

# **Multi-Party Accountability for Environmentally Sustainable Industrial Development: The Challenge of Active Citizenship**

**A study of Stakeholders in the  
Simhadri Thermal Power Project,  
Paravada, Visakhapatnam  
District, Andhra Pradesh**

Study Report No.

**5**





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## **Foreword**

Development Research Centre (DRC) on Citizenship, Participation and Accountability is a research partnership based at the Institute of Development Studies (IDS), Sussex, U.K, which brings together research institutions and practice based civil society groups from India, Brazil, South Africa, Mexico and Nigeria from the South and the U.K from the North. DRC project explores the issues of poverty, exclusion and marginalisation within the framework of rights and citizenship. 'Making rights real for poor people' is what DRC project aims at and it seeks to contribute to this goal through research, dissemination, policy influence and capacity building.

PRIA entered into this partnership in 2001. As part of DRC, PRIA continues to conduct research studies relating to various aspects of citizenship, participation and accountability.

We are happy to bring out this publication as part of DRC study report series and we do hope that the readers will find this exercise beneficial.

**March, 2004**

**Rajesh Tandon**  
President, PRIA  
New Delhi



## Preface

The present report is an outcome of PRIA's research study on **Multi-Party Accountability for Environmentally Sustainable Industrial Development: The Challenge of Active Citizenship** at Paravada Mandal, Vishakapatnam District, Andhra Pradesh.

This study was carried out to examine the role played by the different stakeholders in the setting up of the Simhadri Thermal Power Project and also to find out the citizen's initiatives in the protection of their rights and privileges.

This report is organized in three sections. **Section I Context** provides the profile of Simhadri Thermal Power Project (STPP), activities, methodology, objectives and structured events. **Section II Key Findings** focuses on profiles of affected villages, land holding and income, details of compensation and utilization, nature of employments, impact on health, environment and family and multi-party accountability. **Section III Emerging Issues** interprets the finding and people's perception on it.

We are grateful to PRIA for their encouragement and support throughout the study. Sadhana, an NGO based at Paravada, provided us their active support by taking up the task of data collection. We are also indebted to all our respondents for sharing their experiences and views during the data collection process.

Above all, we express our sincere thanks to Department of Social Work, Andhra University for allowing us to conduct the study.

**A.B.S.V.Ranga Rao &  
R.D.Sampath Kumar**



## Section 1 Introduction

On the cusp of a new millennium, people-centred development is the core of economic, social and sustainable development with appropriate concern for growth with equity, basic human needs, human rights and preservation of the environment for posterity. Increasing evidence suggests that systems of production and economic development can not be sustained indefinitely due to the unprecedented progress in wealth and living standards.

### *Sustainable Development and Accountability*

Sustainable development stresses the longevity of production systems. It is “an economic strategy which simultaneously pursues increased production for the immediate needs of the world's poor and the preservation of the common natural resources which will support their children and subsequent generations”. (Lusk and Mason, 1991:8)

Sustainable development maintains intergenerational equity. At the core of sustainability is the need to preserve the capital stock of natural resources necessary for future generations to enjoy a standard of living that is at least as good as that of the present (Pearce, Babir, and Markandya, 1990). Non-sustainable definitions of development stress the present value of development benefits and discount future values. The maximization of present values tends to lead towards strategies of optimal use that deplete resources and degrade the natural environment.

Environmental economics suggests conservation of current biodiversity, a radiation protective atmosphere, preservation of forest resources, soils, fresh water and energy sources and the ongoing ecological processes of dilution and purification of airborne and waterborne contaminants. (Stoesz Guzzetta, and Lusk, 1999: 157)

Sustainable development requires economic growth. It reflects a shift in cultural values and mirrors new attitudes and priorities. The values that underline the sustainable development approach are a commitment to the preservation of natural capital stock, intergenerational equity and intra-generational equity (Hoff, 1998).

If development is to be lasting, it is crucial that the governments should not act in their own interests and barely be accountable to its people. Sustainable development requires enduring institutions, which are open, accountable,

transparent and representative. There is a commitment to the development of sustainable institutions – public and private entities that genuinely represent the needs and aspirations of their constituencies (McMichael, 1996).

The fact is that development is highly uneven with respect to gender, women on an average, work longer hours than men when all forms of labour are included – agricultural work and household labour. Development initially has a negative effect on women's labour. As communities make a transition from rural agricultural economy to an urban industrial and survey economy, women are more likely to be displaced in the workforce and female employment declines (World Bank, 1995a, United Nations, 1997, Black 1991).

### *People's Participation*

The role of people's participation in development is quite crucial. It would help the people and the community to develop resources and an environment to fulfil their needs in a way that doesn't prevent the means to be passed on to the next generation. Participation allows clarifying needs and using the available resources in a sustainable way for development.

Participation allows the people and the community to understand the inevitability of interdependence and the importance of a peace culture rather than a war culture. Through participation people's skills and leadership qualities/traits begin to cope with change and given the orientation to change participation allows the development of a common vision.

When citizens have been able to take up and use the spaces that participatory processes can open up, they have been able to use their agency to demand accountability, transparency and responsiveness from the concerned institutions. (Cornwell and Gavanta, 2002: 43). People's participation is a foundation of democratic practice, which suggests a more active notion of citizenship. This recognizes the agency of citizens as 'makers and shapers' rather than as 'users and choosers' of interventions or services designed by others. (Cornwall and Gavanta, 2002a)

To initiate a dialogue on participation and governance among the Panchayat Raj, industry and civil societies, the Society for Participatory Research in Asia (PRIA), New Delhi initiated a project to conduct multi-party accountability for environmentally sustainable industrial development at Paravada Mandal, Visakhapatnam District, Andhra Pradesh. This mandal was declared as an industrial zone where the Simhadri Thermal Power Project (STPP) and Special Economic Zone were already grounded. Besides these, an Apparel Park is going to be set up displacing several other villages.

In this context, the present study was carried out to examine the role played by the different stakeholders in the setting up of the Simhadri Thermal Power Project (STPP) and also to find out the citizen's initiatives in the protection of their rights and privileges.

## **Context**

### *Profile of Simhadri Thermal Power Project*

Andhra Pradesh is one of the Indian states suffering from power shortages. The demand for power has been high in view of the tremendous increase in the industrial base, in the domestic consumption and due to increasing agricultural activities. The people of the state experience load shedding and power cut a number of times in the day. To combat this situation, efforts have been made to increase the power generation capacity and the availability of power in the state. The Simhadri Thermal Power Project (STPP), under the aegis of the National Thermal Power Corporation (NTPC), with a capacity of 1000 MW had been commissioned in 2002 in Paravada about 40 km from Visakhapatnam.

The total cost of the project is Rs.3650.79 crores. OECF, Japan and International Resources have financed the project. The fuel required is 5.04 million tones of coal per annum and the source of coal is Mahanadi Coal Fields of Talcher, Orissa.

The project was originally planned by the Andhra Pradesh State Electricity Board, which submitted a feasibility report to the Central Electricity Authority in March 1994. Subsequently, the state government entrusted the project to the NTPC. The project received the Techno-Economic clearness from the CEA in September 1996. The Public Investment Board of the Government of India gave its approval in February 1997. According to the cabinet committee on Economic Affairs, the entire power generated from this project would be supplied to Andhra Pradesh. The Andhra Pradesh State Electricity Board signed a power purchase agreement with the NTPC on February 4, 1997. The NTPC officials started construction work in 1998 after acquiring 3,139.87 acres of land spread over 13 villages and its hamlets in three mandals of Visakhapatnam district. Of these, 2086.93 acres of land belongs to private parties and 1,072.94 acres is government land. Of the government land, 356.77 acres of land is designated as encroached land ("Note", 2002).

The Institute of Public Sector Management, Andhra University was given the task of counselling the Project Affected People (PAP) of the STPP, on utilising the compensation amount for productive investments, so that the loss of land did not affect their existing quality of life. It organized 47 group counselling sessions in which 19448 individual PAPs were counselled and 36 group recounselling sessions for income generating schemes were held (Balamohandas, 2000).

*The major activities of STPP are*

- Unit-I achieved full load on 22.5.2002.
- Unit-I generated 12.08MU at 100.67 percent PLF in a day on 23-6-2002.
- Unit-II ABO completed on 12-4-2002 and Boiler Acid Cleaning completed on 5-5-2002.
- Unit-II steam boiling completed on 18-6-2002 and TG Oil flushing completed on 2-6-2002.
- Unit-II cooling tower changed on 3-6-2002.

**Unit-I**

Unit-I synchronized on coal on 20-3-2002.

