CHAPTER – VII

EMPLOYMENT GENERATION AND AREA DEVELOPMENT PROGRAMMES (JRY / JGSY / EAS / DPAP / AMT / NNT) AND ITS EXTERNALITIES

This chapter aims at shedding some light on the issue of externalities created through various employment generation and area development programmes in the State of Tamil Nadu. The State Government has dovetailed the programme funds in to the State sectoral programmes viz. Anna Marumalarchi Thittam (AMT) and Namakku Naame Thittam (NNT). These schemes were implemented in the study villages to avoid the problems of resource crunch. Through these State sectoral rural development programmes, the Government created, strengthened and renovated the various Common Property Resources (CPRs) in the villages. Since the nature of activity have been clustered at the village level, it could not be delineated and assess the impact of the programmes separately. However, an attempt has been made to explore the impact of these employment generation and area development programmes. The total impact could be seen in terms of various CPRs exist in the villages. The nature of CPRs and the performance in utilizing and managing these resources varied from region to region.

Economists have studied external effects ever since the days of Marshall and Pigou. One of the characteristics of an efficient property rights structure is exclusivity. There are many circumstances when this characteristics is violated in practice. The externalities concept is a broad one covering a multitude of sources of market failure. It is clear that externalities occur when the exclusivity of property rights is violated.

The Central and State Government created and renovated various common property resources for the benefit of rural population. The existing CPRs in the zonal

villages have different characteristics. The question arises in this context, how these rural development programmes made impact on the rural community. The impact may vary among the regions, due to the differences in the endowment of natural resources. Keeping in view of the regional dimensions, the project follows the classification of the seven agro-climatic zones.

Water Harvesting Structures

The Government of India realized the importance of rainwater harvesting and created Water Harvesting Structures. These structures would facilitate to restore the ground water through percolation both in the rural and urban areas. Through, the Rural Development Programmes, these structures were renovated, strengthened and silt removed. The impact of these programmes could be seen in all the areas.

It is expected that the Water Harvesting Structures would have made some positive impact on their economic activities. To explore the positive externalities of Water Harvesting Structures (Table 7.1) various queries were made in respect of Open Tank, Lake and Rivers in some zones. The response of the queries are 'Percolation of water to the wells' (46%), 'Water Tanks as a source of Irrigation' (9%), 'Member of family took Bath' (13%), 'Washing clothes in the tanks' (28%), 'Taking Bath results no disease' (14%), 'Good Breeze near Tank' (15%), 'Cleanliness due to rearing fish' (17%), 'Use of silt as manure' (14%), 'Cultivating short term crops during Summer' (1%) and 'Soaking of coconut leaves and Bamboo' (3%).

The responses were high in the zones of Western Zone and High Rainfall Zone. Among the zones, only two zones faced severe water crisis belong to the dry belt. In the case of Southern Zone people virtually depend upon the monsoon, accordingly they had created water tanks, lakes, etc., to store the water. In the region, they could use the water from these sources only for three months. It is observed that the households used the available facilities and fulfills their needs.

In order to measure the quantum of negative externalities emerged through Rural Development Programmes (Table 7.2); ten questions were framed and elicited their views on this. In total, the responses ranged in between 0.37 per cent to 11 per cent. The details of the negative externalities are follows: 'Washing off Fertilizer and Pesticides by Flood', 'Inadequate water supply to Tail end Farmers', 'Skin Diseases due to washing of Clothes', Other Diseases due to Polluted Water', 'Diseases due to washing off animals', 'Diseases due to Water Scarcity in Summer', 'Water Pollution and Bad Odour', 'Water Scarcity and Problems to take Bath', 'Water Pollution and its Effects on Your life', and 'Water Pollution due to Cleaning of Utensils'.

In aggregation, the negative externalities are very less compared to the positive externalities of the Water Harvesting Structure, created and renovated through Rural Development programmes.

Common Trees

The numbers of Common Trees are being reduced due to illicit tree cutting, no rights, no management, etc. Growing these trees would help the environment and also give yield to the society. In view of managing these trees, the rights were given to panchayats. Besides, the Government of India introduced the tree patta scheme, to help the rural poor and also to manage the trees.

The common trees would have created some impact on their life of the rural people. To assess the externalities, seven queries were made (Table 7.3). They are 'Common tree leaves as cattle feed' (13%), 'Leased-in common trees and enjoyed benefits' (4%), 'Used common trees for fuel wood' (37%), 'Enjoyed common trees shadow for playing / taking Rest' (55%) and 'Used common tree leaves / fruits / seed as medicine' (12%), 'Shadows of common trees and reduction of crop yield' (0.16%) and 'Expense for removing / cleaning thorns' (0.11%). Besides, some queries related negative externalities viz. 'Reduction of yield due to shadows' and 'Expenses for cleaning Thorns'.

In general the performance of Positive Externalities are good. The proportion of positive externalities ranged in between 12 per cent and 55 per cent. Among the zones, the people of High Altitude Zone had not realized any positive and negative impacts. It shows that the region is a hilly and the size of common wastelands is very meagre. In the rest of the zonal villages, the externalities were registered, depends upon the nature of trees, yield of trees, etc. In the context of negative externalities, very poor performance was recorded. It could be said that the negative externalities did not arise among the zonal villages. It could be suggested that the local bodies have to take some steps in growing common trees and manage the same collectively.

Holy Places

Religious diversity is the hallmark of Indian Civilization. Tamil Culture is a part of Indian tradition and there is no exception to this. Hinduism is the majority religion professed by most of its population. Islam and Christianity are the two other religions professed by a significant minority in the state. It is customary that most of the people to visit religious places for making worship like Temples, Mosques and Churches, according to their faith. Here an attempt is made to identify the positive and negative externalities of religious places. Table 7.4 reveals the positive and negative externalities of holy places situated in the villages of different agro climatic zones. More than four fifth of the respondents in all the villages reported that they are visiting religious places regularly. An exception to this is in the High Altitude Zone. However, more than half of the respondents visit Temples, Churches or Mosques. In the villages of North East and Western Zones, all the respondents reported to be visiting religious places for making worship. More than four fifth of the respondents were willing to donate for renovation and construction of religious buildings in the villages of Western, North East, Cauvery Delta and High Rainfall zones whereas in the Southern zone more than half of the respondents were willing to contribute for the renovation. On the contrary very few of the respondents in the villages of North West and High altitude zones are willing to donate. It is reported that there is no respondent faced communal riots and losses due to the existence of religious places in the villages. However there is a case recorded in the North Western zone village.

In the study region positive externalities alone registered in respect of holy places. This is evident that majority of the respondents visiting holy places regularly for making worship and willing to donate for construction and renovation. It may rather surprise to note that only one person has reported the communal riots due to the existence of holy places.

CPR-Roads

In realizing the importance of rural roads, the Government of India took various steps to link all the villages by way of providing roads like metal, black topped, red gravel and concrete roads. The importance of rural connectivity for the development of our villages is self-evident. More than half of the villages remain without roads. Consequently, it affected by various handicaps owing to isolation and the lack of market access without rural roads, there can be no mainstreaming of people with society and the economy.

The State Government introduced some unique programme viz, Anna Marumalarchi Thittam (AMT), and Namakku Naame Thittam (NNT), to make the villages as self sufficient one. Through the earlier programmes, the Government could not complete the work in the village due to resource crunch. These programmes were introduced to avoid the dose inefficiency of the programmes. There are thirteen queries were as mentioned in Table 7.5, made to assess the positive externalities of the CPR of the rural roads. These queries are 'Increase in employment and income' (4%), 'Reduction of transport cost' (5%), 'Due to provision of roads and increase in Consumption of Basic goods' (5%), 'Economising fuel due to the provision of shortest route' (24%), 'Using roads as thrashing floor and minimizing expenditure' (1%), 'Comfortable to go to schools and Carry the Produced goods to markets' (83%), 'Smooth riding of vehicles' (66%), 'During harvest season and comfort in using roads as thrashing

floor' (5%), 'Children using as Play ground' (64%), 'Emerging as contractor and laying roads'(1%), 'Avoidance of water stagnation during rainy days' (49%), 'Good roads and reduction of air pollution'(32%), 'Planting of trees at the road sides and create good Environment'(28%).

In total, the response is very high in respect of the creation of rural roads. The responses ranged in between 4 per cent and 83 per cent. In most of the surveyed villages, the government laid concrete / black topped / metal roads depends on the need of the region. Recently, the State government introduced maintenance free concrete roads. These roads were very much useful to their daily affairs and also to perform the agricultural activities, viz. treating as thrashing floor, drying food grains, drying agricultural by-products, etc. Apart from the above, they could use the roads during rainy days and avoid diseases if any. The North Eastern Zone village people, they could not use the road as a thrashing floor, since the village is situated on the National Highway of Chennai-Kanyakumari. Besides, the local road breadth is not enough to use as thrashing floor. It could be concluded that the roads created good amount of positive externalities on their life.

Nine negative externalities were identified (Table 7.6) in laying of rural roads through Rural Development Programmes. The details of the negative externalities are follows: 'Forced to give Bribe for Contractorship', 'Politically Influenced Person as Contractor', 'Accidents Occurred Using Roads as Thrashing Floor', Rash Driving and Human Losses', 'Using Roads as Thrashing Floor and Disturbances', 'Held up due to traffic', 'Construction of Roads and Offered Bribe', Stagnation of Water Creates Bad Environment', 'Air and Noise Pollution due to Traffic'. In general, the response of negative externalities is very poor among queries and the zonal villages. The total response is varied in between 0 to 11 per cent. It shows that the investment made in creation of rural roads, benefited much in all walks of people living in rural areas.

Culverts / Small Bridges

Culverts and Small Bridges were created in the rural areas for the use of irrigation, transport and others. The positive and negative externalities Culverts and Small Bridges are given in Table 7.7. The identified Positive externalities are as follows: 'Employment in construction', 'Using Bridges for daily Transport', 'Bridges as Thrashing Floor and drying food grains', 'Comfortable for children to go to School', 'Facility for Irrigation and Drainage' and 'Reduction of time for collecting water.'

Among the Positive externalities, the items 'Comfortable for children to go to School' (41%) and 'Using Bridges daily for Transport' (51%) recorded relatively at high level. In the rest of the items, some zones performed well due to the existence of these assets. There are four queries made to assess the negative externalities. The occurrence of negative externalities is very small in number.

Public School

Table 7.8 describes the positive externalities of the public School functioning in the different agro-climatic zonal villages in the State. In realizing the importance of imparting education to the rural people, the Government strengthened the rural school infrastructure over the period. It is expected that the school would have created various externalities among the people. The externalities may arise and it depends upon the style of functioning, location of the school, quality of teaching, number of teachers, parents cooperation and feed back, school infrastructure, etc.

It is attempted to assess the perception of the positive and negative externalities of the public school functioning in the villages. Questions were administered to quantify the economic, social and environmental externalities. The first question is "Employment in Construction". As per the guidelines, they have to entertain the local people to provide employment and also to ensure the quality of construction.

Of the seven zone villages, only in three zone villages, the people received some employment. Only one percent of the population received employment. It is expected that the construction, renovation and maintenance of schools used to be happened once in a while and can't be expected a continuous employment. However, the practice of employing local people has to be ensured to assure the quality.

The second externality is "Children admitted in the local schools". Of the total sample, 41 per cent of the population admitted their kids in the local schools. The percentage varies among the zone villages. Nearly two times differences could be seen. It shows that the goodwill gained over the period and the quality of teaching in the school. These schools were helped the rural population and imparted education.

The third externality is the perception of "Minimisation of Expenditure on Education". 37 households revealed that their expenditure minimized due to the functioning of school in the village. The perception differed among the zones, and it varied more than two times.

The fourth externality is after availing education, "how many of them reached to higher education". This indicator proves the quality of education delivered in the schools. Of the total sample, nine per cent of them reached to higher collegiate education. It reveals that the standard is not up to the mark, and has to be improved on par with the private schools functioning in the urban areas. Then only, these rural students can compete and avail these facilities extended by the Government.

The fifth externality is "Quality of teaching in schools". Quality of teaching is much more important particularly in rural areas. On an average, 44 per cent of them revealed that the quality of education is good in the rural school. The opinion strongly differs among the zone villages, i.e. around five times.

The sixth externality is "the provision of computer facilities in the public school". Of late, the computers were installed in rural public schools. The State government delivered the goods through the program of MLACDS and AMT. Of the seven zone villages, only in four-zone village children used the computer facilities. Of these, some of them had education in the public schools located in the neighbouring areas. Since, this is a recent phenomenon in the rural areas, the performance is very poor only 13 per cent.

The seventh externality is "after availing education in the local school, received employment in Government / private". Of these only one per cent of the population received employment. Gradually the number has trickled down. Although the Government facilitated various concession, reservation to the socially and economically deprived population, they could not enjoy the same at all levels.

