# Informal Vs Formal Panchayats in Managing Common Property Resources: A Case Study of Traditional Drinking Water System "Oorni" in Ramnathapuram District, Tamil Nadu

Jacob George<sup>1</sup>

Traditionally "Oornies" were the major source of potable water in southeast costal Tamil Nadu especially in Ramnathapuram district. The traditional panchayats were responsible for its protection, maintenance and also for equitable distribution of water. The governmental efforts in providing 'safe' drinking water on the one hand and insufficiency of the water provided by the Oornies due to population growth on the other has resulted in neglect of Oornies. However the failure to provide safe drinking water due to salinity of ground water brought back to focus the Oornies. However, the management of 'Oornies' had to be undertaken by the formal panchayats now, as the formal panchayats, constituted by the 73<sup>rd</sup> Constitutional Amendment were responsible for management of CPR and also for provision of potable water. The introduction of formal panchayat into an area were traditional institutions were managing brought in conflicts. The study looks at the various aspects of management of CPRs by formal and informal panchayats and also the people's participation in management of resources.

## **Study Area**

Ramnathapuram, a coastal district in the peninsula -India faces acute drinking water shortage due to salinity of the ground water on one hand and low erratic rainfall (500-700 mm) on the other. Traditionally people in this region used to collect the rain water in 'Oorni' for household purpose and for the cattle. Oorni is a shallow pond like structure, the clay soil of the area neither allows the water in the Ooorni to percolate down nor does it permit the saline ground water to mix up with the Oorni water. Normally, a village has two types of Oornies: the first used only for drinking water/cooking purpose and the second used for bathing, washing and for animals. In a village there can be at times only one (used as multipurpose) to six or seven Oornies depending on population and availability of land etc. Traditionally water is cleaned for drinking,this is done by first collecting the water in an earthern pot (no other material other than earthern pots can be used for this purpose) and a seed which is locally called 'Tathamkottai" is rubbed inside the rough edge of the earthern pot in a rhythmical manner making the water clear allowing the sediments to settle down.

## **Reasons For Neglect Of Oornies**

Even though traditionally Oorni was the only source of potable water in this region it could not cope up with the requirement due to various reasons. One of the reasons is population growth itself, making the per-capita availability of water very low. The impression given by outside agencies, including the government that the Oornies are not a hygienic source is the other reason which led to neglect of this source by the people. In addition, promise of government to provide alternative source of drinking water also resulted in the neglect of Oornies as a source of drinking water by the people.

The attempts by the government since '70s in providing drinking water by bore-wells and overhead water tanks etc. (under Rajiv Gandhi Drinking Water Mission) failed in majority of the cases due to brackishness of the ground water, and other technical and managerial reasons.

By 90s more or less the people realised that the government cannot provide satisfactory solution for their drinking water problem. Government also realised that it may not be easy to provide drinking water in these areas

<sup>&</sup>lt;sup>1</sup> Faculty Member, NIRD-NERC, Guwahati – 781 022

<sup>&</sup>lt;sup>2</sup> Oorni is a shallow pond like structure to gather rain water. The clay bottom of Oorni neither allows the collected water to percolate down nor it allows the saline ground water to mix with the Oorni water.

and one has to support and augment the traditional sources of drinking water. So one can see in the late 90s the government started providing finances for maintenance and repair of the Oornies, and also for constructing additional Oornies in villages etc. (Table -3).

This study was undertaken in Michaelpatnam village of Mudukulathur block in Ramnathapuram district of Tamil Nadu state in India. (Block is an administrative unit within the district with a population of one to two lakhs). In Mudukulathur block the level of dependence on Oorni for drinking water is higher compared to the other blocks in the district.

For the study the Participatory Rural Appraisal technique was used and team of multi-disciplinary experts spent a week's time in the village. Techniques like Time Line, Focus Groups Discussion, Resource Mapping, Social Mapping etc. were undertaken.

Michaelpattnam village with 300 households has an approximate population of about 2000 (Table-1). The households are mainly engaged in agriculture. The soil is generally of black cotton type with high salinity. In the fifties the major crops grown were ragi, sorghum, horse gram and coriander. In the seventies the crops raised were cereals like maize, sorghum, ragi, paddy etc. The other crops like chillies, coriander, gingelly and cotton were also cultivated. At present the major crops cultivated are chilly (a variety suitable for saline soil) cotton (MC7) and paddy. Other crops like coriander and gingelly were also cultivated.

# The Traditional Village Panchayat

The informal or traditional panchayat is in existence for the last few generations. The villagers were not in position to pinpoint when exactly and how this traditional systems have started. Presently the traditional panchayat is constituted by selecting two members each from fourteen rows of houses.