Unit-I generated 120.95MU in June, 2002.

**Unit II**

**Turbine generator**

After completion of steam blowing, work on turbine final alignment has been taken up.

**Boiler**

Coal Mill erection and work on coal piping and coal feeder is in full swing to meet the coal firing target.

**Off-site areas**

- *C.W. Pump House*: Trial operation of Unit I CW system completed on 1-6-2002. Unit II CW pump-5 commissioned on 15-5-2002.
- *D.M. Plant*: Trial operation of DM plant completed on 30-5-2002.
- *Pre-treatment plant*: Pre-treatment plant trial operation started on 15-5-2002.
- *Sea water pumphouse*: Sea water pump system charged on 6-3-2002.
- *Railway Siding*: Signal and telecommunications at receipt and dispatch is and has been commissioned on 27-4-2002 ("Project Activities", 2002:4).

## **UNO-Global compact**

NTPC became a member of Global Compact in 2001, which was formally launched by the UN Secretary General Mr. Kofi Annan in Geneva in July, 2000. Global Compact is a United Nations Organisation sponsored program for encouraging and promoting good corporate practices and learning experiences in the areas of human rights, labour and environment. Global Compact calls on companies to embrace nine universal principles in the aforesaid three areas.

### **Nine principles of global compact**

1. Business should support and respect the protection of internationally predominant human rights.
2. Make sure they are not involved in human right abuse.
3. Business should uphold the freedom of association and the effective recognition of the right to collective bargaining.
4. The elimination of all forms of forced and compulsory labour.
5. The effective abolition of child labour.
6. Eliminate discrimination in respect of employment and occupation.
7. Business should support a precautionary approach to environmental challenges.
8. Undertake initiatives to promote greater environmental responsibility.
9. Encourage the development and diffusion of environment friendly technologies.

### **Rehabilitation and resettlement**

The STPP has Rehabilitation and Resettlement Department headed by a senior manager. The main functions of this department are the rehabilitation of the land oustees and to undertake community development projects in the project affected villages. Some of the community development programmes undertaken are the digging of bore wells, providing furniture to primary schools, building of individual toilets, the construction of a toilet block at Z.P. High School (Girls) Paravada, the construction of bus shelters and road laying from Jajulapalem to Kalapaka at a cost of Rs.39.92 lakhs, reimbursement for short term computer courses and tailoring courses etc.

Some of the community development programmes include the digging of 45 bore wells, a three km. long HPPE pipe provided for the drinking water scheme, a subsidy for the construction of individual toilets (45 nos.), the conduction of three eye camps and two family planning camps. Anti larval

operations were carried out in the affected villages for the eradication of malaria.

One-hundred fifty youth were sent for Industrial Training Institute (I.T.I) training and short term computer training and around 50 women went for a tailoring course organized by the Jan Sikshana Sansthan, Visakhapatnam.

## ***Methodology***

### **Need for the Study**

Industrial development is a welcome feature for the growth and prosperity of the nation. Large-scale land acquisitions resulting in the displacement of thousands of people leads to vulnerability and hence requires suitable attention. The community co-exists with industry but this coexistence should be of mutual benefit.

There is a need for compensating the community for the harm done to the environment and to the natural resources so that they lead a better quality of life. Inter generational and intra generational equity should be maintained through sustainable development.

The role played by many actors in the process of the acquisition of land, the construction of the plant and the implementation of community development schemes for rehabilitation and resettlement of the displaced is crucial and of paramount importance as they are accountable to the people. The active participation of the citizenry and civil societies in the protection of human rights and the equitable distribution of resources can go a long way in furthering community awareness and consciousness.

With this backdrop, the present study envisages examining the multi-party accountability of the significant people: be it the state or industry in pursuance of their role and functions. The objectives and methodology of the study are discussed here under:

### **Objectives**

1. To study the socio, economic and demographic characteristics of the villagers.
2. To find out the perceptions and experiences of the villagers about the impact of the NTPC on environment, family and health.
3. To ascertain the strategies/tactics adopted by the villagers to influence

and negotiate their stakes.

4. To find out the accountability of the multi parties, who are directly or indirectly involved in the different processes of industrial development, and lastly,
5. To make suggestions for policy and practice.

### **Universe**

About 13 villages in four panchayats in Paravada mandal and one panchayat in Peda Gantyada mandal constitute the universe for the study. There are 2,841 households in these villages with a total population of 11,960.

### **Sampling Frame**

Out of 13 villages, which are affected by the NTPC, 11 villages were taken up for the purpose of study. The remaining two villages were not considered for the study as they are at a distance from the NTPC and as such the effect on them is insignificant.

A cross section of people which includes the aged, women, Self Help Groups, youth, agricultural labourers, artisans, people who had lost their land were selected from each village so that their perceptions about the impact of the NTPC could be holistic and pragmatic. Though the selection was based on the purposeful sampling method, care was taken to select the respondents objectively. Thus, 107 respondents from the 11 villages were interviewed for the purpose of the study.

### **Research Tools**

Participatory methods were employed to tap local knowledge and collect information.

#### **i) Transect walk**

The team went for a transect walk in the village to get first hand information and to know the topographical boundaries of the village besides the direction in which the NTPC is situated in context to the village.

#### **ii) Gram sabha**

In every village a mini gram sabha was held to find out the villagers' perceptions. The team facilitated the process of discussion on various issues related to the pre and post establishment of the NTPC.

### **iii) Focus group discussion**

Issues concerning health, environment and family were the focus of different groups to elicit information and also to crosscheck the information which was derived from the gram sabha and individual respondents.

### **Structured Schedule**

A structured schedule was constructed and administered to 107 respondents from the 11 villages. The schedule consisted of three major divisions. The first part covered the respondent's personal and family information. The second part dealt with the details of land holdings, acquisition and compensation. The employment details were also furnished. The impact of NTPC on health, environment and family were provided for in the third section, besides the multi-party accountability of the stakeholders.

### **Video Recording and Photographs**

The study team went with a video recorder and a photographer and took video recordings and photographs of the affected villages. A documentary film of approximately 30 minutes duration was prepared besides this some selected photographs were used as a tool kit.

### **Study Period**

The study was taken up in the month of August, 2002. After a couple of preliminary visits to the affected areas, mini gram sabhas and focused group discussions were held for one month. The data was collected from 107 respondents covering 11 villages for approximately another month. The report writing and preparation of the documentary film took another three months.

### **Mandal Level Sharing**

A mandal level sharing session was conducted on 21-11-2002 in Paravada Mandal Development Office with the multi-stake holders, i.e., people's representatives such as sarpanches (heads of the village body), zilla parishad (district) territorial constituency and mandal parishad territorial constituency (block level) members, village secretaries, members of Self-Help Groups, Community Based Organizations, people who had lost their land, the Mandal Development Officer, Mandal Praja Parishad President, Mandal Revenue Officials and NGOs.

### Significant people/institutions contacted

1. Special Deputy Collector (Land Acquisition), NTPC Unit I, Visakhapatnam
2. Environmental Engineer, A.P. Pollution Control Board, Visakhapatnam
3. Mandal Revenue Officer, Paravada
4. Mandal Development Officer, Paravada
5. Senior Manager (Rehabilitation and Resettlement), Simhadri Thermal Power Project, Paravada
6. Medical Officer, Primary Health Center, Paravada
7. Mandal Education Officer, Paravada
8. Assistant Director, Panchayat Raj and Rural Development, Paravada.  
\* STPC and NTPC are used synonymously.
9. Director, Institute of Public Sector Management, Andhra University, Visakhapatnam
10. Secretary, SADHANA, Paravada.

### *Problems Faced*

The research team had to pay a number of visits to the STPP, Paravada to get information about the STPP and its community development schemes. The team could get only piece meal information. The lukewarm response of the STPP officials made information and interaction inaccessible to the team.

The team had to pay several visits to the affected villages to get the required data and this, caused a slight delay in the submission of the report.

## Section 2 Key Findings

### *A. Profiles of Affected Villages*

The present chapter is based on the data generated through the employment of participatory research methods like focus group discussions and transect walks. The research team visited all the mentioned villages and conducted mini gram sabhas (village meetings) for focus group discussions giving representation to a cross section of the people. Care was taken to ensure that elder people, agriculturists, agricultural labourers, service caste people, women members of the self-help groups were present at the meetings.