The eighth externality is "selling eatables in the school campus". This is an individual benefit to some families doing business in the school campus as well as in the adjacent places. However no response is recorded in the sample population. However, it is observed that some of them are doing small business in the school campus.

The ninth externality is "uniforms and chappals received from the schools at free of cost". The government, NGOs and some philanthropic institutions offer chappals and uniforms to the school children at free of cost. The benefit has not been trickled down to the High Altitude zone. In general, 13 per cent of them were benefited from the scheme.

The tenth externality is "Reduction of Expenditure due to the `distribution of uniform and chapel". Less than 10 per cent of the population enjoyed the benefits and revealed that their expenditure was reduced.

The eleventh externality is "Untouchability prevails in the schools". The government took various measures to remove untouchability. In this context, it is expected that there should not be any communal discrimination among the students as well as teachers too, do not discriminate the students. Among the seven zone villages, only this practice has been noticed in the North Western zone. Seven per cent of the population revealed that Untouchability exists.

The twelfth externality is "Education and changes in culture". The perception of the surveyed households varied among the zones. Of the total surveyed households, 43 per cent revealed that due to the educational attainment, their culture has changed. These changes would help in preserving of environment and natural resources. In the North Eastern zone alone, the beneficiaries had not realized the same.

The thirteenth externality is "Reduction in social Inequality". Realising inequality is one of the objectives of an Indian plan. In the rural areas of Tamil Nadu, people used to follow the Untouchability among the different communities. Particularly scheduled castes were treated as untouchables. They were not permitted to touch upper caste community or to enter in their houses. Still some regions, these practice being continued. To know this current position, this question has been administered. On an average, 41 per cent of the households realised that the social inequality in general as well as in the school camps was reduced.

The fourteenth externality is "participating and benefiting from NCC / NSS". In the schools, generally some extra curricular activities were performed among the students. Since this is not a compulsory programme in the schools, some of the voluntarily participate and benefit the same. These activities would develop the culture and moral behavior among the students. Of this, 24 per cent of the households reported that their children participated in the NCC / NSS activities. The performance is nil in the High Rainfall zone and North Eastern zone. In the rest of the zones, the performance varied significantly. It is observed that some school authorities viewed the extra curricular activities in a serious way.

The fifteenth externality is 'Improvement in social Status'. Except in North Eastern Zone village, all of them had realized that their social status improved due to the functioning of the school.

The sixteenth positive externality is 'Awareness of Diseases among children'. The schools are creating awareness among the students about the occurrence of diseases and educate them how to protect. 41 per cent of the respondents had realized that their kids had some awareness, due to the functioning of the school. Except in the North East Zone village all of them realized the benefit of awareness.

The seventeenth externality is 'Good ventilation facilities in school'. Of the total sample, 52 per cent of the households revealed that the local schools had gained ventilation facilities. Some of them are not aware about the facilities, since their children had crossed their schooling days. However, in some other cases particularly in the tribal hamlet of North Western Zone village, people had realized that there are no light and ventilation facilities.

The Eighteenth externality is 'Availability of toilets in the school campus'. The governments made provisions to construct school toilets for boys and girls. In total, 49 per cent of the beneficiaries' children used the toilets in the schools. It could be recorded that the schools had created various positive externalities to the students as well as to the rural area.

Table 7.9 describes the negative externalities of the public school functioning in the rural areas. The negative externalities arose due to the location and its surrounding of the school, style of functioning, behavior of teachers, etc. Some negative externalities were identified and administered among the surveyed households. The responses are very poor in all the queries of 'Lack of Discipline', 'Lack of Good Manners and Model Behavior', 'Tamil Medium as hurdle for higher education', 'Lavish Expenditure by children', 'Lack of Moral Behavior and Good Manner', 'Frequent visiting of houses during class hours', 'Non provision of English Medium', 'Distributed low quality uniforms and Chappals', 'Overcrowding and Noise Pollution' and 'Dumping of wastes and pollution'. On an average, the responses were less than 13 per cent in all the queries. Among the zones, the negative externalities were high in the High Rainfall Zone. In this zone, the households realized that some negative externalities compared to other zone

villages. They are 'Tamil Medium as hurdle for Higher Education' (40 %), 'Distributed low quality of Uniforms and chappals' (46 %). Putting together of positive and negative externalities, the people had enjoyed maximum amount of positive externalities due to the functioning of public schools in the village.

Community Hall

The State government created the infrastructure 'community hall' in the villages, to perform the family functions like marriage, ear boring, puberty, etc. Apart from the use of family functions, these halls could be used at the time of natural calamities, storing of food grains, entertainment, etc. There are ten queries were made to assess the positive externalities of the community hall as shown in Table 7.10. The expected positive externalities of the community hall are as follows: 'performing family functions', 'Storing and Drying of food grains', 'taking rest and entertainment', 'Used as shelter at the time of natural calamities', 'Used for political meetings or discussions', 'Increasing social status', Receipt of additional income', 'Value addition to their assets and houses', and 'surrounding areas have a better look'. Of these ten queries, only less than ten percent of the sample households recorded their perception. The perception varied in between the queries and the zonal villages. It ranged in between zero response to ten percent. The average cost of construction of the community hall in different agroclimatic zonal villages, stood around at Rs.5 Lakhs. However, the expected positive externalities were not created among the rural population.

In the context of negative externalities, seven questions were administered in the Table 7.11. There are some possibilities that they could not use these facilities. Of these queries only less than 4 percent of the total sample population realized as a disturbance or loss to them. There are seven questions were administered viz. 'Inadequate facilities in the community hall', 'Loud speaker nuisance', 'Inaccessibility', 'Caste discrimination', 'Disputes and property loss', 'Noise pollution', and 'Dumping of wastes create pollution'. Their perception recorded in respect of seven queries differed among the zones. The recorded responses are too low, which is less than 4 percent.

It could be concluded that the provision of Community Halls in the Zonal villages created some amount of positive and negative externalities. In comparing the two components of positive and negative, positive externalities are higher. These externalities were not recorded in the Cauvery Delta Zone and Western Zone villages. In the Cauvery Delta Zone, the constructed Community Hall was rented out by the local panchayat for the use of Police Station. The objective of the Community Hall was failed and no response in the queries. The reasons for not using the Community Halls are as follows: the size of the constructed Community Halls are not enough to perform the functions, open space is not available to create temporary shed, and inadequate toilet and water Hence, they could not use the same. In some exceptional cases, the facilities. Community Hall was used by the SHGs for their economic activities. In the case of High Altitude Zone, the hamlets were situated at different locations with high slopes; hence the population could not access the facilities. Hence, there is no collective responsibility in maintenance of the Halls. The condition of the Halls witnessed the same. In aggregation, the expected benefits were not trickled down to the rural people.

Public Toilet

Sanitation is a major rural environmental problem in the country. Unfortunately majority of the people in the rural areas are not conscious of this problem. Open defecation in common places such as 'dry ponds,' 'wastelands' is used for this. It is observed as a major reason for the spread of a number of water borne diseases. The successive state and national governments have been trying to inculcate the habit of using toilets, which are hygienic. Promotion of individual and community toilets has been incorporated as one of the component of rural development schemes. How far these people utilise and benefit from them is a major question remains unanswered.

The positive and negative externalities of Public Toilet are presented in the Table 7.12. The positive externalities recorded include employment in construction, income from employment, adequate water facilities, appointment of scavenger, neatness and

cleanliness of toilet, family members using the toilet, continuous use of toilet, minimisation of time, minimization of expenditure in construction of own toilet, and creation of hygienic condition in the community.

The positive externalities of employment and income generation had not reached to them. Yet the construction of toilet had resulted in the generation of additional employment to more than one third of households in the high rainfall village. In other villages very few had benefited by way of employment. The toilet construction could not generate income, since the construction activities use to be carried out occasionally.

Proper management of toilets involves more labourers, adequate water supply and maintenance of cleanliness and neatness. Appointment of scavenger was reported in the villages North West, High Altitude and High Rainfall. In High Rainfall Village nearly one tenth of the households received employment as scavengers while in Northwest and High Altitude Zonal villages one or two households reported the same. The provision of adequate water facilities was reported only in the villages of Cauvery Delta, Western, Northwest, High Altitude, Southern and High Rainfall zones. More than one third of the respondents in High Rainfall village reported adequate water facilities while nearly one tenth of them in the Cauvery Delta and North West and nearly one fifth of them in the Western zones reported the same. Only a few in High altitude and Southern villages felt the same. Neat and clean maintenance of the toilet was reported by nearly one half of the respondents in the High Rainfall village. Nearly one tenth of the respondents in the villages of Cauvery Delta; nearly one fifth of them in the western zone and a few in the villages of High Altitude and Southern Zones also reported the same.

In the High Rainfall village nearly one half of the respondents reported the use of public toilets by their family members. In Cauvery Delta village nearly one tenth of the respondents reported its use by their family members. In other villages a few were found to be using the public toilets. The same sad plight obtains as far as the continuous use of toilets and nearly half of the respondents reported the same.

Creation of hygienic conditions in the community due to the construction of public toilet would be the result of proper maintenance of toilets with adequate facilities and personal and proper use of people. As these were found to be absent in most of the hamlets in all the villages of the agro climatic zones surveyed we cannot expect this. Nearly half of the respondents in the High Rainfall Zone village and more than one tenth of them in Western Zone; nearly one tenth of them in the Cauvery Delta and North West zone perceived the creation of hygienic conditions in the community.

Improper maintenance by the personnel appointed and improper usage by the beneficiaries poses major problems in the functioning of public toilet. These would result in the lack of hygiene and cleanliness and spread of diseases. The problem of 'users not flushing the toilet' was reported by only a few in the villages of High Altitude and High Rainfall villages. In other villages none reported this problem. Likewise, none in most of the villages reported uncleaniness and disease and a few in the villages of North West and High Rainfall villages perceived this problem.

The promotion of sanitation systems and popularisation of them among the rural areas suffers from a number of cultural and economic constraints. The toilets existed in most of the hamlets of the villages surveyed. Yet, majority of the respondents found to be not using it. Though the lack of adequate financial support for the maintenance of public toilets by way of engaging a scavenger, the real problem exits in the attitude of the people towards open defecation and toilets. Still the rural people feel that the toilet system is unhygienic, whereas the practice of open defecation in the wasteland is hygienic. Unless this attitude is changed nothing substantial in this front can be achieved. Creation of awareness about the public and private systems and promotion of low cost sanitation systems in the rural areas is urgently needed. Supply of adequate water supply and appointment of sufficient number of scavengers and monitoring the quality of service by the local bodies is called for urgent action.

Television

Communication plays an important role in Rural Development. Still rural people could not access all types of modern communication facilities exist in the world. People didn't access due to lack of awareness, not affordable prices, no need, etc. Of late, the rural people are enjoying the benefits of common television provided by the Government. During 60's and 70's Panchayats had owned a radio to disseminate the information. Later on, the common communication resources were upgraded for the benefit of Rural People.

The State Government constructed a building and provided a colour Television to each hamlet of the Panchayat village depends upon the population. It is expected that the television would have made some impact on the life of the rural mass. In total, the realization of the benefits recorded in all the zonal villages except in North Eastern Zone. In the North Eastern Zone the televisions were looted by the anti-social elements and some televisions were under repair. Due to lack of skill in operation of televisions, high voltage problems in some places, theft, using for their personal benefits, televisions were made not in use. According to their age group, people would prefer some selective programmes like games, cartoon, cinema, etc. There are ten positive externalities registered in the zonal villages (Table 7.13). They are 'Opportunity to Learn Employment/ Venture industrial activities' (37%), 'avoiding economic loss by way of learning weather report and warnings' (44%), 'Awareness about theft incidence and safeguarding money / assets' (43%), 'Viewing television and changes in culture' (45%), 'Viewing television in a common hall and realizing Fraternity' (45%), 'Awareness about world affairs' (45%), 'Viewing educational / employment opportunities and enjoying benefits' (21%), 'Viewing music, cinema and realizing mental peace' (37%), 'Learning political developments and creation of eagerness in participation (33%), 'viewing environmental awareness programmes and realizing importance' (30%). Overall the proportion of the response varied in between 21 per cent and 45 per cent and also varied among the zonal villages. It shows their awareness and the importance of the programmes.

It is expected that there are some negative externalities (Table 7.14), which may arise due to the provision of Television. There are seven queries administered and explored their views on negative externalities. In total, the proportion of response is very poor and recorded less than 4 per cent in respect of the queries among the zonal villages.

It could be concluded that the provision of television in the rural areas made a significant positive externalities and the people benefited the same. It is also observed that the collective action is required to manage these common resources and utilise the same through out the year without any interruption.

