

Community Response towards Common Property Resources Management: A Case of Thamaraikulam Village of Dindigul District, Tamil Nadu

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Abstract: *Common Property Resources (CPRs) have become a topic of scholarly research and attention, only after publication of an article entitled “The Tragedy of the Commons” by Garrett Hardin (1968). It is well established fact that CPRs and its allied products play vital role in promoting sustainable rural development and thus there is a need to understand the perception of local people in management of CPRs (Olo Mola, 1993). In this context, the Theory of Collective Action, also known as Theory of Public Goods, can provide the basis for understanding the conditions under which the users of CPRs will act and react on the utilization CPRs and the major problems confronted in using the CPRs. Traditional economic theories recognize and focus only two types of property viz public and individual. But there is third dimension of property as CPRs, which have been traditionally recognized by the rural society. They CPRs are playing a crucial role in people’s survival and particularly in community development of “Rural India” - real India according to our future of Nation Mahatma Gandhiji. In rural environment of India, both ecological and socio economic sustainability is largely determined by the status of CPRs and rights. In this context (Jodha 1995) and (Singh 1994) are rightly pointed out that CPRs are owned in common by identifiable group of people, regulated by social convention and legally enforceable rules. Further, CPRs are resources accessible to the whole community of a village to which no individual has exclusive property rights. In short CPRs is subject to individual use, but not to individual position. Cross root evidences show that CPRs have made significant contribution to rural mass and they are: providing physical products, generating income, promoting social culture gains, bringing environmental/ecological benefits. With this background, the researchers have made an attempt to study “People’s perception on CPRs management in Thamaraikulam Village of Dindigul District”, by carving out the following objectives such as (i) to study the socio economic conditions of the sample users of CPRs in the study area; (ii) to examine the extend in which the CPRs are used and managed by the sample households; (iii) to identify the major problems in using and many the CPRs; and (iv) to suggest ways and means for effective utilization of CPRs for betterment of village community. The researchable issues and questing raised are: What are the CPRs available to the village community? How these resources are being utilized and managed for the well being of the community as a whole and individual in particular? What are the constraints found by the community for sustainability of CPRs usage? This micro level research provides feasible, viable possible and sustainable solution to these issues and questions.*

Introduction

CPRs are commonly known as public goods, which possess the characteristics of non-excludability and indivisibility. Non-excludability implies free access to all and indivisibility refers that benefits are not subtractive but of the nature of collective consumption. They are jointly available to collective consumption. They are jointly available to all in the same quantity. As a result, collective agencies such as State, Community Based organizations (CBOs), Village Development Committee are usually responsible for their management. It is common knowledge to note that CPRs are resources accessible to the whole community to which no individual has exclusive property rights. In other words, CPRs are in general open access resources and there is an absence of market institutions to manage them. One possible definition of CPRs is resources accessible to the whole community of a village to which no individual has exclusive property rights (Jodha, 1995). In other words, a CPR is subject to individual use, but not to individual position. Further, it is used by a number of users, each of whom has independent rights of use. Although, certain CPRs are in principle owned by the state, such property in effect becomes a CPR for the local community, if it traditionally enjoyed the access.

Research problems

The usual CPRs are basically natural resources like water sources, forest sources, minerals, soil, etc. Traditionally, local water sources for drinking water and irrigation, forest resources for fuel, furniture, fodder and construction, local soil, sand and stones, minerals are used as CPRs by the local community. Some of the contributions made by the CPRs are (i) Physical product (food/fiber/fuel, green grass, fodder, timber, animal grazing, fruits, vegetables, drought period substance, drinking water, irrigation, herbs, medicinal uses, wild animals, birds, sand, stone, slate, mud, manure, silt, space etc); (ii) Source of income and employment (off seasonal income employment, additional crop activities, additional wild animal, bird, sustainability of poor etc); (iii) Social cultural gains (park, playground, mental relief etc) and (iv) Environmental / Ecological gains (better micro climate, sustainability of farming, resources and diversity conservation etc). The CPR sources and contribution made by them to the village people are: the rural poor are more dependent in CPRs than rich; they receive the bulk of their food, fuel, fodder and drought substance from CPRs; the main source of income, employment and livelihood for the poor; CPR product collection is an important source of income and employment, during the periods when other opportunities are almost not existed; CPRs provide the sources for water for irrigation, drinking water, entertainment and such other for village people; CPRs help for environmental and ecological balance; the inclusion of CPRs income in the total household income from other sources help to reduce the income inequalities; CPRs help for the betterment of other occupation such as livestock production, cash crop production, petty trading; CPRs are also the main sources of construction of house and shade, furniture and such other; CPRs construction, utilization and management in these days helps to increase social cohesion.