### **Dalaipalem**

Dalaipalem village comprising of 158 households with a population of 580 members is dominated by the 'Kapu' community. Most of them work as agricultural labourers and salt pan workers. Around 10 per cent are agriculturists and the remaining people work as labourers in the salt pans. The village is situated towards the north east of the STPP within a range of two kilometres from the plant. The STPP has acquired 200 acres of agricultural land in Dalaipalem. The village has 1500 acres of salt pans in which a large number of people work for their livelihood, particularly during the summer season. Four villages are dependent on the salt pans of the village. The salt pans used to provide employment for eight months to people (both men and women). The STPP has acquired 675 acres of salt pans resulting in the loss of employment for a large number of people.

As a result of the construction of a residential colony known as Deepanjali Nagar on the eastern side, the distance between Dalaipalem and Vadacheepurupally (head quarters of the block/mandal) has increased. They have to travel nearly five kilometres to reach Vadacheepurupally, which is almost double the earlier distance. The school children are the worst sufferers as they have to walk for more than five kilometres a day to reach school and that is affecting their education. The villagers protested against the children not being allowed to go to school via the residential colony and their efforts bore fruit. The STPP officials are now allowing the school children to go to school through the residential colony. The villagers have no all weather roads, no bus facility. The bus stop is far away from the village and they have to walk three kilometres to take the bus. Earlier a city bus used to ply but the road transport authority due to the bad condition of the road recently withdrew the city bus. The road, which was laid at a cost of 4.2 million rupees, was damaged during the construction of the NTPC due to the frequent movement of heavy vehicles carrying quarry and construction material. The other problem faced by the village is the release of sewage from the NTPC residential colony into the village. This is causing the emission of a bad odour and has become a breeding ground for mosquitoes. There is also a recurrence of malarial fever.

The villagers organized dharnas for 45 days demanding jobs and enhancement of the compensation. The village was once considered as the poor man's Ooty and used to attract the peoples' relatives during the summer season. Now due to the increasing temperature levels and the increase in mosquitoes due to stagnating sewage water in the village the frequency of visits by the villagers' relatives has decreased.

### **Somunaidupalem**

The village is situated just adjacent to the STPP compound wall, which is a few meters away. It consists of 48 households with a population of around 200 people. 'Velama' is the dominant caste in the village.

All the families except three have lost their lands. The villagers used to grow vegetables such as brinjals, tomatoes etc. and there used to be a city bus to transport the produce to the market. Most of these people are dependent on the land and also on the land of other villages. Now, they can find no employment. Earlier each household used to maintain a large number of sheep, goats and cattle, but with the acquisition of their grazing land, hardly one or two families are maintaining any livestock.

During the construction phase, the village was flooded with contract labourers who were brought from outside, as the village is very close to the plant. The villagers used to grow a lot of vegetables for which there was a heavy demand but due to the acquisition of land they lost their livelihood. The yield from the remaining land has come down due to air pollution caused by the NTPC. "Earlier an investment of Rs.8,000 on growing vegetables used to fetch Rs.35,000. Last year it has fetched Rs.300. This is due to fly ash produced by the NTPC. It is damaging the standing crop even banana trees are being affected" lamented one farmer. The villagers are experiencing the effects of air and sound pollution resulting in health problems and also damage to the crops. Accessibility to other villages was blocked due to the plant and the villagers now have to trek around 10 kilometres to reach a nearby village which was two kilometres from the village. Now they have to trek around 12 kilometres to fetch rations from the public distribution store which before the establishment of the NTPC was only a three kilometre trek.

### **Mula Swayamvaram**

The village is situated very close to the compound wall of the STPP. It consists of 141 households with a population of 600 people. 'Kapu' (peasant caste) is the dominant caste group in the village. Most of them work as agricultural labour and quarry workers.

The villagers who used to have work throughout the year are now finding it difficult to get employment, even with the contractors of the STPP. The villagers are experiencing sound pollution and air pollution which are causing health problems such as upper respiratory problems. The land through which the effluents pass is very close to the village and five cattle died after drinking water from the canal. The villagers feel that the water

levels have gone down and that the taste of the water has changed. Wells are either drying up or getting polluted due to the NTPC. The villagers have shown us the damage done to the brinjal and ladyfinger crop due to the fly ash from the NTPC. The villagers feel that jobs are given to the candidates sponsored by the president of the village or by the Member of the Legislative Assembly (MLA).

### **Thikkavanipalem**

This village is situated on the eastern side of the STPP. It is inhabited by the fisherman community. The main occupation of the village is fishing and as such they depend on the sea. 'Vadabalija' is the dominant caste in the village. It has 350 households with a population of nearly 2000.

### **Key event**

The construction of a bridge in the sea for the pumping of seawater to the cooling towers and the release of hot water into the sea is causing damage to the fish in the vicinity. As a result, the fishermen have to travel long distances for fishing and this has become uneconomical. The women, who used to sell the fish, now find no work as the catch from the sea has drastically reduced. Their lives have become miserable after the establishment of the STPP. In the initial stages, the villagers protested against the construction of the bridge. The revenue officials and other authorities persuaded them with promises of jobs, and loans to the fishermen.

### **Gollalapalem**

The village is situated on the eastern side of the STPP at a distance of four kilometres from the plant. It has 120 households with a population of 600 people. The dominant caste is 'Yadava' whose main occupation is cattle rearing.

### **Key event**

The villagers gave land to the contractors on lease for the purpose of hauling sand and the contractors promised to dig the land to a depth of three meters. The land was dug to a depth of 20 to 30 meters. It has caused irreparable damage to the village land. During rainy season it looks like a river and it has also claimed the lives of cattle and children. "Instead of one metre they dug 10-20 metres. And the land has become unusable. The contractors have cheated us" commented one woman, others joined in chorus with her. A railway track has been laid adjacent to the village and the villagers fear that this may cause fatal accidents as the children play on the tracks. They are demanding the construction of a wall by the side of the track that will provide some security and prevent accidents.

### **Thadichetlapalem**

The village is situated at a distance of 2.5 kilometres from the plant towards the south. It has 100 households with a population of 500 people. 'Yadava' is the dominant caste in the village. They used to maintain a large number of livestock. The acquisition of all the surrounding land of the village and the construction of the compound wall on three sides of the STPP resulted in a sharp decline in the number of livestock, the loss of their burial ground and approach road.

When the villagers objected to the acquisition of the burial ground as they had no place for conducting the last rites, the authorities asked them whether they needed the burial ground everyday. Before the land was acquired, the NTPC officials used to say "you can sell milk, vegetables and for your cattle feed you can take grass available in the colony", but after the establishment of the NTPC and the construction of the living quarters the promises were not kept and the villagers are not allowed in to the colony. Open defecation is a normal feature of Indian villages, but due to the non-availability of waste land and the blocking of the village on three sides by the NTPC wall, the village women are facing problems. The villagers are demanding the construction of septic tank lavatories.

### **Kalapaka**

Kalapaka village and the colony are situated on the north western side of the STPP with 250 households and a population of 2000. The village and the colony are dominated by the 'Kapu' community. Most depend on agriculture.

Out of all the villages that have been affected by the STPP, this village has the distinction of getting as many as 24 jobs equivalent to 48 per cent of the total jobs given to the land oustees. The villagers feel that outsiders who had land here got the benefit and they secured more jobs. Some complain that people with three to four cents of land got jobs while families with two-three acres of land did not get jobs.

### **Pandivanipalem**

It is located on the southern side of the STPP at a distance of two kilometres. It has 95 households with a population of 418. The dominant caste is 'Reddy' followed by 'Settibalija'. Pucca houses were constructed. The villagers have no work. Even for earthwork locals were not preferred.

### **Gorusuvanipalem**

The village is located in the south of the STPP at a range of one kilometre from

the plant. It consists of 98 households with a population of 400. Most of them are agricultural workers. The dominant caste in the village is the 'Reddy' community and agriculture is the main occupation, some of them also work as quarry workers. The weather was pleasant before the establishment of the power plant but the villagers feel that after the establishment of the NTPC there has been a change in temperature of the area. The villagers feel that two fire accidents took place during the acquisition process and they relate this with their resistance to part with the land. The village has lost its burial ground and approach road.

### **Narasapuram**

The village is situated on the eastern side of the STPP at a distance of half a kilometre from the plant. This entire village has been lost in the acquisition process and a separate colony has been constructed by the STPP. 'Velama' is the dominant caste in the village. Most of the people are now jobless and the team found them highly emotional. This is the only village that has been completely lost in the acquisition process. In the case of the other villages the power plant authorities acquired the land leaving the dwelling area untouched. The villagers put up some resistance in the beginning and plant officials promised to provide a lot of facilities and a proposed rehabilitation colony that made them vacate their houses. Now, they are complaining that nothing has been provided to them. As their savings dwindle they have become restless. The villagers feel that injustice has been done to them in the allotment of house sites also. The joint/extended families secured one house site only, but villagers feel that married partners should get one site each.

