CHAPTER - IV

Analysis and INTERPRETATION

This chapter discusses the process and impact of industrialization on the socio-economic and environmental conditions of the rural people at Irungattukottai, Katrambakkam and Thandalam villages of Kancheepuram district, Tamil Nadu.

Analysis and interpretation have taken into consideration specific responses to the interview schedule, secondary source of data, discussions with the stakeholders of the programme, observations and case studies. The database is systematically organized for presentation so that comparative analysis is possible.

The major thrust of the research study is to understand and analyse the different facts of the post-project period of industrialization, on the households whose land was acquired, agriculture labourers and general public, sources of their livelihood, etc. In general, the research study is to understand the influence of the industries on the socio-economic, political and environmental conditions of the people. The purpose of study is divided into five objectives and a comprehensive outlook is systematically demonstrated. Investigations into factors affecting different aspects of their life, with the main focus on the socio-economic conditions and the control over environmental components, have been initiated in the study.
4.1 General information about the respondents

4.1.1 Gender ratio of the respondents

Of the 195 heads of the households interviewed 85.64% were male respondents and 14.36% were female respondents. Of the 28 female respondents, 8 were widows and the remaining 20 respondents informed that their husbands were out of station or had migrated to the nearby city or towns, in search of jobs or had gone out for some personal work. Village-wise, category-wise and sex-wise details of the respondents are given below in Table No.2:

Table No.2: Number of Respondents - Category- and gender-wise

<table>
<thead>
<tr>
<th>Village</th>
<th>Category 1 - Households from whom land was acquired</th>
<th>Category 2 - Agricultural labourers</th>
<th>Category 3 - General Public</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Male</td>
<td>31</td>
<td>14</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>Female</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>17</td>
<td>18</td>
<td>30</td>
</tr>
</tbody>
</table>

4.1.2 Age-wise analysis

Of the 195 respondents, 17.9% were in the age group of 20 to 30 years, 54.9% were in the age group of 31 to 50 years, while 12.8% and 14.4% were in the age group of 51-60 years and above 60 years respectively. The respondents (82.1%) who were above 30 years were...
considered very important, not only because of their maximum contribution to their households or to the society, but also as they had lived and grown up in the same villages, and knew the village conditions much before the land acquisition programme was implemented.

Out of the respondents, 17.9% who were in the age group of 20 to 30 years, said more about the present conditions in their responses. Hence, the data obtained from the respondents are reliable, authentic and entwined with the socio-economic, political, cultural and environmental conditions of the village realities of both the present and the past.

4.1.3 Analysis of caste and religion

Out of the 195 respondents, 44.6% were from the Scheduled Castes (SC), 43.1% were from the Most Backward Caste (MBC), while 9.2% were from the Backward Caste (BC). Of the remaining respondents, 2.6% were from the other Forward Castes (FC) and only 0.5% were from the Scheduled Tribes (ST).

Another important area of observation was that of the total respondents from the Scheduled Caste only 16.34% households had owned land that was acquired by the Government. Of the 48.1% respondents from the Most Backward caste, land was acquired from 83.33% respondents, while only 4.76% were working as agricultural labourers and the remaining 11.9% were from the category of general public.
Yet another important observation was that of the 24.62% of the total respondents who belonged to the agricultural labour households, 89.58% belonged to the Scheduled Caste and only 2.09% belonged to the Scheduled Tribes and the remaining 8.33% belonged to the Most Backward Castes such as Naickers (hunters). Nearly 99.5% of the total respondents were Hindus and only 0.5% of the respondents were Christians.

4.1.4 flaritaS status and classification of households

Except one out of the total respondents, the rest were married. Of the 194 respondents who were married, 9.28% were widows and 1.55% were widowers. It needs to be mentioned that there were no deserted or divorced households from among the respondents.

Another aspect of the family unit was that of the 195 respondents, 81.5% were from nuclear households, while 18.5% were from joint households. It was consoling to observe that even now, inspite of various reasons that necessitate the nuclear households, the joint family system still exists in all the three villages, albeit in a limited way.

4.1.5 Educational qualifications of the respondents

Of the 195 respondents, 50.8% were illiterates, 23.1% had studied up to 5th Std. and 23.6% had studied from 6th to 10th Std. While only 1% had completed 12th Std., another 1% had completed Technical Studies (ITI) and the remaining 0.5% had completed graduation.
4.1.6 Occupation of the respondents

Based on the educational status of the respondents, it was not surprising to note that only 1% of the respondents have got Government jobs. The remaining were self-employed or working with private companies or as labourers either in the agricultural fields or as domestic workers or cultivating their own lands. The details of the occupation of the respondents are given in Table No.3.

While considering the respondents employed as daily wage earners, it could be observed that 47.7% were working as agricultural labourers. Similarly it was observed that 13.3% of the respondents were either self-employed or worked in private companies. It was surprising to observe that of the 195 respondents there were no rural artisans. It was learnt from the respondents that in these three villages, there were earlier a couple of potters’ households and a blacksmith, who were rendering services to the villages. After the land acquisition, those households had either left the villages or abandoned their occupation, due to the ingression of plastic vessels and utensils and due to almost no demand for agricultural implements. It is worth mentioning that a thin majority, i.e., 56.0% of the 25 respondents who worked as industrial labourers, worked in various companies that have come up in the area, due to industrialization.
### Table No.3: Occupation of the respondents

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Employment Category</th>
<th>Villages</th>
<th>Grand Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Irungattukoitai</td>
<td>Katrambakkam</td>
<td>Thandalam</td>
</tr>
<tr>
<td>1.</td>
<td>Government</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2.</td>
<td>Private</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3.</td>
<td>Self-employed</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>4.</td>
<td>Farmers</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5.</td>
<td>Agriculture coolies</td>
<td>9</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>6.</td>
<td>Domestic coolies</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>7.</td>
<td>Artisans</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8.</td>
<td>Industrial coolies</td>
<td>6</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>9.</td>
<td>Unemployed</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>10.</td>
<td>Others*</td>
<td>2</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
<td><strong>17</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

* Include running petty shops within the villages, sale of vegetables and fruits, petty business, etc.

1. Households from whom land was acquired
2. Agricultural labourers
3. General Public
4.1.7 Family income of the respondents

Of the 195 respondents, 72.82% earned less than Rs. 1,500 per month as their family income. Of the remaining, 19.48% of them earned around Rs.2,500 per month and 6.66% earned between Rs.2,500 to Rs.4,000 per month while 1.04% respondents said that their monthly family income was around Rs.7,000 per month. The income earned from supplementary sources, i.e., income from poultry and milch animals, kitchen garden etc., was not included in this income.

Prior to the land acquisition programme for industrialization, the agricultural labourers had a minimum of 6 months agricultural employment, with an average daily wage of Rs.60 to Rs.80 for a male and Rs.20 to Rs.30 for a female, though the minimum wage as determined by the State of Tamil Nadu for women agricultural labour is Rs.45 for 5 hours and for men, it is Rs.54 for 6 hours (www.tn.gov.in/gorders/lab-e-107.htm). In addition, they also leased out the land from the owners for cultivation. Simultaneously, they used to take care of the cattle such as cows, sheep and goats. They also collected firewood from the neighbouring land or forests or from the wastelands and open grounds, which also served as the grazing area. The land acquisition programme had made day-to-day living expensive, as nothing was available free of cost, even to the villagers, who enjoyed some natural benefits traditionally.
4.2 Details of Land Acquisition for industrialization at Srungatukottai

The Government of Tamil Nadu considered the proposal of SIPCOT, as several Multi-National Companies (MNC), Non-Resident Indians (NRI) and local entrepreneurs evinced keen interest in Tamil Nadu, especially near Chennai. They accorded administrative sanction in G.O.Ms. 248/Industries (MIG-2) Department dated 27.10/95 (Appendix - III) for the acquisition of patta lands measuring 592.82.5 hectares (1465 acres) covering the above three villages invoking the urgency provisions of the Land Acquisition Act (Central Act of 1894). In addition, 147.66 hectares (365 acres) of Government poramboke land was acquired for the establishment of the industrial park. The private land included agricultural lands and vacant house plots. The acquired land is being utilized only for industries and not for housing or shopping complexes. The details of the land acquired are given in Table No.4.

**Table 4: Details of the Land Acquired for SIPCOT, Irungattukottai**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the village</th>
<th>Dry and Mammri Patta Lands (in hectares)</th>
<th>Government Porambok Lai nets (in hectares)</th>
<th>Total area (in ' hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Irungattukottai ‘A’ Block</td>
<td>50.79.5</td>
<td>1.10.0</td>
<td>51.89.5</td>
</tr>
<tr>
<td>2.</td>
<td>Irungattukottai IB’ Block</td>
<td>155.12.5</td>
<td>24.77.0</td>
<td>179.89.5</td>
</tr>
<tr>
<td>3.</td>
<td>Thandalam</td>
<td>231.13.5</td>
<td>22.96.0</td>
<td>254.09.5</td>
</tr>
<tr>
<td>4.</td>
<td>Katrambakkam TV Block</td>
<td>106.28.0</td>
<td>32.54.0</td>
<td>138.82.0</td>
</tr>
<tr>
<td>5.</td>
<td>Katrambakkam B’ Block</td>
<td>49.49.0</td>
<td>66.29.0</td>
<td>115.78.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>592.82.5</td>
<td>147.66.0</td>
<td>740.48.5</td>
</tr>
</tbody>
</table>
Pursuant to the Government orders SIPCOT, the requisitioning body had furnished the relevant requisition to the District Collector, Kancheepuram District. One of the Tahsildars, who was involved in the process of land acquisition programme affirmed that the primary reasons for selecting the three villages for the SIPCOT industries were: 1) proximity to the capital of Chennai, which is just around 24 kms. away with easy access to airport, harbour and railways, 2) the land is adjacent to the National Highway No.4, 3) most of the lands identified were dry and even, 4) in the identified area, there were no industries and other commercial activities and 5) more than 500 hectares of land could have been perambulated when SIPCOT wanted to acquire the land.

The officials of Hyundai Car Company for which the land was primarily acquired stated that they had opted for Irungattukottai because it was close to Chennai, a beautiful city with seaports and airport with a supportive Government. Moreover, Chennai had a good skilled work force.

The District Revenue Officer, Kancheepuram district in his proceedings RC.57049/95/F7 dated 3.6.1996 had issued orders locating the above extent of 592.82.5 hectares (1465 acres) to be acquired by five special Tahsildars who were appointed by the Government to deal with the acquisition of these lands. The lands were acquired by the Department of Land Administration (Land Acquisition), Government of Tamil Nadu and handed over to SIPCOT, which developed the lands and sold them to the industries. The layout of industries at the SIPCOT Industrial Park at Irungattukottai is shown in Figure No.4.
During the discussions with one of the Tahsildars who was in-charge of one of the units of the land acquisition programme for SIPCOT Irungattukottai project, it was said that the process of land acquisition was divided into five units. Each unit consisted of one Tahsiidar, two assistants, two revenue inspectors, two surveyors, two chainmen and one office assistant. Thus, when the land acquisition process started, 50 Government officials were involved in the process of land acquisition and in the third year of the land acquisition programme, these five units were reduced to three, then in the fourth year the units were reduced to two and from 2001 onwards, only one unit functions, as the activities are now primarily limited to handling the compensation. The present unit consists of one Tahsiidar, two assistants and one office assistant.

The land to be acquired was divided into 50 blocks of five units, to accomplish the following tasks in a planned manner:

1) preliminary inspection of land by Tahsiidars.
2) conduct preliminary enquiries, preparation of subdivision records and scrutiny.
3) ascertaining sales statistics from the Sub Registrar’s office, Sriperumbudur and obtaining sufficient funds from the requisitioning body.
4) ascertaining ownership of the lands to be acquired and then land verification.
5) submission of draft notification under Section 4(1) and declaration under Section 6 and direction under Section 7 of the Land Acquisition Act (LAA).

6) approval of valuation statement, publication of notification under Section 4(1) of the LAA in the Gazette/two dailies/its substance in the locality.

7) publication of declaration under Section 6 of LAA in the Gazette/two dailies/its substance in the locality.

8) issue of Notice under Section 9(1) of the LAA.

9) taking possession of land after expiry of fifteen days from the date of service of Notice under Section 9(1).

10) payment of 80 percent of the estimated value of cost

11) handing over possession to the requisitioning body

12) prior approval of award by Special Commissioner and Commissioner of Land Administration and passing of award and

13) payment of remaining 20 percent of compensation to the landowners.

While accomplishing the aforesaid procedures, there was a delay in one stage or the other; hence orders were passed not collectively, but for each block, so that each block could complete the process of land acquisition at the earliest. Due to the aforesaid reasons, the people of the three villages, from where the land was acquired were receiving the information at different times and were confused, and were not able to understand the reasons for the delay. The compensation amount, solatium and the interest amount were given to the households, whose land was
acquired unit by unit. Hence there was no uniformity in the implementation of various activities of the Land Acquisition Programme.

Keeping in mind the objectives of the research study, the questions in the interview schedule were grouped into five areas. The responses were analysed and interpreted as below:

4.3 Procedures that are to be followed while land is acquired and the awareness of the people on the procedures.

The Land Acquisition Act lays down certain procedures to acquire the land. When land is acquired under Urgency Clause, like in the case of SIPCOT Irungattukottai, a specific time schedule is also worked out to acquire the land. The data collected on the objective as to whether the procedures are followed when the land is acquired and the awareness of the people on the procedures are detailed below:

4.3.1 Awareness on the Land Acquisition Programme

It was interesting to note that 50.30% of the 195 respondents said that they were aware of the land acquisition programme from only the time the Government officials started measuring the lands, while the other 49.70% said that they were not aware of the land acquisition programme, until the land was acquired.

While almost all the respondents (96.41%) affirmed that the land was taken without the consent of the landowners, only a negligible number of them (3.59%) said that the land was taken with the consent of the owners.
concerned. It was learnt from the Government officials that the landowners were intimated by the Government officials through letters and when the addresses were not in order, these letters were not delivered. The Government officials also confirmed that there was no public hearing, as it was not needed when the land was acquired under the ‘Urgency Clause’.

It is stated by Fernandes et al (2001) that the project authorities do not share information with the people concerned. After excluding the people from their decision concerning ultimately their own livelihood, the powerful State and Project authorities make the people further powerless by keeping them ignorant of their future situation. Even in the case of land acquisition for SIPCOT Industrial Park at Irungattukottai, the people were ignorant of the land acquisition process and were not involved in the decision-making process.

To a question, ‘Why was the land acquired?’ 58.97% respondents expressed that they did not know the purpose, while the remaining 41.03% said that the land was acquired to establish a car factory. Even though there were 19 companies in the SIPCOT Industrial Park at the time of the study, this industrial park was still known as the Hyundai car company.

4.3.2 Awareness on Public Purpose

None of the respondents knew what was meant by the term ‘public purpose’. The Land Acquisition Act does not define ‘public purpose’ explicitly. Upadhyay and Raman (1998) say that broadly, ‘public purpose’ would include the purpose in which the general interest of the society as
opposed to a particular interest of an individual is directly or vitally concerned. While the land is acquired for public health and general welfare, the land is also acquired for residential purpose, construction of dams, institutions and for industries under ‘public purpose’. The ‘public purpose’ is the instrument in the hands of the Government to safeguard above all, the interests of the public and must be used with intense care.

Of late, in the name of public purpose, huge agricultural land is acquired for industries. The resources of the villagers are taken away from them and handed over to the rich and the multinationals for ‘public purpose’. The resources of subsistence are transferred very legally, allowing exploitation of natural resources such as land and water, which cannot be created by human efforts.

4.3.3 Awareness on Urgency Clause

The Land Acquisition Act enumerates the activities that are to be followed for acquisition of land under the Urgency Clause along with the time frame (Baskaran 2000). The details are as below:

1) Preliminary inspection by Tahsildar and conduct of preliminary enquiry.

2) Preparation of subdivision record and scrutiny (Five days from Activity No.1).

3) Ascertaining sales statistics from Sub Registrar’s office and preparation of valuation statement (Ten days from Activity No.2).
4) Obtaining sufficient funds from the requisitioning body (Fifteen days from Activity No.2).

5) Ascertaining ownership of the various pieces of land acquired (Twenty-five days from Activity No.2).

6) Local inspection by L.A.O. and submission of draft notification under Section 4(1) and declaration under Section 6 and direction under Section 7 (Ten days from Activity No.3).

7) Approval of valuation statement (Thirty days from Activity No.4).

8) Publication of notification under Section 4(1) in the Gazette/two dailies/its substance in the locality (Forty-five days from Activity No.5).

9) Publication of declaration under Section 6 in the Gazette/two dailies/its substance in the locality (Fifteen days from Activity No.8).

10) Publication of Direction under Section 7 in Gazette/two dailies/its substance in locality (Ten days from Activity No.9).

11) Issue of notice under Section 9(1) of Land Acquisition Act (Ten days from Activity No. 10).

12) Taking possession of land after expiry of fifteen days from the date of service of notice under Section 9(1) payment of 80 percent of the estimated value of cost (Twenty days from Activity No.11).

13) Handing over possession to the requisitioning body (Ten days from Activity No.12).

14) Prior approval of award by Collector/Special Commissioner and Commissioner of Land Administration and passing of award (Thirty days from Activity No. 13).
15) Payment of remaining 20 per cent of compensation to the land owners and issue of Section 12 (2) notices, if any (Ten days from Activity No. 14).

16) Issue of Notice to parties to whom payments cannot be made (Seven days from Activity No. 15).

17) Reference to Court under Section 18 (Ninety days from Activity No.15).

18) Furnishing of statement in Form No. 13 to the Sub Registrar’s office (Seven days from Activity No.15).

19) Furnishing of ‘A’ and AA’ statement to the Collector (Fifteen days from Activity No. 16).

20) Carrying out changes in the Village Accounts (Fifteen days from Activity No. 15).

21) Action under Section 9(2) of the Tamil Nadu Survey and Boundaries Act 1923 (Twenty days from Activity No.15.)

22) Final scrutiny of subdivision records (Fifteen days from activity No.20 & Fifteen days from Activity No.21).

23) Carrying out changes in taluk accounts (Twenty days from Activity No.22).

24) Publication of Notification under Section 13 of the Survey and Boundaries Act. (Ninety days from Activity No.23 and each hundred and twenty two days from Activity No.21).

25) Submission of final check memo to Collector (Thirty days from Activity No.24).
The Programme Evaluation and Review Technique (PERT) Chart for acquisition of land under the Urgency Clause is given in Figure No.5. This chart helps the land acquisition authorities to monitor and review the land acquisition programme on a periodical basis. While analysing one of the Awards (Award No.1/97 - Block VII of Unit III - Thandalam village) given by the Special Tahsildar (LA), SIPCOT Unit III, Irungattukottai scheme, Sriperumbudur, it was confirmed that the Land Acquisition authorities have followed systematically the procedures in acquiring the land.

Not even a single respondent knew that the land was acquired under Urgency Clause of Section 17(1) of the Land Acquisition Act of 1894 and the difference between the land acquisition process under normal circumstances and under urgency circumstances. Nearly all the respondents were of the opinion that the lands were taken abruptly, and without their consent to benefit someone. It was even more surprising to note that the respondents were not aware of the judgement on the Writ Petition 13965/96 batch dated 14 November, 1997, wherein the invocation of the Urgency Clause for the acquisition of land for the Hyundai car company was challenged. In this case, the Madras High Court had called for files and on perusal of the same, it was satisfied that the Urgency Clause was rightly invoked. This order of the learned single judge had been confirmed by the Division Bench (Baskaran 2000). Hence, according to the law, the mere delay in finalising the matter would not by itself render the invocation of Urgency Clause wrong.
**Figure No. 5: PERT Chart for land acquisition under Urgency Clause**

**TIME SCHEDULE**

1. Stage upto passing of award - 180 days i.e. 6 months (Activity 1 to 14)
2. Stage upto submission of final check memo 30 days i.e. 12 months (Activity 14 to 25)
Most land acquisitions that are now being initiated are under the garb of the urgency clause. This excludes the provision of preliminary objection that the common man could rely on in case of unjustified acquisition. This often results in prolonged legal battles with losses on both sides, more so crippling the common man. The Urgency Clause raises controversy on all fronts. On one hand, the Government claims that there are cost overruns in the Land Acquisition projects due to delay in projects and hence ‘Urgency Clause’ supports the ‘national interest’. On the contrary, the people whose lands are acquired claim that their only means of livelihood had to be sacrificed in the name of ‘national interest’ for the ‘general welfare of the community’ (Upadhyay and Raman 1998).

4.3.4 Village panchayats and Government poramboke Sand

Of the 195 respondents, 90.77% of them observed that, at no point of time, the land acquisition of private or Government poramboke land was discussed in the panchayat meetings, while the remaining 9.23% said that they were not aware whether such things were ever discussed in the panchayat meetings at all.