The objectives

The major objectives of this study are:

- (i) To study the socio economic conditions of the sample users of CPRs in the study area;
- (ii) To examine the extent in which the CPRs are used and managed by the sample households;
- (iii) To identify the major problems in using and managing the CPRs; and

- (iv) To suggest ways and means for effective utilization of CPR for betterment of village community.

Methodology

This study is mainly based on primary data, supported by secondary data. The primary data were collected, by using the well structured and the pre-tested interview schedule, prepared exclusively meant for conducting this research exercise. The administered interview schedule has covered many CPRs such as library, television room, anganwadi, middle school, maternity ward, temple, toilet, river, pond, VAO Office, drinking water tap, drinking water pump, water tank, street lights, common drainage, ration shop, threshing floor, Self-Help Group building, bridges, cement road, waste land, cremation ground, besides socio-economic profile of the sample households. The total number of households in Thamaraikulam village is 300, of which 50 per cent of the households have been selected by using simple random sampling method. Thus, the number of sample respondents is 150, who are classified into different income groups – which are treated as base for analysis and interpretation of data.

This study is primarily used simple average and percentage, for the analysis of data collected from the sample households.

Period of the study

This study has been undertaken during the period from January to July 2010.

Major findings of the study

The total 150 respondents, 62.0 percent of them are male and 38.0 per cent of them are female; 50.0 per cent of them respondents belong to the age group of 30 – 60 years, 45.67 per cent of them belong to the age group of more than 60 years, and only 9.33 per cent belong to the age group of less than 30 years; 99.34 per cent of the respondents belong to the Hindu and the rest of them (0.66 per cent) are Muslim; 35.33 percent of the respondents belong to the scheduled caste and remaining (64.67 per cent) of them are from backward classes; 85.34 per cent of them are married and 7.33 per cent are unmarried and the rest of them (7.33 per cent) are widow; 28.0 per cent of the respondents are literate and 72.00 per cent of them are illiterate; 44.0 per cent are engaged in coolie, followed by farmer (28.67 per cent), business. (19.33 per cent) and 8.0 per cent; among the total population of sample households that is 621, 43.0 per cent are male and 57.0 per cent are female.

The total respondents of 150 sample households, 12.7 per cent of the respondents earn an income of less than Rs.25,000; 33.3 per cent earn Rs.25,000 – Rs.50,000, 42.0 per cent earn Rs.50,000 – Rs.75,000 and 12.0 per cent earn an income of more than Rs.75,000; 42.67 per cent of the respondents in the study area spent less than Rs.20,000; 43.33 per cent spent are Rs.20,000 – Rs.40,000; 17.54 per cent of them are medium farmers, who own less than 2.5 acre of land, 54.30 per cent of them are marginal farmers who own 2.5 acre – 5 acre, 15.79 per cent of marginal farmers own 5 acre – 10 acre and 2.28 per cent of big farmers own more than 10 acres of land; and the total livestock population of the sample household is 332, of which 4.82 per cent are cow; 15.97 percent are buffalo; 4.82 per cent are bullock; 4.32 per cent are goat, 8.43 per cent are sheep, 10.54 per cent are calves and remaining 50.60 per cent of are hen;

It is observed that 67.37 per cent of the respondents have been using the library once in a week, followed by weekly twice (14.67 per cent) and monthly once (9.37 per cent); Out of 150

respondents, majority of them (7.66 per cent) are using library for only one hour daily, two hours per week and three hours per week; Of the 150 respondents, 64.66 per cent said that the facility of library in terms of service is good; 14.67 per cent of them stated that the quality of the service is bad. 13.34 per cent reported that the quality and service can be improved in the course of time; and the rest of them (7.33 per cent) opined that the facilities in the library cannot be improved under the present conditions.