### **Marsivanipalem**

It consists of 40 households. Kapu is the dominant community. The power grid corporation acquired land for erecting transformers to transmit high voltage electricity generated by the NTPC. For erecting transformers, huge trees were felled and the entire land was cleared of trees. As a result the rearing of cattle was very difficult and the village lost a lot of palm trees, which used to fetch them some money. No compensation was paid for the loss of trees. "What the NTPC gave us was smoke and sound. No body was bothered about our welfare" commented one woman.

## B. Results

The data collected from the structured schedule administered to the 107 respondents is presented in this chapter. Out of 107 respondents 70 were males and the rest i.e., 37 were females. The respondents were selected from a cross section of people such as people who have been displaced from their land, landless labourers, artisans, service castes, senior citizens, self-help groups etc. Their social characteristics are as follows:

### I. Social characteristics

The age details of the respondents reveals that around 76 per cent of the respondents are from the productive age group of 20 - 40 years. The elderly and the young constitute around 20 per cent and four per cent respectively.

The literacy levels of the respondents show that a majority of them are illiterate (67 percent) and 15 per cent are educated up to the primary and upper primary levels. Caste details of the respondents reveal that two-thirds of the respondents belong to the backward class category and another one-third belong to other caste groups.

The occupation details indicate that around 36 per cent of them are agricultural labourers while 30 per cent are cultivators. Those who depend on fishing constitute around 9 per cent, service castes formed 11 per cent and the non-working category accounts for 8 per cent.

Table 1: Social Characteristics

Variable	Frequency (n = 107)
<b>Age</b>	
Below 20 years	06
20-30 years	29
30-40 years	31
40-50 years	20
50-60 years	12
Above 60 years	00
<b>Education</b>	
Illiterate	68
Primary	10
Upper primary	05
Secondary	16
Inter	02
Degree	02
Technical (ITI)	04
<b>Caste</b>	
OC	37
BC	68
SC	02
<b>Occupation</b>	
Business	02
Cultivation	31
Coolie (Porter)	37
Fishing	10
Housewife	05
Service (Caste)	08
Rearing of livestock	05
Miscellaneous	09

## II. Land holding and acquisition

The details such as land holding, income, land acquired and compensation etc., are discussed hereunder.

### a) Land holding and income

The land holding pattern of the respondents reveals that 16 percent of them do not have any land. Around 28 per cent have less than 50 cents, another 16 per cent have half to one acre of land. Around 23 per cent have one to two acres of land. The rest i.e., 17 per cent have land between two and five acres.

The income from the land reveals that around 22 per cent of the respondents have an income of Rs. 1,000 to Rs. 5,000 and another 33 per cent have an income of Rs. 5,000 to Rs. 10,000/-

### b) Land acquisition and compensation

The land acquired, the time taken for the compensation to be given and the basis for compensation are discussed in this part.

Land acquired by the NTPC showed that 40 per cent of the respondents have lost land to the extent of 50 cents while another 30 per cent have lost 50 cents to one acre of land. Another 20 per cent have lost one to two acres of land. Only 10 per cent of the respondents have lost two to five acres of land.

Table 2 : Land Holding & Income

Variable	Frequency
<b>Land holding (in acres) (n = 107)</b>	
Nil	16
< - 0.5	17
0.5-1	24
1-2	30
2-3	14
3-4	05
4-5	01
<b>Income (in rupees) (n = 91)</b>	
1000-5000	36
5000-10000	30
10000-15000	07
15000-20000	10
20000-25000	03
25000-30000	05

Table 3 : Land Acquisition

Variable	Frequency (n = 84)
<b>Land acquired (in acres)</b>	
< 0.5	32
0.5-1 acre	28
1-2 acres	17
2-3 acres	06
3-4 acres	00
4-5 acres	01
<b>Basis for compensation</b>	
Individual	35
Family	49
<b>Time taken for compensation</b>	
Below 1 month	30
1-3 months	28
4- 6 months	17
Above 6 months	09

With regard to the basis for compensation paid by the STPP, the perceptions of the respondents show that around 60 per cent of them feel that the land has been acquired and compensation paid on the basis of joint holdings while the remaining i.e., 40 per cent are of the opinion that the acquisition of land was on the basis of individual holdings.

With regard to the time taken for the disbursement of compensation, it has been found that 90 per cent of the respondents reported that compensation was paid within six months of the acquisition of the land.

### **III) Details of compensation and utilization**

#### **a) Payment of compensation**

The STPP provided a compensation of Rs.2.25 lakhs per acre for private land and Rs.1.57 lakhs for government assigned land. For other encroached land Rs. 0.78 lakhs was paid. The following table explains the amount of compensation received by the beneficiaries.

Out of the 84 displaced persons 78.6 per cent received a compensation of less than Rs.3 lakhs and the remaining i.e., 21.4 per cent received more than Rs.3 lakhs. The present classification i.e., < 3 lakhs and > 3 lakhs is made because of the stipulation made by the STPP that those who received more than Rs.3 lakhs were not eligible for employment in STPP.

**Table 4 : Compensation Received**

<b>Compensation (in rupees)</b>	<b>frequency (n = 84)</b>
Below 50,000	14 (16.7)
50,000-1,00,000	16 (19.4)
1,00,000 - 2,00,000	21 (25.0)
2,00,000 - 3,00,000	15 (17.8)
3,00,000 - 4,00,000	10 (11.9)
Above 4,00,000	08 (9.5)

#### **b) Utilization of the compensation**

The details of the utilization of the compensation amount received by the displaced persons are as follows.

A majority of the respondents (52.4 percent) have spent the compensation amount on the construction of houses, around 47 per cent of the respondents had cleared their debts and an equal percentage of them spent it on performing the marriages of their daughters.

An insignificant percentage of the respondents have purchased land with the compensation money. Of those who spent the money on construction of houses, very few could complete their houses and in a majority of the cases the houses were incomplete for want of money. Around 12 per cent of the respondents have wasted the money on vices. Inquiries from the respondents revealed that most of the money has been spent on unproductive expenditure and whatever amount has been saved is used for the maintenance of the families as they did not have any employment to fall back upon.

**Table 5 : Details of The Compensation Amount Spent**

Utilisation of compensation	Frequency*
Cleared debts	40 (47.6)
Purchased land/site	01 (1.2)
Constructed house	44 (52.4)
Performed marriages	40 (47.6)
Invested in banks/ post offices	13 (15.5)
Purchased gold	10 (11.9)
Drinking, womanizing and other bad habits	10 (11.9)

\* Multiple Responses

#### **IV) Details of days of work and nature of employment**

The details and nature of work before and after the STPP are specified here-under.

##### **a) Days of work**

It has been observed that 67 males and 65 females used to find employment for nine months to a full year before the establishment of the STPP. Now, no respondent has reported that they can find employment for nine to twelve months in a year. After the establishment of the STPP the number of days of work has drastically come down to one to three months.

**Table 6 : Days of Work**

Days of work	Before STPP		After STPP	
	Men	Women	Men	Women
Below 3 months	0	0	28	01
3 to 6 months	14	1	50	11
6 to 9 months	26	18	03	11
9 months and above	67	65	0	0

## b) Nature of employment

Table 7: Employment Details

Days of work	Before STPP		After STPP	
	Men	Women	Men	Women
Work on own land	159	114	35	19
Work on the land of villagers	213	167	30	16
Work on the land of neighbouring village	87	76	53	33
Service castes	18	17	06	03
Work on the salt pans of own village	31	22	07	00
Work on the salt pans of other villages	70	45	07	05
Fishing	16	07	05	02
Rearing of livestock	07	06	03	01

In the villages most of the people work their own land. Before the establishment of the STPP around 159 men and 114 women from the respondents and their family members used to work on their own land, whereas now only 35 men and 19 women work on their own land. Around 213 men and 167 women used to work on the land of other villagers within the same village. Now, only 30 men and 16 women have found employment in the same village. Around 87 men and 76 women used to find employment in the neighbouring villages while now only 53 men and 33 women find employment in the neighbouring villages. The data clearly indicates that a large number of people lost their livelihoods after the establishment of the STPP.

### V) Impact on health, environment and family

#### a) Impact on health

The commonly reported health problems have been incorporated in the table.