Post Office

In Rural Communication, Post and Telegraphic services play a vital role in their social and economic activities. Table 7.15 describes the positive and negative externalities of post office. The positive externalities include sending and receiving of letters and telegrams. More than four fifths of the respondents had sent and also received letters. An interesting thing here is that the proportion of sending letters is greater than the receipts of letters in all the villages. In most of the villages a few had sent telegrams. The necessity doesn't arise to send telegrams, since their social and economic activities happened within the close proximity. In North East and High Altitude zone villages none has used telegraphic services. In the villages of Cauvery Delta, North West, and High Rainfall more than one tenth of the respondents had availed the telegraphic services. Altogether a different picture could be seen in the Southern Zone Village, where nearly half of the respondents reported that they sent telegrams. This deviation can be attributed to the fact that a sizeable proportion of members of the sample households work in the district Salem. The use of telegrams in other villages is low because most of the relatives and friends may be living nearby and the people go for telegraph services only during emergency situations and they use postal services for ordinary communications.

The negative externalities are concerned, a few of them had not received letters in time. In the villages of Cauvery Delta, Western, North West and Southern Zones very few had felt problem of delay in delivering of letters.

Police Station

The State Government is expanding the police services to the rural areas, to make the law and order in effective. It is expected that the police controlled the production and sale of illicit arrack in the rural areas. The production and sale of illicit arrack is not only reducing the revenue of the government and also killed the number of people. The drunkards did not give their wages to the family. Of the identified three positive externalities (Table 7.16), the recorded responses varied in between 2 per cent and 54 per cent. Particularly, the response is very high in controlling of illicit arrack production and sale.

On the other hand, there are three negative externalities listed. The details are as follows: 'Misbehaviour of policemen', 'Bribes in settlement of Disputes' and 'Injustice in Resolving Disputes'. The response is very low in respect of the negative externalities identified.

Public Distribution System

Through Public Distribution System, the State Government is delivering the essential goods at subsidised prices to the BPL categories. Besides, the State Government created the infrastructure facilities, to help the poor and make them to access the goods. There are four queries addressed to the beneficiaries, to assess the positive externalities of the Public Distribution System as shown in Table 7.17. They are 'Utilizing Public Distribution System', 'Reduction in Expenditure', 'Time Saving' and 'Shops opened as per schedule'. Of these four queries, the responses were recorded more than 66 per cent. The beneficiaries had minimized their food expenditure since the prices are very low compared to open market prices.

In the context of negative externalities, six questions were posed to the beneficiaries. The question are as follows: 'poor quality of food grains', 'weighed improperly', 'Occurrence of medical expenses due to low quality', 'Pledging Ration Card', 'Ration card gifted to others' and 'Availability of needed goods in time'. Of these negative externalities, the perception of the beneficiaries is less than Sixty per cent. Sixty percent of the beneficiaries reported that goods not weighed properly. In aggregation, the positive externalities are very high in the functioning of Public Distribution System.

Cremation shed and approach road to burial ground

Performance of last rites is necessary and important to any individual whatsoever the religion he / she professes. Though most of the population in the state practices burial for disposal of dead body a significant number of communities cremate dead bodies. Further it is customary to cremate the corpse of the chronically sick. The successive State Governments of Tamil Nadu have recognised the importance of burial ground, proper approach roads and facilities for the disposal of the dead body. Budgetary allocations have been made for laying roads, and construction of cremation shed is of recent origin. The positive and negative externalities were recorded and presented in the Table 7.18.

As far as the positive externalities of cremation ground are concerned the usefulness of the cremation shed during the rainy season was realised by a majority of the respondents in the villages where they exist. It is reported by nearly four fifth of the respondents in villages of Cauvery Delta and North West Zones and more than one half of the High Altitude village. On the contrary none has realised the same in the villages of North West, Western, and High Rainfall Zones and a few had felt it in the case of Southern villages. It is mainly due to the fact that the cremation sheds have yet to be constructed in these villages.

A few respondents those lived nearby the burial ground reported pollution of Air; specifically they get foul smell at the time of cremation. Air Pollution due to the

cremation nearby the houses was felt by a few in the villages of the Cauvery Delta, Western, North West and Southern Zones while none had reported the same in the villages of North East, High Altitude and High Rainfall Zones. It was observed in the field that the increase in the land value resulting the rural poor to construct their houses in the Government waste lands near by the common cremation ground. Hence, the problem of foul smell due to cremation is the result of the faulty location of the houses by the respondents rather than by the government bodies.

The lack of road to burial ground is the major concern of all the villages except North East and High Rainfall Zones. More than two thirds of the respondents in the villages of Cauvery Delta, North West and Southern Zones and all the respondents in the Western zone and half of the respondents in the High Altitude Zone had reported the non-existence of road facility to the cremation ground.

The innovative provisions of Cremation Shed and approach roads to cremation ground are really beneficial to the people. These facilities may be extended to all the hamlets. Sufficient care has to be taken in locating the sites for the construction of cremation Sheds.

Library

Manifold increase in the literacy and educational status of rural people has increased the demand for literature in the countryside. The construction of libraries aims to increase people's general awareness. Table 7.19 presents the positive and negative externalities perceived by the respondents surveyed.

The Positive externalities of library include reading newspapers, books, increased awareness about Human Rights, Environment, Development Schemes, Dissemination of learned Information to others, Increased Employment opportunities, etc.

More than half of the respondents in the High Rainfall village and more than one third of them in Southern village reported reading newspapers in the library. Nearly one fifth of the respondents in the villages of High Altitude and a few in other Zones reported it. Reading books was reported by more than one third of the respondents in the High Rainfall zone and more than one fourth of them in the Southern Zone. In other Zones very few had reported. The use of library for reading newspapers was found in the hamlets, wherever they provided. Further reading of newspaper was prominent among the literate, if they have access to the same. It was also found that the people read newspapers in the tea stalls. As compared to the use of library for reading newspapers, the reading of books was found low in the villages. Still the people have not realised the importance of reading literary and scientific books in day today life other than they required for examination.

A few in the western, North West, and Southern Zones and none in other villages reported that they had awareness of development programmes. More than one third of the respondents in the High Rainfall and more than one fifth of the respondents in the Southern village households learned environmental issues. A few in other villages also reported it. Increase in awareness on Human Rights was perceived by more than one fourth and more than one tenth of the respondents in the High Rainfall, and High Altitude zones respectively. A few in the villages of Cauvery Delta, Northwest zones learned employment opportunities. The learned information was disseminated to others. More than one third of the respondents in the High Rainfall village and more than one fourth of them in Southern village reported that they had disseminated learned information to the illiterate. Only one tenth of the respondents in the High Altitude and a few of them from other villages reported the dissemination.

'Inadequacy of newspapers, books' and 'not opening as per the schedule' was observed as negative externalities of library. Only one respondent in the High Rainfall village had reported the former, whereas only one tenth of the respondents in the same village reported the latter. Also a few of the respondents in the Southern zone expressed the same.

In the light of above discussions and field observations clearly show that the libraries exist only a selected hamlets of villages surveyed. It is observed that a few of them reading newspapers. The general books were also read by a considerable number of the respondents, wherever the libraries exist. The proportion of the respondents read books were lower than the readers of newspapers. The libraries serve the purpose of generating awareness on environment as well as Human Rights as compared to development programmes. It could also be found that the people who use the library mostly disseminate the information to the illiterates. Further, the libraries could help the people to get employment, provided that they have to give continuous service particularly in the rural areas.

Street Light

Rural Electrification has resulted in the removal of darkness in the rural areas of the country. Apart from the use of electricity for domestic and agricultural, the Government provided streets lights in the rural areas. The positive externalities of streetlights presented in the Table 7.20 are as follows: minimisation of electricity expenses, increased working hours, reduced nuisance by animals and insects, enhanced movement of women during the night hours, reduction in the use of public places for open defection and increased political discussion.

More than one third of the respondents in the North West Zone and more than one fifth of them in Cauvery Delta reported minimization of the household expenditure on electricity. In other villages a few have reported it. Increased working hours during the night was perceived by more than half of the respondents in the Cauvery Delta while more than one third of the respondents in the villages of Western, Southern and High Rainfall Zones reported it. Nearly one fourth of the respondents in the High Altitude Zone and a few in other villages also reported.

Reduction of the disturbance by the animals and insects was expressed by a majority of the respondents in all the villages except Northwest and North East villages. More than four fifth of the respondents in the Cauvery Delta, more than two third of them in the villages of Western and High Altitude Zones and more than one half of them in the Southern and High Rainfall reported it. Only one fifth of the respondents in the villages of North West and some in North East opined that the streetlight reduced that nuisance by animals or pests.

Enhanced movement of women during the night was perceived by a majority of the respondents in all the villages except North West and North East villages. More than four fifth of the respondents in Cauvery Delta and Southern Zones and more than two third of them in the villages of Western, High Altitude and High Rainfall Zones reported the enhancement of movement of women due to streetlights.

Open defecation is a major sanitation problem in rural areas. During night, the people use wastelands nearby village for open defecation. Proper functioning of streetlight is expected to result in the reduction in use of wastelands. A vast majority of the respondents in the villages of Cauvery Delta, North East, Western, and High Altitude Zones felt that the streetlights were helpful in reducing the open defecation. Very few in other villages also felt this. More than four fifth of the respondents in the North East and more than two thirds of them in the villages of Cauvery Delta, Western and High Altitude Zones reported the reduction in the open defecation during the night due to the proper functioning of Streetlight.

It is customary in the rural area to have political discussions among the adults during the night hours. Cadres of different parties debate over the policies and programmes of the government at the national and state levels. A simple majority of the respondents in the Cauvery Delta reported the existence of such political discussions. Nearly more than one third of the respondents in the Western Zone and more than one tenth of the respondents in Southern and High Rainfall villages also opined thus.

The negative externalities observed and recorded in the present study include irregular functioning, inadequate brightness and reduction of working hours, stealing of electricity for family functions and killing rodents, Misutilisation of electricity by politicians, accidents during night, disturbances due to insects and antisocial elements.

Irregular functioning of streetlights was reported by a very few respondents in Cauvery Delta, Western, North West, and High Altitude Zones while none in other villages reported the same. Inadequacy of brightness was reported by a few in the villages of Cauvery Delta, North East, North West, Southern Zones while more than one tenth of the respondents in the villages of Western, High Rainfall and High Altitude reported. Regular functioning and adequacy of brightness of streetlights is mainly due the functioning of Panchayati Raj Institutions after the 73rd amendment to the constitution of India. This is witnessed in the study villages. In case of irregular functioning the people report the problem to the local body members and they try to rectify it. The periodical meetings of Gram Sabha have empowered the people to raise such issues in the meetings.

Misutilisation of electricity by people for family functions and killing rodents and political meetings have always present in the rural areas. A few of the respondents in the North West and only a respondent in High Rainfall villages reported usage of electricity from public line for family functions while one or two respondents in the villages of Cauvery Delta, North West and High Rainfall Zones reported that they were using it for killing rodents. As most of the households and pump sets in the rural areas have been electrified a very few are found to be not using public lines for family functions and killing rats.

Light during the night hours attracts pests and insects naturally and anti social elements may utilize the light for their purposes. More than one fifth of the respondents in the villages of Cauvery Delta and a few in other villages reported to be affected by the pests attracted by the streetlights. Medical expenses due to pest was reported a few in all the villages.

Streetlights seem to be a boon to the rural people and in most of the villages surveyed, they were found to be regularly functioning. It was attributed to the functioning of Panchayati Raj institutions after the 73rd amendments especially the periodical meetings of Gram Sabha. It was also found that the functioning of streetlights increased the working hours in some of the villages enhanced the free movement of women and reduced the nuisance of pests and animals. It arrested the practice of open defecation. Facilitation of political discussion was found to be a major positive externality of streetlights in all the villages. The negative externalities are very few and found rarely in most of the villages studied. Misutilisation of electricity by public and politicians were rare while disturbance by insects and antisocial elements was also not found in most of the villages considerably.

Veterinary Hospital

Livestock forms a major source of livelihood to the rural population in India. It constitutes a major share of assets as well as source of income. Health of the cattle needs care and protection. Veterinary Dispensaries and Hospitals have been functioning in almost all the villages of the state of Tamil Nadu. Positive and negative externalities observed in the field have been presented in the Table 7.21.

Treatment of cattle for the common ailments and artificial insemination recorded as positive externalities in the present work. Treatment of the cattle for common ailments was reported in the villages of Cauvery Delta, Western, North West and Southern villages only. More than one third of the respondents in the villages of Cauvery Delta and Western Zones; more than one third of the respondents in North West Zone and a few in the Southern villages reported that they availed treatment for their animals in the Veterinary hospitals. Similar picture obtains on the artificial insemination also. Nearly one third of the respondents in Western zone more than one fourth of the Cauvery Delta and nearly one fifth of them in North Western Villages reported the artificial insemination in the Government veterinary hospitals.