The process of transforming India into a wasteland, which had its beginning under the British rule, had continued under even post-Independence Governments. The most brutal assault has been on the country’s common property resources, on its grazing lands, forests, rivers, ponds, lakes, coastal zones and increasingly on the atmosphere. The use or rather the misuse of these common property resources has been organized
and encouraged by the State too in a manner that has led to their relentless degradation and destruction. Many leading scientists and environmentalists have documented the dependence of the poor on the common lands for their subsistence living e.g. Jodha of ICRISAT, Hyderabad has documented in a major study covering 80 villages in 21 districts in 7 dry States in India that the common lands are a major source of employment and income generation for the rural poor (Dharwad et al 1988). The National Sample Survey (NSS), in its 54th round in 1998, has estimated that common property lands constitute 15 percent of the geographical area and that 45 percent of all rural households collect fuel wood from common property lands. Hence, the village common (poramboke) lands play an important role in the economy of the villages.

While the grazing poramboke land is in the control of the local panchayat, as per section 134 (2) of the Panchayat Raj Act (Government of Tamil Nadu 1995), it is surprising that the grazing land was taken away by the Government for other purposes such as the industries without the consent of the villagers. On enquiry with the Government officials, who were involved in the process of land acquisition, it is learnt that a total of 147.66.0 hectares of Government poramboke land, which is 19.90% of the land that was acquired for SIPCOT, Irungattukottai Park, was transferred to SIPCOT under alienation proposal, which means, mere transfer of documents. As the grazing poramboke lands were managed by the local village panchayats, would it not be justifiable to credit the income from the sale of these grazing poramboke lands to the panchayat?
The Tamil Nadu Government Policy Note 2002-2003 on Land Administration states that lands reserved for communal purposes should be preserved. Hence, the Government has therefore banned assignment of all watercourse porambokes like tanks, ponds, canals, streams etc., and also mandavelli, grazing ground porambokes and burial ground. In order to prevent soil erosion and to maintain the ecological balance, the assignment of lands for cultivation in all hilly areas of the State has been banned. As Government is in need of lands in and around major cities for the development schemes of various departments, assignment in Chennai and its belt areas and in Corporation limits has been banned. This raises queries on why and how poramboke lands were assigned for the SIPCOT Industrial Park at Irungattukottai.

Of the 195 respondents, 89.74% affirmed that the villagers had a lot of benefits from the common lands. They explained that these lands were used for grazing cattle, for threshing the harvested crops, for village festivals, for conducting health camps by the Government officials both for the people and the domestic animals, etc. The remaining 10.26% of respondents had accepted that the common lands were useful to them but were not able to articulate the benefits specifically. It was interesting to learn that prior to the industrialization process, the people used to reach the main road or reach their villages by walking through the common land and even private land, but now as these lands are blocked and the industries
have come up, they have to walk more distance or use other modes of transport.

4.3.5 Procedures followed for the Land Acquisition at Irungaiukottai

As per the official records, the Government of Tamil Nadu had followed all the procedures to acquire land for the SIPCOT Industrial Park at Irungattukottai. To acquire land as per the Land Acquisition Act 1894, notification under Section 4(1) and declaration under Section 6 in the Gazette/two dailies need to be published.

In addition, its substance must be shared in the locality. For example, to acquire 13.12.5 hectares of land from Block I of 101 Thandalam village, publication of notification under Section 4(1) was given in the daily known as 'Murasolf' on September 19, 1996 (Anonymousi 1996). As per the notification, it was stated that the above mentioned land was to be acquired as per Section 17(1) of the Land Acquisition Act of 1894 for 'public purpose' by the Government of Tamil Nadu and the Governor of Tamil Nadu had given consent for the acquisition and also had given powers to the Special Tahsildar (Land Acquisition) to acquire the land. This notification also gave the details such as the type of land (dry/wet), survey number, owner of the land or the person who was in possession of the land, the area to be acquired specified in hectares, whether the land was under cultivation or not and other specific information such as the number of trees, wells, construction, etc., in each land.
The Government authorities had verified and confirmed that the land that was to be acquired did not intrude into either the Tamil Nadu Land Reforms Act 1963 or the Urban Land (Ceiling and Regulation) Act 1978, before commencing the process of land acquisition. It was confirmed from the official records that the Government had followed the procedures of the Land Acquisition Act 1894, to acquire the land. But, how many of the rural poor had access to gazettes and newspapers and were able to know that the land acquisition details were published in these newspapers and gazettes, although these publications were related to them?

4.3.6 Awareness on the procedures to be followed for land acquisition

The particulars regarding the awareness of the respondents on the procedures to be followed for land acquisition are presented in Table No. 5.

Table No. 5:
Awareness of the respondents on the procedures to be followed for Land Acquisition

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Particulars</th>
<th>People from whom land was acquired</th>
<th>People from whom land was not acquired</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The number of respondents who were aware of the procedures of land acquisition</td>
<td>13</td>
<td>6</td>
<td>19**</td>
</tr>
<tr>
<td>2.</td>
<td>The number of respondents who were not aware of the procedures of land acquisition</td>
<td>35</td>
<td>91</td>
<td>176**</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>98</td>
<td>97</td>
<td>195</td>
</tr>
</tbody>
</table>

** Significant at 1% level
From Table No.5, it could also be observed that more than 90% of the total respondents did not know anything about procedures that are to be followed while land is acquired by the Government. Even the respondents, who said that they had very little knowledge about the land acquisition procedures, truly did not have proper knowledge on procedures involved in land acquisition. This could be mainly due to illiteracy and ignorance always abiding with the rural poor. It was painful to learn that even the people from whom the land was acquired were ignorant of the procedures that must be followed during land acquisition.

4.3.7 Compensation for the Land Acquired

As per the procedure that is followed by the land acquisition officials of Tamil Nadu, the officials are to collect all the details of land sales within 1.6 kms. from the land under acquisition on all sides, even if it is in the next village and such details shall be prepared for a period of three years prior to the date of notification under Section 4(1) of the Act. The Land Acquisition officer shall process and select suitable data of land from the sales of one year prior to the date of Section 4(1) notification. If no reasonable data are available in these sales, remaining sales for the other two years shall be examined.

To examine whether the above said procedures were followed in fixing the market value of the land under acquisition, the following two awards were studied.
1) Irungattukottai village - Award No. 14/98 - Unit I - Block No.IV and

2) Thandalam village - Award No.1/97 – Unit III - Block VII

In Page No. 5 of the Award No.14/98 of Unit I of Block No. IV of Irungattukottai village, it is mentioned that the sales statistics have been gathered from the Sub Registrar’s office, Sriperumbudur for a period from 19.9.95 to 18.9.96. Similarly in Page 7 of the Award No.1/97 of unit III of Block No.VII of Thandalam village, it is mentioned that the sales statistics in Thandalam village were gathered from the Sub Registrar’s office, Sriperumbudur for the period from 9.8.95 to 9.8.96.

While going through these two awards, it is learnt that the sales transactions to finalize the compensation for the land to be acquired, were categorized as follows:

1) Sale of wetlands
2) Sale of village site
3) Sales that do not reflect the true and real market value
4) Sale at higher price for house site plots
5) Sale under value document
6) Sale of land involving more than one survey field (combined sale)
7) Faraway sale transaction
8) Sale for commercial purpose and
9) Inflated sale transactions

From the above said types of sales, the sale under value document was accepted. The other sales were discarded due to reasons such as
inflated sale transactions or house plot transactions or commercial purpose etc. As per the Award No.1/97 of Unit IV of Block No.I of Katrambakkam village, Rs.250 was fixed as the market value per cent or Rs.618 per are or Rs.61,800 per hectare. As per the Award No. 14/98 of Unit ! of Block No.IV of Irungattukottai village, Rs.300 was fixed as the market price per cent or Rs.741 per are or Rs.74,100 per hectare. As per the Award No.1/97 of Unit III of Block No.VII of Thandalam village, Rs.300 was fixed as the market price per cent, or Rs.741 per are or Rs.74,100 per hectare. While the claims of the land owners of Katrambakkam village were between Rs. 10,000 to Rs.25,000 per cent, Rs.250 was fixed per cent, which is 2.5% of the least amount that the people of Katrambakkam village expected. Similarly the landowners of Irungattukottai and Thandalam villages claimed Rs. 10,000 to Rs.30,000 per cent respectively, while Rs.300 was fixed per cent, which is only 3% of the least amount that the people expected.

In addition to the market value of the land that was acquired, *solatium* at the rate of 30% of the market value was awarded as per Section 30 (2) of the LAA for compulsory acquisition of land. As per the provisions of Section 23(IA) of the Amendment Act of 1984, additional payment at the rate of 12% per annum on the market value, from the date of notification under Section 4(1) to the date of possession of land or date of the Award, whichever was earlier, had been awarded and included as a part of the compensation. An additional interest on the balance compensation to be paid at the rate of 9% per annum for one year from the date of Award and 15% per annum for the following years, had been awarded as per Section 34 of the LAA.
While going through the reasons for selecting the lowest price for compensation, it appears that the Government officials wanted to fix the smallest amount as the market value, so that the Government may pay the lowest price. Instead of rejecting the sales transactions pertaining to the housing plots or commercial purposes, such transactions could have been kept for fixing the rate per cent, as the Government was in any case going to handover the land to SIPCOT, which would eventually would develop and sell it for a higher price. The question that the people ask is, “Why were we not consulted when our land was acquired or when the price was fixed?”

The respondents whose land was acquired were deeply hurt and pained that the price of the land was fixed to satisfy the Government and not the people. Majority of the respondents wished that land of equal size and quality, closer to their villages, be provided to them in lieu of the land that was acquired. This expectation of the people concerned is worth reflecting on, as it will assure them agricultural employment and regular income, not only for themselves but even for the agricultural labourers.

The agricultural labourers and the general public affirm that a minimum of Rs.1000 to Rs.1500 per cent should have been fixed as the compensation. The households from whom the land was acquired used to cultivate a mixed crop, primarily groundnut with other crops like green gram, maize and millets during the monsoon season and get an average income of Rs.3,000 per acre excluding the fodder and the seeds preserved for the next
cultivation. The harvested green gram, maize, millet and the fodder were kept for domestic use and the twigs were used for firewood.

The compensation amount including the 30% solatium and the additional payment of 12% on the market value, which is around Rs.35,500 to Rs.42,600 per acre was the income that these households would have got in 12 years, excluding all other benefits, had they cultivated the land with the normal monsoon. One of the respondents showed the proof that he used to cultivate vegetables and send them to the city market and earned around Rs.4,000 to Rs.5,000 per month in the season. Altogether 9 respondents from Thandalam village, who were cultivating vegetables stated that the compensation given to them was just equal to 3 years income that they were getting from the sale of vegetables cultivated in the land that was acquired by the Government.

Pentadaewha Autoparts Limited and Inkor Autotech are auto ancillary industries, which had been established in Irungattukottai area, but outside the SIPCOT Industrial Park. Of these industries, Pentadaewha Autoparts Limited had purchased the land from private parties for a cost of Rs. 14,600 per cent (Judgement No.LAOP 775/02, May 2003) and Inkor Autotech had also purchased the land from private parties for approximately Rs.11,000 per cent in 1996-97. From the above sale, it was clear that Government had paid the lowest possible amount as compensation when it acquired the land from the people.
4.3.7.1 Compensation for palmyra trees

Palmyra trees (Figure No.6) can grow in any tropical climate with little attention almost, with the initial douche. It has also been declared as the ‘State Tree’ of Tamil Nadu by the Government of Tamil Nadu (http://www.tn.gov.in.hhtk/palm/palm-welfare.htm). The palmyra tree prevents soil erosion and protects natural wealth. The palm products are free from pollution and are eco-friendly. The Government of Tamil Nadu, which is now stressing on creating awareness among the public on the utility of palm trees, had fixed Rs.15/- only as the compensation for palmyra trees, which were existing in the land that was acquired, irrespective of the age and fruit-bearing capacity of the tree.

While the price of any fruit-bearing plant is higher than Rs.15/-, by fixing this amount as the price of palmyra trees, the efforts of the farmers to protect them for years together, the annual yielding capacity of the trees, other uses like leaves for roofing, fibre for making ropes and other residues as firewood were completely ignored.

In addition to the above, from these trees, juice and toddy are collected and country jaggery (country sugar) is prepared, which is used for various traditional medicinal purposes. Such trees in a row also serve as wind barriers and protect the agricultural land from soil erosion and increase the percolation of water. Once the palmyra tree is cut, it serves as the primary wood for construction of houses of the poor. The trees are known for converting carbon-di-oxide to oxygen and purify the atmosphere. Hence, the yardstick used to fix the price of a palm tree as Rs.15/- is not correct.
From this, one could understand that the amount fixed as compensation by the Government is in no way on par with the value of the property. In a report, ‘Broken Promises and State-induced impoverishment: Study of Gandhi Sagar - displaced people’ presented by Gupta (2002), it is said even fixing Rs.75/- as the average compensation for a tree is definitely on the lower side.

Figure No.6: Palmyra tree

4.3.7.2 Dialogue with the community for compensation

A study on the process of relocation and rehabilitation of villages populated primarily by Shariya tribals in Sheopur district of Madhya Pradesh confirms that the trauma of the community could be mitigated if the
implementing agency concentrated right from the start on genuine mobilization of the community and investment in building its capacity to deal with the drastic changes that displacement entails. Participation and continuous dialogue with the community would be critical to this process says Kabra (2003) in the article ‘Displacement and Rehabilitation of an Adivasi Settlement - Case of Kuno Wildlife Sanctuary, Madhya Pradesh’. Such a procedure was never followed, when the land was acquired for SiPCOT Irungattukottai project.

There are households in the villages who do not own land. But these households also depend on land and land resources. They are of three categories. The first category are the people who work as agricultural labourers in the lands owned by others. The second category provides manual work and skills. They are nomads, pastoralists, fisher folk, service community people like blacksmiths, weavers, carpenters, cobblers, scavengers, potters etc. The third category provides services requiring non-physical skills and roles such as priests, teachers, scribes etc. These households’ livelihood and environment were also affected to their detriment, by the industrialization.

According to the experts of the National Campaign Committee and Colloquium of Experts on Land Acquisition Act (1999) compensation should be based not just on the replacement value of the land, but of all tangible and intangible assets in the total habitat, both individual and collective, including knowledge and cultural losses. While fair compensation is not
given to the households from whom the land was acquired, is it possible to expect compensation on the above grounds for the landless people?

When any individual or an industry wants to buy land, the owner and the buyer should get into a contract that the owner of the land is willing to sell the land, for a price that he is proposing. The buyer either agrees or negotiates the price and other terms and conditions. Once the agreement is acceptable, an advance amount is paid to confirm the agreement.

In the case of the land acquisition programme, without the consent of the owner of the land, the land was surveyed, assessed and the decision was taken to acquire the land. Added to that, the Government fixed the price for the purchase, based on the convenient criteria that it worked out. The decision to acquire the land and its price was solely decided by the party, which acquired the land.

Yet another important point is, while 80% of the compensation was paid immediately after taking over the land, the remaining amount, along with the solatium and interest was paid later. Is there such a transfer of property anywhere? When there were objections for the sale or for the price fixed, the owners of the land who were mostly the small and marginal farmers were considered as troublemakers and the compensation amount was credited in the Government Treasury. While inordinately low compensation was received by the households from whom the land was acquired, the landless agricultural labourers, their other skilled and semi-skilled workers and non-manual workers, who were in some way or the other depending on these lands, did not get any benefit, though their livelihood
was at stake, due to the land acquisition programme. A peaceful village life with little noise and traffic pollution, fresh air and potable water, fresh vegetables and milk, community harmony and homogenous culture, to some extent self-sufficient in the food requirements of their own households, simple and functional life style, etc., all these are being lost slowly from the villages due to the industrialization. Are they not losses that ought to be compensated...

The mandate of the Government officials was to implement the project in an economically viable manner. It did not mean that the officials were not sincere. They were conditioned by the ideological conviction that the projects implemented in the name of national development bring progress to a backward region and people. But in reality, it was not so. National development has become a process of transferring resources from the communities that have traditionally depended on them for their sustenance, to the corporate sector to whom it is a source of profit and a raw material to produce goods for the middle class community as mentioned by Fernandes and Asif (1997).

4.3.8 Type of Land Acquired

The details of types of land acquired for the SIPCOT Industrial Park at Irungattukottai from the three villages are given in Table No.6. While going through the details of the land acquired from the three villages, it is observed that 31.3% was acquired from Irungattukottai, 34.4% was acquired from Katrambakkam, and 34.3% from Thandalam which means that each village had to give up more or less the same quantity of land. However while going
through the details of the Government poramboke land acquired, one could observe that from Katrambakkam alone 66.9% of land was acquired, while from Irungattukottai and Thandalam 17.5% and 15.6% respectively were acquired. It is also noted that 39% of the private dry manavari land was acquired from Thandalam, while 34.7% was acquired from Irungattukottai and only 26.3% was acquired from Katrambakkam.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the village</th>
<th>Dry E. Bannavari Patta land (ha)</th>
<th>Governmental poramboke land (ha)</th>
<th>%</th>
<th>Total land (ha)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Irungattukottai</td>
<td>205.92</td>
<td>25.87</td>
<td>17.5</td>
<td>231.79</td>
<td>31.3</td>
</tr>
<tr>
<td>2</td>
<td>Katrambakkam</td>
<td>155.77</td>
<td>96.83</td>
<td>66.9</td>
<td>254.60</td>
<td>34.4</td>
</tr>
<tr>
<td>3</td>
<td>Thandniam</td>
<td>231.13</td>
<td>22.96</td>
<td>15.6</td>
<td>254.09</td>
<td>34.3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>692.82</td>
<td>147.66</td>
<td>100</td>
<td>840.48</td>
<td>100</td>
</tr>
</tbody>
</table>

4.3.9 Utilization of the Land Acquired

In general, SIPCOT acquires more land than what is needed at a given point of time. The land acquired by SIPCOT as on 31.3.2000 for 15 industrial complexes, parks and growth centres since the inception was around 6,588.95 hectares (16,269 acres approximately). Of this land, the area set aside for infrastructure and amenities was 25.39% and the remaining 74.61% was to be allotted for the industries. Of the land to be allotted for industries, as on 31.3.2000, the area allotted was only 48.36%, leaving a remainder of 51.64% acres. When more than 50% of the land was available for allocation, it is a moot question as to why SIPCOT should
continuously buy land. Can it not sell the land that was already bought and then go for more purchases?

For SIPCOT Irungattukottai project 740.48.5 hectares of land was acquired in 1995-1997. Of this land, allottable area for industries was 66.76% while the land set aside for infrastructure and amenities area was 33.24%. As per the Statistical Handbook of Tamil Nadu 2001 from the area allottable for industries, only 61.14% was allotted as on 31.3.2000 and 38.86% was yet to be allotted. The details of the land acquired by SIPCOT for all the projects as on 31.3.2000, with special reference to the Industrial Park at Irungattukottai and the land yet to be allotted are depicted in Figure No.7. Within a distance of 11 kms to SIPCOT Irungattukottai project, another SIPCOT Industrial Park was launched at Sriperumbudur in 1997 and 572.55 hectares of land was acquired, of which 70% was to be allotted for industries and 30% for the infrastructure and amenities area. However as per the Statistical Handbook of Tamil Nadu 2001, as on 31.3.2000, only 25% of the area meant for industries was allotted (Malathi 2002).

From the above, one could understand that the land acquired for SIPCOT Irungattukottai is fast-selling in comparison even to the Sriperumbudur project, though both are close to Chennai, the capital city of Tamil Nadu and the market value of the land remained the same as on 31.3.2000. The main reason for this could be attributed to the Hyundai Motors, which occupies most of the area along with its ancillary units.
Figure No.7:

Details of land allotted and yet to be allotted by SIPCOT as on 31.3.2000

All Projects of SIPCOT

- 25.39% Area earmarked for infrastructure
- 74.61%

- 48.36% Area earmarked for industries
- 51.64%

SIPCOT Irungattukottai

- 33.24% Area allotted
- 66.76%

- 61.14% Area yet to be allotted
- 38.86%
A news article in *The Economic Times* (Balasubramantan 2002) published from Chennai states that SIPCOT is finding it very tough to find takers for more than 4,050 hectares of land developed by it at various locations, as there is lack of coordination between the Union Ministry of Environment and the State Pollution Control Board. Of late, the latter is taking a firm stand in clearing only projects with inherent importance attached to environmental concerns. Hence, in spite of the efficient marketing strategy and organizational structure of SIPCOT, it is unable to attract investment proposals from entrepreneurs and corporates, as it plays only a 'facilitator role', without any statutory powers for allotting the land. Hence it is all the more important that SIPCOT should not buy vast tracts of land depriving the poor farmers.