The data indicates that 82.2 per cent of the respondents have reported that the incidence of

Table 8: Health Problems

Health problems	f*	Rank
Recurrent viral fevers	88 (82.2)	I
Respiratory problems	34 (31.8)	IV
Burning of the eyes	49 (45.8)	II
Swelling of glands	18	
Skin problems	35 (32.7)	III
Other problems	04	

\* Multiple responses

viral fevers has gone up after the commencement of the STPP. Around 31.8 per cent reported respiratory problems and 45.8 per cent reported severe burning of the eyes. Another 32.7 per cent reported skin problems.

**b) Impact on environment**

Eighty per cent of the respondents reported that there is deafening and unbearable noise causing hearing impairment. Another 60.7 per cent reported that fly ash released by the STPP is causing air pollution. More than half of the respondents reported that the water pollution has gone up (57.9 percent) and there was damage to the crops and yield (52.3 percent) in these villages. With regard to the temperatures the respondents reported that there is a substantial increase in the temperature (65.4 percent) and there is no rainfall (68.2 percent).

**Table 9 : Environmental Problems**

<b>Environmental problems</b>	<b>f*</b>	<b>Rank</b>
Deafening noise	86 (80.3)	I
Dust/Ash	65 (60.7)	V
Scarcity of water	62 (57.9)	VI
Damage to the crops/trees	56	
Increase in temperature	70 (65.4)	IV
Decrease in rain fall	73 (68.2)	III
No grazing land	80	II
Loss of fish due to release of effluents	12	

\* Multiple responses

**c) Impact on family**

Around 93 per cent of the respondents reported the loss of livelihood while 53.3 per cent reported the loss of social status. Another 51.4 per cent of them reported the occurrence of family problems due to the lack of gainful employment of the head of the household. Around 18 per cent of the respondents reported that they commute daily to the city in search of employment.

**Table 10 : Impact on Family**

<b>Impact on family</b>	<b>f*</b>	<b>Rank</b>
Loss of livelihood (93.4)	100	I
Working in the city	19 (17.8)	
Loss of social status (53.3)	57	II
Could not send children to school	02	
Problems due to lack of employment of the head of the household	55 (51.4)	III
Other problems	03	

\* Multiple responses

**d) Impact on village**

More than three-fourths, i.e., 76.6 per cent reported the loss of grazing land and another 45.8 per cent of the respondents revealed that they had lost their burial ground. Around 30 per cent reported the loss of approach roads and another seven per cent reported the loss of the playground.

**Table 11 : Impact on Village**

Impact on village	f*	Rank
Loss of burial ground	49 (45.8)	I
Loss of play ground	08	
Loss of approach road	30 (29.0)	II
Loss of grazing land	82 (76.6)	

\* Multiple responses

**VI) Multi-party accountability**

The perceptions of the respondents with regard to the role played by the P.R. members, the STPP and government officials; MLAs and NGOs have been elicited to find out their accountability.

It has been found that around 70 per cent of the respondents were dissatisfied with the ward members and sarpanches of their respective villages. Around 60 per cent of the respondents reported dissatisfaction with the Village Secretary, Mandal Development Officer and Mandal Revenue Officer. The respondents were highly dissatisfied in all respects with the role played by the MLA with regard to the accountability of the STPP officials; it has been observed that 62 per cent of the respondents are highly dissatisfied while another 25 per cent expressed dissatisfaction. The people perceived

**Table 12 : Multi-party Accountability**

Member	Highly satisfied	Satisfied	No comment	Dissatisfied	Highly dissatisfied
Ward member	0	22	11	74 (69.1)	0
Sarpanch	0	21	09	75 (70.0)	02
V.A.O.	0	06	32	67	02
M.D.O.	0	09	36	63	06
M.R.O	0	04	35	63	06
MP	0	09	25	60	13
MLA	0	01	32	20	54
NTPC officials	0	05	08	27	67
NGOs	07	74	25	0	0

that the STPP officials shirked their responsibilities and their accountability ended with the payment of compensation. During the initial stages a lot of promises were made by the STPP to the villagers with regard to community development projects like the construction of school buildings, bus shelters, the laying of roads, the provision of health facilities, the digging of bore wells etc. The reality falls short of the actual promises. The villagers felt that they were not given any input about the consequences of the thermal power plant and as such they are ignorant about it.

On the other hand the STPP officials contend that they have offered a high rate of compensation i.e., 2.25 lakhs per acre for land whose market value was around Rs.40,000 to Rs.1 lakh. They provided a high rate of compensation with the belief that with that amount the land oustees can purchase more agricultural land elsewhere. They claim that they never promised any jobs to them as the unit is highly technical and a capital intensive one. With regard to the non-government organization, more than three-fourths expressed satisfaction with Sadhana, an NGO which has been working in the area for the last 10 years.

### **Section 3**

## **Emerging Issues**

Environmentally sustainable industrial development is a boon to any society. Industrial development is a result of concomitant changes that take place globally and societal development must be preserved. The fact that industrial development results in environmental degradation and the displacement of people, has proven crucial for the protection of civil rights and empowerment.

The present study was carried out in Paravada mandal where the Simhadri Thermal Power Project was commissioned displacing people and causing environmental degradation. The data on various issues relating to multi-party accountability of the stake holders and citizens initiatives were gathered from a structured schedule administered to 107 respondents and focus group discussions held in the affected villages. The key issues emerged from findings of the study are discussed hereunder.

### ***I. Loss of livelihood***

#### **a) Loss of agricultural land**

The STPP has acquired 3158 acres of land out of which 2086 acres i.e., 66 per

cent belonged to private individuals and the remaining 1072 acres belonged to the government. Out of 1072 acres of government land ... 356 acres was designated encroached upon by individuals in the affected villages for which compensation was also paid by the STPP.

As a result of the above acquisition, 4173 people have lost the land, which they were dependent on before the establishment of the STPP.

#### **b) Loss of grazing land**

A total of 716 acres of land used by these villages for community and common purposes such as grazing land for cattle and the burial ground has also been lost as a result of the acquisition of land by the STPP. Before the establishment of the STPP, the villagers used to maintain large numbers of livestock such as buffaloes, cows, sheep and goats for their livelihood. The number of cattle and sheep and goats has come down steeply due to the acquisition of the village *porumboku* land by the STPP. This has put a lot of strain on their income generating activity.

#### **c) Death of fish**

The STPP has adopted a unique system of using seawater for the purpose of cooling the towers for which a make up water system pump house was built on the Thikkavanipalem village shore (part of the Paravada shore). It was linked to the main plant through a pipeline. They have built a 750 meters long bridge into the sea and also a bore 12 meters deep. This has created problems for the fishermen. The fisher folk who used to get lots of fish before the construction of the bridge are now finding it difficult to get fish in its vicinity. They feel that the water released from the cooling towers has a grease component in it and the temperature of the released water is high which is causing the death of the fish in the surrounding areas.

“Earlier we used to get all varieties of fish but now we hardly find fish near the coast. As a result we have to travel longer distances using motor boats and incurring a lot of expenditure on diesel and thus eroding our income” one fisherman lamented.

The construction of the 750 meters long bridge in Thikkavanipalem is also leading to problems. The nets used for catching fish are pulled by the current and waves of water and are getting spoilt by coming into contact with the pillars constructed for the bridge supports. This is also disadvantageous to them, as they have to spend more money on repairing the nets. When the research team visited the area, they found the fishermen repairing the nets damaged due to the above reason.

The fishermen said, “Had we known the consequences of constructing a pump house, we could have prevented its construction”. The villagers also demand that some amount of compensation is payable to them because of the loss of fish vis-à-vis their livelihood. They also said the bridge was constructed in an area where fish was abundantly available and they had protested against the construction of the bridge at the present place because it may damage the aquaculture. Yet, the STPP officials had insisted and forced them to withdraw the agitation by promising them jobs. They never knew that the treated water would be hot and contain chemicals.

**d) Loss of livelihood for agricultural labour and service castes**

The acquisition of 3158 acres by the STPP has also affected the livelihood of a number of families who used to work on the land as agricultural labourers/coolies earning around Rs.70/- per day. They are now jobless or have lost their livelihood. These findings indicate that a few people migrated to the nearby urban areas in search of manual labour.

The presence of the *jajmani* system in India used to take care of the needs of the service castes. The landed people used to provide paddy and pulses annually in consideration of the services provided by the service castes like washer men, barbers, smiths etc. These caste groups were also severely affected due to the loss of land.

**e) Loss of livelihood for salt pan workers**

The salt pans of Dalaipalem village used to provide employment to both men and women of the village and its neighbouring areas. The acquisition of the salt pans led to thousands of people from these areas losing their livelihood, mostly women.