As far as the negative externalities are concerned, non-availability of medicine and prevalence of bribe have been recorded. A few respondents reported the non-availability of medicine in the villages of Cauvery Delta, Western Zone, and North West Zones. In other villages none reported this problem. A few respondents in Cauvery Delta Village and more than one tenth of the respondents in the village of North West Zone reported the prevalence of bribe in Veterinary hospitals for treatment.

The Veterinary hospitals were found to be widely used by a considerable number of households in the villages of Cauvery Delta, Western, North West and a few in Southern villages. The problems of non-availability of medicine and prevalence of bribe were found rarely. The field observation showed that the Veterinary hospitals were used by most of the households having livestock.

Primary Health Centre

Primary health centre and sub-centre constitute the major components of rural health care system in India. In the present study an attempt is made to identify the positive and negative externalities of primary health care centers which is presented in the Table 7.22. The positive externalities include employment in construction, availability of required medicine, cleanliness and hygiene in the hospital, treatment for common ailments, minimization of transport cost, and treatment at the time of emergency, immunization of children and receipt of contraceptives at free of cost. On the other hand the negative externalities include prevalence of unhygienic conditions and payment for treatment.

Primary health centres and sub centres are managed and cleaned well in respect of the villages of Cauvery Delta, Western, North West, and more than half of them in Southern zone. In the villages of North East, High Altitude and High Rainfall a few reported the same. Availability of required medicine was found by more than four fifth of respondents of Cauvery Delta zone more than half of the respondents in Western and

more than one third of the respondents in Southern zones. In other villages a few reported the same. It was found in North East zone village people are visiting public hospital located in the near by town Villupuram as it is very near and had more facilities. In the context of High Altitude and High Rainfall zone villages primary health centres didn't exist.

Regarding the utilization of primary health centres, more than four fifth of the households in Cauvery Delta, Western, North West and Southern Zones reported to be getting treatment for common ailments as well as immunizing their children from the primary health centres. Four fifth respondents in the Cauvery Delta availed treatment at the time of emergency. More than one fifth of the respondents in the Southern Village and a few others reported that they had received contraceptives at free of cost from the centre. Minimization of transport cost due to the existence of primary health centre was reported by most of the respondents in the villages of Cauvery Delta, Western High Altitude and Southern zones. Employment in construction of PHC was reported by nearly one fourth of the respondents in Cauvery Delta and a few in North West Zonal villages.

With regard to negative externalities, it could be observed that the prevalence of unhygienic condition noticed in the villages of North East, North West, and Southern Zones. Majority of the respondents of North Eastern zone reported that they paid money for treatment Whereas more than one third of them in Southern village as well as one fifth of the respondents in the western zonal village paid money for getting treatment.

In the light of above, the primary health centres were found to be properly functioning in the villages of Cauvery Delta, Western, North West, High Altitude and Southern Zones. However, some of them were suffering from the problem of bribery, unhygienic condition. Inadequacy of required medicine was also pronounced by a significant number of respondents, which warrants immediate action.

Positive Pecuniary Externalities

The Government of India and the State Government put up and strengthened various CPRs in the villages for the benefit of the poor through rural development and also from other development programmes. These resources have made some positive impact on the households. Impacts can be seen as internal and external. In the context of externalities, an attempt has also been made to quantify the pecuniary positive and negative externalities of the major activities carried out in the State of Tamil Nadu.

The study recorded 13 positive pecuniary externalities (Table 7.23). It does not provide any strict of them as classification have not been made strictly as pure public goods, merit goods, etc. The intention of the analysis is to make a general of the pecuniary positive externalities from the Government programmes.

The first positive externality is 'Value addition to their assets and houses due to the construction of Community Hall'. Of late, the State Government constructed a multipurpose community hall in the villages. These halls do create some positive externalities. Of the seven villages surveyed, the responses were recorded only in two villages of NWZ and HRZ. Of the respondents 31 households reported that they lived nearby the community hall hence their asset value increased. On an average, asset value increased to the tune of Rs. 5611. In certain other regions, the rural households did not feel, as to have enjoyed, any benefits due to various reasons viz. size, location, maintenance, etc.

The second pecuniary positive externality is 'wage income received from group housing activity'. As per the guidelines for construction of group houses, the officials have to seek the co-operation of the public and involve the beneficiaries in the construction activities. Some of them were involved directly in the group house activities and contributed as labour. Of these total beneficiaries, only five beneficiaries alone received income. Per household monetary benefit stood at Rs. 880. It reveals that not all the beneficiaries had participated in these activities. The programme should ensure that

all the beneficiaries should involved themselves in the activities of group housing. This involvement help in maintaining the quality in construction and thereby they may also get some additional income.

The third pecuniary positive externality is focused on the 'provision of essential goods at subsidised prices through PDS and reduction in household expenditure'. It is interesting to observe that most of the sample households enjoy the benefits of PDS. On an average, per household per month benefit reached to Rs. 111. These households revealed their opinion on comparing the essential goods prices to the open market as well as the quality. Assessment in reduction of expenditure differs among the zone villages. It varied in between Rs. 38 and Rs. 173. It also reveals the quality of the products disbursed in the villages.

The fourth pecuniary positive externality highlights the 'benefits from the library'. The government has promoted rural libraries to help the rural poor by way of building and up keeping the libraries. It is expected that these libraries would have made some positive impact on the rural households. Information is being treated as a catalytic agent in the process of development. Availability and accessibility of right, relevant and comprehensive information enable the households to make right decision and enjoy the benefits. In this direction, the present question has been administered and gathered information. Of the total sample, only seven households revealed that they had benefited from the library. On an average, per household benefit stood at Rs. 9174. The size of the benefit realised by the benefited household is relatively large, but the number of benefited households is very small in number. It reveals the quality of library service in the rural areas as well as the local participation.

The fifth positive pecuniary externality addressed the issue of 'reduction of food expenses due to the provision noon meal to the children and the old age pensioners'. Of the total sample, 303 households reported that they had benefited from the noon meal scheme to the tune of Rs. 407 per benefited household. The responses of the households

significantly differed among the zones. Zero responses were recorded in the NEZ and NWZ villages. It reveals the quality of the food served among the regions.

The sixth positive pecuniary externality is the 'functioning of PHC and minimisation of treatment cost'. Making provision of PHC in the rural areas and the good quality of services would help the local population to avail health services. This will considerably minimize the treatment cost. In probing these monetary benefits, the present question has been administered. Of the total sample, 661 households reported that their treatment cost has been reduced due to the provision of PHCs. On an average, the benefited households enjoyed the monetary benefit to the tune of Rs. 455. Of the seven zonal villages, three zone village people (NEZ, NWZ, and HRZ) didn't realise any benefits. These services are available in the villages / neighbouring villages for more than two or three decades. Hence, they had not realised the immediate benefits.

The seventh positive pecuniary externality is 'received wage income from the construction work of toilets'. Construction of toilet may not generate sustainable employment throughout the year, for this work is carried out only occasionally. However in order to assess the beneficiary participation in the construction activities, the question has been administered. In total, 22 households alone enjoyed the monetary benefit to the tune of Rs. 125 per household. The response is very poor as comparing to the total toilets constructed in the villages.

The eighth positive pecuniary externality probes the 'minimisation of education expenditure due to the functioning of Government schools in the villages'. The response has been recorded in all the zone villages and in total 711 households reported that they enjoyed the monetary benefit equivalent to Rs. 520. It reveals that the panchayat schools play a key role in delivering educational goods particularly to the rural population. Further, they enjoyed the cloth, chappals distributed at free of cost. This has been listed as ninth positive pecuniary externality of this analysis. On an average, per household benefit reached to Rs. 276. In juxtaposing the figures of minimisation of educational and

cloth, chappals expenditure, one could understand that the benefits were not equitable in respect of regional distribution in the State.

The tenth externality examines the development of roads in the rural areas. The Government constructed various forms of roads depends on the regional requirement and availability of funds. These roads have been used for multiple purposes. Since the roads are pure public goods, it could be expected that all of them benefited from these services. However, a poor response is recorded only in the case of pecuniary benefits. In total, 63 households reported that they enjoy the services and their transport cost has been reduced considerably and the monetary benefit equal to Rs. 82. Zone wise assessment is too varied significantly.

The eleventh positive pecuniary externality is 'using road as thrashing floor and reduction of cost'. Of the total sample, 22 cases were reported that they used the roads as thrashing floor and reduction of cost. On an average, they enjoyed the monetary benefit to the tune of Rs. 96 per household. These cases were recorded only in three zones viz. CDZ, WZ and HRZ. It is understood that the farmers who have possessed land nearest to the main / pucca road, they enjoyed these services.

The twelth externality highlights the additional income from SGSY activities. This programme aims to develop micro enterprises in the rural areas. If they involve in these activities, additional income would have been generated. In total, 41 households reported that their income level has been increased to the tune of Rs. 2101. These cases were reported only in the zones of Western, North West and High Rainfall. In the rest of the zone sample population also involved in the SGSY activities, but they had not really involved or promoted to the next grade of economic activities.

The thirteenth positive pecuniary externality is 'reduction in electricity expenses due to the provision of street lights'. In all, 90 households reported that their electricity expenses were reduced due to the functioning of streetlights. This monetary benefit

varied from region to region and on an average the benefit reached to Rs. 64 per benefited household.

In the light of the above discussion, it could be concluded that the major CPRs, public goods and merit goods put up and strengthened under the rural development programmes, made good impact on the rural households. Further, the benefits did not trickle down to all the targeted groups due to the nature of the property / service provided by the Government.

Negative Pecuniary Externalities

Any developmental activity may create positive as well as negative externalities apart from generating internal benefits. In this context, it is aimed to quantify the pecuniary negative externalities arose in the course of implementing various rural development programmes in the State of Tamil Nadu. If the magnitude of negative externalities is very high, the developmental activity may not be construed as sustainable. In this context, fifteen pecuniary negative externalities were identified and presented in Table 7.24. Of these, the first two negative externalities are related to group housing. Due to the various practical problems in execution of group housing, the quality of construction suffers in all the zones of the study. On an average, Rs. 12,695 is required to renovate per house constructed under group housing. At the next level, Rs. 5137 is needed to set right the damages of group housing. It shows that the houses were not constructed properly and also without the participation of the beneficiaries. Had they participated and made some additional contribution in terms of labour, the entire negative externalities would have been avoided. It reveals that a minimum dose of capital is required to construct good quality of houses. This could be done by way of making additional contribution either by the beneficiary or the Government to build good houses. Further, the political involvement and corruption have to be reduced in execution of the programmes.

In the rest of the negative externalities, the number of cases reported in between 51 and one. And the monetary loss is ranged from Rs. 575 to Rs. 23. These externalities arose due to various irregularities in the functioning of local / village level institutions. These institutions have to be strengthened to protect the environmental and CPRs available in the villages.

