard. Similarly, the PIDA can frame Regulations/ByLaws under Section 14 of the Act for the formation of the AWB.

The PIDA would require Regulations relating to the AWBs, and for that purpose, Regulations will have to be framed, *inter alia*, on the following subjects:

- a) Election of the Chairman and other office bearers of the Board.
- b) Meetings of the Board.
- c) Office bearers of the Board.



- d) Duties of the Chairman and other office bearers of the Board.
- e) Accounts.
- f) Audit of the accounts.
- g) Tenure of the members of the Board.
- h) Removal of the Chairman and other officers.
- i) Official records of the Board.
- j) Appeals against the decisions of the FOs relating to irrigation disputes.
- k) Terms and conditions of service of the employees of the AWBs.

### **6.2.3. Bylaws**

The Authority will also have to frame Bylaws for the FOs and AWBs. However, it is suggested that the Bylaws be restricted to the formation of the Farmer's Organizations and that the formation and working of the AWBs shall be governed by the Regulations framed for that purpose. Model Bylaws are suggested:

#### **6.2.3.1. Bylaws for Farmers Organizations at Minor Level**

There shall be a Farmer Organization of the water users of specified watercourses of a distributary/minor channel within the concerned distributary. The above water users' organization shall be called minor/sub-system organization.

#### **Constitution of the Farmer Organizations**

A Farmers Organization shall consist of a General Body and a Management Committee.

#### **General Body**

The General Body of the Sub-system Organization shall consist of one representative from each watercourse selected according to the Bylaws of the Organization.

#### **Powers and Functions of General Body**

The General Body of a Farmers Organization may be vested with the following functions and powers:

1. to formulate and implement policies for the efficient working of FOs;
2. to formulate and implement policies relating to irrigation, drainage, flood control and other related matters;
3. to elect the office bearers of the FO;
4. to propose bylaws for the approval of the Authority;
5. to approve the annual budget of the FOs; and

6. to refer any matter for the consideration and determination of the Management Committee.

### **Management Committee**

The Management Committee shall comprise the following office bearers:

President  
Vice President  
General Secretary  
Joint Secretary  
Treasurer

### **Eligibility**

Any member of the General Body shall be eligible to hold any office of the Committee if he:

- is a major member of the General Body and is not in default of *abiana*/water charges/fines etc., for more than one year;
- has not been convicted by the court of law for an offense involving moral turpitude; and
- is not holding any public/political office, or has not held any such office, within the last one year.

The General Body of a Farmers Organization may be vested with the following powers:

1. Formulate and implement policies for the efficient working of FOs.
2. Formulate and implement policies relating to irrigation, drainage, flood control and other related matters.
3. Elect the office bearers of the FO.
4. Propose Bylaws for the approval of the Authority.
5. Approve the annual budget of the FOs.
6. Refer any matter for the consideration and determination of the Management Committee.

### **Tenure**

The Management Committee shall be elected for a period of 2 years by a single non-transferable vote of existing members through a secret ballot organized by the respective Farmers Organizations as provided in its Bylaws.

A person shall not be eligible to hold any office in the Management Committee for a period of more than two consecutive terms.

## **Meetings**

There shall be a meeting of the General Body once during each quarter of the year, provided that a special meeting may be requisitioned by at least one-third of the membership of the General Body; and provided further that the Farmers Organizations at the distributary/minor canal level may direct the sub-system organization to hold a meeting of the general body for a particular purpose.

The conduct of the meeting shall be governed by the relevant Bylaws of the Farmers Organizations.

## **Duties of President**

- a. To represent the FO in all activities.
- b. To operate the development fund.
- c. To sign, as joint signatory with the Treasurer, cheques and all financial documents.
- d. To preside over the meetings of the Management Committee, Annual General Meeting and Special Meetings.
- e. To prepare, in consultation with appropriate officers and committees, a yearly program of activities for the FO.
- f. To exercise such other powers and perform such other duties as the Committee may from time to time fix or delegate.

## **Duties of Vice President**

The Vice President shall serve as Chairman and exercise the powers and perform all the duties of the President during his absence or incapacity.