The non-availability of fish, the lack of work in the salt pans and the acquisition of land by the STPP including the loss of grazing land has virtually thrown the women out of employment and confined them to the house. Earlier, both men and women used to work on the farms and salt pans for maintaining the families. Now both the wife and husband are unemployed and that is causing problems for the families particularly for maintaining their livelihood.

## ***II. Displacement***

The STPP has acquired 3158 acres of land belonging to 11 revenue villages consisting of 13 panchayats spread over three mandals. They have designed the acquisition of land in such a way that except for one village, which was

completely affected, the inhabited areas of the other villages were left untouched and the land of these villages was acquired to avoid the problems of dislocation and displacement. As a result, the livelihoods of the villagers were affected and the villagers were left in dire straits. This has caused a lot of problems to the villagers who have lost their land and lost respect and prestige and come on par with the landless labourers. They feel that they are being marginalised.

### ***III. Loss of common properties***

#### **a) Digging of hills**

Hills are considered to be the natural resources of a country, which prevent the erosion of the land and preserve environmental equity in terms of the maintenance of the ecological balance. It has been found that 13 hills surrounding these villages were degraded to the maximum extent possible. They were indiscriminately dug and excavated by the contractors without any resistance from the villagers, thus causing environmental degradation. The extent of damage done to the hills, which formed a part of village property, cannot be compensated.

The village panchayats have received a paltry amount for allowing the contractors to excavate the hills for gravel and canker. This is substantially very low compared to the loss or damage caused to village property. The villagers averred that the village panchayat members were in tandem with the contractors and minted money for themselves, sacrificing the interests of the village.

#### **b) Digging of agricultural land**

The research team found a large stretch of agricultural land in the village of Gollalapalem being dug to a depth of 20 to 30 feet. It has been learnt through interviews, that the villagers allowed the contractor to dig the land to a depth of one or two meters for the purpose of earth work. The villagers were paid Rs.1,200 per cent for digging of the agricultural land. They complained that most of the digging work was carried out at night without the knowledge of the villagers and the damage caused to the agricultural land is irreversible.

During the rainy season, the entire stretch of land looked like a river and also caused the deaths of their children and cattle. The STPP officials pleaded ignorance about this and affirmed that they are not accountable for the damage done by the contractors. Even though the STPP has no direct role in such an act, it cannot escape from the vicarious responsibilities of ensuring environmental maintenance or conservation.

**c) Loss of burial ground**

It has been found that in three villages the burial grounds which are considered a village common resource were lost in the process of acquisition. As death is inevitable for any human being the performing of the last rites is the duty of the family. The loss of burial grounds in these villages is creating hardship for them, as they have to take the corpse for longer distances for the last rites. It has been observed from the accounts of the villagers of Thatichetlapalem that when they insisted on keeping the burial ground, the authorities questioned them as to whether deaths took place every day.

**d) Loss of roads and interconnectivity**

Before the establishment of the STPP, these villages were connected with approach roads and the mobility of the people from one village to another was frequent. With the establishment of the STPP the villagers of Thatichetlapalem, Dalaipalem, Somunaidupalem and its hamlets lost contact with other villages and the public transport buses, which used to run, were withdrawn by the A.P. State Road Transport Corporation.

A well-laid road built with NABARD funds at a cost of Rs.56 lakhs in 1995-96 from Jajulapalem to Kalapaka (via Dalaipalem) was badly damaged due to the frequent movement of heavy vehicles carrying quarry materials for the construction of the plant. The damage done to the road has resulted in the withdrawal of city bus No.544, which used to ply on this road and is now greatly inconveniencing the people of these villages. The construction of fencing and border walls by the STPP has also prevented the movement of people from one village to the other and at present the villages were inaccessible.

#### ***IV. Employment***

**a) Employment by the STPP**

The respondents reported that during the land acquisition phase the STPP officials promised jobs to the land oustees. After the commissioning of the plant, it was observed that only 55 people from among the land oustees were provided with jobs. They put a condition that the land oustees, who had received more than Rs.3 lakhs, were not eligible for jobs. The people were not informed about the Rs.3 lakhs stipulation during the acquisition stage. As a result most of them got their compensation on the basis of their joint holdings. The land acquisition officials also said that they did not know of this condition at the time of acquisition.

The ceiling of Rs.3 lakhs has made a large chunk of the land oustees ineligible for jobs. In India, land is usually in the name of the head of the household and all the sons are co-partners of the property. In a majority of the cases the partition deeds are not made till the death of the head of the household.

The STPP officials claim that providing jobs is not a part of their package as the STPP is highly automated and capital intensive and does not require much manpower. The officials claim that the high amount of compensation offered for the land is because of the non-provision of employment.

#### **b) Employment by contractors**

During the project construction stage, the contractors employed a large number of non-locals who were brought from other states, mostly from Orissa, Madhya Pradesh etc., thus denying jobs to the local people. The locals had high hopes of getting work during the construction stage, but the contractors belied these hopes. Some of the respondents have complained that they have not been given preference even for the unskilled and manual jobs. The contractors preferred non-locals to locals as they feared that locals might create problems and the work would be done at a snails pace and deliberately avoided the locals. The contractors also did not face any resistance from the locals as the members of the panchayat, who have been charged by the locals of being in connivance with the contractors, pacified the locals.

The STPP officials also did not insist on the contractors employing local people, as they were interested in the completion of the work without any trouble.

#### **c) Indirect employment**

The establishment of any industry entails the creation of indirect employment for many people through its ancillaries and residential colonies. The STPP has no ancillary industry for providing employment.

The villagers expected that the residential quarters of the STPP might offer some indirect employment to them like petty business, vegetable vending, selling of milk, firewood and the utilisation of women for domestic services. The residential quarters are made like a fortress and no body is allowed inside the colony. The security personnel refuse to give gate passes to the locals. Even now, the locals were not given any passes to meet the contractors to get some work that was being done by the contractors.

## *V. Pollution*

### **a) Air pollution**

During the process of generating electricity, a lot of fly ash is released causing air pollution. The villages namely Mula Swayamvaram and Somunaidupalem, which are very close to the STPP, bore the brunt of the air pollution. Their house tops, windows, tumblers, doors and other furniture were covered with one-inch of ash. This was brought to the notice of the District Collector. The Collector directed the A.P. Pollution Control Board to measure the pollution levels in the above villages. The research team's enquiries with the A.P. Pollution Control Board officials revealed that the pollution levels were above normal in both these villages.

### **b) Sound pollution**

The villagers reported that the STPP produces deafening noises during the afternoons for a couple of hours. During that period, nothing can be heard and they fear that this may lead to hearing impairment. The noise is so frightening it terrifies the infants and may lead to deafness.

### **c) Water pollution**

The effluents released by the STPP in to the large drains are causing damage to the water resources. The respondents reported that the water has become unpotable. There has also been a change in the colour of the water and the water levels have also been depleted. The villagers said that the water in the wells in the vicinity of the two villages is contaminated.

The effluents discharged by the STPP into the large drain are causing problems. The respondents have reported that five buffaloes died after drinking the water in the drain and even the media has reported this fact. Yet, the STPP officials did not respond.

The sewage released from the residential colony of "Deepanjili Nagar" of the STPP is affecting the lives of the villagers of Dalaipalem as the foul smell emitted is affecting the environment and creating a breeding ground for mosquitoes.

## *VI. Health*

It has been reported by the villagers of Somunaidupalem, Mulaswayamvaram and Dalaipalem that the incidence of viral fevers has gone up which has made them consult doctors and Registered Medical

Practitioners (RMPs) frequently resulting in an increase in medical expenditure. The recurrent viral fevers, burning of eyes, skin problem and upper-respiratory infections were some of the health problems reported by the villagers.

The P.H.C. doctors, who have said that there has been a substantial increase of the same after the establishment of the STPP, have also corroborated the presence of upper-respiratory infections as reported by the villagers.

During the plant construction phase, the entire area was flooded with migrant labour employed by the contractors. The large numbers of outsiders put a lot of strain on the water resources, sanitation and hygiene and also caused health problems. The presence of HIV positive cases in Vadachipurapalli village have been reported and AIDS has claimed four victims.

### ***VII. Agriculture***

In some of the villages, which are very close to the STPP, the cultivation done on the remaining land has become unproductive. The farmers grow vegetables such as brinjals, tomatoes, ladyfingers, chillies etc. and the yield from their crops has come down drastically. The fly ash is causing damage to the standing crops and the research team observed white patches on the leaves.

Earlier, they used to grow large quantities of vegetables that made the authorities run a bus from these villages to Visakhapatnam city for the marketing of the vegetables. Now, the situation has been reversed and the villagers are buying the required vegetables from outside.