Table 7.1 Positive Externalities of the CPR - Water Harvesting Structures

		Agro Climatic Zone								
		Cauvery	North	Western	North	High	Southern	High	Total	
Sl.No.	Positive Externalities	Delta	East		West	Altitude		Rainfall		
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890	
1	Percolation of Water to the Wells	270	29	208	6	5	104	246	868	
		(100.00)	(10.74)	(77.04)	(2.22)	(1.85)	(38.52)	(91.11)	(45.93)	
2	Water Tanks as a Source of Irrigation	3	44	80	4	0	0	38	169	
		(1.11)	(16.30)	(29.63)	(1.48)	(0.00)	(0.00)	(14.07)	(8.94)	
3	Members of the Family took Bath	15	0	46	0	0	109	83	253	
		(5.56)	(0.00)	(17.04)	(0.00)	(0.00)	(40.37)	(30.74)	(13.39)	
4	Washing Clothes in the Tanks	37	0	150	4	5	110	222	528	
		(13.70)	(0.00)	(55.56)	(1.48)	(1.85)	(40.74)	(82.22)	(27.94)	
5	Taking Bath results in No Disease	0	0	157	2	0	102	10	271	
		(0.00)	(0.00)	(58.15)	(0.74)	(0.00)	(37.78)	(3.70)	(14.34)	
6	Good Breeze near Tank	11	0	208	2	0	20	36	277	
		(4.07)	(0.00)	(77.04)	(0.74)	(0.00)	(7.41)	(13.33)	(14.66)	
7	Cleanliness due to Rearing of Fish	16	0	190	0	0	0	116	322	
		(5.93)	(0.00)	(70.37)	(0.00)	(0.00)	(0.00)	(42.96)	(17.04)	
8	Use of Silt as Manure	10	0	86	1	0	1	166	264	
		(3.70)	(0.00)	(31.85)	(0.37)	(0.00)	(0.37)	(61.48)	(13.97)	
9	Cultivating Short term Crops During Summer	1	0	8	0	0	1	1	11	
		(0.37)	(0.00)	(2.96)	(0.00)	(0.00)	(0.37)	(0.37)	(0.58)	
10	Soaking of Coconut Leaves, Bamboo etc.	45	0	12	0	0	4	0	61	
		(16.67)	(0.00)	(4.44)	(0.00)	(0.00)	(1.48)	(0.00)	(3.23)	

Source: Computed

Note: Figures in parentheses are percentages to the total

 Table
 7.2
 Negative Externalities of the CPR - Water Harvesting Structures

		Agro Climatic Zone							
		Cauvery	North	Western	North	High	Southern	High	Total
Sl.No.	Negative Externalities	Delta	East		West	Altitude		Rainfall	
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
1	Washing off Fertilizer and Pesticides by Flood	5	5	21	2	0	0	13	46
		(1.85)	(1.85)	(7.78)	(0.74)	(0.00)	(0.00)	(4.81)	(2.43)
2	Inadequate Water Supply to Tail Areas	2	6	25	0	0	0	9	42
		(0.74)	(2.22)	(9.26)	(0.00)	(0.00)	(0.00)	(3.33)	(2.22)
3	Skin Diseases due to Washing of Clothes	0	0	7	0	0	0	6	13
		(0.00)	(0.00)	(2.59)	(0.00)	(0.00)	(0.00)	(2.22)	(0.69)
4	Other Diseases due to Polluted Water	5	0	10	0	0	3	82	100
		(1.85)	(0.00)	(3.70)	(0.00)	(0.00)	(1.11)	(30.37)	(5.29)
5	Diseases due to Washing off Animals	1	0	3	0	0	0	4	8
		(0.37)	(0.00)	(1.11)	(0.00)	(0.00)	(0.00)	(1.48)	(0.42)
6	Diseases due to Water Scarcity in Summer	2	0	4	2	0	0	4	12
		(0.74)	(0.00)	(1.48)	(0.74)	(0.00)	(0.00)	(1.48)	(0.63)
7	Water Pollution and Bad Odour	9	0	16	1	0	4	154	184
		(3.33)	(0.00)	(5.93)	(0.37)	(0.00)	(1.48)	(57.04)	(9.74)
8	Water Scarcity and Problems to take Bath	0	0	0	0	0	199	9	208
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(73.70)	(3.33)	(11.01)
9	Water Pollution and Its Effects on your Life	1	0	0	2	0	0	4	7
		(0.37)	(0.00)	(0.00)	(0.74)	(0.00)	(0.00)	(1.48)	(0.37)
10	Water Pollution due to Cleaning of Utensils	2	0	0	2	0	0	4	8
		(0.74)	(0.00)	(0.00)	(0.74)	(0.00)	(0.00)	(1.48)	(0.42)

Source: Computed

Note: Figures in parentheses are percentages to the total

Table 7.3 Positive and Negative Externalities of the CPR - Common Trees

		Agro Climatic Zone							
		Cauvery	North	Western	North	High	Southern	High	Total
Sl.No.	Externalities	Delta	East		West	Altitude		Rainfall	
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
	Positive Externalities								
1	Tree Leaves as Cattle Feed	105	43	82	9	0	5	1	245
		(38.89)	(15.93)	(30.37)	(3.33)	(0.00)	(1.85)	(0.37)	(12.96)
2	Benefits from Lease-in Common Trees	8	0	64	3	0	0	1	76
		(2.96)	(0.00)	(23.70)	(1.11)	(0.00)	(0.00)	(0.37)	(4.02)
3	Use of Common Trees for Fire wood	164	211	110	177	0	30	1	693
		(60.74)	(78.15)	(40.74)	(65.56)	(0.00)	(11.11)	(0.37)	(36.67)
4	Trees Shadow for Playing and Taking Rest	163	243	182	188	0	268	1	1045
		(60.37)	(90.00)	(67.41)	(69.63)	(0.00)	(99.26)	(0.37)	(55.29)
5	Medicinal use of Trees	123	0	75	26	0	0	1	225
		(45.56)	(0.00)	(27.78)	(9.63)	(0.00)	(0.00)	(0.37)	(11.90)
	Negative Externalities								
1	Reduction of Yield due to Shadow	1	0	0	2	0	0	0	3
		(0.37)	(0.00)	(0.00)	(0.74)	(0.00)	(0.00)	(0.00)	(0.16)
2	Expenses for Cleaning Thorns	2	0	0	0	0	0	0	2
		(0.74)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.11)

Source: Computed

Note: Figures in parentheses are percentages to the total sample

Table 7.4 Positive and Negative Externalities of the CPR - Holy Places

					Agro Cl	imatic Zo	ne		
		Cauvery	North	Western	North	High	Southern	High	Total
Sl.No.	Externalities	Delta	East		West	Altitude		Rainfall	
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
	Positive Externalities								
1	Visiting Places of Worship	266	270	270	261	176	264	265	1772
		(98.52)	(100)	(100)	(96.67)	(65.19)	(97.78)	(98.15)	(93.76)
2	Donate to Renvoation and Construction	256	269	270	26	2	240	181	1244
		(94.81)	(99.63)	(100.00)	(9.63)	(0.74)	(88.89)	(67.04)	(65.82)
	Negative Externality								
1	Communal Riots and Losses	0	0	0	1	0	0	0	1
		(0.00)	(0.00)	(0.00)	(0.37)	(0.00)	(0.00)	(0.00)	(0.05)

Table 7.5 Positive Externalities of the CPR - Road

					Agro Cl	imatic Zon	ie		
Sl.No.	Positive Externalities	Cauvery Delta	North East	Western	North West	High Altitude	Southern	High Rainfall	Total
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
1	Increase in Employment and Income	9	0	15	13	0	10	37	84
		(3.33)	(0.00)	(5.56)	(4.81)	(0.00)	(3.70)	(13.70)	(4.44)
2	Reduction of Transport Cost	8	0	0	39	31	11	4	93
		(2.96)	(0.00)	(0.00)	(14.44)	(11.48)	(4.07)	(1.48)	(4.92)
3	Increase in Consumption of Basic Goods	12	0	231	55	217	125	159	799
		(4.44)	(0.00)	(85.56)	(20.37)	(80.37)	(46.30)	(58.89)	(42.28)
4	Economising Fuel Consumption	15	6	143	30	99	51	111	455
		(5.56)	(2.22)	(52.96)	(11.11)	(36.67)	(18.89)	(41.11)	(24.07)
5	Reduction of Cost on Thrashing Floor	4	0	12	5	0	2	3	26
		(1.48)	(0.00)	(4.44)	(1.85)	(0.00)	(0.74)	(1.11)	(1.38)
6	Increased Accessibility to School, Market etc.	240	256	252	231	219	229	147	1574
		(88.89)	(94.81)	(93.33)	(85.56)	(81.11)	(84.81)	(54.44)	(83.28)
7	Smooth Riding of Vehicles	241	236	231	169	137	90	147	1251
		(89.26)	(87.41)	(85.56)	(62.59)	(50.74)	(33.33)	(54.44)	(66.19)
8	Comforts in using Roads as Thrashing Floor	4	0	33	16	0	10	26	94
		(1.48)	(0.00)	(12.22)	(5.93)	(0.00)	(3.70)	(9.63)	(4.97)
9	Children using as Play Ground	241	247	213	179	228	82	26	1216
		(89.26)	(91.48)	(78.89)	(66.30)	(84.44)	(30.37)	(9.63)	(64.34)
10	Emerging as Contractor and Laying of Roads	4	0	0	0	11	1	0	16
		(1.48)	(0.00)	(0.00)	(0.00)	(4.07)	(0.37)	(0.00)	(0.85)
11	No Water Stagnation during Rainy Days	195	41	184	7	107	254	139	927
		(72.22)	(15.19)	(68.15)	(2.59)	(39.63)	(94.07)	(51.48)	(49.05)
12	Good Roads and Reduction of Air Pollution	211	37	155	9	102	50	47	611
		(78.15)	(13.70)	(57.41)	(3.33)	(37.78)	(18.52)	(17.41)	(32.33)
13	Road Side Trees Create Good Environment	220	106	128	3	0	42	34	533
		(81.48)	(39.26)	(47.41)	(1.11)	(0.00)	(15.56)	(12.59)	(28.20)

 Table 7.6
 Negative Externalities of the CPR - Road

					Agro Clin	natic Zone			
		Cauvery	North	Western	North	High	Southern	High	Total
Sl.No.	Negative Externalities	Delta	East		West	Altitude		Rainfall	
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
1	Forced to Give Bribes for Contractorship	2	0	0	1	0	0	0	3
		(0.74)	(0.00)	(0.00)	(0.37)	(0.00)	(0.00)	(0.00)	(0.16)
2	Politically influenced Person as Contractor	9	37	39	5	0	13	99	202
		(3.33)	(13.70)	(14.44)	(1.85)	(0.00)	(4.81)	(36.67)	(10.69)
3	Accidents Roads as Thrashing Floor	2	0	4	0	0	0	2	8
		(0.74)	(0.00)	(1.48)	(0.00)	(0.00)	(0.00)	(0.74)	(0.42)
4	Rash driving and Human Losses	2	0	0	0	2	0	1	5
		(0.74)	(0.00)	(0.00)	(0.00)	(0.74)	(0.00)	(0.37)	(0.26)
5	Roads as Thrashing Floor and Disturbances	9	0	40	0	2	1	42	94
		(3.33)	(0.00)	(14.81)	(0.00)	(0.74)	(0.37)	(15.56)	(4.97)
6	Held up due to Traffic	9	0	32	0	0	0	38	79
		(3.33)	(0.00)	(11.85)	(0.00)	(0.00)	(0.00)	(14.07)	(4.18)
7	Construction of Roads and Offered Bribe	2	0	0	2	0	0	0	4
		(0.74)	(0.00)	(0.00)	(0.74)	(0.00)	(0.00)	(0.00)	(0.21)
8	Stagnation of Water Creates Bad Environment	12	2	69	4	36	6	31	160
		(4.44)	(0.74)	(25.56)	(1.48)	(13.33)	(2.22)	(11.48)	(8.47)
9	Air and Noise Pollution due to Traffic	15	0	141	3	12	0	36	207
		(5.56)	(0.00)	(52.22)	(1.11)	(4.44)	(0.00)	(13.33)	(10.95)

 ${\bf Table~7.7~~Positive~and~Negative~Externalities~of~the~CPR~-~Culverts~/~Small~Bridges}$

					Agro Cli	matic Zone			
		Cauvery	North	Western	North	High		High	Total
Sl.No.	Externalities	Delta	East		West	Altitude	Southern	Rainfall	
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
	Positive Externalities								
1	Employment in Construction	4	0	18	8	0	0	130	160
		(1.48)	(0.00)	(6.67)	(2.96)	(0.00)	(0.00)	(48.15)	(8.47)
2	Using Bridges Daily for Transport	18	0	231	204	3	259	242	957
		(6.67)	(0.00)	(85.56)	(75.56)	(1.11)	(95.93)	(89.63)	(50.63)
3	Bridges as Thrashing Floor and Drying Food Grains	11	0	55	10	0	0	38	114
		(4.07)	(0.00)	(20.37)	(3.70)	(0.00)	(0.00)	(14.07)	(6.03)
4	Comfortable for Children to go to School	11	0	227	46	3	247	234	768
		(4.07)	(0.00)	(84.07)	(17.04)	(1.11)	(91.48)	(86.67)	(40.63)
5	Facilitating for Irrigation and Drainage	6	0	0	26	0	1	77	110
		(2.22)	(0.00)	(0.00)	(9.63)	(0.00)	(0.37)	(28.52)	(5.82)
6	Reduction of Time for Collecting Water	6	0	0	27	0	1	80	114
		(2.22)	(0.00)	(0.00)	(10.00)	(0.00)	(0.37)	(29.63)	(6.03)
	Negative Externalities								
1	Disturbances for Transport Activities	4	0	0	4	0	0	5	13
		(1.48)	(0.00)	(0.00)	(1.48)	(0.00)	(0.00)	(1.85)	(0.69)
2	Occurrence of Accidents	4	0	0	7	0	4	1	16
		(1.48)	(0.00)	(0.00)	(2.59)	(0.00)	(1.48)	(0.37)	(0.85)
3	Losses of Crops due to Water Storage	0	0	0	4	0	0	2	6
		(0.00)	(0.00)	(0.00)	(1.48)	(0.00)	(0.00)	(0.74)	(0.32)
4	Protested by Tail end Area Farmers	0	0	0	7	0	3	3	13
		(0.00)	(0.00)	(0.00)	(2.59)	(0.00)	(1.11)	(1.11)	(0.69)