These twenty-eight members select three to four elder members of the community to be the members of the Panchayat making the total thirty two. From among them, one is selected to be the head. However, this selection has to be ratified in the village panchayat. Women are neither members of the traditional panchayat nor are they allowed to attend the village traditional panchayat meeting. The body is changed every three years. The panchayat is empowered with necessary powers to deal with problems that affect the village. However, their main responsibility is in maintaining and managing the Oorni.

#### **Management of Oornies by Traditional Panchavat**

The traditional panchayat takes the responsibility of Oorni management. The annual operation starts with cleaning and desilting of Oorni before the rainy season. For this the Panchayat requests one member of the family to come on a fixed day and cleans the Oorni. The labour is free and voluntary, however, from families where labour cannot be provided one days labour charges are to be given to the panchayat. During the rainy season it is the responsibility of the traditional panchayat to see that the channels which allows the rain water to come to the Oorni is cleared and the entry sluice opened so that water is filled in the Oorni. Care is also taken to see that when the water in the Oorni is full the sluice is properly closed. When there is good rain it is mandatory for the entire village that maximum water is collected in all the Oornies.

There is a strict control on the use of water from the Oorni especially the drinking water Oorni. Care is taken that excess water is not drawn by any family, and that the water is utilised only for the purpose of cooking and drinking. It is seen that as summer starts, the quantity of water that is lifted is judiciously used. Anybody found misusing water is fined by the panchayat. Even after the formal panchayat came into existence the management of Oorni is by the traditional panchayat.

Table 1: Trend - Michaelpattanam Village

	1950	1975	2000
No. of households	150	200	300
Population	850	1100	1800
Cattle	470	350	185
Sheep	1000+	Stopped rearing	Stopped rearing
Goats		500	200
Composition of Fuel	Cow dung 60%	Cowdung 55%	Fuel wood 55%
consumption for cooking	Crop residue 30%	Crop residue 25%	Twigs/ crop residue 12%
	Twigs 10%	Kerosine 5%	Kerosene 10%
		Twigs/ fuel wood 10%	LP Gas 8%
			Cowdung 15%
Cropping pattern	Ragi, Sorgum, Horsegram,	Maize, Sorghum, Ragi,	Chillies, Cotton, Paddy,
	Coriander	Paddy, cotton, Gingily	Coriander, Gingily

## Formal Panchayat vis a vis the Traditional Panchayat and Provision of Potable Water

The formal panchayats came into existence after the 73<sup>rd</sup> and 74<sup>th</sup> Constitution Amendment (1993-94) and subsequent elections, in the State of Tamil Nadu after a gap of 18 years.

Provision of drinking water is the responsibility of the formal panchayat as per the 11<sup>th</sup> schedule of the 73<sup>rd</sup> constitution amendment. However, in this village Panchayat the Management of Oorni is still with the traditional panchayat.

After the realisation by the Government that the Oornies cannot be neglected as a source of drinking water, efforts are being made to clean, fence and maintain the Oornies. Efforts are also being done to dig new Oornies in the village. However, these works are undertaken with the help of formal panchayats. When works are being implemented by formal panchayats, people work for wages. People in general feels that in the formal system little bit of corruption has crept in, which they felt did not exist in the traditional systems.

Even though there is no conflict between traditional and formal panchayats in the management of Oornies, now people expect Government funds for the maintenance of Oorni.

The traditional panchayat has been in existence for the past three to four generations or even more. It was in existence even when the formal Panchayati Raj system was introduced in 1950s and in mid 90s. The traditional panchayat still has the same powers and it never interferes in the functions of the formal panchayat. It also helps in amicable settlement of many issues in the village.

## Governmental Interventions in solving the Drinking water problem

The Governmental efforts in solving the water problem started from 1970's. Initial efforts were in digging well and in installing bore wells. The table (table3) shows that these efforts could not achieve the desired results due to the high level of salinity of the ground water.

The efforts then shifted to finding a potable water source in the neighbourhood and providing water through an Over Head Tank (OHT) and supplied through pipes. A bore well and OHT was installed about 5 km away. This OHT was expected to supply water to four villages including the study village. In this village 14 taps were fitted in strategic positions to supply water. However, as this village is at the tail end, it could hardly get any water. The water in OHT is supplied once in two days as the availability is limited as a result the households could get one or two pots of water once in two days. In summer they could not even get this. The management and distribution of water was with the Rajiv Gandhi Drinking Water Mission. The villagers at proximity from the OHT had appropriated the major share of water by taking additional connections etc. One interesting aspect of this project is that (villagers) were not involved in the distribution of water and no Users Committee was constituted.