The 150 respondents, 44.0 per cent of them said that the TV room is located very nearer to their home and 56.0 per cent stated that TV room is located far away from their homes; Children are the only watchers of the TV, which was put up in the common TV room and other family members did not watch the TV common;

It is found out that 38.0 per cent said that the middle school is located very nearer to their homes and 62.0 per cent said that the middle school is located far away from their homes.; Space of the middle school is sufficient as reported by 48.0 per cent and 52.0 per cent the respondents recorded as insufficient; Regarding the opinion about the majority and punctuality of teachers, 72.0 per cent said that the teachers are very regular and 28.0 per cent stated that the teachers are irregular; Class room facility is enough as expressed by 21.34 per cent of the respondents and opined as not enough and insufficient by 78.66 per cent of the respondents; In the case of black board facility, 83.34 per cent stated that the facility is available, but 16.66 per cent opined that black boards are damaged and they are not in usable form; and 91.33 per cent of them said that electricity facility is available and not available as reported by 8.67 per cent of the respondents;

Out of 150 respondents, 81.33 per cent of opined that play ground facility is available in the school and 18.67 per cent said that the play ground facility are not sufficient; Small size of the play ground (75.33 per cent) poor and unclean environment of the play ground (24.67 per cent stated by the respondents; Toilet facility is good (89.33 per cent) and the worst (10.67 per cent) reported by the respondents; Toilet facility is available for teachers and the environment of the toilet is good as opined by 69.33 per cent and 30.67 per cent of the respondents reported by the worst. Environmental condition of anganwadi seems to be hygienic as expressed by 28.67 per cent and majority of them (71.33 per cent) have given negative opinion (i.e) unhygienic conditions prevailed in the anganwadi; and All the respondents uniformly confirmed a fact that anganwadi workers and teachers are regular in duty and they do the work for the benefits of the anganwadi children;

Majority of the respondents (53.33 per cent) did not use the maternity ward and 46.67 per cent have used the maternity ward; 33.33 per cent informed that the maternity ward is issuing regular supply of medicine and 66.67 per cent said the medicinal supply seemed to be irregular; 81.33 per cent reported the maternity ward is highly helpful in giving polio injections and only 18.67 per cent of the respondents stated that the maternity ward is not taking interest in giving polio injection; and It is pathetic to note that drinking water, toilet, electricity and bed facility are not in good conditions in maternity home;

The environment around the temple is so hygienic (40.0 per cent) and unhygienic (60.0 percent) reported by the respondents; Majority of the respondents (86.67 per cent) do not have the habits of singing and praying the temple, but only 13.33 per cent of them are regular visitors to this village temple; 42.0 per cent of them said that there is a restriction of entry into the temple and the rest of them (5 respondent) opined that there is no restriction of enter into the temple; Special puja during festival is well organized (32.0 per cent) poorly organized (68.0 per cent) as recorded by the respondents; and Regarding opinion about the temple administration, 74.67 per cent of the respondents expressed good, followed by poor (25.33 per cent);

Among the respondents, 58.00 per cent said that the public toilet is located away from their houses and 42.00 per cent said that it is located near to their houses; 94.00 per cent of the respondents recorded that sufficient water supply is available for the use of public toilet and 6.00 per cent ported that water supplied to the public toilet is not sufficient; 76.67 per cent of the respondents opined that the environment of the public toilet is the worst, whereas, 23.33 per cent opined as good; and Majority of the respondents that is 95.33 per cent, are not paying money for using the toilet and only 4.67 per cent pay money;

Among the respondents, 54.00 per cent are using the pond water and 46.00 per cent are not using the pond water; Among the total respondents, 71.33 per cent said that the pond is located 1-2 kms from their homes, whereas, 28.67 per cent respondents' homes are located less than 1 km from the road; and Regarding the environmental conditions of the pond and its surroundings, particularly the path way to pond, 63.33 per cent of the respondents opined that the environment of the pond is the worst; and 46.00 per cent of the respondents opined that the environment of the path way to pond is food;

Among the households of the respondents, 52.67 per cent said that their households are situated away from the river and remaining recorded that their households situated nearer to the river; and Only 12.00 per cent of the respondents are using the river water for their drinking purposes, 80.67 per cent of the respondents opined that the quality of the river water is the worst and thus, all the respondents in the study area told shared that the river water is polluted;

The VAO office is located in the centre part of the village and nearer to the village panchayat office, 42.67 per cent of the respondents stated that their households are located nearer to the VAO office, whereas, others opined that their house are located some what away from the VAO office; With regard to the easiness to meet the VAO, 72.00 per cent shared that the VAO is not easily approachable, whereas, 28.00 per cent here not given any opinion; 86.00 per cent of the respondents recorded that they experienced much difficulties in getting the certificate from the VAO office, whereas, 14.00 per cent recorded it as a easy process; and 95.33 per cent of the respondents noted that there is existence of bribes culture in the VAO office, whereas, 4.67 per cent are not opined so;