## **Duties of Secretary General**

- a. To keep full minutes of the meetings of the General Body of the Management Committee.
- b. To serve as custodian of all records for the FO.
- c. To keep an up-to-date list of members.
- d. To receive and present applications for membership to the Committee, and to inform the applicant of whatever action is taken by the Committee..
- e. To fill and countersign all certificates of membership issued by the Organization.

## **Duties of Joint Secretary**

- a. Assist the Secretary General in all matters.
- b. Act on behalf of the Secretary General during his absence.

### **Duties of the Treasurer**

- a. To serve as the Chairman of the Finance Committee.
- b. In collaboration with the President, operate the Development Fund.
- c. Be the joint signatory with the President for cheques and all financial transactions.
- d. Responsible for all financial transactions with WUOs .
- e. To maintain all financial records, cash books, inventory and bank account and other records necessary for efficient financial management.
- f. Make payments against vouchers on behalf of the Organization.
- g. Along with the President, sign all bank cheques and maintain an account in a bank to be decided by the Board of Directors.
- h. Submit a monthly statement of accounts.
- i. Present to the Annual General Meeting an audited statement of Accounts.

### **6.2.3.2. Bylaws for Farmers Organizations at Distributary Level**

#### **Organization of the FO**

Farmers Organization shall consist of the General Body and Management Committee.

#### **General Body**

The General Body shall consist of a representative of each FO of the Minor/Sub-system Organization within the said distributary command area. The representatives of the minor canal shall be elected according to the Bylaws of distributary farmers organizations.

#### **Management Committee**

The following office bearers of the Management Committee are suggested:

President  
Vice President  
Secretary General  
Asst. Secretary General  
Information Secretary  
Treasurer

#### **Duties of President**

The President, who must be a member of the Farmers Organization, shall have the following powers and duties:

- a. To exercise general supervision and direction of the FO affairs and to oversee the proper implementation of the resolutions and instructions of the Committee.
- b. To represent the FO in all economic and social activities to which it is a party, or participates
- c. In collaboration with the Treasurer, operate the Development Fund.
- d. To sign as joint signatory with the Treasurer, cheques and all financial transactions.
- e. To preside over all meetings of the Committee, Annual General Meetings and Special Meetings.
- f. To prepare, in consultation with appropriate officers and committees, a yearly program for activities of the FO.
- g. To exercise such other powers and perform such other duties, as the Committee may from time to time fix or delegate.

#### **Duties of Vice President**

The Vice President shall serve as Chairman and shall also exercise the powers and perform duties of the President during the absence or incapacity of the latter.

#### **Duties of Secretary General**

- a. To keep complete minutes of all the meetings of the General Body and the Committee.
- b. To serve as custodian for all records of the FO.
- c. To keep an up-to-date list of members.
- d. To receive and present applications for membership to the Committee; and to inform the applicant of whatever action is taken by the Committee.
- e. To fill and countersign all certificates of membership issued.
- f. To provide guidance and support to the Assistant Secretary General.

#### **Duties of Assistant Secretary General**

- a) Assist the Secretary General in all matters.
- b) Act for the Secretary General during his absence.

#### **Duties of Information Secretary**

- a. To communicate the decisions made by the Organization to all of the members.
- b. To maintain all incoming and outgoing relevant records.
- c. To convey actions taken by the Management Committee relating to the issues forwarded by the sub-system/watercourse organizations.

## **Duties of Treasurer**

- a. In collaboration with the President, operate the Development Fund.
- b. Be the joint signatory with the President for cheques and all financial transactions.
- c. Responsible for all financial transactions with the FO.
- d. To maintain all financial records, cash books, inventory, bank account and other records necessary for efficient financial management.
- e. Make payments against vouchers on behalf of the FO.
- f. Along with the President, sign all bank cheques and maintain an account in a bank to be decided by the Committee.
- g. Submit a monthly statement of accounts.
- h. Present to the Annual General Meeting an audited statement of Accounts.

## **Working of FOs**

The Authority shall also have to frame bylaws under Section 14(2) of the PIDA Act (1997), relating to other aspects of FOs. That bylaws shall be framed in consultation with the FOs and that the FOs shall have the right to recommend amendments in the said bylaws is suggested.