4.3.10 Justification for higher compensation

The maximum expenses incurred for acquisition of private lands at Irungattukottai (205.92.0 hectares), Katrambakkam (155.77.0 hectares) and Thandalam (231.13.5 hectares), in terms of compensation, as per the Land Acquisition Act, which is confirmed by the Awards sanctioned are shown in Table No.7.

As per the Act, 80% of the total compensation amount should have been paid when the Award was sanctioned and the interests of 9% and 15% were to be paid on the balance 20% of the compensation. However, in Table No.7 the interest was calculated on the entire amount of
compensation. It was estimated that a maximum of Rs.6,95,99,358.56 could have been spent for acquiring 592.82.5 hectares of private land.

Table Mo.7: Compensation for acquisition of private Sands*

<table>
<thead>
<tr>
<th></th>
<th>Marked Value</th>
<th>Sollage @ 30%</th>
<th>12% on the Market Value</th>
<th>Total Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>61,800.00</td>
<td>18,540.00</td>
<td>2,224.00</td>
<td>82,564.00</td>
</tr>
<tr>
<td>2.</td>
<td>7,430.83</td>
<td>8,999.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>12,364.72</td>
<td>14,049.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* These details are worked out based on the information collected from the Awards.

1) Maximum estimated compensation for
   205.92.0 hectares of private land at Irungattukottai = Rs.25,278,125.56

2) Maximum estimated compensation for
   155.77.0 hectares of private land at Katrambakkam = Rs.15,947,787.12

3) Maximum estimated compensation for
   231.13.5 hectares of private land at Thandalam = Rs.28,373,443.82

For the SIPCOT Industrial Park at Irungattukottai, 592.82.5 hectares of private land along with 147.66 hectares of Government poramboke land were acquired and a single boundary for 740.48.5 hectares was laid. Of this 33.24% (246.13.5 hectares) of land was set aside for infrastructure and
amenities; hence only 66.76% (494.35 hectares) was earmarked as allottable area for industries as mentioned in the Statistical Handbook of Tamil Nadu 2001 (Malathi 2002). The other expenses related to acquisition of land were 1) publication of notifications in the newspapers as per the Land Acquisition Act, 2) verification, land survey, demarcation of land, etc., 3) development of land which includes laying of boundaries, tarred approach roads, laying of bore wells, overhead and surface tanks, telephone and electricity, sewage etc., 4) administrative expenses for land acquisition by the Government personnel, 5) marketing expenses and 6) other miscellaneous expenses.

It was learnt from the SIPCOT brochure dated 30.11.2000 that the land was leased for 99 years to the industries at the rate of Rs.300/- per sq. metre, i.e., the cost of one hectare of land was Rs.30,00,000/-. Therefore the 494.35 hectares of land meant for allotment to the industries could fetch a sum of Rs.1,48,30,50,000 (Rupees One hundred and forty eight crores, thirty lakhs and fifty thousand). Against this, as less than five percent of the total sale/lease value of the industrial land was paid as compensation to the households from whom the land was acquired, it is worth reflecting whether the compensation amount paid to the people is appropriate. The escalated sales/lease is proved from the terms of the Memorandum of Understanding entered into by the Government of Tamil Nadu with Hyundai Motor India Limited (HMIL), as per which SIPCOT was to make available land to the extent of 543 acres at Irungattukottai at an agreed price of Rs.40 crores to HMIL. (http://cag.nic.in/reports/tn/rep2000/comm._ch4.pdf), which means the
cost per acre of land was Rs.7,36,648/-. It is suggested that the compensation amount to be paid to the people must be at least 25% of the total sales/lease value of the industrial land and the remaining could be proportionately used for development and administrative expenses. Similarly for the Government poramboke land, at least 25% of the total sales/lease value of the industrial land must be given to the panchayats for the rehabilitation of the landless, agricultural labourers and the people, who have been indirectly affected by the land acquisition.

4.3.11 Awareness on the legal standing

A social action group or any member of the public can approach the court if they feel that the Government has exceeded its authority or its act is mala fide. There are numerous cases in which letters have been written or petitions filed on behalf of such victims by social action or legal aid groups and journalists. For instance, Biswa Priya Kanugo, President of Rajdhani Busti Basinda Kalyan Sangh sent a petition with some annexures to the Honourable Chief Justice of India alleging forcible eviction of slum dwellers from different areas of Bhubaneshwar, Orissa for no public purpose, whatsoever, but with the sole motive of allotting the land to the people in power and their relatives. This letter of Kanugo along with its annexures were then forwarded by the Supreme Court of India to the High Court of Orissa, where it was registered as O.J.C. No.1632 of 1989. By order No.8 dated 20.3.90, a Division Bench comprising the Honourable Chief Justice and Justice Patnaik directed an enquiry into the matter (Unnayan 1992).
Similarly, a number of public interest litigations are filed by individuals and institutions, who are interested in the sustainable development of the people and the nation. Roy (1999) in the book ‘The Greater Common Good’ writes of a typical example of the Narmada Bachao Andolan (NBA), which nearly halted the Narmada Valley Project. Though the project is being implemented, due to the concerted efforts of the people to be displaced and the members of the Narmada Bachao Andolan and the mass media, a number of changes, have been introduced in the project to benefit the people to be displaced.

A suit was filed by three lawyers on behalf of sixty households whose housing plots were acquired by SIPCOT Irungattukottai. These housing plots were adjacent to the Chennai-Bangalore Highway No.4. The argument for the case started on 14th June 2002 in the Fast Track Court No.4, Poonamallee, Chennai. On behalf of the SIPCOT Director and Special Tahsiidar - Land Acquisition Programme, two lawyers argued the case. During the argument, purchase of land at the rate of Rs. 14,600/- per cent for Pentadaewha Autoparts India (Pvt.) Limited, which is around one kilometre from SIPCOT Irungattukottai Industrial Park, was considered as fair price. Based on the argument, the court declared that for the land acquired from the above said sixty households, Rs.7,300/- was fixed per cent, as Hyundai Car Company is spread over an extent of 1 km. away from the National Highway No.4. The judgment further stated that the interest and solatium at the rate of 30% must be provided to the households as per the Land Acquisition Act. This judgment was passed in
May 2003. On enquiry from the people at Irungattukottai, it is sad to note that they are not aware of the judgment. Judgments were also passed to provide Rs.5,000/- per cent for the lands acquired in Katrambakkam and Thandalam villages. It is learnt that SIPCOT has appealed in the Chennai High Court and the judgment is expected in 2005.

In a similar incident where lands were acquired in various villages in South Arcot District, Tamil Nadu for the expansion of existing mines and dumping yard for Neyveli Lignite Corporation between 1975 to 1978, a large number of References were filed under Section 18 of the Land Acquisition Act by the landholders. The final verdict on the appeal by the landholders was given by the Supreme Court only in 1999 after a lapse of over twenty years from the time the land acquisition programme was initiated (www.supremecourtonline.com/cases/1068.html). This is an example that the households from whom the land was acquired have to wait for a long period. Hence the amount received as compensation does not really compensate the loss.

To a question, “Why are you not interested to follow up the case?” the respondents said that they have authorized the lawyer to be their power of attorney and they have no time, energy and money to know the present status of the case. They further state that they do not know how long they have to wait for the final judgment and do not have any hope that in the near future, they will get a revised compensation. These comments show a similarity with the experience of the people whose lands were acquired for the Neyveli Lignite Corporation.
It is sad that the households whose lands were acquired for SIPCOT Irungattukottai Industrial Park could not be motivated by the local NGOs and like-minded individuals to follow up the case systematically.

4.3.12 Land Acquired for industrialization from an industry

It is also strange to note that land was acquired in the name of industrialization from another industry itself. Around 25.79 acres of land was acquired from Aban Constructions Limited, an industry which was already functioning at Thandalam village during the time of acquisition. The company had approached the courts and also the Government and managed to get back 11.70 acres of land. The company is continuing its struggle to get back the 14.09 acres of land, which is still unutilized by SIPCOT. At present the company is running an orphanage in one acre of land and the company is functioning in the remaining 10.70 acres. What is the interest of SIPCOT to bring other industries in at the cost of an existing one? The Aban company officials are very much distressed that they are unable to use their own land for expansion of their company. Does industrialization mean setting up of a new industry at the cost of an existing one?

4.3.13 Exceptional Institute - Exempted from Land Acquisition

The authorities of Lake View Bible College and Seminary ecstatically expressed that they were the only ones who were exempt from the land acquisition programme, as they were located towards the rear end of the proposed site for the Industrial Park, adjacent to the Puduppair Reserve.
Forest. The land was purchased by them in March 1990 and the construction work started in 1993. By 1995, a huge two storeys building was completed. They were not aware that their land was also under the acquisition process for the SIPCOT Irungattukottai Industrial Park in 1995, as no notices were served on them, as per the legal procedure. They had come to know of the land acquisition programme through one of their employees who had read about the land acquisition in the newspaper. Immediately, they took up the matter with the officials concerned and explained their situation. They had perseveringly continued their struggles in the form of a legal suit, contacting the local SIPCOT officials, the officials at the SIPCOT Head Office, the District Collector and the Minister of Industries.

Though their undaunted efforts bore fruits, by getting exemption from the land acquisition programme, they had to face a lot of misery such as the blocking of the approach road to the institution etc. By continuing their dialogue with the SIPCOT officials they had obtained permission from SIPCOT to use the roads of the SIPCOT Industrial Park by paying an annual sum of Rs.38,000/-. They also said that they had approached SIPCOT for the purchase of a small piece of isolated land measuring 24’ x 147’ which lies between the road and their land, but did not purchase it as the price quoted by SIPCOT was too high. Now they are paying a rent of Rs.2,500/- per year to use the same piece of land, as the approach road to their institute. It is obvious from the data stated above that the Government officials have documentary evidence to prove that the procedures were
followed correctly white land was acquired for the Industrial Park at Irungattukottai. However, the people whose Sand was acquired, the landless agricultural labourers and the public, in general, were not aware of the procedures followed when the land was acquired.

4.4 The institutional and infrastructural changes caused by Sand acquisition.

The joint family system, caste system and village administration by the *panchayats* are the characteristics of rural communities of India. Acquisition of agriculture land for industrialization generally leads to changes in the institutional and infrastructural facilities of the villages from where the land is acquired. The data collected to understand the changes that take place in the institutional and infrastructure facilities in the three villages are analysed below.

4.4.1 Joint family system

As agriculture is the main source of livelihood for most of the rural households and also as agriculture is labour-intensive, the joint family system was part and parcel of Indian culture. As the agricultural land was acquired for industrialization, it was imperative to understand the impact of industrialization on the joint family system. It was surprising to observe that the respondents were unable to decide whether the industrialization had an influence on the joint family system, which is the hallmark of the rural and agricultural societies. While 28.20% of the respondents confirmed that the joint family system was disturbed by industrialization, 57.95% felt that the
industrialization did not have any impact on the joint family system. A sizeable number - 13.85% of respondents were not in a position to decide whether industrialization had any impact on the joint family system. This is depicted in Figure No. 8.

Of the 195 respondents, only 18.50% were from the joint family system, while the rest, i.e., 81.50% were from nuclear households. This analysis itself clearly indicates that the joint family system is no more a significant social unit in these villages. The urban impact, increasing awareness on the importance of the small households and the economical independence of the grown-up children, necessitate the increase of nuclear households in the villages.

Figure No. 8: Impact on the Joint family system
4.4.2 Caste system

To a question, “Do you feel that the industrialization in the villages can solve the caste problem?” the respondents differed in their opinion. Of the 195 respondents, 56.40% of them said that the caste system cannot be changed even until death. Of these respondents nearly 50% were from the dalit community. Of the remaining respondents, 27.70% said that the caste system could be slowly phased out if the dependency of the dalits on the other caste people for employment is reduced, while 15.90% respondents were not able to decide in any way.

As the local people know the caste of each and every person, as long as they live in the villages, their caste identity cannot be erased. Even if they settle in the towns and improve their social status, once they come back to the village - though economically and educationally they are well off - their social status remains the same. The respondents confirmed that when some of them rent their flats to the employees of the companies, they find out their caste. The magnitude of the evils of the caste system is reduced in the villages due to various factors such as access to education and other resources but it is sad to note that its negative influence still continues.

4.4.3 Panchayat Raj system

“Democracy is an essential component of sustainable development. The strengthening of local democratic system, which empowers local
communities to decide on the use of local natural resources, is vital for environmental management”, quotes Agarwal et al (2001). Hence, the local panchayats are empowered by the Panchayat Raj Act of 1994 to take care of the village environment.

While all the respondents agreed that the companies did not have any direct influence on the Panchayat Board/Council of the village, 62.00% of them were of the opinion that the industries could influence the officials of the panchayats as the panchayat receive huge revenue from the companies in the form of taxes. Hence, they felt that Panchayat Board/Council members always maintain a comfortable relationship with the companies and never question any violations by them. One of the village panchayat leaders affirmed that only when there is a healthy relationship with the industries, could they tap facilities, such as employment for the local people.

4.4.4 Community benefits as a result of Industrialisation

The respondents mentioned the following five as the community benefits that they have received due to industrialization.

1) Improved communication facilities
2) Better approach roads to the villages
3) Increase in educational institutions
4) Increase in value of immovable property and
5) Improved drinking water facilities

Improved drinking water facilities in the villages was quoted as the first benefit by 49.74% of the respondents, while the first benefit for 23.08%
of the respondents was the increased value of the immovable properties. It was surprising to note that 13.84% of the respondents ranked the increased number of educational institutions around the area as the best benefit, while 8.72% of them felt that better approach roads to the villages was the predominant benefit and the remaining 4.62% of them opted for the increased communication facilities as the top most community benefit due to the industrialization. These data are shown in Figure No.9.

**Figure No. 8: Community benefits**

<table>
<thead>
<tr>
<th>Community Benefits</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved communications facilities</td>
<td>4.42%</td>
</tr>
<tr>
<td>Better approach roads to the villages</td>
<td>8.72%</td>
</tr>
<tr>
<td>Educational institutions increased around the area</td>
<td>13.84%</td>
</tr>
<tr>
<td>Increase in value of immovable property</td>
<td>23.98%</td>
</tr>
<tr>
<td>Improved drinking water facilities</td>
<td>49.74%</td>
</tr>
</tbody>
</table>

4.4.4.1 Community benefit - drinking water

Of the five community benefits, there is a direct relationship between the industries and the drinking water facilities. The drinking water facilities were improved in the villages with the revenue received from these
industries by the *panchayats*. While all the respondents of Irungattukottai village and Katrambakkam village and 47% of the respondents of Thandalam village confirm that they mostly use tap water for drinking, 53% of the respondents of Thandalam village said that they also use water from bore wells for drinking. Tap water facility is one of the major benefits that these villages received as the result of industrialization.

SIPCOT has also permitted the Katrambakkam *panchayat* to sink a bore well in the SIPCOT Industrial Park, from where the water is pumped and taken through underground pipes to the overhead tank in Katrambakkam village, which is then supplied to the people through taps, as per a time schedule. Although the bore well is located inside the SIPCOT Industrial Park, the cost of sinking the bore well, laying the underground pipelines, building the tanks, etc., had been met by the Katrambakkam *panchayat*. Two overhead tanks (one of which is not used due to poor maintenance) had been built at Keevalur by the Tamil Nadu Water Supply and Drainage Board (TWAD Board), from where the water is taken through underground pipelines and supplied to the people of Keevalur, Thandalam and Irungattukottai, as per a time schedule. The people have no say in cleaning the water tank, quality of water and time of release of water.

It islearnt from the respondents that the SIPCOT Irungattukottai office, had constructed a pumping station with two overhead water tanks of 20-lakh litres capacity and four surface tanks of 45-lakh litres capacity,
which exclusively cater to the needs of the industries in SIPCOT Irungattukottai Industrial Park. To what extent the water could be distributed to the three villages and also meet the needs of the industries of the area are to be assessed in due course of time. The overhead tanks at SIPCOT Industrial Park are shown in Figure No. 10:

Figure No.10: Overhead tanks at SIPCOT industrial Park to benefit only the industries.

4.4A.2 Community benefit - Educational institutions

The increase in the value of the immovable property and the increase in the number of educational institutions are the natural effects of industrialization. The Government is running *balwadis* (nursery) in all the three villages - Irungattukottai, Katrambakkam and Thandalam. In addition to these, there are primary schools in Irungattukottai, Thandalam and Keevalur, a middle school in Katrambakkam and a high school in Thandalam. There are two private English-medium schools in Thandalam and a private technical institute in Irungattukottai.
The recent past has seen the growth of private educational institutions in this area. The areas around Irungattukottai and Sriperumbudur have become a haven for engineering colleges in the dawn of the 21st century. Four engineering colleges, namely Rajalakshmi Engineering College, Sakhthi Mariamman Engineering College, Marianna Engineering College and P. B. Engineering College are functioning in Thandalam and Irungattukottai. Apart from these, Maharaja Engineering Trust and Abaraju Ammal Educational Society are also constructing engineering colleges in Irungattukottai. This sudden increase of private professional educational institutions in this area is not necessarily due to industrialization but primarily due to the proximity of the area to Chennai, the capital city of Tamil Nadu.

The improved approach road and the communication facilities are to be considered as the facilities provided primarily to benefit the industries and its personnel, though the villages also benefit from them. It is confirmed by the respondents that the inflow of truck drivers and cleaners, especially from North India has increased around the industrial park, from five years back, as the Hyundai Car Company had started producing a variety of cars. As the truck drivers and cleaners stay only for a few days that is, until they load the new cars, their presence has not made any significant impact on the life style of the local villagers.

4.4.5 Banking and other facilities

The respondents reacted sharply, when it was pointed out to them that as a result of industrialization a branch of Indian Overseas Bank (IOB)
was opened at Irungattukottai. Of the 195 respondents, only 18.46% said that they knew that there was a bank at the SIPCOT office in Irungattukottai. These respondents also said that though they were aware that a bank was operating for sometime, they confirmed that they did not get any service from the bank.

It was learnt from one of the officers of the branch at Irungattukottai that this branch of the Indian Overseas Bank at Irungattukottai was started with the approval of the Reserve Bank of India in December 1998, as a Small Scale Advances Branch and later extended as a large advances branch, with the primary responsibility of providing a minimum loan of Rs.25,00,000/- for the industries of SIPCOT Irungattukottai and Sriperumbudur. It collects excise duty and income tax from the companies and remits them to the Government departments. It serves as a foreign exchange bank too, to import goods, raw materials and machines. All bank clearing operations are done by this bank though it is in the rural area.

The Indian Overseas Bank, Irungattukottai does not provide any service to the villages. The people have to go to Poonamallee, which is around 12 kms. or so from Sriperumbudur to avail bank facilities. “While the bank is within our village limits, why cannot a separate counter be opened to meet our requirements” argue the people. The request of the people looks genuine and is a felt need too.

An electric power station, telephone exchange and an emergency accident care unit have been provided in the industrial park to attract more
industrial investments. All these mostly cater to the needs of the industries and the villages get only marginal benefits from them.

4.4.6 General changes in the villages

"A simple life has now become a complicated one", was the opinion of 95% of the respondents. They further said that though people of different castes live in the villages, as all of them were born and brought up in the same village, they knew each other and their households. Even the landowners had to depend on the landless labourers for work in the fields and the landless labourers had to depend on the landowners for regular work. Hence, to a great extent there was a harmonious relationship among the farming community. The rural life which was an ambience of simplicity and healthy neighbourhood, supported by the domestic cattle population, is now gradually disappearing from these villages. The quality and quantity of fresh vegetables and milk are also reduced. The people are in the midst of industries that may have destroyed the present and the future quality of life of their children.

The people further stated that though farming practices were reduced in the villages, transport and communication facilities had improved and the land value had gone up, paving the way to sell the agricultural land as house plots to unknown persons. The villagers depend on other villages for agricultural labour and they have become economically weak due to lack of regular income from the lands and cattle. They further stated that they no longer show any interest in participating in village festivals and thanksgiving
celebrations like *Uzhavar Thirunal* (farmers’ festival), etc., which were once celebrated by the entire village community. “Are all these changes the symbols of urbanization....? Are these changes going to bring self-dignity and regular income to the villages?” the respondents posed these questions.

4.4.7 New commercial establishments

Prior to the land acquisition programme in the same geographical area, there were only 9 shops. Of those 9 shops, 3 were tiffin stalls, 1 was a restaurant, 2 were grocery shops and of the remaining 3 shops, 1 each was a petty shop, an automobile workshop and an engine oil sales shop. Of the 9 shops, 6 belonged to the households of the three villages and the remaining 3 shops belonged to the people of other districts of Tamil Nadu.

