
**STUDY ON CUSTOMARY RIGHTS AND THEIR
RELATION TO MODERN TANK MANAGEMENT
IN TAMIL NADU, INDIA**

By

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Part I

Overview of Customs,

Rights and Modern Tank

Management in Tamil Nadu

Customary Rights and their relation to Modern Tank Management in Tamilnadu, India

Tanks in South India

Village tanks occupy a significant position in irrigation and in the local ecosystem in low rainfall areas. Irrigation tanks have been one of the most important water resources for the rural communities in Indian subcontinent. Most of these tanks are situated in semi-arid parts of peninsular India where there are no rivers of importance. These water harvesting structures were ingeniously designed by the native rulers and managed by the local communities over the past several centuries. These unique indigenous water storage and management systems are now in a general decline.

Continuing Mismanagement

The centralization of the tank administration in the last two centuries by the British colonial administration are said to be one of the reason for its decline. Such a process led to severe consequences over the centuries - alienating the local community from taking up collective efforts towards the betterment of tanks. The investments on the preservation of tanks also steadily declined, resulting in the deterioration of the tank systems. In the last three decades the decline in tankfed agriculture has become more rapid and has severely affected agricultural production in several places. The region is facing a grave situation through the deteriorating tanks, forcing the marginal and small farmers into a cycle of deprivation and debt, as also leaving them increasingly at the mercy of the vagaries of monsoon.

Tanks in Cascades

There exist around 140,000 number of tanks in the three South Indian states of Karnataka, Tamil Nadu and Andhra Pradesh, mostly spread over the low rainfall monsoon dependent districts. These tanks are earthen bunded reservoirs constructed across slopes by taking advantage of local depressions and mounds. Most of them are linked as cascades in watersheds, which are not always uniform in terms of agriculture and administration. These cascades cross government administrative boundaries and are managed by several departments for various activities. The tanks have provided support for the livelihood of the local village communities and have to be restored and conserved as economic assets, especially for the poor and marginalised communities in the under developed areas.

Tanks as Multiple use Systems

As one of the oldest man-made ecosystems, the tank system consist of water bodies, tank structures, feeder canals and supply channels, wells, wetlands, semi dry tankfed lands, soils and plants, animals and birds, aquatic plants and fishes. As an agricultural system it is distinct in cropping practices, varieties and water management. As an engineering system it is historically one of the oldest in irrigation engineering design. As a management system it is capable of becoming administratively and financially self reliant structure. As a social system the tank serves and benefits various groups and sections of the village community such as farmers, fisher folk, artisans, animal rearers - and especially the women.

Customs, Customary rights in Tanks

Customary rights to tank waters and other associate usufructs have been traditionally exercised by farming and non farming villagers according to norms that have been handed down over centuries. Study of customary rights, from available records as well as from intensive field studies are necessary to document the existing patterns of inter and inter tank management systems. The relationship of such customary rights to the irrigation and land laws of the state needs to be investigated in order to evolve an appropriate legal framework for tank management in Tamilnadu. The formal and non-formal legal framework on tanks will be studied to explore the subject of rights in tank systems and its relationship to some of the critical issues at current times:

- Equitable and sustainable use
- Decentralized governance
- Management of conflicts
- Integrated Resource Management

A study to understand the customs, practices and customary rights and their relation to modern tank management was undertaken during the year 2003. The study was formulated with the following specific objectives.

1. To *investigate* historical and extant customary rights in tank systems in Tamilnadu in relation to the different types of tanks and their relation to past and present customary management of tanks.
2. To *review the current irrigation* law and policy of the State in relation to right institutions and management processors including a review of the institutionalization of irrigators under official modern tank management strategies and through non government organization's initiatives, and
3. To *finalise a strategy* a public consultations for legal reform for tank management in Tamilnadu.

The study was undertaken with a fond hope of understanding the following important components in tank management. They are:

1. Environmental and geographical issues like nature and types of rights in tank systems, relationship of rights in tanks to such physical features as type and size, relationship of rights of tanks to rights in catchments areas and other water bodies and relationship between rights and changes in land use, environmental conditions water availability and demographic factors.
2. Socio political issues relating to relationship of rights in tanks to socio- economic status and relations, intra and inter village, relationship of rights in tanks to profiles of local or supra-local, social, political and economical institutions, relationship of rights in tanks to management institutions both formal and non formal.
3. Economic issues focusing on distinction between economic value and tank water in relation to water from other sources, economics of transfers of water rights in tanks, economic of tank maintenance community, inter-community and regional levels and impact of change of agricultural technology on rights in tank systems.
4. Legal issues regarding relationship between rights in water and other usufructs and management responsibilities, relationship between rights of various groups and normative

frameworks regarding the resource systems, relationship of rights to decision making processes and outcomes, distinction between rights as recognized in law and rights in practice, norms and rules on transfer of rights, formal and non-formal institutions and a processes for dispute resolution, interpretation of rights in non-formal fora and relationship of rights in practice to those define under irrigation and land laws of the state.

The study was conducted in southern districts of the state of *Tamilnadu* concentrating on village tanks at micro, meso and macro levels, and the geographical area being the major consideration. The study was conducted in selected districts of the state of Tamilnadu. Archival and published records, books and other materials, Government orders and Court verdicts were reviewed for better understanding of the problem in general and specific to the selected cases. Interviews were conducted using a well-constructed and standardized interview schedule for collecting data from individual farmers wherever needed. Case studies were also conducted with the group of villagers and various stakeholders in the tank management systems.

The important findings of the study are presented under the following headings:

1. Legal Analysis of Customs, Customary Rights related to Tanks in Tamilnadu with a summary of case studies
2. Documentation of Customary practices and their relations to modern tank management in Ramanathapuram district with an example of Pooseri tank in Mudhukulathur Taluk.
3. Customary rights and their relations to modern tank management at a micro level through the cases and salient inferences from them.
4. Customary rights and their relations to modern tank management at a meso level spanning a few villages in a hydrologically connected tanks systems in Madurai District.
5. Customary rights and their relations to modern tank management at a macro level depicting the changes happening with regard to the tank systems and their customary practices.

Section I. Legal Analysis of Customs, Customary Rights related to Tanks in Tamilnadu

Custom and Customary Rights

Custom is a law not written, established by long usage and consent of our ancestors. No law can oblige free people without their consent; so whenever they accept and follow certain or ways of doing things proposed by the community for a longer period of time, such methods will be treated as law. When it is universal, then it is common law. If it is particular to a place it is custom or called customary law. Custom is an important source of law. India is a land where there are very many customs appropriate to certain areas or territory¹.

Custom in the legal sense means a long established practice considered as un-written law. They are to be strictly adhered to by all the members of the community for instance, the custom of free grazing in the village waste. In another sense it means an established practice or usage having the force of law. Custom is authoritative; it stands in the place of law, and regulates the conduct of men in the most important concerns of life. Customs die away or abolished or suspended by statutory law.

¹ The Law Lexicon.

Custom must be ancient, certain, reasonable and continuous and in derogation of the general rule of law. The court by its formal and explicit approval attests the 'jural quality' of the custom. When a customary right is upheld by the court it becomes customary law. But to obtain that legal status, the custom must be ancient, certain and reasonable and, in derogation of the general rules of law, be construed strictly.

It is further essential that they should be established to be so by clear and unambiguous evidence. It is only by means of such evidence that the courts can be assured of their existence, and they possess the conditions of antiquity and certainty on which alone the title recognition depends.

Proof of Custom

As regards the nature and conditions of proof of custom, the following propositions enunciated by the Madras High Court are the very valuable;

1. The evidence should be such as to prove the uniformity and continuity of the usage and the conviction of those following it; that they were acting in accordance with law and this conviction must be inferred from the evidence.
2. Evidence of the acts of the kind acquiescence in those acts; decision of courts, or even of Panchayat, approving such acts; statements of experienced and competent persons of their belief that such acts were legal and valid, will all be admissible; but it is obvious that although admissible, evidence of that latter kind will be of little weight, if un supported by actual examples of the usage asserted.²

No hard and fast rules can be laid down as to how many instances are sufficient to make out a valid custom.

Custom cannot be said to be founded on reason and no reason could make a custom as law. Continuity is essential for a valid custom and a custom cannot be created by an agreement of what is so as to be binding upon others.

According to some scholars, law originated in customs and only much latter was created by Juristic Activity. For a long time in the history of society, the laws were not expressed in writing. They were committed to memory and handed down in that form from generation to generation. Gradually law making became the prerogative of the legislature constituted by elected representatives of the people who are to govern by the law erected. Through enactments the legislature started to meet the shifting needs of the society and mutual adjustment of conflicting interest.

Custom, Usage, Prescription

A Usage in its most extensive meaning includes both custom and prescription'; but in its narrower signification it refers to a general habit, more of procedure; The words "Custom" and "Usage" are not synonymous. A usage need not possess the same degree of antiquity as custom.

Customary – Easement

Similar to customary right there are other rights called easement rights and prescriptive right. Though similar in nature they are essentially different in their contents.

² Gopalayyan Vs Raghupatiayyan 7M.H.C.R.250 quoted in "Hindu Law" by N.R. Ragavachariar.

A right of easement is a right which the owner or occupier of certain land possess as such, for the beneficial enjoyment of that land to do and continue to do something or to prevent something being done in or upon or in respect of certain other land not his own.

Prescriptive right is a right acquired by prescription that is uninterrupted use or possession from time immemorial or for a period fixed by law. What may suffice to establish customary easement may be wholly insufficient to establish an easement by prescription and vice-versa. The two rights are different although the result may be the same.

Customary Right

Rights arising out of established custom are customary right. A Customary right belongs to no individual in particular. Easements are, so to speak, private rights belonging to particular persons; while customary rights are public rights annexed to the place in general.

Customary Law

A vast range of human activities laid out side the reach of regulating aim of the state. Much of human inter-relationship is regulated by “non-state legal system”, a complex system of “norms institutions and culture” which parallel the substantive and procedural functions of state made law. This body of law variously defined as customary law, traditional law or local law as distinguished form actual behavior or practices, the term refers to norms and rules underlying or determining behavior as well as procedures that enable their application. Custom is generally understood to be that today of law, which is predominantly oral than written and which derives its authority from sources other than state³.

Contrary to state law, customary laws emerge from the community and command social acceptance and observance or compliance. Custom has held an important place in Indian legal system prior to the introduction of English law. It was sustained by the Ruler, as well as by Dharma, the moral authority which activated both. The distance between law and custom was itself a tradition in India.

Importance of Customs and Customary Rights

Customs occupied a very important place in modern India and are recognized by parliament and Indian legislature as valuable in the administration of law and justice. Several Regulations and Acts between 1753 to 1935 reserved a legal space for custom (Kane P.V. “Hindu customs and Modern Law”)

1. The charter of Mayor’s court in Bombay in 1753 reserved laws and customs to natives resident in the company’s territory in India.
2. The Bombay regulation IV of 1827 provided that in the trial of suits, in the absence of parliament and regulations of Govt. the usages of the country in which the suit arose was to be applied; and if there were none such, the law of the defendant, and in the absence of specific law and usage, justice, equity and good conscience alone was to be observed.

³ Snyder 1981 in “Legal Pluralism”, Sally Engle Merry, Law ans Society Review Vol. 22 No.5 (1988) as cited in M.S. Vani (2002) “Customary law and Modern Governance of Natural Resources of India – Conflicts, Prospects for accord and strategies”, DCAP, New Delhi.

3. The High Courts Act of 1861 provided that in matters of inheritance and succession and in other matters specified, the High Courts to be established were also bound to decide according to usages, as much as the supreme courts were bound.
4. The Govt. of India Act 1915 by Sec. 112 provided that the High Courts at Calcutta, Madras and Bombay shall, in matters of inheritance and succession to lands, rents and goods and in matters of contract and dealing between party and party, decide according to the personal law or custom having the force of law to which the parties are subject.
5. The Govt. of India Act of 1935 (Sec. 223) preserved intact the operation of Sec 112 of the G.O. I. Act 1915
6. Besides these Acts, other miscellaneous legislation – such as Punjab Laws Act IV of 1872, the Madras Civil Courts Act III of 1873, Burma Courts Act XVII of 1875, Central provinces Laws Act XX of 1875, the Oudh Laws Act XVIII of 1876, the Bengal, North West provinces and Assam Civil Courts Act XII of 1887 – also provided that custom shall form the rule of decision in certain matters affecting the Hindus and Mohammedans. These matters included succession, inheritance, marriage, caste, religious usage etc.

All these Acts provided that custom will be rule of decision “unless it is opposed to justice, equity and good conscience or unless it has been abolished or altered by a legislative enactment⁴”.

Such is the force of custom, a Hindu marriage which is otherwise prohibited and hence void in law will be considered as valid if it is permitted by custom. According to Sec 5 of the Hindu Marriage Act 1955 (Central Act XXV of 1955) a marriage will not be valid if the parties are within the prohibited degree of relationship, unless the custom or usage governing each of them permits of the marriage between the two. For instance the marriage with the sister’s daughter which is very common among many communities will be void and invalid because of this statutory prohibition but for the custom prevailing in such communities⁵.

Origin of Tanks and Customary Rights

Ever since the dawn of civilization when people started living in clusters they felt the need for storing water for domestic as well as agricultural use. They established tanks in suitable locations after identifying proper contours for the purpose. These tanks were owned and maintained by the community or by the Panchayat existing at that time. According to established practice and custom they shared the water and there was no written law or rules during the early stages. Later kings and lords built tanks during their rule. The plethora of tanks over the peninsular South India owes their existence to the community and the kings who ruled later.

The Hindu satraps have laid down in numerous texts the high merits which a man acquires by farming a tank and dedicating it for public use. If a tank is constructed by a private person and public were allowed to use it for some period it was considered as a public tank. This principle has been brought out vividly in a judgment of the Calcutta High court delivered as early as in 1926. The operative portion of the judgment is as follows:-

⁴ Kane P.V, Hindu customs and Modern Law, Sir Lallubhai A Shah Lecture 1944), University of Bombay cited in MS Vani (2002) “Customary law and Modern Governance of Natural Resources of India – Conflicts, Prospects for accord and strategies”, DCAP, New Delhi.

⁵ Principles and Precedents (1960), Raghavachari, “Hindu Law”, The Madras Law Journal Reports,(1960) Madras.

The right claimed in this case is by the neighboring residents of an old tank. The water of the tank, they say was used for the various purposes stated in the plaint.

In a hot country like Bengal necessity for user of the pure water is very great indeed. A good tank largely supplies such a need and it is only a rich man who can find the money necessary for the construction of such a tank but the poor people also need the water which they cannot themselves provide for. In these circumstances it has been an immemorial custom in this country that those who can afford think it an act of great public benefaction to construct tanks for public use. The Hindu *Sastras* have laid down in numerous texts the high esteem which man acquires by digging a tank and dedicating it for public use. I shall quote one of such texts which when translated runs as follows:-

“As there is no sustaining of life in both worlds without water consequently the wise man should always construct a reservoir of water. A well is equal to AGNISTAMA sacrifice; in a desert it equals the *Ashwamedha*” *Vishnudharmattora*. “Again it promises heaven to the maker of wells and large tanks”. (See P. N. Saraswati’s Tagore Law Lectures pages 192-193.) The words by which dedication is made are these: - “This water has been given by me to all beings in common: Let all beings be satisfied by bathing, drinking and immersion”. See page 205. For religious use or from a sense of public duty many thousands of such tanks were constructed all over Bengal and dedicated for public use.

In this country, therefore, where this mode of dedication is so widely known when one finds that a tank exists from a long time past and the public, that is the people of its neighborhood, have enjoyed the use of the water of such a tank, it is open to the Court to Presume that the water of such a tank was dedicated by the owner for public use. Such a dedication can be inferred from the manner and the duration of such use. It is not necessary therefore to seek the aid of section 26 of the Limitation Act for the acquisition of such a right. It should also be remembered that in this country a large number of tanks do exist which were intended for private use and no dedication to the public was intended, although as a matter of fact the people in the neighborhood are ordinarily allowed to use the water. The words used in dedicating such a tank are expressive of a limited use. They are these: - “Let the relations in my family that have “come to this world, or will come into existence in future have satisfaction by means of the water: let “all beings enjoy it by washing, drinking and bathing”, (see Raghu Nandan in his treatise on consecration of tank.) Such private tanks are usually found in the compound of a private house. In such cases the use by the neighbors will of course be merely taken to be permissive. The Court shall find in the circumstances of each case whether the tank is a private one, or one in which a dedication in favor of the public may be presumed. The tank in this suit was not shown to be a private one⁶.

The following extract from the work of M.S. Vani entitled “Role of Panchayat Institutions in Irrigation Management: Law and Policy” gives a good idea of the irrigation system prevailing in Medieval South India and the part played by the community and Panchayat in establishing and maintaining them

.....The vast majority of tanks were designed and constructed centuries ago. The historical evidence dating the creation of the tank system also provide very valuable evidence of the system of management adopted and exercised by the local bodies in the period. Hundreds of stone inscriptions have been discovered, relating to tanks and village organization, belonging to various places and

⁶ Bhabadeb Chatterjee vs, Bhusan Chandra Mukherjee. Calcutta series,, 1926, Indian Law Reports, Vol LIII p 1016-1022.

various times in South India covering a span of time from the 2nd to 16th century AD from the Pallava, Pandiya, early Chola, later Imperial Chola and Vijayanagara empires which at one time or another included the modern states of Tamilnadu, Karnataka, Andhra Pradesh and Kerala.

All this evidence, when reconstructed into a pattern, poses quite an amazing contrast to the present day Panchayat Institutions' role in irrigation.

Local autonomy was a characteristic feature in medieval Tamil country as well as contemporary kingdoms in Mysore. Most of the evidence relating to the subjects of Village Government and Irrigation related for about 200 years. A widely recognized distinctive feature of medieval South Indian states was the primacy of various kinds of assemblies in the governance of the numerous localized societies of which contemporary South Indian consisted. The villages of that period were to a great extent self-governing, the forms of democracy which operated in them were perhaps more vital than those which have been so laboriously imposed on India in modern times'.

While most of the information available relates to the Chola period, the beginning of the system of the village government that is seen in full swing under the Cholas can be traced to an earlier age. The Pandiya and Pallava inscriptions of the eighth and early ninth centuries show a similar system though not quite so developed in operation throughout the Tamil country.....

Irrigation Management by Village Assemblies

An appraisal of the inscriptions relating to medieval South India, as reported by historians reveal various functions relating to irrigation exercised by the village assemblies which indicate the following kinds of powers and functions that they possessed over irrigation.

- 1) Ownership of water resources.
- 2) Powers to arrange for construction, repairs and maintenance of tanks.
- 3) Powers relating to land transactions relating to irrigation.
- 4) Management of water supply.
- 5) Levy and collection of cess for irrigation; powers to assign cess.
- 6) Powers to engage and remunerate local functionaries.
- 7) Dispute settlement.
- 8) Maintenance of records.
- 9) Relationship with Central Government in certain matters.

Ownership of Water Resources:

That village bodies exercised full control over their irrigation sources can be deduced from various transactions entered into by them.

These transactions include:

- a. Purchasing water from other village bodies.
- b. Selling a tank.

- c. In cases where wholesale reclamation of lands and reconstruction of tanks were involved, sale of the tank system in its entirety – i.e. ayacut, tank, bund, tank beds, foreshore of tanks, channel and channel heads; in some cases, the foreshore catchments, usually dry lands were also sold and other village bodies purchased tank systems.
- d. Sale of fractional shares in tank water.
- e. Sale of share of fisheries.
- f. Sale of right to take a proportionate share of water along with parcels of land sold.
- g. Creating irrigation rights afresh; when lands were sold with no source of irrigation, vendees were permitted by the terms of the sale to excavate channels for diverting water from rivers.

Construction, Repair and Maintenance of Tanks:

The construction of tanks in the middle ages by private individuals was considered an act of great spiritual merit. Therefore, we find most of the evidence referring to individual grants made for construction of tanks. It was also considered a part of the duty of the state to undertake such works. Even kings built tanks for merit.

The advantage of this value attached to the construction of irrigation works was that the person who built the tanks did so in order to give it away-as an act of charity – invariably to a body of people and to be used for public good. This necessitated the receivers assuming collective responsibility over it. Secondly, while the water resource was sought to be fully and beneficially utilized, it did not assume the character of a commodity solely for profit that we see under a later colonial administration.

Construction of tanks was by:

- a. Individuals
- b. Kings
- c. Village community jointly
- d. Temples which gave grants to *Sabha* to construct tanks
- e. The State helped by granting land as reward to the builder or by remission of taxes.

Maintenance and Repairs:

Village Assemblies and other local bodies had a wide ranging strategy to deal with maintenance and repair of tanks. The main objective was to create funds for the work to be done. The evidence is overwhelmingly supportive of the fact that resources were raised locally. However, assistance from the Central Government was not precluded-royal grants were made. Prevention of damage was also planned; members of the governing body were held accountable for damages⁷.

⁷ Vani, M.S. (1992), Role of Panchayat institutions in Irrigation Management: Law and Policy, Indian Law Institute, New Delhi.

Management of local systems:

Sivasubramanian⁸ records that among irrigation works, tanks are the most important category. The minor irrigation census conducted in 1985 estimated that the country has some 208,000 tanks. The reported area under tank irrigation as per official statistics was 3-3.5 million hectares in the mid-eighties as against the 4.5 million hectares recorded in 1960-61. Tank irrigation is particularly widespread in South India. Nearly 60 per cent of the area under tank irrigated is in Tamil Nadu, Andhra Pradesh and Karnataka. In these states, tanks irrigate a much higher proportion of total cultivated land (seven per cent against a national average of two per cent) and of total irrigated land (24 per cent as against a national average of eight per cent) (GOI. 1989).

Tanks in Tamil Nadu

Tamil Nadu, has 39,000 tanks of which about half are small (serving less than 100 acres each) and depend solely on local rainfall. There are about 5300 rainfed tanks with command area exceeding 100 acres. Some 3600 tanks are linked to larger systems fed by canals drawn from large rivers and storages (GOTN 1979, Vaidyanathan 1992:5). Though the tanks are generally small, each is serving one village or a part of it; some are large spread over several villages. However, the volume and duration of water supply relative to area irrigated as well as its assurance varies widely.

We have some sketchy accounts of their historical origin and evolution (see Raju 1941, Ludden 1978, Reddy 1990). For the most part, tanks were constructed long ago (in some cases centuries ago) by efforts of local chieftains, temples and village communities. These tanks were maintained and managed by user communities. The Kudimaramath (a system of voluntary labor participation to upkeep and maintenance of tanks and irrigation channels) system provided for collective maintenance by community efforts: Under the *Mirasi* system of land tenure, a part of the village produce was earmarked for tank maintenance.

The wars led by local chieftains preceding the advent of British rule saw considerable physical damage to the irrigation works. There were also significant changes in the social structure and land control in the village communities. Changes in land tenure – and in particular the introduction of the *Ryotwari* system in place of *Mirasi* tenure and the recognition of ex-rulers/chieftains as *zamindars* – are believed to have further weakened the traditional socio-economic structures which took care of tanks and other community activities. The deterioration in irrigation adversely affected government revenues-land revenue was at the time the dominant source-and this led the colonial government to assume direct responsibility for maintenance of system facilities (other than distribution networks) and subsequently for repair, renovation and improvement and construction of new tanks (Raju 1941, Krishnaswami 1947, Dikshit, et al. 1994).

The government's take over of maintenance did not, by all accounts, make much of a difference, partly because of inadequate allocation of resources. Attempts to revive *Kudimaramath* were also unsuccessful. However, the government made substantial investments during the late 19th and the early 20th centuries for major repairs, construction / remodeling of *anicuts* to augment supplies to tanks, increasing the number of system tanks and construction of new tanks. Such works were taken up in Palar, Vaigai and Tambraparni basins.

In the early 1900s, the government had initiated survey of existing tanks with a view to ascertain whether they were up to the required standards and then taken up works needed to bring them to

⁸ Sivasubramanian.K (1995), Irrigation Institutions in Two large multi-village tanks of Tamil Nadu, Ph.D Thesis, Madras Institute of Development Studies (MIDS).

standard. This made relatively slow progress. There was some quickening of pace in the post-Independence period but out lays have been rather small and results modest. During the 1980s, a large tank modernization project was started. This program focused mainly on engineering works to improve tank structures and distribution networks more or less entirely under the Public works department (PWD). Lately the program has emphasized participation of users in the program. Surprisingly, however, neither government reports on minor irrigation nor the modernization schemes, recognize that tank communities generally have informal local institutions for maintenance and operation. Nor do they explore the role which they might play in improving management.

Community Management of Tanks:

That local irrigation works have traditional community based institutions for their management is well known and documented by studies in different parts of the world. There are also several studies relating to India. Studies, relating to Tamilnadu, are rather limited in coverage and scope, but nevertheless useful.

There are few properly documented accounts of the way these user communities worked in pre-British times. It is known that they were governed by customs and tradition; in some cases (notably North Arcot district of Tamil Nadu) these have been codified in writing and published (under the title of water *Mamul namas*) in the 19th century. Many accounts in the latter part of the 19th century attributed the collapse of the Kudimaramath to the decline of these traditions. Currently too there is a widespread belief that traditional arrangements for tank management have disintegrated and become ineffective. But recent studies cited above show that while local tank management institutions are not uniformly effective, and there have been considerable changes, there is no evidence for the belief that they have declined everywhere.

Most communities studied are found to have well defined rules regarding the contributions, to be made by *ayacutdars* for maintenance and managing water allocation, as well as enforcement mechanisms.

In many cases the community was found to be actively involved in collective action for appropriation of water (by participating in inlet channel maintenance to get increased supply), in maintenance of distribution networks in the ayacut where water is available, and in regulating water use especially in times of shortage through functionaries specifically appointed for the purpose.

The general pattern observed in Tamil Nadu (for details see Vaidyanathan and Janakarajan 1989, Rajagopal 1991, Ramanathan unpublished) was that the village leaders (called *Nattanmaidars*), who are drawn from the large landholders of the dominant, usually upper, castes took active part in tank management. In some villages, the task is entrusted to a specialist functionary (called *Kavaimaniyam*) experienced and knowledgeable about tank matters. Decisions made by them are implemented by irrigation workers (called *Neerkattis*) mostly from the Scheduled Castes by rotation. They are expected to monitor water flows to the tank, watching the bunds and other tank structures, open and close sluices and regulate water flow in the ayacut when required by the *Nattanmai / Kavaimaniyam*. The *Neerkattis* are paid by the *ayacutdars*, usually in kind, on per acre basis. In Tambraparni basin, the tank level organizations are more formal and elaborate (Sengupta 1991, 1993, Ramanathan unpublished).

There are well recognized procedures for maintenance of the distribution networks, including the contributions expected from the *ayacutdars*, penalties for non-participation and the organization of work. The *ayacutdars* are normally expected to contribute labor in proportion to their land holding;

sometimes cash contributions are allowed. The studies also report that in some cases the ayacutdars participate in cleaning inlet channels, when the PWD, which is supposed to be responsible, fails to do the work. In some villages detailed accounts of contributions, default and fines are being maintained.

There are also conventions and rules for regulating the flow of water in the ayacut. Based on a survey of about a dozen tanks in North Arcot district, Chambers, (1977) noted the existence of systematic, though varying, rules for allocating water in times of scarcity. One village distributed water to fixed acreages during scarcity period; in five villages the usual distribution system of the top-enders first was practiced by the organization, while in three others a special provision for tail enders first in times of scarcity was observed. Chambers observed, however, that water distribution under tanks was usually both inequitable and inefficient in terms of productivity. Water is less productive after conveyance losses to the tail end of a channel than if it is applied at the top end. Scarcity of water also mostly affects the tail end farmers. The traditional rules of allocation framed earlier according to the conditions prevailing then, may not be applicable to the present day. New rules may therefore, emerge or changes may take place in the structure and functioning of earlier associations. Similar variations are recorded by Vaidyanathan and Janakarajan (1989).

There are considerable variations in the working of tank organizations: The study of Palar *Anicut* System (PAS) (Vaidyanathan and Janakarajan 1989) found that while almost all villages had *Nattanmaidars* and *Neerkattis*, only five had specialized Kavaimaniyam, eight of the 15 villages covered by the study reported regular maintenance of inlet channels, distributions and field Channels, six reported that regular maintenance was not done in the last five years. The system of rationing by turn was followed in 7 villages⁹.

Customary Irrigation Rights-Water Manual Namas

In the early years irrigation rights in tanks were governed by custom and local practices. These rights were generally not recorded.

But in Vellore District they have recorded the irrigation right of *pattadars* for 188 tanks of Vellore Taluk in 1815 A.D. under the heading "Water Manualnamas". This manual namas is a record on the distribution of water which the *ryots* have accepted for many years. It was written during the early 19th century and approved and printed by the British in the year 1907. The *Mamulnamas* have been written in Tamil and signed or attested with thumb impression by the *karnam* and important *ryots* of the villages. It is astonishing to note that how meticulously they have been written recording the period in which the tanks will get supply, the quantity of water that will be available in the tanks in particular months, the source of supply, the area that can be cultivated when the tanks get full supply and during the distress period, the spring channels in the area, the mode of irrigation by using *mohte* or "*Kamalai* or other contrivances, the permissible number of wells that can be sunk in the ayacut, the crops that can be cultivated in the area etc.

Similarly, *Mamulnama* has been recorded in the year 1815 A.D. for Kaveripakkam tank, one of the biggest tanks in Vellore District, serving 14 villages and having a registered Ayacut of 5853 acres. An English version of the Mamulnama extracted from G.O. No.60 I; 8th Feb 1918 and cited by K. Sivasubramanian in his Ph.D thesis.

⁹ Sivasubramanian.K (1995), Irrigation Institutions in Two large multi-village tanks of Tamil Nadu, Ph.D Thesis, Madras Institute of Development Studies (MIDS).

As stated earlier most of the customary rights are unrecorded; but meticulously observed by the *ryots* and community from time immemorial. However, some of the customary rights can be ascertained from the 'A' register maintained by the revenue Department and the old settlement records.

Maintenance of the Tanks during Pre-British Period and Later

Historically, tanks and other small water bodies were maintained in condition by the user communities themselves. In Tamil Nadu, under the Kudimaramath, users were expected to contribute labour for upkeep and repair of irrigation facilities from time to time. Information available on the arrangements for repair and maintenance of tanks and their effectiveness before the advent of the British rule is scanty. It is widely believed that the Kudimaramath worked well till the advent of the British rule, progressively deteriorated thence, and became derelict. Recent studies by Vaidyanathan (1984b, 1985, 1991b), Vaidyanathan and Janakarajan (1989), Janakarajan (1993b) and Sengupta (1991,1993) suggest that though the traditional irrigation institutions have undergone major transformations, they are still active in a number of places.

One of the important factors accounting for the regular up-keep of channels by the *ryots* under the ancient kingdoms was the cultivators' obligation to pay the land rent or tax imposed by the rulers (the *ryots* were, in fact, the tenants of the state), and subsequently by intermediaries (especially the Zamindars) to whom the rulers assigned the lands. This placed the *ryots* in a position where they had to undertake a good deal of maintenance work of channels to get proper supply of water to of their lands. It continued till the abolition of the *Zamindari* Settlements. The Zamindars were believed to have enforced maintenance and restoration of tanks and channels:

Of course, the security of the revenue demanded that irrigation works should be attended to, and this attention took the form of enforcing the corvee, and if the official summons did not prove effective, the *Amildars*, Slippers, Rattans, and Jairbunds" were employed to bring a refractory *ryot* to a proper realization of his responsibilities (Raju 1941:124).

The Zamindars initially formed the irrigation tanks in many villages and kept them in condition at their own cost. This cost was later recovered from the *ryots*. The recovery was at the rate of 1 *toom* (local measure of grains equal to 48 seers) per candy of gross produce (45Kg:1 Seer = 0.933 Kg). When repairs were executed, half the cost was contributed by the villagers and paid to the *Zamindar*; the other half was borne by the *Zamindar* himself. This payment was called *Maramat Nesuff*. The British government also followed the same system when the *Zamindari* estates came under its management. It introduced money rents, and undertook the major repairs at its own cost. The villagers were required to undertake the customary upkeep.

The state of Kudimaramath which existed under the Company rule was described by Raju as follows:

Tahsildars were expected to enforce it. The village peon, *toti*, *taliari* and others had to watch the tanks and watercourses and as soon as any damage was noticed, the Tahsildars called out the riots of the village or villages concerned. The villager used to was contribute labour and carry out the repair works. The system even in pre-British times was based on voluntary action, - communal if not individual - and was managed by the village authorities who constituted the most natural agency. But with the decay of village corporate life and the weakening of the power of village officers, *Kudimaramat* fell into desuetude (1941:124-5).

After the introduction of *Ryotwari* settlements by the middle of the 19th century, the effectiveness of the traditional system deteriorated progressively. With the result the tanks were not maintained well.

Kudimaramath so valuable an institution was practically dead and past restoration (see Krishnaswami 1947:449).

The British government's several attempts (including legislation) for the revival of Kudimaramath system did not succeed. The element of obligation which was present in the traditional system was weakened by changes in land tenure. Earlier, bulk of the land used to be controlled by the Zamindars or by a few Mirasidars who were powerful in the village community. The British administration also could not enforce the Kudimaramath. After taking over the Zamindari estates and introduction of the *Ryotwari* tenure the traditional conditions in force gradually weakened. This naturally inhibited the capacity to enforce Kudimaramath obligations. The government, therefore, assumed more and more direct responsibility for maintenance and repair, only to find that it could not provide adequate resources for the purpose. Whatever resources it diverted were only for the maintenance of inlet channels, tanks and associated structures, and not for facilities within the ayacut of each tank¹⁰.

Community ownership of tanks and their maintenance was the hallmark of the irrigation management system. In Tamilnadu before the advent of the British colonial power in India, the local bodies also played an important part in the upkeep and maintenance of the tanks. In Madras state a separate department of tank repairs was created in 1819. Later the public works department was created in the 1850. The divide between the P.W.D. and the revenue department which control the land revenue system has been the single most important limiting factor affecting the popular participation in irrigation works – repairs, maintenance and distribution of water. However, much less attention has been paid to this issue than that accorded to understanding the Indian villages from the revenue point of view; the extensive and in depth administration system, is nowhere matched with that of irrigation management.

Between 1851 and 1949 the Madras government passed various acts for the upkeep of irrigation works

- 1) The Madras compulsory labor act of 1858
- 2) The Madras land encroachment Act 1905
- 3) The Madras irrigation (voluntaries) Act 1942
- 4) The Madras irrigation tanks (improvement) Act of 1949 are some of the important enactments made during the period

By these enactments the government assumed full ownership of the land and water bodies. Section 2 of the land encroachment Act 1905 states as follows:-

Right of Property in Public Roads etc. Water and Lands:

- 1) All public roads, streets, lanes and paths, the bridges, ditches, dikes and fences on beside the same, the bed of the sea and of harbors and creeks below high water mark and of rivers, streams, nalas, lakes and tanks and all back waters, canals and water-courses and all standing and following water, and all lands, wherever situated, save in so far as the some are the property:
 - a) Of any Zamindar, poligar, Mittadar, Jagirdar, Shortriemdar or gnamdar or any person laming through or holding under any of them; or

¹⁰ Vani, M.S. (1992), Role of Panchayat institutions in Irrigation Management: Law and Policy, Indian Law Institute, New Delhi.

- b) Of any person paying Kist, Kattubadi, Jodi, Poruppu or quit-rent to any of the aforesaid persons; or
- c) Of any person holding under *Ryotwari* tenure, including that of Janmi in the Gudalur taluk of Nilgiris District and in the transferred territory or in any way subject to the payment of land, revenue direct to government; or
- d) Of any other registered holder of land in proprietary right; or
- e) Of any other person holding land under grant from the government otherwise than by way of license.

And, as to lands, save also in so far as they are temple-site or owned as house-site or backyard, or and are hereby declared to be the property of government except as may be otherwise provided by any law for the time being in force. Subject always to all rights of way and other public rights and to the natural and easement right of other land-owners and to all customary rights legally subsisting.

- 2) All public roads and streets, vested in any local authority shall, for the purposes of this Act, be deemed to be the property of Government.

EXPLANATION

In this section “high watermark” means the highest point reached by ordinary spring-tides at any season of the year.

Further section 3 of the Madras IRRIGATION TANKS (Improvement) Act 1949 declares.

- (1) Notwithstanding anything contained in any other law for time being in force, the government shall have power to raise the full-tank level of any tank or to take any other measures for increasing its capacity or efficiency, where it may be situated and whether in a *Ryotwari*, *Zamindari*, *Inamdari* or other area.
- (2) The owner of a tank not belonging to the government shall not be required to bear any portion of the cost of carrying out any measures in respect of tank under sub section(1)
- (3) Where in pursuance of sub-section (1) any measures are carried out in respect of a tank, the cost of carrying them out of such portion of the cost as the Government may specify, may be recovered by the district collector from the owners of the lands and other properties benefited by the work in such proportions and in such manner, as may be prescribed.

By the above measures Government acquired full right over the water bodies and tanks and assumed responsibility for improving them even if they are under the control of private persons. These measures enable the Government to interfere in the customary irrigation rights. Though substantial improvement in irrigation tanks were made due to these measures it didn't succeed to the expected level.

Involvement of Panchayats in Irrigation Works:-

The Madras Village Panchayat act 1920 which was later repealed by the Madras Local Boards amendment act of 1930 and the Madras Village Panchayats Act 1950 provided for the involvement of Panchayats in irrigations works. It didn't actually happen because of the stringent conditions imposed by the Government for the transfer of irrigation sources to the Panchayat and inadequate devolution of funds and powers to the Panchayats.