A further suggestion is that the bylaws shall deal with the following aspects of FOs:

- Basic information of the Farmers Organizations.
- Method of election for the office bearers.
- Conduct of business.
- Record maintenance.
- Form of membership.
- Operation and maintenance of the irrigation channels.
- Procedure for assessment and collection of *abiana*, etc..
- Dispute resolution procedure.
- Schedule of fines.
- Warabandi* schedules –procedure.
- Agriculture-related activities.
- Procedure for bylaws (making amendments).

## **6.3. Suggested Subordinate Legislation Under SIDA Act (1997)**

### **6.3.1. Notifications**

#### **6.3.1.1. Notification Relating to SIDA**

- a) Notification to establish SIDA (Section 3).
- b) Notification to nominate the Chairman and representative of Farmer Organizations.

#### **6.3.1.2. Notification Relating to AWBs**

- a) Notification to establish AWBs and determine its territorial jurisdiction (Section 23).
- b) Notification to nominate two representatives (Section 23(2)(d)).

#### **6.3.1.3. Notification Relating to FOs**

Section 26A(1) enjoins the SIDA and AWB to take steps to establish FOs at minor and distributary levels.

Section 26A(3) provides that FOs established by the Agricultural Department, NGOs, Community Organizations and other sponsoring agencies shall be deemed as FOs within the meaning of the Act. Therefore, in the project areas where Agricultural Department have established Water Users' Associations and Organizations under the Water Users' Association Ordinance, the same shall be treated as FOs under the SIDA Act and notification issued accordingly.

#### **6.3.2. Rules**

Section 30 of the SIDA Act empowers the Provincial Government to frame Rules to carry out the purposes of the Act. The Rules framed by the Authority is always subordinate to the provisions of the parent Act; in this case, the SIDA Act. Thus, the Government may frame Rules that are consistent with the provisions of the SIDA Act. Section 31 empowers the SIDA to frame Regulations to give effect to the provisions of the Act. However, these Regulations are subject to the provisions of the Act and Rules framed by the Government.

#### **6.3.3. Regulations**

Section 23A(1) provides for the formation of FOs at minor and distributary levels in accordance with the relevant Bylaws and Regulations framed by the SIDA. Thus, the SIDA shall have to frame Bylaws and Regulations for the formation of FOs.

Accordingly, the SIDA will have to frame Regulations relating to additional functions of the FOs under Section 26(6).

#### **Suggested Policy:**

The following powers may also be given to the FOs:

- a) assess *abiana*, drainage cess/ fees /fines/ other charges, etc., in consultation with the WUAs at the watercourse level;

- b) obtain irrigation water from the Authority, or AWB, concerned at the head of the minor or the distributary and to supply the same to their members and other water users, if any;
- c) receive the drainage effluent from their water users and to convey the same through field/collector drains to the designated nodal points of the drainage system;
- d) collect the agreed water charges/other dues, if any, from its water users and to pay the agreed consideration for supply of irrigation water and conveyance and/or disposal of drainage effluent to the Authority or AWB concerned;
- e) engage, hire or employ any consultants, advisors and employees as may be deemed necessary or be otherwise reasonably required for the due and effective performance of various powers and functions on such terms and conditions as may be prescribed, including terms and conditions relevant to the conclusion, or premature determination, of such engagements, etc., of any consultant, advisor or employee, as the case may be;
- f) resolve disputes referred by the Water Users' Organizations at the watercourse level;
- g) revise water turn schedules (*warabandi*) in consultation with the WUAs so as to ensure adequate, reliable and equitable water supply to the water users;
- h) exercise the powers of the Collector under the Land Revenue Act for the collection of arrears of water charges/*abiana*/drainage cess/ fees/other charges to recover it as arrears of land revenue;
- i) provide sanctions, including fines, against the misconduct relevant to irrigation of the FOs and other persons according to the Bylaws of the Organization;
- j) exercise magisterial powers available under the Canal and Drainage Act (1873);
- k) propose changes in its Bylaws for the efficient working of the Organization;
- l) promote agricultural productivity and higher incomes to the farming community through procurement and distribution of agricultural inputs, credit facilities and efficient and profitable marketing of crop produce;
- m) carry out afforestation/plantation of trees at the distributary/minor banks for the purpose of increasing the income of the Farmers Organizations, in view of the requirements of irrigation and the environment; and
- n) levy any charges/rates/other charges, etc., for the non-irrigation use of distributary and minor structures, such as the service road, navigation, aquaculture, etc..