After the industrialization process, as of mid-September 2003, there were 68 shops within a kilometre radius of the SIPCOT Irungattukottai office on both sides of the National Highway No.4. The type of shops and the business centres such as 1) firewood depot in a rural area, 2) a real estate centre for sale of housing plots, 3) four automobile repair shops, 4) two wine shops, 5) nine restaurants - of them one to cater to the needs of the Koreans (Figure No.11), yet another to meet the requirements of the North Indian truck drivers and cleaners, 6) eighteen tiffin/tea stalls, 7) ten Subscribers Trunk Dialling (STD) booths, 8) three national/international couriers, are examples of the rural areas being converted into an urban mode.
It is observed that forty six shops were owned by people who do not belong to the three villages from where the land was acquired. Of those 68 shops/establishments, 86.76% shops were started within a period of 8 years (after the initiation of the land acquisition process at Irungattukottai). The type of shops/establishments and their conglomeration, the speed in which they were established and the ownership pattern are the clear indicators that the rural identity is fading in the area from where the land was acquired for industrialization. It was further observed that the local people have not made use of the opportunity to shift their occupation to the informal service sector due to lack of awareness and experience.

Figure No.11: Korean restaurant at Thandalam village

While the land acquisition did not have much impact on the caste system, joint family system and *Panchayat Raj* system, its impact on the
infrastructure was vivid. The people felt that at present, although they had better infrastructure facilities, they did not have resources to access them.

4.5 Changes taking place in the natural resources and the general conditions of environment

Conversion of agricultural land for industrialization will normally lead to changes in the general conditions of the environment and natural resources. Data collected from the respondents were compared with the remote sensing pictures of two seasons of two years, 1) prior to land acquisition and 2) after the land acquisition programme. In addition, the data was collected from the Tamil Nadu Pollution Control Board about the polluting industries. The quality of the water from the three villages was analysed. All the above mentioned data are given herewith to understand the changes that had taken place in the natural resources and general conditions of the environment.

4.5.1 Quantity of drinking water

In analysing the responses of the 195 respondents, it is learnt that 52.8% of them felt that the drinking water they got was not sufficient while 33.8% of them felt that it was just sufficient and the remaining 13.4% of them said that what they got daily was more than enough to meet the requirements. This is depicted in Figure No. 12. The tap water is not used by the people for drinking and cooking purposes alone. It is also being used for bathing, washing utensils and clothes. This tap water is also used for the cattle. Prior to the introduction of the tap water, for washing the clothes and
to have a bath, either the lake or pond water was used. As the tap water is easily available now, and that too, close to their houses, the people no longer use water from the ponds or lakes, to meet their basic requirements.

To a question, "Why can’t the traditional practices of washing the clothes and taking bath by drawing water from open wells, ponds and lakes be continued?", 42% of them said that the water was easily available at their doorsteps and hence, they did not want to take any extra time or strain. Another 53% of the respondents said that while the companies used lots of water for various purposes, their query was why should they not use water
that too from their own villages to meet domestic purposes. The remaining 5% of the respondents did not share their views on this question.

The culture of living with Nature is slowly shifting away from the minds of the people. The people argue that if they do not take advantage of their resources, somebody else will.

4.5.2 Quality of drinking water

It was observed that 95.9% of the respondents were happy that the water that they get from the taps is potable and neither they nor their family members were affected by any water-borne diseases so far. This is the highest percentage of response for a single question. Only 4.1% respondents were not able to decide whether they or their family members got any water-borne diseases due to the drinking water that they get from the taps.

Water was collected from eleven sources in the study area (the details of the location of the water samples are shown in Figure No.13) and were tested by the Madurai Kamaraj University Energy Environment Consultancy Group. The details of the water samples and the analysis are given in Table No.8. Of the total samples, sample numbers 3, 6, 7, 8, 9, 10 and 1 were quite safe for human consumption, irrigation and industrial purposes. The sample numbers 1, 2 and 4 were fit for domestic use such as washing and bathing but not for drinking. The sample number 5 was highly contaminated, as it was from an abandoned well, which is filled with litter.
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Village</th>
<th>Source</th>
<th>Depth</th>
<th>Utility</th>
<th>Results of the analysis of water quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thandalam</td>
<td>Borewell</td>
<td>40 ft.</td>
<td>Private hand pump – water used for washing and bathing</td>
<td>All values except COD are in the permissible level. Could be used for irrigation and domestic purposes like washing and bathing.</td>
</tr>
<tr>
<td>2</td>
<td>Thandalam</td>
<td>Borewell</td>
<td>50 ft.</td>
<td>Hand pump on the roadside – water used for washing and bathing</td>
<td>TDS, EC and chlorides are little higher than the permissible level. Phosphates, COD and magnesium far exceed the permissible limit. Could be used for washing and bathing.</td>
</tr>
<tr>
<td>3</td>
<td>Katrambakkam</td>
<td>Borewell/public tap</td>
<td>&gt;200 ft.</td>
<td>Water supplied through tap for drinking</td>
<td>It is fit for human consumption, agricultural purpose and for industrial use.</td>
</tr>
<tr>
<td>4</td>
<td>Thandalam</td>
<td>Borewell</td>
<td>80 - 100 ft.</td>
<td>Water used for washing and bathing.</td>
<td>TDS, chloride, magnesium, BOD, COD are higher. Could be used for irrigation, washing and bathing.</td>
</tr>
<tr>
<td>5</td>
<td>Thandalam</td>
<td>Open well</td>
<td>80-100 ft.</td>
<td>Abandoned – filled with litter</td>
<td>Highly contaminated. Cannot be used.</td>
</tr>
<tr>
<td>6</td>
<td>Thandalam</td>
<td>Borewell</td>
<td>450 ft.</td>
<td>Water supplied from a catering unit.</td>
<td>It is safe for human consumption, irrigation and for industrial purpose.</td>
</tr>
<tr>
<td>7</td>
<td>Thandalam</td>
<td>Closed well/public tap</td>
<td>&gt;100 ft.</td>
<td>Water supplied through taps for drinking</td>
<td>It is safe for human consumption, irrigation and for industrial purpose.</td>
</tr>
<tr>
<td>8</td>
<td>Irungattukottai</td>
<td>Tap water in SIPCOT Office</td>
<td>-</td>
<td>Used for drinking and washing</td>
<td>It is safe for human consumption, irrigation and for industrial purpose.</td>
</tr>
<tr>
<td>9</td>
<td>Irungattukottai</td>
<td>Open well</td>
<td>100 ft.</td>
<td>At the petrol bunk – used for drinking and washing</td>
<td>It is safe for human consumption, irrigation and for industrial purpose.</td>
</tr>
<tr>
<td>10</td>
<td>Irungattukottai</td>
<td>Open well</td>
<td>50 ft.</td>
<td>Used in the restaurant for drinking and washing</td>
<td>It is safe for human consumption, irrigation and for industrial purpose.</td>
</tr>
<tr>
<td>11</td>
<td>Katrambakkam</td>
<td>Borewell</td>
<td>&gt;200 ft.</td>
<td>Used for drinking and industrial purpose.</td>
<td>It is safe for human consumption, irrigation and for industrial purpose.</td>
</tr>
</tbody>
</table>

(The permissible levels are as per the recommendations of ICMR/BSIS. BOD – Biochemical Oxygen Demand; COD – Chemical Oxygen Demand; TDS – Total Dissolved Solvents; BOD – Bureau of Indian Standards; ICMR – Indian Council for Medical Research.)
Six out of the eleven samples were collected from Thandalam village, as people also use bore wells in this village. The people of Katrambakkam and Irungattukottai primarily depend on tap water supplied from the overhead tank, for all purposes, except irrigation.
4.5.3 Sources of irrigation

With regard to sources of irrigation, only 10.8% respondents confirmed that they used the lake water for irrigation, 3.1% respondents said that they used open wells/bore wells for cultivation and the remaining 86.1% said that they either have no source of water for irrigation or depended on the monsoon for the rain-fed or dry land cultivation (Figure No.14). The type of irrigation showed that these households are too poor to either dig open wells or install bore wells. These tanks and lakes were considered as the basic source for percolation by the farmers.

Figure No.14: Sources of Irrigation

Sakthivadivel, Gomathinayagam and Shah (2004) in the article ‘Rejuvenating irrigation tanks through local institutions’ state that of late, the importance of tanks is being realized even more, as the rapidly growing use
of ground water and large surface irrigation systems are proving costly and inadequate. Conserving the tank ecosystems for multipurpose use such as irrigation, domestic and livestock use and ground water re-charge is a way to provide a safety net to protect the livelihood of millions in a semi-arid India. The district of Kancheepuram in Tamil Nadu had 1942 major tanks and 4000 minor tanks as on 2003 (http://kanchi.tn.nic.in/waterhaverst1.htm). The state of these tanks is a serious issue to be contended with. A large majority have not been repaired or desilted for a long time, as a result of which, their storage capacities have deteriorated over the last several decades. Lying at the root of the problem is the alienation of the farmers and local community from the ownership of these tanks.

Around SIPCOT Irungattukottai industrial complex there are five tanks and one lake, all of which once served as the source for irrigation. They are Thandalam tank, Sundhandram tank, Katramakkam tank, Pizathangal tank, Keevalur tank and Chembarambakkam lake. The respondents feel that since the establishment of industries, these tanks and lake do not get sufficient water, as the feeder canals are closed due to the construction of big buildings and elevated roads. As the tanks and lake around the industrial complex of Irungattukottai are no more a source for irrigation, the local people and the panchayats have lost interest in maintaining the tanks and lakes. While analysing the above factors, one can understand that water is yet to be understood as a non-renewable resource.
Seventy eight percent of the total respondents feel that industries must take the responsibility of desilting these tanks and lake, establish interlinking canals between the lake and tanks and let the excess water percolate closer to the bore wells. They also said that the rain water, which goes as run-off could be let into huge sumps and used during peak summer. It may not take a long time for the farmers of the area to withdraw from farming, due to failure of monsoons and lack of irrigation facilities and tamely surrender to the real estate owners, who are readily willing to buy the land for laying out housing plots. As a result, the households that would sell land will have to search for alternative employment for their survival. With meagre educational qualifications, no entrepreneurial skills, poor financial resources and no marketing competence, they will be forced to migrate in search of employment in the towns and cities, thereby resulting in swelling of the urban population. As per the Census of 2001, the percentage of the urban population in Tamil Nadu State is as high as 43.86%, in comparison to the all-India average of 27.78% (http://www.censusindia.net). With the additional increase of population in the cities and towns, the demographic, employment, social and psychological pressures will keep increasing, in the cities and towns.

4.5.4 Pollution

As of mid-June 2003, of the nineteen industries established at SIPCOT Irungattukottai project, five are considered as highly polluting, twelve as moderately polluting and two are considered non-polluting. All the polluting industries strictly follow the norms prescribed by the Tamil Nadu
Pollution Control Board, which is the State Government regulating machinery. All these industries have appropriate cooling towers and effluent treatment plants. The Tamil Nadu Pollution Control Board monitors the industries regularly. The details of the type of industries and pollutants are given in Table No.9.

After the discussions with the respondents and the staff of Tamil Nadu Pollution Control Board one could understand that so far, the villages around the SIPCOT Industrial Park at Irungattukottai do not face any major pollution threats, due to the strict and regular monitoring of the Tamil Nadu Pollution Control Board. It was observed that nearly 65% of the respondents said that noise pollution has increased due to the large number of heavy vehicles in the area. One could observe at any point of time that around 150 to 200 heavy vehicles wait around the industrial area to transport the cars manufactured at the Hyundai car company (Figure No.15).

Figure No.15: Heavy vehicles parked in one particular place at the Industrial Park on 20.9.2003
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the Industry</th>
<th>Category of the Industry</th>
<th>Product</th>
<th>Type of Pollutant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hyundai Motors India Limited</td>
<td>Cars</td>
<td></td>
<td>Solid wastes, water and air pollutants, like oxides of nitrogen and sulphur.</td>
</tr>
<tr>
<td>2</td>
<td>Matushita Air-conditioning India Pvt. Ltd.</td>
<td>Air conditioners</td>
<td></td>
<td>Oxides of carbon, sulphur and nitrogen pollute the air and water.</td>
</tr>
<tr>
<td>3</td>
<td>JBM Sungwoo Limited</td>
<td>Automobile ancillary</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Dynamatic Technologies</td>
<td>Automobile ancillary</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>JKM Daerin Automotive Ltd.</td>
<td>Automobile ancillary</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>Iljin Automotive (P) Ltd.</td>
<td>Automobile ancillary</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>Sharda Motors India Ltd.</td>
<td>Non-polluting</td>
<td>Automobile ancillary</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Lumax Samlip Ind. Ltd.</td>
<td>Automobile ancillary</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>PHC Manufacturing Ltd.</td>
<td>Automobile ancillary</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>POS Hyundai Steel Manufacturing Ltd.</td>
<td>Automobile ancillary</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>Mando Brake Systems (India) Ltd.</td>
<td>Automobile ancillary</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>12</td>
<td>Reynolds Pens India Ltd.</td>
<td>Ball pen tips</td>
<td></td>
<td>Sewage water - water pollution.</td>
</tr>
<tr>
<td>13</td>
<td>Hindustan Colas Ltd.</td>
<td>Bitumen Adhesive</td>
<td></td>
<td>Water pollution - Air pollution more prominent, emits oxides.</td>
</tr>
<tr>
<td>14</td>
<td>Bailey Hydro Power (P) Ltd.</td>
<td>DG set power plants</td>
<td></td>
<td>Mostly air pollution.</td>
</tr>
<tr>
<td>15</td>
<td>Dextech Innovation Ltd.</td>
<td>Automobile ancillary</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>Schwing Stetter Ind Pvt. Ltd.</td>
<td>Non-polluting</td>
<td>Concrete mixture plant</td>
<td>-</td>
</tr>
<tr>
<td>17</td>
<td>ABAD Exports</td>
<td>Automobile ancillary</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>18</td>
<td>Crescent Auto Components</td>
<td>Automobile ancillary</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>19</td>
<td>Precision Press Form</td>
<td>Automobile ancillary</td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>
4.5.5 Cultivation around the industrial area

To a question, “How is the agricultural operation now within the vicinity of 5 kms. of the industrial establishments?”, 28% respondents had stated that the farmers continue cultivation of the land as done prior to the industrialization and the remaining 72% respondents had stated that the area under cultivation had reduced as the result of industrialization in the area. Of the 28% respondents, who had agreed that the cultivation was going on as before, only 26% of them felt that the yield was satisfactory, while the remaining 74% of them had felt that the yield was either poor or very poor. They also stated that in general, people lost their interest in farming due to lack of support from the Government in the form of subsidy and failure of the monsoon.

While analysing the response of 72% of the respondents, who had stated that the cultivable land had reduced in the area, it was learnt that, as another industrial park of SIPCOT at Sriperumbudur was established at around 10 kms. distance to SIPCOT Irungattukottai Industrial Park, that too, on the same side of the National Highway No.4, Chennai-Bangalore Highway, the farmers were not sure, when their lands would also be acquired. Farmers do not want to invest and develop the land, hence, cultivate with minimal inputs. Yet another reason is that there was a strong tendency among some of the small and marginal farmers to sell the agriculture land, to the real estate agents for housing plots. Some of the respondents stated that the wages of the labourers have increased, though the labourers do not work as much as earlier times. Reduced duration for higher wages and
equal wages for men and women, have increased the hardship of the small and marginal farmers, who do cultivation. However, none of the respondents had mentioned lack of agricultural labourers, as the reason for cultivation being reduced in the area.

4.5.6 Changes in the land use pattern

There was a change in the land use pattern in the study area from the time land was acquired for the SIPCOT Irungattukottai Industrial Pak. The Table No. 10 shows the area under each class of the land use in 1994 (i.e., prior to land acquisition) and 2001 (i.e., after the establishment of the SIPCOT Industrial Park), within 5 kms. radius of the Industrial Park as interpreted from the remote sensing pictures.

**Table No.10: Area under different land use**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Land use</th>
<th>1994 land use (in ha.)</th>
<th>2001 land use (in ha.)</th>
<th>Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agriculture</td>
<td>1781.28</td>
<td>1511.53</td>
<td>-269.75</td>
</tr>
<tr>
<td>2</td>
<td>Settlement</td>
<td>30.67 **</td>
<td>224.37</td>
<td>193.70</td>
</tr>
<tr>
<td>3</td>
<td>Commercial</td>
<td>11.56</td>
<td>805.96</td>
<td>794.40</td>
</tr>
<tr>
<td>4</td>
<td>Water body</td>
<td>1453.33</td>
<td>583.82</td>
<td>-869.51</td>
</tr>
<tr>
<td>5</td>
<td>Others</td>
<td>4513.30</td>
<td>4664.46</td>
<td>151.16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>7790.13</td>
<td>7790.13</td>
<td>-</td>
</tr>
</tbody>
</table>

In 1994 the residential area were covered by a dense vegetative cover, indicating that they were very small hamlets, not mapable in 1:50,000 scale.

All the lands which are not classified under agriculture, settlements, commercial or tanks are considered as 'Others' in the study. These lands include the reserve forests, race course, barren land, etc.

While Figure Nos.16 and 17 show the land use pattern in the study area in the immediate vicinity of the Irungattukottai Industrial Park with its
extent and geographical location in 1994 and 2001 respectively. Figure 18 depicts the changes in the land use pattern from 1994 to 2001. Detailed interpretations of the change in land use pattern in 2001 as compared to 1994 are given in Table No. 11.

**Table No.11:** Changes in the land use pattern

<table>
<thead>
<tr>
<th>1994</th>
<th>2001</th>
<th>Settlement</th>
<th>Commercial</th>
<th>Water body</th>
<th>Others*</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>46.03</td>
<td>100.91</td>
<td>0</td>
<td>6.99</td>
<td>0</td>
<td>0</td>
<td>100.91</td>
</tr>
<tr>
<td>52.03</td>
<td>23.67</td>
<td>0</td>
<td>11.56</td>
<td>0</td>
<td>0</td>
<td>23.67</td>
</tr>
<tr>
<td>725.38</td>
<td>641.38</td>
<td>461.35</td>
<td>651.00</td>
<td>78.43</td>
<td>3074.02</td>
<td>7790.13</td>
</tr>
</tbody>
</table>

All the lands which are not classified under agriculture, settlements, commercial or tanks are considered as ‘Others’ in the study. These lands include the reserve forests, race course, barren land, etc.

4.5.6.1 Changes in the use of agricultural land

The area where the cultivation was not undertaken at the time of data acquisition have also been considered and included in agricultural area based on the field pattern. This eliminates any possibility of omission of agricultural area due to non-cultivation to the maximum extent possible, it is evident from the Table No.11 that 100.91 hectares of agricultural land have been converted into settlements while only a trifling extent of 52.03 hectares have been converted for commercial activities.
Figure No.16: Land use pattern in 1994 as per the Remote Sensing Pictures

Legend

- Roads
- Agriculture
- Commercial
- Settlement
- Water body
- Others

The analysis has been made for the area within 5 Km. radius of SIPCOT Inungattukottai Industrial Park in May and November 1994.
Figure No.17: Land use pattern in 2001 as per the Remote Sensing pictures

Legend

- Roads
- Agriculture
- Commercial
- Settlement
- Water body
- Others

The analysis has been made for the area within 5 Km. radius of SIPCOT Irungattukottai Industrial Park in February and July 2001.
Figure No.18: Changes in the Land use pattern from 1994 to 2001 as per the Remote Sensing Pictures

Legend

- Agriculture to Water body
- Agriculture to Settlement
- Agriculture to Commercial
- Agriculture to Others
- Water body to Agriculture
- Water body to Settlement
- Water body to Commercial
- Water body to Others
- Settlement to Others
- Others to Agriculture
- Others to Water body
- Others to Settlement
- Others to Commercial

Changes in the land use pattern within 5 Km. radius of SIPCOT Irungattukottai Industrial Park between 1994 and 2001
It was obvious that agriculture had been abandoned in 725.38 hectares (which amounts to 40.72% of the total land under cultivation in 1994). The reasons for this could be the loss of interest in cultivation due to failure of monsoons and escalating costs of fertilisers, pesticides, etc., which ultimately resulted in no or low income to the farmers. Another significant reason could be the lure to take up employment in the industries and commercial establishments which have come up in the area. However, it was noticed that there was a reduction of only 269.75 hectares of land under cultivation in 2001 in comparison to 1994. This could probably be due to the increase in cultivation around the tanks due to availability of water for irrigation.

4.5.6.2 Increase in the settlements

The settlements were actually hamlets with good vegetal cover in the 1994 data. In 2001 data, the settlements were observed as groups of well-constructed tenements. The type of construction and the size has been considerably improved over the years.