Later the Madras Panchayat Act 1958 provided in Section 83, 84 & 85 of that act for the transfer of irrigation sources to the Panchayat Union council and village Panchayats. The provisions are as follows:-

83. Any property or income including any fishery right which by custom belongs to, or has been administered for the common benefit of the inhabitants of the village or town, or of the holders in common of village land, generally or of the holders of lands of a particular description or of the holders of lands under a particular source of irrigation shall, if so declared by the Government, vest in the Panchayats and be administered by it for the benefit of the inhabitants or holders aforesaid.
84. (1) All public water courses, springs, reservoirs, tanks, cisterns, fountains, wells, stand-pipes and other water works (including those used by the public to such an extent as to give a prescriptive right to their use) whether existing at the commencement of this Act or afterwards made, laid or erected, and whether made, laid or erected at the cost of the Panchayats or otherwise and also any adjacent land (not being private property) appertaining thereto, shall vest in the Panchayats and be subject to its control:

Provided that nothing contained in this sub-section shall apply to any work which is, or is connected with a work of irrigation or to any adjacent land appertaining to any such work.

(2) The Government may, by notification, define or limit such control or may assume the administration of any public source of water supply and public land adjacent and appertaining thereto after consulting the Panchayats and giving due regard to its objections, if any.

85. (1) Subject to such conditions and control as may be prescribed, the Government may transfer to any Panchayat or to any Panchayats union council the protection and maintenance of any irrigation work, the management of turns of irrigation, or the regulation of distribution of water from any irrigation work to the fields depending on it.
- (2) The Panchayats or the Panchayat union council shall have power, subject to such restrictions and control as may be prescribed, to execute Kudimaramath in respect of any irrigation source in the village or town and to levy such fee and on such basis for the purposes thereof as may be prescribed:

Provided that nothing contained in this section shall be deemed to relieve the village community or any of its members of its or his liability under the (Tamil Nadu) Compulsory Labor Act, 1858, in respect of any irrigation source in the village or town, in case the Panchayats make default in executing the Kudimaramath in respect of that irrigation source.

(3) Where the maintenance of any irrigation work is transferred under this section the fishery rights of Government in such work shall be transferred to and be vested in the Panchayats or the Panchayat union council, as the case may be, subject to such terms and conditions including terms and conditions regarding the utilization of the income, as may be specified by the Government.

Sections 83 & 85 of the 1958 Act have been retained as such in Section 132 & 133 respectively of the T.N. Panchayats Act 1994.

Section 84 of the 1958 Act which vests the water works in village Panchayats for reasons not known has not been incorporated in 1994 Act. Actually it is this section that enables the village Panchayats to own and exercise control over the water courses, springs, reservoirs, tanks, Ooranies etc. lying with in the Panchayats area. The failure to incorporate section 84 of the 1958 Act in the 1994 Act is considered as very serious omission. If any legal dispute arises in the ownership and control of the above water bodies, village Panchayats may face serious difficulties because of the lacuna.

The powers under Section 85 (Section 133 of the 1994 Act) were delegated to the Collectors. The tanks were actually transferred to the Panchayat unions and not to village Panchayats. Small irrigation tanks with ayacut of ten acres and less were not transferred to the Panchayats or Panchayat unions. Tanks forming part of river irrigation system and tanks having an ayacut of more than 100 acres were retained by the P.W.D. The conditions of transfer of tanks were laid down in G.O. NO.-711 LA Dt. 16-04-1960. One of the important conditions of the transfer is where as the Panchayats union shall have power to regulate the manner and order in which the land and the irrigation work shall be managed..... but this power shall not be exercised so as adversely affect any established or customary right to preferential or proportional supply. Another important condition is that in order to prevent customary obligation, a record shall be maintained by the Panchayat union commissioner specifying the existence of customary obligation and its precise nature in respect of each source in which it is exercised, the nature of the customary obligation will be available in the Settlement Registers of the village and records in taluk office. The particulars in respect of each source should be obtained from the Tahsildars and entered in the said registers.

Thus, even while transferring the irrigation source to Panchayat unions for maintenance the customary rights were recognized and given importance; because anything done against the customary rights is likely to be challenged in the court of law and the verdict may go against the Panchayat union. In fact there are cases in which the failure to follow customary right has resulted the court finding fault with the Panchayat unions. The relevant case will be discussed in the latter part of this paper.

Customary Irrigation Right – Legal Position – In Roads Made in the Customary Right due To Statutory Law and the Constitution of India.

Customary rights on the use of water have been always recognized by law; but this customary right is not an absolute right and is subject to the paramount right of the state to regulate and control the supply of water for irrigation purpose. The Customary right of the *ryots* has also undergone a change after the enactment of the Madras Irrigation tanks (Improvement) Act 1949, and the constitution of India.

A case was between Secretary of State Vs P.S. Nageswara Iyer & others in the Madras High court in 1936 (AIR 1936 Madras 1923) and the dispute relates to the question of customary right enjoyed by a particular village was affected by digging a channel to feed another village. The proposed diversion of the channel by the Government, the villages thought and feared would cause loss to the village hence they preferred a suit for a declaration of this exclusive right to the water flowing in the channel and for an injunction restraining the government from carrying out the proposed diversion of the channel based on their claim on customary right and prescription. It seems that villages were enjoying the water from the channel exclusively for over 100 years. The court held that claim based on prescription was precluded by their relationship between the plaintiff and defendant and though the plaintiffs are entitled to the accustomed supply of water for irrigation of their lands, yet they could not acquire any exclusive right to challenge the paramount right of the state to regulate and control all supply of water in public streams and channel. The court also held that the extent of right of plaintiff villages to take water from the channel for irrigation of their lands should be determined with

reference to the accustomed user of the water by the plaintiffs and not with reference to the entries in registry. The court laid down the dictum that Custom cannot give exclusive right to the detriment of the state.

In Indian Law, the state possesses the right to regulate the supply of water in public streams to utilize it to the best advantage. The rights and the obligation as between the state and ryot in India in the matter of irrigation rest largely on unrecorded custom and practice. It has generally been stated that the *Ryotwari* holder is only entitled to claim that supply of water required for cultivation of the registered wet lands and it should not be materially diminished by any Act of the Government. Subject to this condition Government in this country has claim absolute right to change the source of irrigation or the method of irrigation by which the ryot has been supplied and to regulate use of waters from all public or natural streams in the best interest of the people.

In [C.N. Marudhanayagam Pillai Vs Secretary of State for India, M.L.J. 1939: 176] the dispute relates to the diversion of the water from Cholavaram tank and Redhills tank to Madras city for drinking purposes. The proposed diversion was detrimental to the existing ayacut of over 5000 acres. The question which arose for decision is whether the Government is entitled to supply water to Madras without regard to the rights of the cultivators in the old ayacut as they existed in 1860. The court held that in the Madras presidency the ryot is entitled to receive the water which his lands have been accustomed to for irrigation purposes without interference by the Government or anyone else. The Government cannot be required to supply water when none is available and it has a right of conserving and distributing the water available in the interest of the particular ayacut, and years of shortage. The only obligation of the Government is to make an equitable distribution of water. But the ryot has a claim against the Government when it with holds from him the water which he has a right to demand taking into consideration the supply available.

That a ryot holding land under the old ayacut in a tank can successfully sue the secretary of state for a declaration that he was entitled to a sufficient supply of water for the cultivation of the crop per annum subject to the power of the Government to control the distribution of the available water in the interest of the land holders, whose lands comprise the old ayacut. It was pointed out that the rights and obligations as between the state and the ryot in this country so far as supplying water for irrigation purposes was concerned vested largely on unrecorded custom and practice.

In this particular case the court awarded damages of Rs. 450 for the loss suffered by the ryot.

However, the madras high court in Annaswami Naicken and Others VS. C. Manicka Mudaliar and Others. A.I.R. 1937 MADRAS 957 has held that it was not open to the Government to interfere with the customary method of supply of water to the ryot and it should be taken that the Government have recognized the customary method of supply of water to the field. The court has observed:-

“A ryot in respect of his *Ryotwari* land is entitled to receive from the Government & supply of water necessary and sufficient for irrigation of his registered wet fields. The Government has got the right to regulate the method and manner of supply. They can therefore indicate to him the source or method of supply and he is bound to accept those indicated. But as incident to the tenure, there is a right in the ryot to receive the said water, call it contractual or proprietary. There is a corresponding duty on the part of the Government, thought in one sense negative, to see that the supply shall be at his disposal by the usual and customary method.

Where the water of a natural stream falling into a thangal and exclusively used by the plaintiffs holding the *Ryotwari* lands was diverted into a tank and for over 30 years it had been the customary

method to take the water of the stream from that channel to augment the supply of the tank without which it would have been impossible to cultivate the land registered as wet under the ayacut of the tank:

Held: that the Government must be taken to have impliedly recognized that as the customary method of supply for the time being for the irrigation of the wet fields. The fact that the stream or channel was not pointed out as the source of irrigation in the Settlement Register could not curtail the right of the plaintiffs to receive water which was absolutely necessary for the irrigation of their wet fields according to the customary method and it was not even open to the Government to interfere with that method of supply.”

Customary Rights against Individuals

Though the customary rights against the state can't be enforced because of the statutory powers of the state and the principle of paramountcy of the state. It can be enforced against the individuals. In a case arising in Tirunelveli District T.K. Nallamuthu Pillai and Other – Appellants Vs R.K.Thirumalai Ayyangar and Others – Respondents (A.I.R.29 1942 Madras 258), the Court held that the interference with the customary rights recognized by Law will not be permitted and therefore the interference will be prevented by an injunction issued by the Court. The facts are Kadamba Tank in Tirunelveli District is a large tank fed from a river through a channel flowing into the tank, a bund running from north to south was raised by the appellants to prevent water spreading during the monsoon season to the line beyond the boundaries of the lands cultivated by the appellants. It is admitted that from time immemorial these lands have been submerged for several weeks in the year after the tank has filled as a result of rains. The withdrawal of water from the tank for the purpose of cultivation of the lands fall in within a ayacut causes the water to recede gradually from the appellants lands and when these has happened they are fit for cultivation. The appellants and predecessors have accepted tenancies of these lands knowing that they would be completely submerged for part of the year. In 1898 the appellants “predecessors erected bunds to prevent the submersion. This caused some of the water in the tank to escape over the weir and lessened the supply the *ryots* in the ayacut were accustomed to receive. They naturally objected to the erecting of these bunds and as a result of their objection the revenue authorities caused them to be demolished. Notwithstanding the action of the revenue authorities similar bunds near were the weir erected in 1899, 1904, 1907 & 1924. Except in the year 1924 the revenue authorities stepped in immediately and caused the protective earth works to be demolished. In 1924 however, the revenue authorities refused to interfere as they considered that the bunds erected by the appellants were merely field ridges and loss of water was inconsiderable. .. There are concurrent finding of the courts below that the bunds are more them field ridges and the respondents have in consequence suffered material diminution in their customary supply of water. It is the rising of the bund which is the subject matter of dispute.

The court held that the rising of bund amounted interference with the bed of the tank because the lands for several weeks in the year formed the bed of the tank and since as the result of the construction of the tank. Generations ago the plaintiffs and other *ryots* of the ayacut have become entitle to have these lands irrigated from it. Any one who interfered with customary supply was interfering with the rights recognized by law and therefore was subject to the injunction of the court and the plea that the defendants were merely protecting their own property could not be accepted. The injunction against raising the bund was allowed to stay.

Irrigation Rights - Rights of *ryotwari* proprietor to water – Liability of Government

In *Lachuma Goundan Vs Pandiyappan alias Annamalai Goundan*. M.L.J. 1950 (II) 658. The Madras High Court has held as follows:-

The obligation of the Government is, it supplies water necessary and sufficient for the accustomed requirements of the *Ryotwari* proprietor so long as such supply is not adversely affected by natural causes such as deficiency of rainfall or scarcity of water in the rivers from which the supply channels take off. The *Ryotwari* proprietors have a claim against the Government only when the Government diverts, to their prejudice, water which is available in the channel so as to materially diminish the supply of water that they had been accustomed to receive from the channel for the cultivation of their wet lands. In other case, the interference by the Government with the existing rights of irrigation from artificial channels constructed by Government is not an actionable wrong and the *Ryotwari* proprietor is not entitled to insist that the entire volume of water which had been flowing through the artificial channel should, for all time, be allowed to run along the channel without diminution or diversion by the Government. Damage to the *Ryotwari* proprietor actual or invisible, is the gist of the action as well as the basis of liability of the government.

Present Trend of the Court in Interpreting Customary Right With Reference to the Constitution of India and the Principle of Social Justice.

When the Manjalar dam was constructed, the lower down ayacutdars affected by the proposed construction approached the court for injunction against the construction. They succeeded in the lower court in getting the injunction. But on appeal a division bench of the Madras High Court held, that no injunction or stay against the project devised in public interest and welfares of the people can be granted. They also held interpreting Article 39 (b) of the constitution of India that the interest of social and distributive justice such injunction against public oriented schemes has to be denied and basic tenets of the principle of equality have to be upheld. The court also held interpreting section 4 of the Tamil Nadu Irrigation tanks (Improvement) Act 1949 that the State Government has power to regulate and distribute water for effective irrigation of agricultural lands. The court held it is unjust and inequitable to deny to others even water for one crop to provide water to the plaintiffs for raising second crop merely lands are registered as “double crop”, wet lands.

In another recent Judgment, the Madras High Court has held that the request for permanent injunction restraining the state from interfering with supply of water to a tank cannot be granted. The court also held that the suit is barred because of section 4 of the Tamil Nadu Irrigation Tanks (Improvement) Act 1949 (*State of Tamil Nadu Vs Sudallai Pothinadar* 1999-1-L.W.129).

From the above discussion it is clear that the customary right against the State is no longer absolute. The state can make regulations and make inroads in the customary right of individuals in the larger public interest. It has also been held that with the coming in to force the constitution of India the principle of social and distributive justice has to be upheld. Article 39 (b) of the constitution of India enjoins the state also to direct its policy towards securing that the ownership and control of the material resources of the community are so distributed as the best to sub serve the common good and the words ‘material resources’ have been assigned wide meaning to include not only natural but physical resources”.

Fishery Rights

When the irrigation tanks are transferred to the Panchayat Unions for maintenance the Panchayat Unions will have the right to fishery in those tanks wherever the tanks have been transferred to Panchayats, the Panchayats will have the right to fisheries in those tanks under section 84 of the Tamil

Nadu Panchayat Act 1958. But as pointed out earlier corresponding to section 84, there is no such section in the 1994 Act. However Government has issued rules under the power to regulate the water sources, by the village Panchayats to maintain and regulate them. Like Ooranies, fountains, tanks, springs, reservoirs etc., lying in the village Panchayats area. Wherever fish *patta* has been granted to individuals or institutions the Panchayat union will have no right to the fishery until the *patta* is cancelled.

Fishery right will accrue to the Panchayats under section 83, of the 1958 Act (Section 132 of the 1994 Act). If by custom such right belongs to the inhabitants of the village from a particular source of irrigation and if the collectors make a declaration that such right vest with the Panchayat, the income from the fishery will then be administrate for the benefit of the inhabitants.

It is very important that the declaration to this effect has to be issued by the collector. Until such a declaration is issued the Panchayat will not have any right.

Earlier instructions regarding fishery rights have been completely modified after the issue of statutory rules by the Government in G.O. (R.T) No.169 RD Dept, dt.16.08.1999. Under this rule the Panchayat union commissioner is authorized to auction the fishery right in all tanks vested with the Panchayat Union and all P.W.D. tanks other than the provincial sources in the Panchayat Union area. Panchayats will auction the fishery rights in all water bodies vested with them

The important point to be noted is that the fishery right in tanks can be granted only by public auction and not by any other means.

The Madras High Court has recently held that section 83 of the 1958 Act (Section 132 of the 1994 Act), clearly contemplates a declaration by the Government. There has to be a declaration by the Government for vesting the community property or income to Panchayats. There is no automatic vesting under Section 83 without the declaration by Government (delegated to the Collector). In this case, in the absence of such a declaration the court held that the fisheries were owned and enjoyed by the *Karaiswans* of 43 *Karas* and the income derived was utilized as per customs and usage for common good. Fishery *pattas* for the suit properties were granted to the *Karaiswans* as far back as 1912. The kist relating to the fishery rights was being paid to the Government regularly. In such circumstances the beneficiaries (*Karaiswans*) will have the fishery rights and the Panchayat union will not have any right to interfere with the fish *patta* (Alagar Iyengar and 12 Others Vs State of Tamil Nadu 2002-4-L.W.498)¹¹.

Concluding Remarks

From time immemorial, customary rights in irrigation have been recognized by the community and law. Whenever, customary rights were violated, courts did not approve the violations and awarded compensation to the riots who suffered due to the violation of customary rights.

By the Tamil Nadu land encroachment Act, 1905, the Government assumed full ownership and control over the water bodies. In 1949, Government enacted the Tamil Nadu Irrigation Tanks (improvements Act). This Act empowered the Government, to increase the capacity of the tanks, whether they are Government tanks or private tanks. Suit against such actions were also barred under section 4 of the Act. Therefore in all the decisions of the court the customary right against the

¹¹ Vani, M.S. (1992), Role of Panchayat institutions in Irrigation Management: Law and Policy, Indian Law Institute, New Delhi.

Government was not upheld but customary irrigation right against the individuals was recognized by the courts. Also, the customary rights related to the usufructs from tanks were also upheld by the higher courts after long and tiring legal battle against the villagers as a collective.

The constitution of India was enacted in 1950. Article 39(b) of the constitution of India enjoins the state also to direct its policy towards securing that the ownership and control of the material resources of the community are so distributed as best to serve the common good of the people. The Governance of the country has to be in conformity with the basic tenets and fundamental principles of 'Rule of law' with its essential attributes of equality of opportunity and equal protection of laws. Hence, even though the courts still recognizes the customary rights they interpret the right with reference to the 'larger interest of the community'. However, such an interpretation tends to kill the community initiatives. The annexed case studies depict such a trend.

Section – II: Summary of Findings from the Case Studies

Analysis of Customs and Customary rights in Ramanathapuram district

This part of the study included in the analysis of the available irrigation tanks and the management systems selected in the above districts. The salient findings are:

Revenue from Usufructs

In all the selected villages, the farmers have reported that they were enjoying the full right over the irrigation water and they had power to utilize the usufructs as desired by them. However, such a use of the usufruct revenues by them is always objected by the government authorities mainly the revenue departments and not by the Irrigation department (PWD) or the local Panchayats. The villagers claim that they have to part away an amount of revenue in dealing such officers of the revenue departments and are a routine. The use of funds is towards the festival and other village development works including maintenance of tanks.

In general, the villagers were enjoying the right to rear fish and grow trees in the bunds are in the water spread area of the tank enjoy the proceeds. Individuals mostly plant the trees such as Tamarind and other usufructs giving ones and they enjoy these revenues by paying 2 C *patta* charges. The revenue department collects a tax based on the type of tree and recognizes the right of individuals who planted and guarded them, and allow them to make revenue from them. However such a practice is not seen if all the villagers are joining together for generating revenue from the tank bed. Currently the Panchayats are given such powers to raise such usufructs by planting or otherwise however they are not capable of doing anything in the tank beds. The practice of cutting juliflora sp., which is a wild growth, is a sort of illegal works as far as the law is concerned and thereby the revenue department is making their 'enforcement'. Therefore the farmers want the right to raise any revenue from the tank beds as a matter of right rather than resorting to 'illegal' means.

Customary Practice in vogue

They had their own norms transmitted by their ancestors regarding the management of the water tanks and various other related issues. The water management by and large remains with the villagers. Their informal /formal associations take care of such functions. More important is the water acquisition in chain of tanks is dealt by the efforts of the villagers. Government authorities are very distant from this situation and remain away from these functions.

Collective Action

In most of the villages studied, they had their own village body which are not registered or formalized by external authorities in the name of village committees to enforce, monitor, and control various issues relating to tank management. Such committees had full powers and the people respected them. They were even able to resolve conflicts whenever occurred in their community. The villagers in resolution of such conflicts cited many instances in an effective manner.

Water Sale and Regulation

They were also enjoying the power to transfer any of the rights related to the irrigation tanks. In a few places in Ramnathapuram District, like Muthukulathur big tank, which is located in a chain of tank, does hard work in bringing water by clearing the long winding channels enforce prices for the lower down tanks for letting water to their tanks. This is happening because of the non-cooperation of the lower down tank villagers in bringing the water through a joint effort. The buyers see such a price for water as their price for non-cooperation during the water acquisition works as a collective practice. In a particular village, the farmers have put social pressure by way of stopping the irrigation water to the villages in the down stream when they have refused to contribute either labor or money for carrying out works in the irrigation tanks. By this method, they have made the people from other villagers to cooperate with them in such common endeavors.

The village communities are enjoying their freedom to decide the priorities according to the needs of the farmers and water availability. Say for e.g., a village use to fill the drinking water pond once in the beginning of the season and again at the end of the season from the irrigation tank even when water was required for irrigating the crops. Such a practice is seen as a practice of maximizing the returns from the availability of water. This regulation needs a lot of cooperation from the farmers and the rest of the villagers. Usually drinking water is given the priority and thereafter the crops and other requirements considered. This practice is found to be common in many villages studied.

Composition of Committees

Village committees were formed with due representation comprises all the castes groups of the village, thus showing a democratic approach in their decision making process. Among the studied villages either formal associations exist or informal ones exist. The informal ones comprise all the castes living and having the lands. In the formal associations also all the castes get a representation. The study could not find any issue of dominating or controlling by a single group in the matter of water availability or resource use.

Routine System Maintenance work

Villagers themselves were involving in clearing of the feeder channels, strengthening of the bunds at desilting of the tanks through community participation by way of either contributing labour or money as decided by the village committee. The requirement of clearing of channels and other obstructions are routine maintenance works that are done by them by their own labor or paying through the money made available from the tanks. Government or the formal Panchayat has not done any annual maintenance works as required before the monsoon arrivals on a year-to-year basis. It is true in all the case the informal association is the instrumental in undertaking such works and not the Government or Local bodies.

Non-Registered Ayacuts

In some villages, the farmers have permitted their fellow farmers to irrigate crops grown in non-ayacut areas after collecting some money from them and adding the same to the village common fund. This is a good proposition considering the frugal and efficient use of available water in maximizing the collective and individual returns. It is more equitable than fixing up the Ayacuts in a rigid format. However this is reported only in Ramnathapuram District and not in all the other places. Thus they ensure equitable distribution of irrigation water among all the members of the community.

Government Development work

Tanks have been provided monetary assistance for the rehabilitation works, which are mostly done by the contractors and not by the associations. Only in cases of associations promoted by DHAN they were given the opportunity of implementing them. The villagers as a collective are not given a legitimate option of doing the works for maintenance and management of tank by the government. In most situations the villagers have complaints about the poor quality of works, which are mostly not useful in improving the situation of tanks. Since, they felt that the funds were not properly utilized as the works were entrusted to the local contractors it is appropriate to give such works for associations even though if they are unregistered.

Villagers have experienced lot of interferences from officials of the Government department while they are exercising their works on tanks, like selling the fish or cutting the bushes and trees from the revenue department and are forced to part away money to the bureaucracy in several forms and ways. Therefore the villagers as a forum such rights to usufructs are given to them and the Panchayats can see the funds are utilized for the benefit of the village tanks rather than undergoing such illegal practice every time.

Water management Functions

In most cases, the villages themselves have formulated a method to appoint person to manage the irrigation tanks and the irrigation activity during years of scarcity. Such persons are called '*Neerpaichies*' were paid in kind by all the farmers at the time of harvest for the service rendered by them. However, the farmers have reported that such practice is slowly disappearing due to the non-cooperation of farmers due to breaking down in collective action and unity in the villages. However, no external agency such as Irrigation department or Panchayats is reported as having done water management functions below the sluice.

'Becoming Poorer' after major Irrigation Development works

The farmers of the study area in Ramanathapuram district are of strong opinion and feel that the Government has done gross injustice to them by constructing Vaigai Dam and other diversions across the river Vaigai. According to them this act of the government has totally stopped the arrival of water to their tanks through the river Vaigai that they were enjoying from time in memorial. In total most of the 3,000 tanks in the basin were affected seriously by such an act of new development in the last 50 years through large irrigation dams and control structures. In essence the Ramnathapuram as a district is poorer than what it was before 50 years. However, Ramnathapuram is said to be the most drought hit parts of the state. It is appalling to note that development in the name of dams have made them to lose what they had earlier living in a historically water starved countryside.

Micro (Village) Level studies in Tamilnadu

This part of the study was conducted in four selected villages viz., Athoor and Sithayankottai in Dindigul district, Sathangudi village of Thirumangalam Taluk in Madurai District and Rasingapuram village in Theni District. The above villages were considered as this part of the study is focused on a micro level.

Athoor village

The village is said to be a Sangam age village having a technologically sophisticated tank. There are three tanks in the village capable of irrigating 269 ha. There is more number of marginal and small farmers compare to big farmers. The farmers are enjoying all the rights on the water and other usufructs available from the irrigation tanks in their village for time immemorial without any disturbances. Historically the Government has fully recognized the rights of the villagers for fish in the particular village tank. Various communities of the people are living in the village amicably under sharing the benefits from the irrigation tanks. Modern agricultural technologies in the form of hybrid varieties, chemical fertilizers and pesticides are widely use by the farmers.

The villagers appoint persons called *Maniams* to distribute the available water in an orderly manner equitably to all the cultivators under the tank ayacut. To ensure the proper use and control the water management functions, at times of scarcity the villagers themselves decide the area to be irrigated at a proportion to the total area cultivated by each farmer. The government or any external agency is not said to be involved in any manner at any time for such functions.

The entire tank management affairs are supervised by what is called the *Athoor Pattadhars Committee* consisting of selected farmers representing various caste groups/communities in the village. The APC decide on various works like deepening of the tank, cleaning of feed and supply channels, closing of breeches in the channel bunds and tank bunds, control the duties of the *Maniam* and fight against those who act against the interest of the tank and supply sources. Other activities include guarding the crops from transplantation to harvest resolving conflict during the time of water scarcity and communicating with various government departments for developing the tank and the village.

The village enjoys the fishing right in the tanks. Every year the used rear fishes by introducing finger lings purchased from the department of the fisheries on market price. At the end of the agricultural season auction will be conducted on the fishing right on the proceeds obtained will be used for some common purposes like maintenance of the tanks and meeting the expenditure during the village festivals.

All the decisions relating to the maintenance of the tank and irrigation are taking by the committee and all the villagers accept the decisions. Whenever minor conflicts emerge among the farmers regarding the supply of irrigation water the committee is able to settle them amicably. Either to no case has been taken beyond the village committee.

The APC also appoints persons to do watch and ward in the entire ayacut area. The ayacut area of the village is divided into three regions (Kandams) for easy supervision and control. Such persons engaged for watch and ward or paid in kind by the villagers.

The villagers are allowed to rear cattle like sheep and goat and they are also allowed to use the banks and adjoining areas for gracing the animals. The changing political systems in the State have not affected this village. The villagers have able to solve most of their common problems through the

APC. During 1946, the Government through the fisheries department has tried to cancel the fishing rights of the Athoor village. One of the leaders from the village Mr. Savarimuthupillai filed a suit in the Madras High Court, obtained, an order preventing the Government from taking away the fishing rights from the villagers. However, during 1998 the Government has taken over the fishing rights from the villagers and the Madras High Court when challenged by the APC upheld the same in favor of the Government.

The case has been similar to the Sithayankottai village and discussed together in the next sections for the legal implication on customary rights and practices in the name of development.

Sithayankottai Village

Sithayankottai village is a town Panchayat with five villages and has a population of 15,012. There are three major tanks in the village commanding an area of 471 hectares. The three tanks of the village receive water through a canal called *Rajavaikkal*. The Government has constructed weir across this channel to divert excess water to Kamarajar dam which is a source of drinking water for the Dindigul town. The major occupation of the villagers is farming. They cultivate modern crop varieties and also use new technologies in their cultivation.

The activities of the tank association includes, among other things, cleaning and maintaining the irrigation channels, collecting feed for Kaval (Watch and Ward) from the farmers, appointing people for performing the Kaval activity and to take decisions regarding punishing the thieves who steal away farm producers. Sithayankottai Grama Vivasagal Padukappu Sangam fought with the Dindigul Municipality regarding the right of water from Rajavaikkal. They filed a case in the year 1976 pleading to restrain the municipality from drawing more water from the Rajavaikkal. Only in 1986, the farmers received favorable order from the court restoring the water rights from Rajavaikkal. However, the farmers themselves decide to release water to Dindigul Municipality whenever it experiences difficulty in providing drinking water supply on humanitarian considerations.

Nowadays, some of the farmers are not abiding by the customs of the village. In one instant a farmer have compelled the *Kaval* to open the sluice to irrigate his field out of turn. When the *Kaval* refused to do so the farmers himself has broken open the sluice and irrigated his field. The other villagers objected to it and preferred a complaint with the local police. It was also informed to the local Tashildar and PWD officials. The Government officials have ask the villagers to divide the ayacut into three segments which has to be managed by three leaders. This revised system is being followed since 1998 by appointing *Kaval* people separately for the three regions.

Some of the farmers have encroached the water-spread area of the tank. The villagers represented these ills to the revenue department and succeeded in evicting the encroachers with the help of local police and revenue officials. During 1988, the Fisheries department has taken away the fishing right of the villagers by the Fish Farmers Development Agency Act. The villagers challenged the order in the Madras High Court. The Court after detailed enquiry ordered to restore the fishing rights to the villagers themselves.

Now the villagers are earning anything about Rs 40,000 to Rs 50,000 from fish rearing by taking fishery lease through individuals as decided by the FFDA. The revenue is effectively spent for purposes like cleaning of supply channels arresting of leakage in the tank, cleaning the field channels and desilting of the tank.

The Villagers of Athoor and Sithayankottai filed a case against the Government for taking away their rights in various courts. After more than 10 years of legal haggling and delays the case was dismissed as not pressed by the petitioners in the High court which has happened due to their inability in fighting a case in courts involving time and money. However, the Issues Raised by the Case is as Follows:

1. The Petitioner consists of the farmers making a livelihood from the tanks for ages and depending on the resource for along time in history.
2. The Farmers are the right holders of the water and the government is only doing tax collection recognizing our rights. APC is having the Fishing rights for ages and spending the proceeds for the benefit of the tanks and the village. No single individual benefits for the Fishery. The revenue resettlements have also confirmed the rights of the APC.
3. The proceeds from the Fishery is only marginal compared to the stakes on water and agriculture therefore the APC will always give priority to farming and will use the entire water even if the proceed from fishery is going to be fully affected. This cannot be the case if the FFDA appointed contractors come into picture.
4. FFDA has only been in existence to promote inland fishery in the district from the water resources. The modern fishery may affect the customary practice of fish farming and not suitable for agricultural areas and tanks because the use of chemicals and others may affect the agriculture, sanitation and hygiene.
5. The right of the Fishery is a natural or common law right vesting with wetland owners and cannot be taken away by the state. Such taking away of the natural and common rights infringes the fundamental rights of the Petitioners.
6. Right of fishery is vested with the petitioner time immemorial and inseparable from agrarian and irrigation rights. Such a right of occupation, trade or business can not be taken way from the citizens with executive orders without due process of law.
7. The Fishery contractor may not provide the water at times of the water scarcity foregoing his losses in scarcity years. Considering the Paddy production and their value fishery production is not worth comparing. No data is made available of such losses to the villagers in such eventualities. No consultation is made before they have taken away the rights.
8. When the Government is collecting 'Meen Pasy' (a kind of fishery tax) from the Petitioner and then how it can be the same rights given to the FFDA for the same activity.
9. The public interest of the village will get affected and such action will affect the unity and integrity and communal harmony of the villagers by the government.
10. When the Government still focuses on Agricultural production for basic need fulfillment how can an enterprise like fishery be made out at the cost of the Agriculture. Since the fishery production sets out certain quantity of water at the cost of Agriculture

The case is a classical example of taking away the collective rights of the villagers in the name of fishery development. In reality the FFDA was a controversial project and has not made any real profits as the government claimed. In the recent years the agencies were closed in many districts because of the futility of such corporation and drain of government funds. However, the damage has been done in many places that were successfully enjoying their rights and using the common property resources.

Legal analysis of Court cases on Safeguarding Customary Rights

Athoor Tank

From the records it seems the villagers of Athoor were enjoying the Athoor from time immemorial. The Athoor pattadars committee was formed only in 1933. The government was collecting fish tax (*Meen Passi*) from the ayacutdhars in recognitions of the fishing rights in the name of traditional families. The income derived from the fishery was utilized for the up keep of the tanks. When the government tried to interfere with this the APC has got a stay from the Madras High Court stopping the take over of the fishery right.

The Fish Farmers Development Agency (FFDA) was founded in 1980s through a separate law to promote inland fisheries in the state of Tamilnadu through modern practices and rearing improved varieties of fish. The District Collector is defined as the Chairman of the FFDA. The FFDA was not meant to protect the irrigation interests of the farmers and their upkeep of the tank. Tanks were vested with the PWD and Panchayat Unions for all its maintenance and upkeep. Even then the traditional customary fishery rights were recognized by the Panchayat unions and the PWD.

Tanks were taken over by the FFDA from the PWD and Panchayat Unions etc with the consent of the Panchayat unions and the PWD for the limited purposes of developing Pisciculture whenever sufficient water exists in these tanks. The PWD and Panchayat unions were not divested of their control over the tanks which was rested in them statutorily. The Panchayat Acts have vested such rights of maintenance, management and generating usufructs from the tanks by the Panchayat unions and village Panchayat.

Because the District Collector happened to be the Chairman of the FFDA, the official machinery especially the Revenue dept went out of the way to make over the tanks to FFDA without following any proper procedure of law. When the Dindugal Thasildar tried to interfere with the rights in 1985, the APC was able to obtain a stay from High Court. It seems that finally the government abrogated the rights of the APC. But this was not seriously contested by the APC in court. The court has not taken view of the legality of such action because the suite is dismissed as not pressed for the plaintiffs. This is due to the continuous pressure from the local bureaucracy on the APC and the FFDA has convinced them to get a few members of APC co-opted in the FFDA.

Sidhayankottai Tank

Here also the traditional fishery rights have been recognized and recorded in the government revenue records. In the 'A' register of the year 1920, it was given under the heading fishery that the fishery of all government sources is managed by the ayacutdaras who pay a fixed rent of Annas Two and Paisae Nine for every area cultivated. The Pattadars were continuously enjoying the fishery right and they were paying fishery rent also. There was interference by the fishery department in 1988 and the Pattadaras Sangam was able to get a stay in the year 1988. After that the Sangam continued to enjoy the fishery right till 1997.

The case was not seriously followed but the Sangam tried to get their rights recognized through political influence and it failed. During the year 1988 the fishery department issued a letter stating that the case went in favor of the government and the Sangam should not catch fish in these tanks. This was not verified and the copy of the court order is also not available. Even if the case has gone in favor of the department an appeal could have been filed. Evidently this has not been done.

In both cases a decision on merits has not been obtained and the cases have never been contested. In a recent decision the Madras High-Court has upheld the traditional customary fishery right of the Pattadars against the Panchayat union and the government. The case was decided on the basis entries available in the 'A' register regarding fishery right (Alagar Iyengar and 12 Others V.State of Tamilnadu Etc. and Another) 2002-4-Law Weekly.

At present the fishery right in Panchayat and PWD tanks is governed by the rule issued in GO MS No-169 RD Department Dt-16-08-1999, According to this rules the fishery rights in all Panchayat union and PWD tanks vest with the Panchayat union/Panchayat. The fishery has to be auctioned by the Panchayat union Commissioner / Panchayat president. In such auctions the fishermen co-operative society or the Fish Farmer Development Agency (FFDA) has no preferential right.

Whether proper procedure was followed in abrogating the right and whether the traditional and customary right can be abolished and made over to an agency are serious legal issues which has not been agitated and a legal decision obtained on that count. There are cases in which the customary right has been upheld especially against, private persons and agencies in other cases. As regards the writ petition W.P.No-11474 of 1988 filed by the APC the following observations are made from their case records:

- 1) Normally a writ petition is filed along with a sworn affidavit. It is strange that in this case the affidavit is **dated-29.09.1998** but the withdrawal order is **dated as 17-07-1998** that is more than two months before filing the affidavit a withdrawal is submitted. So really the case was never considered by the court.
- 2) Evidently the case has not been prosecuted properly and no serious attempt has been made to pursue the case properly by the APC. This may be due to their continuous haggle and finding a local alternative with the local bureaucracy.
- 3) Had the case been properly conducted the result could have been different, because there are government instructions that customary rights should not be interfered with. It is presumed that the petitioners buckled under pressure from the government departments.

Sathangudi Village

Sathangudi is a village Panchayat where number of caste groups is living and many people are migrating to near by towns and cities in search of profitable jobs. It is an agricultural village with 2000 acres of cultivable lands of which 500 acres are under tankfed irrigation. There are two tanks in this village. The villagers have spending a minimum of Rs 20,000/- per year on tank related works. They offer voluntary labour for regular maintenance works like acquiring water from Vaigai system and Ponnamangalam tank, cleaning of field channel and closing the breaches.