#### **6.3.4. Bylaws**

The SIDA shall also frame bylaws for the formation and working of the FOs at minor and distributary levels. The following model Bylaws are suggested:

##### **6.3.4.1. Bylaws for Farmers Organizations at Minor Level**

There shall be a Farmers Organization of the water users of specified watercourses of a distributary/minor channel within the concerned distributary. The above water users organization shall be called minor/sub-system organization.

##### **Constitution of the Farmers Organizations**

A Farmers Organization shall consist of a General Body and a Management Committee.

##### **General Body**

The General Body of the Sub-system Organization shall consist of one representative from each watercourse selected according to the Bylaws of the Organization.

##### **Powers and Functions of General Body**

The General Body of a Farmers Organization may be vested with the following functions and powers:

1. to formulate and implement policies for the efficient working of FOs;
2. to formulate and implement policies relating to irrigation, drainage, flood control and other related matters;
3. to elect the office bearers of the FO;
4. to propose bylaws for the approval of the Authority;
5. to approve the annual budget of the FOs; and
6. to refer any matter for the consideration and determination of the Management Committee.

## **Management Committee**

The Management Committee shall comprise the following officers:

President  
Vice President  
General Secretary  
Joint Secretary  
Treasurer

## **Eligibility**

Any member of the General Body shall be eligible to hold any office of the Committee if he:

- is a major member of the General Body and is not in default of *abiana*/water charges/fines, etc., for more than one year;
- has not been convicted by the court of law for an offense involving moral turpitude; and
- is not holding any public/political office, or has not held any such office, within the last one year.

The General Body of a Farmers Organizations may be vested with the following functions and powers:

1. Formulate and implement policies for the efficient working of FOs.
2. Formulate and implement policies relating to irrigation, drainage, flood control and other related matters.
3. Elect the office bearers of the FO.
4. Propose Bylaws for the approval of the Authority.
5. Approve the annual budget of the FOs.
6. Refer any matter for the consideration and determination of the Management Committee.

## **Tenure**

The Management Committee shall be elected for a period of 2 years by a single non-transferable vote of existing members through a secret ballot organized by the respective Farmer's Organizations as provided in its Bylaws.

A person shall not be eligible to hold any office in the Management Committee for a period of more than two consecutive terms.

## **Meetings**

There shall be a meeting of the General Body once during each quarter of the year provided that a special meeting may be requisitioned by at least one-third of the membership of the General Body; and provided further that the Farmers Organizations at the distributary/minor canal level may direct the sub-system organization to hold a meeting of the general body for a particular purpose.

The conduct of the meeting shall be governed by the relevant Bylaws of the Farmers Organizations.

## **Duties of President**

- a) To represent the FO in all activities.
- b) To operate the development fund.
- c) To sign, as joint signatory with the Treasurer, cheques and all financial documents.
- d) To preside over the meetings of the Management Committee, Annual General Meetings and Special Meetings.
- e) To prepare, in consultation with appropriate officers and committees, a yearly program of activities for the FO.
- f) To exercise such other powers and perform such other duties as the Committee may from time to time fix or delegate.

## **Duties of Vice President**

The Vice President shall serve as Chairman and exercise the powers and perform all the duties of the President during his absence or incapacity.

## **Duties of Secretary General**

- a) To keep full minutes of the meetings of the General Body, Management Committee.
- b) To serve as custodian of all records for the FO.
- c) To keep an up-to-date list of members.
- d) To receive and present applications for membership to the Committee and to inform the applicant of whatever action is taken by the Committee.
- e) To fill and countersign all certificates of membership issued by the Organization.

## **Duties of Joint Secretary**

- a) Assist the Secretary General in all matters.
- b) Act on behalf of the Secretary General during his absence.