### ***VIII. Gender issues***

The acquisition of the agricultural land and the salt pans and the absence of fish in the Paravada shore has led to a loss of employment for the women leading to the feminisation of poverty and the marginalisation of women. Women, who used to work as labourers in the agricultural lands and in the salt pans, have no work now and are idle. The economics of the families, which used to be maintained by the earnings of both the males and females, are being affected as a result of the loss of employment. The presence of the husband or breadwinner in the family without any work is leading to family disputes and also to the loss of respect in the community.

The plight of old women and widows is pathetic as they are dependent on

the earnings of their children, whose incomes have come down substantially.

Due to the loss of income, the family members are forced to send their children and adolescent girls for work in the salt pans and child labour has increased.

### ***IX. Strategies adopted by the villagers***

The villagers during the initial periods of the land acquisition process resisted the government's move to acquire the land at a cheaper rate. They organised themselves, put their case before the revenue officials and ultimately secured higher compensation to the tune of Rs.2,25,000. During the construction stage, sporadic attempts were made by them to bring pressure on the contractors to employ locals/land oustees by blocking the movement of vehicles carrying quarry materials. Most of the protests were confined to the village or individual level and did not take the form of an organized struggle for the want of leadership. The villagers reposed their confidence in the leadership of the local panchayat members and sarpanches who worked against the interests of the villagers. The government constituted the Village Development Advisory Committee in 1999 for the NTPC affected villages and the committee is packed with sarpanches (heads of village local bodies), MLAs and MPs and government officials and the actual land oustees did not get fair representation on the committee. The villagers demanded that the committee should be reconstituted giving fifty percent representation to the land oustees. The villagers of Gollalapalem, protested against the laying of a railway line in the village and the air pollution caused due to the fly ash, by squatting on the railway line, to block the movement of railway wagons.

Mulaswayambuvaram, Somunaid-upalem villages situated at a stone's throw from the chimney and cooling towers of the STPP boilers, which bear the brunt of air, water, noise pollution, are vociferous in their demand to relocate the village away from the plant. These villagers relentlessly pursued the matter of air pollution, which was causing severe health problems, and low yield in agriculture, with the authorities and the press also played an important role in highlighting the problems of pollution faced by these villagers.

Their pleas echoed in the NTPC affected Village Development Advisory Committee meeting held on Sept. 16, 2003 and the collector ordered the monitoring of the pollution levels in the two villages by the Andhra Pradesh Pollution Control Board. The Pollution Control Board conducted studies and found the pollution levels in these two villages above normal.

## *X. Accountability of stakeholders*

The multi-party accountability of different stakeholders as perceived by the people are as follows:

### **Simhadri Power Plant**

The National Thermal Power Corporation's Simhadri Unit (STPP) acquired around 3000 acres of land and paid a compensation of Rs.2,25,000 for the land with clear title and 75 per cent of 2,25,000 was paid to assigned land. During the acquisition process, the villagers claimed that the STPP officials promised to provide one job to each family and a plethora of infrastructural facilities to the affected villages that included the laying of roads, bore wells, bus shelters, schools, septic tank lavatories, medical facilities, street lighting, vocational training institutions and cooperative societies. The villagers unequivocally aver that these promises were observed more in breach than in adherence. Except paying the compensation for the land that has been acquired, the NTPC did not do much for these villages. The study probed the promises made by the STPC and the extent to which these were fulfilled. It has been found that the STPP promised to provide as many bore wells as required by the villages but only 14 bore wells were provided in eight villages, unfortunately four of these are not working. Community centres were promised in seven villages but only one village community centre was provided (Thatichetlapalem). Approach roads to villages were promised but were only provided for two villages. Street lighting was promised to the villages, but only one village was provided a lamp post that too with out the supply of electricity. School buildings were promised to seven villages but only one school was established in one village. Temples were promised in five villages, but only one village got a temple. Only 49 families were provided financial assistance for the construction of low cost septic tank lavatories, which had been promised to all families. Besides these, water tanks, retaining walls, dispensaries, vocational training institutes were promised, but in practice what has been provided fell far short of the promises made.

The offer of one job for one family was reported to have been made by the plant officials and around 50 jobs were given to the project affected families but, the rest were denied jobs. The STPP officials deny having made any such promises particularly one job for one family. They say that as the plant is a highly technical unit involving less man-power, the provision of employment was not included in their package and that was the main reason for offering such high compensation for the land whose market value ranged from Rs.40,000 to Rs.1,00,000.

The villagers felt the NTPC not only denied jobs to the land oustees in the plant, they did not insist that the contractors who undertook the work, should employ the locals/land oustees. After the commissioning of the plant, the contractors are still doing some work and the villagers wanted to meet the contractors in the plant in search of jobs. The villagers expected the plant officials to issue gate passes to them so that they could enter the premises and get some jobs on a daily basis with the contractors. To their dismay they were not allowed inside the plant and gate passes were denied to them. The research team members also discussed these two issues with the Relief and Rehabilitation Department officials of the STPP. One official said “we do not allow ordinary people to enter the plant as it has assets worth thousands of crores (one crore is equivalent to 10 million) and they pose a threat to the security of the plant.” The STPP officials' refusal to issue gate passes to the locals who have been displaced from their lands to secure work with the contractors created resentment among them and it was sometimes manifested in protests, blocking the movement of trucks carrying quarry material from the vicinity and occasionally in agitations.

Answering the issue of non-employment of locals by the contractors during the project stage, the NTPC official who did not want to be quoted said “there was an agreement between us and the contractors which stipulated that 50 per cent of jobs must be given to displaced persons”. He maintained that “notwithstanding the fact that locals were not employed, they did not raise the issue with the contractors as the work was going on at a faster rate and what the industry needs is timely completion of work and when that is going on smoothly, they did not see any reason for their interference on insisting on the contractors employing locals”.

The denial of employment to the project affected families, the NTPC not insisting that the contractors employ displaced persons, the NTPC's refusal to issue gate passes to them so that they could get employment with the contractors, the unfulfilled promises, the indifferent attitude of the management to the problems of pollution made them see the NTPC officials in a negative manner.

The NTPC/STPP officials are not only indifferent to the problems caused by pollution to the villagers, but they are also not providing any safety devices to the workers in the plant. A news item that appeared in the local vernacular newspaper (EENADU 5-4-03) is a testimony to the indifferent attitude of the NTPC officials. The news item is in relation to the non-provision of an exhaust system to release dust while sending coal from the hopper to the

boilers. One of the workers working in the plant who is suffering from respiratory problems due to the absence of the exhaust system made a complaint to the Chief Minister bringing this to his notice. The office of the chief minister sent the complaint to the NTPC officials for its redressal. The NTPC officials instead of looking at the matter positively removed him from service. He said that he was removed from the service not because of the fact that he had made a complaint to the Chief Minister, but because he brought to light the fact that there was no exhaust system in the STPP.

'Sadhana' an NGO operating in the area for the last 20 years has been active ever since the publication of the notification establishing the thermal power plant by the National Thermal Power Corporation in Paravada ( a wholly central government owned corporation). They had started organizing workshops, meetings with professors of Geology and Environmental Sciences of Andhra University and legal experts and took them to the project area and conducted meetings. Cultural shows depicting the likely environmental problems that may emerge with the establishment of the power plant were also organized in the affected villages. An association with all the villagers likely to be affected was also formed.

With the increasing realization among villagers that the acquisition of land was imminent, Sadhana started motivating the villagers not to accept the paltry sum offered by the government in the initial stages. Sadhana with the help of villagers conducted rallies and dharnas before the District Collector's office and the public hearings conducted by the revenue officials with regard to the compensation payable to the land oustees failed because of the awareness created by Sadhana with regard to the compensation or rate of land. As a result of the failure of the negotiations with the officials, the matter came to the notice of the Chief Minister and ultimately they agreed to pay Rs. 2,25,000 per acre for *patta* land, and for other lands like assigned land, it was 75 per cent of the compensation paid to the *patta* land. The advocacy and awareness camps conducted by Sadhana paid dividends in the form of higher compensation to the land oustees. Sadhana is conducting thrift and credit activities in the villages affected by the NTPC and is organizing 100 self help groups consisting of 2,000 women members in 33 villages (including the villages affected by the NTPC). It is also organising non-formal education and child labour schools. It has also taken up the organization of unorganized labour like agricultural workers, quarry workers and fishermen; with the help of Water Aid Support, an integrated water and sanitation hygiene education project was taken up. It networks with the Panchayati Raj representatives at the village and mandal level and it conducted workshops for the village level president or the panchayats and sarpanches (presidents of

the village level local body) for effective functioning with the support of PRIA.