Another substantial change in the land use pattern was that the settlements have bulged in size, i.e., 193.70 ha. Nearly 52% of this conversion was from agricultural land, while a negligible 6.4% were encroachments in and around the tanks and ponds.

The size of the settlement in the immediate vicinity of the industrial park had experienced a quantum jump in the recent past, which showed the increased mobility and socio-economic prevalence in the area. The
type of the construction within the settlements has a marked improvement. The houses were mostly *pucca* (concrete buildings) in 2001 whereas in 1994, it was noticed that these were mostly *kuccha* (huts). This could be one of the main reasons for the few settlements which were not significant in the remote sensing pictures of 1994. The increase in population could be attributed to the development that has taken place due to industrial establishments, educational institutions and other commercial activities.

4.5.6.3 Increase in the use of land for commercial activities

The area in the vicinity of the industrial park and the transportation corridors have been converted widely for commercial activities like food outlets, truck yards, shops, etc. in the study period. The visits to the field and local enquiries have indicated that most of them were service units to the industries and to the population. The factories and infrastructures, feeder industries, small and petty business establishments in and around the SIPCOT Industrial Park were classified as commercial use. The commercialization also has taken place around the settlement in the immediate vicinity of the industrial park, mostly engaged in small business like hotels, tea shops, etc.

It is explicit from the Table 10 that a vast area of land, *i.e.*, 794.40 hectares has been converted for commercial usage in 2001. However, an in-depth analysis indicates that only 6.55% of the total land which had been converted for commercial use was under cultivation and 11.50% were
water bodies in 1994. A huge extent of the lands under commercial use in 2001 were from the category ‘Others’.

4.5.6.4 Shrinkage of water bodies

There was a marked reduction in the extent of the water bodies of about 869.51 ha. The number of mapable water bodies/tanks was 31 in the study area in 1994 while only 26 is observed in 2001. The reduction in the number and also the extent of water bodies could be attributed to the reduction in the rainfall received over the years or the extensive extraction of water for the commercial/industrial activities in and around the industrial park. The obstruction of water in the catchments areas of a few tanks, particularly the ones in the vicinity of the industrial park could also be another reason. The pressure on the water resources by the large scale industrial activity in the vicinity and the increased population in the area could be a vital reason for the shrinkage of water bodies.

4.5.6.5 Changes in the land use pattern under other classifications

The remote sensing pictures were analysed under a one-tier classification of land use such as agriculture, settlement, water bodies and commercial use. Hence, the lands which were not covered under the above four uses were categorised as ‘Others’ for a clear picture of the area under study. Therefore, even though enormous changes in the usage of land in this category were shown in Table 11, an in-depth analysis had not been done.
4.5.6.6 General Observations

From the analysis carried out with the satellite data pertaining to two different points of time spanning a period of 8 years, the following observations are made. Commercial activity has expanded in the vicinity of the industrial park. The agricultural area has been reduced, as shown by the conversion of the fringe area into commercial use or settlements. The water bodies have shrunk which may be due to the intensive extraction for industrial and related purposes. The continuous poor rain spells can also be another reason. Considering the fact that the data pertaining to the study period, namely 1994 and 2001 were acquired during the summer and winter/rainy season, it may be concluded that one of the main reasons for the reduction in water spread was due to the pressure on the water resources by the large-scale industrial activity in the vicinity. Conversely the size of the settlement in the immediate vicinity of the industrial park has experienced a quantum jump in the recent past.

From an in-depth analysis of the land use pattern studied through the remote sensing pictures of the study area, it is clearly indicated that the utility of the lands of the study area had undergone tremendous changes after the establishment of the industrial park. As the command area of the ponds, tanks and lake had beers blocked due to constructions and elevated roads, there was shrinkage in the water spread. Government machinery controlled the water pollution from the industries and the people were generally happy about the quality of water that they got from the taps.
4.6 Impact of land acquisition on the source of income and the standard of living of the people.

In India, the bottom 40 percent of the population, i.e., virtually all the poor do not benefit from the economic changes that take place in their villages or in the nation. Be it economical, political, educational or employment opportunities, all of them who have benefited are the emerging middle class. The ‘top down’ model of development was virtually a ‘top to middle’ affair. Thus the middle class remained the core of Indian nationhood and the major beneficiary of national progress, says Nag (2001).

The small and marginal farmers and the landless agricultural labourers of the three villages fall either in the category of below-poverty-line or just above the poverty line. It was interesting to know whether the industrialization process that had taken place in these villages had any impact on the source of income and the standard of living of the people.

In order to understand the changes that have taken place in the source of income and the standard of living of the people, a number of questions were asked to the respondents and the responses are consolidated as below.

4.6.1 Investment of compensation for higher standard of living

The utilization of 80% of the total compensation that was received from the land acquisition authorities by the households was taken into consideration for the analysis of data. The amount received as the
compensation for the land acquired was spent by the households in different ways.

Of the 98 households from whom the land was acquired, 3.1% of the respondents mentioned that the compensation amount was spent for the purchase of agricultural land, 20.4% of the respondents said that either they repaired their houses or bought house sites, 18.4% of the respondents said that they had repaid loans, 30.6% of them said that they utilized the money to meet the domestic expenses such as marriages and other ceremonies in the households, 15.3% of the respondents said that they had invested the amount in developing the land that they have in other places, 6.1% respondents had deposited the amount in the bank and the remaining 6.1% of them had set up shops. The above mentioned details are represented in Figure No.19.

From this data, it is learnt that only 30.6% of the respondents have invested the compensation amount for income generation purpose, such as: 1) purchase of land 2) developing land elsewhere 3) running of petty business and 4) investing as fixed deposit in the bank. The other 69.4% of the respondents have spent the amount for various other purposes. Though the households were quite aware that this amount was the only compensation received for the sale of the land - as they had to prioritise their needs - they had to spend the compensation amount for various other pressing needs, rather than investing it for income generation activities.
4.6.2 Employment in the industries - hopes and the reality

It could be observed from the responses of the respondents that their opinion on the land acquisition programme and industrialization was gradually changing with the passage of time. Table No. 12 shows the variation in attitudes in each of the category of the respondents in three different periods - 1) prior to land acquisition 2) during the process of industrialization and 3) after industrialization. After industrialization, even the respondents who were hoping for a brighter future were dismayed as all their hopes turned into a farce.
Table No.12: Opinion of the respondents on the industries

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Very Happy</th>
<th>Nappy</th>
<th>Satisfied</th>
<th>Sad</th>
<th>Very Sad</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B  D A</td>
<td>B  D A</td>
<td>B  D A</td>
<td>B  D A</td>
<td>B  D A</td>
<td>B  D A</td>
</tr>
<tr>
<td>People from whom land was acquired</td>
<td>0 0 0</td>
<td>0 0 0</td>
<td>0 0 0</td>
<td>31 25 11</td>
<td>67 73 87</td>
<td>98 98 98</td>
</tr>
<tr>
<td>Percentage</td>
<td>0% 0% 0%</td>
<td>0% 0% 0%</td>
<td>0% 0% 0%</td>
<td>31% 25% 11%</td>
<td>67% 73% 87%</td>
<td>98% 98% 98%</td>
</tr>
<tr>
<td>Agricultural labourers</td>
<td>18 0 0</td>
<td>26 0 0</td>
<td>4 21 0</td>
<td>0 20 17</td>
<td>0 0 31</td>
<td>48 48 48</td>
</tr>
<tr>
<td>Percentage</td>
<td>100% 0% 0%</td>
<td>100% 0%</td>
<td>100% 0%</td>
<td>100% 100%</td>
<td>100% 100%</td>
<td>100% 100%</td>
</tr>
<tr>
<td>General Public</td>
<td>20 19 0</td>
<td>21 30 8</td>
<td>8 0 12</td>
<td>0 0 18</td>
<td>0 0 11</td>
<td>49 49 49</td>
</tr>
<tr>
<td>Percentage</td>
<td>100% 100%</td>
<td>100% 100%</td>
<td>100% 100%</td>
<td>100% 100%</td>
<td>100% 100%</td>
<td>100% 100%</td>
</tr>
</tbody>
</table>

B – Before the establishment of industries  D – During the establishment of industries  A – After the establishment of industries
4.6.2.1 Opinion of the people before the land acquisition

Before the land was acquired for the industrialization, of the 98 respondent households from whom the land was acquired, 68% of them were very sad about the land acquisition programme, while the remaining 32% were sad about the entire process. Of the 48 households, who belonged to the category of landless agricultural labourers, 38% of them were very happy, 54% were happy and the remaining 8% were satisfied with the land acquisition programme, as they were hopeful of employment opportunities that the industries would provide. Of the 49 respondent households that belonged to the general category, 41% of them were very happy, 43% were happy and 16% were satisfied about the land acquisition, as they expected that these industries could provide employment opportunities or open new avenues to start auxiliary units. The respondents from the third category - the general public had lots of hope in the industries.

4.6.2.2 Opinion of the people during the process of industrialization

While the industries were being constructed, there was no significant change in the opinion of the households from whom the land was acquired. There was a considerable change in the opinion of the respondents from the second and third category. Of the category 2 - the agricultural labourers, 14% of them were very sad, 42% of them were sad and the remaining 44% were satisfied because of the industries that were coming up. The positive impression about the industries was lower among the respondents, as they were not getting the expected employment. However, the general public -
category 3 - were still nurturing hopes of getting new employment opportunities once the industries started functioning.

4.6.2.3 Opinion of the people after the industrialization

Once the industries were set up and started functioning, the impression of the respondents had changed. Of the 98 respondent households from whom the land was acquired, 89% of them were very sad and the remaining 11% of them were sad, because they did not get fair compensation and some of the land acquired was still vacant. Another important reason why they were very sad or sad was that their livelihood was lost and they were yet to acquire any alternate source for their earning.

The respondents from the second category - the landless agricultural labourers had realized that they have no place in the industries and need to go to a far-off place in search of their daily wages. All the hopes that they could get any menial job in the industries were lost as they neither have the skills, nor knowledge and resources to start any new means of livelihood. While 35% of them were sad, the remaining 65% were very sad after the establishment of the industries.

The third category of the respondents, the general public had also lost hope on the industrialization. Of the 49 respondents, 22% of them were very sad, 37% of them were sad, 24% of them were satisfied and only 16% of them were happy about the industries that had come up in their villages. This category of respondents who had hope on industries, started losing hope during the construction of industries and lost all hope once they started
operating, as the industries neither provided jobs in the companies nor created opportunities to start any auxiliary units.

Of the 195 respondents, 66% of them were very sad, 24% of them were sad, 6% of them felt satisfied and only the remaining 4% felt happy about the industries, once they started functioning. How could any villager feel happy or satisfied when the source of livelihood was taken away from them and when even the menial jobs in the companies were given to people from far-off places? Point (1) of the Article 23 of Universal Declaration on Human Rights says that “Everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment” (www.un.org/Overview/rights.html). As the land was acquired by force for the SIPCOT Industrial complex and the smallest of compensation was given, the households from whom land was acquired and the agricultural labourers were adversely affected.

As per the National Thermal Power Corporation (NTPC) - Resettlement and Rehabilitation Policy 1993, jobs were to be given to some eligible Project Affected Persons (PAP) on preferential basis as mentioned below: 1) jobs with NTPC - although NTPC did not envisage significant job opportunities to the local residents, some jobs were to be earmarked for the PAPs in the unskilled and semi-skilled category. However, preference was to be given to eligible PAPs, if they met the job requirements in the skilled categories, 2) contractors were to be persuaded to give jobs to eligible PAPs on a preferential basis wherever feasible
It is unfortunate that during the land acquisition programme for SIPCOT Irungattukottai, the Government, which has to protect its citizens from unemployment, had instead served as a catalyst for unemployment of the small and marginal farmers and landless agricultural labourers. SIPCOT should have negotiated with the industries and worked out suitable employment avenues for the local people but it did not.

4.6.3 Occupational changes due to industrialization

To a question, “Is there any change in yours and your family members’ occupation, due to land acquisition and industrialization programme?”, the landless agricultural labourers and the general public did not find much difference while the respondents from whom land was acquired said with pain that they lost their only source of livelihood due to the land acquisition.

Nearly 71% of the 95 respondents from whom the land was acquired said that after their land was acquired they were forced to work as agricultural labourers in the neighbouring villages, as they do not know any other occupation. Around 16% of the respondents had diversified their occupation by setting up shops while the remaining 13% has purchased land elsewhere and were cultivating them.

All the 48 respondents from the category of agricultural labourers had adapted themselves to take up any sort of work in the construction sites. They also said that as they do not get regular income, they are forced to
send their spouses and grown-up children for labour work, even though they had to travel 4 to 6 kms. per day on an average. These respondents further added that earlier they used to get employment in their villages for at least 6 months and had to go out in search of jobs only in the remaining months. The Figure No. 20 depicts the villagers travelling from Katrambakkam village to other places in search of daily work on 20th September 2003 as early as 7 in the morning.

As a number of shops had come up on both the sides of the National Highway No.4, near the SIPCOT Irungattukottai Industrial Park, children of these villages got jobs for low wages. Thus, the child labour force from the agricultural sector was being shifted to the organized sector. It was learnt that approximately 20 children of the three villages, work in these shops as helpers for maximum wages of Rs.15 to Rs.20 per day.

**Figure No.20:**

**Villagers from Katrambakkam going to work on 20.9.2003**
Out of the 49 respondents who were from the category of the general public, 72% said that neither their occupation nor income was different due to the land acquisition programme. However, 28% of the respondents expressed that new openings were available now to run shops, restaurants and tea stalls near bus stands, as the floating population had increased in the area.

During the discussions it was learnt that some of the people have explored new avenues to earn an income due to industrialization. They have partitioned the houses or extended their houses or constructed houses with the minimum facilities and rented them out to the youth, who were working in the factories. Some of them also run a mess for the youth.

Even the households that have ventured into the above income-generating activities do not know how long they could get a regular income, as the employees move away to towns for better accommodation or leave the job. Hence, this income has not been considered as an increase in their annual family income due to industrialization.

The percentage of the respondents who said that their income had increased due to industrialization is only 4.6%, and that too from the category of general public.
4.6.4 Less employment opportunities in the industries

Nearly 80% of the respondents further expressed that as they or their children do not have any technical education, they were not able to work in the factories. Even the jobs such as cleaning and maintenance of the area were not given to them, as the companies’ management feel that it was better to bring the staff from elsewhere for cheap labour, long hours of work and could terminate them at any point of time. This is further confirmed by Acharya (2002) in a study on ‘Land acquisition, Loss of employment and Women’s participation in income generation: A case study of the coastal belt of South Gujarat’, which states that in Hazira, South Gujarat, although one male adult from each family from whom land was acquired was inducted in the companies, only a few were made permanent in the organization. Some of the villagers were hired as daily labourers but preference was given to outsiders, as they are more hard working according to some executives in the industry.

Aragon et al (1989) said that in a study conducted by the Institute of Agrarian and Rurban Development Studies, among the farmers in Philippines, from whom the land was acquired, it is learnt that although the industries have provided training and skill development for possible employment and livelihood, it was ineffective, as the farmers are usually averse to taking risks. It would take not only skill but also courage to venture into new enterprises as an alternate means of livelihood. Hence, the study said that alternative methods of ensuring the well-being of the farmers, like giving an option of farm relocation, need to be looked into.
4.6.5 Employment opportunities in the industries

As per the information collected from the SIPCOT Irungattukottai office, as on 17th June 2003, 19 companies were functioning at SIPCOT Irungattukottai park and these companies had employed altogether 4,774 people. Of them, 4709 (98.64%) were men and the remaining 65 (1.36%) were women. This information was collected. The data show that the companies employ mostly men as the work force.

It was surprising to note that of the 19 companies, 9 of them do not have any women employees. Of the 19 companies, Hyundai Motors India Limited alone had employed 2677 persons which was about 56% of the total number of persons employed in all the 19 companies. JBM Sungwoo Limited had employed 503 persons, while Lumax Samlip India Limited had employed 234 persons.

Five other companies had employed altogether 837 persons and the remaining 11 companies had employed 523 persons. Of the 11 companies that had employed 523 persons, one company had employed only 5 persons while another company had employed 9 persons, yet another two companies had employed 10 and 11 employees each respectively. This is depicted in Figure No.21.
Figure No. 21: Number of male and female employees in the Industries at SIPCOT Industrial Park at Irungattukottai
as on 17.6.2003

[Diagram showing the percentage of male and female employees across various companies.]
In Tamil Nadu State, the new industrial units (small, medium and large) in which more than 30% of the total workers employed were women, shall be eligible for an additional capital subsidy of 5% of the investment in fixed assets subject to a ceiling of Rupees five lakhs (SIPCOT 2000). In spite of such subsidies, the companies/industries prefer to have more men in their workforce.

Till 1986, industries and mines came under the T.N. Singh Formula that bound the displacing industry or mine to give one job to every displaced family. Jobs were normally given to men, as they were considered heads of the households, ignoring the role of women in the family and community. Even this possibility of getting a job disappeared with the public sector enterprises abandoning the T. N. Singh Formula in 1986 because of mechanisation and the consequent reduction in unskilled jobs (Fernandes and Asif 1997).

Of the 195 respondents, 3.6% respondents confirmed that their family members were working in the industries. Of them, 71.4% were men and the remaining 28.6% were women. Except one woman, who was employed as an engineer, the remaining were employed only as short-term contract labourers for plumbing, electrical, housekeeping and gardening works. In spite of the best efforts, it was not possible to find out the exact number of people from these three villages who were employed in the industries. The respondents stated that a maximum of 30 local people could have got employment, and that too only short-term contract employment.
It is interesting to note that the Hyundai Motors Project was planned with an expectation that around 3,000 persons would get direct employment and around 30,000 would get indirect employment (Special Correspondent 1996). “Why not at least 5% of the local people are employed either directly or indirectly?” is a question posed by the respondents.

4.6.6 Women and employment

Tripathi (1997) in the article, ‘Women hold the key to improving food security’ says that 80% of all economically active women in India are employed in the agriculture sector with them constituting nearly half of the agriculture labour force of over 200 million. The United Nations Population Fund confirms that both in Asia and Africa, women work on an average 13 hours more per week than men. This means women work more for 52 hours in a month and 624 hours in a year. On an average, if one estimates a maximum of 40 years as productive years for a woman, then in her lifetime she works 24,960 hours more, which means a woman works in her lifetime 1,040 days or 2.84 years continuously more in comparison to her husband or brother. In spite of such an extensive and intensive labour, two-thirds of the world’s poor are women. Though the workload of women of the three villages had increased - collecting firewood, going to a far-off place in search of jobs, and in addition attending to all the regular housework - they were still not considered as the primary breadwinners of their households. 89.23% of the respondents (151 men and 23 women) said that though the woman earned on an average Rs.500 to Rs.700 per month, her primary role was to take care of the children and the family. The
remaining 10.77% respondents (16 men and 5 women) said that as the women too earned almost an equal amount, in addition to taking care of their households, children and domestic cattle, the position of women must be equal to the men.

However in contrast to the experience of farmers in Philippines, Acharya (2002) in the study, ‘Land acquisition, loss of employment and women’s participation in income generation: a case study of coastal belt of south Gujarat, confirmed that training for women could help them to earn better. The author further says that the women would also need some stipend as they have an earning opportunity lost for time. If they spend the time for training, their time was lost for earning. As the industries have failed to generate employment to the local people, they should initiate training for women, youth and men on income generating activities, offer credit facilities, build linkages among the entrepreneurs and assure marketing facilities. This would not only help the women but also the local communities to regain the lost hope and it was also one of the long-standing demands of the local people.

Shiva (1998) in the article, ‘Staying Alive. Women, Ecology and Development in India’ reports that as a collective document by women activists, organisers and researchers stated at the end of the United Nations Decade for women, The almost uniform conclusion of the Decade’s research is that with a few exceptions, women’s relative access to economic resources, income and employment has worsened, their burden of work has increased, and their relative and even absolute health, nutritional and
educational status have declined. This observation of the United Nations is absolutely true with regard to the status of women in these three villages, as their economic status had reduced considerably and their workload has increased.

4.6.7 Employment opportunities in the commercial establishments

Out of 68 shops/establishments in the area, only 30.9% were run by households of the three villages from where the land was acquired. Among those 30.9% respondents, only 8.8% were the households from whom the land was acquired for industrialization, while 1.5% belonged to the agricultural labour category and the remaining 20.6% households were from the category of the general public. This is an indicator that the land acquisition programme did not benefit the local community much.

Of the remaining 69.1% shops, 27.9% were owned by people from other villages of Kancheepuram district, 20.6% were owned by people from other districts of Tamil Nadu, 19.1% were owned by people from other States of India and the remaining 1.5% was owned by Koreans. The details of the shops/establishments and the ownership pattern are given below in Table No. 13. The 14 shops/establishments categorized as others include beef stalls, chicken stalls, sweet stalls, vegetable shops, fancy stores, clinic/hospital, firewood depot, real estate agents and engine oil shop. In addition to the local households that own the 21 shops, 33 people from the local villages from where the land was acquired were employed as daily
workers in the 68 shops. Of the 33 people, 20 were children in the age group of 10 and above.