They are following the *Neerpaichies* system for distributing the water during times of scarcity. They have managed to get a sum of Rs 5 lakhs under 'Namakku Namae Thittam' for desilting the supply channels to their tanks. They have contributed 25Per cent of the above sum through contributing their labour. The tanks in Sathangudi village have rehabilitated during 1980 under European Economic Commission (EEC) programme. Under this programme, the tank bund was strengthened feeder channels desilted field channels were lined with concrete slabs and in addition a community well was dug. All the above works were carried out at a cost of Rs 15 lakhs.

However, the villagers feel that the works carried out were not of good quality because the contractors have not used quality materials. The Sathangudi village tank is supposed to regularly receive water

from the Periyar Vaigai system through the Thirumangalam canal. But they are not getting the same. They have attempted four times spending about Rs 25,000/- each tank to get water from Vaigai Dam but they have not succeeded.

Encroachment along the supply channel and in the water spread is common in the tanks of Sathangudi village. Encroachment is also there by way of digging wells in the feeder channels and on the tank bunds for growing trees. The villagers are helpless in this regard.

The case study is raising important observations with respect to the customs, customary practices and government interventions. They include

1. At times of help the village collectives are not helped by the government agencies. During the encroachments happening many villagers made complaints against the encroachers and they are never considered favorably to evict and prevent such encroachments by the government. Had them been given such a help the present state of encroachments would have not happened at the first place.
2. Secondly, the poorer status of tanks is linked with the illness of tanks arising out of the government projects for their failures. All the so-called modernization works done in the tanks are not functioning and they are not in use for reasons of non-cooperation by the villagers. Such a behavior has come because they had never been consulted during the modernization programs and most of the works are in any case not useful for the tanks and villagers. The villagers feel that the Irrigation Department (PWD) has used the contractors and executed such a poor quality and unnecessary works, which gave them up due to its poor strength.

Findings in Rasingapuram village

Rasingapuram village is a town Panchayat with a geographical area of 2618 ha and 1640 households. It is also a village where many caste groups are living. Agriculture is the main occupation of villagers. The people are also involved in activity such as agriculture coolie, cattle rearing, sheep and goat rearing and petty businesses.

There is only one tank in the village, which is also not functional. Due to the negligence of the villagers in general and the farmers in particular the supply channels got silted up and the flow of water was totally blocked, resulting in the virtual death of the tank. It was very much useful in recharging the wells during the older days. As a result, there are more than 250 wells in this village but only 80 wells are providing irrigation that too to a very small extent due to poor ground water situations.

As the tank has become dysfunctional people started encroaching on it. The original area of the tank was 5.17 ha. Before hundred years and the same have been reduced to a small strip of bund and the tank became extinct due to encroachments. The encroachers are cultivating crops in the tank area by digging wells and one of them has even managed to get electricity connection to his pumpset. Yet another person has managed to get a *patta* for the piece of land encroached by him.

The villagers on representation to the District Collector have managed to retrieve some portions (0.485 ha) of the encroached area in 1997. The Government also helped to reestablish the boundary of the tank and strengthening the tank bunds with a grant of Rs 88,000/-. In the villagers managed, evict the encroachers from an area of 1 ha using force and spending Rs 1.8 lakhs from the village common fund. However, they are unable to evict one person who is continuing to enjoy the land he

has encroached upon. In this case, a case is spending in the Madras High Court and the people are awaiting its verdict in their favour.

The case study again depicts the plight of villagers even if they are united and come under formal associations their views are not heard by the authorities. The request from the villagers do not attend to encroachment eviction and they were made to run pillar to post in vain. After years of struggle the village association could not succeed in getting the encroachment evicted and system got repaired. Their voice is not given due care and importance in the various levels of government from local to state levels.

Meso level Study spanning twenty five tanks in a watershed

This part of the study was conducted in the Periya Aruvi System in Melur taluk of Madurai district and a chain of tanks under its command. The Periya Aruvi system originating from Alagar Malai hills runs through Kesampatti village feeding 25 tanks in a series. These tanks are small and big and serve single crop paddy cultivation under their command. A reservoir has constructed across the stream during 1965. This has drastically affected the inflow into the tanks originally fed by the Periya Aruvi Stream. The salient findings of this meso level analysis are presented below:

The Periya Aruvi Stream was unregulated and was flowing for a long time in history through several villages feeding 25 tanks spanning across four Panchayats. The villagers were enjoying fishing rights in the stream and the tanks apart from the irrigation rights. The villages used to make small revenue by leasing out the tanks for fishing rights. They also used to take silt from the tanks for applying their fields. They maintained the tanks by carrying out repairs, closing the breaches and cleaning the channels using the village common fund and through collective action. The villagers used to respect their tanks and consider the water as holy in their lives, and sprinkle the water into their fields before tilling, showing and harvesting as a measure of reverence to the stream.

They were managing their tanks and irrigation systems by appointing *Neerpaichies* (traditional water mangers), mostly from the Schedule Caste community. The *Neerpaichies* were paid in kind by the farmers during the harvest of the crops. Of late they have dispensed with the services of the *Neerpaichies* as they were not getting adequate water in the tank particularly after the construction of the reservoirs. The farmers nearer to the reservoir area have dug as many as 30 wells and 50 per cent of them are having electric motor pump sets. This is one of the consequences of constructing the reservoir.

The construction of the reservoir was based on the Irrigation department's calculation about the surplus. This helped some section of the farmers who are getting water directly from the reservoir whose lands were earlier dry lands with tree crops or dry crops. But enough water is not reaching the 25 tanks that were served by the stream earlier. This had very badly affected the lives of the farmers depending on the tanks. Ten out of the twenty-five tanks originally fed by the Periya Aruvi stream have become dysfunctional due to the non-arrival of water. The water levels in the wells around the tanks have also drastically gone down, making 500 wells unable to supply the needed irrigation water. The farmers have also experiencing severe reduction in the productivity due to uncertain supply of water through the tanks.

Some people have started encroach the empty tank beds cultivating dry crops. One of the twenty-five tanks has been totally defaced as it is completely occupied by the encroachers. An analysis done during 1996 by DHAN Foundation revealed that the water has been released from the reservoir to the

tanks only on 64 occasions instead of 416 tanks in the last 17 years. This has badly affected agricultural in their area on the life of the poor farmers.

At the time of the construction of the reservoirs it was planned to provide 170 acres with direct irrigation. However, the reservoir is not supplying water even to those 170 acres presently. As a result, the farmers in this area have once again converted around 30 acres of land into orchards anticipating similar situation in the future also. The new ayacutdars of the upstream new reservoir have filed a case against the PWD claiming that they should always get first write-up water from the reservoir. The case is in the trial stage at the court.

The case presents the following issues in relation to Tank management in meso level watersheds.

1. The engineers from the departments use methods, which are *dubious and difficult to understand*, and the same result in faulty calculations. The traditional users who are spread across several villagers have difficulty in understanding such a work based on several complicated calculations could not act in time to stop such constructions of upstream dams or reservoirs. This result in loss of their traditional livelihoods and force their resources into disuse.
2. The *failure of such projects in a longer time span* affects mostly the tail enders and not the head enders, In this case the reservoir is built at the head of the stream and the new ayacutdars are located at the head end and using all the water as it arrives in the reservoir without allowing to downstream. It will be very difficult to mobilize all the landowners of the 25 tanks to come together against a consolidated group of new reservoir farmers who sit at the strategically vantage points.
3. Also the *holding the of flows at one place* in a reservoir gives the control of the entire stream at one place and stops all collective action from the 25 tanks downstream and leave it the government engineers who manage the system. Such a centralized managing of a traditionally decentralized stream becomes detrimental to the small tanks located at the tail end and grossly results in inequitable proposition.

Macro level Study spanning a river basin

This part of the study to understand the issues related to the customary rights and management in a macro level system was undertaken in Vaigai system. Vaigai River originates from Varushanadu hills in Theni districts. It has three tributaries. The river traverses a total length of 250 km and finally empties itself into a huge tank called Ramnathapuram big tank. The river basin covers an extent of 7031 sq.km area. There are inter-basin transfers from the basin to the adjoining Gundar river basin for long years in history. The construction of Periyar Dam in 1895 and Vaigai Dam in during 1959 has very much influenced the irrigation management system in this river basin. These projects were major river basin projects aimed at building centralized reservoirs to store the running water from the river at one place.

The salient findings are presented below:

1. Prior to the construction of the Periyar and Vaigai Dams. The Vaigai river works was supplying water to about 3,000 tanks in its basin, sufficient to fill all the tanks at least twice. All these diversions are temporarily done through collective actions of the villagers historically.

2. The construction of Periyar Dam in Kerala enabled to supply irrigation water to about Rs 52,000 ha. Of this, water was supplied to 18,211 ha for raising two crops and 34,399 ha for raising single crop. The water for the area is technically arranged to get from the Periar reservoir located in Kerala. The releases from Periar are fed into River Vaigai through its tributaries and accounted as separate releases. Also later developments such as Thirumangalam main canal and others have also added more areas under the reservoir.
3. Vaigai river which is historically the source of water for around 3,000 tanks located in the lower down districts of Sivaganga and Ramnathapuram are assumed to draw the same historic supplies as flown in Vaigai before the Periar reservoir is constructed. Vaigai River in the lower reaches from Peranai situated near Nilakottai. The farmers in Sivaganga and Ramanathapuram districts in their tanks do not get their water as they used to get decades ago and were worst affected.
4. Hence, the lower Vaigai basin comprising mainly the tank irrigation through hundreds of village tanks has become a man made water starved system due to the constructions of dams and mingling of Pereira and Vaigai water and through centralized management practices. Presently the tanks, which were centuries old linked with River Vaigai, are no more linked to their original source and starved of water. The traditional rights of several hundred villagers in a drought prone area is last and man made droughts are invited through a centralized management of Rivers.
5. In order to improve the Vaigai river basin drastic changes in the rules of regulation are necessary to restore the riparian rights of lower down command area farmers and also to improve the operational efficiency of the system without any financial investment. However given the centralized administration and its inefficiency this may not result in any better.

Section III. Conclusions of the study

The tanks are mostly managed for their water at the community level using the traditional customs and practices. However, any disputes arise within the communities concerned with conflicts such as the tank water distribution, dealing with free riders, encroachment and misuse of property, conversion of tank into other uses are dealt only by the state and not the local people. This is mainly due to the fact that the formal and informal tank associations representing the local farmers do not have any right to deal such people.

Tank water distribution in conflicting situations is decided by the Revenue authorities through their local officers depending on the seriousness of the case. In case of conflicts between villages across they are solved through negotiations by the officials who take a lot of time and cause tensions among the villages. In case the distribution involves the government or its department as one party the state tend to take a partisan attitude that the departments get the first preference. Most often the technical details are used to justify such action, and these actions are contested by the traditional water users.

The local associations do not have any powers to control the encroachers. Since, the encroachments are done by the private people in the villages they need to be taken to the government officers by spending good amount of resources by the village collective bodies. Since the gain is visible for a private person he will be preferred to take the fight till the end and the loss is not much for him. Because of the prevailing corruption and inefficiency in the local government offices the villagers as a collective are forced to run from pillar to post to safeguard their interest and no priority is given for them in resolving the situation by the officers.

In case, if the villagers decide to take such action to court by making a case they do not have any ground to be a party for the case. The representation in court need to be done in the name of the government officers District Collector or Revenue officers who will not cooperate to run a case. Mostly the village tank users as a collective is at the disadvantage at the hands of the free riders, misuses and the government bureaucracy apart from losing their money, time and energy for a common cause. If they fail they would even lose their livelihood.

In general, the governmental transactions do not have any transparency in matters related to encroachment evictions, misuse of tank by any one and free riders. Mostly the situation will be seen by the government officers and the government system as a mere internal conflict in the village. The tank as a resource is important for the livelihood will not be the central point of transactions. The efficiency of the government system in resolving such issues is pathetic and it takes years if not decades by then the damage is completely done. The participation by the local people in such decisions does not exist and they are viewed as one of the party in the case and usual court proceedings go on depending on the capacity of resources to spend for that.

The actual practices of micro level management such as protecting tank structures, acquiring water by cleaning supply channels, watch and ward of available usufructs from tanks. Such practices vary from place to place in its extent based on their immediate needs, constraints and context. There are not serious omissions and commissions felt by many village tank farmers. There are various users for the tanks and not many conflicts found across the water users. Even if they have arisen they were solved without any intervention from the government officers. The decisions are done at the local level and conflicts are resolved amicably.

The actions against the encroachers are at the instance of the village collective rather than by the regular duty of the village level government system by way of safeguarding the state properties. However it is found that in all the studied places the government officers and the system are against the collective action and safeguarding the tank system. This is due to the partisan attitude of the government officials and extensive corruption in the revenue department making the encroachers go scot free and enjoying as far as possible.

The village collective representing the tank users face tremendous difficulties in evicting encroachment. They find even difficulty in using the court to file against the encroachers. This is due to the fact that the tank property is owned by the state and represented by the Revenue Department. Any action against the encroacher has to go through the Revenue Department which is already marred with corruption in favour of individuals who gain at the cost of the tank property. Even if they are evicted after several delays they are accomplished at great cost and risk for the village collective leaders and others involved in such public action.

The state authorities have monopoly on finalizing the technical related works such as building new structures affecting existing tank and users. They do not consult and their actions are unilateral and when comes to know by the existing users they are made to run to courts with all their disadvantages of not knowing the scheme of things fully.

The frequent development works done by the government through their departments are done only through contractors. The village level collective bodies which are informal and formal are not given any chance to implement these programmes. In stray case they are implemented by the associations they are done with great difficulties and fights with the engineering bureaucracy against the corruption. The associations do not have any right to avail the works to be implemented by them. The

departments think that there is no need to consider views of these associations are given chances for them to implement works.

By using engineering estimates related to the hydrology of the stream feeding several tanks a new structure is proposed at the head end. When such estimations are made there were no consultations to explain the consequences to the existing users. The study shows that the calculations are not correct in real terms spoiling the rights and livelihoods of traditional users apart from providing unsustainable expectations for the new users from the new reservoirs. Such an action has resulted in huge losses for the government and the existing tank users. The Engineers had not used any traditional understanding of the stream and their supplies by keeping the users in dark. Such an act is totally devoid of any reasons and scope of its sustainability in a resource context.

The macro level study clearly shows that the centralized dams constructed in the name of regulating river flows and doing a proper management do not achieve such intentions and rather damage the existing structures which are run on a decentralized manner helping the poor communities.

The findings of the study have clearly indicated the following:

1. In the micro and meso level tank management systems the villagers are running the tanks based on their customary practices and their rights. There are not much interference from the government exists. The village level collective action is thriving depending on the tank performance and vice versa. This offer a lot of scope of reviving and legitimizing such actions through giving enough powers related to tanks to such organisations.
2. Enjoyment of usufructs is left with village collective bodies whether registered or unregistered as an 'illegitimate' measure and corruption thrives through such action at an extensive scale. Rather legitimizing the rights of raising usufructs by the village collective organisations will be a better option for the Government as well as the system maintenance. This will provide much needed revenue for tank maintenance by the villagers and take care of the system for a longer time span.
3. The distributing of available water requires a dynamic action in the village and hence it is better to strengthen village tank associations or any collective organisations by way of giving the needed powers for achieving them. There is a legal vacuum in the existing order for exercising any enforcing of collective norms for the tank as a whole. The scope of free riding always exists by a section of farmers who indulge in malpractices with the help of external bureaucracy in their support. Hence the farmers feel that their organisations should be empowered with powers.
4. The tank management systems, which were in vogue in the olden days, is slowly disintegrating and the tanks were still being managed by the communities only in few villages studied with less and less rigorousness. The participation of the villagers in works related to the tank management like desilting of the tanks, strengthening of the bunds, cleaning of the feed and supply channels and managing irrigation during times of scarcity is slowly dwindling due to non-cooperation and loss of control by the local leaders.
5. In the meso-systems studied it was noticed that the Government itself failed in not properly considering the interest of the several villagers benefited by the tanks. It is

said that political interest compels them to prepare technical documents without considering centuries of practice and tamper the system in favor of smaller sections and damaging the total tank networks. Further, the case analyzed has vividly indicated that neither the new ayacutdars nor the old tank beneficiaries were benefited by the reservoir built across the stream. This has resulted in poor storage in the tanks and depletion of water levels in the wells which were the life line of the villagers prior to the construction of the reservoir. The loss is immeasurable because of the infrastructure being lost by the villagers because of such technical complacency.

6. As a case for the macro system the Periyar Vaigai system was studied. The Vaigai River was supporting around 52,000 ha of land in Madurai, Ramanathapuram and Sivagangai districts prior to the construction of Periyar and Vaigai Dams. Though the Government has provided irrigation facility to new ayacut in Madurai district it was not able to provide the promised quantity of water to the erstwhile beneficiaries living downstream in the districts of Sivaganga and Ramanathapuram. In the overall game the traditional right holders spread in one of the drought hit parts of the country have lost their livelihoods and made into migrants in search of a life elsewhere. In order to undo such damages a transparent, technically sound and participatory water management practices should exist.

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2. Pooseri Tank, Ramanathapuram District
3. Veeravanur Tank, Ramanathapuram District
4. Ponnakaneri Tank, Ramanathapuram District
5. Kadambankulam Tank, Ramanathapuram District
6. Authoor Tank, Dindigul District
7. Sithayankootai Tank, Dindigul District
8. Sathangudi Tank, Dindigul District
9. Goundankulam Tank, Theni District
10. Peria Aruvi Reservoir System with 25 Tanks
11. Vaigai Dam and Tank in the basin

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Part II

Customs, Practices and Management in Village Tanks: Micro level

Customary Rights and their Relations to Modern Tank Management in Ramanathapuram District of Tamil Nadu

An overview of Tank Management

Tanks which are also called as Eries, Kulams, and Kanmois are different types spread across the state. The most prominent use of these systems is related to providing water for irrigation, domestic use and generating revenue for the village in general. While there are various estimates on the number of tanks their number ranges from 36,000 to 42,000 tanks in the State. There is no accurate measure available with any of the departments.

The discussion related to customary rights of the tanks is not limited to the water, water use and water management alone. Since the tank is a resource in itself, produces huge revenue from the usufructs such as silt, sand, fish, trees, minor minerals and others. They play a very important role in the village economy in agriculture as well as non-farm revenues. This note discusses about various observations made across Ramanathapuram district.

All tanks in the State of Tamil Nadu are owned by the 'State' and are vested with different departments for various purposes. The Water Resource Organisation – Public Works Dept. (WRO-PWD) is vested with the management of the tanks which have an ayacut of more than 40 ha or else linked with any canal command system. The Panchayats are given with the task of maintenance and management of tanks having less than 40 ha of ayacut area. PWD directly handles the operations of the tank sluices in a few places, where the ayacut area is very large

Irrespective of who owns and who has the management responsibility, the Panchayats have been given the rights to enjoy the usufructs from the tanks. However, not all the Panchayats exercise this option and use this power for their benefit. Usually, the Revenue Department holds the responsibilities of protecting the tanks from encroachments and auctioning the usufructs of all types. However, there are variations across the villages depending on the size of revenue, the type of usufructs and the local situation and customs.

The farmers as a group are expected to take care of all the issues related to water management right from acquiring water from the catchments, from the Anaicuts, and using the same within the ayacut in an amicable way. In most of the places, the water management within the ayacut is the sole responsibility of the farmers alone and no agency has anything to do with that.

The usufructs from the trees on the bund in most of the places have been taken over by the individuals who have planted trees on their own with a license from the revenue department named 2C Patta. These trees are usually the ones which give fruits, leaves and others except the timber. The farmers are not expected to cut them in toto and enjoy them even though they were the planters and rearers. In a few villages, certain village temples or the village Panchayat Institutions themselves have got the rights over these usufructs under the same category of 2C patta and that is being enjoyed.

Fishery as a major usufruct has different types of enjoyments of which customary right holders in many small tanks have the rights to rear, auction and enjoy. Apart from this, the Panchayats do auction the fishery in a few of the tanks and raise the revenue for their coffers. It is also found that the revenue department also does the auctioning in many tanks including the Panchayats managed or PWD managed tanks and raise the revenue. Nobody seems to know under what authority they do such auctioning while the Panchayats are empowered to do the same by law. Irrespective of most of the

system tanks which have good source of water have been taken over by Fish Farmer's Development Agency (FFDA) under which registered fishers or fishery cooperative can only do the fishing and enjoy the usufructs.

The wild growth of tree species such as Prosopis Juliflora has lot of monetary value come up on the tank beds. Most of the tanks in the Southern Districts have such growth. The local villagers collectively safeguard the Juliflora jungles from cutting by the other villages or any one. While the jungle becomes worth enough to cut they usually bribe the revenue authorities and auction it from the village and generate the revenue. No one in the revenue dept. seems to know under what authority or power they auction such usufructs from the Tahsildar's Office. This practice is rampant and provides huge illicit revenue for the revenue officers across the Ramanathapuram District. No where, it is reported that the Panchayats and the presidents have attempted to auction the Juliflora jungles, on their own asserting their powers.

Silt the common soil material carried away by the run off is valued as manure by the farmers, pot making raw material for the potters, ingredients for making bricks and for other general use such as filling and dumping. As per the Panchayat manual every user irrespective of whoever it is, have to pay the usufruct charges for using them. It is found that the brick kiln owners and labourers transporting earth for bricks have to take license from the revenue authorities and indulge in such works. When take the silt Farmers for their agricultural fields they are normally not asked to pay anything. However if they do for building their houses or filling their courtyards they are expected to pay and this usually happens through the bribes.

In general, it is true that there is no collective body existing in the villages who have the powers or authority to do anything with the usufructs in the tanks. Whatever happens in the tanks related to the usufructs or happens only through illicit practices and bribes. It is known to all levels across the bureaucracy and there are seldom any efforts to do something with the present situation.

The tanks of Ramanathapuram District

Ramanathapuram is one of the South eastern Districts located on the coast line of the Gulf of Mannar on the east and Pudukottai, Madurai on the west. Historically this district is named as a 'drought-prone' district depending on tanks and ponds. The tanks in the district are characterized by the long and unwinding bunds placed on a plain ground in a cascading fashion. Since the slope is very minimal all the tanks are fed by the trained channels which often runs into miles. The development of such vast network of tanks in this district is a response to the drought and the prevailing scientific harvesting of water over the centuries. Usually these tanks have more water spread area per acre of ayacut they serve. This means, vast expansion of lands are available as village commons for use other than water.

The villages in Ramanathapuram are mostly located on the banks of the tanks, enjoy the water from the tank for their use in agriculture, livestock, drinking and domestic use. Historically, the water spread area is used for grazing the livestock, growing of trees and undertaking seasonal cultivation by certain marginal groups. Even today, the district has one of the highest populations of livestock such as sheep and goats which require vast area for grazing. The district has the majority of two major castes namely Thevars and Pallars who are involved in agriculture. These two castes are traditionally warring factions located in adjoining geographical areas. The frequent disturbances have many reasons to do with the tanks either for acquiring / disposing of flood water or for their usufructs.

The rules of governance of most tanks in Ramanathapuram district are well settled and still practiced to its level best even today. This field observation comes from working in more than 100 villages

directly. The rules in the villages are never static and they constantly change depending on the situation and circumstances. **The following matrix tries to provide an approximate summary of the situation as exist in Puseri Village of Mudhukulathur Taluk.**

Acquisition of water

Across many villages it is a custom that the entire village is responsible for getting water to their tank. This process at times happens through violence leading to diverting water from the upper villages by force. The closing of the Anaicut, (in the case of a tank getting water from an Anaicut) is the responsibility of the villagers making sure that their rightful amount of water is being ensured through the respective supply channel. The farmers collectively involve in cleaning of the channel every year, making sure that the water will not get dissipated on its way to their tank. This practice is in vogue in many villages which depend on their tanks for their livelihoods.

In these kinds of situations, the encroachment on the supply channel plays a crucial role in delivering the water to the tanks. After the Indian Independence, the poor and the marginal families are given with the dry lands. At times, this practice is killing the supply channel which used to carry the water. This practice of giving away the lands wherever a clear boundary of supply channels are not made available has resulted detrimental to the tanks. This practice will get aggravate, if the Pattadars of the supply channel and the tank villagers are different. It is observed that in many tanks, unscrupulous way of giving away the atta to the poor have resulted in huge loss for the tank apart from being a source of tension for water.

Usually the houses are located on either side of the tank and at times on the bund itself. The channels leading to the tanks have to cross the villages which are mostly settled with houses and courtyards. The growth of the village has also resulted in encroachments of such piece of lands which used to be the supply channels. The encroachment of this nature has played havoc in the performance of the tank because either the channel is dead, or the channel is made defunct. Here again, usually the revenue department which is supposed to protect the tanks Poramboke does not act immediately and resolve the situation. The conflict between the encroachers and the tank ayacutdhars becomes a sort of personal conflict and in the course of time the resource gets degenerated. Across the district of Ramanathapuram, this has been pronounced.

Box – 1:**The case of Mudhukulathur Big Tank**

Mudhukulathur big Tank is located in Mudhukulathur taluk of Ramanathapuram district. The ayacut lands belong to Thoori, Ettiseri and Selvavinayapuram. Traditionally, Thoori villagers were maintaining and managing the Mudhukulathur big tank. Till 1980s, the villagers from Thoori send its messengers to Selvavinayapuram, Ettiseri, Kadambankulam, Melamanantharai and other five villages for mobilizing voluntary labour to clear up the feeder channel from its original source called Ragnatha Cauvery. After 1980s the practice has been converted into mobilizing money rather than mobilizing labour from the same villagers towards the same cost. This change has happened because of the behaviour of one or two villagers who do not send enough number of labourers. These practices also collapsed and the village Thoori was forced to do the entire clearing operations on its own. For e.g. in 1999 the villagers have spent Rs 20,000 and filled the Mudhukulathur big tank. The other villagers as usual wanted to release their legal share from the supply channel and the tank.

The Mudhukulathur big tank ayacutdhars have simply refused to release any water even after the Public Works Department engineers tried to open the sluices. 'No pay for clearing no water in the channel' was the argument put forth by the farmers of Thoori village. The tank farmers have not agreed to release water even though there was a surplus waters in the tank unless villagers of each tank downstream pay and compensate all its expenses. Hence after lot of tensions, Melachakulam village has paid Rs 10,000 and Kadambankulam paid Rs 6,000 and agreed thereafter either to participate in the customary works or pay whenever it is needed.

It is noted that though all the tanks in the chain are left with inadequate water during 1999, Mudhukulathur big tank had enough water for two crops and taught a lesson for the users of other tanks to keep their custom alive.

Box – 2:**Making the farmers lazy and lead to the collapse of tanks by new developments**

Veeravanur tank is a big tank listed under Public Works Department, in located near Chatragudi in the Ramanathapuram Highway. The tank has a supply channel length of 3 km which receives supplies from the river Vaigai. The drainages from the river after the floods, used to drain to the tank down below through a shallow stream. The PWD has proposed to construct a deeper channel to mobilize this thin sheet of flow. Because of this work the level of the channel has changed, the tank has become elevated compared to the newly dug channel. To compensate this level difference, the PWD has proposed a big check dam on the riverbed to head up water. Because of this heading up of water, most of the thin flows coming out of the sub surface drainage could not flow to the tank. The tank has in effect lost its sub surface flow from the river. The villagers regret that around 100 acres of their ayacut is lost due to the water losses because of the changes in the structure.

Use of Water

For the purposes of discussion, the use of water shall be divided into agricultural use, drinking water use, domestic use and other uses. The rules of administration within the villages changes depending on the quantity of water available, demand for water and the general circumstances. The following are some norms generally applicable across the district.

1. The drinking water pond would get filled first from the tank irrespective of starting the agricultural operations.
2. In the event of the tank becoming dry, the drinking water pond is once again filled irrespective of the farmers waiting for the last wetting.
3. During the surplus years the tank ayacut is being extended by adding up the dry lands under irrigated paddy. As per revenue department, this practice is illegal and a penal tax is levied.
4. During the scarcity years the water is regulated equitably across the ayacut. The equity is defined locally depending on village custom and practice.
5. In general, farmers are not allowed to pump (manual bailing is allowed) water when the gravity flow from the sluice is stopped. This practice ensures certain equity among the users.
6. All the disputes arising out of water distribution is resolved within the village by the village committee. These village committees defer in constitution from village to village. There are not many cases reported reaching the Tahsildar's office in this regard.

Box - 3:

Drinking Water and Tanks

It is a custom that villagers in and around Ponnakaneri, Puseri, Kadambankulam and Ilandaikulam villages fill their ooranis (drinking water ponds) from the tanks. This happens at the beginning of the rainy season (September), and again at the end of the season (January) and once again during summer (June). It is the way of life and the source of drinking water which they cannot separate from the irrigation tanks for ages. For e.g. during the year 2002, Ilandaikulam village has pumped water from its irrigation tank by spending Rs 9,000 even when their crops are suffering from water scarcity. There are numerous such examples where the water for drinking and domestic purposes in drawn from the tank.

The village named Kadambodai has only one drinking water pond and there is none for domestic use. Therefore it adopts a custom of keeping the waters in the tank for more than 6 – 9 months by a simple rule. Nobody shall pump or bail below the sill level of the sluice. This is a custom followed in many villages where there are not many drinking water ponds.

Use of Trees on Bunds and Tank Bed

Many tank bunds are planted with Tamarind, Neem and other trees yielding various usufructs. These trees are planted by individual farmers holding 2C Patta. It is also true in a few villages, the temples and the Village Panchayats enjoy these trees. So the enjoyment from the usufruct is only by the individual after paying the fixed tax.

Trees and bushes inside the tank water spread are mostly guarded by the village collectively. Felling by anyone is not allowed, at times punished by the village committee. To realize the revenue from such trees, the village collective will pay a minimum payment to the Thasildar apart from a big bribe to his office. The village collective resorts to auction to realize the full revenue from the trees. It is estimated that 25-50 per cent of the total realization goes for bribing and covering up. The revenue from such realization is used for temple festivals or settling caste disputes across the villages. Rarely, the main revenue is used for tank development works.

Box - 4:

Juliflora jungles and the custom

The tank bed is a piece of land where Juliflora jungles come on their own without any effort. In the district of Ramnad where there is a large extent of Juliflora jungles, crores worth of money float around the villages. Usually most of the villages collectively keep and follow a custom that nobody will cut the Juliflora jungles in the tank beds for any private gain. Once in five years they collectively decide to cut down the jungle and make money for their common fund. In many villages it is also true that every year they will realize certain amount by novel methods from Juliflora jungles.

The Revenue Department is usually taken care of by paying huge bribes. Nobody knows under which law or regulation the Revenue Department has anything to do with tank bed usufructs. According to the existing regulations, the Panchayats are supposed to be the agencies vested with the usufructs. However in Ramanathapuram district, it is the Revenue Department enjoys an upper hand and deals with Juliflora jungle. It is estimated that a tank with 20 hectares of tank bed will be able to realize Rs 1.5 lakhs in every 4 – 5 years by this jungle growth. Many villagers claim that: atleast a minimum of one-third of the money would be spent on expenditures towards the officers. Of course Panchayats also get a small amount from this transaction.

Many experienced village elders, Panchayat presidents, and farmers expressed that if the Government do not interfere the funds can legitimately raised by the villagers through their tank associations for the benefit of the tanks. Since there is no mechanism of encouraging the tank associations to involve in these huge opportunities are wasted and the money realized is spent on paying bribes, caste violence and all other non productive purposes.

Fisheries

Leaving a very few tanks most of the tanks, hold water for only 3-4 months. Therefore the fishery revenue from the tanks is less compared to other districts. Most of the villages have a custom of harvesting the fish on a pre announced date wherein everyone is allowed to catch as much as they can.

Silt and Earth

Silt and earth from a tank is mostly enjoyed freely by the farmers, occasionally if required large digging the villagers bribe the revenue department officials at the village level.

Discussion on the Equity and the Present tank Management

The present tank management in Ramanathapuram District is characterized by

- The complete control of the water resource by the local villagers
- The partial control and negotiation with the 'state' (for the usufructs such as trees, fishery, silt and earth)

In general, most of the village households own a piece of land and everyone almost has got some access to the tank water. This is irrespective of whether they are within the ayacut or outside the ayacut. This phenomenon is unique and only true of Ramanathapuram district, where the rule of delimiting the ayacut does not matter for the villagers. This practice in many ways is equitable and helping the villagers across various sections. The various uses of water is acknowledged by everyone in the village and the use is decided based on that. This practice is again unique and not applicable to other districts where the water is only limited to ayacutdhars. The use of modern technology such as pumps during the scarcity years is not allowed and if allowed it is through a mutual consensus alone.

The water administration within the village is more democratic wherein everyone has got some representation either through their caste groups or through their locational groups. Even in multi caste village tanks, all castes do find a place in the tank administration and the decision making processes. This practice is even true of huge tanks servicing more than 500 acres of ayacut. Most of the village committees are an assorted mix of different caste groups within the village and their representation is based on the local strength. However, their local strength does not decide upon the equity in the distribution of water.

The decision related to sale of surplus water within the village for the non ayacut lands seems to be a regulating factor than as a market mechanism. Many village committees sell water to the non ayacut lands as a matter of regulating the supply by matching with the demand existing among those who are willing to pay. This practice by all means is more equitable, sustainable and prudent in making the tank more efficient. It is reported that at times the local revenue officials make noise about such practice to gain some bribes for such sale of water.

The decision related to sale of surplus water to outside the villages depends upon the collective bargaining of the upper village which sells over to the lower village which receives. In some cases, the geographical and design advantages of upper tanks play a crucial role than any other factors. Usually the upper tank villages make huge money for their village common temple festivals or any other purpose. This practice also meets with the same reaction from the revenue administration.

The Local Customs and Practices

In general much of the practices happening on the ground related to tanks such as use of water, enjoying usufructs, and other matter are not recorded. The biggest beneficiary of such practices is the revenue department which thrives on the bribes received from almost all kinds of transactions in the villages.

The Panchayats, though they are the rightful entities to use the usufructs are nowhere closer to the ground realities. Often, they are not even considered by anyone including the local revenue officials or by the tank ayacutdhars as the legitimate holders of tank usufructs.

All conflict or dispute resolution mechanisms related to the tank which has its jurisdiction within the village are attended only by the village collective. Whenever the disputes arise out of the provision of Patta on the supply channels, fore shores and other tank complex areas by the Government Agencies, the local collective could not resolve those.

Wherever the conflicts or the disputes across the villages exist because of the encroachments on supply channels, tank beds or defacing of the supply channels by outsiders the local collective organization is helpless and look for Government and court interventions.

Tank Improvement works

Ramanathapuram being a drought-prone area received vast sums of money from the Central and State sponsored programmes which are mostly earthwork schemes. Irrespective of the scheme, the contractors only implement the programmes. Even the programmes such as employment assurance, Jawahar Rozgar Yojana which are meant only for the labourers were implemented by the contractors. There were many attempts by the villagers to use such funds for the benefit of the tanks systems which never happened.

Realising the fact that the existing method of tank development work by the Government agencies and Panchayats will never benefit the tanks in full, the villagers seek a collective bargaining bribe from the contractors. This money is asked because contractor in any case is going to gain huge sums. Then why not pay for the village? This practice emerges from the ground situation where the people are disempowered to involve themselves in tank development work. Though in the heart of their hearts the villagers want the work to be done in a sincere manner, they are unable to force the contractors to do so.

The tank development works are not normally given to the villagers even if they have their own association or groups. The government officials – contractors- politicians' lobby in the district is very strong that the organized local communities are never allowed to undertake such works. In a few villages it they are forced to pay the bribes to the officials whenever they are permitted to take up such works.

Issues related to Water from Vaigai River to the tanks of Ramanathapuram District

Historically the district of Ramanathapuram used to get water from the Vaigai river and Gundar river through inter basin transfers. It is an established fact that in the last 50 years after the construction of two reservoirs across the river Vaigai the tanks of Ramnathapuram do not get their share of water. A separate analysis of the present situation is being presented for greater understanding of ignoring the customary rights of the tail end tanks by the rich and politically powerful in the upper reaches.