Source: Computed **Note**: Figures in parentheses are percentages to the total

Table 7.8 Positive Externalities of the CPR - Public School

					Agro Cli	matic Zone			
Sl.No.	Positive Externalities	Cauvery Delta	North East	Western	North West	High Altitude	Southern	High Rainfall	Total
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
1	Employment Construction	6 (2.22)	0 (0.00)	0 (0.00)	6 (2.22)	0 (0.00)	0 (0.00)	6 (2.22)	18 (0.95)
2	Admitted Children	122 (45.19)	109 (40.37)	114 (42.22)	153 (56.67)	70 (25.93)	127 (47.04)	85 (31.48)	780 (41.27)
3	Minimisation of Expenditure	120 (44.44)	109 (40.37)	114 (42.22)	79 (29.26)	50 (18.52)	127 (47.04)	112 (41.48)	711 (37.62)
4	Reached to Higher Education	20 (7.41)	12 (4.44)	35 (12.96)	43 (15.93)	3 (1.11)	16 (5.93)	39 (14.44)	168 (8.89)
5	Quality of Teaching School	139 (51.48)	54 (20.00)	105 (38.89)	185 (68.52)	83 (30.74)	140 (51.85)	128 (47.41)	834 (44.13)
6	Provision for Computer facilities	122 (45.19)	0 0.00	0 0.00	57 (21.11)	60 (22.22)	0 (0.00)	0 (0.00)	242 (12.80)
7	Employed in Government or Private	4 (1.48)	2 (0.74)	7 (2.59)	9 (3.33)	0 (0.00)	0 (0.00)	4 (1.48)	26 (1.38)
8	Selling Eatables in the School Campus	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
9	Given Uniforms and Chappals	41 (15.19)	36 (13.33)	64 (23.70)	68 (25.19)	0 (0.00)	18 (6.67)	13 (4.81)	240 (12.70)
10	Reduction of Expenditure	41 (15.19)	0 (0.00)	32 (11.85)	20 (7.41)	0 (0.00)	14 (5.19)	8 (2.96)	115 (6.08)

Contd ...

Table 7.8 Contd ...

				A	gro Clin	natic Zon	ne		
		Cauvery	North	Western	North	High	Southern	High	Total
Sl.No.	Positive Externalities	Delta	East		West	Altitude		Rainfall	
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
11	Untouchability Prevails in the School	0	0	0	20	0	0	0	20
		(0.00)	(0.00)	0.00	(7.41)	(0.00)	(0.00)	(0.00)	(1.06)
12	Education and Changes in Culture	77	0	143	177	85	122	208	812
		(28.52)	(0.00)	(52.96)	(65.56)	(31.48)	(45.19)	(77.04)	(42.96)
13	Reduction in Social Inequality	98	0	137	101	73	128	229	766
		(36.30)	(0.00)	(50.74)	(37.41)	(27.04)	(47.41)	(84.81)	(40.53)
14	Participated and benefited in NCC / NSS	105	0	97	22	15	0	221	460
		(38.89)	(0.00)	(35.93)	(8.15)	(5.56)	0.00	(81.85)	(24.34)
15	Improvement in Social Status	89	0	126	48	41	53	177	534
		(32.96)	(0.00)	(46.67)	(17.78)	(15.19)	(19.63)	(65.56)	(28.25)
16	Awareness of Diseases among Children	100	9	157	104	67	128	215	780
		(37.04)	(3.33)	(58.15)	(38.52)	(24.81)	(47.41)	(79.63)	(41.27)
17	Good Ventilation Facilities in School	130	53	176	182	74	145	227	987
		(48.15)	(19.63)	(65.19)	(67.41)	(27.41)	(53.70)	(84.07)	(52.22)
18	Availability of School Toilets	126	45	159	184	40	135	231	920
		(46.67)	(16.67)	(58.89)	(68.15)	(14.81)	(50.00)	(85.56)	(48.68)

 Table 7.9
 Negative Externalities of the CPR - Public School

					Agro Clim	atic Zone			
		Cauvery	North	Western	North	High	Southern	High	Total
Sl.No.	Negative Externalities	Delta	East		West	Altitude		Rainfall	
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
1	Lack of Discipline	6	0	13	6	0.00	3.00	27.00	55.00
		(2.22)	(0.00)	(4.81)	(2.22)	(0.00)	(1.11)	(10.00)	(2.91)
2	Lack of Good Manners and Moral Behavior	6	50	45	1	1.00	2.00	44.00	149.00
		(2.22)	(18.52)	(16.67)	(0.37)	(0.37)	(0.74)	(16.30)	(7.88)
3	Tamil Medium as Hurdle for Higher Education	4	44	65	24	0.00	6.00	109.00	252.00
		(1.48)	(16.30)	(24.07)	(8.89)	(0.00)	(2.22)	(40.37)	(13.33)
4	Lavish Expenditure by Children	4	0	29	2	0.00	0.00	31.00	66.00
		(1.48)	(0.00)	(10.74)	(0.74)	(0.00)	(0.00)	(11.48)	(3.49)
5	Lack of Moral behavior and Good Manners	1	46	36	1	0.00	0.00	32.00	116.00
		(0.37)	(17.04)	(13.33)	(0.37)	(0.00)	(0.00)	(11.85)	(6.14)
6	Frequent Visiting Houses During Class Hours	5	0	5	1	0.00	0.00	23.00	34.00
		(1.85)	(0.00)	(1.85)	(0.37)	(0.00)	(0.00)	(8.52)	(1.80)
7	Non provision of English Medium	0	5	1	0	1.00	1.00	0.00	8.00
		(0.00)	(1.85)	(0.37)	(0.00)	(0.37)	(0.37)	(0.00)	(0.42)
8	Distributed low Quality Uniforms and Chappals	30	0	0	2	23.00	0.00	123.00	178.00
		(11.11)	(0.00)	(0.00)	(0.74)	(8.52)	(0.00)	(45.56)	(9.42)
9	Overcrowding and Noise Pollution	7	0	0	1	0.00	0.00	12.00	20.00
		(2.59)	(0.00)	(0.00)	(0.37)	(0.00)	(0.00)	(4.44)	(1.06)
10	Dumping of Wastes and Pollution	25	0	0	2	2.00	0.00	6.00	35.00
		(9.26)	(0.00)	(0.00)	(0.74)	(0.74)	(0.00)	(2.22)	(1.85)

Source: Computed Note: Figures in parentheses are percentages to the total

 Table 7.10
 Positive Externalities of the CPR - Community Hall

					U	imatic Zor	ie		
Sl.No.	Positive Externalities	Cauvery Delta	North East	Western	North West	High Altitude	Southern	High Rainfall	Total
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
1	Performing Family Functions	0 (0.00)	0 (0.00)	0 (0.00)	18 (6.67)	7 (2.59)	0 (0.00)	1 (0.37)	26 (1.38)
2	Employed in Construction	0 (0.00)	0 (0.00)	0 (0.00)	1 (0.37)	0 (0.00)	0 (0.00)	0 (0.00)	1 (0.05)
3	Storing and Drying Foodgrains	0 (0.00)	0 (0.00)	0 (0.00)	1 (0.37)	0 (0.00)	0 (0.00)	0 (0.00)	1 (0.05)
4	Taking Rest and Entertainment	0 (0.00)	0 (0.00)	0 (0.00)	16 (5.93)	3 (1.11)	45 (16.67)	0 (0.00)	64 (3.39)
5	Shelter During Natural Calamities	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	14 (5.19)	15 (5.56)	0 (0.00)	29 (1.53)
6	Political Discussions and Meetings	0 (0.00)	0 (0.00)	0 (0.00)	15 (5.56)	0 (0.00)	97 (35.93)	0 (0.00)	112 (5.93)
7	Increase in Social Status	0 (0.00)	0 (0.00)	0 (0.00)	3 (1.11)	0 (0.00)	46 (17.04)	4 (1.48)	53 (2.80)
8	Receipt of Additional Income	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	32 (11.85)	32 (1.69)
9	Value Addition to Assets and Houses	0 (0.00)	0 (0.00)	0 (0.00)	2 (0.74)	0 (0.00)	0 (0.00)	31 (11.48)	33 (1.75)
10	Surrounding areas have a Better Look	0	123	0	2	26	9	33	193
		(0.00)	(45.56)	(0.00)	(0.74)	(9.63)	(3.33)	(12.22)	(10.21)

Table 7.11 Negative Externalities of the CPR - Community Hall

					Agro Cli	matic Zo	ne		
Sl.No.	Negative Externalities	Cauvery Delta	North East	Western	North West	High Altitude	Southern	High Rainfall	Total
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
1	Inadequate facilities	0	0	0	2	0	3	71	76
		(0.00)	(0.00)	(0.00)	(0.74)	(0.00)	(1.11)	(26.30)	(4.02)
2	Loud Speaker Nuisance	0	0	0	1	0	0	1	2
		(0.00)	(0.00)	(0.00)	(0.37)	(0.00)	(0.00)	(0.37)	(0.11)
3	Inaccessibility	0	0	0	0	0	0	0	0
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
4	Caste Discrimination	0	0	0	1	5	1	1	8
		(0.00)	(0.00)	(0.00)	(0.37)	(1.85)	(0.37)	(0.37)	(0.42)
5	Disputes and Property Loss	0	0	0	0	0	0	0	0
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
6	Noise Pollution	0	0	0	1	0	0	1	2
		(0.00)	(0.00)	(0.00)	(0.37)	(0.00)	(0.00)	(0.37)	(0.11)
7	Dumping of Wastes and Pollution	0	0	0	2	6	0	0	8
		(0.00)	(0.00)	(0.00)	(0.74)	(2.22)	(0.00)	(0.00)	(0.42)

 Table 7.12 Positive and Negative Externalities of the CPR - Public Toilet

				1	Agro Cli	matic Zo	ne		
Sl.No.	Externalities	Cauvery Delta	North East	Western	North West	High Altitude	Southern	High Rainfall	Total
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
	Positive Externalities								
1	Minimisation of Expenditure for	25	0	49	8	4	2	108	196
	constructing Toilet	(9.26)	(0.00)	(18.15)	(2.96)	(1.48)	(0.74)	(40.00)	(10.37)
2	Constructing Toilet and	1	0	0	3	0	1	126	131
	Received Employment	(0.37)	(0.00)	(0.00)	(1.11)	(0.00)	(0.37)	(46.67)	(6.93)
3	Income from the employment	1	0	0	4	0	0	17	22
		(0.37)	(0.00)	(0.00)	(1.48)	(0.00)	(0.00)	(6.30)	(1.16)
4	Minimisation of Time	0	0	16	23	1	7	133	180
		(0.00)	(0.00)	(5.93)	(8.52)	(0.37)	(2.59)	(49.26)	(9.52)
5	Adequate Water Facilities	25	0	50	26	1	7	106	215
		(9.26)	(0.00)	(18.52)	(9.63)	(0.37)	(2.59)	(39.26)	(11.38)
6	Creation of Hygienic Condition	25	0	33	25	1	7	131	222
		(9.26)	(0.00)	(12.22)	(9.26)	(0.37)	(2.59)	(48.52)	(11.75)
7	Family Members Using Toilet	25	0	14	19	19	7	134	218
		(9.26)	(0.00)	(5.19)	(7.04)	(7.04)	(2.59)	(49.63)	(11.53)
	Negative Externalities								
1	Neat and clean	25	0	49	25	14	7	134	254
		(9.26)	(0.00)	(18.15)	(9.26)	(5.19)	(2.59)	(49.63)	(13.44)
2	Uncleanliness and diseases	0	0	0	10	0	0	9	19
		(0.00)	(0.00)	(0.00)	(3.70)	(0.00)	(0.00)	(3.33)	(1.01)
3	Appointed a Regular Person	0	0	0	2	1	0	25	28
	to Clean Toilet	(0.00)	(0.00)	(0.00)	(0.74)	(0.37)	(0.00)	(9.26)	(1.48)
4	Regularly Using the Toilet	25	0	14	21	0	7	127	194
		(9.26)	(0.00)	(5.19)	(7.78)	(0.00)	(2.59)	(47.04)	(10.26)