Table No.13:
Mature of Shops around SIPCOT industrial Park at Srungattukottai as on September 2002

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Type of shops</th>
<th>Type of Employment</th>
<th>Class of Villages of SIPCOT industrial Park</th>
<th>Class of Villages of other District</th>
<th>Other states of India</th>
<th>Foreign</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Petty shops</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>63</td>
<td>4.41</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Tiffin/Tea Stalls</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>18</td>
<td>26.47</td>
</tr>
<tr>
<td>3.</td>
<td>Restaurants</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>69</td>
<td>13.24</td>
</tr>
<tr>
<td>4.</td>
<td>STD booths</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>10</td>
<td>14.71</td>
</tr>
<tr>
<td>5.</td>
<td>Groceries</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>63</td>
<td>04.41</td>
</tr>
<tr>
<td>6.</td>
<td>Couriers</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>63</td>
<td>4.41</td>
</tr>
<tr>
<td>7.</td>
<td>Wines</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>62</td>
<td>2.94</td>
</tr>
<tr>
<td>8.</td>
<td>Automobiles</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>64</td>
<td>5.80</td>
</tr>
<tr>
<td>9.</td>
<td>Hardware</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>62</td>
<td>2.94</td>
</tr>
<tr>
<td>10.</td>
<td>Others</td>
<td>-</td>
<td>4</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>14</td>
<td>20.59</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>14</td>
<td>19</td>
<td>13</td>
<td>1</td>
<td>68</td>
<td>100.00</td>
</tr>
<tr>
<td>Percentage</td>
<td></td>
<td>8.8</td>
<td>1.5</td>
<td>26.6</td>
<td>27.9</td>
<td>20.8</td>
<td>19.1</td>
<td>1.5</td>
</tr>
</tbody>
</table>

4.6.8 Migration in search of employment

The respondents were of the view that the land acquisition and the industrialization programme did not force the households to migrate to other places. Of the 195 respondents, 94.4% said that neither they nor their family members had to migrate, while only 5.6% of them had confirmed that their
family members and the members of the households known to them had migrated. Of those 11 respondents who confirmed the migration, 64% belonged to the households from whom the land was acquired and 18% each were from the other two categories. The 5.6% of the respondents who had confirmed the migration said that the male members had gone to the nearby towns/cities for construction work and returned to the villages, once in three to four months, for a week’s stay and then go back either to the same place to continue the construction work or go to other places, where the construction work was going on. Of those 11 respondents, 64% of them have agreed that there was an increase of nearly 10% to 15% in their income.

The respondents who had mentioned that there were no migrations from their villages due to industrialization, further stated that some villagers worked as casual labourers in the nearby towns or cities but returned to the villages in the evenings, as it was not possible for them to live in the towns due to higher house rent and also due to improved transportation facilities. In general, one could observe that the land acquisition and the industrialization programme at Irungattukottai did not disintegrate the households through the migration factor. It was but natural that the industries bring in new families to the surroundings where they are located. This fact was reconfirmed in the villages from where the land was acquired for the industrialization. Of the 195 households, 73.33% had confirmed that there were new families/individuals in their villages, which was the direct result of the industrialization. These households/individuals not only came from
different parts of Tamil Nadu State, but also from other States of India and
other countries like Korea. The remaining 26.67% of the respondents were
not aware of any new households or individuals living in these villages. The
individuals who worked in the companies rented a room individually or
collectively and stayed together in the villages only for a short period till they
got better accommodation in the nearby towns or left the jobs once the
contract period was over. Hence in general, the new households/individuals
did not stay in these villages for more than a year or so and they did not
identify themselves as the local people to include them to collect the data
from the part of general public.

It was observed that most of the employees of the industries of
SIPCOT Irungattukottai project travelled by chartered buses from different
parts of Chennai and got back once the day or work was over. This was yet
an additional advantage for the companies and industries. They need not
plan for housing colonies and other welfare measures for their employees.
Close to the city, and that too on the main road, was one of the chief
reasons, this particular geographical area was identified for the
industrialization. Moreover, the public transport system carries a good
number of employees not only from Chennai, but also from towns like
Kancheepuram, Vellore and Tiruvallur, the adjacent districts' headquarters,
which are at an approximate distance of 45 kms., 90 kms., and 40 kms.,
respectively from the SIPCOT Irungattukottai office.
4.6.9 Livestock - a secondary source of income

In the villages, livestock is treated as an important secondary source of income. A family that has a pair of oxen could save Rs.700 or so per month by using them to plough their lands or they could earn an income by hiring the oxen to other farmers. In general, the households in the villages usually have at least one cow, in addition to the oxen, which provide them with milk. The dung of the cattle is used as fuel and also as organic manure. Thus cattle play an important role in increasing the income of the households and cattle is also treated as a status symbol in the villages.

Prior to the land acquisition programme, 37.95% of the 195 respondents had cattle and the remaining 62.05% of the respondents did not. For the study purpose, mainly oxen and cows were taken into consideration, as cattle. Of the 37.95% of the respondents, who had cattle prior to the land acquisition programme, 67.57% of the respondents were from the category 1 - households from whom the land was acquired, 21.62% were from the category 2 - landless agricultural labourers’ households and the remaining 10.81% were from the category 3 - general public. All the households stated that prior to the land acquisition programme, these cattle were fed through stall feeding, grazing in Government *poramboke* land and private lands.

When the study was conducted, i.e., after the industrialization of the 195 households, only 22.0% respondents had cattle and this reduction of cattle was mainly because the oxen were only an additional burden to the
farmers, who now do not have land for cultivation. Of the households who had cattle after the industrialization, 51.2% were the households from whom the land was acquired, 34.8% households were from the category of agricultural labourers and the remaining 14.0% were from the category of general public. Due to severe scarcity for fodder and water during the summer season and the increased usage of tractors and other sophisticated machines for cultivation, the reduction of cultivable land and increased transport facilities, maintaining the oxen had become very difficult.

4.6.10 Increased expenditure for cooking

Firewood is the most common source of cooking energy in these villages. It was affirmed by 71.79% of the respondents that firewood was used for cooking. Prior to industrialization, the firewood was collected either from the nearby lands or from the nearby Reserve Forest but now, they buy the firewood. Using dried cow dung cakes as fuel was losing ground even in these villages, primarily due to lack of sufficient cattle and only 0.51% of the respondents were using the cow dung cakes, as the source of fuel for cooking. While 25.13% of the respondents used Liquid Petroleum Gas (LPG) for cooking, kerosene was used by only 1.54% of the respondents. On an average, each family that used one Liquid Petroleum Gas cylinder per month that costs around Rs.250/- would have incurred an additional expense of Rs.3,000/- per year. Only 1.03% respondents did not cook due to old age and depended on their relatives for food. Industrialization had not only reduced the land under cultivation and the cattle population but had also indirectly influenced the life style of the
people which had resulted in higher expenditure to meet the basic requirements of the villagers.

4.6.11 Impact of land acquisition on the livelihood of the villagers

"We not only lost our lands, and our livelihood but also the hope of getting employment in the factories that were established on our lands. Those industries have shattered our lives and our future generation", was the response of 60% of the respondents to the question, ‘Your personal views about the industries in the rural area’. Of the remaining respondents, 22.05% of them said that there was not much difference in their family income after the industrialization, as they used to go for labour work even earlier but after industrialization, they are forced to go to a far-off place in search of different labour-intensive works in the construction industry etc., as agricultural labour work was not available locally. It was surprising to note that 17.95% of the respondents felt that due to frequent droughts, reduction of subsidy for fertilizers and poor quality of seeds, they have almost lost interest in cultivation, as they got very little income from it. They also felt that cultivation has become a luxury for the small and marginal farmers and at one point of time, the poor had to sell the land as they cannot cultivate. Hence, the people should have alternative employment in the villages. In a country like India, where 70% of the people are rural-based and are primarily dependant on agriculture, can industrialization provide alternate employment to the illiterate, small and marginal farmers and landless agricultural labourers?"
World Food Programme (2001) reports that Amartya Sen strongly feels that when the natural resources, land and water are taken away and the financial capacity to buy food is further reduced due to lack of regular income, the households that had land and were depending on their daily wages are either added to the Below-Poverty-Line category or if they are already in the Below-Poverty-Line category, are forced to its bottom. Sooner or later, the people of these three villages will be forced into the Below-Poverty-Line category, if steps are not taken to rejuvenate agriculture or to provide alternative employment to the people.

4.6.12 Displacement due to Industrialization

For involuntarily displaced households, displacement is next to death while for the politicians, bureaucrats and beneficiaries of the project, it is a necessary sacrifice for national development. In fact, the truth lies somewhere in between the conflicting views. While it is true that several projects that displaced many households have led to an increase in the Gross Domestic Product and employment, it is equally true that the displaced persons were neglected and thrown as sacrificial lambs to the God of development says the Campaign for People's Control over Natural Resources (2000) in the book, The Land Acquisition, Rehabilitation and Resettlement Bill, 2000'.

In the displacement projects like dam construction, the entire population along with its cattle is shifted to other places, a totally new location, where the infrastructure facilities are provided by the Government
or its representatives. The changes that take place in the land that was acquired are not witnessed by the people, as they have been forced to leave the place, whereas the industrial displacements do not disperse the native population to wider areas, and hence, they could observe the changes. They live, in general, around the industrial area and have an opportunity for constant interaction with the ongoing development process.

In industrial displacement, agricultural land is added regularly to the industrial belt, as one industry creates scope for other industries to grow. Industrial displacement will bring in a massive influx of outsiders, bring unplanned growth of human settlements in the form of slums, putting pressure on the existing natural resources and civic amenities. As Dhagamwar, De and Verma (2002) point out the industrial displacement does not disperse the native population to wider areas. Rather, it scatters them in and around the industrial area. This gives them an opportunity for constant interaction with the ongoing development process. The displaced people of industrialization see the people working in the industries doing well and such a feeling creates frustration among the displaced communities, resulting in social deviations.

While analysing the data, it was observed that the industries established at Irungattukottai had not increased the source of income of 1) the people whose land was acquired, 2) landless agricultural labourers and also 3) the general public. Although the infrastructure facilities had improved in the area, it was strange to observe that there was no remarkable
change in the standard of living of the people, except the influence of the urban culture on some of the households.

4.7 Alternative measures to reduce the adverse impact of the land acquisition programme on the people.

After a critical analysis on the impact of the land acquisition programme on the people and the environment, it is imperative to look for alternative measures to reduce the adverse impact of industrialization on the people and environment. A few proposed alternatives are stated below:

4.7.1 Should agricultural land be acquired?

The respondents whose land was acquired were of the firm opinion that under no circumstances any agricultural land, whether wet or dry, be acquired from the medium, small and marginal farmers. Without any exception, all the respondents from whom the land was acquired felt that even during natural calamities such as floods, cyclones or earthquakes, agricultural land must not be acquired for housing or for any other developmental activities as the households from whom the agricultural land was to be acquired would become refugees similar to those who were affected by natural calamities.

For another question, ‘What type of land could be acquired to rehabilitate the victims of natural calamities?’ 47% of the respondents stated that the wastelands of different villages could be used to rehabilitate the victims of natural calamities.
In the publication ‘Wastelands Atlas of India 2000’, of the Department of Land Resources, Ministry of Rural Development, Government of India, New Delhi, in collaboration with the National Remote Sensing Agency, it is mentioned that of the 31,66,414.00 sq. kms. of land in India, (except 1,20,849 sq. kms. of Jammu and Kashmir) 6,38,518.31 sq. kms., which is 20.17%, are total wastelands. In Tamil Nadu out of 1,30,058 sq kms., 23,013.90 sq. kms. that is 17.70% are wastelands. Of the 4,433 sq. kms. of land in Kancheepuram district, 952.82 sq. kms. are wastelands, which is 21.49% of the total land of the district. This percentage is 3.79% more than the State percentage for wasteland.

Of the total wastelands of Kancheepuram district, 279.24 sq. kms. are land with/without scrubs, 326.64 sq. kms. are saline/alkaline area and 185.54 sq. kms. are degraded notified forest land (Wastelands Atlas of India 2000). Of the above said three types of wastelands, the land with/without scrubs could be used for the resettlement of displaced people or to provide welfare measures or industrialization. The degraded lands could be given on 25 or 50 years lease to the companies and industries for industrialization. By doing so, the small and marginal farmers, the landless agricultural households could be saved from the problems of land acquisition programmes. The Government and Socal panchayats could also get revenue by leasing the land periodically. Thus, the wastelands, which are in fact the wasted lands, could be used effectively for national development.
4.7.2 How to minimise the volume of land to be acquired by the Government?

The statement of the respondents on how to minimise the volume of land to be acquired explains their deep understanding on this issue. The respondents have taken the land acquisition for SIPCOT Industrial Park at Irungattukottai as an example and have explained the following. Instead of acquiring nearly 740 hectares of land for various companies, from the same area, which led to displacement of the households and the villages, if wastelands of various neighbouring villages were selected and the industries were established at different places, the agriculture population of the three villages would not have lost large tracts of cultivable land and faced unemployment and livelihood problems in a place where their forefathers too, were born and brought up.

Eighty five percent of the respondents further questioned the Government on why it selected a particular place to establish the industries, which results in converting the agricultural land into a non-agricultural area and in effect forcing the population depending on agriculture to become like refugees in their own villages. Spreading the industries and companies to different places would dilute and minimise some of the social, economical and cultural problems, which were the outcome of the industrialization. No doubt, acquiring the land in a particular place, as per the choice of the companies and developing it, was easier than developing the wastelands at different places, but by distributing the industries to different points, the
adverse impact of the industrialization on the rural community could have been minimised.

Bali (2000) argues that a sort of land budgeting is required which would restrict land use shifts and safeguard the food and water sanctuaries of the nation. A maximum number of trees should be grown in such lands for environmental safety. He further states that a system of apartment dwellings and multi-storeyed factories could save land.

In this context, it may not be out of place to reflect on the possibility of ‘vertical’ expansion of the industrial buildings. Like the flat system, which has become necessary to answer the housing needs of the urban communities, in huge multi-storeyed buildings, even by using the space below the ground level, a number of companies and their auxiliary units could be accommodated, which will lead to acquisition or utilization of less land for companies and industries.

Kanda (2000) reports that the per capita availability of land in India has been declining from 1.37 hectares in 1901 to 0.89 hectares in 1951. Similarly the per capita availability of land of 0.50 hectares in 1981 further declined to 0.33 hectares in 2000. Moreover all the land cannot be made available for agricultural purposes while development activities must also centre around the places of economic growth and stability. From 2000 AD, with a population of one billion, hardly 0.15 hectares of cultivable land is available per head. In this situation, it is essential to think of ‘vertical’ expansion of industrial buildings.
Subramanian (2001) in the book, “Introspection for India: A paradigm for progress” states that growth centres should be developed for a group of 20 to 30 villages within a radius of 15 to 20 kilometres. These growth centres should be utilized to develop technical skills and employment opportunities, channelise credit and develop an agro-industrial base. His observation is all the more relevant when a country like India has to support 16.7% of the world’s population on 2.2% of the world’s land resources (Bali 2000).

4.7.3 Should the Government acquire Sand for industries?

Eighty seven percent of the 195 respondents felt that the Government or its institutions should not assist the industries in buying land. As the industrialists are rich, they could approach the people and fix the price through direct negotiations. As the Government was involved in buying and developing the land with a view to establish the industries by the private people, there was a strong negative feeling among the respondents that the Government did not bother about the rural poor. They further stated that an independent and more certainly, an impartial agency should have been set up to monitor applications for setting up of industries. The respondents further argued that no one had ever established any industry with an objective primarily to provide employment to the people. As profit was the primary objective of an industry, providing too many concessions and facilities to the industries by the Government at the cost of the local people’s future was perceived by the people not just as a pro-industrial attitude but more an anti-poor attitude of the Government. All the respondents were of
the unanimous opinion that at no point ‘Urgency Clause’ could be invoked for acquiring land for industries.

This could be better understood in the light of Gandhiji’s perception on industrialization. Chappie and Tucker (2001) quote Gandhiji, “What I object to is the craze for machinery, not machinery as such. The craze is for labour-saving machinery...I want to save time and labour not for a fraction of mankind but for all. I want the concentration of wealth, not in the hands of the few, but in the hands of all. Today machinery merely helps the few to ride on the backs of millions.” As pointed out in the ‘Food Insecurity Atlas of Rural India’ published by the M. S. Swaminathan Research Foundation (2001) modern industry is not labour-absorbing but usually enhances its efficiency by down sizing of staff to improve output per person. Several other studies have proved that industrialization has benefited only a few at the cost of the rural poor, as pointed out by Mahatma Gandhi.

4.7.4 Proposed role of NGOs during the land acquisition process

India today is witnessing a series of struggles throughout the country organized by the victims of globalisation to protect and preserve their jal, jangal, jameen - water, forest, earth/land. In many places people have achieved success in retrieving their stolen rights and ousting the multi-national companies (Widyatamadja and Longchar 2002). However, the people of the three villages from where the land was acquired for SIPCOT Irungattukottai have another opinion about their struggles.
Usually when land is acquired, not only the agricultural land, but also the habitation of the people is acquired. In such cases, the public outcry leads to collective social action and the Government feels the need to review or invite the people to take higher compensation or for other negotiations. Unlike the above, only the private dry land meant for cultivation and the Government poramboke land was acquired for SIPCOT Irungattukottai, which could be one of the reasons, why the support from other like-minded individuals and institutions was hardly evident.

Of the 195 respondents, 74% of them confirmed that there were two non-governmental organizations that were working for the last few years in the three villages. These NGOs were basically involved in organizing the women to form self-help groups, credit and savings programmes, health care programmes and guide the people for mobilising Government resources to enhance their economic standards. The respondents had confirmed that though these organizations were working in their villages, when the land acquisition programme was in full swing, these organizations did nothing to support or organize the people to protest or express their dissatisfaction about the land acquisition process.

One of the respondents expressed his anguish saying that freedom fighters of India, Jaganathan and his wife Krishnammal, of Land for Tillers (LAFTI), who were more than 80 years old, had struggled continuously for nearly forty years and mobilised 10,000 acres of agricultural land for the poor peasants in Nagapattinam, Tiruvarur and Thanjavur districts with the support of the people’s movements. On the contrary, Government through
its force easily acquired the agricultural lands from small and marginal farmers to benefit the rich industrialists. In this context, he pointed out to Dr. Baba Saheb Ambedkar’s quote, “Whatever I have done, I have been able to do after passing through crushing miseries and endless troubles all my life fighting with my opponents. With great difficulty, I have brought this caravan where it is seen today. Let the caravan march on and further on despite the hurdles, pitfalls and difficulties that may come in its way. If my people, my lieutenants are not able to take the caravan ahead, they should leave it where it is seen today, but in no circumstances should they allow the caravan to go back”. He added, “It is alright if our politicians, bureaucrats and NGOs do not continue the good works of Jaganathan and Krishnammal, but let them not undo them” - well-substantiated reflection.

As the impressions of the respondents about the NGOs were unexpected, the responsible persons of the two NGOs were contacted to find out why those organizations could not support the people of the three villages, when they were probably in the worst situation of their lives. Both the organizations had a similar reason to state. They said that their organizations were quite aware of the land acquisition process that was going on and the sufferings of the people. As the Government would never withdraw its decision of acquiring the land, even if the people demonstrate or protest, those organizations felt that there was no point in giving false hopes to the people by organizing them.

On the contrary, when SIPCOT obtained 1,423.4 hectares of land in 1997 to set up an industrial park near Coimbatore, Tamil Nadu, the villagers
resisted and indulged in agitation, road *roko* (road blocking) etc., against the land acquisition. The SIPCOT had approached the Government once again requesting for withdrawal of orders for land acquisition and disbandment of the land acquisition staff, though it had already spent Rs.27.08 lakh as establishment charges on land acquisition staff and officers (http://cag.nic.in/reports/tn/rep200/comm._ch4.pdf). Similarly the people and the like-minded individuals and institutions should have made sincere attempts to prevent the land acquisition at Irungattukottai.

Yet another example is the Samata judgment, which was given in 1997 by the Supreme Court in honour of an NGO, which filed a case against the government and one of India’s leading business houses - the Birla group. The dynamic non-governmental tribal rights organization - Samata took up the case of the tribal villagers of Nimalapadu, Vishakapatnam District, Andhra Pradesh in the Supreme Court on behalf of the villagers as the tribal lands were given on lease for mining to private companies and individuals. As per the judgment, the court ruled that the government had no right to grant lease - even on government-owned forest land - to private companies on areas governed by the Fifth Schedule of the Constitution and only cooperative societies solely run by the Scheduled Tribes could mine in such areas, subject to compliance with the Forest Conservation Act and the Forest Protection Act (Krishnakumar 2004).