### **Duties of Treasurer**

- a) To serve as the Chairman of the Finance Committee.
- b) In collaboration with the President, operate the Development Fund.
- c) Be the joint signatory with the President for cheques and all financial transactions.
- d) Responsible for all financial transactions with WUOs.
- e) To maintain all financial records, cash books, inventory and bank account and other records necessary for efficient financial management.
- f) Make payments against vouchers on behalf of the Organization.
- g) Along with the President, sign all bank checks and maintain an account in a bank to be decided by the Board of Directors.
- h) Submit a monthly statement of accounts.
- i) Present to the Annual General Meeting an audited statement of Accounts.

### **6.3.4.2. Bylaws for Farmers Organizations at Distributary Level**

#### **Organization of the FO**

Farmers Organization shall consist of the General Body and Management Committee.

#### **General Body**

The General Body shall consist of a representative of each FO of the Minor/Sub-system Organization within the said distributary command area. The representatives of the minor canal shall be elected according to the Bylaws of distributary farmers organizations.

#### **Management Committee**

The following office bearers of the Management Committee are suggested:

President  
Vice President  
Secretary General  
Asst. Secretary General  
Information Secretary  
Treasurer

#### **Duties of President**

The President, who must be a member of the Farmers Organization, shall have the following powers and duties:

- a) To exercise general supervision and direction of FO affairs and to oversee the proper implementation of the resolutions and instructions of the Board.

- b) To represent the FO in all economic and social activities to which it is a party or participates.
- c) In collaboration with the Treasurer, operate the Development Fund.
- d) To sign as joint signatory with the Treasurer, cheques and all financial transactions.
- e) To preside over all meetings of the Committee, Annual General Meetings and Special Meetings.
- f) To prepare, in consultation with appropriate officers and committees, a yearly program for activities of the FO.
- g) To exercise such other powers and perform such other duties as the Committee may from time to time fix or delegate.

#### **Duties of Vice President**

The Vice President shall serve as Chairman and shall also exercise the powers and perform duties of the President during the absence or incapacity of the latter.

#### **Duties of Secretary General**

- a) To keep complete minutes of all the meetings of the General Body and the Committee.
- b) To serve as custodian for all records of the FO.
- c) To keep an up-to-date list of members.
- d) To receive and present applications for membership to the Committee and to inform the applicant of whatever action is taken by the Committee.
- e) To fill and countersign all certificates of membership issued.
- f) To provide guidance and support to the Assistant Secretary General.

#### **Duties of Assistant Secretary General**

- a) Assist the Secretary General in all matters.
- b) Act on behalf of the Secretary General during his absence.

#### **Duties of Information Secretary**

- a) To communicate the decisions made by the Organization to all the members.
- b) To maintain all incoming and outgoing relevant records.
- c) To convey actions taken by the Management Committee relating to the issues forwarded by the sub-system/watercourses organizations.

#### **Duties of Treasurer**

- a) In collaboration with the President, operate the Development Fund.
- b) Be the joint signatory with the President for cheques and all financial transactions.

- c) Responsible for all financial transactions with FO.
- d) To maintain all financial records, cash books, inventory, bank account and other records necessary for efficient financial management.
- e) Make payments against vouchers on behalf of the FO.
- f) Along with the President, sign all bank cheques and maintain an account in a bank to be decided by the Committee.
- g) Submit a monthly statement of accounts.
- h) Present to the Annual General Meeting an audited statement of Accounts

### **Working of FOs**

The Authority shall also have to frame bylaws under Section 26c(6) of the SIDA Act (1997) relating to other aspects of FOs. A suggestion is that the bylaws shall be framed in consultation with the FOs and that the FOs shall have the right to recommend amendments in the said bylaws.

A further suggestion is that the bylaws shall deal with the following aspects of FOs:

Basic information of the Farmers Organization.  
 Method of election for the office bearers.  
 Conduct of business.  
 Record maintenance.  
 Form of membership.  
 Operation and maintenance of the irrigation channels.  
 Procedure for assessment and collection of *abiana*, etc..  
 Dispute resolution procedure.  
 Schedule of fines.  
*Warabandi* schedules –procedure.  
 Agriculture related activities.  
 Procedure for bylaws (making amendments).

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28. Elahi, Noor. 1994. Manual of Canal and Drainage Laws in Pakistan. Punjab Law House Publishers and Book Sellers, Lahore.