Among the total respondents, 65.33 per cent recorded that the quality of water is the worst, whereas, others recorded as good; The supplied water is used for drinking (35.33 per cent), cooking (35.33 per cent), bathing (12.00 per cent), cleaning of vessels (12.67 per cents), and washing and other purposes (4.67 per cent) of the households of the respondents; Among the respondents, 64.00 per cent shared that there are no quarrels in using the water taps, whereas, others have experienced the quarrels, and 66.67 per cent of the total respondents are not fully utilizing the water from the water taps, whereas, others fully utilized the water from the water taps; and Among the total respondents of the study, 84.67 per cent shared that the water pumps are functioning well, whereas, 15.33 per cent have negative opinion on the function of the water pumps;

Among the total respondents, 65.33 per cent opined that the water tank is frequently cleaned, whereas, others are not opined so; Further, 63.33 per cent of the respondents recorded that the water tank is cleaned once in 45 – 60 days, 24.00 per cent recorded that it is cleaned once in 30 – 45 days and 12.67 per cent recorded as 15-30 days; and Among the respondents, 84.00 per cent opined that the wall around the water tank is not well protected;

Majority of the respondents (59.33 per cent) said that there are more than twenty street lights in their residential area, about one-fourth of the total respondents (24.67 per cent) said that there are 10-20 street lights and remaining said that there are only less than 10 street lights in

their residential area; Regarding the status of functioning of the street lights, 58.00 per cent of the respondents opined that the street lights are well functioning and others are not opined so; 54.00 per cent of respondents felt sufficient with the number of street lights available, a notable number of respondents (46.00 per cent) felt insufficient; and Majority of the respondents (71.33 per cent) opined that the street lights are maintained regularly and others (28.67 per cent) are not opined so;

Majority of the respondents (81.33 per cent) recorded that they have drainage facility in their residential area and remaining (18.67 per cent) don't have drainage facility; Except 32.67 per cent of the respondents, others (67.33 per cent) said that they are letting out the waste water from houses into the common drainage; Among the total respondents, 13.33 per cent of the respondents said that they usually letting out the toilet waste into the common drainage, whereas, 86.67 per cent never done; and In the case of regular cleaning of drainage, 49.33 percent said that the drainage is regularly cleaned by the workers appointed for that purpose, whereas, 50.67 per cent said that the workers are not regularly cleaning the drainage;

Regarding the surroundings of the ration shop, though 71.33 per cent recorded as they are hygienic, 28.67 per cent recorded that the surroundings of the ration shop is unhygienic; Majority of the respondents (86.67 per cent) said that the ration shop is used to be opened only one day per month; Regarding the quantity of ration supplied, 78.00 per cent said that they are not getting right quantity and only 22.00 per cent of respondents said they are getting right quantity of ration supplied; and Among the total respondents, 78.00 per cent recorded that the price list of the products are regularly put up in the notice board and 22.00 per cent are not opined so;

Among the total respondents, 93.33 per cent opined that the threshing floor is not useful to all the people of the village, whereas, 6.67 per cent opined as useful to all; In the case of conflicts in using the threshing floor, 21.33 per cent recorded that conflicts are there in using the threshing floor, whereas, 78.67 per cent are not recorded so; and In the case of distance between threshing floor and agricultural field, 52.00 per cent recorded that their fields are situated 1-3 kms away from the threshing floor, 24.00 per cent recorded that their fields are located less than 1 km away and another 24.00 per cent recorded that their fields are more than 3 kms away from the threshing floor; Among the total respondents, 72.33 per cent recorded that the SHG building is located away from their households, remaining 28.67 per cent recorded that the building is located near to their households;

Among the total respondents, 71.33 per cent said that it is the responsibility of panchayat to maintain the bridge, remaining log 28.67 per cent said that it is the responsibility of village administrate office; Among the total respondents, 61.33 per cent recorded that the bridge is not regularly maintained, whereas, 38.67 per cent recorded as regularly maintained; and of the total respondents, 18.67 per cent said that there is some conflicts in using the cement road, but 81.33 per cent are not opined so;

Among the total respondents, 91.33 per cent opined that the waste land is used for the purpose of grazing the livestock and remaining 8.67 per cent are not opined so; and

Regarding the availability of separate cremation ground for various castes, 15.33 per cent of the respondents said that they are using the existing cremation ground for their castes, whereas, 84.67 per cent of the respondents said that they don't have separate cremation ground for their castes and they added that they already faced some conflicts in accessing and using the existing common cremation of the village.