Another incident took place at the Chennai Collectorate on 27th October 2004. A City Civil Court had ordered the attachment of the movable properties of the Chennai Collectorate for its failure to settle the amounts due...
to two individuals in a land acquisition case. The case dates back to 1972 when the State Government had acquired about three grounds (7,200 sq. ft.) of land from one Rajeshwari and Thambiah Reddy of West Mambatam for public purpose (extending the Railway Station road). As the compensation paid to them was very low, the erstwhile land owners moved the City Civil Court seeking more money and in 1997, the court awarded a compensation of Rs.15 lakhs to the duo. The government paid the compensation amount in instalments regularly till 2001. Thereafter it defaulted in disbursing the instalment resulting in an arrear of Rs.2.70 lakhs to Rajeshwari and Rs.1.85 lakhs to Thambiah Reddy. Hence, the two once again moved the City Civil Court, which in turn ordered the attachment of the movable properties of the Collectorate, two months ago. But the attachment was not carried out as the Government officials promised to settle the dues within a month’s time. But as nothing happened despite the lapse of more than a month, the duo once again moved the Courts and a fresh order for attachment was issued and executed (Sekaran 2004).

While the NGOs, like-minded individuals and institutions generally lobby against the Land Acquisition Act and land acquisition programmes, those two NGOs did not involve themselves in any proactive role in guiding the people or supporting the families by building the lost confidence through individual or collective income generation programmes or started any non-formal and vocational programmes or built up the pressure on the Government machinery to release the compensation amount at the earliest. These NGOs by their pessimistic attitude and in safeguarding their interests
had lost an opportunity to serve the local community, that too, when the people were at a loss. What should be the primary purpose of running an NGO is a subject worth reflecting.

4.7.5 Ultimate beneficiaries of the land acquisition programme

It was interesting to observe that 47.70% of the 195 respondents were of the view that the ultimate beneficiary of the land acquisition programme was the Government of Tamil Nadu, as it had gained a huge profit, in selling the land acquired forth© industrialists.

23.60% of the respondents ranked the multinational companies and the industrialists, who have established the companies in the area, as the second beneficiaries, while the people employed in the industries were placed in the third position by 11.80% of respondents. The Figure No.22 is self-explanatory and is about the main beneficiaries of the land acquisition programme, as envisaged by the respondents. The people who had established shops adjacent to the National Highway No.4, which was close to the SIPCOT Irungattukottai park, were ranked in the fourth position by 9.20% of the respondents.

It was disheartening and certainly not edifying to learn that nearly 7.70% of the respondents placed the local politicians who were mediators between the people and the Government officials in acquiring the land in the fifth position. No respondent had said that neither the general public nor the households from whom the land was acquired were beneficiaries of the land acquisition programme.
In the article ‘When the state turns a shark’ published in The Week’, Bhanutej (2004) argues that in Madavara village of North Bangalore taluk in Karnataka State, the Karnataka Industrial Areas Development Board (KIADB) had acquired 223.57 acres belonging to 140 farmers. The KIADB, which acquired the villagers’ lands had passed it on to the Nandi Infrastructure Corridor Enterprises Limited (NICEL), a private consortium, which had been executing the infrastructure corridor project. That NICEL was engaged in real estate business was beyond doubt. Its director Shivakumar Kheny, in a letter dated (ref:NICE/06/03) June 19, 2002 offered
land to LIC HFL Care Homes at the Mysore Road interchange at a ‘most
competitive price of Rs.27.50 lakh per acre’. This land was acquired from
farmers at Rs.7 lakhs an acre. It was another matter that LIC HFL Care
Homes did not accept the offer. This article reaffirms that the Government
institutions are the primary beneficiaries of the land acquisition programme.

4.7.6 Employment to be earmarked in the industries

To promote small, medium and large-scale industries in the most
backward areas and in special areas, a capital subsidy of 20% on the fixed
assets subject to a ceiling of Rs.20 lakhs is given by the Tamil Nadu
Government. Similarly a capital subsidy of 15% on fixed assets subject to a
ceiling of Rs.15 lakhs is available to the industries that are set up in the
backward blocks and in the special areas identified (SIPCOT 2000). Such
concessions are offered to develop the most backward and backward areas
of Tamil Nadu. But what does development mean in those areas? Is it
employment for the urban and educated in the rural areas or promotion of
employment to the rural poor in the most backward areas?

Should there not be a new clause to promote employment in the
industries to the people of the villages from where the land was acquired for
industries? A minimum of 10% of the entire work force of different categories
must be from the same villages and another 15% must be fixed for the
employment of the rural educated work force from the same district. That
was the opinion of 89.23% of the respondents. They have also confirmed
that 50% of the aforesaid employment must be earmarked for local women.
As a special support, the developed lands allotted to the prospective entrepreneurs in any industrial parks/growth centres/complexes developed by SIPCOT and located in Government-declared backward areas were fully exempted from the payment of stamp duty. However, registration fee at 1% of the land cost should be met by the promoter. The Government had also announced a number of subsidies in order to attract large scale foreign investments (Anonymous2 1996). The then Chief Minister of Tamil Nadu made a formal announcement in the State Legislative Assembly that the Korean car company, Hyundai would get a sales tax waiver/deferral for 14 years (as it was a super mega project with an investment of more than Rupees one thousand and five hundred crores), in addition to capital subsidy and power tariff concessions (Anonymous3 1996). When special concessions and a number of facilities were offered to the industries, was it not expected of the industries to motivate, train and equip the local people to get employment in their own villages? This was the strong feeling of 79% of the respondents.

4.7.7 Future vision of the villagers

To a question, ‘Could you imagine how your village will be in another 15 to 20 years?’, the respondents were sharp in their answers. Of the 195 respondents, 65.13% of them said “our families would have moved either to the towns or to the nearby villages, as there won’t be any source of employment in our villages”. They also said that the dwellings of the poor, those that were seen today would have been demolished and new housing colonies would have come up, accommodating the urban people. They felt
that even the name of their villages would have been changed. Of the remaining, 18.97% of them said that their living places would be looking more like slums with dense population and with minimum basic amenities, due to increased pressure for accommodation near the industries.

The remaining 15.9% of them stated that the Government would improve employment opportunities for the villagers and prevent overcrowding in these villages, so that with improved infrastructure facilities, they would live better. Only 15.9% of the people nurse any hope of a better future, and that too at the mercy of the Government. They also further expressed that as their children would have been educated by then, they would be getting jobs in the local companies. From the above mentioned observations, one could observe that a vast majority of the respondents felt that they could be aliens in 15 to 20 years in their own villages. The vision of the respondents for a brighter future will fructify only if the Government, with the assistance of the NGOs, takes every step to build up the people’s faith by increasing income generating avenues and other holistic development initiatives.

4.7.8 Proposed compensation from the industries

Of the 195 respondents, 49.74% of them stated that on humanitarian grounds, the industries could pay compensation annually to all the villagers. While 20.51% respondents felt that on displacement grounds the annual compensation must be paid, yet 17.44% respondents felt that as the companies were disturbing their village atmosphere by polluting the
environment, compensation must be paid for the damages they cause in the
villages. Of the remaining, 12.31% respondents did not state their opinion.
The details of the opinion of the respondents on the grounds for compensation are shared in Figure No.23.

**Figure No.23**: Basis for compensating the loss to the villages

![Circle diagram with percentages]

All the respondents who had insisted on compensation proposed that a minimum of 20% of the profit of the companies must be earmarked for annual compensation to the villagers, of which, 50% should be paid in cash to the households from whom the land was acquired, 25% for the landless agricultural labourers and for other supporting communities and the remaining 25% must be used for development and welfare activities of the villages. There were suggestions that for the landless agricultural labourers, and for the households from whom the land was acquired, income
generation training must be organised and financial assistance must be provided by the industries on a long term basis, with low interest, so that the households could be rehabilitated.

While the respondents stated that their expectations were not just casual requests but genuine hard core demands, one wonders as to why the people had not taken up these issues until now with the industries directly. When asked for clarification on this point, most of the respondents stated that only the Government had taken the land and hence it should negotiate with the industries and provide the needed support, which seemed to be logical. Some of the respondents were aware of the revenue that came to the panchayats from the industries but they did not want to mix it with the compensation. Is it not possible for the Government to request at least the major industries to sponsor 10 to 20 households living below the poverty line every year from each of the three villages and provide financial, technical and educational assistance, so that these industries could also become a sort of change agents in the villages? What is needed is not welfare measures like medical camps or sports activities for children, but development initiatives. The industries must play a vital role in the integrated development of the individuals, households and the communities in their periphery, which is definitely lacking at present.

4.7.8 Demand for more industrial employment for rural women

The PRA exercise was carried out at Irungattukottai village to find out the opinion of the rural women about the industries and the employment opportunities in the area. As the first part of the PRA method,
the participants were asked to draw the village map keeping in mind the resources of the village. The participants drew the village map (Figure No.24) focusing on the interior roads, houses, water sources, the agriculture lands, the colleges and the companies that have come up in the villages. While drawing the maps (Figure No.25), the participants stated that ten years earlier there were no colleges or companies in their village. They further stated that at present, due to the growth of colleges, companies and the motor race course, the agriculture and Government wastelands were reduced and the village appeared primarily as an extension of the nearby town, Sriperumbudur.

Once the resources of the area were identified and drawn on the floor, the women sat together to explain about their employment opportunities (Figure No.26). The respondents felt that as industries had acquired the cultivable lands of the village, which were the source of employment for them, it was the primary responsibility of the local industries to provide employment opportunities in the industries. All of them have affirmed that so far, a maximum of 20 local villagers were employed in the industries as contract labourers, that too, only with the recommendation of the local village panchayat leader and influential people such as local politicians, on condition that these people would neither form unions or associations in the villages against the village president nor the companies. Hence, the local people employed in the companies have not raised their voices for any common issue, not even in the Gram Sabha (village body) meetings.
Figure No. 25:
Women mapping the resources of the village - Irungattukottai

Figure No. 26: Analysing the impact of industrialization through PRA
The economic condition of the poor did not allow them to raise their voice even to meet their basic needs such as food, clothes, shelter, primary education and primary health and were submissive to the influential local people, who were generally rich. The women also have stated that the President of the village did not want the social and economic status of the people to be improved, as even though there were several vacancies in the companies, he was selective in identifying people and preferred outsiders, who would be loyal to him.

The women preferred to work as sweepers, gardeners and cleaners on contract basis in the companies than working as agricultural labourers, because the contract labour guaranteed a fixed time of employment, easier jobs, fixed salaries and above all respect in the society.

To a question, as to why they were not able to search for new avenues and start some income generation programmes, they stated that their first priority was getting jobs in the companies, as income generation programmes would lead to complications in learning new skills, mobilizing loans, production and selling of the products, which was a time consuming process. Hence, for the landless agricultural women, income generation programmes were of second priority, though all of them were from Self-Help Groups (SHGs).

They have also stated that women from other villages came to their village to do agriculture labour work, though they were paid less wages.
Thus, because of the low wages, the local women refuse to work in their own villages as agricultural labourers. They also stated that as agriculture land was reduced in the area as a result of industrialization, at present only the rich people were able to get the land on lease for a higher price from the landowners and cultivate the land. This further curtails the access of the poor to the agricultural lands. As the poor have no source for regular income either from cultivation or from any employment opportunities they become poorer.

When asked why the women cannot form a group or an association and ask the local Government officials or the industries to provide employment, they straightaway refused saying that such behaviour will hurt the village President and the panchayat ward members, and as a result, the people who are working at present will be thrown out of employment. Hence no such attempt would ever be thought of. These views of the women affirm what Rao (1996) says in the book, ‘Dry wells and “Deserted” Women - Gender, Ecology and Agency in Rural India that for rural women in non-western societies such as India, dwindling ecological resources such as water, land, fuel, forests and fodder not only makes them work harder-walk more miles - get less nourishment, endure more hardships etc. - to acquire these resources, but also affects their life-views, their self-images, coping strategies, choices and consciousness and consequently their ability, potential and willingness to organise as a group and struggle for social change.
The role of the NGOs that were functioning in these villages is worth reflecting. They limit their services to form Self-Help Groups only and use the Self-Help Groups to provide health benefits and other welfare measures. As of now, the NGOs never reflected about the employment opportunities of these people. As these people were living where industries had come up and also were coming up, and as this village was very close to Chennai, the capital city of Tamil Nadu, several income generation programmes based on the local resources could have been planned and implemented to benefit the local people. These NGOs could have formed a federation of unemployed women of the locality, who could negotiate with the companies to produce and supply minor components needed by these industries.

The women felt that earlier they were buying food with the wages that they were getting for providing agriculture labour and now the only difference was that sometimes they go to far-away places as contract labourers for construction work or road laying work and do non-agriculture work and earn an income. They affirmed that industrialization had reduced the income avenues and the infrastructural facilities provided such as better roads, telephone facilities and number of shops have increased their financial burden, because their desires had increased.

The attitude of respecting the land was not felt by those landless agricultural women, probably because they had never owned any piece of land to understand the intrinsic value of land. The industrialization has made them understand the relevance of higher education and this was the
unanimous opinion of the women, though they stated that the source of
income was reduced due to lack of regular income and as a result of which
they had to prioritize their expenses to basic requirements like food,
clothes, shelter, and education.

During the discussions it was learnt from the women that their
primary need was decent employment in the companies. If such an
employment was not assured, they did not mind becoming members of an
organization which provides them employment. They were not prepared to
start any business on their own, for fear of risk.

They felt that they must be absorbed in the industries, as the
industries are located in their own villages, especially in the land where
they were employed earlier. However, neither individually nor collectively
they have taken any measures to pressurize the Government machinery for
employment. In a situation like this, they also felt that in another 5 to 10
years, even the few jobs that they get in the companies will be taken away
by the machines or outsiders and they will all be unemployed. It was painful
to note that people have not thought of themselves as resourceful, but
instead they depend on others for organizing them even for employment.

There was a fear in the people that if they did not get titles for the
house sites where they were staying, even their present settlement would
be taken away easily by the companies, showing that these lands were
Government land and they will not get any compensation for their houses.
The NGOs, like-minded individuals and institutions must play an important role in mobilizing local support to get the land titles for the house sites. The NGOs could form associations like labour contract societies where the local people could be enrolled along with their qualification, age and experience, and they could be employed by the companies, and if need be, the NGOs must provide the needed capacity building trainings to the individuals and groups. The NGOs must come forward to become the real change agents of the local people.

When the efforts of the people to search for alternative employment is limited and the local leadership indirectly does not permit the socio-economic development of the people, the NGOs that have concern for people must play a proactive role in making the local people realise the situation and take concerted efforts for individual and collective income generation programmes by making use of all local available resources including their own skills and expertise.

Based on the analysis of data, one could conclude that the respondents were disturbed by the manner in which they were treated by different officials and the local influential people when the land was acquired. The lack of transparency on the part of the Government officials and the indifferent attitude of the local NGOs have led the people to become refugees in their own villages. Several relief, rehabilitation and resettlement programmes must be introduced in consultation with the local stakeholders, to minimise the adverse impact of industrialization on the small and marginal farmers and landless agriculture labourers’ households.
4.8 Higher order impact of industrialization in the rural background

Any action in general has a series of reactions. Industrialization in the rural background had a chain of reactions which would have had diversified influence, both directly and indirectly on the stakeholders. The influences that the SIPCOT Industrial Park at Irungattukottai would have had on the stakeholders are grouped in the order of impact in Figure No.27.

4.8.1 First order impact

Loss of agriculture land, loss of primary occupation, changes in the infrastructure facilities and the general environment were the first order impact.

4.8.2 Second order impact

The first order impact led to the second order impact. The impact of the second order were reduced cultivation and less food production, unemployment, under employment, reduced avenues of secondary income of the people, especially the women, reduced grazing lands, reduced availability of fodder and firewood, increased transport and communication facilities, increased commercial establishments in the area and increased exploitation of natural resources.

4.8.3 Third order impact

Increase in price of food commodities, reduced family income, increase in expenditure due to the increased consumerist attitude,
reduction of cattle population, water scarcity and dust pollution were part of the third order impact.

4.8.4 Fourth order impact

All the above mentioned impacts would have finally led to food insecurity, poverty, malnutrition, health hazards and eventually migration, which would have resulted in disintegration of individuals, families and village communities.
Thus industrialization in the rural background results in the rural people becoming refugees and disintegrated in the places where they were born and brought up.

4.9 Futuristic perspective off land acquisition for industrialization

In this transitory world only one thing is permanent and that is change. In the modern world, due to various reasons, the process of change is expedited. Every event that takes place cannot be seen as isolated in nature and instead it should be seen as inter related. While analysing the changes that are taking place, one should consider the holistic perspective of the causes and consequences.

The land acquisition for industrialization in the rural areas has implications not just on the land that was acquired but also on the entire environment of the area and the people of today and the future generations. Land acquisition also has direct and indirect influence on the people in their ideas, values and positive visions, resources and capacities in creating a better future. When one accepts change it is underlined that there could be more than one type of change. The future of land acquisition for industrialization in the rural areas could be contemplated in three different scenarios.

4.9.1 Possible future

Industrialisation would have increased the source of income of the individuals and the panchayats, which will lead to a better standard of living with various comforts and facilities for the individuals, families and the
community at large. On the other hand, industrialization in the rural areas would have maintained the income at almost the same level also as in the earlier days. Hence there would be no difference in the standard of living of the individuals, families and community.

As industrialization is the consequence of the land acquisition, agriculture which was the primary source of income will no longer be possible in the villages. Since the rural people, especially the *dalits* and women are illiterate, they will not get any employment in the industries nor will they have the capacity to search for alternate employment, which will ultimately lead to a poor quality of life. Such a life will lead to discontented individuals, families and the community at large, which is a harmful or disturbing atmosphere for any healthy future.

4.9.2 Probable future

Based on the present scenario, what is most likely to happen in the future is that the people would have lost their livelihood in the villages and would have to search for employment either in the nearby villages or in the cities and towns. This will lead to disintegration of the families and the village community. The relationship between the family members will become dysfunctional, as economic dependence will become the only primary force. The small and marginal farmers, landless agricultural labourers, especially the women, will be the worst sufferers in every sphere of life and they will be treated as aliens in their own place, as they will not have any source of income in their own villages. These villages will become
small pockets of urban colonies catering to the needs of the industrial workers.

Refusal of employment for the illiterate villagers in the industries will create frustration and disappointment about their illiteracy and perhaps kindle in them a fire to educate their children, as per the requirement of the industries. The proximity of the technical institutions around the area and the improved infrastructure facilities may also encourage them to send their children for higher studies, thereby enhancing their chances of getting employment in the industries.

4.9.2 Preferable future

The most desirable or preferable thing to happen in the future is that the individuals as well as the community of the three villages and its surroundings will have a better socio-economic, educational, political and cultural life, which will be sustainable and such a better life is also assured for all the future generations. The people must learn to understand industrialization as a positive force for the development of the nation but at the same time, the Government must take steps to sustain agriculture, which has always been the backbone of the country. Hence, the Government and the people should understand that both agriculture and industrialization are very important to build the nation’s economy.

To make the above a possible reality, the Government machinery, the industrialists of the area, the panchayats, NGOs, CBOs, SHGs and the villagers should accept that land acquisition for industrialization as an
inescapable fact. The representatives of all the aforesaid groups must see that they work collectively for the economic, social, political growth of individuals, families and communities by creating awareness about themselves and the resources that are available for a better future. The necessary training especially for landless families, small and marginal farmers, dalits and women should be imparted, so that they will be enabled to search for suitable employment either in the industries or be able to take up some income generating activities.

The need of the hour is to empower the people to choose and act responsibly and consciously in the present, as this will help in creating the future. It is the primary role of the Government, industrialists and the NGOs to help the people realise that they are all, together creating the future that they will be living and working in. The future depends mainly on what they think and do every day of their lives. Hence, it is important for the people to realise that they always have choices in what they could do to build a better future. In short, the stakeholders of the Sand acquisition for industrialization programme must realize that they can make a difference, be it however small, to make the world a better place for them to live in.

Such planned efforts will make a great impact on the life of the people. These are the possibilities that could be looked into for a preferable future. To be precise, the stakeholders should not leave their future to chance but proactively try continuously to create a future that they and their posterity would like to be living in.
1. The Land Acquisition Act must incorporate the right to deny acquisition by the panchayats and this right must not be subject to the decisions of the Government officials and tribunals.