The cost towards maintenance is to be shared by the four villages based on the population. So even though this village was not getting drinking water the water bill used to be around Rs.1500 to Rs.2000 per month. This the villagers felt was an additional burden especially when they were not getting water. The formal panchayat which had to pay the bill refused to pay it and did not do so even while the study was in progress.

Table - 2: Source of Water Historical Trend

	Before 1950	1980	2000
Drinking	Kovil Oorni provided for 100% requirement of the village	Kovil Oorani + Bore well/ well inside Oorani etc. Very rarely went to other villages	Kovil Oorani (water available for 4 to 5 months). Piped water, one or two pots of water once in two days and in summer at times no water. Water from neighbouring villagers in summer distance from 2.5 km to 4.5 km
Washing vessels etc.	Kovil Oorani	Vellaikan Oorani Borewell near the Oorni	Bore well. Moderately salty in rainy season. Salty in summer
Bathing/ washing clothes etc.	Vellalkan Oorani/ a well near the Oorani	Vellaikan Oorani/ other Ooranis in the village	Vellaikan oorani/ hand pump in Vellaikan Oorani (summer) salty water

**Table 3: Governmental Efforts in Providing Drinking Water** 

A well with parapetwall inside the Kovil Oorni	High salinity closed after some time
Handpump in Velaikon Oorni	It was in use for four years: not in use at present
A bore well within Kovil Oorni	Used for two years high salinity abandoned
A borewell adjacent to Kovil Oorni	Saline water low salinity in rainy season and
	salinity increases in summer presently under use
	for washing vessels etc.
A borewell near the southern side of Kovil	High salinity abandoned
Oorni	
A overhead tank and pipeline about 5 km away	The pipe line is for three villages and this tail
to provide pipe water supply	end village hardly gets any water for drinking
	Functioned for one year - could not maintained
Oorani on the eastern end	properly - filtering system failed- not used at
	present
Desilting, deepening and fencing of Kovil	Improved the Oorni condition
Oorani	
Handpump in Vellaikkanon	It is in use now (water saline) for water for
	animals etc.
Water inlet was constructed on the western	In good condition
side near the old in-let (Kovil Oorani)	
Retaining wall around half of the Kovil Oorani	In good condition
Two more new Oornies constructed under the	Under construction at the time of study.
watershed development programme	
	Handpump in Velaikon Oorni A bore well within Kovil Oorni A borewell adjacent to Kovil Oorni A borewell near the southern side of Kovil Oorni A overhead tank and pipeline about 5 km away to provide pipe water supply A filter well was constructed within Kovil Oorani on the eastern end  Desilting, deepening and fencing of Kovil Oorani Handpump in Vellaikkanon  Water inlet was constructed on the western side near the old in-let (Kovil Oorani) Retaining wall around half of the Kovil Oorani Two more new Oornies constructed under the

Now the Government efforts has turned to the Oornies, the first attempt was in providing a filter well within the Kovil Oorni, so that the villagers could get filtered water or clean water from the Oorni. However, this worked only for one year after which it failed.

Presently there is a realization on the part of the Government that Oorni as a source of potable water cannot be neglected. This led to the Government investing money in repairing, disilting, and protecting the Oornies. Efforts have also been made in constructing additional Oornies in the village.

# **Coping Strategy In Solving The Water Scarcity**

Historical trend (Table 2) shows that in the fifties the villagers depended on its own indigenous sources i.e. "Oornies" for potable water. The neglect of this source due to the reasons stated above has led to people placing less reliability on Oorni as a source of water. The governmental efforts also could not provide potable water to the people. This resulted in people depending on outside sources for potable water. This trend has started from the eighties. The study of the mobility matrix has shown that (Map 1) people had to travel a distance of around 2.5 km to 4.5 km for potable water during summer. In many cases villagers had to face hostility of those villagers from where they collected water.

## **Conclusion:**

The traditional management of Oorni by the informal panchayat has ensured equitable distribution of available water. Till outside interventions were made the villagers were self reliant and sustained their resources. The governmental approaches were mostly top down in nature and did not involve people at any stage from planning and implementation. That technology and resources by itself cannot solve the problem was less understood by the Government. Even though the formal panchayats were constitutionally entrusted with the responsibility of provision of drinking water, the importance of traditional panchayat, could not be wished away. The women are the most sufferers due to scarcity of water. Unless people are involved in planning and implementation and also unless user committees are formed and legal validity provided to these committies onemay not be able to address the problem of provision of potable water in the future.