Sadhana made its presence felt in all the affected villages and its team of dedicated workers has a very good relationship with the people and the villagers hold the organization in high esteem. The good rapport maintained by the organization facilitated the conduct of the present study. The villagers expressed satisfaction with the role played by it in espousing their cause and it is viewed by all the villagers as the only one grassroots organization which is in constant touch with the villagers, frequently bringing experts in the fields of environmental studies, geology and law and creating awareness among the affected villages. Its work in the fishermen villages like Tikkavanipalem, Mutyalammapalem is praiseworthy. The fisher folk belonging to these villages were organized and made a part of a national federation of fishermen. A number of awareness camps were conducted in these villages. Fr. Thomas Kochori, an activist working with fishermen was also brought to these areas. Sadhana with PRIA conducted a study on the occupational health hazards of salt pan workers.

### **Panchayati Raj Members**

The villagers cutting across caste lines expressed dissatisfaction with the role played by the Panchayati Raj (PR) members and the local member of the Legislative Assembly. The reason for their dissatisfaction stems from the fact that the PR members and the local MLA are indifferent to the sufferings caused by the NTPC in denying them jobs, the refusal of the contractors to employ locals and the problems of pollution. The villagers say that the PR members while acknowledging the right of the contractors to employ outsiders in public, managed to get their own people employed by the contractors. The villagers quote a number of cases or instances where the PR members took money from the villagers for a job in the NTPC or with the contractor. Not only employment, but other problems like sound and air pollution, health problems of the villages did not receive the necessary attention from the PR members. Despite a number of appeals made by the villagers to them they have not brought them to the notice of the higher authorities. The villagers say that because of the connivance of the PR members with the contractors the extent of damage to the hills in the vicinity was much more. They also said that the MLA's nephew secured the mining rights and he minted money by giving unchecked freedom to the contractors to dig the hills to the maximum extent possible.

It has been observed that there has been disagreement between the panchayat and the community. Panchayati Raj members viewed the estab-

ishment of the NTPC as a God sent opportunity to make money while it has actually played havoc with the lives of many villagers, exposing them to the negative effects of the plant.

### **Land acquisition**

The land acquisition for the Simhadri Power Plant commenced in 1997 and continued till 2001. The revenue department which was entrusted with the responsibility of acquiring land had also set the cut off date as 31-12-1996 to avoid the possibility of outsiders taking advantage of the higher amount of compensation being offered by the government. The land was acquired and compensation paid based on the revenue records as they existed on 31-12-1996. Five units for land acquisition were constituted involving five deputy collectors and 24 revenue inspectors for the acquisition of land and a total of 3,139.87 acres of land was acquired. Initially a compensation of Rs. 90,000 was offered for the land, but it went up to Rs. 2,25,000 as a result of the villagers' struggles and the intervention of the Chief Minister.

The land acquisition process received flak from the respondents and the villagers entertain a feeling that the revenue officials cheated them. The process of land acquisition has placed a majority of the affected villagers in a disadvantageous position and made them ineligible for employment in the NTPC. In India immovable property usually is in the name of the head of the family (generally a joint family) and all the sons are co-partners of the property. During the acquisition process the land held by a joint family which was in the name of the head of the family was acquired and compensation paid to the head of the family even though his sons had established separate families and the property had been divided among them. The land officials continued acquiring land in the above manner ignoring the protests made by the other family members, that land should be acquired based on individual holdings but the land revenue officials pacified them saying that this would not do any harm to them and jobs would be given to the sons having a share in the property.

The NTPC at the time of recruiting the displaced persons, had put a condition that those who received Rs. 30,000 or more were not eligible for employment in the NTPC. This condition and the refusal of the revenue officials to acquire land on the basis of individual holdings has virtually destroyed any hopes the displaced persons had of being employed in the NTPC.

During the second phase of land acquisition, the displaced persons were careful and got the land acquired in their names (individual holding). As a result they secured employment in the NTPC. The following example illustrates how the land acquisition process placed them in a disadvantageous

position.

**Ex.:** A family consisting of parents and three married sons has three acres of land. The land is in the name of the father. No formal partition took place. Each son is cultivating 0.75 acres of land.

Acquisition of this land which is in the name of the head of the household results in an earning of  $2.25 \times 3 = \text{Rs.}6.75$  lakhs. The father gets Rs. 6,75,000. The father does not get a job because the amount of compensation received by him is above Rs. 3,00,000 his sons are not eligible for jobs because the land is not in their names. If the same property is acquired on the basis of individual holdings (in the name of the sons) each son parts with 0.75 acres of land and gets an amount of Rs. 1,88,750 as compensation and a job in the NTPC.

The displaced persons who were careful during the acquisition process benefited and secured jobs in the plant, while others whose land was acquired during the first phase did not get any such benefit.

The land acquisition officials were contacted to elicit their views. The *tehsildar* who took part in the acquisition process said that they never knew that the NTPC was going to put the condition of Rs.3,00,000 which made the majority of the displaced persons ineligible for a job.

## Suggestions

Based on the findings and the peoples' perceptions, the following suggestions are made.

1. The adjacent villages of Mula Swayamvaram and Somunaidupalem need to be shifted, as they are the most affected by air and sound pollution. The fly ash released by the plant is causing harm to the standing crops and the livelihood of the people is severely affected, besides posing health hazards.
2. As there is a low rate of employment offered by the STPP, the aspirations of the youth, who have general and technical education, have been crushed. They could not work on their lands as these were acquired by the STPP. The STPP could run an ITI for the educated youth so that they can either be absorbed in the STPP or be able to get jobs elsewhere.

3. The present vocational training programmes that are being organized for the youth by the STPP with the collaboration of different agencies are not adequate. A larger number of need based training programmes such as radio and TV mechanics, air conditioner and refrigeration mechanics, house wiring, book binding etc. should be taught. Women in these villages are marginalised and are vulnerable. The STPP can organise short-term courses such as pickle and papad making, candle making, horticulture etc.
4. Village cooperatives can be promoted by STPP. A well-budgeted corpus fund for each village can be earmarked towards community development programmes and the village monitoring committee, which determines its priorities can monitor corpus fund. Petty loans can be sanctioned by the committee to the needy who wish to set up self-employment units. The loan that is advanced to the member through the cooperatives may be collected through easy equal installments. This will help the families improve their livelihood.
5. Though the compensation was paid to the land oustees, no compensation was paid nor was any package designed for the landless labourers, who were the worst sufferers. These agricultural labourers who worked in farmlands were virtually marginalized as their lives were at stake. The STPP can design a package of services for the landless poor so as to compensate for the loss of work.
6. There has been a considerable increase in the occurrence of viral fevers, malaria, respiratory disorders and skin problems in the project affected areas. The setting up of free medical aid centres in these areas with qualified medical practitioners is of prime concern. Hence, the STPP may implement a health care scheme and provide health services.

Thus, the STPP authorities can organize need based community development programmes with the active participation of the people, thereby making them stakeholders of the entire process. As the STPP and government are accountable to the people's needs and aspirations it would be appropriate if suitable concerted measures are initiated for the marginalized.

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## About PRIA

PRIA is a civil society organization, that undertakes development initiatives to positively impact the lives of the poor, marginalized and excluded sections of the society, by encouraging and enabling their participation in the processes of their governance. It strives for achievement of equity and justice, through a people centered approach, focusing on 'Citizens'- 'their participation and inclusion', 'awareness and empowerment' and 'their democratic rights'.

PRIA recognizes the value of people's knowledge, challenges traditional myths and concepts, raises awareness of people's rights and promotes experiential learning. It applies a multi-dimensional strategic approach to creating knowledge, training and capacity building of stakeholders, public education and policy advocacy and intervenes at various levels of the demand and the supply segments, to reach out locally, nationally and globally.

Operating under two broad themes 'Reforming Governing Institutions and Civil Society Building', PRIA's people centred interventions aim at promoting active participation of the poor and marginalized in the effective utilization of resources through local governance. It engages itself in strengthening of Panchayati- Raj Institutions and municipalities, promoting environmental and occupational health, facilitating a strong network of civil society organizations, promoting citizen leadership, monitoring policies and programmes of bilateral, multilateral and government agencies, to achieve an agenda of 'Governance where People Matter.'

PRIA proactively involves and engages a range of stakeholders including academia, media, donors, civil society organizations, trade unions, private business and government agencies in its efforts and provides a platform for a multi-stakeholder development approach.

PRIA is an International Centre for learning and promotion of participation and democratic governance.





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