Suggestions

- » An awareness campaign could be organized among the households about the importance of sending children to Anganwadi, which increases the children's strength in Anganwadi;
- » The area and size of the play ground in the middle school is to be enlarged. Separate toilet should be constructed exclusively meant for boy's students;
- » The nurse attached with health sub center should stay in the village for the benefits of the village community;
- » All caste and community people must be allowed to enter into temple;
- » Besides women toilet, men's toilet should be constructed by the joint initiatives of village panchayat and district administration;
- » Waste water from the houses should not disposed into the river water;
- » A bench must be put up in VAO office for visitors;
- » People in the village are asked to keep the place neat and tidy where the street water taps are located;
- » Once in a month, water tank in the village is to be cleaned with chlorine powder by the village administration;
- » District administration must instruct the PDS incharge to open the ration shop daily;
- » Compound well can be constructed around the cremation ground;
- » The village administration should take initiatives to distribute the waste land to the users of this village;
- » The drainage channel should be closed with cement slap so as to control and avoid mosquitoes breeding;
- » Fraudulent activities in the supply of the ration products from the PDS should be avoided;
- » Dust tank should be put up in all streets of this village;
- » The VAO should not demand money for issuing the certificates, demanded and requested by the public;
- » The stockholders of drinking water are advised, not to waste water; and
- » Separate dinning hall should be constructed within the school premises for effective supply of noon meals to the school children.

Conclusion

CPRs possess the characteristic feature of public goods and management of public goods requires people's participation in the absence of which the investment programmes on CPRs do not yield economically desirable result, and do not bring sustainable development. Moreover, equitable distribution of CPRs among all households in village situation will certainly make the society quite stable. Based on the field visit to the study village, one can conclude that some of the CPRs are not fully utilized by the community, and some of them are misused and mismanaged by the institution like government. Yet another conclusion is that the decline in CPRs area, are the net result of an increase in population, and livestock pressures and poverty and marketing of CPRs products in the study village. As a result, livelihoods of vulnerable sections are being eroded. CPRs degradation are likely to produce the environmental disaster. Thus, what we need today is sustainable management of CPRs for the sake of the present as well as the future generations.

References

- Agrawal (1997) "Environmental Action, Gender Equity and Women's Participation". Development and Change, Vol.28.
- Arnold and Steward (1991) "Common Property Resource Management" Oxford : Tropical Forestry Paper No. 24; Oxford Forestry Institute; University of Oxford.
- Jodha (1995) "Common property resources and the environmental context; Role of Biophysical vs. social stress", Economic and Political Weekly, December 23.
- Jodha (1995) "Studying Common Property Resources, Biography of a Research Project". Economic and Political Weekly, Vol. XXX. (11) March 18.
- Mckean (1995) "Common Property Regimes in the forest: Just a relic from the past". Unasylva, Vol 46, FAO, Rome.
- Olomola, Ade "The traditional approach towards sustainable management of Common Property Fishery Resources on Nigeria", MAST, Vol.6, Nos. 1-2, 1993.
- Singh "Managing Common Pool Resources" Oxford University Press, New Delhi, 1994.
- Singh, K.N. Singh, and R. Singh (1996) "Utilization and Development of Common Property Resources – A Field Study in Punjab". Indian Journal of Agricultural Economics, Vol. 51 Nos. 1 and 2.
- Smith (1981) "Resolving the Tragedy of the Commons by Creating Private Property Rights in Wildlife". CATO Journal, Vol (1).
- Topal, et.al, (2000) "Socio economic and cultural adoptions in the central Himalaya", Man in India, Vol. 78, No.1.
- World Bank (1996), "Staff Appraisal Report". India Economic Development, Project No, 1494. August, Washington D.C.
- World Bank (1996) "Staff Appraisal Report", India Ecodevelopment Project. No: 14914-in. August 11/3, South Asia Department of Agriculture and Water Division. The World Bank. Washington D.C.
- Zak and Kanack (2001) "Trust and Growth". The Economic Journal, Vol. 111, No: 470.