Annexure – 1
Customs related to Water Use in
Puseri Village, Mudhukulathur Taluk in Ramanathapuram District

| Sl.No. | Use | Situation | Custom |
|--------|----------------|---|--|
| 1 | Agriculture | a) Beginning of the season: When the tank is surplussing and more than adequate quality of water available. | <ul style="list-style-type: none"> Along with wet lands, drylands also get water for paddy. Hence an unregistered ayacut is allowed by villagers to accommodate other villagers who are not privileged. However, the Revenue department puts a penal levy for non registered ayacut. Pricing of water for unregistered ayacutdhars is done by the village association depending on the needs for funds in the village |
| | Agriculture | b) End of season: When water is available at the end of the first crop season. If it is more than adequate for Registered Ayacutdhars | <ul style="list-style-type: none"> Dry crops (Pulses, Cotton, Gingelly) are irrigated by registered ayacutdhars Unregistered ayacutdhars are allowed to irrigate for dry crops. |
| 2 | Drinking Water | a) Beginning of the Season | <ul style="list-style-type: none"> Oorani is filled from the tank to Full Tank Level (FTL) even if there is any uncertainty of monsoon |
| | Drinking Water | b) End of the Season | <ul style="list-style-type: none"> Oorani is filled once again to its FTL even if the crops may be reading irrigation. |
| 3 | Agriculture | a) Beginning of Season: When there is only adequate water | <ul style="list-style-type: none"> Unregistered ayacutdhars are not allowed to use for crops |
| | Agriculture | b) End of the Season: When there is inadequate water | <ul style="list-style-type: none"> Water is provided for all ayacutdhars in an equitable manner fixed locally. Water is supplied only after fulfilling drinking and domestic water use after filling up the Oorani |
| 4 | Agriculture | Middle of the Season: If there is a sudden arrival of unexpected water | The dry crops will be converted into wet crops such as dry paddy into wet paddy, dry cotton / pulses into irrigated dry crops |
| 5 | Agriculture | a) Beginning of the Season: | <ul style="list-style-type: none"> Reduction in crop area limited to <1 |

| Sl.No. | Use | Situation | Custom |
|--------|--------------------------|---|--|
| | | Less than adequate water for registered ayacudhars | acre per family or proportion of the area owned. |
| | Agriculture | b) End of the Season: Less than adequate to make a successful crop | <ul style="list-style-type: none"> • Sale of water even for registered ayacudhars to regulate the water in an equitable manner. The sale proceeds are reserved for tank works. • If there is no agreement all lands are kept as fallow. |
| 6 | Domestic use | End of the Season: Limited water available | <ul style="list-style-type: none"> • Leave water in pits for bathing, cattle • Filling the Oorani to FTL. |
| 7 | Personal use from trees | a) Trees on bund | <ul style="list-style-type: none"> • Through 2c patta to the plants or the tree. Normally the land owners adjoining the tank bund exercise this option |
| 8 | Community use from trees | b) Juliflora inside the tank bed | <ul style="list-style-type: none"> • Auction it for sale. Initially someone from the village take auction from Revenue village for a small most and paying a considerable amount of bribe. Then the same is re-auctioned for anyone in the village. Revenue proceeds go to community use. |
| 9 | Fishery | Enjoying fish: Community harvest | <ul style="list-style-type: none"> • At the end of the season on a pre-announced day everyone come to the tank and catch as much as they can |
| 10 | Fishery | Incuse of cultivation of fishes | <ul style="list-style-type: none"> • The revenue goes to village collective purposes after paying usual bribes to revenue officers |
| 11 | Silt and tank earth | Desilting | <ul style="list-style-type: none"> • Anyone can do as much as they can. No fee or remittances. |
| 12 | Mobilising labour | Community labour : For cleaning channels | <ul style="list-style-type: none"> • Compulsory labour from every family. Whoever not contributing labor should pay wages equivalent of their laborers |
| 13 | Mobilising labour | For breach closing at emergency | <ul style="list-style-type: none"> • Everyone should participate and it is found more than one person participates from a family as the situation demand |

Conflict in Tank Usufructuary Rights in Athoor Village, Athoor Taluk, Dindigul district, Tamilnadu

Athoor, the village

Athoor is a traditional zamin village bound by its heritage and cultural practices of a traditional multi caste village in Southern Tamilnadu. The village is situated 20 km away in the southwest direction of Dindigul town in Dindigul taluk and District. It is a well-developed village with most of the modern amenities such as road, drinking water and other facilities. This is a village Panchayat as well serve as the headquarters of the Athoor Panchayat Union. It is well connected with Sempatti a village on the Highway leading to Madurai and Coimbatore. The Western side of the village is surrounded by Panrimalai and Palanimalai hills, which are part of Western Ghats.

This part of the country was once ruled by the *Nayak* dynasty before the arrival of the British. Rani Mangammal was the Royal Regent. The myth is that the Regent once took the *Thambool* (*Betelvine*) with her left hand and was cursed. To compensate her action she offered lands to Brahmin families to settle in the village. Thus the village with 60 houses of Brahmin was used to be called as *Athupuram* meaning riverside in Tamil. As the days gone by the present name came into existence as Athoor. The lands once donated to the Brahmins are at present mostly owned by non-Brahmin communities except a few.

The changes in the land ownership and change in the caste system are attributed to many reasons, of which the following are subscribed by many villagers:

- Migration of Brahmins to urban areas
- Absentee landlordism
- Introduction of the Land Ceiling Act and Tenancy Acts

Athoor Grama (Village) Committee was established even before 1900 with a view of helping the village to gain certain benefits from the then Governments. However, the written documents were available only since 1940. Initially, the Committee functioned in an informal manner was led by late I. Savarimuthu Pillai, an important leader in the village. He was active in the welfare of Athoor and Sempatti villages and spearheaded the growth of the Athoor village much against the interests of the neighboring villagers. He was claimed to be a charismatic leader, and built the foundations of the present officer of the Athoor Pattadars Committee¹² (APC).

The same was registered as Athoor Pattadars Committee in the year 1993. The registration has been done because of the insistence of the Government Public Works Department to do the Tank Rehabilitation works in the Village. The Anna University under a specially devised program facilitated the works while the Public Works Department funded and technically supervised the project. The committee consisted of 4 office bearers namely the President, Vice president, Secretary and the Treasurer and 13 EC members who constituted the apex body in the decision making process. Apart from this there exists a Village Committee which is deciding many social events in the village.

¹² Athoor Pattadars Committee is not the new entity come on its own. This Committee is a recent version of the existing social organization already functioning to manage the Tank related purposes in the village. The APC also represents the change in the village social life where the powers related to Tank affairs have moved from the Brahmins to other castes. However, the Functions related to water in the village is continuously carried out for ages.

Demographic Profile

In this village, people belonging to various communities live together in a most civilized manner. There isn't much evidence about any communal conflicts that had aroused in this village in its past. We find communities like Christians, Muslims and Hindus of various sub castes living together with mutual understanding and with harmony. Each community has its own profession and people engage in their respective professions.

Table 1: Community wise Population

| Community | No. of Households | Total Population | Occupation |
|-------------------------|-------------------|------------------|---|
| A: Christians | | | |
| i. Vellalar | 160 | 676 | Landowners, Coolies and Government employees. |
| ii. Parayar | 240 | 916 | Coolies and marginal farmers |
| iii. Kallar | 15 | 58 | Coolies. |
| Sub Total | 415 | 1650 | |
| B: Muslims | 250 | 1050 | Landowners, Petty Business, Coolies |
| C: Hindus | | | |
| i. Kallar | 322 | 1280 | Landowners, Coolies |
| ii. Pillai | 172 | 408 | Landowners, Coolies |
| iii. Agamudayar | 101 | 276 | Landowners, Coolies |
| iv. Gounders | 50 | 132 | Landowners, Coolies |
| v. Asari | 41 | 112 | Landowners, Coolies |
| vi. Brahmins | 14 | 57 | Landowners, Coolies |
| vii. Parayar | 135 | 357 | Coolies |
| viii. Pallar | 218 | 564 | Coolies |
| ix. Chakliyar | 18 | 45 | Coolies, Stitching of chapels and shoes |
| x. Yadava | 21 | 61 | Coolies, goat rearing |
| xi. Vannars and Barbers | 12 | 40 | Washing and pressing of clothes Barbers hair cutting and coolies |
| xii. Koravargal | 10 | 41 | Cleaning the village and temples |
| xiii. Naidu | 18 | 82 | Cultivators and Petty business |
| xiv. Naickar | 15 | 58 | Cultivators and Petty business |
| Sub Total | 1147 | 3405 | |
| Grand Total | 1812 | 6105 | |

Each community follows its own traditional work for its livelihood. They are mostly bounded by their customs and religious practices.

Tanks in the Village

Tank is a man made reservoir created by simple construction (bund) that captures the surface runoff of the ground water. In almost all the south Indian villages the tanks play a significant role in its usage. Mostly the tanks in the State of Tamil Nadu is owned by the 'State' and vested with different departments for various purposes. The Water Resource Organization – Public Works Department is vested with the management of the tanks which have an ayacut of more than 40 ha or else linked with any canal command system. The Panchayats are given with the maintenance and management of tanks having less than 40 ha of ayacut area.

Athoor village is bound by a series of tanks namely Karunkulam, Pagadaikulam and Pulvettikulam. The tanks are located in the southwest direction of this village. These tanks are all, aligned in a single line from the east to west direction of the village.

Table-2: Tanks in the Village

| Tank | Water Spread Area (in ha) | Ayacut Area (in ha) | Cultivated area (in ha) | |
|---------------|---------------------------|---------------------|-------------------------|---|
| Pulvettikulam | 68.750 | 165.505 | 156.005 | These tanks receive the supply from the river named Kundaar. The tributaries, Periyar and Kooliar rivers originate from the Yanamali and Panrimalai hills. The water starts flowing towards the tank From the Kanimalar koil, which is located, near the foothills of Yanaimalai and Panrimalai and |
| Karunkulam | 20.030 | 34.075 | 31.520 | |
| Pagadaikulam | 33.085 | 88.480 | 81.580 | |
| Total | 121.865 | 288.06 | 269.105 | |

when it reaches the place called Kalthekkam it splits into two and one starts flowing towards Tamaraiikulam and another towards Puliankulam. A diversion weir has been built across the river to divert the water to the Raja Vaikkal and also direct the excess water into the drinking water reservoir.

Tanks are the important sources of livelihood for the people living in this village. The water let out from these tanks is used for various purposes. The prime usage is for cultivation of crops. When water reaches its optimum level it is distributed to the cultivable lands through supply channel. These tanks in this village alone are benefiting more farmers. People living in the neighboring villages namely, Sithayankottai, Kulampatti, Narashimapuram, Alagarnayakanpatti, Sedapatti, Palyamkottai are also benefited from these tanks.

Land Holding Pattern

Table-3: Land holding Pattern under the Tank area

| Category | Wet Lands | Wet and Dry Lands | Dry Lands | Total |
|------------------------------|------------|-------------------|------------|-------------|
| Marginal Farmers (0-1 in ha) | 516 | 47 | 256 | 819 |
| Small Farmers (1-2 in ha) | 64 | 34 | 72 | 170 |
| Big Farmers (above 2 ha) | 24 | 18 | 25 | 67 |
| Total | 604 | 99 | 353 | 1056 |

* Note: The data includes the landowners of the neighboring village also.

Agricultural Operations

Agriculture is practiced in most part of the village in a large scale as well as in a small scale. There are big farmers, who own land-ranging from 25 to 30 acres, and marginal farmers with 10 to 15 acres and small farmers having less than 5 acres of land. Paddy is the main crop in this village and it is grown by all sections of the village who own land. Where as crops like coconut, sugarcane are cultivated only by the big farmers. Marginal as well as small farmers cultivate cumbu (Bajra), cholam (jowar) and other pulses. Most of the crops are seasonal and they are grown only once in a year. Only at times when there is enough water in the tanks they go for a second crop.

Agriculture is dependent mainly on the monsoons. Seasonal rains and the flow of water to these tanks have largely influenced the livelihood of the farmers in the village. Though we could see many technological developments in the field of agriculture, farmers are not up to date regarding many of these technical changes. Most of the technological advances like hybrid seeds and equipment are evidently used in this village.

Cropping Pattern

Normally, the farmers cultivate paddy as first crop and pulses as second crop. The varieties of paddy raised in this village are CO43, IR34, IR36, ADT45, ADT43, ADT39, ADT38, ASD19, ASD20, IR64, and IR20. Most of these varieties are of high yielding with 110 days of directions. Majority of the farmers cultivate the CO43 variety which is consider to be superior in quality and at the same time it takes nearly 135 days to reap for the harvest. The first crop season is from September to February and the second crop season is from April to July.

Area of Cultivation of Different Crops in the year 2001-02

The village as a whole has the following cropping pattern, which remains the same for every year.

Table –4: Cultivation of Different crops

| Sl. No | Name of the Crops | Area of Cultivation (in ha) (March 2001-02) |
|--------------|-------------------|--|
| 1 | Paddy | 508.775 |
| 2. | Cholam | 9.120 |
| 3. | Cumbu | 4.915 |
| 4. | Corn | 0.580 |
| 5. | Green gram | 0.440 |
| 6. | Black gram | 2.050 |
| 7. | Other Pulses | 19.040 |
| 8. | Coconut | 294.790 |
| 10. | Chilli | 1.640 |
| 11. | Tamrind | 2.730 |
| 12. | Sugarcane | 2.785 |
| 13. | Silk Cotton | 0.090 |
| 14. | Cashew nut | 2.145 |
| 15. | Betel leaf | 1.850 |
| 16. | Banana | 8.180 |
| 17. | Mango | 11.820 |
| 18. | Others | 6.450 |
| TOTAL | | 878.180 |

Note: Area of Cultivation comprises of both wetland and dry land crop together.

The land use pattern is static over the period of years. The land which contains the alluvial typed soil which is useful only for a particular type of crops and even when other crops are tested they result in failure. And at the same time, only one crop can be cultivated in a year and the chance of second crop is very much limited. So, after the harvest of the first crop the land is left barren and this land cannot be used for any other cultivation process.

Athoor Tamil Sangam

Prof. Nainar Murugan who was then working in Jamal Mohamed College of Tiruchy started the Athoor Tamil Sangam in the year 1967. He often used to visit this village and enquire about the developmental aspects of this village. During one of his visits a separate Tamil Sangam was started and all the villagers have accepted this idea and decided to contribute to the Tamil Sangam in this village. During the year 1969, a new building was constructed for the Sangam in the middle of the village. Initially there were only 30 members and as days progressed the membership increased. Every one used to gather and tell a 'Kural' and discuss about it each day. Every year they used to conduct one 'Patti Mandram' and for this, eminent scholars were invited to preside over the function and deliver speeches. For the last two years the building is given for rent and the amount received as rent is used for Sangam's developmental activities.

Mat Weaver Groups

In this village a particular community namely the Muslims practice mats weaving for more than 40 years. These people are highly professionalized in this sphere and they are outstanding in their technical know-how. Athoor mats are very famous for their quality and design. Some of the designs, which are printed in this village, are specific and which cannot be found in the mats cover in other areas.

After gaining momentum this Association was registered in the Dindigul Registrar's office in the year 1993 (5/6 of 1993) as two individual associations with a minimum of 10 members in each association. They took assistance from the state government and other banking institutions at times of necessities. In the year 1993, they got an amount of Rs. 15,000 as revolving fund from the government. These people used to buy raw materials like soft mat, thread, strings, color powders and other required materials from Karur. It takes nearly two to three days to complete one mat. One important thing to note is that they prepare only with hands and not with the machines. There is no intermediary marketing; instead, only direct marketing is practiced.

The cost price of mat (only raw materials) is nearly Rs.60 –70 and adding to it the labour cost they fix the selling price at Rs. 200 / mat (based on the design and quality). They do their work based on the orders, which they get in routine and they do get orders throughout the year. They maintain records and regular auditing is carried out periodically. Later in the year 1996 two more associations were registered under DW CRA (265/96/B2). Altogether, there are four registered groups in this village for mat weaving. They have very good lending practices.

Rights in the Tank System

Irrigation rights

Tanks are located on the eastern side of the Athoor village. Since tanks serve as one of the source of livelihood for the farmers of this village, they are well protected by them. Athoor Pattadars Committee takes care of the conservation, rehabilitation and maintenance of the tanks in general. The committee members with the support of the villagers collectively take decisions regarding the

restoration of tanks and the welfare of the village. Tanks as a resource system provide water, fish, trees, sand, silt and other minor minerals, which is providing livelihood to the local villagers in direct and indirect forms. The Usufructs from the all these tanks are largely depending on the geographical, environmental, socio-economic and political factors. They are used for varying purposes by varying groups.

Water from these tanks is mainly used for irrigation purpose. The right to control the water supply and its even distribution is not merely a propriety right but it is a sovereign right. Since these tanks are rainfed tanks, irrigation is a vital service by them. The farmers of this village are more cautious and frugal in the irrigation practices. To practice their irrigation, they appoint Maniams (Water Managers), whose job is to distribute the available water from these tanks in a most efficient and equitable manner.

Local Rules Governing the Irrigation Practice in Athoor

Water had to be distributed by the agreed rules by the APC. They include,

- Maniams have to distribute the water in an orderly manner sequentially (Head to Tail end)
- If any one needs beyond the requirement they have to request the APC only and Maniams will be instructed suitably
- During the periods of scarcity, water delivering time will be fixed on the basis of availability and certain prefixed norms on the basis of equity. Neerpaichies (manning) have to adhere to this while they deliver water.

Few farmer violate the rules and even bribe marimus the mariaus. Mariaus are also some times harassed, threatened and in some cases beaten by the dominant farmers for the sake of availing more water out of their turn and proportion. However, this practice is not very common and the Athoor Pattadars Committee(APC) regulates them amicably. In order to make the irrigation system more viable and equitable the Athoor Pattadars Committee protects the tanks from damages framed rules and stops water supply to the farmers.

The important functions of the present day APC are explicitly presented below in the following narration. According to the villagers, these functions have not changed much in the last decades except the fact that they have registered an Association and do the same after the year 1993.

Tank related Functions

- Take timely action when breaches occur in the tanks, supply channel and bund;
- Engage laborers to clean the Raja Vaikkal at the time of water flow;
- Control the duties of Maniam and the agents;
- Fight against those who act against the interest of the tank and the supply sources;

Other Functions

- Income generation through renting the community hall, auction of Kalathukadai (a petty shop near threshing floor);
- Taking action on those who act against the interests of the APC;
- Guard the crops from transplantation to harvest by engaging agents, subagents and guardsmen;
- Water distribution through appointing Maniams at the time of water scarcity;

- Conflict resolution at the time of water scarcity; and
- Interact with various Government departments for the development of the tank and the village.

Fishing Rights

Fishing is one of the important activities from these tanks as far as the people of this village are concerned. Over several decades it is a custom of the villager's to grow fishes in these tanks. After the rainy season when the tank is full the villagers use to buy fingerlings from the neighbouring towns. Usually they are fast growing species yielding very high returns. When most of the water is let out for irrigation purpose the water level in the tank decreases the villagers auction the fishing right. The returns from the auction will be used for the Temple and Tank related purposes only. All the religions get their share of revenue for their festivals and it is known to all public.

Every year it is a custom to conduct auction especially when the water in the tank is decreasing. People used to gather in front of the village committee and in the open they conduct to auction, and during this every one has got equal right to participate in the auction. The village committee or association has got the full powers relating to the auction. The Committee used to enjoy the rights of rearing fish in all the tanks for a long period. The villagers claim that this practice is there for more than forty years.

One of the important functions of the APC is to protect the fishing rights of the villagers. Since the auction for fishing is the major source of income, the custom of fishing is practiced every year under a set of rules framed by the villagers.

Decision Making Process

As far as the rehabilitation and renovation works that are related to the tanks are concerned, the village committee is the prime authority in the decision making process. The main source of income is the income from fishery, which is derived from the auction. Apart from this, the villagers contribute voluntarily for the benefit of the village. The government till recent times had not imposed any restrictions on these activities carried out by the villagers through their APC.

At times there arises minor conflicts among the farmers due to the regulation of water supply through the channels from the tanks. These disputes are mostly settled by the APC. The changes in the rules made by the APC are known to all and there are not much misunderstanding among them. If there are any disputes unsettled by the APC the Village Committee will involve themselves and settle the same. Rarely cases have gone to such levels. So far, there are no disputes which reached the Public Works Department or the Revenue Authorities in the village history.

Customs and Practices

Irrigation

The agricultural production cannot depend solely on natural rainfall and artificial irrigation is a necessity. Water from these tanks are primarily used for irrigation purpose followed by other uses. IT is a major custom of the farmers to irrigate the lands periodically with the help of the Maniams and in some cases by themselves. Irrigation occupies the first right as far as the tank is concerned. Farmers while irrigating their lands they follow certain customs, which are listed below:

Appointment of Maniams

It is the custom of appointing *Maniam* in order to have effective and even distribution of the available water to the crops. The *Maniams* are appointed by normative basis by the farmers themselves and there is no rule or regulations framed by the government. The villagers on their own without any discrepancies determine all the activities of the *Maniams*. Each farmer has the right to appoint *Neerpaichies* under his discretion without any restriction. The farmers themselves in accordance to the necessities frame the payment, working hours and other responsibilities.

The *Maniam* is traditionally appointed by the APC to look after the water distribution activities. His duty is to open and close the sluices under the guidance of the President of the APC. The *Maniam* is also attends to the cleaning of supply channels and irrigation channels under the instruction of the President by engaging laborers. Further he is also responsible to intimate any functional defects in all the three tanks to the President and he should rectify the defects after the approval of the President of the APC. The water distribution system is implemented whenever there is a scarcity of water in the tank.

The main functions of *Maniam* are:

- Cleaning the supply and irrigation channel by engaging laborers with the approval of the President of the APC;
- Bring water to all the tanks;
- Operating the surplus weir shutters of all tanks for maintaining their FTL level;
- Opening and closing of sluices of all the three tanks;
- Acting as an informer or messenger
- Informing the APC meetings to all its members; and
- Other works assigned by the APC.

The *Maniam* gets Rs.350/per year from the APC and also collects paddy from the cultivators at the time of harvest at the rate of 15 Kg per *kaani* (0.48 ha).

The Appointment of Maniams

The farmers themselves irrigate their lands or by appointing *Neerpaichies* of their own. The *Neerpaichies* appointed by the respective farmers are responsible for irrigation at their field levels. Each *Neerpaichi* is looking after at least 10 ha of land in the command area. All are paid in kind at the rate of 60 Kg per *kaani* (0.48 ha). The *Maniams* are responsible for irrigating the lands under their jurisdiction. The involvement of the APC in water distribution is more when there is a scarcity of water.

Fishing

Once the water is decreasing in the tanks then the Committee proposes for the auction of the tanks for fishing purpose. Every year it is a custom of the village to grow fingerlings in these tanks and at the end of the season they sell it in the domestic markets. The villagers practice this custom for long time. The income derived from this auction is the major income source for the village.

Initially fishing was done only on a smaller scale because in those days the water from these tanks was only used for irrigation and other domestic purposes. People used to catch the naturally breeding

fisher using ethics or hooks . After seeing this people realized that, they could rear fish in these tanks and get profits out of it. Every year the APC used to purchase fingerlings from Tanjore, Samayanallur and Dindigul at a cost of Rs. 20,000 to Rs. 30,000/- and rear them in Pulvettikulam, Pagadaikulam and Karunkulam tanks. The agents and guardsmen are responsible to protect the fish from any theft. Every year the auction of fish has been conducted and through this the APC earns a lump sum amount. They use to get nearly Rs. 75000 to Rs. 85000 every year. After meeting the expenses the remaining amount is kept for village development activities and also for renovation works in the tanks.

Watch and Ward System

For the convenience of better management and control of the entire ayacut areas, the watch and ward system is traditionally implemented in the ayacut, which comes under the control of the APC. For easy management and control, the whole ayacut area is divided into three *kandams* (segment). For each kandam, the agent, sub-agent and guardsmen are appointed by the APC to tackle the day-to-day problems on irrigation and for effective crop protection. The names of three kandams and their area are given below:

- | | |
|----------------------------------|--|
| i. Melakandam (West segment): | Consists of direct ayacut area of Rajavaikkal and a head reach area of Karunkulam tank. |
| ii. Nadukandam (Middle segment): | Consists of middle and tail reach areas of Karunkulam tank and head and middle areas of Pagadaikulam tank. |
| iii. Keelakandam (East segment): | Consists of the tail end command of Pagadaikulam and the entire command area of Pulvettikulam tank. |

So in each segment separate agents are appointed and these agents are responsible for the proper functioning and even distribution of the limited water from the tanks. These are from different communities irrespective of castes. As a hierarchy we can say that the Committee followed by Agents are followed by Watchmen called *Kavalali*.

Cattle Rearing and Other Recreational Activities

Most of the houses in the village have cattle and they graze them on the banks of the tanks and other adjoining places and the flocks drink water from the tanks. Apart from this the people used to take bath, wash clothes, wash cattle in these tanks. At times after tilling and unloading of mud in the fields, the lorries and tractors are being washed with the water of these tanks. During the village festivals the people used to gather around the tank and worship their god and goddess in order to give more rains and to increase their productivity. These rituals and Poojas are performed on the banks of the tanks especially near the sluices and its adjacent areas.

Kalathukadai Auction

During every harvest season, the APC perceives that it is imperative to have a threshing floor for simplification of harvesting and threshing operations and takes efforts to make such 'KALAM' (threshing floor) are 9 places in and around the tank command. The cultivators utilize this kalam. 'Kalathukadai' is a petty shop near the threshing floor. The agricultural laborers engaged during the

time of harvest use Kalathukadai to purchase eatables and other required items. The APC auctions these kalams and raise some revenue from that.

Social and Political Status

From the social point of view the people in these villages are more cultured and disciplined and there is no sign of communal violence that took place in the recent times within the village or between the villages. People participate in all the village development activities without any racial discrepancies. The political changes doesn't affect much the decision making process or the smooth functioning of the village activities. The village committee used to modify the existing rules and regulations framed according to the conditions.

The APC consists of a President and other Office bearers and they collectively take decision regarding the welfare of the village. There are different customs followed by the villagers over the years with pride in various spheres. Before taking any decision the local bodies with the villagers sit together and discuss the various aspects and finally come to a solution. In the special meeting arranged by the village committee, representatives of each community participate and spell out their views and suggestions and every point is taken into consideration before coming to the final solution.

Here people are left at their discretion in revealing their preferences and at the same time they enjoyed all rights in the decision making process. But after the intervention of the governments in the life of the villagers they started losing their customary rights to a greater extent.

Dispute on Fishery Usufructs: Loss of Rights

The tank fishery was used by the villages for a long time. The possibility of fish rearing was realized long back and the Government agencies have taken efforts to capture the Fishery right from the APC. However, the Government was collecting a tax *Meen Pasy* (Fish tax) to recognize the rights of the villagers to have fishery under their control. Every year the villagers pay the *Meen Pasy* in the name of the traditional families. As far back in 1946, the government while tried to cancel the fishery rights of the APC in order to make its own. The then President, Thiru. I. Savarimuthu Pillai fought against in courts and finally a stay was awarded by the Madras High Court stopping the take over of the tank from the villagers.

The APC has written down rules and regulations for conducting the Fishery Auction in front of the Village Public. They are given below:

The bidding Regulations of APC

- Any bidder has to pay Rs 100 as deposit to APC.
- The total amount of the bid has to be paid at the end of the Auction meeting
- The entire fishing has to be carried away within 25 days and the tank has to be handed back to the APC
- In case there are rains before the fish is harvested the actual and real expenses of the bidder will be reimbursed by the APC.
- In case there are rains in the middle of the fish harvesting the bidder shall deposit the collection and get back his bid amount and hand over the tank
- If there are any damages for the fishing gear and craft the APC is not responsible for that.
- The bid is subjected to the approval of the APC

- The APC shall keep pending the fishery auction at its discretion.
- The bidder has to adhere and follow the usual customs and practices of the village

The Tamilnadu Government has brought the tanks under the Fish Farmer Development Agency Act and declared the tanks as part of the Pilot tanks where Fishery is going to be promoted. The FFDA has started enrolling the members from the district and provided the tanks on the basis of tenders for those who have quoted the highest bid. The Assistant Director of the Fishery Department, Dindigul has requested the Tahsildar to cancel the rights of the APC's customary rights to the fishery.

Athoor Pattadars for Their Right to Rear and Harvest Tank Fishery.

But the APC strongly opposed their move and filed a case against them and got the stay order by making use of the provision of paying land tax and also of '*meen pasy*'. Using the prior experience the APC registered a case against the government at Madras High Court during the year 1985. Apart from this the APC has given many petitions to the District and State level officers to get back their rights. The developments related to that are detailed in the **Annexed case documents**. However, it is important to note that the government has abrogated the existing rights of the Athoor Pattadars Committee (APC) to make it for the Government.

Though the Case has taken ten years to end, the developments are interesting. Considering the futility and time, waste of money the APC has decided to not press the case and therefore the case went in favor of the Government in 1998 without going into the details of the merits of the Petitions. The APC has decided to make one of their members to get into the FFDA as a fish farmer and keep enjoying the same status, of course with additional expenditures with the FFDA officials. In the year 1998 the High Court vacated and announced that the right of fishing has been vested with the Assistant Director (AD), Fisheries Department, Dindigul. So, the APC has lost its enjoyment of fishing rights and could not be able to fish in these tanks from 1998 as a right holder. Ever since the APC has become a member by paying Rs 25,000/- for every three years in the name of a farmer. Their right stands cancelled as of now.

Various Stages of the Dispute

Stage 1: APC objected to the abrogation of their customary rights to the Thasildar

Stage 2: The Village Panchayat has resolved in support of the APC and against the decision of the Thasildar stating that their customary rights and practices have to be upheld.

Stage 3: The Village Panchayat has resolved in support of the APC and against the decision of the Thasildar stating that their customary rights and practices have to be upheld.

Stage 4: The APC went to court to assert their claims based on the customary rights

Stage 5: A stay was ordered against the Government Order and lasted till 1998

Stage 6: The case went against the APC and in favor of the Fishery Department as not Pressed without going into the merits of the case.

Stage 7: A representative farmer from APC has become a member in the Fishery Development Agency and got the contract for every three years for a payment of Rs. 25,000-

The Customary right of the holders was finally abrogated under the executive order issued by the Thasildar under the recommendation of the Assistant Director of the Fishery. Though the stated role of the FFDA is to intensify the Fishery Promotion activity in the Inland Fishery sector and not to transfer any of the rights from anyone it has resulted in the collapse of the customary right of important stakeholder of resource system such as APC. The issues raised by the APC in the courts are given below: Since these are not settled by the court it is difficult to conclude about the government's actions in the case.

The Issues Rised by the Case are as Follows:

The Petitioner APC consists of the farmers making a livelihood from the tanks for ages.

1. The Farmers are the right holders of the water and the government is only doing tax collection recognizing our rights. APC is having the Fishing rights for ages and spending the proceeds for the benefit of the tanks and the village. No single individual benefits for the Fishery. The revenue resettlements have also confirmed the rights of the APC.
2. The proceeds from the Fishery is only marginal compared to the stakes on water and agriculture therefore the APC will always give priority to farming and will use the entire water even if the proceed from fishery is going to be fully affected. This can not be the case if the FFDA appointed contractors come into picture.
3. FFDA has only been in existence to promote inland fishery in the district from the water resources. The modern fishery may affect the customary practice of fish farming and not suitable for agricultural areas and tanks because the use of chemicals and others may affect the agriculture, sanitation and hygiene.
4. The right of the Fishery is a natural or common law right vesting with wetland owners and cannot be taken away by the state. Such taking away of the natural and common rights infringes the fundamental rights of the Petitioners.
5. Right of fishery is vested with the petitioner time immemorial and inseparable from agrarian and irrigation rights. Such a right of occupation, trade or business can not be taken way from the citizens with executive orders without due process of law.
6. The Fishery contractor may not provide the water at times of the water scarcity foregoing his losses in scarcity years. Considering the Paddy production and their value fishery production is not worth comparing. No data is made available of such losses to the villagers in such eventualities. No consultation is made before they have taken away the rights.
7. When the Government is collecting *Meen Pasy* from the Petitioner how can give the same rights to the FFDA for the same activity.
8. The public interest of the village will get affected and the unity and integrity and communal harmony of the villagers will get affected by such action by the government.
9. When the Government still focuses on Agricultural production for basic need fulfillment how can an enterprise like fishery be made out at the cost of the Agriculture. Since the fishery production sets out certain quantity of water at the cost of Agriculture

Annexure 1

The Case of Athoor Pattadars Association Vs the FFDA and the Government

IN THE HIGH COURT OF JUDICATURE AT MADRAS.

(Special Original Jurisdiction)

W.P.No. 114/74 Of 1966.

Athoor village, Pattadhars
Committee represented by its
President K. Nuthuramalingam ... Petitioner

Vs-

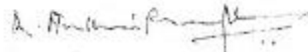
1. The State of Tamilnadu,
represented by its Commissioner
and Secretary to Government,
Forest and Fisheries Department,
Fort. St. George, Madras, 9.
2. The District Collector,
Anna District, Dindigul.
3. The Tahsildar,
Dindigul, Anna District.
4. The Assistant Director of
Fisheries, Intensive Inland
water developing and Marketing,
Thirumangalam, Madurai District.
5. The Assistant Director of Fisheries,
(Regional) 12, Spencer Road,
Dindigul, Anna District.
6. The Chief Executive Officer,
Fish Farmer Development Agency,
A. K. M. P. Nagar, Karur Road,
Dindigul. ... Respondents.

AFFIDAVIT OF K. NUTHURAMALINGAM

I, K. Nuthuramalingam, son of late Kaliappa
Nadar, Hindu, aged about 50 years and residing at No. 5/66,
Main Road, Athoor, Dindigul Taluk, Anna District having

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-2-

temporarily come down to Madras do hereby solemnly affirm and sincerely state as follows:

1. I am one of the Pattadhars, and President of the abovesaid Committee and I am well acquainted with the facts of this case.

2. I submit that the members of the Petitioner Committee are the Ayacutdhars of the four tanks namely Thamaraikulam/ 2. Kannikulam (Karungulam) 3. Pagadaikulam and 4. Pulvettikulam, all situated in Athoor Revenue village, Dindigul taluk, Arma District most of the lands are double crop Nanja lands. Requiring water all through the year. The total extent of the lands irrigated by all these four tanks comes to above 1000 acres. The source of irrigation is the irrigation through these tanks.

3. I submit that time immemorial the Ryots pattadhars receiving irrigation supply from these four tanks are also entitled to Fishery rights, in the said tanks. The Government is only entitled to collect Fishery cess in the Ayacut dhars or pattadhras and income from such Fisheries, vest with the committee, which in turn utilises the said amount for the welfare activities of the village, temple festivals etc., This right of Fishery has been vested with the Pattadhars, only to safeguard the irrigation rights and seasonal agricultural operations of the pattadhars. In the

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K. M. R.

-3-

resettlement also the fishery rights has been confirmed. Further the Revenue Department is collecting the Fishery cess from the pattadhars.

5. In practice the proceeds that the Ryots, Pattadhars would get out this fishery rights is only marginal compared to the stakes involved in their agricultural operations. In the lean season, when the water is more essentially required for the crops, the pattadhars will never hesitate to use the water for saving the crops foregoing their fishery proceeds.

6. I respectfully submit that such right of fishery in the village irrigation tanks is the right attached, to their rights of ownership of the lands and the irrigation rights and such rights to fish is also the fundamental right to business or occupation and such rights stands protected under Article 19(1) (g) of the Constitution of India. Now it appears from the letter No.4571/C/86 dated 1.8.1988 of the 5th respondent that a pilot scheme has been formulated under the Government order No.1286/84. Forest and Fisheries Department dated 9.1.1984 for exploiting the available land. Water resources in Anna District for better fishery production and intensive breeding and stocking of them and I understand that the Collector has accordingly directed the major irrigation tanks and long seasonal

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K. Thirumalaiah

- 4 -

tanks in Anna District be taken over by the Fisheries Department, thus taking away the rights of Fishery from the Pattadhars and vesting those rights with the Fisheries Department Respondents 4 to 6, and the 2nd respondent has been directed to take necessary steps in this regard. Pursuant to that the respondents 3 to 6 are taking steps to take over the aforesaid four tanks namely 1. Thamaraikulam (Narasimhapuram) 2. Kannikulam (Karungulam) 3. Pagadikulam 4. Pullvettikulam of Athoor village in the control of the petitioner committee.

7. I submit that the pattadhars are not given any notice regarding the taking over of their fishery rights and the petitioner came to know only two days back from the P.W.D. & Revenue authorities regarding the vesting of fishery rights of the aforesaid four tanks with the respondents 3 to 6. The petitioner is seriously affected by the aforesaid actions of the respondents and the action will seriously hamper the agricultural operations, which will vary from season to season. The proposed gowing of fishery on modern technology deviating from the customary methods will affect the sanitary and hygienic conditions of the water in the tanks and that would be a health hazard. The action of the respondents is unsuitable to the irrigation tanks.

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K. J. [Signature]

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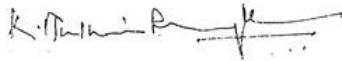
8. I submit that the petitioner has no other alternative or efficacious remedy except to invoke the jurisdiction of this Hon'ble Court under Article 226 of the Constitution of India on the following among other Grounds:-

a) The right of Fishery being a natural or common law right vesting in common with the wet land owners of the village in question cannot be acquired or taken over by the State, except by a law within the meaning of Articles 19(b) (ii) of the Constitution of India. The effect and purpose of the aforesaid orders of the first and second respondents herein is to take away such natural and common law rights vesting in the villagers and vesting the same in the State to the complete exclusion of the villagers and as such the said action of the ~~xxxx~~ respondents herein completely infringes the fundamental rights guaranteed to the petitioner.

b) The right to fishery having been vested with the pattadhars for a long time from time immemorial and it has become the inseparable right from their agrarian and irrigation rights. Such a right of occupation, trade or business which is guaranteed under Article 19(1)(g) of the Constitution of India cannot be taken away by the Executive Order of the respondents except by due process of law. Such executive orders cannot be construed to be a reasonable restriction.

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within the meaning of the Article 19(1)(6) of the Constitution of India.

c) I respectfully submit that in practice the ryots pattadhars are agriculturists who are in possession and control of the tanks would risk their right to fisheries in preference to their agricultural operations, the latter involving very high stakes when compared to the former. Therefore to save the withering crop the villagers would drain the irrigation tank at the cost of loosing the fishery income and save the crops. Now consequent ~~upon~~^{upon} the fishery right and possession of the tank being vested in the Fishery Department of the Government the villagers will not be in a position to ~~exercise~~^{exercise} such discretion and the Fisheries Department would always insist upon a minimum quantity of water to be maintained in the tank for the purpose of fisheries. Even judging from the needs of the community at large, paddy cultivation is more basic and important than fisheries and therefore even the public interest would demand that the agricultural operation for cultivating paddy is more protected than fisheries. I am also more concerned with my agricultural occupation than with my additional right to fisheries. Therefore the proposed action of the respondents tantamount to a infringement of their fundamental right to carry on their agricultural occupation.