Table 7.13 Positive Externalities of the CPR - Public Television

				A	gro Cli	matic Z	one		
		Cauvery	North	Western	North	High	Southern	High	Total
Sl.No.	Positive Externalities	Delta	East		West	Altitude		Rainfall	
		n = 270	n = 270	n = 270	N = 1890				
1	Learn Employment Opportunities	8	0	185	167	118	108	114	700
		(2.96)	(0.00)	(68.52)	(61.85)	(43.70)	(40.00)	(42.22)	(37.04)
2	Learning Weather Report and Warnings	43	0	188	188	139	143	126	827
		(15.93)	(0.00)	(69.63)		/	(52.96)	(46.67)	
3	Awareness about Theft Incidents	47	0	196	182	138	140	116	819
		(17.41)	(0.00)	(72.59)	` /	` /	(51.85)	(42.96)	
4	Changes in Culture	40	0	189	197	159	145	122	852
		(14.81)	(0.00)	(70.00)	` /	,	(53.70)	(45.19)	
5	Watching T.V. and Realising Fraternity	41	0	196	199	153	144	121	854
		(15.19)	(0.00)	(72.59)			(53.33)	(44.81)	
6	Awareness about World Affairs	44	0	195	206	146	144	118	853
		(16.30)	(0.00)	(72.22)		(54.07)	(53.33)	(43.70)	
7	Watching Educational, Employment Progrmmes	0	0	154	182	36	28	4	404
		(0.00)	(0.00)			(13.33)	(10.37)	(1.48)	(21.38)
8	Watching Music, Cinema and Entertianment	45	0	187	188	113	111	60	704
		(16.67)	(0.00)	(69.26)	(69.63)	(41.85)	(41.11)	(22.22)	` /
9	Learning Political Developments	42	0	184	150	73	88	85	622
		(15.56)	(0.00)	` /	` /	(27.04)	(32.59)	(31.48)	
10	Watching Environmental Programmes	38	0	186	88	82	69	102	565
		(14.07)	(0.00)	(68.89)	(32.59)	(30.37)	(25.56)	(37.78)	(29.89)

Table 7.14 Negative Externalities of the CPR - Public Television

				A	Agro Cli	matic Zo	ne		
		Cauvery	North	Western	North	High	Southern	High	Total
Sl.No.	Negative Externalities	Delta	East		West	Altitude		Rainfall	
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
1	Inducing Caste Feelings, Social Disharmony	0	0	3	4	0	1	0	8
		(0.00)	(0.00)	(1.11)	(1.48)	(0.00)	(0.37)	(0.00)	(0.42)
2	Disputes over the Choice of Programmes	2	0	6	5	1	0	11	25
		(0.74)	(0.00)	(2.22)	(1.85)	(0.37)	(0.00)	(4.07)	(1.32)
3	Reduction of Eyesight due T.V.	4	0	11	12	0	4	37	68
		(1.48)	(0.00)	(4.07)	(4.44)	(0.00)	(1.48)	(13.70)	(3.60)
4	Routine Works Affected	8	0	25	16	0	5	24	78
		(2.96)	(0.00)	(9.26)	(5.93)	(0.00)	(1.85)	(8.89)	(4.13)
5	Watching Regional Problems Create Disturbances	0	0	0	3	0	0	0	3
		(0.00)	(0.00)	(0.00)	(1.11)	(0.00)	(0.00)	(0.00)	(0.16)
6	Noise Pollution	1	0	6	4	0	0	2	13
		(0.37)	(0.00)	(2.22)	(1.48)	(0.00)	(0.00)	(0.74)	(0.69)
7	Inducing Religious and Communal Tensions	0	0	1	3	0	0	0	4
		(0.00)	(0.00)	(0.37)	(1.11)	(0.00)	(0.00)	(0.00)	(0.21)

Table 7.15 Positive and Negative Externalities of the CPR - Post Office

				,	Agro Cli	matic Zo	ne		
		Cauvery	North	Western	North	High	Southern	High	Total
Sl.No.	Externalities	Delta	East		West	Altitude		Rainfall	
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
	Positive Externalities								
1	Sent Letters during Last Year	265	268	215	248	243	266	266	1771
		(98.15)	(99.26)	(79.63)	(91.85)	(90.00)	(98.52)	(98.52)	(93.70)
2	Received Letters during Last Year	243	243	192	231	49	263	231	1452
		(90.00)	(90.00)	(71.11)	(85.56)	(18.15)	(97.41)	(85.56)	(76.83)
3	Sent Telegrams during Last Year	27	0	35	21	0	41	123	247
		(10.00)	(0.00)	(12.96)	(7.78)	(0.00)	(15.19)	(45.56)	(13.07)
	Negative Externalities								
1	Letters not Promptly Delivered	15	0	19	9	0	0	3	46
		(5.56)	(0.00)	(7.04)	(3.33)	(0.00)	(0.00)	(1.11)	(2.43)
2	Posted Letters Not Delivered	1	0	15	5	0	0	0	21
		(0.37)	(0.00)	(5.56)	(1.85)	(0.00)	(0.00)	(0.00)	(1.11)

 Table 7.16
 Posive and Negative Externalities of the CPR - Police Station

			Agro Climatic Zone										
		Cauvery	North	Western	North	High	Southern	High	Total				
Sl.No.	Externalities	Delta	East		West	Altitude		Rainfall					
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890				
	Positive Externalities												
1	Controlled the Production and sale	263	249	0	95	0	203	218	1028				
	of Illicit Arrack	(97.41)	(92.22)	(0.00)	(35.19)	(0.00)	(75.19)	(80.74)	(54.39)				
2	Police Helped to Settle Disputes	33	1	34	12	0	5	14	99				
		(12.22)	(0.37)	(12.59)	(0.44)	(0.00)	(1.85)	(5.19)	(5.24)				
3	Helped to Recover Theft Property	14	0	12	1	0	0	4	31				
		(5.19)	(0.00)	(4.44)	(0.37)	(0.00)	(0.00)	(1.48)	(1.64)				
	Negative Externalities												
1	Misbehaviour of Policemen	5	0	6	0	0	4	0	15				
		(1.85)	(0.00)	(2.22)	(0.00)	(0.00)	(1.48)	(0.00)	(0.79)				
2	Bribes in Settlement of Disputes	4	1	6	0	0	0	0	11				
		(1.48)	(0.37)	(2.22)	(0.00)	(0.00)	(0.00)	(0.00)	(0.58)				
3	Injustice in Resolving Disputes	2	0	6	1	0	0	0	9				
		(0.74)	(0.00)	(2.22)	(0.37)	(0.00)	(0.00)	(0.00)	(0.48)				

Table 7.17 Positive and Negative Externalities of the CPR - Public Distribution System

		Agro Climatic Zone										
		Cauvery		Western			Southern	_	Total			
Sl.No	Externalities	Delta	East			Altitude		Rainfall				
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890			
	Positive Externalities											
1	Utilising PDS	265	270	270	270	270	252	266	1863			
		(98.15)	(100)	(100)	(100)	(100)	(93.33)	(98.52)	(98.57)			
2	Reduction in Expenditure	265	270	270	270	270	252	266	1863			
		(98.15)	(100)	(100)	(100)	(100)	(93.33)	(98.52)	(98.57)			
3	Time Saving	16	270	109	253	249	97	261	1255			
		(5.93)	(100.00)	(40.37)	(93.70)	(92.22)	(35.93)	(96.67)	(66.40)			
4	Shops Opened as per Schedule	164	259	150	200	245	53	224	1295			
		(60.74)	(95.93)	(55.56)	(74.07)	(90.74)	(19.63)	(82.96)	(68.52)			
	Negative Externalities											
1	Poor Quality of Food grains	236	269	131	131	0	205	231	1203			
		(87.41)	(99.63)	(48.52)	(48.52)	(0.00)	(75.93)	(85.56)	(63.65)			
2	Weighed Improperly	234	269	78	129	3	190	232	1135			
		(86.67)	(99.63)	(28.89)	(47.78)	(1.11)	(70.37)	(85.93)	(60.05)			
3	Occurance of Medical Expenses	3	30	4	36	0	2	0	75			
	due to Low Quality	(1.11)	(11.11)	(1.48)	(13.33)	(0.00)	(0.74)	(0.00)	(3.97)			
4	Amount for Pledging Ration Card	0	0	0	10	0	0	1	11			
		(0.00)	(0.00)	(0.00)	(3.70)	(0.00)	(0.00)	(0.37)	(0.58)			
5	Ration Card Gift to Others	52	0	19	34	0	0	9	114			
		(19.26)	(0.00)	(7.04)	(12.59)	(0.00)	(0.00)	(3.33)	(6.03)			
6	Availability of needed Goods in Time	91	6	65	34	250	3	13	462			
		(33.70)	(2.22)	(24.07)	(12.59)	(92.59)	(1.11)	(4.81)	(24.44)			

Table 7.18 Positive and Negative Externalities of the CPR - Cremation Shed and Road to Burial Ground

		Agro Climatic Zone									
		Cauvery	North	Western	North	High	Southern	High	Total		
Sl.No.	Externalities	Delta	East		West	Altitude		Rainfall			
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890		
	Positive Externality										
1	Cremation Shed Useful during Rainy Days	214	0	0	219	167	0	12	612		
		(79.26)	(0.00)	(0.00)	(81.11)	(61.85)	(0.00)	(4.44)	(32.38)		
	Negative Externalities										
1	No Approach Road for Burial Ground	197	0	270	207	135	0	196	1005		
		(72.96)	(0.00)	(100.00)	(76.67)	(50.00)	(0.00)	(72.59)	(53.17)		
2	Air Pollution due to Cremation nearby	11	0	7	4	0	0	3	25		
		(4.07)	(0.00)	(2.59)	(1.48)	(0.00)	(0.00)	(1.11)	(1.32)		

Source: Computed Note: Figures in parentheses are percentages to the total

Table 7.19 Positive and Negative Externalities of the CPR - Library

				1	Agro Cli	matic Zo	ne		
Sl.No.		Cauvery Delta	East	Western	West	Altitude	Southern	High Rainfall	Total
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
	Positive Externalities								
1	Reading News Papers	21 (7.78)	0 (0.00)	13 (4.81)	8 (2.96)	49 (18.15)	93 (34.44)	136 (50.37)	320 (16.93)
2	Reading General and Text Books	19 (7.04)	0 (0.00)	14 (5.19)	7 (2.59)	2 (0.74)	75 (27.78)	108 (40.00)	225 (11.90)
3	Existence of library and Opportunities for Employment	2 (0.74)	0 (0.00)	0 (0.00)	5 (1.85)	0 (0.00)	0 (0.00)	0 (0.00)	7 (0.37)
4	Learning of Introduction of New Schemes	0 (0.00)	0 (0.00)	8 (2.96)	6 (2.22)	0 (0.00)	2 (0.74)	0 (0.00)	16 (0.85)
5	Dissemination of the learned Information to the Illiterates	19 (7.04)	0 (0.00)	24 (8.89)	10 (3.70)	27 (10.00)	71 (26.30)	102 (37.78)	253 (13.39)
6	Awareness of Preserving the Environment and avoiding losses	20 (7.41)	0 (0.00)	22 (8.15)	5 (1.85)	57 (21.11)	64 (23.70)	99 (36.67)	267 (14.13)
7	Political activities and Learning the Human Rights	16 (5.93)	0 (0.00)	20 (7.41)	3 (1.11)	47 (17.41)	40 (14.81)	80 (29.63)	206 (10.90)
	Negative Externalities								
1	Inadequate News Papers and Books	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	4 (1.48)	4 (0.21)
2	Not Opening as per Schedule and loss if any	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	11 (4.07)	30 (11.11)	41 (2.17)