## LIST OF ORGANIZATIONS, OFFICIALS AND PERSONS CONSULTED

### A. WATER USERS ORGANIZATIONS

- 1 Water Users Federation, Hakra 4-R Distributary, Haroonabad
- 2 Water Users Organization Sub-system No. 1, Hakra 4-R Distributary, Blass Pur, Haroonabad
- 3 Water Users Organization Sub-system No. 3, Hakra 4-R Distributary, *Chak* No. 69/4-R, Haroonabad
- 4 Water Users Organization Sub-system No. 4, Hakra 4-R Distributary, Khatan, Haroonabad
- 5 Water Users Organization Sub-system No. 5, Hakra 4-R Distributary, *Chak* No. 60/4-R, Haroonabad
- 6 Minor Canal Committee, Bahadarwah Minor/ Sirajwah Distributary

### B. STAFF OF IRRIGATION AND AGRICULTURE DEPARTMENTS

- 1 Mr. Sheikh Muhammad Nawaz, XEN, Hakra Division, Bahawalnagar Circle
- 2 Mr. Khalid Iqbal, XEN, Sadiqia Division, Bahawalnagar Circle
- 3 Mr. Ali Sher Zahid, Project Director, FES(S), OFWM, Bahawalnagar
- 4 Mr. Anwar-ul-Haq Shehzad, Assistant Director, OFWM (Research), Bahawalnagar
- 5 Mr. Khalid, Assistant Director, OFWM (Research), Bahawalnagar

### C. IIMI-Pakistan STAFF

- 1 Mr. Don Jayatissa Bandaragoda, Senior Management Specialist/ Team Leader Institutional Development Component, IIMI-Pakistan, Lahore
- 2 Dr. Muhammad Asghar Cheema, Social Scientist, IIMI-Pakistan, Lahore
- 3 Mr. Zafar Iqbal Mirza, Irrigation Agronomist
- 4 Mr. Mehmood Ul Hassan, Field Research Social Scientist
- 5 Mr. Waheed-uz-Zaman, Senior Field Research Engineer/ Field Team Leader
- 6 Mr. Abdul Hamid, Senior Field Assistant
- 7 Mr. Muhammad Amjad, Social Organizer
- 8 Mr. Nasir Sultan, Social Organizer
- 9 Mr. Bilal Asghar, Social Organizer
- 10 Mr. Khalid Rashid, Field Assistant

# IIMI-PAKISTAN PUBLICATIONS

## CONSULTANCY REPORTS

S.No.	Title	Author	Year
C-1	Consultancy inputs for the preparation of project inception report on social organization in irrigation management	P. Ganewatte P. Pradhan	Jan 1995
C-2	Regional Salinity - Sodicity Issues in Punjab, Pakistan Consultancy Report	Dr. James W. Biggar	Apr 1996
C-3	Study of Water and Salt Balances for Eight Sample Watercourse Commands in Chishtian Sub-division, Punjab, Pakistan - Consultancy Report	E.G. van Wayjen	June 1996
C-4	Unsteady Flow Simulation of Pehur High-Level Canal Including Automatic Downstream Water Level Control Gates - Consultancy Report	Dr. Kobkiat Pongput	June 1996
C-5	Distributary Level Water Users Associations in Pilot Projects for Farmer-Managed Irrigated Agriculture, Punjab and Sindh Provinces, Pakistan	Dr. P. Pradhan	Sept 1996
C-6	Water Users Organization Program in IIMI's Pilot Projects in the Punjab and Sindh Provinces, Pakistan	Piyasena Ganewatte	Oct 1996
C-7	Soil Salinity and Sodicity in Relation to Irrigation Water Quality, Soil Type and Farmer Management - Consultancy Report	J.C. van Dam M. Aslam	Apr 1997
C-8	Maintenance of Water Management Systems for Irrigation in Pakistan: A Study Report	MM Pakistan (pvt) Ltd	Apr 1997
C-9	Salinization of the Irrigated Soils in the Punjab (Pakistan)	Serge Marlet	Aug 1997
C-10	Case Study on Agriculture Department of Punjab Province	Mushtaq Ahmad Gill Khuram Mushtaq	Sep 1998
C-11	Legal Framework for Irrigation Management in Punjab and Sindh	Prof. Dr. Dil Muhammad	Sep 1998