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K. N. R. [Signature]

-7-

d) The respondents before embarking upon the taking over the tanks for fishery have not consulted the Agricultural Department or the high level committee on Agricultural Department or the high level committee on Agriculture headed by Farmer speaker of the Legislative Assembly of Tamilnadu. No data has been formulated and circulated among the repairin villagers calling for their comments views, and grievances . This goes against the norms and principles of natural justice. The decision being a policy decision of the Government that cannot be taken out side the Legislature, such action of the respondents would amount to colourable exercise of power. The petitioner was not given reasonable opportunity.

e) I am advised to submit that the government having collected the Fishery cess and vested the right of fishery with the pattadhars cannot and should not vest these same right with the respondents 3 to 6 and it goes against all norms and the respondent 1 and 2 are estopped from vesting the fishery rights of the 4 tanks with the respondents 3 to 6.

f) It is further submitted that the compensation has not been given for taking over such vested right

g) - Further respondents failed to consider that by depriving the vested rights public interest of the village will be very much affected and will cause havoc to the unity, integrity

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and communal harmony of the village.

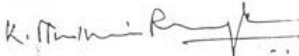
h) Further the policy of the government is to give priority to green revolution and fishery is secondary and the Fishery is given importance only in respect of non-irrigation tanks. Once the tanks are vested with the respondents 3 to 6, the pattadhars will be deprived of their valuable rights of irrigation to their withering crops. Since the respondents 3 to 6 will give importance only to the fishery and insist that a minimum quantity of water should be retained in the tanks.

i) I am advised to state that the income from such fishery is utilised for the minor repairs of the channels, tanks, village Road and other basic amenities of the village. The aforesaid four tanks are included in the pilot scheme. As per the letter No.4571/C/86 dated 1.8.1988 and till today the fishery is carried out by the petitioner committee, and the committee has made substantial investment to that effect. The pattadhars are very much agitated ~~xxx~~ over the ~~mo~~ of the respondents. The pattadhars reasonably apprehend that the respondents may take over the fishery rights behind their back at any time and the valuable rights of the pattadhars would be deprived without due process of law.

g) The petitioner therefore prays that this

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Hon'ble Court may be pleased to issue a Writ of Mandamus or any other appropriate writ or direction in the nature of writ directing the respondents to ~~xxx~~ forbear from interfering with the existing fishery rights of the petitioner so far as the fourth tanks namely 1. Tamaraiikulam (Narasimhapuram) 2. Kannikulam (Karunkulam) 3. Pagadaikulam 4. Pulvettipulam of Athoor village, are concerned and pass such further or other orders as this Hon'ble Court may deem fit and proper in the circumstances of the case and thus render justice.

Solemnly affirmed at
Madras this the 29th
day of September, 1988
the contents of the
affidavit having been
read over and explained
to the deponent in Tamil
and who perfectly under-
stood the same and signed
his name in my presence.

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BEFORE ME

ADVOCATE, Madras.

IN THE HIGH COURT OF JUDICATURE AT MADRAS

DATED: 17.7.1998

CORAM

The Hon'ble Mr. Justice Jagadeesan

W.P.No.11474 of 1988

Athoor Village Pattadhars Committee,
rep. by its President, K.Muthuramalingam. . . . Petitioner

Vs.

1. The State of Tamilnadu,
rep. by its Commissioner and
Secretary to Government,
Forests and Fisheries Department,
Fort St. George,
Madras - 9.
2. The District Collector,
Anna District at Dindigul.
3. The Tahsildar,
Dindigul, Anna District.
4. The Assistant Director of Fisheries,
Intensive Inland Water Developing
and Marketing,
Thirumangalam, Madurai District.
5. The Assistant Director of Fisheries
(Regional), Dindigul.
6. The Chief Executive Officer,
Fish Farmer Development Agency,
A.K.M.P. Nagar, Dindigul. . . . Respondents

Certified to be a true copy.
Dated this the 28th day of
July 1998.
[Signature]
Sub Assistant Registrar,
P.A. Section

For petitioner : Mr.S. Abdul Samath

For respondents : Mr.A. Paramasivam,
Government Advocate

O R D E R

In view of the endorsement made by the counsel
for the petitioner that the writ petition may be dismissed
as not pressed, the writ petition shall stand dismissed.

17.7.1998

kkk.

JAGADEESAN, J

N.P. 11474/88

| | |
|---|----------|
| HIGH COURT OF JUDICATURE MADRAS | |
| S. A. No. | 43450 - |
| Carbon Copy | 17.7.98 |
| Approval | 10 |
| Application | 10 |
| Copy made | 2/8.7.98 |
| Copy delivered | 30.7.98 |
| <i>[Signature]</i> in Charge of Offices | |

Dt: 17.7.98

Conflict in Tank Usufructuary Rights Sithayankottai Village, Athoor Taluk, Dindigul District, Tamilnadu

Sithayankottai, the Village

Sithayankottai Town Panchayat is located 20 km away in the southwest direction of Dindigul town in Dindigul Taluk and District. It is one among the 3 town Panchayats in Athoor Block. This village has all necessary basic infrastructure facilities. There are better road connections to other village/nearby towns and enough transport facilities available to reach Dindigul town via Sempatti village. There are number of educational institutions, such as higher secondary school, Elementary schools, and Matriculation schools. A Nationalized Bank, Dindigul District Central Co-operative Bank and Primary Agriculture Cooperative Bank are operating in this village.

It has a Primary Health Centre (PHC) and a few private hospitals. A Veterinary hospital is located at Narasingapuram village to serve the cattle population. A Post Office with Telegram facilities is doing services to the people. There are eight over head tanks situated within the village that distributes water to the people through 231 street taps and 750 individual, house taps. Apart from this source, the people are also getting drinking water from the Kamarajar dam which is the main source of water to Dindigul town and its places around. Tamil Nadu Electricity Board Office is operating here to help the people of this village. There are enough restaurants and petty shops in the village.

Demographic Profile

Table – 1: showing the village wise household details

| Sl. No. | Name of the village | No. of households |
|--------------|---------------------|-------------------|
| 1 | Sithayankottai | 1411 |
| 2 | N. Pudupatti | 550 |
| 3 | Alagarnaickanpatti | 500 |
| 4 | Sedapatti | 390 |
| 5 | Lakshmiapuram | 415 |
| 6 | Narasingapuram | 160 |
| Total | | 3426 |

Sithayankottai is a Town Panchayat and it consists of Sedapatti, Lakshmiapuram, Narasingapuram, Alagarnaickanpatti and N. Pudupatti villages. The total geographical area of the town Panchayat is 11.25 sq. km with 18 wards and 3426 houses. The total population is 15012 of which 7543 are male and 7469 are female (according to 1991 census). The village wise households' details are given in the Table 1.

There are more than six caste group peoples living in the village. *Muslims* are the dominant groups in

Sithayankottai followed by *Pillai* and *Chettiar*. Whereas in Sedapatti and Alagarnaickanpatti, the Hindu *Pallar* is the dominant caste followed by *Pillai* and *Muslim*. In Pudupatti, *Goundars* constitute major share than the Hindu *Pallar* and Scheduled Caste group. But in Narasingapuram, the *Thevar* community is the major group followed by Scheduled Caste.

Tanks in the Village

Agriculture is being done intensively both in wet and dry lands. Wet land agriculture is practiced under two rainfed tanks namely Thamaraiikulam and Puliyanikulam and also in the direct ayacut area of Thamaraiikulam Rajavaikkal. The channel, locally called *Rajavaikkal* is feeding these two tanks. Major irrigation is carried out directly from supply channel before it reaches these tanks. The names of the tank, water spread area, and its ayacut area are given in the Table 2.

Table – 2: Water spread area and command area of the tanks

| Sl. No. | Name of the Tank | Water spread area (Ha) | Command area (Ha) |
|--------------|---------------------------|------------------------|-------------------|
| 1 | Puliyankulam | 22.40 | 151.495 |
| 2 | Thamaraikulam | 30.19 | 58.005 |
| 3 | Thamaraikulam Rajavaikkal | - | 271.230 |
| Total | | | 471.065 |

These tanks receive water from the seasonal river called Koolaiyar. The Koolaiyar river originates from the Kannivadi hills (Pantrimalai) and helps to serve for agriculture and drinking purposes. Across the Koolaiyar river, a diversion weir was constructed to divert the water into *Rajavaikkal* for agriculture purpose. The excess water overflowed on the weir goes to Kamarajar dam which was constructed for the purpose of supplied drinking water to Dindigul town (see box 1).

Box 1 Kamarajar Dam

The Kamarajar dam was constructed at the down stream of the hills to capture the rainwater. It is serving as a reservoir for drinking water to Dindigul Municipality as well as to the villages around Dindigul. This reservoir also gives drinking water to Sithayankottai on its way to reach Dindigul. The water from Koolaiyar river serve first for irrigation and then for drinking purpose. During heavy inflow, the water is diverted to the dam. But, in scarcity period, the farmers allow water to the dam for drinking purpose under humanitarian grounds.

The Rajavaikkal directly irrigates 271.230 ha on the way to reach these two tanks. The water comes from the Rajavaikkal get a diversion near Kalthekkam to Thamaraikulam and Puliyankulam. There is one sluice in Thamaraikulam tank that irrigates about 58.005 ha. There are three sluices in Puliyankulam that has a command area of 151.495 ha. The surplus water from Thamaraikulam tank goes to Vadi tank and then to Senkulam tank and finally to Nilakottai tank. On the other hand, the surplus of Puliyankulam goes to Chittoor tank and then to Pattiveeranpatti. As these tanks are located at the foot of the hills, the water is found to be good and sufficient. At least one successful crop

is possible under these tank command areas.

Well Details

There are 130 open wells and 18 bore wells in the wet lands of Thamaraikulam, Puliyankulam and direct ayacut area to supplement during scarcity period. The ground water is helpful to raise second crop as well as for annual crops such as banana, sugarcane. The well water is also used for the cultivation of perennial crops like coconut. The number of wells in each tank command is given in the Table 3.

Table – 3: Showing the number of wells and type of well in the command area

| Sl. No. | Name of the Tank | Wells | | Total |
|--------------|------------------|------------|-----------|------------|
| | | Open | Bore | |
| 1 | Thamaraikulam | 15 | 3 | 18 |
| 2 | Puliyankulam | 65 | 8 | 73 |
| 3 | Direct ayacut | 50 | 7 | 57 |
| Total | | 130 | 18 | 148 |

Land holding Pattern

| Sl. No | Name of the tank | No of households | | |
|--------------|------------------|------------------|------------|------------|
| | | More than 2 ha | 1 – 2 ha | Below1 ha |
| 1 | Puliyankulam | 35 | 47 | 134 |
| 2 | Thamaraikulam | 8 | 12 | 32 |
| 3 | Direct ayacut | 21 | 100 | 155 |
| Total | | 64 | 159 | 321 |

Occupation

More than 70 per cent of the people are engaged in agriculture either directly or indirectly. The *Chettiar* caste group is doing weaving and they are producing export quality clothes. There is one cotton mill near Sedapatti village on Dindigul to Vathalagundu main road, which provides employment opportunity to the villagers. Some of the people are doing business such as hotels, petty shops, cloth stores, etc and they are earning considerably.

Agricultural Operations

Normally these tanks receive water during the northeast monsoon. When the rain starts, the *Rajavaikkal* of Thamaraikulam gets water from Koolaiyar river. So, the direct ayacut area farmers start nursery preparation making use of the water. Subsequently, the Thamaraikulam and Puliyankulam farmers also go for nursery preparation.

The production of paddy depends upon the water availability in the tanks as well as the continuous flow of water in the *Rajavaikkal*. During normal season, the farmers are harvesting an average of 2600 kg of paddy per acre. During poor monsoon period the well owners manage to harvest 1900 kg of paddy per acre, where as the non-well owner get only 975kg per acre and some times they are forced to harvest chaffy grain. The cultivators of banana crop are able to get a net income of Rs 35,000 to 40,000 for an acre of cultivation. During second crop period, the farmers are getting 150 to 200 kg of gingelly per acre.

Cropping Pattern

Normally, the farmers cultivate paddy varieties of Co 43, IR 36 and Ponni during first cropping season. If the monsoon is delayed, then they go for short duration varieties such as IR 36, IR 64, ADT 43, ADT 36 and ADT 45 (110 days). The well irrigation farmers cultivate vegetables during second season and others cultivate gingerly. The farmers also grow banana in the tank command as an annual crop. Some of the farmers cultivate coconut in the wet land and the area under coconut cultivation is around 20 per cent. The first crop season is usually from September to February; if monsoon is delayed it will start during November and continue up to March. The second crop season is from March to July.

Village level Associations

There are three associations functioning in the Sithayankottai village, they are

- Sithayankottai Handloom Weavers Cooperative Production and Sales Society.
- Pudupatti village Coconut Growing Farmers Self - Help group.
- Sithayankottai Gramma Vivasaignal Pathukappu Sangam.

Sithayankottai Handloom Weavers Co-operative Production and Sales Society

It was formally started by the government of Tamil Nadu in the year 1975 and registered. Like Primary Agriculture Co-operative Society, it is expected to serve for the welfare of weavers and responsible for enhancing the livelihood of the weavers. It also helps the weavers by providing loans for the purchase of machinery and for house construction with the subsidy. All the members are belonging to Chettiar caste and they are residing at Sithayankottai village. Out of 175 members, 36 members were benefited from a housing loan in the year 1997.

The society provides all materials like threads that are needed for the production of clothes. The weavers get the wage based on the output and the quality of materials they produced. Normally, a weaver is able to earn nearly Rs. 60 to Rs. 90 per day. The variation is due to the quality of materials that they produce. The Secretary of the society said that they did not experience any problem with the weavers as that of other parts of state because they often used to change the quality based on the market requirement. Further, he suggested that the weavers should equip their skill based on the current needs so that this occupation would their will in future also.

Pudupatti Village Coconut Growing Farmers Self - Help Group

It is started currently in the year 2002 and got registered. The coconut cultivators of Pudupatti and Sithayankottai village become the members of the self-help group. The purpose of this group is to get benefit from the Government for coconut growing farmers.

Sithayankottai Gramma Vivasaignal Pathukappu Sangam

It was established with the aim of improving the standard of living of farmers in general and implementation of *Kaval* system in the whole paravu (ayacut area) in particular. Then the influential big farmer in this village Mr.N. Abdul khadar organized the farmers and started a formal organization namely Sithayankottai Gramma Vivasaignal Pathukappu Sangam in the year 1972 to safeguard the interests of the farmers. Before the year 1972, the farmers had experienced theft frequently by the adjoining villagers. Here onwards the Sithayankottai Gramma Vivasaignal Pathukappu Sangam is mentioned as the Sangam for our discussions. The other activities under taken by the Sangam were

- To clean and maintain the channel.
- To collect fee for Kaval from the farmers.
- To appoint paid Kaval people to all four Kandams.
- To take decision regarding punishment to thieves, etc.

During his period as the leader, he fought against Dindigul Municipality regarding the right of water. The farmers got the first priority in getting water from the river and the Municipality was the second to get the same. However, the Municipality frequently intervened and demanded water to the Kamarajar dam for drinking water. But, the farmers objected to release any water when there was also a need for the standing crops. In the year 1976, he filed a case against the Municipality regarding the rights and the judgment was delivered in 1986 in favor of farmers.

Thiru. Abdul khadar continued as the president of the Sangam till 1980. Then Mr. Mohammed Syed Meeran of Sithayankottai had been given the president's post and he performed his duties well. During his period, he appointed Secretary and Treasurer for the Sangam. He was the person who holds the President post for a long period of time until 1997. During his tenure, there were lots of development activities under taken by the Sangam. They were to

Tank Related Activities

- Efforts to clean the Rajavaikkal every year.
- Regulate water distribution.
- Purchase a land for Puliyankulam Tank Farmers Association building construction (it was rehabilitated under EEC fund).
- Fish rearing activities in the tank.

Development Activities

- Protection to the crop from theft and cattle damage.
- Construction of threshing floor near the tank.
- Issued tablets worth of Rs 10,000 for Cholera treatment.
- Donate land for Veterinary hospital.

Area of Control

The direct ayacut areas of Thamaraiikulam *Rajavaikkal* and Thamaraiikulam tank command area and Puliyankulam tank command area are coming under the control of the Sangam. Nearly 480 ha of wet land owned by the villagers in Sithayankottai, Alagarnaickanpatti, Sedapatti, Pudupatti, Sundararajapuram, Veerusikkampatti, Chithoor etc. is administered by the Sangam. There are nearly 600 farming family holding the total ayacut area of 480 ha. Among them, Muslim community is the dominant community followed by *Pillai, Hindu Pallar, Mooppar, Chettiar, Gounder* etc. Roughly, about 50 per cent of the land is owned by the Muslim and the remaining 50 per cent is shared among the other caste groups.

Income Sources to the Sangam

To meet out the expenses related to protection of crops, tank maintenance and management there were only two sources of income to the Sangam

- Collection of fees for Kaval from all beneficiaries at the rate of 15 kg of paddy per acre and Rs15 per month from annual crop growers which need Kaval for the whole year.
- Incomes from fish rearing in Thamaraiikulam tank.

Appointment of Kaval

For the better management of whole command area of the two tanks and the direct area of *Rajavaikkal*, the complete ayacut area has been divided in to four *Kandams viz., Karisal, West, North, South Kandams* and the *Kaval* people were appointed to look after their respective area.

There were 15 people appointed by committee members of the Sangam every year to look after the *Kaval* activities in the whole ayacut area. They were responsible for the prevention of theft and damages from the cattle. If any body found to be a culprit, then the Sangam punished him in the form

of fine. If he did not obey the condition then, a complaint against him will be lodged in Police Station seeking legal action.

Payment to Kaval people

The payment has been made in cash on monthly basis. The monthly wages for *Kaval* was Rs 800. The *Kaval* coolie was collected from the farmers either in kind or in cash. The *Kaval* members could be reduced after the paddy-cropping season was over.

Duties of Kaval

The duties and responsibilities of *Kaval* people are

- Safeguard the crops from theft and cattle damages.
- Produce the culprit before the Sangam.
- Whenever there was misuse of water bring to the notice of the Sangam.
- Take the responsibility of wage collection.
- Inform the Sangam if any damages occurred in the tank structures, and etc.

Conflicts

The conflicts within the farmers are big and small with varying degree of complexities. The nature of conflict depends upon the individuals' feeling, and the socio-economic and cultural background. As a custom, the Sangam used to resolve all the conflicts amicably. These conflicts shall be classified in the following areas.

- Distributing the water to all farmers
- Evicting the encroachment in foreshore area.
- Claiming the right of priority in getting the water.
- Rearing fish in the tank.

The first two conflicts were connected with the farmers group and the remaining two related to the other departments/ agencies. The first two cases of conflicts had been resolved within the farmers groups by negotiations. There were not many resentments in the village regarding these. However, in the other two cases with the outsiders, the legal aspects were involved and done outside the village in courts.

Conflict in Water Sharing

After forming the Sangam, the *Kaval* people appointed by the Sangam were given the responsibility of overseeing the irrigation in all fields. They were given power to close and open the sluice based on the instruction of the Sangam in order to ensure proper utilization of the available water. During the irrigation period, some farmers wanted to irrigate their land with more water. It was objected to by the down stream farmers as well as by the *Kaval* people and it lead to some problem between the farmers. In some occasions the farmers wanted to open the sluice for irrigation when it was kept locked. But the *Kaval* people did not accept their demand and it sparked disputes. Such disputes were brought to the notice of the Sangam and they were settled among themselves without creating major problems.

In the year 1997, a farmer belonging to Hindu Pallar community of Alagarnaickanpatti village asked the *Kaval* people to open the sluice for irrigation. But, at present neither sangam nor other farmers are

willing to open the sluice. Later he himself opened the sluice by damaging the shutter. It was brought to the notice of the President and office bearers. They called the farmer concerned for enquiry. He refused to attend the enquiry. At last the Sangam decided to lodge a complaint against him. The farmer formed a group and started to fight against the case. He charged the President by saying that he misused the common fund as well as the power. Series of discussions had been conducted for getting the problem solved by the Thasildar, PWD officials and Sub Inspector of Police. Finally it was agreed to divide the whole command area into three parts. Each could have a separate leader to look after the activities related to tank maintenance and *Kaval*. The President resigned his post and the common fund with him was also distributed among the three groups. Each group got Rs 35,000 for the further management of their own parts. From the year 1998 onwards there are three groups doing the activities by appointing the *Kaval* people. The wage collection is also done by them separately.

Conflict in the Eviction of Encroachment

Encroachment in tank water spread area is a common problem everywhere. Normally, the upstream villagers and tailed field owners are responsible for such encroachment. The encroachers many, times try to reduce the level of water in the tank as quick as possible in order to save their crops cultivated in the encroached water spread area. They illegally try to open the sluice during night or they would support somebody in doing such activities. The Sangam realized the problem and decided to evict the encroachment for which they demanded the support from the Revenue department by doing a survey. They formally requested the revenue authority to take necessary action against the encroachers. In the presence of Revenue officers and Police the encroacher's fields were destroyed and got evicted in the year 1995.

Conflict in Claiming the Rights of Priority

The supply channel called 'Thamaraikulam Rajavaikkal' starts from the foot of the hills and passes through the diversion weir constructed across the river Koolaiyar. The surplus water flows to the Kamarajar dam for drinking purpose. The Dindigul Municipality tried to prevent the inflow of water to the supply channel to divert to the dam even at times when the crops required water. But, the Sangam raised objection and fought against them regarding the rights. The FA filed a case against Dindigul Municipality regarding the rights in the year 1976. The farmers said that there was a written document stating that the water from the river should serve Agriculture first and then for drinking purposes. That document was prepared at the time Kamarajar dam construction. The Madurai court ordered favorably to the Sangam in the year 1989. But under the humanitarian ground, the Sangam is allowing to take water when there was a scarcity for drinking water at Dindigul.

Fish Rearing

Fish rearing is being practiced both in system and non system tanks in the area. Presently, the Fishery department has the right to rear fish in those tanks. But in the Panchayat tank the village Panchayat has the right of fishing. In some tanks, either Fishery department or the Panchayat is not doing the fish rearing activities. It is due to inadequate supply source to the tanks. So, the people or the local community groups take the responsibility of rearing fish in those tanks. The Thamaraikulam tank in Sithayankottai village had experienced a major conflict with the Fishery department in rearing fish in the tank.

The farmers of Sithayankottai and those who are holding land under the Thamaraikulam said that, there was no practice of organized fish rearing in the past by any one other than harvesting the fish grown nature. When the tank receives inflow from the river, naturally a few varieties of fish entered

into the tank and they started to grow at least for 6 months. On a pre-announced day, the village headman, or Gramma Nattanmaikar declare open fishing by all villagers.

Fish Rearing Practice in the early 1980's

The people of Sithayankottai and nearby villages had been enjoying the right of catching the fish year after in the part year. After Mr. Mohammed Syed Meeran offered as resident of the Sangam, he consulted the big farmers and the members of the association and decided to rear fish in Thamaraiikulam tank on behalf of the Sangam. The Sangam bought fingerlings from outside and rear then by giving protection with the help of *Kaval* people. After 4 or 5 months, the Sangam auctioned it and got sizable income to the Sangam. The income generated from fish rearing had been used for the purpose of tank maintenance. It was being practiced by the Sangam year after year based on the availability of water in the tank. This was the practice till 1988.

Intervention

After 1988, it had experienced interventions from the outsiders with the support of the government departments. In the year 1988, the Fishery department from their Dindigul office raised an objection and ordered the Sangam not to rear fish in the tank as the right had been transferred and vested with them for matters related to fishing. But the Sangam did not accept to forgo the right on that advice. So, they decided to fight against the Fishery department based on the following ground in High court, Chennai.

- The beneficiaries (village farmers collectively) are paying Fishery rent (FR) to the Revenue department along with their regular land taxes.
- Being the users of tank, they realize their rights and enjoy from time immemorial.
- If the Fishery department takes over the tank and provides the contract of fishing to an individual what would be the consequences when there are conflicts between him and the ryots for water. The private contractor may try to let out the water from the tank wastefully in order to catch the fishes at his will.

The interim judgment came in favour of the Sangam in the year 1988 and the court issued an injunction order against the department. After the Sangam got the injunction they had enjoyed the fish rearing rights till 1997. In between they also continuously followed the case in the High court by appointing a Lawyer at Chennai. When ever there was a clear possibility for rearing fish, the Sangam used to do the fish rearing activities otherwise they do only the final harvesting at the end of the season by all. From this source, the Sangam was earning Rs 40,000 to Rs 50,000 as net income in such a year. The income generated from the fish rearing had been utilized for the maintenance of tank such as cleaning of supply channel, arresting of leakage, cleaning the field channels etc. The Sangam also had given donation for the common cause in the village like land purchase for Veterinary hospital, purchase of tablets to control Cholera etc. The Sangam also spent money for conducting case against the Fishery department.

Fishery

In the 'A'-register of the year 1920, it was given under the heading fishery that the fishery of all the government sources is managed by the ayacut dail who pay a fixed rent of *annas* two and *pie* nine for every acre cultivated.

Efforts Taken by the FA for Getting Court Order

Even though the High court gave the injunction order, the Sangam wanted to get the judgment in their favour. So, the Sangam of Sithayankottai planned to approach the political leaders to get the order in their favour through the government. They approached Mr. Abdul khadar (Ex-President of the Sangam) when he was a Rajya Sabha MP, and requested him to do the needful. The Sangam representatives along with the MP and local constituency Minister approached the PWD minister and requested to help in getting the government order. The PWD Minister assured to help in this regard. But, there were no orders passed in favor of the Sangam till date.

Another problem on fish rearing comes from the foreshore villagers of *Hindu pallar* community belonging to the SC, who often enter inside the tank during the night time and steal them. The *Kaval* people appointed by the Sangam came across such events and made a complaint against them in the Sangam. The Sangam had warned such persons. Even after repeated warning they continued their activities and so the Sangam decided to take stern action against them. The Sangam complained against such people with the police for immediate action. Though the problem was settled in the police station the gap between the Sangam and such groups who indulged in fish stealing had widened further. This trend continued and has grown year by year. Finally, these villagers started to demand share from the income to stop such practice. Such activities of foreshore villagers had forced the Sangam to stop the fish rearing for few years.

Present Condition in Fish Rearing

There were number of efforts taken by the Sangam to get the rights in its favor. Though the case against the fishery department was pending with the High Court, they continuously enjoyed the rights using the injunction. During the year 1998, the fishery department of Dindigul issued a letter stating that the case went in the favour of the government and the Sangam should not catch fish in these tanks there after. After that, the fishery department took over the charge and did not allow the Sangam to enter in the tank for fishery. Though the tank had received enough water to do fishery in the year 1999 and 2000, the department did not take any step for rearing fish. The contractors for such fishing is also not willing to apply fearing the Sangam and the villagers may not allow to do any fishing which is much against the local practice.

On the other hand, the SCs belonging to the Alagarnaiyakkanpatti who had given many troubles to the Sangam in fish rearing also could not enjoy the benefit. Though they would be willing they could not have the potential to indulge in such activity for want of technology and know how and resources. But, the Thevar caste people belonging to Narasigapuram village are enjoying the fishing with the help of a contractor through Fishery Department contract.

In the end, neither the Sangam nor the relevant and related farmers enjoy the benefit. Also the Government department could not do anything. The farmers and local leaders feel that it may only be possible to practice fish rearing further by handing over the responsibility to the Sangam with the required power to prevent the intervention.

The High court case is similar to the one filed by the Athoor villagers for reclaiming the fishery rights. The case has been dismissed without pressing for a decision and the merit of the case has never been contested. The annexure provides the legal points on which the Sangam has fought the case.

Annexure- 1

The issues raised by the Case are as follows

The Petitioner Sangam consists of the farmers making a livelihood from the tanks for ages.

1. The farmers are the right holders of the water and the government is only doing tax collection recognizing our rights. PETITIONER SANGAM is having the Fishing rights for ages and spending the proceeds for the benefit of the tanks and the village. No single individual gets the benefits of the Fishery. The revenue resettlements have also confirmed the rights of the PETITIONER SANGAM.
2. The proceeds from the fishery is only marginal compared to the stakes on water and agriculture therefore the PETITIONER SANGAM will always give priority to farming and will use the entire water even if the proceed from fishery is going to be fully affected for want of Agriculture production in the village. This can not be the case if the FFDA appointed contractors come into picture.
3. FFDA has only been in existence to promote inland fishery in the district from the water resources. The modern fishery may affect the customary practice of fish farming and not suitable for agricultural areas and tanks because the use of chemicals and others may affect the agriculture, sanitation and hygiene.
4. The right of the fishery is a natural or common law right by vested with wetland owners and cannot be taken away by the state. Such taking away of the natural and common rights infringes the fundamental rights of the petitioners.
5. Right of fishery is vested with the petitioner from time immemorial and is inseparable from agrarian and irrigation rights. Such a right of occupation, trade or business can not be taken away from the citizens with executive orders without due process of law.
6. The fishery contractor may not provide the water at times of the water scarcity foregoing his losses in scarcity years. Considering the Paddy production and their value to be put in risk for the sake of fishery production it is not worth a economic exercise. No data is made available of such losses to the villagers in such eventualities. No consultation is made before taking away the rights.
7. When the Government is collecting Meen Pasy from the Petitioner how can give the same rights to the FFDA for the same activity.
8. The common interest of the village will get affected and the unity and integrity and communal harmony of the villagers will get affected by such action by the government.
9. When the Government still focuses on Agricultural production for basic need fulfillment, how can an enterprise like Fishery be made out at the cost of the Agriculture. Since the Fishery production sets out certain quantity of water at the cost of Agriculture.

Collapsing Tank Customs in a large Multi Caste Village: Sathangudi Tank Sathangudi, Thirumangalam Taluk, Madurai district

Sathangudi, a Village in Transformation

Sathangudi, a Panchayat village is situated 3 km from Thirumangalam on the Thirumangalam - Usilampatti road. It is located in the head reach of Gundar river basin. The former Orissa Governor Mr.M.M.Rajendran, a well-known doctor Dr.Vadamalayan, and the notable public speaker Mr.Solomon Pappaiah, belong to this village. The village is often called as a military village. About 200 army men and 125 ex-service men live here.

The village has the following infrastructure facilities. Being on the Thirumangalam -Usilampatti road, the village has adequate transport facilities; Around 10 petty shops and tea shops A Primary Agriculture Co-operative Bank Telecommunication facilities three primary schools, one middle school and one high school and around ten temples; another wet the village lacks proper drainage facilities.

Demography

There are 2000 thalaikkattu (refers married couple) in the village. It is a multi-caste village. Pallar, Kallar, Agamudayar, Parayar, Sakkiliyar, Vannar, Navithar, Asari, Naidu and Naikkar caste people are living in this village. Kallar and Agamudayar are the dominant castes. About 1000 thalaikkattu belong to these castes. Kallars and Agamudayars are numerically equal in population. Around 1000 thalaikkattu belong to other castes. Most of the houses are old. They are mud walled and tiled. In mud walled houses, a small bund like structure is made with soil on the roof to drain the roof water orderly in order to avoid erosion in walls. Several houses are thatched, while a few are terraced.

Migration for a better and prosperous business and government jobs and opportunities is predominant in this village. Many houses particularly the old one are unoccupied. Almost the entire Nadars have migrated and settled in Dindugal, about 40 kms away. People belong to minor castes like Vannar, Asari and Navithar have migrated to nearby towns like Thirumangalam and Madurai. Seasonal migration is also noticed. According to the villagers, about 500 people are working in Thirumangalam. Most of them are engaged in construction works and other related works.

Resources

It is an agricultural village and has about 2000 acres of cultivable land, of which about 500 acres are under tankfed irrigation. The tankfed lands get water from Sathangudi, a PWD tank and Puliur, a Panchayat union tank. The soil under tankfed land is moderate Clay and Clay Loam with good fertility. Well irrigation is predominant in tankfed lands. A few wells are there in dry lands. The soil type in dry land is Black. Red soil is also there in a few pockets. The village has four Oorani's which all of them are in a state of disuse.

Leadership

There exist three kinds of leadership i.e. 1) Traditional leadership, 2) Caste-based Leadership and 3) Panchayat President the elected leader.

Traditional Leadership

The traditional leader is called as Kariyakarar. Kariyakarar is elected through nomination and on villagers' consensus. Based on his characters, interest, involvement and contribution to common activities Kariyakarar is elected. During early days it was inherited through generations. Kariyakarar has high influence over the villagers. The changes taking place within the village and outside have affected the traditional leadership. A new system of Kariyakarar selection has been introduced since mid 1980s to cope up with the changes.

Out of ten Kariyakarars, three belong to the Kallar caste, another three belong to the Agamudayar caste and the remaining four represent the other castes.

One Kariyakarar told me that during earlier days Kariyakarars were undisputed monarchs and their word were implicitly obeyed. They also dedicated their time to the village development. Every month they celebrated village common functions. Now the youngsters never give respect to our words. They always react against our activities. To add to this another Kariyakarar said, "In order to match the generation gap we decided to elect Kariyakarars based on caste representation. The respective caste should select their representative for the post of Kariyakarar.

The Kariyakarars evolve a consensus before initiating any common work. Each Kariyakarar obtain the consensus with their caste people in the respective caste meetings. Subsequently, the Kariyakarars note the villagers' response and based on the overall response they call the village meeting and then they discuss and take the decision.

Caste-based Leadershi

Recently, Caste-based leadership is gaining importance as powerful lobbying agent in the village. Each caste has its own way of selecting its leaders. In Kallar and Agamudayar caste, a committee is performing the leadership function. The committee is constituted based on the number of Pangalis in the respective caste. A three and a five-member committee are leading the people in Kallar and Agamudayar castes respectively.

Casteism in Sathangudi

Being a multi-caste village, 10 castes are living here. Changes taking place over the years have broken the organic relationship among the castes in the village. Politics of survival, politics of sustenance and politics of prestige have played a major role in shaping the people's mindset.

Nadars and Nayakkars caste people who once had economical dominance, migrated to nearby towns in order to sustain their wealth. The setback in agriculture was the main reason for their migration. Reddiyars involved in weaving migrated to the towns to sustain their activity. A few migrants have changed their occupation and have got involved themselves in different works.

Kallars and Agamudayars who had worked as labors in agricultural land have purchased land on their own. A shift in power structure has been realized. Migration has disturbed the hierarchical balance existed among castes in the village. Hierarchical balance is very much essential to maintain harmony in multi-caste village. The Kallars and the Agamudayars have become dominant. Always there exists difference of opinion, tension, and disputes between these two castes. It has disturbed the village unity.

Changes taking place over the years have affected the other caste people. Vannars, Navithars, Sakkaliyars, Paraiyars, and Asaris who supported the village agricultural system by washing clothes, hair cutting, other household and agricultural works no longer works. They depend on others for their survival. Division of labour exists in each caste. They provide service through labour and earn their food through kind and produce.

Caste-based approach exists in all activities. The impact of casteism on Panchayat election, village functions and other common works is very high. The village has 5 schools of which 4 are managed by caste institutions. While celebrating caste-based common functions, the groupism exists and affect the function. Groupism and internal conflicts are there in all the castes. But while initiating common works, groups within the caste unite together and create problems.

Panchayat President

| Hamletwise castes in Sathaigudi Vilallage | |
|--|--|
| Hamlet | Caste |
| Sathangudi | Kallar, Agamudayar, Nadar, Nayakkar, Pallar and others |
| Puliyur | Kallar and others |
| Poolanaikkanpatti | Nayakkar and others |
| Pullamuthur | Reddiyar and Pallar |
| Kandukulam | Agamudayar, Nayakkar, Pallar and others |
| Arappalayam | Kallar |

Though the leader is elected through the formal process of voting, the leader has limited influence over the villagers and village common activities. He has power to spend Panchayat money for various village development activities. Sathangudi Panchayat consists of 6 hamlets including Sathangudi, Puliyur, Poolanaikkanpatti, Pullamuthur, Kandukulam and Arappalayam hamlets. There are three irrigation tanks in the Panchayat, two at Sathangudi hamlet and one at Pullamuthur hamlet. Since the first Panchayat election, all the presidents were from Sathangudi

village. Either a Kallar or a Agamudayar candidate wins the election. During the last election, four members contested. A Kallar caste candidate won the seat.

Kallar and Agamudayar population is numerically equal in the Panchayat. The election result is always decided by the other caste people.

Collective Action

During the early days, it was one of the prosperous villages in the region. Agriculture was practiced throughout the year. Weaving was also done. Agriculture and weaving supported livelihoods for many people. People of different castes lived together and benefited from each other. Division of labour, traditional norms and regulations were followed. Collective action in the village in still practiced.

Resource Mobilization

There are about 20 temples in the village. Many of them are owned by the particular caste people. A few are common for the village. Resource are mobilized through auctioning trees in the temple Poramboke and 'neirhikkadan' (villagers offer things to God). The village generate about Rs 40,000 - 60,000 per annum as common fund. It has the potential to generate about Rs 1 lakh from these sources. Karuppukoil itself generates about 95 per cent of the total revenue through 'neirhikkadan'.

Common Fund through 'Neirthikkadan'

The villagers are practicing 'Neirthikkadan' for the God Karuppanasamy. They believe that the god is very powerful one and it can fulfill the individuals needs and wishes. As a satisfaction, the beneficiaries offer calves as 'neirthikkadan' to the God. The person who is willing to offer neirthikkadan meet the Koil Poosari (temple priest) with the offspring and offers it to the God. The Poosari registers the neirthikkadan. As a symbol of the God's property, villagers never the 'Mookkanang Kayiru' (nose string) so control the animals.

