CHAPTER – VII

FINDINGS, CONCLUSIONS AND SUGGESTIONS

Relevance of the Study

A distinguishing feature of water is that it is one of the most manageable of the natural resources, as it is capable of transporting, storing and recycling. Thus, augmentation/conservation of water is feasible. In this augmentation/conservation, technology and economics play a decisive role in a conducive institutional set up, monitored by the society itself. In this context, a sociological study of water management is bound to be relevant and rewarding.

A review of past studies on water management has revealed that the sociological aspects were not elaborated, to the extent the technological and institutional aspects were dealt with.

Selection of the Study Area

Deciding to attempt at a micro study, two taluks in Kanyakumari district (Thovalai and Agasteeswaram) were chosen as the universe of the proposed study. That particular area was chosen because there were no sociological studies of water
management with reference to that area, even though the area has a rich heritage of socially monitored institutional set up for water management.

**The Design of the Study**

The proposed study is designed to give a historical account of the role of the State vis-à-vis the community in the harnessing of water. A description of the role of the local community organization in the up-keep of rivers, channels and tanks and a critical assessment of these local organizations and institutions in water management is to be given. The socio-political impact of the prevailing system of water management on inter-community relationship is to be enquired into.

The study consists of preparation of schedule, pre-testing, execution, classification, tabulation and analysis of data, interpretation of analysed data and suggestions for future. Using the purposive sampling method, three hundred respondents, spread over the study area associated with the traditional (*puravus*) and State-sponsored (*sabhas*) Water User Associations (WUAs) are selected for the study.
Objectives of the Study

1. To analyse the performance of formal and informal Water Users Associations in the study area.

2. To study the participation and involvement of farmers in the management of Water Users Associations.

3. To appraise the problem faced by the Water Users Associations in the study area.

4. To understand the grievances and disputes that arises in sharing distribution and regulation of water for irrigation.

5. To assess the efficacy of the strategies adopted for redressal of the grievances.

6. To make suggestions for effective functioning of Water Users Associations.

The chapters of this study are designed to fulfil the objectives. While the first four chapters are of the conventional type, the fifth chapter analyses the origin, structure and functioning of WUAs. The sixth chapter analysing the perception of the respondents over the functioning of WUAs, fulfil the second and third objectives. The last chapter gives the social inputs needed for the success of the
WUAs. The findings of the study, enumerated below, will show how, what the objectives expected, are met with.

**Findings of the Study**

1. Puravus are more active not only in normal times, more so in times of scarcity, through the appointment of *kandottu* and, through him, regulate supply of water from the tail end to the head reach.

2. The sabhas as a whole are not up to the expectation of the respondents in evolving timely measures to tackle the drainage problem.

3. From the reports of a very large proportion – 60 to 64% of respondents that they have never attended the meetings of the sabhas, it can be inferred that the deliberations of the WUAs, in general, have not succeeded in raising the enthusiasm of its associates.

4. Only about 20% of the respondents in both the taluks report that the decisions in the puravus are made at the meeting of the General Body. The deliberations of the sabhas are also along the same lines. It is the President/Secretary in the
puravu and the executive committees in the sabhas that are
taking decisions. While the General Body is clueless there is
no interest in participating in its meetings and this is one of
the reasons that could explain the lack of enthusiasm among
the respondents in the affairs of the WUAs.

5. The main aim of the sabhas is to promote peoples’
participation, the government officials are assigned to play
the role of the catalytic agent; but in practice, it is not so
reports 15% the sabha associates in both the taluks. Evidently, this shows the weakness of the sabhas.

6. It is found that while land ownership and caste are involved
in forming puravus, the NGOs, the State and politicians are
involved in forming sabhas.

7. Founders apart, if we turn to the personality of the present
day leader of the WUA, only 15 to 20% of respondents
perceive the hold of land owners in the selection of leaders.
Caste factor is also now found to be very weak. Family status
has lost its hold. Administrative ability and political
affiliation have been significant in selecting the leader of the
sabhas. As the sabhas are sponsored by the State, this is quite possible.

8. Among those who visualize the problem of encroachment, only 43% of the respondents in Thovalai and 40% in Agasteeswaram find that WUAs have taken measures for eviction of encroachments. 75% of these people point out that puravus are more involved in the process of eviction.

9. Periodical clearance of channels and tanks off weeds and silt is essential for the free flow and full storage of water. It is perceived that while the PWD cleans the main channel (over which the sabhas and puravus have no authority), the WUAs show interest in clearing the feeder channels. All the three agents show interest in clearing the tanks. Tank clearance is not easy in the study area as the PWD leases public tanks for cultivating lotus plants to private parties. Atlast, four public spirited persons were motivated to file a suit in the high court and got banning of leasing of tank for cultivation of lotus plants.
10. It is found that the work carried by the puravus has given much satisfaction to the respondents in both the taluks (especially in feeder and field channel clearance and repairing of shutters that show their interest in effecting local improvements). In both the taluks, on the whole, there is only dissatisfaction on the work of the sabhas in liaison with officials.

11. The three most important barriers that affect the efficient functioning of WUAs in general are lack of finance, caste differences and conflict among the users in both the taluks.

12. According to the respondents, three factors that have more impact on local conflicts on matters of water are (a) tackling the problem of encroachments (b) underlying caste differences and (c) choosing diverse cropping patterns. Distribution of irrigation facilities in between the head reach and the tail end and political indifference are the other causes. It is worth noting that in the number of respondents who cite political indifference as a factor in both the taluks, the number of sabha associates is higher than that of the puravu associates. Further, a very small section (6 to 7%)
finds fault with the physical system; it is possible to conclude that if the system is satisfactory, there will be no conflict and that the overall work of the WUAs depends entirely on the organizational pattern and personality factors.