2. The Act must ensure that all the information related to the land acquisition programme, like purpose, total land to be acquired, individual families from whom the land has to be acquired, proposed compensation, how the compensation amount was worked out, proposed relief, rehabilitation and resettlement package, payment procedures, the price fixed for sale of the developed land to the industries etc., are explained to the people well in advance. The people should have access to all the information and that too, in their own language. Hence, it is essential that the right to information must be introduced in the Act.

3. The term, ‘public purpose’, which is subject to controversies must be defined in the Act keeping in mind the welfare of the general public. Housing, education, water and sanitation facilities, taking care of wild life, flora and fauna, historically important places, activities and schemes related to the safety and security of the nation and development schemes and programmes related to science and technology could be considered as public purpose. In addition, any relief, rehabilitation and resettlement programmes to benefit the victims of natural or man-made calamities could also be considered as public purpose. Only for the aforesaid public purpose, the land could be acquired and that too, using sparingly the Urgency Clause.

4. Proposed amendments In the Land Acquisition Act

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At any cost, the Urgency Clause should not be used for land acquisition for industrialization, to be initiated either by the public or private efforts.

The law should further assure that not more than 15% of the required land could be acquired for further expansion and once the land is acquired for any specific purpose, the purpose must not be changed. Until the land is sold to the individual industries, it could be given to the local panchayats, CBOs and SHGs for cultivation.

Special terms and conditions must be introduced to acquire land for industrialization. Only when the negotiation process between the individual owners of the land and the prospective buyers fail, there should be negotiations with the intervention of the local panchayats. Even if this effort does not bring the proposed buyers and the sellers to a common understanding, then the Government could play the role of a mediator and not of an arbitrator. Any pressure techniques used by the Government machinery or the proposed buyers must be treated as illegal and punishable.

A suitable provision must be included in the Act so that the compensation is determined on the replacement value and not on the land value. Similarly, the compensation must be provided to

1) the households, whose lands are acquired, 2) the landless and agricultural labourers’ families and sharecroppers, 3) other people who do not own land, but whose livelihood is dependent on land and land resources such as nomads, pastoralists, fisher folk, forest dwellers, special service-providing households and those families
dependant on common property and 4) the neighbouring communities whose life and livelihood would be affected by the land acquisition programme. The compensation amount has to be worked out for the above four categories of people differently keeping in mind the loss of property, employment, displacement and resettlement.

7. If the people are not interested in selling the land, then a new clause could be introduced to lease the land for a particular period, but not less than 25 years, with the lease amount being paid every year in installments and the lease amount being a minimum of 3 times of the income that the land was fetching every year. In case of difference of opinion in fixing the income of the land, income of the neighbouring lands could be considered as terms of reference. After the expiry of the lease period, the period of lease could be extended on mutual agreement or could be continued as a shareholder.

8. A new clause should be introduced in the Act, as per which the role of the village panchayat must be duly recognized. The local panchayat should play a nodal agency role in the entire process of land acquisition. In case the Government/poramboko land is acquired, the compensation amount must be given to the panchayat to initiate and continue the developmental activities of the village. The local panchayats should also be empowered to monitor the industries, in case they are violating the terms and conditions fixed in preserving the local environment. A tripartite agreement between the industries, Government and the local panchayat must be
executed to ensure that the social, cultural, environmental and
political fabric of the society will not be disturbed by the industries.

9. A clause must be introduced in the Act to provide a minimum of 10
to 15% of the employment opportunities in the industries to the
families who were displaced by the land acquisition programme. The
local panchayat must ensure that local people are employed even if
they are to be trained or their skills are to be upgraded at the cost of
the industries.

10. The poor, who are already disintegrated due to land acquisition,
should not be further harassed to search for legal remedies, if the
compensation is not acceptable to them. Hence, until the
compensation amount is accepted and received and also the relief,
rehabilitation and resettlement policies are accepted by the project-
affected people, no land could be acquired, even though, such a
delay may lead to price escalation and loss of employment or
income. This must be introduced as a clause in the Land Acquisition
Act.

11. For every land acquisition programme, a development and
resettlement forum must be formed to ensure that the land
acquisition programme is implemented with the least damage to the
living conditions of the people and the environment. The forum
should also ensure that it gives a feedback once in six months to the
concerned Ministry of the State Government, explaining the actual
status of the people, projects and the environment. This forum
should play a proactive role in informing the village panchayats
about the Land Acquisition Act, process involved and build up the
*panchayats* to become the monitoring machinery of the programme.
The forum’s recommendations must be directives to the Government
and it must be independent of the Government machinery. Such a
clause must be introduced in the Land Acquisition Act.

12. A clause has to be introduced in the Land Acquisition Act that at
least, once in ten years, the Land Acquisition Act must be reviewed
for suitable amendments, keeping in mind the people and
environment and sustainable development as the first order of
priority.

13. As the Land Ceiling Act of India has an upper limit of land that could
be owned by each family, any industry in India could only buy only a
limited number of acres of land. Such a clause will prevent excess
purchase and will prevent efficient usage of land.

4.11 Transparency in the process of Sand acquisition

Information is indispensable for the functioning of a true democracy.
People have to be kept informed about current affairs and broad issues -
political, social and economic. Free exchange of ideas and free debate are
essentially desirable for the Government of a free country. This is important
because every developmental process depends on the availability of
information. The right to know is also closely linked with other basic rights
such as freedom of speech and expression and right to education. Its
independent existence as an attribute of liberty cannot be disputed. Viewed
from this angle, information or knowledge becomes an important resource.
An equitable access to this resource must be guaranteed. The Freedom of Information Bill 2000 introduced in the Parliament and the Tamil Nadu Right to Information Act No.24 of 1997 guarantees the information, but regrettably the information is not available at the right time to the people concerned.

The Government acquires land in spite of the protests by the individuals and communities. Is it not possible to handle the people with dignity, when the land acquisition programme is being introduced and implemented? Are not the people from whom the land is acquired viz., the general community of the village, especially the people who depend for their sustenance directly or indirectly on the land that is acquired, to be informed and consulted instead of being directed throughout in the process of land acquisition? As official information is generally not divulged about the land acquisition programme especially about compensation and possible employment, interested individuals and groups spread rumours of false hopes that such industries will provide employment to the local people. In reality, when the people do not get what they were informed or what they had hoped for, they become frustrated and non-cooperative in all possible ways.

Any land acquisition programme must first think of relief, rehabilitation and resettlement of the people whose lands are to be acquired and also to the people whose vocation will be marred due to land acquisition. No doubt, dialogue with the people is time consuming but nevertheless rewarding as both the parties - the buyer and seller - share
their views and come to a possible solution. In a land acquisition process, it appears that the Government deliberately introduces the strategy of monologue basically to dictate terms and conditions on how soon the land could be acquired and also how cheap the land acquisition programme could be. It is an undeniable fact that the process of transparency is time consuming. The road safety rule of starting early to reach the destination in time holds good, even to acquire land through Land Acquisition Act. Transparency will increase the support and involvement of the people, in addition to upholding the basic right to information of the people.

A professional forum from among the social workers, entrepreneurs, women activists, lawyers, agricultural experts, doctors, development experts, local bankers, journalists, NGOs, CBOs, like-minded individuals, retired Government officials and teachers of the area, under the leadership of a retired judge could be formed as a forum to work out, implement and monitor different aspects of the land acquisition programme. The forum, which should have a minimum of ten years’ life span, should be independent of the clutches of the Government machinery and its decisions must be directives to the Government. The expenses of the forum and the programmes that it suggests must be met by the Government, either from the revenue of the industries that are to be established locally or from the income earned in selling the land to the industries or by approving a new scheme for the development of the people.
4.12 The role of panchayats in development of people

The people of the three villages, from where the land was acquired for SIPCOT Irungattukottai Industrial Park are very much disturbed and frustrated as neither the families from whom the land was acquired did get enough compensation nor the public did get any employment in the industries that have come up within their village boundaries. The people have already developed a negative feeling about their lives, as they lost their source of life and there is no one to understand and extend a helping hand. The confidence of the people must be built up immediately by the panchayats by making them understand and accept that the land, acquired for industrialization, cannot be given back. The people must be made to realize that they cannot lead a life of refugees in the place where not only they but their forefathers too lived and laid down their lives.

The panchayats have an important role in building up these people and the environment so that once again all the households of the three villages could lead a dignified life. The panchayats must play a proactive role in the following sectors:

4.12.1 Economic sector

1) Some families could be guided to take the responsibility of repair and maintenance of the village lake, ponds and tanks and they could also start fisheries. These families must ensure that the feeding channels are well-maintained. To repair and maintain the water
bodies, funds could be obtained from the industries and the Government.

Maintenance of the approach roads and interior link roads in the villages could be taken care of by a couple of people for an honorarium which could be provided by the industries and from the income of the local panchayats.

Plantations around the industrial area could be initiated which could be maintained by the local people for an annual income. In the wasteland, firewood trees and fodder trees could be grown and sold to earn an income.

Catering services could be run with the support of the panchayats in the companies and in the educational institutions. Similarly, food prepared in individual houses could be served to the employees for a moderate price. Such efforts will increase the daily income.

The village panchayat could demand that all the support services, such as gardening, plumbing, mechanical, electrical, driving of vehicles, security staff, support staff, cleaners, etc., could be set aside for the local people. The village panchayats should also ensure that quality of work would be maintained by them. If need be, necessary training could be given to the people from the revenue of the panchayats.

The panchayats must insist that henceforth one fifth of the vacancies to be filled for the white-collared jobs of the companies be set aside for the people of the three villages and keeping in mind such
vacancies, the people must be educated, qualified, trained and equipped with the support of the income of the panchayats.

7) The panchayats could become producers of the by-products and auxiliary parts needed for the industries and the local youth and women could be employed in such units.

8) The contract labourers needed for the construction and maintenance of the industries could be supplied by the panchayat.

9) Rural artisans must be encouraged and trained to diversify their skills as per the local requirements.

10) Based on the natural resources that are available locally, more labour-intensive - with the least financial support - environment-friendly, sustainable small scale income generation programmes must be taken up by the panchayats.

11) Through the support of the Government, the Self-Help Groups could be motivated and encouraged to run economically viable and technically feasible programmes such as 1) hiring concrete machines, 2) renting cooking vessels, furniture, etc., 3) running fair price shops, 4) renting out road-levelling machines such as bulldozers, 5) running chartered mini vans for the industrial and institutional employees, etc. Such a diversification of source of income will enable the people to choose what is feasible to improve the income.

12) It must be the duty of the panchayats to identify a suitable place near the industries and the educational institutions, for a weekly market. The vegetables, fruits and groceries produced by the
villagers could be sold to the employees of the industries and educational institutions, which will bring income to the people. In addition, the various items produced either individually or collectively by the members of the Self-Help Groups could also be sold in the weekly market.

13) All the Government and poramboke land of the three villages could be used collectively for community forestry and raising of grass, which could be sold, to increase the income for the households. The possibility of leasing poramboke land for joint and mixed farming could be explored.

14) The cultivable lands, which are not cultivated due to financial constraints, could be identified and with the support of the loans received from industries and banks, joint and mixed farming could be taken up.

15) The panchayats should find out whether the people could get any land through the Land Reforms Act and encourage the people to get this land for cultivation of food crops only through organic farming.

4.12.2 Educational sector

1) The panchayats should get fee concessions for all the local children who are studying in the technical institutions and colleges that are established in the area, which will facilitate the poor children to pursue their studies.

2) The panchayats should conduct special coaching classes in the evening to encourage the academically weaker children to cope with
their studies and these expenses must be met by the educational institutions.

3) The panchayats must motivate the local industries and educational institutions to sponsor children of the three villages for higher studies.

4) The local industries and educational institutions must be requested by the panchayats to provide basic facilities in the local Government schools.

5) The elders of the villages must be honoured by providing a place for them for meetings, reading the newspapers and for other recreational activities. A library in each of the villages will enhance the interest of the youth to learn more and search for various alternatives to better their income. All these programmes should be supported by the industries established locally.

4.12.3 Environmental sector

1) The panchayats should regularly assess the environmental impact of the industries on these villages with the support of the Tamil Nadu Pollution Control Board and ensure that pollution is controlled at the early stage itself.

2) The panchayats must ensure that the flora and fauna of the area are studied carefully by experts and endangered species are identified, protected and multiplied. Financial support must be obtained from the industries to take care of the endangered flora and fauna.
4.12.4 Social and cultural sector

1) Keeping in mind the several requirements of the people, community halls must be constructed with the support of the finance mobilized from the industries and like-minded individuals and institutions. Lending the community hall at a cheaper rate for the villagers will fetch an income to the panchayats. These community halls could also be used for various celebrations organized by the industries for their employees.

2) Village festivals like pongal (farmers’ festival), village temple festivals and other common festivals like deepavali (festival of lights) must be celebrated in traditional style and culture, which will bring back the ethos of the villages that is slowly disappearing. The panchayats must initiate such programmes.

4.12.5 Health sector

1) As a special feature, the village panchayat must ensure that the Government/industries provide insurance for the health and life of all the family members of the three villages.

2) The women, children, elders and the physically and mentally challenged persons of the villages should be given special care and concern in the health sector through regular medical check-ups.

3) The practice of using toilets and maintaining cleanliness in and around the villages must be taught to the people through special campaigns by the local panchayats.
4) Efforts to re-introduce herbal medicines for simple ailments must be given top priority.

5) The panchayats should also ensure that health services, both preventive and promotive and a primary health centre are initiated and maintained by the industries in the villages.

4.12.6 Legal sector

1) The panchayats must follow up the cases pending in the court for increased compensation and see that the increased compensation is handed over by the court through the banks immediately. By doing so the middlemen could be eliminated.

2) The panchayats must also ensure that not only the people who file petitions for higher compensation but all the families whose land was acquired get higher compensation within a period of two years from the time a case is filed in the court. On behalf of the people, the panchayat should identify the lawyers and the expenses could be met by the Government.

4.12.7 Social Accountability of the Panchayats

The local panchayats must utilize the revenue received from the industries efficiently and effectively and also insist that the revenue is revised periodically. The local panchayats must follow social accountability to build its credibility among the people and the industries. Once in six months, the panchayats must report to its members the income received from the industries and the expenses met from the income. Such a practice
will encourage not only the people but also the industries to collaborate actively in different programmes initiated by the panchayats. The three panchayats should form a consortium and work collectively. Similarly, the industries should form a consortium and elect its representatives to attend all the panchayat meetings and join hands in strengthening the society.

The panchayat must create the feeling of the possibility of a new world in the minds of the people. The local NGOs, like-minded individuals, CBOs, local industries and institutions must play an important role in joining hands with the panchayats in building a new confidence in the people. If a professional forum is created by the Government for every land acquisition programme, then the panchayats must work hand-in-hand with the forum in helping the people from the inception of the land acquisition programme. The SIPCOT Irungattukottai project must be seen by the people and the panchayats as an opportunity to face challenges and reconstruct their so-called lost future.

4.12.8 Panchayats and food sovereignty

All policies approved and promoted at the panchayat level should favour small and marginal farmers and the principles of agro-ecology to increase food sovereignty. All human beings on the planet have a right to have access to resources needed for a decent living. All rules and policies should be aligned to recognize the basic rights of the people. The final and functional solution to the socio-economic and ecological problems is a transition to a more decentralized, democratic and cooperative, non-
corporate, small scale organic farming as practiced by traditional farming communities. All rules and regulations at every level of governance should be aligned to encourage such solutions as well as changes in other sectors of the society to emphasise sustainability.

4.13 Where will the calf go?

Here, the researcher would like to record the almost plaintive cry of a very elderly illiterate occupant of the land, now irrevocably dispossessed. He was one of the respondents met during the survey mentioned earlier. To one of the questions he looked sharply at us and then asked whether we were aware of the situation of a cow and its dead calf. He went on by saying that the calf after an unforeseen early death is brought to the visibility of the cow again after a few days, but of course with only its skin stuffed with straw to resemble almost apologetically, its earlier live days. This was to persuade the cow to release milk from its udders which had stopped flowing after the calf went missing. Usually the cow obliged. But is this possible with green fertile land which had been providing food, timber, fodder and so many other essential and useful objects for humans for generations, taken away for non-agricultural purposes? No, he thundered. He continued, but ever so softly asking this researcher another question which was what if the cow (this researcher assumed that he was referring to the land) died and was destroyed and never returned to sustain its calf (meaning perhaps the inhabitants of the land). An old woman apparently his wife asked, “Where will the calf go, what can it do to sustain itself when its mother is killed?” These questions are yet to be answered. The cry of the local people could be
compared to the quotation of Midgley, "Ecology is a more important science than economics - the profitable exchange of goods within a ship is a less important matter than how to keep the whole ship above water" (Madely 2002).

4.14 Inference on the analysis of data

The industries that were established at Irungattukottai SIPCOT project were pollution-free and are regularly monitored by the Tamil Nadu Pollution Control Board, a Government undertaking. The underground water samples confirmed that the quality of water was satisfactory. No doubt, the area was slowly getting converted into an urban area with better transportation and communication facilities. The demand for housing has increased; hence the price of the land had gone up. Six engineering colleges have come up in this area, as this place was close to the capital of Tamil Nadu State.

A heterogeneous culture was being spread among the villagers and a number of shops and establishments, which included restaurants etc., had speeded up consumerism. In short, an urban way of life was slowly spreading in these villages. Could this be development? Could there be development at the cost of their livelihood? The extra facilities and comforts were to be bought at a price for which financial resources were needed. Agriculture, which was a fundamental way of life of the villages was being phased out and on the land where food was produced, industries have
come up, that too to benefit an outside community, which was educated and above the poverty level in general.

The livestock mobility was curbed; firewood and fodder were not available as before in the villages. Vegetables, pulses, cereals and milk were to be bought from the outsiders. The water bodies around the industrial area had been reduced, and were not maintained. Sizeable land of the industrial area was either cemented or macadamized which did not allow percolation and thus increase the run-off of the rain. Survival, which was not a big problem in the rural area, had become a reality of the past. Calmness and a peaceful atmosphere, which were special characteristics of the villages, were slowly disappearing. The local people who were treating nature as Mother Nature had started exploiting it injudiciously, which was a clear symptom of losing faith and respect for nature.

There was an urgent need to instil in all people a respect for nature and to strengthen decision-making process in favour of environmental protection. This must be the focal point for a new global consciousness in an environmentally uncaring world. A new universal consciousness must be developed that believes in at least two dictums: “what we sow is what we reap” and “everything is connected to everything else”, and our inherent dharma, entwined with a third: Sarva-bhuta-hite-ratah, that is, serve all beings equally (Chappie and Tucker 2001).

Could industries in rural areas be an answer for the removal of poverty of the illiterate rural poor? Could fully mechanised or semi-
mechanised industrialization be of any help to the rural poor especially the landless agricultural labourers, women and small and marginal farmers in alleviating their untold miseries? If villages are seen as a potential source for exploitation by the industries and multinationals, that too, with the blessing of the Government, could there be sustainable development for the poor? At the cost of the rural population, could a few companies and industries grow? Industrial growth is needed for any developing or developed nation. But at what cost..... where...and when....? Could an industry be sustainable if it is not in conformity with the land, water and the local people? Economic development must remain under man’s direction, it should not be let to the judgment of a few individuals or groups possessing too much economic power nor of the political community alone nor of a few strong nations. It is not only right that in matters of general interest as many people as possible should participate actively in decision making. Development should not be left to the almost mechanical evolution of economic activity or to the decision of the public authority. All reforms which subordinate the basic rights of individuals or groups must be denounced (Flannery 1975).

After the discussions with the respondents and Government officials, the analysis of the responses of the respondents, impressions collected during the field visits, the opinion of the scientists after studying the remote sensing pictures of the area, and in comparison of the data with the land acquisition programme being implemented elsewhere in the country, it is sad to note that the impact of the industrial park at irungattukottai,
Kancheepuram district, on the rural socio-economic and environmental conditions is hardly in favour of the rural poor.

4.15 Future research

A number of further areas of research are suggested, to work out ways and means to safeguard nature, to protect the rural people and their occupation and also to link industries as a new phase in the development process of the individuals, communities and the nation. A few of them are:

1) A research study on the agriculture lands, which were acquired under the Urgency Clause, for establishing industries in Tamil Nadu in the last ten years, with special reference to the extent of land that is yet to be allotted to the industries,

2) A study to find out the actual beneficiaries of the rural industries in Kancheepuram district, with specific reference to women in the last ten years,

3) A study to analyze the pressure on the cultivable land due to the increase in infrastructure and transport facilities in the rural areas due to the establishment of industries,

4) A study to find out the revenue received from the industries and its utilization by the village panchayats in Tamil Nadu in the past three years and

5) A study on the pollution caused by the various industries promoted by SIPCOT in Tamil Nadu and the efforts taken by the industries to minimize pollution.