The offspring is free to graze anywhere in the village. Often they move to the nearby villages also. People offer about 100 calves per annum as neirthikkadan. Once in 6 months the villagers conduct auction and sell the calves. During December 2000 the village auctioned the calves and got Rs.35,000. Normally the calves graze in the agriculture field and damage the crop. If the number of neirthikkadan increases, the damage will be more. Then they decide on auctioning. The village leaders call the meeting, after getting the consensus in the meeting auctioning date will be announced. The money generated from the auction is kept in a cash box and locked. It has four keys. The keys are with 4 Kariyakarars. The villagers keep the box in a locked room. It has also 4 keys and the four keys with another four Kariyakarars.

Whenever moneyies needed the Kaniya kumaris will call the village meeting. The need, required amount, mode of transaction etc. are discussed in the meeting. Then in front of a group of people, Kariyakarars open the room and the box, take the required amount. Normally the amount is used for village functions, temple festivals, temple construction works, tank repair works and other common works.

On need basis the village collect 'thalaikkattu vary' (contribution) from the villagers. This is mainly to celebrate temple festivals and village functions. The Asaris, Pallar, Parayars, Vannars and Navithars are exempted from thalaikkattu vary. Instead of the contribution they are expected to do 'thonduliyam' (wage free works like repairing wooden structure in the temple for Asari, making thandora for Parayar, white washing the temple for Sakkaliyar etc). For tank related works the thonduliyam is common for all caste people. Those who can't participate (age-old people, woman headed family etc.) in thonduliyam can give cash or send a labour on behalf of them. For example during 1996, the entire village worked for 2 days to get water from Ponnamangalam tank (Kudimaramathu), with the participation of all the people.

The irrigation tanks situated in the village generate resources. The villagers mobilize resources in the following ways:

- Auctioning trees in the tank bund and in the tank foreshore;
- Auctioning fish;
- Selling the tank water to the farmers.

Tank has huge potential to generate revenue on its own. The existence of encroachment and the poor water storage has affected the tank revenue generation. Water is sold whenever there is a surplus.

Common Work Implementation: There are about 20 temples in the village. The common fund is mainly used for temple repair works, construction works, village festivals and functions. Repairs works and construction works Mari Amman temple are in progress at an estimated cost of Rs 2 lakhs. All the temples are maintained properly. The maintenance cost alone comes to around Rs 10,000 - 20,000 per annum. The maintenance cost includes electricity charges, white washing and others.

This year the villagers are planning to celebrate Mari Amman temple festival, which was celebrated 45 years ago. The conflicts between the Kallar and the Agamudayar caste people affected the function celebration also. The old villagers show much interest to have the function this year.

A person from Sathaigudi residing at Dindugal requested the villagers to average the function this year. He requested the villagers to take necessary precautionary steps to prevent any conflict expected to happen in the function. In order to have common understanding among the villagers to celebrate the function, he requested the leaders to mobilize Rs 2 lakhs through thalaikkattu vary. He has agreed to give the remaining amount required for celebration. The total expenses would be Rs 8 lakhs. Each family would spend a minimum Rs 10,000 during this function.

Every year the village spends a minimum of Rs 20,000 for tank related works. They also offer voluntary labour for regular tank maintenance works. It includes water acquisition from Vaigai system and from Ponnangalam tank, cleaning field channel, breach closing, Neerpaichi system of water distribution etc. Since 1975 they have tried 4 times to bring water from the Vaigai system and incurred Rs 25,000 each. Two years ago, they completed the supply channel desilting work spending Rs 5 lakhs under 'Namakku name thittam' (a scheme of Tamil Nadu Government to promote people's participation. Twenty five per cent of work cost is mobilized as their contribution and the remaining is funded by the respective district administration). The villagers have contributed Rs 1.5 lakhs and completed the work. The work was done through contractors. During 1996 the entire village offered their voluntary labour and got Ponnangalam tank water to the tank.

Water Resources

Sathangudi has 2 tanks, Sathangudi tank and Puliur tank. Sathangudi is a PWD tank, located in the northern side of the village (Annex -1) has a three km long bund and an ayacut area of about 400 acres. It has two sluices -Melamadai and Keelamadai. It has water access from Gundar supply channel and from Pungangulam surplus course. It also has water access from the Periyar -Vaigai system through Thirumangalam extension branch canal (5 & 6).

Puliur tank, a Panchayat union tank, located in the western side of the village, has a 2-km long bund and an ayacut area of around 100 acres with one sluice. It has water access through Gundar supply channel.

Nearly, 50 years ago, the river and the supply channel had water running throughout the year. The village had harvested 2- 3 crops per year through tank irrigation. The tank could supply water for about 60 days through one filling. They had a minimum of 3 fillings in a year. The tank had facilitated the agriculture in two ways.

The subsurface flow or seepage from tank itself is enough to the crop. Farmers particularly the tail enders never irrigated the crop directly from sluices. According to the villagers, with 2 or 3 tank irrigation they harvested the paddy crop. In another way, the tank facilitates the ground water recharge. It has effect for about one year.

The changes (hydrological, social) have taken place in head reaches of Gundar and Vaigai River has affected the water flow in the channel. Now the channel carries water hardly for 30 days in a year. During the last year water-flow was there in the channel for just 10 days only. After very long period in mid 1980s the tank was rehabilitated under EEC program. Thereafter a few works were carried out.

Sathangudi Tank Rehabilitation under EEC Program

During mid 1980s the tank was rehabilitated under EEC program. Strengthening of F tank bund, feeder channel desilting, field channel lining and community well construction, works were implemented. The total value of work was about Rs 15 lakhs of which field channel lining channels cost was about 70 per cent. Lining work was implemented in two sluices to a length of about 4 kms. The villagers- have damaged the lining work and have taken these defeated to their own houses. The community well work has been completed.

The villagers appreciate the objectives of the tank rehabilitation program. They say that though a meager amount has been allocated for desilting work the other works particularly lining and community well works were very useful. Improper implementation has affected the purpose and the objectives of the program. Lack of proper understanding of the different components of the program has affected the purpose for which the huge money was invested.

According to the villagers, the EEC funded tank rehabilitation program has failed to achieve any improvement in the tank system. The reasons were as follows:

1. Poor quality -In construction work, particularly in lining work, poor quality cement mortar mix, and lack of proper gradient maintenance affected the quality. In earthwork, the quantity of work done was less than the proposed quantity.
2. Farmers' needs were not considered -In lining work farmers need like vent (for irrigation, for drainage), provision for tractor crossing were not considered and included while implementing the work.
3. Incompletion of community well work -Community well was included in the proposal to save agriculture during scarcity period. It helps the poor farmers a lot. Though there existed scope, the work has not been completed.
4. Corruption -The work was done through the contractors. Though the villagers try to influence the contractors to do good work, they couldn't. Corruption prevailed at all levels and it affected the implementation.

Water Acquisition

During earlier days, the villagers never faced any hardships to bring water to the tank. They regularly did the feeder channel clearance work. Prior to the onset of monsoon they used to complete the following works.

- Cleaning of bushes in the feeder channel to a length of about 3 kms from Sathangudi to Vagaikulam
- Breach closing (natural and man-made) in the feeder channel and in the tank.
- Maintaining shutters in the feeder channel

These works ensured enough water to the tank. In the mid 1970s they faced water scarcity. Then they tried to put their efforts to acquire water from different sources.

Water from Vagaikulam Tank Through the Feeder Channel: Decades back, the villagers negotiated with the Vagaikulam villagers to get water from their tank. They also negotiated with the Kangeyanatham and the Ernampatti villagers to get surplus from their tanks. The surplus waters from

the two tanks enter the Sathangudi feeder channel at just below the Vagaikulam tank (Annex -2). The purpose of negotiation is not to get share from upper tanks but to show their desperate situation to the upper tank farmers. This also build a space to confront encroachers those who are diverting or pumping the water directly from the feeder channel to their field.

Water from Periyar -Vaigai system through the Thirumangalam Extension Branch Cana

As a part of the Periyar -Vaigai system, an extension branch canal (6) was constructed to feed the tanks from Kuppanampatti to Sathangudi. The work was completed in 1970s. The branch canal which in meant for Sathangudi tank, takes off from main branch canal at Kuppanampatti. Then it feeds Kalappanpatti, Aryapatti, Uchappatti, Ampattayanpatti, Poolankulam, Thidiyar Mettupatti and reaches Sathangudi tank via Vagaikulam village. Farmers Associations were formed at different levels (tank, branch canal and canal) to regulate the distribution. Farmers say that since the inception of the system (administrative, management, engineering system) they have never received water supply to the Sathangudi tank. The Sathangudi association has made efforts for 4 times to get water. They spent Rs 20,000- 25,000 each time to get water. But they couldn't fill the tank. The following table depicts the extent of problems they faced in getting water from the Periyar- Vaigai system.

Water from Ponnangalam Tank Through Surplus Course

Ponnangalam is one of the upper tanks for the Sathangudi tank. Between these two tanks, Melandal, Chitalai and Pungangulam tanks are situated. Ponnangalam receive water from Jyothimanickam tank and also from the Periyar - Vaigai extension branch canal (5) through Valandur tank

Ponnangalam tank has 2 surplus weirs. One has shutters and it feeds Urappanur tank via Alangulam tank. The another weir is called as Thamboki Kalingu (without shutters), located in the eastern side. It feeds Melandal tank. The surplus from Melandal tank feeds Urappanur tank, besides supplying water to Pungangulam and Chithalai tanks, Pungangulam, Urappanur and Chithalai tanks are lower tanks to the Melandal tank. Sathangudi tank receive water from Pungangulam tank.

The following illustration depicts the process they have to follow to get water to Sathangudi tank.

Water Distribution

Water distribution is a crucial activity and somehow the villagers are managing it. Long back the village had a well established system of water distribution. Conflicts, encroachments, poor storage capacity, well irrigation and set back in agriculture have affected the effective implementation of traditional water distribution system.

Neerpaichi (irrigators) managed system of tank irrigation was in practice.

Neerpaichi System

Neerpaichies are appointed every year by the village. For each sluice one Neerpaichi is appointed. In Sathangudi 3 Neerpaichies are appointed to manage 3 sluices in two tanks. Traditionally Neerpaichi work is a caste-based occupation and Kudumbamars do this work. Most of the Kudumbamars have migrated to the nearby cities and at prefect only 10 families are living in the village. Each year on a rotational basis 3 families get the Neerpaichi work.

Functions

- Prior to the onset of monsoon, he visits the feeder channel, surplus course, tank bund etc. to its entire length and inform the village about the works to be done before the monsoon.
- He assesses the possible ways of getting water from the upper tanks and inform the same to the village.
- During rainy days while water is flowing in the supply channel he periodically visit.
- He walks entire length and assess the possible places of breaches. He informs the village about the precautionary measures to prevent the breach.
- Similarly he does in the tank bund also. During heavy rainy days, he usually has sleepless nights in order to protect the tank from breaches.
- He ensures proper upkeep and maintenance of shutters and regulators.
- He regulates the water distribution within the sluice. He ensures day time irrigation.
- He acts as a guard to protect tank resources -water, tree, fish.
- He acts as a mediator while the village is negotiating for water with other villages.

Benefits to Neerpaichies

- 4 padi (6 kg) paddy per kani (66 cents) land
- Exempted from thalaikkattu vary
- Village respect him while celebrating any common functions
- Individual farmers according to their interest give produce/money to them

Problems

- Age old people are doing the job. Now they are doing only about 50 per cent of the neerpaichies work
- Very low income
- Migration
- Caste-based occupation. They are seeing this as a low status job

Tank water is distributed to the field on a first-come-first-served basis. Even during scarcity period the same approach is followed. During the surplus period, water selling is practiced.

Encroachment

Encroachment is very common in this village. Encroachment is seen in all types of Poramboke lands i.e. Panchayat, tank and odai Poramboke land. The following kinds of encroachment are seen in water bodies.

Encroachment for Agriculture: The village has a large area of Poramboke lands. The adjoining landholders have encroached the nearby lands and are doing agriculture. Incidentally, they have encroached the lands mainly to cut the Prosopis trees for fuel and other purposes. Over the years they have invested a huge amount of money and converted it into an agricultural field.

Poramboke Encroachment

Mr.Jeeva has land in the western side of Sathangudi tank (Annex -1). He is a young and progressive farmer. He has a well in his land. Over the years he encroached the adjoining odai Poramboke land. In the eastern side of the odai (opposite to his land) his fellow farmers were doing agriculture in the encroached land. The extent is about 5 acres.

Recently Mr.Jeeva has purchased the 5 acres land from the encroachers. He paid Rs 3.5 lakhs and purchased the land. Mr.Jeeva said, though it is a Poramboke land our fellow farmers were doing agriculture for about 40 years. We have no patta for this land. When I purchased the land we gave bribe to the survey officials and they came and did the survey for us. We didn't go to the registrar office for documentation. We ourselves prepared the agreement and signed it in front of our villagers.

Last year, he spent Rs 17,000 and raised the bund in order to arrest the surplus water to his field. Otherwise the entire field gets submerged. The patta holders who have lands in the opposite side objected his work, but through his influence he successfully did it. He also put underground PVC pipeline to carry water from his well to the encroached land. He spent about Rs 30,000 for this work. Now in the he has cultivated green gram in focus of the encroached land.

During 2001, though the tank water was not enough to irrigate the command area, using his influence he watered his field thrice. According to Mr.Jeeva, the extent of encroachment is about 100 acres. Majority of the encroachers belong to Kallar and Agamudayar castes. Encroachment is seen throughout the length of supply channel. Tank foreshore cultivation is also seen.

Encroachment for Water

There are a few wells in the odai Poramboke. Each well has the capacity to command about 5 acres. The encroachers couldn't get the electricity connector for these wells. They are using diesel engines for pumping.

Encroachment for Trees

The entire Poramboke lands are encroached. The encroachment is done by all the castes. The encroachment is mainly to cut the trees for fuel and for sales.

Agriculture

During earlier days, it was one of the progressive agricultural villages in the region. Now the agriculture is experiencing a setback in this village. About 40 acres of wetland are in a fallow condition.

In tank command they cultivate paddy crop. Transplanted paddy is grown. Paddy nursery is raised by using well water. After paddy, pulses like green gram, black gram and oil seeds like groundnut are grown. They take cotton as a third crop.

In dry lands sorghum, baja, pulses like cow pea and red gram are grown. Mostly one crop was grown in dry lands. The introduction of well irrigation has modified the cropping pattern and increased the cropping intensity in a few places.

Bullocks have been replaced by tractors. Nearly, 200 pairs of bullocks were there in the village and now 15 tractors are there in the village. Tractor ploughing damages the tank field channel. Wage rate

for man is Rs 70 per day, for woman it is Rs 251 per day. Laborers are not interested in doing agriculture work. They are more interested in doing other works in cities where men and women get Rs 105 and 60 per day respectively.

Conclusion

Tank being a common property the impact of other conflicts on tank performance is significant. Individual problems, groupism within the caste, difference of opinion between castes, disputes between villages directly affect the performance of the tanks. Regarding water bodies, there exist the following type of conflicts.

Between Command area Farmer

The groundwater access helped the farmers to plant paddy as earlier than other farmers. During the end of the season, the other farmers require tank water for their crop whereas the farmers who have planted earlier than the others do not allow the water through their field in order to protect the crop which is at the harvest stage. This create conflicts between command area farmers. The conflicts arise mainly for want of water or for want of space to dispose water.

Between the Tank Command area Farmers and the Well Owner

Personal interest and relationship decides the well water supply to other field. Any personal dispute or difference of opinion creates conflicts between these two categories.

Between the Tsank Command area Farmers and the Villagers

Usually the village common fund is utilized for tank development works. All the villagers including landless people and dry land farmers have equal rights over the village fund. While allocating village fund to the tank works always there arise a dispute between the two. The dispute is triggered mainly by other conflicts.

Between the tank Command Area Farmers and the Encroachers

Encroachment being a common phenomena in this village, no one can question the encroachers. Encroachers claim equal right over the tank water for their land. The problem is very high during the scarifies periods.

Between the Encroachers and Nearby Land Owners

Encroachment in odai Poramboke affects the other farmers who own land in the opposite side of the channel. Any developmental work in the encroached land proportionately affect the other farmers.

The conflicts/ disputes between tanks and among the tanks in the Thirumangalam cascade are very common (see: Water Acquisition). The damage to water bodies are irreversible or otherwise the opportunity cost for revival is very high. The damage to water bodies is very slow and progressive. The effect of damage is hidden for very long period.

A village which acts as a power centre through its unity can influence nearby villages and can establish rights over the resources e.g. Urappanur.

Wherever the village has significant common fund, the traditional institutions function. The villagers ensure the institutional performance by altering the hierarchical structure already existed in the villages. They modify the system according to the changes taking place in and around the village e.g. Sathangudi.

Setback in agriculture, migration, casteism etc. have altered the hierarchical balance among the castes in Sathangudi village. It has direct impact on the maintenance of water bodies. It also altered the occupational balance among the castes. This affected the poor people.

Encroachment and groundwater exploitation will create a serious problem in the near future. These two will affect the tank performance and also the village unity. Those who have ability to influence others can get water. This is true in all cases i.e. within tank, between tanks, among tanks etc. The influencing factors are money and muscle power. The muscle power includes village unity, caste support and political support.

Establishing a new code of conduct or reviving the traditional rights to suit the present context is necessary to conserve water bodies.

Neerpaichi system of tank irrigation should be promoted. Tank endowment fund can be built up by using the village common fund to conserve water bodies.

Encroachments and the Rights of the Cultivators Goundankulam, Rasingapuram Village Theni district

Rasingapuram, the Village

Rasingapuram is one of the village Panchayat in Bodinaickanur block of Theni district. It is a multi caste village where in more than 12 castes are residing with traditional and cultural bondage. This village is situated 23 km away from Theni in the south west direction and 7 km from Bodinaickanur in south direction on the Bodinaickanur to Thevaram main road. It has all basic amenities like drinking water, electricity, hospital, communication and others. Rasingapuram village is well connected with Bodinaickanur and Thevaram through frequent transport facilities. The village was prosperous and visible from the well developed residential buildings with pucca houses and the range of goods available in the village market. The western part of the village is surrounded by a mix of toamy and sandy soil fields where as the eastern part of the villagers covered with high fertile cultivable lands.

Demographic Profile

The total geographical area of the Rasingapuram village Panchayat is 2618.28 ha with around 1640 households. Rasingapuram is the main village and Kariappa goundanpatti, Bodibomminaickanpatti, Veerajakkammalpuram and Samathuvapuram are its hamlets. All these hamlets are located adjoining to the main village and hence looks like a single village. The total population of the village is 6426 of which 3272 are male and 3154 are female. People belonging to various caste groups are living together with harmony. Kurumba goundar is the dominant caste followed by Vakkaliga goundar group. The other major castes living in the village are Thevar, Chettiar, Naidu, Pillai, Naicker, schedule caste etc. The hamlet wise households and their occupational patterns are given in Table - 1.

Table - 1: Hamlets with occupation of the People

| Sl No. | Name of the village / hamlet | No. of households | Occupation |
|--------------|------------------------------|-------------------|---|
| 1 | Rasingapuram | 750 | Agriculture, business cattle rearing, cardamom planters, agriculture labors |
| 2 | Kariappa goundar patti | 650 | Agriculture, business, sheep and goat rearing, petty shop, hotels etc |
| 3 | Bodi bomminaickan patti | 95 | Agriculture, agriculture coolie, cattle rearing |
| 4 | Veerajakkamal puram | 45 | Agriculture, agriculture coolie, cattle rearing, goats and sheep rearing |
| 5 | Samathuvapuram | 100 | Agriculture and agriculture coolie. |
| Total | | 1640 | |

Agriculture is the main occupation in the village. The other agriculture related activities such as agriculture coolie, cattle rearing, sheep and goat rearing are also being practiced in the village. Few families are involving in the business activities like hotels, petty shops, medical shop etc. The decline in the irrigated agriculture over the last two decades and the frequent droughts in the recent years

made many families to migrate to Tiruppur town seeking employment in textile mills and garment factories and also to Kerala as laborers in construction sites and estates.

Presently, cultivation is being practiced in the village with the support of ground water. There is no irrigation tank to support the agriculture activities directly at present. But, the Goundan kulam, a tank listed under the management of Panchayat is located 1 km away from the village in south west direction has been used as a source of ground water recharge in the recent years. The farmers cultivate mostly dry millet crops like jowar, maize, cumbu, and minor millets; cotton and red gram are the important dry crops during the northeast monsoon period (from Oct to Feb). Only few farmers cultivate paddy in a small extent for their own usage using their pumpsets. During the southwest monsoon, the farmers mostly go for vegetables and minor millets cultivation. The perennial crops like coconut, teak, mango and tamarind are also cultivated to some extent. The break up details of total geographical area and area cultivated in the last year are given in Table – 2.

Table - 2: The present land use of the village (2002)

| Sl. No. | Description | Total area in ha | Area cultivated I crop | Area cultivated II crop |
|--------------|------------------------------|------------------|------------------------|-------------------------|
| 1 | Dry land | 1659.185 | 1123.065 | 33.420 |
| 2 | Assessed waste land | 87.365 | 31.525 | - |
| 3 | Un assessed waste land | 659.910 | 0.405 | - |
| 4 | Poramboke (Government lands) | 211.820 | 8.275 | - |
| Total | | 2618.280 | 1163.270 | 33.420 |

Irrigation in the Village

The tank

It is said that the village was prosperous due to the irrigated cotton cultivation and there will be continuous movement of cotton bales from the village to Theni market. The prosperity is attached to the village tank called Goundan kulam and its feeder Suthangai Odai. This village used to have several ponds apart from this tank. The tank was located in a high ground and was receiving copious supplies from the hill areas. Because of the locational advantage the tank was serving a great cause of recharging the numerous wells sprung up in the vicinity. The farmers claim the recharge of the tank was upto a few Kilometers covering the neighboring villages.

The village tank was constructed long back and no one knows its age. Till the sixties the tank was serving as a source of irrigation apart from the tremendous recharge it was making for the wells. The village was one of the first villages to get electrified and the wells in the village are fitted with the electric motors in the late fifties and sixties. At this point of time the tank has been reduced to a small pit and the story is described to study the decay of customs and village assets. The Goundan kulam in Rasingapuram village is presently serving like a storage and recharge structure rather than for direct irrigation. It helps to get water recharge in the wells constructed in the vicinity of this tank and also in the surrounding areas.

The main source of water to the tank is rain water. The drainage water from the upper land reaches the tank. The tank is also a part of the local cascade of tank called Suthagangai cascade system. There is a small check dam recently renovated across the Suthagangai Odai which diverts the rain water into the tank. A supply channel from the check dam feeds the tank. In the past, the tank has got filled with rain water every year and hence the wells under this tank have got enough water recharge around the year. The farmers have utilized the well water for agriculture purposes. During that period, there were 60 wells in the command area alone with an average depth of 25 to 30 feet providing irrigation to an average of 4 acres per well.

The wells

At present there are more than 250 wells existing in Rasingapuram village of which only 80 wells are providing irrigation to very small extent. The functioning wells are very deep reaching 70-100 feet with a bore of more than 100 feet inside. It is estimated that the average well would cost around Rs 4 lakhs to construct in these days, however they do not stand for any value now. The remaining wells are dried up completely due to the poor recharges from the water bodies like the tank and supply channels.

Decline of the Tank

The farmers had shown more interest on well irrigation till the seventies and forgotten the tank during these hey days of well irrigation. Due to the negligence of the tank by the villagers in general and the farmers in particulars, the decay of the tank has slowly set in and finally is in a bad state. The feeder channel got silted up, heavily encroached and ploughed for cultivation. Due to this, the tank did not receive any water in the last twenty years completely. Hence, the farmers having lands in the foreshore of the tank encroached the tank bed, and started to cultivate permanently. The water level in the wells under the tank has gone down year by year and the farmers have tried to extract ground water by increasing the depth of wells. The depth of the wells increased year after year and now the average depth of well is 120-130 feet.

Under this situation, the farmers have realized the importance of tank for their survival and sustained agriculture. Many of the farmers in the ayacut area have joined together in the late eighties and formed themselves into an association and approached for the eviction of the encroachments. By the year 1997, the total water spread area of 5.17 ha has been reduced to around 1.2 ha with complete dismantling of the bund. The villagers who own lands in the ayacut as well as others have tried to protect the water spread since 1985, but they failed.

Totally, 10 farmers have encroached the land (Table – 3). A few of the encroached farmers have also got electricity connections for the wells dug in the tank bed and the land is being continuously cultivated by them for dry and well irrigated crops. One of them has got a patta for the piece of land he has encroached.

Table - 3: The encroachments declared as legitimate Patta

| SI No. | Name of the encroacher | SF No. | Patta No. | Extent of encroachment (ha) |
|--------------|------------------------|---------|-----------|-----------------------------|
| 1. | Krishnasamy.S | 346/1 | 45 | 0.445 |
| 2. | Ramuthai.K | 346/2 | 1553 | 0.515 |
| 3. | Kariappan.C | 346/3A1 | 139 | 0.230 |
| 4. | Srinivasan.S | 346/3A2 | 2148 | 0.040 |
| 5. | Keppammal.S | 346/3B1 | 2149 | 0.035 |
| | | 346/3B2 | 348 | 0.220 |
| 6. | Malarkodi.S | 346/4 | - | 0.230 |
| | | 346/5 | - | 0.295 |
| 7. | Ondiveeran | 346/6 | - | 0.300 |
| 8. | Thangamani | 346/6 | - | 0.300 |
| 9. | Perumal.O | 346/6 | - | 0.300 |
| 10. | Subramani.P | 346/6 | - | 0.800 |
| Total | | | | 3.700 |

During the year 1996, the farmers had approached DHAN for removal of encroachments and revive the tank. The farmers were interested in restoring and reclaiming the tank through the eviction. They felt that their efforts so far had not been successful and so the agencies like DHAN would guide them properly to get rid of the problems. They formed a formal Tank Farmers Association and arrived at a consensus for making contribution to the rehabilitation works.

The villagers have approached the District Collector for funding the project and they have got the same. The works to the value of Rs 88,000 has been allotted to the TFA under *Namakku Name Scheme* (Self Help Scheme). After a great deal of struggle a land survey was organized by the Thasildar and the boundary was established for the tank at least on paper by the villagers. They have done the construction of the bund work after evicting the total area of 0.485 ha under the S.F No. 346/3A1, 346/3B1 and 346/1. However, the encroachers were continuously making threats as well as taking legal steps to stop the revival through any means. Since a part of the tank was revived the many wells in the vicinity got rejuvenated by next year (during 1998) and many villagers started pressing for the complete eviction.

The villagers again tried to get funds from the Panchayat Union for reviving the rest of the tank. This time they have evicted around 1.00 ha of land using force and coercion and spent Rs 1.80 lakhs. Then the encroachers have joined together and consulted lawyers and filed a case against the Collector for illegal eviction of their lands. The village farmers were agitated a lot and jointly decided to evict all the encroachment at any cost and collected Rs.25, 500. Using this as their contribution they got a sanction order for water harvesting work for an amount of Rs 1.02 lakhs under Village Self

Sufficiency scheme. This time they have formed a stable and big bund around the revived water spread area. Also they have completely evicted the supply channel by clearing it using coercive means. By this exercise, they have encircled the entire area of the tank bed. The encroacher sitting in the middle of the tank bed went on an all out offensive against the villagers. He was successful in getting an interim injunction to the works sanctioned by the Government. Now the case is pending in the High Court, Chennai.

Presently the villagers are confronted with a question of whether their retrieved land will survive in the court battle. In case, the court upholds the Patta given to the encroacher in the eighties what would be the fate of the tank. In such a case the entire tank will become useless because some one is sitting in the middle of the tank. Their efforts to get implead in the court case is also not met with the success because of the Government Pleader's assertion that it is not necessary for them to get impleaded in the case.

Box- The timeline of the encroachment and its fight

- During the 1800's (under Zamindari system), the Goundan kulam was maintained by the ryots with the support of the zamin. The map published by the British in the early 1800's clearly depicts the size of the tank and its sources without any doubt. The tank was laid in SF No.776 of the village and the total extent of tank water spread was marked as 5.17 ha. The map had been recovered from the archives and used as a witness in the court case by the villagers. However, the subsequent maps published in the 1980 does not show the extent fully because of the Patta issued in the middle of the tank.
- During the time of the Zamindars the land tax was collected by Avildhar from the farmers and much of it was used for the maintenance activities. These are narrated and remembered by some of the villagers. (However, it needs verification).
- After Zamin dari system was abolished, the water body was brought under the list of Panchayat Union tanks of the Bodinaickanur Panchayat union. So, this tank is presently maintained by the BDO of the Panchayat Union. For all practical purposes the BDO office has to represent the case but they hardly do so because of their indifference.
- This tank was used for ground water recharge after the 1950's and hence more than 60 wells sprung up in the command area benefiting around 200 acres. The functioning of the tank was reduced from the direct source to an indirect source rendering the tank bed vacant most of the time. The encroachers have started their act because of the farmers' indifference and neglect. A complete neglect by the villagers had resulted after the intense well irrigation in the 1960's. All works attended by the villagers such as clearing of the supply channels, protecting the tank from the encroachments had been given up.
- More number of wells were dug for irrigation in the later years and depth has been continuously increased and reached around 120 feet making the agriculture economically unviable.
- Most of the wells dried in the late eighties due to over exploitation of ground water resulting from the poor status of recharge capacity. By then, the tank water spread area was slowly encroached by the fore shore farmers. The encroachers started to cultivate the land and paid land tax with penalty which is a meager amount compared to the realization. There were 10 encroachers cultivating 3.70 ha of land in an intense manner. They also dug wells inside the tank for irrigation purposes and got electrified using illegal means.
- The survey number 776 of the older settlement of Nineteenth Century got changed into S.F No. 346 in the year 1981 after the re-survey. The fragmentation of the tank bed was marked without giving any notice to villagers and hiding from the knowledge of the ayacutdhars. This has resulted in getting Patta by the encroachers
- The new realization by the farmers had come after a series of failures from their wells. They started working for eviction and sending petitions to various officers and none of them worked. They organized into a formal group by themselves in to Tank Farmers Association in the year 1997 and got registered and approached with a militant attitude.
- They secured funds from DRDA, Panchayat Unions and other sources and evicted the encroachers by themselves without any formal support from the lower level bureaucracy. In the same way they have cleared the supply channel through coercion, threats and bribing the local officials.
- Presently the last and final battle to retain what they have revived is being held at the High Court against the encroachers. No one is sure about what would happen there.

Table - 4: The efforts of the villagers for evicting the encroachments

| SI No. | Date | From | To | Purpose | Outcome |
|--------|----------|--|--|--|---|
| 1 | 23.12.85 | MLA, Bodi (after several pleas from the villagers) | Chief Minister, T.N | For tank renovation and encroachment eviction | No action was taken. |
| 2 | 24.1.86 | EE, PWD | MLA, Bodinaickanur | Intimation on estimate preparation | Estimate prepared for the rehabilitation by PWD and sent to the 'Government'. |
| 3 | 23.12.87 | Ex. Village Panchayat President | SE, PWD, Madurai | Request for encroachment eviction and tank rehabilitation | No action was taken |
| 4 | July 97 | Tank Farmers Association | District Collector and special Officer for Theni | Request for encroachment eviction and tank rehabilitation | Considered for funding |
| 5 | 23.8.97 | DRDA, Theni | Pradan, Madurai, EE, DRDA, Theni | Order issued for part of the tank works. No formal efforts were made to evict the encroachers by the administration. | The Tank farmers Association has completed the work by recovering a part of the tank bed by convincing and coercion but major part remains as encroached. |
| 6 | June 98 | Village Panchayat President | District Collector | Request for funds to do a complete rehabilitation works for the tank revival. | A part of the works sanctioned and done by the Tank Farmers Association using local coercion. |
| 7 | 7.1.99 | TFA, President | District Collector | Regarding action against the culprits involved in damaging the check dam in the Suthagangai Odai. | No action was taken |
| 8 | 22.2.00 | DRDA, Theni | EE, DRDA, AEE, | A part of rehabilitation works | Partial works done |

| SI No. | Date | From | To | Purpose | Outcome |
|--------|---------|--|--|--|--|
| | | | DRDA, Pradan, Madurai | ordered using DRDA funds. | |
| 9 | 5.3.02 | DRDA, Theni | BDO, Bodi EE, DRDA, Theni | Order issued for a new check dam construction in the Suthagangai feeder channel to divert water to the tank. | The works were completed after a big haggling and threats. |
| 11 | 7.6.02 | Encroachers | District collector, The Tahsildar, Panchayat Union Commissioner | Notice to stop the action against illegal eviction of encroachments of his clients. | No reply from the Government and work was progressing because of the farmers' insistence. |
| 12 | 5.7.02 | Encroachers | District collector, Thasildar, Union Commissioner | Intimation of a stay order. | No action. |
| 13 | 8.7.02 | TFA, President | RDO, Uthamapalayam Division | Request for action against the persons who resist the works in the channels and check dams | No action. |
| 15 | 11.7.02 | District Federation of Tank Farmers | RDO, UPM | Requesting for supply of records to face the encroachers in court | The court notice and the injunction were given to the farmers. A suitable reply was prepared by the villagers and sent to the Government Pleader in the name of the BDO for reply in the High court. |

| SI No. | Date | From | To | Purpose | Outcome |
|---------------|-------------|------------------------------|---------------------------------|--|---|
| 16 | 6.9.02 | The Tank Farmers Association | The commissioner, Bodi Union | Complaining about the breach on the tank bund by three encroachers | No action. |
| 17 | 6.9.02 | TFA, President | The village Panchayat President | Information on tank bund damage by group and seeking for action. | Letter sent to the commissioner, Bodi, regarding the damages. |
| 18 | 19.8.02 | TFA, President | Chief Minister, Chennai | For restoration of the tank area | No action |
| 19 | 17.10.02 | District Farmers Federation | Superintendent of Police, Theni | Request for action against the encroachers | No action. |

M: AJMAL KHAN, M.L.,
Advocate

Chamber: 34, Law Chambers,
High Court Buildings, Chennai - 600 104.

Off. & Res: No.6, Arulanandam Street,
Santhome, Chennai-600 004.
Ph.:4617670

Date 05.07.2002.

To
Smt. Ramuthai,
w/o. Kakkilu Gowder,
W-3, 42B, Middle Street,
Rasingapuram Village,
Bodinayakkanur Taluk,
Theni District..

Madam,


Ref.: W.P.No.24117 of 2002
W.P.M.P.No.33174 of 2002.
(On the file of High Court, Madras).

The above writ Petition filed on your behalf seeking to issue a Writ of Mandamus restraining the Respondents from dispossessing you in respect of the Land in S.No.346/2 in Rasingapuram Village in Bodinayakkanur Taluk to an extent of 51.5 Ares came up for admission before His Lordship Justice F.M. Ibrahim Kalifulla today. After hearing me, His Lordship was pleased to grant an Ad-Interim Injunction as prayed for and posted the above Writ Petition on 19.7.2002 for further hearing.

I have applied for the carbon copy of the order made in the above W.P.M.P. and I shall send you the same as soon as it is made ready by the office of the High Court.

This is for your information.

Yours sincerely,


(M. AJMAL KHAN).

Copy to:-

1. The District Collector,
Theni District, Theni.
2. The Tahsildar,
Bodinayakkanur Taluk Office,
Bodinayakkanur, Theni District.
3. The Commissioner,
Bodinayakkanur Panchayat Union,
Bodinayakkanur, Theni District.



Su. BALASUBRAMANIAM, B.Sc., B.L.,
Advocate

Office : Municipal Complex, Thenkari,
Periyakulam - 625 601. ☎ 30131.

Office : T.S.P. Complex, Cumbum Road,
Theni - 625 531. ☎ 70616.

Resi : ☎ 31656 (04546)

Date : 7.6.2002

On behalf of

Ramuthayee

W/o .Kakilu gounder,
Nadu St, Rasingapuram (PO)
Bodinayakanur (TK)
Theni (Dt).

1. The District Collector
Theni (PO) Theni District.
2. The Tahsildar,
Bodinayakanur Taluk Office,
Bodinayakanur (PO) Theni (Dt).
3. Panchayat Union Commissioner,
Bodinayakanur (PO) Theni (Dt).

Sirs,

Under the instructions given by my client
abovenamed I issue this notice to you as follows:

1. That my client is in occupation of the land
situate in patta No. 1583, in S.No. 346/2 with an extent of
51.5 Ars.
2. That my client is enjoying the land for more
than 50 years. That my client dug a well and installed a motor
pump set.