Table 7.20 Positive and Negative Externalities of the CPR - Street Light

	Table 7.20 Tositive and	l				imatic Zon		8	
Sl.No.	Positive Externalities	Cauvery Delta	North East	Western	North West	High Altitude	Southern	High Rainfall	Total
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
1	Minimisation of Electricity Expenses	56	1	15	97	0	15	4	188
		(20.74)	(0.37)	(5.56)	(35.93)	(0.00)	(5.56)	(1.48)	(9.95)
2	Working Hours Increased	174	0	112	14	65	99	101	565
		(64.44)	(0.00)	(41.48)	(5.19)	(24.07)	(36.67)	(37.41)	(29.89)
3	Nuisance of Animals / Insects reduced	238	4	179	56	205	154	149	985
		(88.15)	(1.48)	(66.30)	(20.74)	(75.93)	(57.04)	(55.19)	(52.12)
4	Women go arround during Night Time	248	0	187	95	190	252	174	1146
		(91.85)	(0.00)	(69.26)	(35.19)	(70.37)	(93.33)	(64.44)	(60.63)
5	Political Dicussions held at Night	150	7	114	24	15	37	39	386
		(55.56)	(2.59)	(42.22)	(8.89)	(5.56)	(13.70)	(14.44)	(20.42)
6	Reduction in Use of Common Place as Open Toilet	209	268	183	12	175	8	25	880
		(77.41)	(99.26)	(67.78)	(4.44)	(64.81)	(2.96)	(9.26)	(46.56)
1	Negative Externalities	10	0	1.7	7	1.4	0	0	50
1	Irregular Functioning	12 (4.44)	(0.00)	17 (6.30)	7 (2.59)	14 (5.19)	0 (0.00)	(0.00)	50 (2.65)
2	Stealing Electricity for Family Functions	0	0	0	5	0	0	1	6
		(0.00)	(0.00)	(0.00)	(1.85)	(0.00)	(0.00)	(0.37)	(0.32)
3	Stealing Electricity to Kill Rodants	2	0	0	1	0	0	2	5
		(0.74)	(0.00)	(0.00)	(0.37)	(0.00)	(0.00)	(0.74)	(0.26)
4	Accidents during Night	0	0	0	2	0	0	3	5
-	In the set in brightness of Dellering in West Hear	(0.00)	(0.00)	(0.00)	(0.74)	(0.00)	(0.00)	(1.11)	(0.26)
5	Inadequate in brightness and Reduction in Work Hours	10 (3.70)	4 (1.48)	41 (15.19)	7 (2.59)	28 (10.37)	6 (2.22)	35 (12.96)	131 (6.93)
6	Medical Expences due to Insects	9	21	13	8	18	0	2	71
	induced Emperiods and to induced	(3.33)	(7.78)	(4.81)	(2.96)	(6.67)	(0.00)	(0.74)	(3.76)
7	Disturbances by Anti Social Elements	7	1	38	9	0	0	28	83
	D. L. C. CD. C.	(2.59)	(0.37)	(14.07)	(3.33)	(0.00)	(0.00)	(10.37)	(4.39)
8	Reduction of Benefits	(4.07)	7 (2.59)	9 (3.33)	7 (2.59)	0 (0.00)	(0.74)	20 (7.41)	56 (2.96)
9	Misutilization of Electricity by Politicians	6	182	30	4	9	0	13	244
		(2.22)	(67.41)	(11.11)	(1.48)	(3.33)	(0.00)	(4.81)	(12.91)
10	Pests attracted by Lights during Winter	60	17	12	9	7	19	0	124
		(22.22)	(6.30)	(4.44)	(3.33)	(2.59)	(7.04)	(0.00)	(6.56)

Table 7.21 Positive and Negative Externalities of the CPR - Vertinary Hospital

	14510 7.21 1 0511110	- 8				matic Zo	ne	1	
		Cauvery	North	Western			Southern	High	Total
Sl.No	Externalities	Delta	East	***************************************	West	Altitude		Rainfall	
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
	Positive Externalities								
1	Treatment for the Animals	100	0	106	70	0	8	0	284
		(37.04)	(0.00)	(39.26)	(25.93)	(0.00)	(2.96)	(0.00)	(15.03)
2	Artifical Insemination	71	0	92	53	0	7	0	223
		(26.30)	(0.00)	(34.07)	(19.63)	(0.00)	(2.59)	(0.00)	(11.80)
	Negative Externalities								
1	Non-Availability of Medicine	2	0	7	9	0	0	0	18
		(0.74)	(0.00)	(2.59)	(3.33)	(0.00)	(0.00)	(0.00)	(0.95)
2	Bribing for Getting Treatment	2	0	0	29	0	0	0	31
		(0.74)	(0.00)	(0.00)	(10.74)	(0.00)	(0.00)	(0.00)	(1.64)

Table 7.22 Positive and Negative Externalities of the CPR - Primary Health Centre

					Agro Cl	imatic Zon	e		
Sl.No.	Externalities	Cauvery Delta	North East	Western	North West	High Altitude	Southern	High Rainfall	Total
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
	Positive Externalities								
1	Employment in Construction	65 (24.07)	0 (0.00)	0 (0.00)	26 (9.63)	0 (0.00)	0 (0.00)	0 (0.00)	91 (4.81)
2	Treatment for Ailments	249 (92.22)	0 (0.00)	243 (90.00)	178 (65.93)	4 (1.48)	259 (95.93)	0 (0.00)	933 (49.36)
3	Minimization of Treatment Cost and Time	249 (92.22)	0 (0.00)	243 (90.00)	178 (65.93)	4 (1.48)	240 (88.89)	0 (0.00)	914 (48.35)
4	Treatment at the Time of Emergency	252 (93.33)	0 (0.00)	24 (8.89)	23 (8.52)	4 (1.48)	35 (12.96)	0 (0.00)	338 (17.88)
5	Availability of the Required Medicine	247 (91.48)	0 (0.00)	148 (54.81)	10 (3.70)	7 (2.59)	98 (36.30)	0 (0.00)	510 (26.98)
6	Immunization of Children	241 (89.26)	0 (0.00)	239 (88.52)	228 (84.44)	270 (100.00)	228 (84.44)	0 (0.00)	1206 (63.81)
7	Get Contraceptives at free of Cost	16 (5.93)	0 (0.00)	9 (3.33)	38 (14.07)	0 (0.00)	64 (23.70)	0 (0.00)	127 (6.72)
	Negative Externalities								
1	Cleanliness of PHC	228 (84.44)	0 (0.00)	233 (86.30)	227 (84.07)	0 (0.00)	159 (58.89)	0 (0.00)	847 (44.81)
2	PHC Use to be cleaned Everyday	227 (84.07)	0 (0.00)	189 (70.00)	216 (80.00)	0 (0.00)	147 (54.44)	0 (0.00)	779 (41.22)
3	Use of Phenol	231 (85.56)	0 (0.00)	207 (76.67)	209 (77.41)	9 (3.33)	152 (56.30)	0 (0.00)	808 (42.75)
4	Syringes Cleaned in Hot water	228 (84.44)	145 (53.70)	34 (12.59)	231 (85.56)	7 (2.59)	158 (58.52)	0 (0.00)	803 (42.49)
5	Unhygienic Condition Prevails	(8.15)	228 (84.44)	37 (13.70)	196 (72.59)	1 (0.37)	100 (37.04)	0 (0.00)	584 (30.90)
6	Money Paid for Getting Treatment	13 (4.81)	230 (85.19)	55 (20.37)	24 (8.89)	0 (0.00)	83 (30.74)	0 (0.00)	405 (21.43)

 Table 7.23
 Pecuniary Positive Externalities of the CPR
 (Value in Rs.)

		Agro Climatic Zone									
Sl.No.		Cauvery	North	Western	North	High	Southern	High	Total		
	Positive Externalities	Delta	East		West	Altitude		Rainfall			
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890		
1	Value Assets and Houses: CH	0.00	0.00	0.00	1000.00	0.00	0.00	5580.65	5610.95		
		(0)	(0)	(0)	(2)	(0)	(0)	(31)	(33)		
2	Income from Construction Work: Group House	0.00	0.00	0.00	3200	0.00	0.00	1200	880		
		(0)	(0)	(0)	(4.00)	(0)	(0)	(1)	(5)		
3	Reduction in Expenditure: PDS	172.74	151.30	100.59	37.50	106.67	100.30	108.06	111.44		
		(265)	(270)	(270)	(258)	(270)	(252)	(266)	(1851)		
4	Income Increase due to Library	53000	0.00	0.00	15000	0.00	0.00	0.00	9714.29		
		(2)	(0)	(0)	(5)	(0)	(0)	(0)	(7)		
5	Reduction of Food Expenses: N.M.Centre	253.68	0.00	250.00	0.00	96.15	359.78	553.88	406.93		
		(68)	(0)	(1)	(0)	(13)	(92)	(129)	(303)		
6	Minimization of Treatment Cost: PHC	722.29	0.00	292.10	0.00	150.00	300.67	0.00	455.43		
		(249)	(0)	(243)	(0)	(4)	(165)	(0)	(661)		
7	Income from Construction Work: Toilet	300.00	0.00	0.00	275.00	0.00	0.00	144.12	125.00		
		(1)	(0)	(0)	(4)	(0)	(0)	(17)	(22)		
8	Minimisation of Expenditure: School	508.75	179.82	585.09	512.66	498.60	772.32	554.72	520.01		
		(120)	(109)	(114)	(79)	(50)	(112)	(127)	(711)		
9	Reduction of Expenditure Cloth, Chappals: School	410.98	0.00	325.00	200.00	0.00	425.00	75.00	275.73		
		(41)	(0)	(32)	(20)	(0)	(8)	(14)	(115)		
10	Reduction of Transport Cost: Road	137.50	0.00	0.00	66.13	100	87.50	116.67	81.93		
		(8)	(0)	(0)	(39)	(9)	(4)	(3)	(63)		
11	Reduction of Cost on Thrashing Floor: Road	50.00	0.00	133.33	0.00	0.00	0.00	50.17	95.50		
		(4)	(0)	(12)	(0)	(0)	(0)	(6)	(22)		
12	Additional Income from SGSY	0.00	0.00	6000.00	288.33	0.00	0.00	629.41	2101.46		
		(0)	(0)	(12)	(12)	(0)	(0)	(17)	(41)		
13	Reduction in Electricity Expenditure	77.69	75	67	20	0.00	28.33	41	64.11		
		(52)	(1)	(15)	(3)	(0)	(15)	(4)	(90)		
									`		

Source: Computed

Note: Figures in parentheses are Number of Persons

Table 7.24 Negative Pecuniary Externalities of the CPR (Value in Rs.)

				1	Agro Clim	atic Zone			
		Cauvery	North	Western	North	High	Southern	High	Total
Sl.No.	Negative Externalities	Delta	East		West	Altitude		Rainfall	
		n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	n = 270	N = 1890
1	Amount Required for Renovation of Group House	2000.00	3968.75	3525.00	6025.00	3000.00	1750.00	31037.14	12695.33
		(5)	(32)	(16)	(8)	(9)	(2)	(35)	(107)
2	Expenditure to Set right the Damages: Group House	9727.27	3577.97	4780.00	5882.35	3146.43	4980.77	6166.67	5136.64
		(22)	(59)	(25)	(51)	(28)	(26)	(21)	(232)
3	Medical Expenses due to Low Quality Food Grains	83.33	50.00	125.00	42.00	0.00	50.00	0.00	60.77
		(3)	(2)	(4)	(15)	(0)	(2)	(0)	(26)
4	Loss due to Irregular Functions of Street Lights	0.00	0.00	141.59	50.00	242.86	0.00	0.00	181.50
		(0)	(0)	(17)	(1)	(14)	(0)	(0)	(32)
5	Medical Expenses due to Insects	88.33	28.10	161.54	95.83	280.56	0.00	500.00	146.52
		(9)	(21)	(13)	(6)	(18)	(0)	(2)	(69)
6	Loss due to Pests attracted by Lights	0.00	20.00	164.58	0.00	0.00	58.33	0.00	123.42
		(0)	(1)	(12)	(0)	(0)	(6)	(0)	(19)
7	Amount of Medical Expenses (In Rs)	150.00	0.00	260.71	177.20	50.00	0.00	611.11	293.57
		(2)	(0)	(28)	(10)	(2)	(0)	(9)	(51)
8	Medical Expenses Unhygienic Food: NMC	10000	0.00	0.00	125.00	186.90	65.00	216.67	464.70
	ali bi m l	(1)	(0)	(0)	(4)	(21)	(4)	(3)	(33)
9	Expenses on Skin Diseases: Tank	0.00	0.00	135.71	0.00	0.00	0.00	440.00	262.50
		(0)	(0)	(7)	(0)	(0)	(0)	(5)	(12)
10	Medical Expenses due to Water Pollution: Tank	500.00	0.00	133.33	0.00	0.00	0.00	925.00	575.00
		(1)	(0)	(3)	(0)	(0)	(0)	(4)	(8)
11	Expenditure during Water Scarcity: Tank	75.00	0.00	225.25	0.00	0.00	0.00	333.67	228.00
1.0		(2)	(0)	(4)	(0)	(0)	(0)	(3)	(9)
12	Losses due to Rash driving: Road	525.00	0.00	400.00	0.00	0.00	0.00	500.00	456.25
12	Annual of Daily Office 1 Materials Heaviet	(2)	(0)	(4)	(0)	(0)	(0)	(2)	(8)
13	Amount of Bribe Offered: Veterinary Hospital	32.50	0.00	0.00	23.08	0.00	0.00	0.00	24.33
14	Loss of Crops due to Common Trees	(2) 500.00	(0)	0.00	(13) 0.00	(0)	(0) 0.00	(0)	(15) 500.00
14	Loss of Crops due to Common Trees	(1)	(0)	(0)	(0)	(0)	(0)	(0)	(1)
15	Expenses for Removing Thorns: Trees	22.50	0.00	0.00	0.00	0.00	0.00	0.00	22.50
13	Expenses for Removing Thorns. Trees		(0)	(0)	(0)	(0)	(0)	(0)	
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)

Note: Figures in parentheses are Number of Persons