**Testing the hypotheses**

The study has put forth three hypotheses:

1. **Social changes have a definite impact on the institutional set-up**

   The district has been witnessing a social change, the traditional upper caste paddy cultivators being replaced by an emerging enterprising caste people, to whom agriculture is not a way of life, but a business proposition. The rise of this caste people effected a basic change in the cropping pattern in the study area – coconut and banana usurping the place of traditional paddy. These people are more interested in protecting the coconut groves; they founded a new institution – Boomi Pathukappu Sangam- Land Protection Association. Similarly, their cultivation of banana in the midst of paddy fields has made the traditional water management over time out of gear. Thus the hypothesis stands validated. Thus, to-day’s WUAs do represent the plurality of Indian society much
better and reverberates with the voices of those sections that had remained voiceless for generations.

2. The State-Sponsored WUAs cannot replace the traditional WUAs

As of now in the study area itself, there are 18 traditional WUAs and 20 state-sponsored WUAs. The traditional WUAs still survive in some way or other. Some of them have simply converted themselves into state-sponsored WUAs, attracted by the privileges, the latter offer. Further, as the area of operation of state-sponsored WUAs is wider, covering a cluster of villages, the traditional WUAs of particular villages within the cluster have a role to play to safeguard the local interests. Further, failing to contribute their entrance payments to the state-sponsored WUAs, many small holders remain out of the fold of the state-sponsored WUAs, and they put their faith on the traditional WUAs. The traditional institutions not insisting on any subscription, run by elderly and honest men and adjusting themselves to social changes cannot be easily dislodged.
3. The State-Sponsored WUAs presuppose the awareness and involvement of water users

The general level of awareness about the matters of water is found to be not up to the mark among the respondents. A large number of them are not aware of many important provisions of the Tamilnadu Act of 2000 – the provision for recall of office bearers, the duty to collect and remit water charges to the government, the passage of the high court judgment banning raising of lotus plants in tanks. Unlike the traditional WUAs, the state-sponsored WUAs are introduced from outside, and so, their establishment and functioning presupposes a set of motivated members in its fold. Anyhow in course of time, once in the field, they will acquire the required motivation. This is evident in their pointing out the absence of volunteers, interference of political leaders, caste differences and lack of unity as the barriers in the functioning of their institution. The associates of state-sponsored WUAs are dissatisfied with the failure of their institution in maintaining liaison with officials. This again is another evidence for the growing awareness of the members of state-sponsored WUAs. Above all, the (District Level) Project Committee’s fight against official-dom, in
securing their rights, and efforts to get raising of lotus plants in tanks banned by the judiciary also bear testimony to the development of motivation among the WUAs in general.

**Conclusions of the Study**

The conclusions of the present study shall now be enumerated:

1. Social changes consequent upon changes in land ownership have brought out a change in the composition of the traditional WUAs, the higher caste giving way to the socially lower castes. Thus to-days WUAs does represent the plurality of Indian Society much better and reverberates with the voices of those sections that had remained voiceless for generations.

2. It is found that a significant positive relationship exists between farm size, farm income and peoples’ participation; this means that as farm size and farm income increase, so do perception of farmers on system effectiveness. In the context of land ownership changing towards the new enterprising backward caste, it follows that it is the social make up that induces system effectiveness.
3. Peoples’ participation in irrigation management will click only when the officials willingly “participate”. Bureaucratic apathy/aberration (which many feel as a threat to the state-sponsored WUAs) needs to be transferred into bureaucratic support and commitment. Actually, state-sponsored WUAs are sponsored with the ultimate aim of transferring the managerial responsibilities of water bodies to the water users. This means dismantling the power of the PWD and the bureaucracy, as it is, is not prepared for such a dethronement.

4. The commendable success of some traditional puravus and state-sponsored WUAs means that both the old and the new types of organisations are needed. Both may adapt taking new functioning and spontaneously merge at different levels for modern efficient water management.

**Suggestions offered for follow-up action**

A few suggestions can be offered for follow-up action.

1. There is an urgent need to clear the tanks in the basin of aquatic plants and encroachments. This is to be attempted on a massive scale with machines and man power. The
society as a whole should be mobilized for the purpose. Involving the N.C.C. and N.S.S. cadets and volunteers in a well-organized ‘Save Our Tanks’ campaign will rouse a social consciousness and awareness. The campaign is to be started from the up reach downwards, for the aquatic plant menace is constantly flowing through water.

2. The financial resources of the WUAs can be augmented, if the State comes forward to reserve to them all types of revenue that are currently extracted from the water bodies – usufructs of trees, flowers, fish, 2C patta fines, plantation of bunds etc.

3. The farmers are to be motivated to coordinate their cropping pattern in the ayacut and actively cooperate in the farming operation.

4. The Mahatma Gandhi National Rural Employment Guarantee Scheme shall be used for removing siltation in the water bodies.

5. Removal of silt by the farmers themselves (without getting the approval of the redtape-ridden Revenue authorities) and transporting it to the farm to be mixed with the top soil, will
help to improve the fertility of the entire ayacut, for silt is a highly valuable organic manure.

6. Rules regarding eviction of encroachments, granting the authority to do it to the Revenue Department (with the help of the Survey Department) are only delaying the operations. And so, the authority to evict encroachments should be given to the PWD.

7. The use of aquatic weeds as green leaf manure shall be propagated on Agricultural Extension Services. This will ensure the removal and profitable use of these weeds. A biological method of control is also suggested: The weevil neochetina eichhonai- (available in Bangalore) if released over the water hyacinth infected areas, will eat away the plants.