FIG.1: GAVUNDANKULAM AS PER 1875 MAP

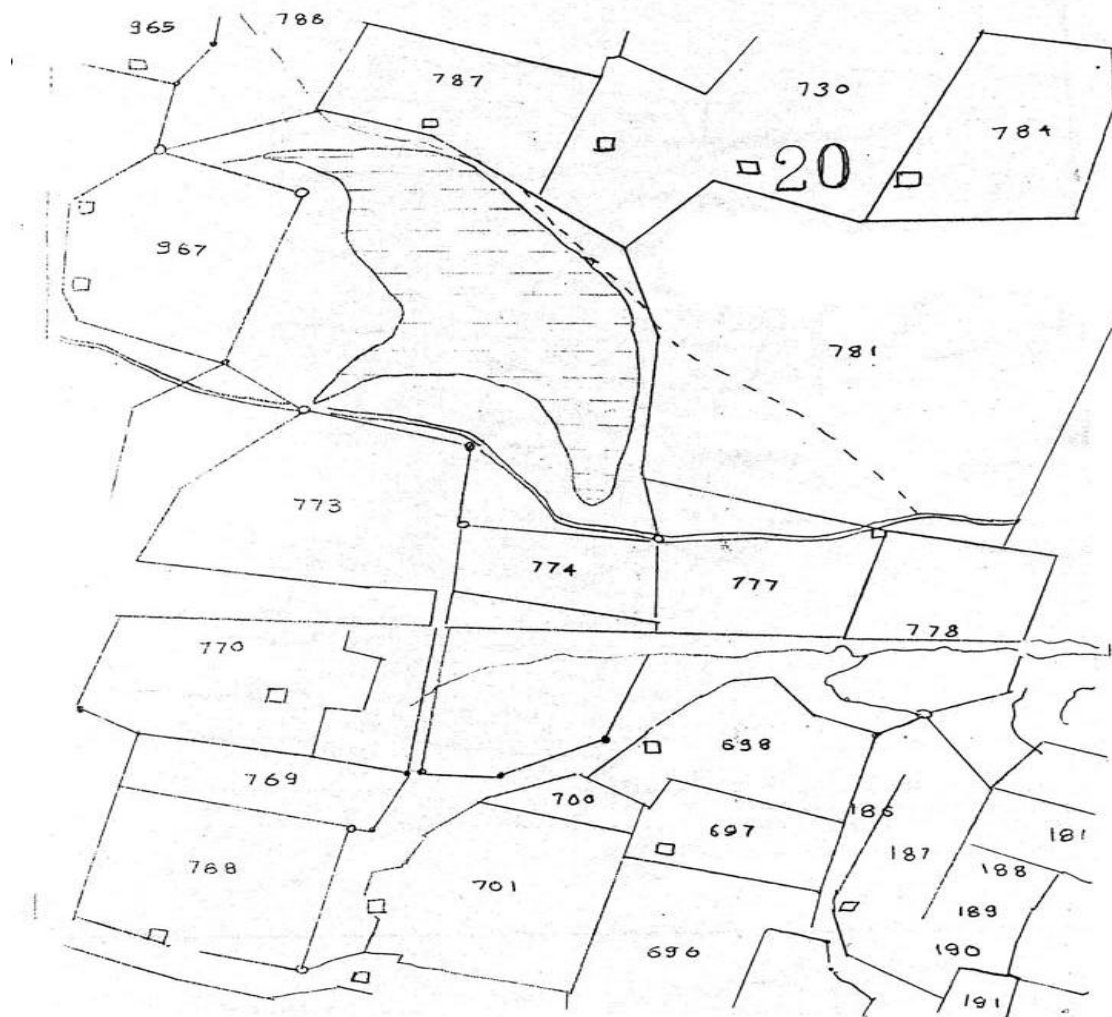


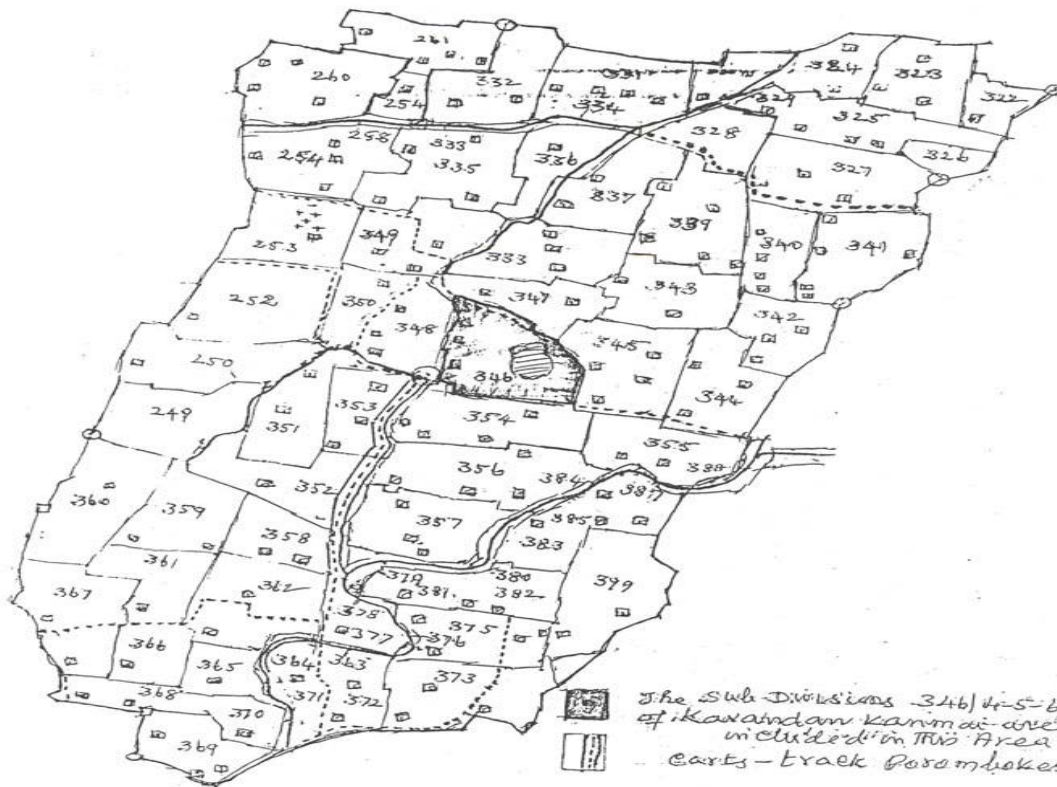
FIG. 2 GAVUNDANKULAM AS PER 1983 MAP

DISTRICT : MADURAI

TALUK : UTHAMPALAYAM.

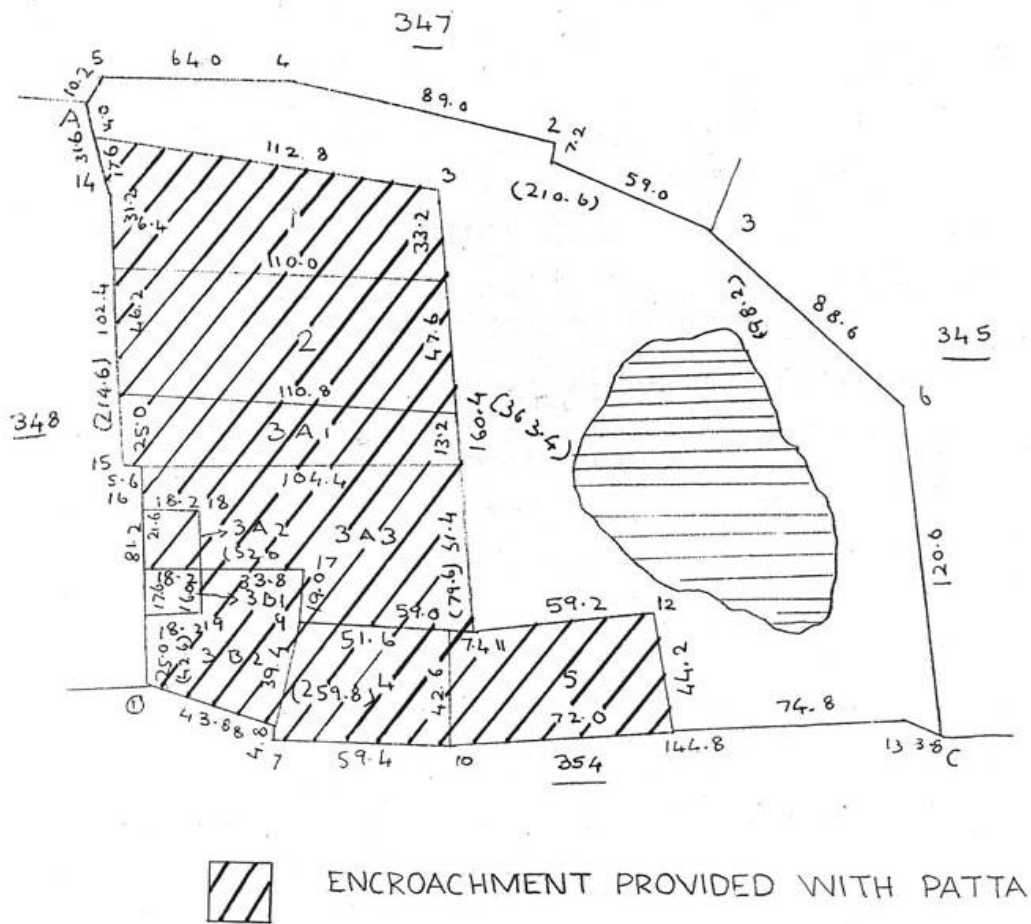
NO : 15
VILLAGE NAME : RASINGAPURAM.

TOP SKETCH OF SURVEY, FIELDS [NUMBERS] 346, 352, 353 AND 358.



[Signature]
VILLAGE SURVEYOR
RASINGAPURAM

FIG. 3: GAVUNDANKULAM AS PER 1983 MAP



Part III

Customs, Practices and Management in Village Tanks: Meso level

New Development Interventions and the Customary Rights: Peria Aruvi Reservoir and the Chain of Tanks in Madurai District

Peria Aruvi System in Melur Taluk

The Periya Aruvi stream originates from Alagarmalai Hills in Dindugal district in Tamilnadu and runs through Kesampatty village in Melur taluk feeding 25 tanks in a series. These tanks are historically old and none knew when these were formed. These tanks are small and big and serve single crop paddy cultivation in this area. The stream was unregulated and flowing for a long time through several villages feeding these tanks. A reservoir is proposed and formed across the stream in the valley between Alagarmalai Hills and Mundamalai Hill in the same range. The reservoir is located at the head reach of the stream before it starts feeding any of the 25 tanks. This is situated at a distance of 1.5 miles from Arukkanpatty hamlet of Kesampatty village in Melur Taluk.

History of the Reservoir

A proposal to form a reservoir across Periya Aruvi in Alagarmalai Hills was originally taken up as early as 1949 for investigation. Influential ryots from the head reach area owning large dry land areas have persistently made pleas to the officials and elected representatives for a new reservoir to feed their dry lands. Due to these continuous pleas, PWD has decided to explore the possibility of constructing the reservoir. In pursuance of the proceedings of the Fifth Half yearly District Irrigation Conference, the executive Engineer, Periyar Division who took up the investigation of the scheme, then opined that the to the lower roguery irrigation will be affected if the reservoir is formed. Again in 1950, the scheme was investigated by Food Production Department. At that time, the scope of this was to provide irrigation facilities to an extent of 60 acres of dry land at near the reservoir an estimated cost of Rs. 24,000/-. The scheme was considered not desirable and the government in the memo 537 F9/(F.P) dt. 05-12-1951 ordered to drop it.

When the minister for public works of the state government inspected the site on 16-12-1958 he desired to take up the scheme for detailed investigation. The Executive Engineer, special Minor Irrigation programme, Investigation Division, Trichy investigated the scheme comprehensively and framed a proposal based on his findings.

The proposal was made for providing irrigation facilities to an extent of 170 acres of dry land besides bridging a gap of 80 acres in this existing ayacut lands in the 25 tanks. Under the 25 tanks fed by Periya Aruvi, the total registered ayacut area was 660.65 acres. The scheme was sanctioned in G.O Ms. 2447 by Food and Agriculture Department dated 27-07-1962 for Rs. 4.96 lakhs and inaugurated by the same minister for public Works and was completed in the year 1965, water was let out for irrigation for the direct ayacut in the fasly year 1376 (1966).

At the time of the project execution, the government had given high priority to the development of dry land areas and, hence several programmes and projects have been launched for utilization of the potential. This has been cited in the original project document as follows:

Realizing the projected requirement of about 240 MT of annual food production by 2000 AD and to smoothen out fluctuation in annual production.

- Reducing regional disparities between irrigated and vast rain fed areas.
- Restoring ecological balance by generating rain fed areas through appropriate mixture of trees, shrubs, and grasses.

- Generating employment for rural masses and reducing large-scale migration from rural areas to already congested cities and towns.

However, what has happened after the construction is any body's guess and let us discuss them in the following paragraphs.

Before 1965

The site of the present reservoir before 1965 was a barren land with bushes, which was not fit for any cultivation. During the rainy season the surface runoff from these hills and from the upper basins used to flow through the stream area with high speed and feeding nearly 32 tanks in its downstream covering more than ten villages. Some of tanks have got direct supply channels from the stream and others receive from their upper tanks which are connected to the reservoir.

There are four major revenue villages namely Kesampatti, Kambur, Pattur, and Sekkiapatti in which these 32 tanks are located. The water from the tanks was used for irrigation and other domestic purposes including drinking and bathing. Those days the villagers also enjoyed rights including fishing in the streams and the tanks. Apart from cultivation, when the water level shrinks they used to leave out for lease for fishing purpose and catch fish. Other usufructs from these tanks are that villagers used to cut trees from the tanks for fuel purpose and the shepherds use to cut the branches to feed their cattle. The villagers sometimes used to take silt from the tanks and use it for their household purpose. The bed of the stream also served as a cart track for the villagers.

Farmers in those days were more hard working and much involved in the cultivation. They maintained and managed the small tank works such repairs, flood breach closing and cleaning by using the village common funds or through collective action. They also used to desilt the tanks and maintain the depth so that the storage capacity is not much affected. It is said that most of these tanks were deeper and hold water for more than six months when they were filled to the full.

Customs

As it is rightly said that "India lives in her villages", people of these villages largely depend on agriculture for their survival in which these tanks have played an important role. We could list out various customs and culture followed by the villagers from the tanks. They considered tanks as the inherited asset of their village and they were feel proud to own a piece of wet land. It has become a prestigious issue that every farmer whether he posses land or not that he has to cultivate some land on his own or as a tenant and irrigate his land from these tanks.

The various customs as observed or listened to are:

- Farmers cultivated paddy crop mostly, however they also irrigated different type of crops from the tanks on a rotational basis
- Tanks were leased out for fishing purposes and a part of the proceeds was spent on village developmental activities such as temple functions and other emergencies.
- In some tanks sand and silt are taken for domestic purpose with a small fee or at free of cost.
- Based on the nature of the soil the silt from the tanks are taken in order to apply in their lands to increase production.
- In some tanks there are rocky outcrops where stones are excavated for commercial use as well as for domestic purposes by the villagers. In such occasions the villagers also

collected fees depending on the stone being cut. The fee is mostly used to bribe the revenue departments and spent on temple functions.

- The trees from the tanks are used for fuel and feeding the cattle by the villagers.
- Several rituals are being practiced in these tanks, namely
- Before any agricultural activity whether it is sowing, tilling, thrashing or harvesting, the water from the tanks is taken and sprinkled on the equipments and separate festival is conducted by worshipping their deities
- In the same way if any one expires the body is brought on the shore of the tank and it is washed and later buried in the adjoining places
- While some tanks are considered as sacred and the villagers use to take water from these tanks and perform 'sacred bath' to the temple deities

Neerpaichies

The system of *Neerpaichies* was prevalent in most of these tank villages from ancient times to irrigate the fields; they are also called as water guides, from the SC community. They were being paid in kind i.e. during the harvest time the first sheaf is given to them based on the acreage. Before the construction of the reservoir this system was largely in existence operating with periodical supervision and changes in the appointment of these *Neerpaichies*. But now the systems not prevailing and there are not many such *Neerpaichies* for the simple reason that there isn't enough water in the tank, which requires a manager. Nowadays the ayacutdhars themselves perform the work of a *Neerpaichi*.

Well Details

The number of wells in these areas has increased to a greater extent especially in nearby areas of the reservoir. Before 1965 there were no wells, but now there are about 30 wells out of which 15 are having motor pump sets. The average depth of the wells is around 80 to 120 feet and water is there through out the year for irrigation purpose. But as far as the tank fed areas there isn't any profound increase in the wells and even the water in the wells are not available through out the year and most of the wells are dried up during the summer season.

Table - 1: Periya Aruvi Cascade of tanks

| Sl. No | Name of the Tank | Name of the Village | Name of the Basin | Registered Ayacut Area (Acres) |
|--------------|-------------------------|---------------------|-----------------------|--------------------------------|
| 1. | Alagi kulam | Kesampatti | Periya. Aruvi. System | 26.96 |
| 2. | Malyappan kulam | -do- | -do- | 19.18 |
| 3. | Elavenpitchi kulam | -do- | -do- | 32.88 |
| 4. | Mamathankulam | -do- | -do- | 25.04 |
| 5. | Paralayan kulam | -do- | -do- | 3.66 |
| 6. | Mookupari kulam | -do- | -do- | 4.66 |
| 7. | Mandan kulam | -do- | -do- | 4.32 |
| 8. | Thalampoo kulam | -do- | -do- | 6.27 |
| 9. | Pee kulam | -do- | -do- | 7.47 |
| 10. | Ootha kulam | -do- | -do- | 8.04 |
| 11. | Nallanthani kulam | -do- | -do- | 6.97 |
| 12. | Kesavaambalam kulam | -do- | -do- | 18.00 |
| 13. | Periyavirupan kulam | -do- | -do- | 17.95 |
| 14. | Nedun kulam | Pattur | -do- | 36.59 |
| 15. | Thanakkan kulam | -do- | -do- | 79.76 |
| 16. | Periya kulam | Sekkiapatti | -do- | 62.64 |
| 17. | Vijayrayan kulam | Kambur | -do- | 77.58 |
| 18. | Muthukarupapillai kulam | -do- | -do- | 12.89 |
| 19. | Kar kulam | -do- | -do- | 14.59 |
| 20. | Paechi kulam | -do- | -do- | 92.30 |
| 21. | Ayvathan kulam | -do- | -do- | 60.86 |
| 22. | Kamba kulam | -do- | -do- | 47.38 |
| 23. | Ambalakarachi kulam | -do- | -do- | 1.84 |
| 24. | Kidaviluda kulam | -do- | -do- | 2.55 |
| 25. | Allan kulam | -do- | -do- | 4.50 |
| Total | | | | 674.88 |

Agricultural Practices

There isn't any profound change in the methods applied by the farmers in the cultivation process in the recent years. Most of the farmers from these villages tend to follow the conventional approach. This is totally because of their reluctance in adopting the latest technology. On the other side the nature doesn't support them because the fertility of the soil is not that much rich i.e. after the harvest of the first crop the soil loses its fertility and it becomes uncultivable and the lands are left as fallow. Even today, the farmers use wooden ploughs to till the lands and rest of the activities till the harvest time are carried out only on manual basis and the usage of machineries are limited in most of the villages.

Occupational Pattern

Agriculture seems to be the primary occupation of the villagers in the following areas. Nearly 90 per cent of the population are engaged in the cultivation process and while others are scattered following different occupational pattern. Some of them are engaged in coconut thatti making, coir industry (small level), local business, private jobs, daily wages, and few are in government jobs. Another drastic change noticed in the recent years is that people are more craze of going to foreign countries in search of jobs and we could find the same in most of the villages. More of this aspect is found among Muslims and SC community.

Impact of the Reservoir

The major impact lies in answering the question whether the reservoir is a benefactor or a detriment? The underlying principle of the construction of the reservoir is to utilize the surplus water and make the optimum use of the available resource. On the contrary it depicts a dual picture of benefiting a section of farmers in the direct irrigation area and hampering more farmers in the tank fed areas. Because of this most of the rights that were enjoyed by the tank farmers are now being impeded and are in a state of desolation.

There are about 25 tanks, which are supposed to get water from this reservoir. These villagers view that before the construction of this reservoir they were living better and their tanks performed well. After the construction of the reservoir the life of the tank fed farmers have been turned upside down in all aspects.

Benefits

As far as the benefits, it has benefited only the farmers who come under direct irrigation. Before the construction of the reservoir the livelihood of these people were in poor condition. They did not have a source of income except to cut woods from the nearby forests and sell in the neighboring towns. The people were very much struggling hard to make their living each day. But after the construction of the reservoir they are well settled and their standard of living has gone up to certain extent. The reason is that these lands are brought under direct ayacut amounting to 170 acres, which were used to be fallow lands. The direct irrigation from the reservoir has brought stable cultivation for them. Most of the ayacutdhars are from the Kadumittanpatti and Arukkanpatty villages of Valiar community. However, in the recent years the benefit from the direct ayacut has also been under threat for reasons of stiff resistance from the lower down tank villages and poor performance of the reservoir due to siltation problems. More than 30 acres of crops have been converted into dry land orchards with the hope of not getting the water from the reservoir.

Destruction

On the other hand the consequences of the construction of the reservoir affected more people in the tank fed area.

- Total Irrigable area of around 670 acres with the tanks has become more or less obsolete because of the certainty of filling has greatly reduced after the construction of the reservoir. More than 10 of them stopped functioning once for all as a tank since they solely dependent on the Peria Aruvi stream and now it is not flowing.
- Water level in the wells has gone down in all the village. This has resulted because of the fact that the stream does not flow its original 12 km stretch and curtailed in the reservoir. Apart from that, the tanks have stopped functioning and so they have no means to get recharged. A rough estimate is that more than 500 wells are in distress in these original tank areas.
- The crop losses are increasing year by year for the reason that the tanks would not be filled in time. The farmers in the new ayacut who are located in the upper reaches have gained strength politically as well as strategically to stop water flowing from the reservoir to the tanks.
- Changing from wetland to dry lands has started happening because of the poor performance of the tanks and complete death of more than 10 tanks.
- More encroachments in the tank beds, bunds, supply channel areas have happened because all these parts of the tanks have been rendered useless. This would not have happened at least if the original situation was existing.
- Tanks storage capacity has been reduced because of the farmers' indifference towards them have increased. The indifference has the roots in the poorer or nil arrival of their original source to their tanks. This has resulted in complete siltation or weed growth and neglect.
- Out of the 25 tanks Paralikulam has been totally demolished and occupied by the encroachers and there is not any trace of its existence. This would be fate of the rest of the tanks in the coming years.
- More lands are becoming uncultivable and fallow lands in the tank irrigated areas because of the failure of ground water apart from the failure of the tank ayacuts.
- The economic development of these villages had come to a stand still because of the decline of the agriculture. The standard of living has decreased
- The system of Neerpaichies is completely dead for the reason that the uncertainty of the tanks' performance and there are no need for mangers in the villagers.

The Fall Out in the Villages

The social and mental attitudes of the people were much affected by the construction of the reservoir in this location. A common view prevailing among the villagers is that the reservoir hasn't benefited much instead it has ruined their life especially the farmers in the tanks located in the tail end of the stream. These villagers urge the government to make necessary steps to reorganize the present system of water distribution and see to that every farmer is benefited equally.

Right from its inception the farmers have approached several times and gave many petitions to the Collector and other officials regarding the renovation of the reservoir, but till here is now no response from the government side.

People's complaint is that the reservoir's bund is breached on the western side willfully and so also there is a continuous leakage by which water is leaking and going to the direct sluice ayacutdhars.

Also out of the two sluices one has been willfully damaged by the ayacutdhars belonging to the direct ayacut. It also got rusted and not been opened for the past eight years leading to the total denial of water to the original tankfed farmers. This is also one of the reasons for poor utilization of the water in the reservoir.

In summary

An analysis done during the year 1996 by DHAN Foundation reveals the following. The reservoir has released water to the tanks 64 times in the last 17 years of its existence (since its construction), where as its design mentions that it should be 416 times. This means that there are only 16 per cent of the number of times it has served the purpose. This has resulted in immobilizing all the tanks which were originally benefiting the farmers from the olden days.

There prevails a dual situation in the economy between the tank fed farmers of these villages and the farmers of the direct irrigation. The farmers coming under the direct irrigation are much more benefited and raised from rag to riches, whereas the tank fed farmers totally got dismayed and their interest hampered because of the reservoir. The perseverance of the construction of the reservoir was a felt need in those days and people and the government officials welcomed the scheme. The fruits of the outcome were not equitably distributed to all the intended beneficiaries.

During those days the tank fed villagers had more number of cattle flocks and more land under their cultivation. One of the reasons was that in earlier days we could find that there was rainfall throughout the year with regular intervals and there wasn't any blockage in the flow of water to these tanks and villagers lived happily enjoying certain rights from the tanks. But as days passed the entire scenario changed and people started to sell their property and the state of indebtedness increased among the villagers. During the last three years the condition has become worst in the tank villages. As an outcome, many villagers have migrated to other places in search of employment and settled elsewhere.

Most of the irrigated lands in the original tankfed areas are now being wasted and idling due to lack of sufficient water. It is notable that even though the area has adequate and enough rainfall to make the tanks fill in a normal year they are unable to utilize them for the reason that the reservoir controls the entire flow in the stream.

Court Case

The direct ayacutdhars have filed a case against the PWD stating that they should always get the first right of water from the reservoir. The case is in the court at the stages of trial. The new ayacutdhars claim that, according to the rules framed by the government when the project was planned the fixed ratio of 17:8 in utilizing the reservoir water they are not getting the same. In a way the new ayacutdhars claim more from the reservoir than what they are getting presently and hence leaving the tanks originally benefiting from the stream into a lurch.

The study of the Peria Aruvi Reservoir will make one wonder how new projects are planned when there is little scope for the same. After planning and implementing such projects much against the customs existing in the area they become the sole and major reason in dismantling the historically old and well performing tanks and their dependent livelihoods. In essence the project has resulted in spoiling more than what it has brought new to the area solely because of its negligence in understanding the customs, practices and riparian rights.

Annexure- 1

Rules and Regulations of the Periya Aruvi Reservoir

The Periya Aruvi Irrigation scheme was sanctioned in G.O.Ms.No. 2447 Food And Agriculture Department dated 21-07-1062 and completed in the year 1966. It has a direct ayacut of 170 acres in Kesampatty village and an indirect ayacut under 25 tanks spread out in Kesampatty, Kambur, Pattur and Sekkiapatty villages having a registered ayacut of 660,65 acres in single crop.

As per the following rules, the Sub-Divisional Officer, Melur Sub-Division, is authorized to draw water from the Periya Aruvi reservoir according to requirements and demand for irrigation during the single crop period. If the Sub-Division Officer found it essential to draw more than the supply permissible under the rules especially to prevent loss of seedling or to save standing crops, he could draw the extra supply. Also whenever the water level in the Periya Aruvi reservoir rose above the level of 841 m in the reservoir, the Sub-Divisional Officer, Melur is authorized to draw as much as possible to feed all the 25 tanks up to FTL so as to avoid surplus and wastage without the water level in the reservoir following below 840.50.

With the completion of the Periya Aruvi reservoir with a storage capacity of 23.6 Mc.ft. In the year 1966 and excavation of channel with sill of channel sluice at 815.00 with a carrying capacity of the channel of 9 Cusec and the direct ayacut of 170 acres will be brought under cultivation.

The present scheme provides for utilizing the discharges drawn during the irrigation season from 1st November to 28th February, with the end of the irrigation season, the entire storage in the reservoir will be depleted to feed the 25 tanks.

The Periya Aruvi reservoir shall be under the control of Executive Engineer PWD, Madurai Division, Madurai:

- (a) Irrigation demands shall have the first right and shall be passed down in full, without modification or alteration.
- (b) Up to 9/C/s can be drawn in the head sluice without referring to Executive Engineer, Madurai by the Sub-Divisional Officer. The Executive Engineer shall obtain any increase in discharge on approval.
- (c) The average quantity of water drawn daily shall be reported daily by the operator to the Sub-Divisional Officer and Executive Engineer by post.

The Periya Aruvi reservoir shall be opened for irrigation on 1st November and closed on 28th February.

The demand for irrigation of the entire irrigation system for the various periods shall be as detailed below:

| | Period | Direct Ayacut |
|----------|---------------|----------------------|
| November | I Half | 9 C/s |
| | II Half | 9 C/s |
| December | I Half | 9 C/s |
| | II Half | 9 C/s |
| January | I Half | 9 C/s |
| | II Half | 9 C/s |
| February | I Half | 9 C/s |
| | II Half | 9 C/s |

During irrigation season, the Sub-Divisional Officer, Melur shall draw from Periya Aruvi, a total of 80/7 – 11.5 Mcft required for irrigation in the lower down tanks to supplement their requirements. During 1st March to 30th September during non-irrigation period, the water will be let out to lower down tanks. Till the construction of masonry weir upstream across Periya Aruvi total flow into the reservoir will be computed from the water levels in the reservoir at 6.00 a.m between 2 successive water levels. The river sluice shall be opened ordinarily at 6.00 a.m to 12.00 noon and 6.00 p.m daily. And if circumstances warrant the regulations may be done at closer intervals to meet the requirements. While issuing water from the reservoir care will be taken to see that the water level does not decrease more the 2 feet per day.

The discharge prescribed in the above rules are the quantities to be realized at crop No.1 of the channel. Whenever the demand for water is beyond the irrigation period the supply is needed for crop which otherwise may die and enough supply could be spared without affecting other lower down interest, The Executive Engineer, Madurai Division can allow such supplies.

The storage of Periya Aruvi reservoir above 815.00 M will be shared between direct and indirect ayacut in the ratio of 17:8 (direct ayacut being 170 acres and indirect ayacut gap being 80 acres) and the discharge for the direct and indirect ayacut will be regulated accordingly.

The reading of level in the reservoir and the channel shall be recorded at 6.00 a.m, 12.00 noon, and 6.00 p.m in the relevant forms and registers. Any intermediate change in the regulations shall be noted in the form.

During floods, a set of readings at mid night shall also be recorded. In addition, a set of readings shall also be recorded when the flood reaches the maximum.

As a general rule the river sluice shall be operated in the case of moderate floods. When such flood raise seems probable section officer in-charge will be free to open the river sluice to endeavor scouring away if shoals or keep open effective approach to river sluice.

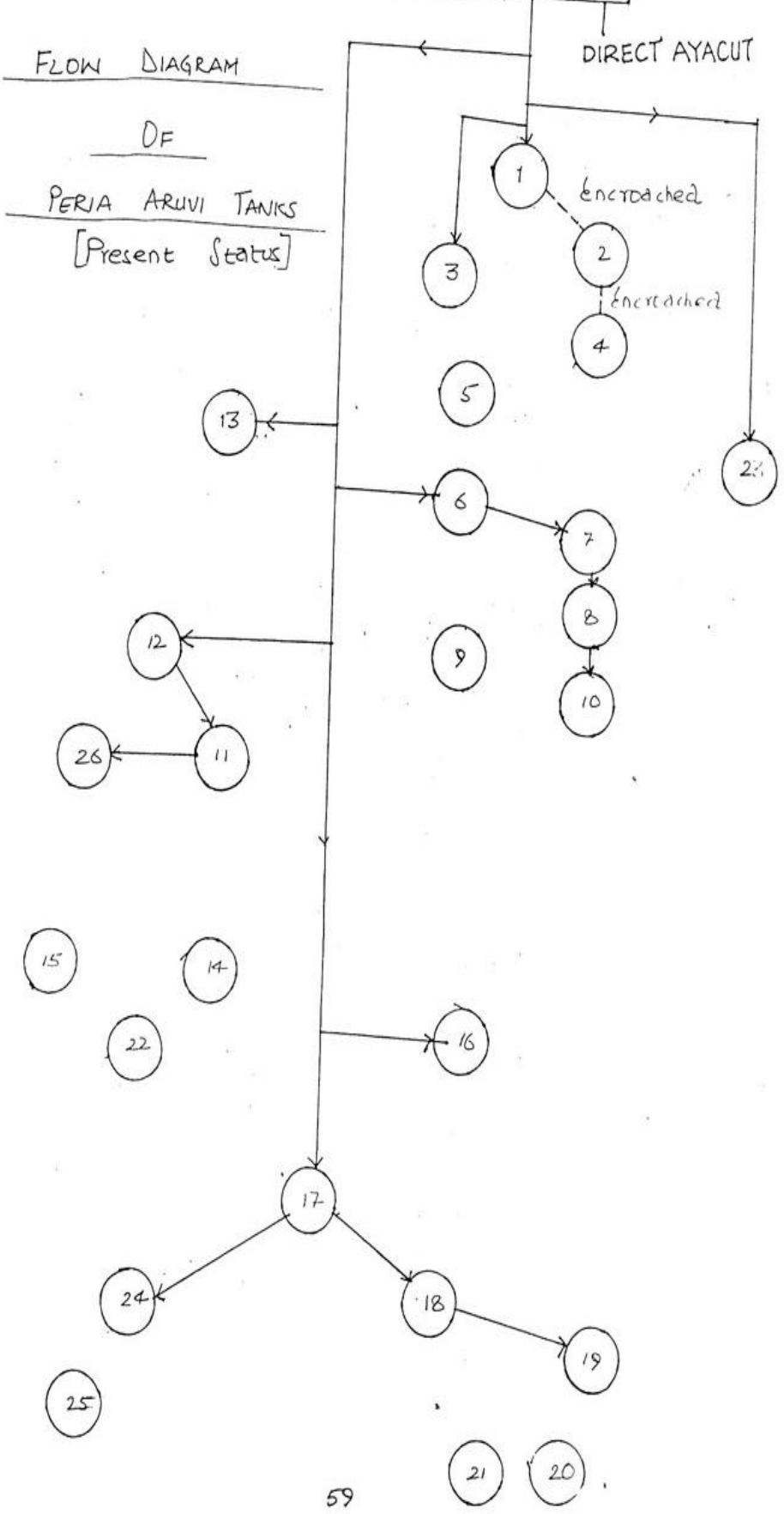
Notwithstanding the rules mentioned above the Executive Engineer may at times of rainfall in the irrigated area reduce the supply below the permissible rates or order a complete shut down of supplies and at circumstances, it may washout.

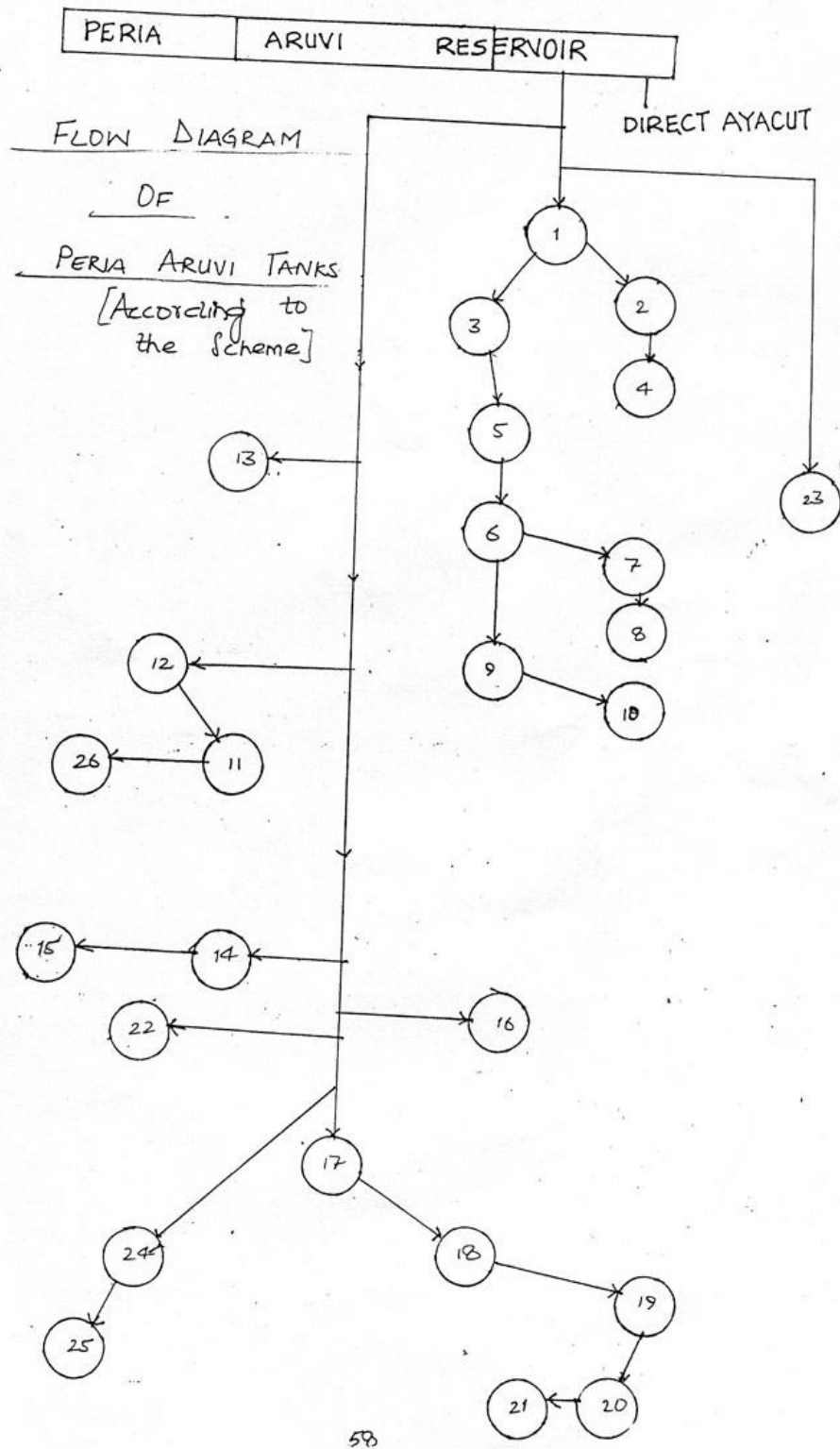
The section officer in-charge will be held responsible for the observation of the above rules and he is expected to take responsibility and to take such steps as may be necessary as to meet any emergency not herein provided for. Whenever he is away he will nominate a responsible officer to do his duties in his absence.

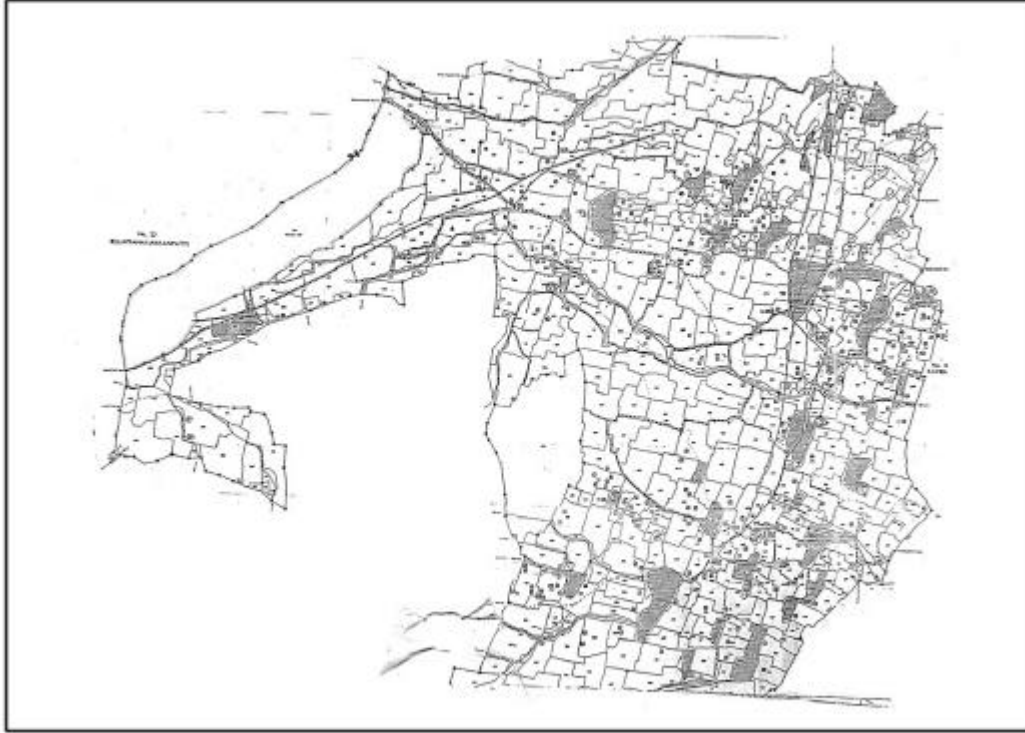
PERIA ARUVI RESERVOIR

ai

FLOW DIAGRAM
DF
 PERIA ARUVI TANKS
 [Present Status]







Part IV

**Issues related to Customs, Rights
and Management in a Macro level
system:**

Vaigai system

Twisting and Turning the Customary and Riparian Rights in a Tank intensive basin: Case of the Vaigai River Basin System

River Vaigai originates from Varusha Nadu hills within the Gandamanur Zamindari limits at an altitude of 1525 m above MSL. Three tributaries, Palar, Periyar and Koraliar join the river in the hilly reaches. After running in a northeasterly direction for a length of 64 km through Gandamanaickanur and Srivilliputhur reserve forests, the river enters the plains. The rivers Suruliar and Theniar, which originate from the western ghats and pass through the Cumbum Valley join the Vaigai in the plains. Varshanadhi, Varattar, Pambar, Marudhanadhi, Manjalar, Sathiar odai and Uppodai are the tributaries which enrich the river. The river traverses a total length of 250 km and finally empties itself into Ramanathapuram big tank, the surplus of which flows into Gulf of Mannar. The river basin covers an extent of 7031 km². The width of the basin varies from 6 to 50 km. Vaigai river and its tributaries run in a valley upto the Peranai, from where irrigation had been developed to a large extent on either side of the river.

Irrigation Development

The irrigation development under Vaigai river system had undergone many changes. It can be classified into six stages.

1. Prior to the construction of Periyar dam (upto 1895).
2. After construction of Periyar dam and before the construction of Vaigai dam (1895 – 1959).
3. After construction of Vaigai dam and subsequent developments (1959 – 1970).
4. Modernisation of Periyar System 1977 – 1990.
5. Modernisation of Vaigai Channels (1970 – 1979).
6. Water Resources Consolidation Project (1994 till date).

} Discussed under
section 2

Stage 1: Prior to the Construction of Periyar dam (upto 1895)

Irrigation under Vaigai river system was developed by Pandia kings and later by the Sethupathies of Ramanathapuram Zamind. Prior to the construction of Periyar lake, irrigation under Vaigai River system was a run of the river system, utilizing the flash flows of the river through open off take channels. Channels had been dug to feed tanks even outside the basin wherever the levels permitted, since the ridges that divide Vaigai basin and adjoining Gundar and Saruguniar basins are low. Apart from this, innumerable tanks were created in the drainage basin of the river, which had intercepted the land surface runoff from the monsoonic rains before its infall into the river. Thus it can be seen that the irrigation development under Vaigai system can be classified into two categories, one by intercepting the basin run off through tanks directly before its infall into the river and the other by diverting the river flows by open off take channels to tanks and direct ayacuts. The number of tanks were about 3000 and their total capacity was sufficient enough to absorb the total run off of the basin with about two fillings. Hence the local people described Vaigai river as a river which does not fall into the sea as it ends in Ramanathapuram big tank.

During the earlier period, only two anicuts were built to head up water to command the canals. These canals were feeding mostly through the tanks with a very small direct ayacuts. Other than that, there was no storage systems like dams or reservoirs across the river. Thereby any one can understand the development of tanks in conjunction with the river system in wider area spanning hundreds of kilometers. The ecosystem prevalent then was able to provide a continuous and reliable flow in the river during the monsoon upto its tail reaches, which had been changed subsequent to the developments that had taken place. The system behaved well providing an assured supply of water from the river to the dependent tanks in 7 out of 10 years. The table shows that before these modern reservoirs were built, for 20 out of 28 years with 71.43 per cent success (vide annexure -1). The system's performance was mainly through the supply to the tanks from the river.

Stage 2: After Construction of Periyar Dam but before the Construction of Vaigai dam (1895 – 1959):

The basin area on the left side of the river in Nilakottai, Madurai north and Melur taluks were repeatedly drought prone areas as all the tanks were small without supplementation by any major streams. These areas fell under the jurisdiction of the British Government. As there were heavy revenue losses due to famines, the British Government took up the Periyar project by constructing a dam across the west flowing river Periyar in Kerala, and diverting the water through a tunnel which fall into Suruliar, a major tributary of Vaigai river. The Periyar water is allowed to flow through the Suruliar river and then through Vaigai river up to Peranai. A new channel called Periyar main canal was excavated by widening the Vadakarai channel and extending it to Melur taluk to irrigate a total command of 130000 ac with 45000 ac (18211 ha) double crop and 85000 (34399 ha) single crop. Such an arrangement had changed the flow pattern of Vaigai river in the lower reaches. The British Government used the mixed waters of Periyar lake and Vaigai river to the best interest of ayacut under its territory and against the interest of farmers of Sivaganga and Ramanathapuram districts.

A dispute between the British Government and the erstwhile states of Sivaganga and Ramanathapuram as lower riparian states came to the court over the usage of Vaigai waters as early as 1906 when the British Government started the construction of a Regulator with shuttering arrangements in place of a masonry structure called Peranai which was built by Pandia king Parakrama Pandian in the twelfth century. A suit was filed objecting to the construction of the regulator and diversion of water to the Periyar main canal. The case filed in the high court was referred as Fisher suit.

The judgement of the high court as per G.O. MS. No.577 dt.1.3.1909, pronounced the right to utilise 1750 cusecs at every freshes in the Vaigai during 52 floods to the benefit of the old Vaigai command which were included in the Periyar ayacut to an extent of 11000 acres comprising Vadagarai channel and ten channels lower down the Peranai regulator and not for any other tenements.

The judgement pronounced did not specify the period of flow during each flood. Further it was technically impossible to divert the flow at the rate of 1750 c/s through the head sluices of the eleven channels including the Vadagarai channel, as their total discharge capacity as only 350 cusecs. Even as per the water requirement for group, the water required to irrigate 11000 acres of paddy crop will be only 305 cusecs.

The system behaved well during 15 out of 27 years with 57.7 per cent success during the years 1908 - 1909 to 1934 – 1935. This is considering the irrigation requirement of Vaigai river system (below Peranai) as 10 TMCft (vide annexure-2).

If water allowed in Periyar main canal at Peranai regulator is restricted to the tunnel discharge, the discharge in Vaigai river would have been more than 10 TMC in the years 1917 – 18, 1918 – 19 and 1920 – 21 also and the success rate would have been 69.2 per cent. The reduction in realisation of Periyar lake tunnel discharge at Peranai regulator would not have affected the crops in both Periyar system and Vaigai river system in these 27 years.

The availability of water for Periyar main canal is worked out as follows:

- “Deducting 1740 MCft towards evaporation loss in Periyar lake and 1490 MCft as transit loss, upto Peranai, the point where irrigation use is to start, the quantity that would be available for irrigation was estimated as 29,670 MCft for planning purposes”. (Vide P73 of history of Periyar dam with century long performance authored by Prof.A.Mohanakirshnan).
- Further, in the history of Periyar dam project (P117) it is mentioned that the “Cumbum valley ryots are to be allowed to take what water they wish for the existing wet cultivation, but no extension of the latter is to be permitted”.

From the above it can be deduced that the quantum of water to be allowed to Periyar main canal below Peranai regulator should be less, by the above quantity (about 2000 MCft), than the tunnel discharge from Periyar lake. Considering the water requirement of 11000 acres (2000 MCft) of old Vaigai command which is now included in Periyar main canal, this reduction of 2000 MCft can be waived and the Periyar Main canal discharge needs to be equal to the tunnel discharge but not more, as has been allowed so far.

Stage 3: After the Construction of Vaigai Dam and Subsequent Development (1959 – 1975)

After the Periyar system was working for a period of more than 50 years, it was found that more water was overflowing through Periyar dam surplus regulator into the Arabian sea. Therefore it was decided to divert the surplus water for beneficial use by widening the tunnel to discharge more water and also to reduce the carry over storage at Periyar dam.

To store the extra water so diverted, the construction of the Vaigai dam was proposed 8.5 km below the junction of Suruliyar and Vaigai river near the village Narasingapuram in Periakulam taluk, with a storage capacity of 6800 MCft (192.58 MCu.m). The tunnel widening was carried out while Vaigai dam was constructed during 1959.

A new command of 4202.35 ha (10384 ac) in Thirumangalam taluk, 4627.3 ha (11,434 ac) in the extension area and also for regularising the hard cases within the original command of the Periyar main canal and 405 ha (1000 ac) in Cumbum valley were proposed under Vaigai dam project.

The mingling of Periyar lake water, Suruliyar catchment flows and Vaigai river flows which were all stored in Vaigai dam, created problem in allocating the quantum of water that had to be diverted to the Periyar system (Periyar credit) and Vaigai river system (Vaigai credit).

The development of new command areas below Vaigai reservoir and above the Peranai regulator under Manjalar dam and Marudhanadhi dam projects and other minor irrigation projects further reduced the quantum of water available for irrigation in the lower Vaigai river system.

The total quantity of water let down below Peranai regulator into the Vaigai river, before the construction of Vaigai dam from 1934 – 35 to 1953 – 54 (20 years) and flows in Vaigai river after the construction of Vaigai dam for the period from 1986 – 87 to 1999 – 2000 (14 years) were analysed, based on the water requirement of the command as 10 TMC. (Total Command below Peranai in Vaigai river is 133400 ac). Based on a normal duty of 6 acres per million cft, the total irrigation requirement is 22233 MCft. Taking river water supply as 50per cent and free catchment as 50per cent on an average, the river water supply works out to 11117 MCft. Out of this, deducting the contribution of Sathiar odai, Uppodai and other streams below Peranai to the Ramanathapuram big tank, the irrigation water requirement is assumed as 10 TMC at Peranai regulator, as also confirmed by PWD Engineers who worked in the tail end areas).

The dependability of this quantity (10 TJMC) before the construction of Vaigai dam was 11 years out of 20 years at 55.0per cent (vide annexure-3).

After the construction of Vaigai dam, the dependable yield available was for 5 years out of 14 years at 35.7per cent only (vide annexure-4).

One of the main reasons for the reduction of dependable yield is the specific allotment of water to Periyar credit at the Palanichettipatti (PCP) anicut at the tail end of Suruliyar river through twisting the rules of the game in adverse effect to the tanks.

The rules of regulation as approved in G.O., MS No.1689 PWD dt.22.11.1974 under para 28 note (1) states.

“The flows passing down the Palanichettyatty anicut across the Suruliyar and recorded daily at 4.00a.m., 8.00 a.m., 12.00 noon and 4.00 p.m., 8.00 p.m., 12.00 mid night shall be deemed to be Periyar waters”.

The water measured at this point as stated above includes the Periyar lake water received through the tunnel and also the rain water from the Suruliyar river catchment runoff, **which customarily belongs to Vaigai river system.**

The then Chief Engineer irrigation in his endorsement no.5617/51/D1 dt. 2nd January 1952 on the proposed Vaigai reservoir project had stated as follows:

“The river receives supply from Periyar lake through the tunnel in the range hills dividing Periyar and Vaigai watersheds and this Periyar supply only is proposed to be impounded”.

Notwithstanding the above endorsement of the then Chief Engineer the rules of regulation as per para 28 note (1) has been framed and this has resulted in the loss to Vaigai credit as presented in annexure -5.

During November 1989, the three Superintending Engineers (Madurai circle, Sivaganga circle and Aruppukottai circle) discussed the changes required to the rules of regulation and unanimously decided as follows: (Vide Madurai circle S.E.’s letter no.AET/51/2/89/791 dt.20.12.1989 communicating the minutes of the meeting).

- “The flows passing down the Palanichettyatty anicut across the Suruliyar and recorded at 4.00 am, 8.00am, 12.00 noon, 4.00 pm, 8.00pm and 12.00 mid night shall be declared to be Periyar water, limited to the Periyar lake discharge through the tunnel”.

- “The Standing Irrigation Water Resources Commission (SIWARC) had objected to the change of rules on the plea that the Cumbum valley ayacut was getting water from Suruliyar sub basin even prior to the construction of the Periyar dam and it was entitled to the Suruliyar waters (only).
- In the history of Periyar dam project (P117) it is mentioned that the Cumbum valley ryots are to be allowed to take what water they wish for the existing wet cultivation, but no extension of the latter is to be permitted”.

As analysed in the history of Periyar dam project, soon after the construction of Periyar dam, the Cumbum valley ryots were given this concession to use Periyar tunnel water. Hence the contention of SIWARC about the Cumbum valley ayacut getting Suruliyar water (only) even the prior to construction of Periyar dam is not tenable. As the British Government itself has given this concession, the objection of “SIWARC” has to be over ruled and the rule under para 28 note (1) requires change.

Stage 4 : Modernisation of Periyar – Vaigai Irrigation System

The modernisation of Periyar – Vaigai irrigation system phase 1 and 2 was meant to improve its operational performance efficiency and minimise losses. While it did improve the Periyar system, this project has not improved the Vaigai river system. The improved operational efficiency of Periyar has resulted in the reduced return flow and drainage into the Vaigai river through the Sathaiar odai, Uppodai and other streams, which join as Vaigai river.

An Analysis of the Twists in the Rules and Required Changes for Remedy

The Lower Vaigai Basin irrigation is a man made water starved system, due to the mingling of Periyar reservoir water with Vaigai river water and the constraints imposed by the existing rules of regulation.

In order to improve the performance of the Vaigai river basin some changes in the rules of regulation are necessary to restore the riparian rights of lower down command area farmers and also to improve the operational efficiency of the system without any financial investment.

The modifications to the rules of regulation, approved in G.O.MS.No.1689 PWD dated 22nd November 1974 are detailed below.

| Present rules of regulation | Suggested changes in the rules | Remarks |
|---|--|---|
| <p>Para 28, note (i) of rules of regulations of Vaigai Basin states that the flows passing down the Palanichettipatti anicut across the Suruliar and recorded daily at 4.00 am, 8am, 12.00 noon, 4.00 pm, 8.00 pm and 12 mid night shall be declared to be Periyar water.</p> | <p>Para 28, note (i) The flows passing down the Palanichettipatti anicut across the Suruliar and recorded daily at 4.00 am, 8 am, 12 noon, 4 pm, 8 pm and 12.00 mid night shall be declared to be Periyar water limited to the Periyar lake discharge through the tunnel and the pick up weir.</p> | <p>The suggested change is in accordance with the then Chief Engineer's endorsement no.5619/51/D1 dt. 2nd January 1952, in which the proposal and estimates for the construction of Vaigai dam were sent to Government. (viz 2.1.3.6)</p> |
| <p>Para 35 At times of need, the Vaigai credit available in the Vaigai reservoir could be utilised for he Periyar ayacut, subject to the condition that the quantity so drawn is restored to the Vaigai credit.</p> | <p>Para 35 – At times of need, the Vaigai credit or Periyar credit available in the Vaigai reservoir could be utilised for either of the ayacuts, subject to the condition, that the quantity so drawn is restored to the respective credit from which water is drawn.</p> | <p>The suggested change will benefit both the command areas of Periyar and Vaigai credits reciprocally and will not infringe upon the existing water rights of the others.</p> |

The storage capacity of Vaigai dam is 6800 MCft (192 MCm). Out of this, the storage space fixed for Periyar credit and Vaigai credit at Vaigai dam as per rules of regulation is 113 MCm and 79 MCm respectively for the whole year. Instead, 5000 MCft (141.58 MCm) of storage space can be provided for Vaigai credit during the northeast monsoon period to absorb the flood flows of Vaigai river. The period of storage of this quantity may be from 1st October to 31st March. Similarly, during summer and southwest monsoon periods 141.58 MCm storage space can be provided for Periyar credit at Vaigai dam to absorb the flood flows of Periyar river from 1st April to 30th September.

Between the years 1973 to 2000, (28 years) the Vaigai flood flows had gone to sea during 10 years (vide table 7). If those flood flows were stored they could have been utilized for irrigation during those years as well in the succeeding years. Thus more water would have been available for Vaigai river command and successful irrigation would have taken place in 15 years out of 28 years (the rate of success would have been 53.57 per cent instead of 35.71%). This would be equivalent to restoring the dependable flow of 55 per cent that existed before the construction of Vaigai dam.

This suggestion is also in conformity with the recommendation of Prof. A.Mohanakrishnan made in his book, (History of the Periyar dam with century long performance – P 179) as given below. “The only solution to improve the situation appears to be better integrated management of the water resources generated in the Vaigai basin and that brought in across the hills from the Periyar basin. Conjunctive use of surface and ground water is also to be encouraged to the extent possible”.

The suggested change to provide more storage space for Vaigai credit and Periyar credit at different periods will facilitate flexibility in the operation of the system which will result in a higher

operational efficiency and more equitable distribution of water supply to both the command areas. The rules of regulation, approved in G.O.M.S.No.1689 PWD dated 22nd November 1974 are to be suitably modified as follows.

| Present rules of regulation | Suggested changes in the rule |
|--|---|
| <p>Para 19. The waters so released for power development during the non irrigation season shall be stored in the Vaigai reservoir for the benefit of Periyar ayacut in the ensuing irrigation season up to a maximum of 4000 MCft (113 MCm). Storage of Periyar water in excess of 4000 MCft (113 MCm) may be permitted if sufficient Vaigai water is not available for storage – vide also rule 30.</p> | <p>Para 19. The water so released for power development during the non irrigation season shall be stored in the Vaigai river for the benefit of Periyar ayacut in the ensuing irrigation season up to a maximum of 5000 MCft (141.58 MCm) during the period 1st April to 30th of September. Storage of Periyar water in excess of 5000 MCft (141.58 MCm) may be permitted if sufficient Vaigai water is not available for storage vide also para 30.</p> |
| <p>Para 29. Vaigai credit – The total inflows thus impounded under rule 26 to 28 and reckoned as per definition in the note under rule 28 shall be deemed as Vaigai waters and this shall not exceed 2800 MCft (79 MCm) at any time. The Vaigai waters so impounded shall be let down for the benefit of the old ayacut under the Vaigai river at such rates as decided by the Executive Engineer, Periyar – Vaigai Division.</p> | <p>Para 29. Vaigai credit – The total inflows thus impounded under rule 26 to 28 and reckoned as per definition in the note (ii) under rule 28 shall be deemed as Vaigai waters. The revised note (i) under rule 28 shall be deemed as Periyar water. The Vaigai water so impounded shall be let down for the benefit of the old ayacut under the Vaigai river at such rates as decided by the concerned Executive Engineers – Vide also para 30.</p> |
| <p>Para 30. A quantity greater than 2800 MCft (79 MCm) of Vaigai credit can be impounded in the Vaigai reservoir provided that when Periyar flows are to be accommodated, the excess Vaigai storage shall be let down restricting the Vaigai credit to 2800 MCft (79 MCm). Conversely when Periyar water is stored in the Vaigai reservoir in excess of 4000 MCft (113 MCm), Periyar water shall be let down to admit storage of Vaigai water restricting the Periyar credit to 4000 MCft (113 MCm).</p> | <p>Para 30. In Vaigai dam the storage of Vaigai water shall be 5000 MCft (141.58 MCm) during the period of 1st October to 31st March and storage of Periyar water may be restricted to 1800 MCft (50.97 MCm). Similarly the storage of Periyar flow shall be 5000 MCft (141.58 MCm) during the period of 1st April to 30th September and the storage of Vaigai water shall be restricted to 1800 MCft (50.97 MCm). A quantity greater than that mentioned above for each of the Periyar and Vaigai credits can be impounded in the Vaigai reservoir provided there is storage space. The excess quantity thus impounded in Vaigai reservoir shall be let down for irrigation downstream. Such integration of the Vaigai and Periyar credits will make the operation more flexible to utilize the excess water stored from either of the two credits usefully.</p> |

Note: This suggested change will not infringe upon the existing water rights of the others .

Annexure 1

Periodical fillings of Vaigai river obtained from Nelson's Manual and from the Estate records

| | |
|-----------|--|
| 1850 – 51 | This year the Vaigai filled well |
| 1851 – 51 | This year Vaigai never filled rapidly |
| 1852 – 53 | There were good freshes in the Vaigai from time to time – All the tanks dependent on the river were well filled. |
| 1861 – 62 | Famine |
| 1862 – 63 | The Vaigai came down in continuous freshes month after month during the greater part of the year, a thing unknown to the oldest inhabitant. |
| 1866 – 67 | Famine |
| 1867 – 68 | There were good freshes |
| 1868 – 69 | The Vaigai was full |
| 1869 – 70 | |
| 1870 – 71 | |
| 1871 – 72 | |
| 1872 – 73 | The Vaigai was full in these years |
| 1874 – 75 | |
| 1875 – 76 | |
| 1876 – 77 | |
| 1877 – 78 | Famine |
| 1877 – 78 | Extraordinary freshes in the river Vaigai in December when almost all the tanks under it breached. |
| 1878 – 79 | |
| 1879 – 80 | Fresh came down the river vaigai in these years |
| 1880 – 81 | |
| 1881 – 82 | The Vaigai was dry about Ramnad |
| 1882 – 83 | The Vaigai was quite dry during the greater part of the year, there were considerable and extraordinary freshes in the river in February and May, which breached many of the tanks under it. |
| 1883 – 84 | High freshes in the Vaigai in November. It filled the Ramnad tank to the brim in two days. |
| 1884 – 85 | In October the freshes in the Vaigai were unprecedented and filled the tank in 8 hours, a thing unknown to the oldest inhabitant, and there were continual freshes also in November and December. Many tanks breached. |
| 1885 – 86 | There was not much water in the Vaigai. |
| 1886 – 87 | Slight freshes in the Vaigai. |
| 1887 – 88 | There were high freshes in the Vaigai and many tanks breached |
| 1888 – 89 | The Vaigai filled well. |

Source: PWD, Periyar Vaigai division, Madurai

Annexure 2

Discharges at various places in the Vaigai Basin

(million cubic feet)

| S. No. | Year | Periyar lake water discharge through tunnel | Periyar main canal discharge below Peranai | Excess (+)/ Deficit (-) discharge in PMC over tunnel discharge | Vaigai river discharge through regulator and sand vent |
|--------|-----------|---|--|--|--|
| 1. | 1908 - 09 | 16,784 | 20,359 | +3,575 | 5,433 |
| 2. | 1909 - 10 | 23,105 | 23,169 | +64 | 8,546 |
| 3. | 1910 - 11 | 15,814 | 18,295 | +2,481 | 28,864 (1) |
| 4. | 1911 - 12 | 18,639 | 21,978 | +3,337 | 5690 |
| 5. | 1912 - 13 | 19,977 | 22,910 | +2,923 | 13,521 (2) |
| 6. | 1913 - 14 | 17,018 | 20,349 | +3,331 | 3081 |
| 7. | 1914 -15 | 15,348 | 21,546 | +6,198 | 20,291 (3) |
| 8. | 1915 -16 | 22,375 | 22,286 | -89 | 10,540 (4) |
| 9. | 1916 -17 | 23,244 | 24,023 | +775 | 4,132 |
| 10. | 1917 -18 | 17,683 | 20,472 | +2,789 | 8,128 |
| 11. | 1918-19 | 18669 | 21,711 | +3,042 | 7,605 |
| 12. | 1919 -20 | 24,123 | 23,832 | -291 | 17,085 (5) |
| 13. | 1920 -21 | 21,704 | 22,749 | +1,045 | 9,003 |
| 14. | 1921- 22 | 22,055 | 21,684 | -371 | 6,358 |
| 15. | 1922 -23 | 22,523 | 20,735 | -1,788 | 43,859 (6) |
| 16. | 1923 -24 | 26,278 | 25,544 | -734 | 10,304 (7) |
| 17. | 1924 -25 | 26,905 | 26,504 | -734 | 10,304 (8) |
| 18. | 1925 -26 | 23,583 | 24,010 | -427 | 21,627 (9) |
| 19. | 1926 -27 | 21,216 | 19,863 | -1,353 | 2,693 |
| 20. | 1927 -28 | 26,630 | 24,856 | -1,774 | 8,368 |
| 21. | 1928 -29 | 21,516 | 19,378 | -2,138 | 13,689 (10) |
| 22. | 1929 -30 | 24,957 | 20,832 | -4,125 | 24,505 (11) |
| 23. | 1930 -31 | 20,936 | 20,722 | -214 | 45,125 (12) |
| 24. | 1931 -32 | 24,222 | 21,879 | -2,343 | 28,264 (13) |
| 25. | 1932 -33 | 28,083 | 23,956 | -4,127 | 20,639 (14) |
| 26. | 1933 -34 | 25,802 | 28,377 | +2,575 | 50,322 (15) |

Source: PWD, Periyar Vaigai division, Madurai

Annexure - 3**Flow in Vaigai below Peranai regulator****(all figures in Million Cubic foot)**

| Year | June | July | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Total |
|-------------|-------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------------|
| 1934-35 | 231 | 188 | 179 | 126 | 2678 | 970 | 45 | 48 | 10 | 164 | 681 | 234 | 5,554 |
| 1935-36 | 7 | 72 | 154 | 48 | 638 | 4170 | 513 | - | 294 | 2602 | 2809 | 551 | 11,858 (1) |
| 1936-37 | 95 | 575 | 111 | 604 | 1799 | 25323 | 1438 | 37 | 565 | 562 | 1802 | 2341 | 35,252 (2) |
| 1937-38 | 1 | 128 | 10 | 219 | 242 | 3,079 | 28 | - | 66 | 336 | 713 | 610 | 5,432 |
| 1938-39 | 35 | 244 | 155 | 20 | 91 | 25 | 256 | 14 | 27 | 557 | 1112 | 185 | 2,701 |
| 1939-40 | 39 | 31 | 55 | 30 | 2200 | 9127 | 24 | 0 | 99 | 173 | 2007 | 3723 | 17,508 (3) |
| 1940-41 | 23 | 77 | 110 | 451 | 895 | 15512 | 1790 | 694 | 24 | 136 | 273 | 92 | 20,077 (4) |
| 1941-42 | 89 | 514 | 74 | 629 | 999 | 3435 | 508 | 5 | 43 | 254 | 2251 | 227 | 9,028 |
| 1942-43 | 28 | 81 | 102 | 260 | 1156 | 732 | 1369 | 11,196 | 465 | 223 | 1082 | 393 | 17,087 (5) |
| 1943-44 | 156 | 613 | - | 109 | 3242 | 934 | 160 | - | 264 | 3726 | 1935 | 143 | 11,282 (6) |
| 1944-45 | - | - | 4 | 1234 | 5461 | 14342 | 6805 | - | 7 | 58 | 14522 | 4808 | 47,241 (7) |
| 1945-46 | 749 | 17 | 57 | 15 | 2388 | 9331 | 137 | 4 | 9 | 225 | 206 | 71 | 13,209 (8) |
| 1946-47 | 48 | 18 | 50 | 29 | 1098 | 5123 | 9404 | 325 | 153 | 904 | 8367 | 4155 | 29,674 (9) |
| 1947-48 | 287 | - | 184 | 13 | 7297 | 359 | 97 | 2233 | 782 | 213 | 177 | 201 | 11,843 (10) |
| 1948-49 | 207 | 2 | 926 | 11 | 737 | 6399 | 103 | - | 8 | 24 | 1406 | 906 | 10,729 (11) |

DHAN Foundation, Madurai

| Year | June | July | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Total |
|---------|------|------|-----|------|------|------|-----|------|-----|------|------|------|--------------|
| 1949-50 | - | 29 | 41 | 38 | 706 | 663 | 5 | 9 | 31 | 421 | 355 | 192 | 2,490 |
| 1950-51 | 87 | 91 | 63 | 22 | 572 | 142 | 70 | 15 | 17 | 208 | 2845 | 2719 | 6,851 |
| 1951-52 | 4 | 90 | 20 | 1003 | 994 | 4399 | 503 | 3 | 325 | 923 | 394 | 37 | 8,695 |
| 1952-53 | 25 | 90 | 86 | 83 | 96 | 97 | 84 | 79 | 12 | 47 | 2302 | 335 | 3,336 |
| 1953-54 | 120 | 97 | 16 | 95 | 2261 | - | - | 1229 | 15 | 1959 | 964 | 1846 | 8,602 |

Source: PWD, Periyar Vaigai division, Madurai

Note: The requirement of 10MCft is surpassed only in 11 out of 20 years. An interpretation of the data is that the success of tanks in Vaigai getting filled only by 55% during these two decades. This shows a decline from the previous stage.

Annexure- 4**Flow in Vaigai Below Peranai Regulator**

all figures in MCft

| Year | June | July | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Total |
|---------|------|------|-----|-----|------|------|-------|------|------|------|-----|-----|------------------|
| 1986-87 | 213 | 192 | 149 | 538 | 91 | 164 | 301 | 130 | 222 | 66 | 70 | 177 | 2313 |
| 1987-88 | 116 | 123 | 102 | 102 | 395 | 2896 | 2720 | 1599 | 665 | 64 | 408 | 170 | 9360 |
| 1988-89 | 103 | 75 | 67 | - | 12 | 4 | 777 | 95 | 70 | 257 | 54 | 64 | 1578 |
| 1989-90 | 148 | 109 | 441 | 269 | 945 | 1495 | 702 | 1019 | 119 | 1605 | 139 | 373 | 7364 |
| 1990-91 | 200 | 206 | 166 | 112 | 524 | 746 | 2861 | 601 | 370 | 157 | 216 | 203 | 6362 |
| 1991-92 | 164 | 251 | 154 | 248 | 135 | 153 | 218 | 624 | 94 | 78 | 134 | 85 | 2338 |
| 1992-93 | 294 | 170 | 255 | 210 | 1701 | 6321 | 281 | 658 | 1474 | 192 | 221 | 192 | 11969 (1) |
| 1993-94 | 138 | 230 | 177 | 72 | 557 | 9847 | 778 | 150 | 94 | 2025 | 357 | 233 | 14658 (2) |
| 1994-95 | 199 | 271 | 293 | 280 | 436 | 9264 | 1421 | 671 | 254 | 65 | 74 | 178 | 13406 (3) |
| 1995-96 | 71 | 140 | 112 | 127 | 128 | 46 | 142 | - | - | - | 33 | 113 | 912 |
| 1996-97 | 95 | - | 716 | 91 | 482 | 1178 | 497 | 22 | 9 | - | 134 | - | 3224 |
| 1997-98 | - | - | - | 211 | 1 | 6780 | 7832 | 80 | 10 | 32 | 120 | - | 14966 (4) |
| 1998-99 | 151 | 171 | 24 | 64 | 76 | 2710 | 13802 | - | - | - | 166 | 136 | 17300 (5) |
| 1999-00 | 66 | - | - | - | 2021 | 32 | 660 | 620 | 85 | 68 | - | 4 | 3552 |
| 2000-01 | 27 | 972 | - | 71 | 28 | 206 | 1089 | 22 | - | - | 119 | 132 | 2668 |

Source: PWD, Periyar Vaigai division, Madurai

Note: The requirement of 10MCft is surpassed only in 5 out of 14 years. An interpretation of the data is that the success of tanks in Vaigai getting filled only by 35.7 % of the times during these fifteen years. This shows a sharp decline from the previous stage and a clear sign of the poor performance of the tanks.

Annexure- 5

**Loss to Vaigai Credit at Palanichettipatty(PCP) Anicut
due to Rules of Regulation para 28 Note I
All figures are in MCft**

| Year | October | | | November | | | December | | | Total Loss of Vaigai Credit |
|------|---------------------------|----------------------------|-----------------------------|---------------------------|----------------------------|-----------------------------|---------------------------|----------------------------|-----------------------------|--------------------------------------|
| | P.C.P. anicut issue | Periyar Tunnel issue | Loss of Vaigai credit | P.C.P. anicut issue | Periyar Tunnel issue | Loss of Vaigai credit | P.C.P. anicut issue | Periyar Tunnel issue | Loss of Vaigai credit | |
| 1965 | 1868 | 1323 | 545 | 1818 | 1811 | 7 | 2504 | 2113 | 391 | 943 |
| 1966 | 3416 | 1970 | 1446 | 2149 | 1076 | 1073 | 1469 | 1109 | 360 | 2879 |
| 1967 | 2389 | 2237 | 152 | 1829 | 1354 | 475 | 1946 | 2256 | - | 627 |
| 1968 | 3541 | 3990 | - | 3285 | 3484 | - | 2636 | 2343 | 293 | 293 |
| 1969 | 2296 | 1854 | 442 | 1912 | 2124 | - | 2790 | 2901 | - | 442 |
| 1970 | 3708 | 2644 | 1064 | 3094 | 3032 | 62 | 2813 | 2370 | 443 | 1569 |
| 1971 | 6340 | 3418 | 2922 | 2621 | 2691 | - | 7362 | 2070 | 5492 | 8414 |
| 1972 | 3072 | 2219 | 853 | 1968 | 1176 | 792 | 2288 | 1685 | 603 | 2248 |
| 1973 | 3147 | 2593 | 554 | 3030 | 2718 | 312 | 4134 | 1878 | 356 | 1222 |
| 1974 | 3035 | 3443 | - | 4050 | 3401 | 649 | 2042 | 2371 | - | 649 |
| 1975 | 3159 | 3725 | - | 3951 | 4035 | - | 2589 | 3806 | - | - |
| 1976 | 176 | 425 | - | 3278 | 1029 | 1249 | 979 | 758 | 221 | 1470 |
| 1977 | 6132 | 2298 | 3844 | 5375 | 3258 | 2117 | 2425 | 2263 | 162 | 6121 |
| 1978 | 3983 | 3445 | 538 | 4129 | 2934 | 1195 | 1636 | 2612 | - | 1733 |
| 1979 | 4791 | 3166 | 1626 | 3939 | 3085 | 854 | 3075 | 2691 | 384 | 2863 |

Source: PWD, Periyar Vaigai division, Madurai

Note: Most of these losses in the Vaigai credit is a loss for the tanks built centuries ago in the drought stricken parts of Ramanathapuram district.

Annexure - 7

Surplus Vaigai River Water flowing to Sea from Ramnad Big Tank

| S. No. | Year | Total Surplus Water in MCft |
|--------|------|-----------------------------|
| 1. | 1973 | Nil |
| 2. | 1974 | Nil |
| 3. | 1975 | Nil |
| 4. | 1976 | Nil |
| 5. | 1977 | 12,400 |
| 6. | 1978 | 2,208 |
| 7. | 1979 | 17,549 |
| 8. | 1980 | Nil |
| 9. | 1981 | 7,030 |
| 10. | 1982 | Nil |
| 11. | 1983 | Nil |
| 12. | 1984 | 5,403 |
| 13. | 1985 | Nil |
| 14. | 1986 | Nil |
| 15. | 1987 | Nil |
| 16. | 1988 | Nil |
| 17. | 1989 | Nil |
| 18. | 1990 | Nil |
| 19. | 1991 | Nil |
| 20. | 1992 | 3,142 |
| 21. | 1993 | 11,534 |
| 22. | 1994 | 7,903 |
| 23. | 1995 | Nil |
| 24. | 1996 | Nil |
| 25. | 1997 | 9,905 |
| 26. | 1998 | 14,285 |
| 27. | 1999 | Nil |
| 28. | 2000 | Nil |